

September 2018 - Volume 13, Number 9

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

September Holiday Hours

Please note: the RASC Society Office will be closed on Monday September 3rd for Labour Day. Have a safe holiday and clear skies!

Also: Renata Koziol will be on holidays September 4 – 7. Processing of Centre membership for August will take place Monday, September 10.

NEW Products:

We have many new items available on our eStore. **Stop by our eStore today** and check them out!



NEW Item: **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 available for order!



NEW Item: **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.

The 2019 Handbook will be sent out to all RASC members late October/early November.

Youth Outreach Coordinator Position

As part of the RASC's mandate to promote astronomy and engage Canadians in observing the sky, we have always run programs to promote astronomy to all Canadians. Our Centres run excellent public outreach programs which reach thousands of people every year. A challenge we have had for a long time is how to engage young people into astronomy and space exploration.

Many Centres run outreach programs — they include star parties, library talks, tours of Centre observatories or talks to school groups. This can be a challenge as school is in session during the day and many members have full time jobs. One solution is running events at schools during the evening — this is a big commitment for the school, the teacher and the parents. Some Centres have run programs specifically directed at young people — and quite successfully. But it takes a lot of volunteer time and effort.

At Centre star parties, many young people come out with their families and enjoy the experience of looking through telescopes. In spite of this, we have only 450 youth members.

This year we had an opportunity to request funding from the Trottier Foundation to hire someone whose responsibility will be to evaluate the existing programs and resources we use to reach young people. With that information, we will develop new resources, new programs and make them available to Centres across the country to supplement the existing programs or to start up new ones.

The Youth Outreach Coordinator, a new, full time permanent position reporting to the Executive Director, has a mandate to engage more youth in astronomy and the allied sciences. Based in the Society's Toronto office, the schedule is Monday to Friday, 35 hours per week with occasional travel in the GTA, evenings and weekends.

Duties and Responsibilities:

- Conduct an inventory of current youth astronomy programming, activities and resources.
- Assess and identify best practices and materials to be used in a national youth astronomy program.
- Recruit a youth committee for program development, promotion and implementation.
- Develop RASC astronomy youth programming, educational materials and web content.
- Establish connections and long term relationships with local communities, schools etc.
- Disseminate and promote youth programs and resources to Centres, members and the public.
- Deliver national youth programming.
- Monitor and evaluate impact/effectiveness of the youth program.
- Develop partnerships with other youth /astronomy / science organizations to achieve program goals.
- Assess and evaluate outcomes.
- Other duties as required.

Qualifications:

- ✓ Experience in developing and delivering youth programming and outreach.
- ✓ Ability to write educational and promotional copy.
- ✓ Accurate record keeping.
- ✓ Able to motivate and work with volunteers.
- ✓ Knowledge of astronomy and allied sciences would be helpful.

To apply, please send a cover letter and resume on or before 2018, September 7 to:

Randy Attwood, Executive Director The Royal Astronomical Society of Canada 203-4920 Dundas St. W Toronto, ON M9A 1B7 execdir@rasc.ca

Robotic Telescope update

Our Robotic Telescope Project has a manager — Paul Mortfield. Paul teaches astronomy and science courses at a Toronto college, and has extensive experience using a robotic telescope at the Sierra Remote Observatory site. In fact, it was Paul's telescope that we purchased last spring. The telescope has quite a history — it has been used to produce NASA APOD images, RASC Calendar cover shots and perform exoplanet photometry.

The telescope is already taking test images. It has been equipped with a new large chip SBIG STX-16803 CCD camera, filter wheel and Adaptive Optics unit. In addition, riding atop the telescope is a full frame Canon 6D DSLR with a 200mm f/2.8 lens for wider field images. Sample images from both cameras appear with this article.

Over the next few months, Paul will recruit people to help run the program. This will include telescope operators, astrophotographers, astronomers and educators. As well, training materials will be developed for those who sign up to process or analyze the imagery.

We are working on developing a method for everyone to communicate their needs for this telescope — it may end up being an email forum of some sort. And we need to find a lot of storage space for the terabytes of data the telescope will generate. So there is a lot to do this autumn to get the project up and running.

The Astrophotography Group will be set up first. Members will be able to sign up and have access to raw data images from the telescope. As well there will be training to help those new to astrophotography to process the images.

Next the Science Group will be formed, followed by the Public Outreach group.

To whet your appetite, there are plans to provide access to the DLSR photos for all RASC members as soon as we can put a distribution mechanism in place.

For more information and the latest updates on the telescope along with photos, visit **www.rasc.ca/telescope**

If you have any questions or wish to help with the setup of the project, please send an email to **robotictelescope@rasc.ca**

There will be an announcement to members when the project is ready to accept subscribers. We hope to start signing people up before the end of the year. There will be a user fee for subscribers. The amount is to be determined as part of the project setup.



