



**April 2018 - Volume 13, Number 4**

We welcome your comments on the *Bulletin*.  
Email them to the Editor, David Garner at  
[bulletin@rasc.ca](mailto:bulletin@rasc.ca)

► [News @ RASC.ca](#)

---

## News from the Society Office

by [Randy Attwood](#), RASC Executive Director

# NEW RASC WebStore!

The RASC has an exciting announcement: a brand-new webstore! A ton of new Apparel items will be available in different sizes, colours and will be printed on demand and [available here](#). The apparel items sport both the 150<sup>th</sup> logo and the RASC Wordmark. **Polo shirts** are now available as well as new **tote bags** and **hats**. We hope you will enjoy the new webstore offerings and wear the RASC with pride! Thank you for your support!



If you have any questions regarding your apparel order, please contact the customer service team:  
[webstores@tshirtelephant.com](mailto:webstores@tshirtelephant.com).

**Please note:** many items are still available on our **RASC eStore** like publications (books), observing aids and promotional items.

### **National Star Party – Saturday, 2018 September 15**

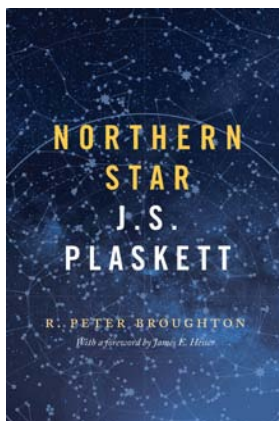
The 2017 National Star Party held last July was the first ever – it was extremely successful with thousands of Canadians participating, celebrating Canada’s 150th birthday.

To celebrate the Society’s 150th, we are scheduling a National Star Party for Saturday, September 15. The date was chosen because on that evening the Moon, Jupiter, Saturn and Mars will all be perfectly placed in the evening sky. As well, a date later in the summer is easier to manage for Centres at higher latitudes – it gets dark earlier.

We are planning to produce information sheets on observing these planets to hand out at the event. The Observing Committee is producing Mars observing info sheets as well.

### **Northern Star: By Peter Broughton \$90.00**

Get your copy today: a beautifully-imaged, 400+ page hardcover book. Northern Star is the first full-scale biography of major Canadian astronomer John Stanley Plaskett. Broughton’s accessible and engaging prose combined with rich illustrations illuminates Plaskett’s achievements and motivations, and the social, political, economic, and religious milieu surrounding them.



## 2018 Election of Board of Directors Call for Nominations

by **Robyn Foret**, RASC 2nd Vice-President

Three (3) Board of Director positions, each being a 3-year term, are open for election at the General Assembly.

Nominations for the RASC Board of Directors is open through 2018 April 30, and we encourage all Members in good standing to consider a role on the Board. The 2018 Board of Directors will be announced at the General Assembly in Calgary.

Candidates' requirements are stipulated in **Policy G9: Society Nominations and Elections** of the Policy Manual. The Policy Manual is available in the Member's-Only section of the website at [www.rasc.ca/rasc-policy-manual](http://www.rasc.ca/rasc-policy-manual).

For more insight into the effort and commitment expected of Board members, feel free to reach out to the Nominating Committee Chair, Robyn Foret who can be reached at [arforet@shaw.ca](mailto:arforet@shaw.ca) or 403-803-1075.

## General Assembly 2018

by **Robyn Foret**, RASC 2nd Vice-President

**GA 2018 is Live:  
Register now at [rascga2018.ca](http://rascga2018.ca)**

The 2018 GA will be held in Calgary, June 28 through July 2. With the Society celebrating its 150th and the Calgary Centre celebrating its 60th, 2018 will be a very special GA.

Accommodation is at Hotel Alma on campus at the University of Calgary. An upscale euro-style hotel, Alma offers 2-bedroom student quarters, standard hotel rooms and 1-bedroom suites. Overflow accommodation is in Student Housing, so book early to secure your optimal room at Alma.

A western-style barbeque at the U of C's Rothney Astrophysical Observatory informally kicks off the GA on June 28. Great speakers, opportunities to take an

Alan Dyer workshop or a tour of the Cross Conservation area, a Social to meet up with RASC friends old and new, a Big Reveal on Friday night, a Stampede Breakfast, incredible poster and paper presentations, the Hogg Lecture, the actual General Assembly, the RASC 150 celebrations, the Banquet, and an optional visit to the KT Boundary and Dinosaur Provincial Park will all make this a very special GA that Members and their families can enjoy.

In the spirit of the West, and espousing our Western values and hospitality, you will be well cared for. Airport pick-up and drop off, a comprehensive meal plan and comfortable accommodations are ready for you.

