

# The Royal Astronomical Society of Canada NATIONAL NEWSLETTER

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## **RASC 150th CULTURAL CONNECTIONS**

wareness of the art of astronomy as a science that could interact meaningfully with other areas of culture first became evident in the printed records of the Society during the 1890s. Poetry appeared in astronomy papers, observers recorded their scientific observations using materials familiar to artists, and at least two members of a family prominent in Canada's artistic circles were associated with the Society. From that time forward, various members have explored the connections between astronomy and the performing, visual and literary arts. Some notable examples were presented in the context of the Internation Year of Astronomy 2009.

For RASC members and Centres, this is a golden opportunity to partner with other community cultural organizations to either renew a successful coopera-





The Art of Astronomy: This amazing aurora image, top, was taken by Kitchener-Waterloo Centre member Jeff Dawkins in 2014. Above: In 1892, member John Goldie made this sketch of a paraselene, or moon dog. A higherresolution image is at www.rasc.ca/paraselene-1892. Both will be on display at the Homer Watson Gallery in the fall.

tion or venture into a new relationship. Personal discovery can come from experiencing astronomy through artistic expressions not previously encountered. The exploration of cultural connections can be a form of education and public outreach (EPO) to sectors of the community not reached by the RASC's typical EPO.

The Kitchener-Waterloo Centre, for example, submitted a proposal to the Homer Watson House & Gallery. The partner institution is a significant regional gallery dedicated to the collecting, preservation and display of the art of Homer Watson (1855-1936), a major Canadian landscape artist of international reputation whose career overlapped with the first four decades of the Society in its revived 1890s form (and Watson was acquainted with members of the Hahn family, who had strong RASC connections). To celebrate the RASC's sesquicentennial, the K-W Centre proposed an exhibition exploring how amateur representations of astronomical phenomena have evolved from 1868 to 2018. One gallery will feature the *Continued on page 2* 



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### CONTACT US

We invite all Centres to contribute articles about their latest activities. Have you had any public star parties, award ceremonies, special events or observatory activities? Photos are welcome. Please send articles and pictures to newsletter@rasc.ca.

#### Cultural Connections cont'd.

astrophotography and astronomy sketches of current members of the K-W Centre, interspersed with historic examples of astrophotography and astrosketches by past members (these will be drawn from the collections of the RASC National Archives). Another gallery will be devoted to the astrophotography of K-W member Jeff Dawkins, whose nightscapes highlight aurora, the Milky Way and star trails. The exhibit is scheduled to run from September 9 to October 21, 2018, and the opening reception will be held on September 16 from 2-4 p.m. Any RASC member from across the country who happens to be in the Kitchener-Water-

**RASC IN TORONTO IN THE 1950S** 

A fter attending several meetings of the RASC in Toronto with a classmate while still in public school, I joined the Society in 1954. In those days, the meetings were held in a small room with 12 to 20 people attending. That's quite a contrast to today's meetings of around 130 people in larger Centres like Toronto and Ottawa. The group consisted of people from various walks of life, as is the case today. A few who stand out in my mind are Fred Troyer, who worked for *The Toronto Telegram*; Kurt Frankel, a machinist who



loo area during the exhibition run is invited to attend. The Homer Watson House & Gallery is located at 1754 Old Mill Road, Kitchener, ON N2P 1H7 (phone: 519-748-4377; website: www.homerwatson.on.ca), and the gallery hours are Tuesday-Sunday, noon-4:30 p.m.

> -R.A. Rosenfeld, unattached, and Clark Muir, Kitchener-Waterloo Centre

Resources and ideas for Centres can be found at www.rasc.ca/cultural-connectionsresources, and any inquiries or help with programs can be addressed to randall. rosenfeld@utoronto.ca or James.Hesser@ nrc-cnrc.gc.ca.

had a very finely crafted telescope mount; and Jesse Ketchum, the great-grandson of the Jesse Ketchum of temperance fame. Often, there were also a couple of painted ladies, one rather plump and the other tall, who stood out not so much for their excessive makeup but for their interest in the astrological aspect of studying the stars.