A single 30 minute H-alpha frame of NGC 6888 — the Crescent Nebula — an emission nebula in Cygnus, some 5,000 light years away.



A single two-minute exposure using the piggy-backed Canon 6D DSLR of the region around NGC 7000 – the North America Nebula.

September 15 National Star Party

To celebrate the RASC's 150th Anniversary, the Society is planning to hold a National Star Party. On Saturday September 15th, RASC Centres are invited to hold a star party — from coast to coast to coast! The first-quarter Moon as well as the planets Mars, Jupiter and Saturn will be perfectly placed for early evening observing. Special handouts to mark the occasion are being produced — these will be posted on the National Star Party website for download.

www.rasc.ca/national-star-party

Centres are reminded that we have various materials in the Society Office available to be handed out at the star party — contact Julia Neeser at mempub@rasc.ca for details.

Awards Deadline

by Colin Haig, RASC Past President

Mark November 30th in your Calendar. Make it your deadline to nominate someone for special recognition.

Do you know a volunteer or active member of our Society who deserves special recognition for the impact they've made on astronomy and our Society?

This is your annual opportunity to make sure these people are recognized for their efforts and the results they've achieved.

Take 30 minutes to think about the unsung heroes, the coaches and mentors, the people who helped you get excited about astronomy.

Think about those people who quietly do their part every month, helping on committees, projects, or newsletters.

Remember the ones who may be less active today, but made big contributions in prior years, and nominate them for an award.

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 in1979 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 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.

The deadline for the RASC's National Awards Program is 2018 December 31.

Nominations for awards should be sent to the Awards Committee at awards20000@rasc.ca.

For more information on the awards nominations, see **RASC Awards**.

A New Honorary President

by Chris Gainor, President RASC

I am delighted to announce that Dr. Douglas P. Hube of the Edmonton Centre is the new Honorary President of the RASC.

Dr. Hube joined the RASC as a student in 1960 and has been active member ever since. He has served as President of the Edmonton Centre and was Society President from 1992 to 1994. He won the RASC Service Award in 1982.

He grew up in St. Catharines, Ontario, and studied astronomy at the University of Toronto, where he met his wife Joan.

Since joining the faculty at the University of Alberta in 1969, Dr. Hube has mentored generations of astronomy students and RASC members, including the undersigned. He also has a strong record as a researcher, administrator and

promoter of astronomy. He has written many articles in RASC publications and scientific journals. Doug and Joan Hube continue to take active part in RASC activities, including the recent GA in Calgary.

Dr. Hube succeeds Dr. John Percy of Toronto as Honorary President, and his term runs for four years until the GA in 2022.

Observing News

by Dave Chapman, Observing Committee Chair



In August of 2018, RASC awarded the following observing certificate: Explore the Universe to observing and life partners Ronnie Reid and Heidi Verheul (Halifax) and Deep-Sky Challenge to Ted Wang (Unattached, Taiwan). In the first 8 months of this 150th Anniversary year, RASC has awarded 19 observing certificates—keep them coming!

Heidi and Ronnie decided to work on EtU together, and I have watched them learn together, Their visual observation of Jupiter and Venus took place during the conjunction of those planets on 2016 August 27, when many of the registrants of the Nova East Star Party left the site for higher ground to watch the two planets set. We were all astonished to see the Green Flash as Venus set behind the distant horizon. This observation is in the logs of Ronnie and Heidi. I personally inspected their observing logs at this year's Nova East. To complete the Deep-Sky Challenge is a significant achievement, and Ted Wang not only observed all 45 objects but also sketched them! He is the 9th observer to complete DSC. Ted observes with smaller-aperture telescopes than is normally expected for the DSC, but makes up for that by observing from high in the mountains. We hope to feature Ted in an article in the RASC Journal.

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.

Keji Dark Sky Weekend 2018

by Dave Chapman, Observing Committee Chair

The 9th annual Keji DSW has successfully completed. In all, Keji visitors experienced 450 "Galileo Moments," a bit down from previous years, probably due to sky conditions.

A couple of members arrived in the park a day or so early and observed from the Sky Circle on Thursday night, unannounced, but their presence still attracted about 25 curious visitors. This soft start to the weekend may be worth repeating.

Friday night at the Sky Circle was the best-attended event, with several telescopes and binoculars in the field offering views of the Moon, Jupiter, Saturn, Mars, and some double stars and brighter deep-sky objects. Cultural interpreter Ursula Johnson played her flute and told a lovely Mi'kmaw night sky story involving Hercules, then Chris Young took everyone on a night sky tour with his "light sabre." None of this was scheduled, we just let folks wander around and we'd call them in as required.

We applied to use Green Laser Pointers but never heard back. The Transport Canada system seems broken and needs investigation. Our work-around involves bright focussing Maglites with a piece of PVC plumbing pipe attached to limit sideways light leakage. These produce usable fat beams of while light for pointing.