Jesse was guite active in the club and invited us over to his basement in New Toronto to learn about grinding mirrors by walking around a barrel for hours. You would purchase a six-inch glass blank and then use finer and finer grits of grinding and polishing compounds to grind the glass down until you got a mirror-smooth, parabolic shape. How this could work to an accuracy of a fraction of the wavelength of light seemed like a miracle. He also demonstrated how to use various rudimentary tests to check the accuracy of the shaping and how to achieve the necessary corrections. It was rare for someone to try to grind anything bigger than six inches.

As a young lad, I found it almost unbelievable that Jesse and his wife, who were both getting on in years, would walk to and from the RASC meetings from their home in New Toronto rather than take the streetcar. The distance from New Toronto to Spadina Avenue is roughly 10 miles. I once walked with them for just a few miles, as my place was on the way,

### **OBSERVING NEWS**

RASC Observing Certificates Earned in December 2017 and January 2018 The RASC has dozens of active members who have distinguished themselves by earning observing certificates. See www.rasc.ca/certificate-programs for more details.

**Explore the Universe:** Simon Poole (Calgary)

**Explore the Moon (Telescope):** Peter Holden (Sunshine Coast)

In addition, Colin McKenzie (Vancouver) received a commendation for completing the Lunar 1000 Challenge. Congratulations to all!

Follow @RASCobserving on Twitter

The RASC Observing Committee now has a Twitter account: @RASCobserving. Follow us to be notified of observing certificates as they are earned and for announcements of noteworthy observing opportunities.

### Explore the Universe Guide 2nd Edition

This novice guide to the Explore the Universe observing program has been fully revised and updated and is available from the RASC shop. Centres (especially those running beginner astronomy courses) should contact the Society office for significant discounts on bulk orders.

> —Dave Chapman Chair, RASC Observing Committee

and I had difficulty keeping up with them.

Jesse was also keen to show the public the heavens by setting up telescopes at star parties in public parks. During the Canadian National Exhibition, we set up telescopes south of the Ontario building, facing the lake to avoid the bright lights of the exposition, which were far fewer in those days. The reflector scopes were almost exclusively Newtonians, and few amateurs purchased refractors, mainly because of the cost. And, of course, there were no computer-driven guidance systems.

—Hugo Lama, Ottawa Centre

# RASCNEWSLETTER



To celebrate the RASC's 150th anniversary, the Fundraising Committee and Board of Directors have approved a special project: to fund and obtain a remote telescope and to develop programs to use it.

Initial plans are to purchase and set up a 16- to 24-inch telescope in a remote site, such as the Sierra Remote Observatories, in California. Outfitted with various cameras, the telescope will be used by four groups:

- Astroimagers will decide what the telescope will image and then download and process the image data. Through e-mail and webinars, they will learn how to process the raw image data.
- The scientific research team will decide which research projects to work on, what data to obtain and how to analyze the data, hopefully making some discoveries and publishing papers.
- The public outreach group will run live sessions on-line for school and youth groups and anyone who logs in and participates in public sessions. High school classes will be linked with local astronomy graduate students to help them plan research projects and analyze data from the telescope—a great way to encourage young people to follow a STEM (science, technology, engineering and mathematics) education path.

 As a promotional tool, images from the telescope will be made available to national and local photo editors and journalists for publication.

Only RASC members will be able to participate in the telescopeuser groups.

An annual user fee will be charged to help offset the costs of running the telescope.

The remote telescope will be a major benefit of membership, one of the largest additions in recent history. It will become part of our Public Outreach Program and will help promote the Society through its connections with the public, students and the media. It will provide a way to bring major citizen science programs to members of the public. It will serve as a vehicle for the Society to partner with astronomy faculties across the country. And, most important, members will be able to do astronomy in the winter.

An example of what can be done with such a telescope? A 16inch telescope at the Sierra Remote Observatories site imaged the Tesla Roadster as it headed away from Earth.

We are looking for volunteers to help set up and run programs. Please send your questions and ideas to remotetelescope@rasc.ca.

Look for a fundraising campaign in the spring to kick off our remote telescope project.

—Randy Attwood Executive Director, RASC

### **CENTRE NEWS**

### THE MAGNIFICENT SKY: A WEEKEND IN KEJIMKUJIK DARK-SKY PRESERVE

**RASC** Halifax presents a new short video capturing events at the 8th Annual Keji Dark-Sky Weekend in August 2017. The video was professionally edited by member Halley Davies using material collected by herself and others. See www.You Tube.com and search for "RASC Halifax" to see this and other original videos from the Centre.