On Friday and Saturday afternoons we hosted astronomy drop-ins where we handed out StarFinders, Moon Gazer Guides, *SkyNews* magazines, etc., and did a bit of solar observing. We also had a telescope clinic where people brought us their "sick" telescopes for attention.

Friday at the Sky Circle we walked the Solar System with the young at heart. Planets made guest appearances at other events as well. None were eaten, as was Pluto at Nova East (the little girl is fine).

Saturday night we had an excellent presentation by Kathryn Auorora Gray "How I Discovered a Supernova," and drew for door-prizes (6" classic SkyWatcher Dob telescope and several astronomy books by member and author John A. Read). Kathryn has graduated high school with honours and will begin studying Astronomy and Physics at Saint Mary's University this fall.

Saturday was rainy and there was no observing. Campfire time!

Some of us stayed Sunday night to lead public observing from Merrymakedge Beach, but skies did not clear until everyone had left; however, we talked telescopes with a few dozen visitors.

Thanks to Charles White, Karl Hudson, Mark Dryden and Greg, John McPhee, Melody Hamilton, Liz Greenough, Judy Black, Jerry Black, John Read, Wayne Mansfield, Tony Schellinck, Paul Heath, Quinn Smith, Chris Young, Bruce Hamilton, and Kathryn Gray.

Thanks to Atlantic Photo Supply for the telescope door prize.

Thanks to Parks Canada: special events coordinator Audrey Levesque and her team of student helpers—they provided excellent logistical support and publicity. Also thanks to Ursula Johnson for the story.



National Council Meeting

by Eric Briggs, National Council Co-Chair

The draft minutes of the most recent RASC National Council meeting, NC18-4, have been uploaded to the website: https://rasc.ca/nc-minutes-2010s

At this July 1 meeting at the Calgary General Assembly, a proposed rationale for the National Council was agreed upon and referred to the Board, to bring back at the next National Council teleconference on September 16th for ratification.

Peter Hiscocks

by Robert Dick, LPA Committee Chair

I regret to inform everyone that Peter Hiscocks passed away on August 1. He was a valued member of our LPA Team.

Peter joined our LPA Committee in 2017 after making significant contributions to the LPA Program in Toronto. He contributed to the RASC LPA Discussion List with technical information based on a number of reports he posted on his website (www.ee.ryerson.ca/~phiscock/).

Peter was a respected engineer - the President of an instrument design company (www.syscompdesign.com) with the goal of providing low-cost instruments for hobbyists, and others. In 2003 Peter received the Citizenship Award from the Professional Engineers Ontario

(www.peo.on.ca/index.php/ci_id/26390/la_id/1.htm), and the Award for the Support of Women in the Engineering Profession from Engineers Canada. This was for his efforts to increase the participation and inclusion of women in engineering.

Most recently (January 2018), Peter contributed to the lighting course offered by Forest Pearson of the Yukon Centre, co-presented by Forest, Peter, Charles Ennis, and me.

We have lost a key member of our team.

RASC Montreal Centre Upcoming Events for September

by Carl Jorgensen, Secretary, Montreal Centre

Saturday, September 1, 7:30 – 11:00 pm: Members offsite observing at Thompson Park, 726 Rue Main, Hudson, (weather permitting).

Wednesday, September 5, 7:30 – 11:00 pm: Members observing and Star Hopping Workshop (Part 1) at the Morgan Arboretum Conservation Center. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Saturday, September 8, 7:30 – 11:00 pm: Members offsite observing and Star Hopping Workshop (Part 2) at WoolyWoods 45 Rang Saint-Antoine, Saint Chrysostome (weather permitting).

Wednesday, September 12, 7:30 – 11:00 pm: Members observing at the Morgan Arboretum Conservation Center. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Saturday, September 15, 7:30 – 11:00 pm: Public offsite observing Westmount Summit Lookout. RASC Montreal Centre members are asked to bring their telescopes for public observing (weather permitting).

Wednesday, September 19, 7:30 – 11:00 pm: Members Observing at the Morgan Arboretum. The Bellevue Observatory will be open, but you can also bring your own telescope or binoculars (weather permitting).

Saturday, September 22, 7:30 – 11:00 pm: Arbo Clubhouse at the Morgan Arboretum. Observing afterwards (weather permitting).

Wednesday, September 26, 7:00 – 9:30 pm: Members Library Clubhouse at John Abbott College Rm H355 21275 Rue Lakeshore, Sainte-Anne-de-Bellevue. Presentation at 7:30 pm. RASC members only. Can borrow and return books. Talk with other members, show and tell, etc..

Saturday, September 29, 7:00 – 11:00 pm: Montreal Centennial Townsend Public Lecture, John Abbott College, Casgrain Entrance (off Maple Ave.)Doors open 7:00 pm, Presentations begin at 7:30.

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.



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