—Dave Chapman, Halifax Centre



## THE FUTURE OF RASC GENERAL ASSEMBLIES

While we look forward to the 2018 RASC General Assembly in Calgary, the RASC Board of Directors and National Council are considering the future of RASC General Assemblies.

In recent years, we have experimented with different formats, including coupling the GA with the 2009 Saskatchewan Summer Star Party and with AstroCATS at the 2016 London GA. Since the first GA, which was held in Montréal in 1960, these meetings have usually taken place on university campuses.

However, Centres have become more reluctant to host GAs, reflecting changes in how universities handle meetings like ours, which have increased the cost and complexity for organizers.

GAs combine Society business meetings, including the annual general meeting, Board meetings and National Council meetings. As well, there are astronomy talks, workshops and social activities, capped by the annual banquet, during which awards are presented. A typical GA lasts three or four days.

We want to make GAs more attractive to members and easier to organize. What changes to the GA format would make you more likely to attend? What do you like about the current format? Most GAs are held on the July 1 weekend or the Victoria Day weekend. Do you think they should take place at those times or at another time, away from holiday weekends?

Please let me know what you think at volunteer@rasc.ca, or contact your friendly neighbourhood National Council rep or Board Member. I have developed a discussion paper about GAs, which I will be happy to share with any member who requests a copy. —*Chris Gainor, Vice President, RASC* 

# RASCNEWSLETTER

### **ONE COUNTRY, ONE SKY**

The RASC is celebrating its 150th birthday this year. I have been an RASC member for 57 of those years and active (more or less) in the Society for over 50 of them. Back in the 1970s and 1980s, when I was most active at the national level, a constant challenge was whether and how we could serve francophone astronomy enthusiasts in Canada, as well as anglophones. We couldn't, really, even though we thought of ourselves as a national society and were perceived as a Canadian national astronomical organization (e.g. by our neighbours to the south).

Luckily, there is now Fédération des astronomes amateurs du Québec (FAAQ), founded in 1975. FAAQ, with over 40 clubs and other affiliated organizations, provides exemplary service to francophone amateurs and to schools and the public through outreach programs. During International Year of Astronomy 2009, the RASC and FAAQ partnered very effectively to make IYA Canada a truly national success. Québec universities contribute substantially to astronomical research, and Mont-Mégantic Observatory is one of the largest on Canadian soil. Québec has a strong science teachers association, and I am pleased that the Discover the Universe (discovertheuniverse.ca) astronomy education program is both national and bilingual.

The Royal Canadian Institute for Science (RCIS), founded in 1849, is a sister organization that was the voice of Canadian science for much of its history, just as the RASC was the voice of Canadian astronomy until quite recently. RCIS has had national impact but has little or no connection with francophone Canada today—now with one small exception.

Since 1982, RCIS has awarded the Sandford Fleming Medal for outstanding contributions to the public understanding of science in Canada. Only one previous recipient, Fernand Seguin in 1988, is francophone, and I take some credit for promoting his nomination. But I am proud to say that the

2017 recipient is astronomer Pierre Chastenay. He has been a longtime presenter and administrator at the Montréal planetarium, an author, a creator and reviewer of educational material and now a professor of science education at Université du Québec à Montréal. He has hosted or contributed to hundreds of award-winning TV episodes, especially Le Code Chastenay. Most (but not all) of his contributions have been in the French language, but these have contributed significantly to science literacy and appreciation in Canada. His contributions in English are well known and respected by those of us in the astronomy-education community. Congratulations, Pierre!

So in the RASC's sesquicentennial year, I wish continuing success to the RASC and FAAQ and to the other astronomy groups both amateur and professional—that contribute to Canadian astronomy. And in our mission, let's not forget those whose native language is neither English nor French, especially our Aboriginal peoples. We are one country under one sky.

J-John Percy, University of Toronto

### **CALIFORNIA DREAMING**

This five-hour narrowband exposure of NGC1499, the California Nebula, was taken from Calgary, Alberta, with a 5-inch refractor and a QSI 583 CCD camera. —Dan Meek, Calgary Centre

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