**Registration is limited so visit our web site and register soon.** You don't want to miss this GA.

P.S. If you're planning an extended trip, the Calgary Stampede begins on July 6. Imagine a wonderful GA followed by a visit to Banff and Lake Louise, horseback riding on Moose Mountain then Yaa-Hoo along with the Calgary Stampede.

## **RASC Anti-Harassment Policy Revised**

by **Charles Ennis**, National Secretary

Canadian women first got the vote in Manitoba in 1916. Federal authorities granted women limited female franchise in 1917, and this was expanded in 1918, the same year Great Britain finally granted women limited access to the polls. In 1921 Agnes Macphail became the first woman to win a seat in the House of Commons. You'd think that all these years later we'd see women enjoying the same rights and pay as men and equal numbers of women in the STEM fields in Canada. Yet in 2015 a United Nations Human Rights report raised concerns about "the persisting inequalities between women and men" in Canada, including the "high level of the pay gap" and its disproportionate effect on low-income women, racialized women, and Indigenous women.<sup>1</sup> Out of 34 countries in the OECD, Canada had the 7th highest gender wage gap in 2014.<sup>2</sup>

---

<sup>1</sup>United Nations Office of the High Commission for Human Rights. "Concluding observations on the sixth periodic report of Canada," 2015.

<sup>2</sup>OECD. "Gender Wage Gap." 2014.

Women are still underrepresented in science, technology, engineering, mathematics and computer science (STEM) fields. The UNESCO Institute for Statistics reports that only 28% of the world's researchers are women.<sup>3</sup> Statistics Canada reports that the National Household Survey (NHS) showed that women accounted for 39% of university graduates aged 25 to 34 with a STEM degree in 2011, compared with 66% of university graduates in non-STEM programs.<sup>4</sup> Among STEM graduates aged 25 to 34, women accounted for 59% of those in science and technology programs, but accounted for 23% of those who graduated from engineering and 30% of those who graduated from mathematics and computer science programs.<sup>5</sup>

In her article in the June 1993 issue of the RASC Bulletin, RASC Past President Mary-Lou Whitehorne of the Halifax Centre asked: *Where are the Women?* Whitehorne looked at the membership rolls when she was president and discovered that only 8% of RASC was female. I searched through the current list of over 5100 RASC members looking for female names and arrived at a figure of 18%, which is a slight improvement but far short of what you'd expect a century after women first achieved emancipation in Canada. In June 2016 I wrote an article asking Whitehorne's question again: *Where are the women? Why aren't they joining the RASC?* We have had women like Whitehorne in prominent positions in the organization. Why don't we seem more female members?

It was not until March of 2015 that our Society adopted an anti-harassment policy. This was just over a year later in May 2016 when reports of violations of this policy arose at the General Assembly in London. Within hours of the installation of the new Board of Directors an emergency meeting was held to deal with an alleged incident of harassment. This resulted in the GA organizers ejecting a male attendee from the event. For the first time in the history of the RASC, a disciplinary committee was struck, and this ultimately resulted in the expulsion of a member of our Society.

---

<sup>3</sup> UNESCO Institute for Statistics: [www.uis.unesco.org/ScienceTechnology/Pages/women-in-science-leaky-pipeline-data-viz.aspx](http://www.uis.unesco.org/ScienceTechnology/Pages/women-in-science-leaky-pipeline-data-viz.aspx)

<sup>4</sup> Stats Canada website: [www.statcan.gc.ca/pub/75-006-x/2013001/article/11874-eng.htm](http://www.statcan.gc.ca/pub/75-006-x/2013001/article/11874-eng.htm)

<sup>5</sup> Ibid.

Following that incident many more women in the Society came forward with alarming stories of past sexual harassment by members, and how they felt they needed to behave in certain ways and dress in a certain fashion because they feared that someone would blame them for having invited or enticed the perpetrators into behaving badly to them. At the time, one Board member commented to me that he had “noticed a lack of minorities in the Society as well, and have observed members make anti-religious, anti-Islamic, anti-LGBT comments, and worse. This is a quick way to cause some members or prospective members to leave. We all need to be reminded to be on best behaviour.”<sup>6</sup>

That any of our members should feel it necessary to behave in such a manner to feel safe while participating in RASC events is totally unacceptable. This incident proved that our Society was not yet doing nearly enough to promote and respect women and minorities within the RASC. As Whitethorne said in her 1993 article: “It is not that the RASC does not welcome women, for it does. However, society makes it nearly impossible for a woman to participate actively in organizations such as ours.”<sup>7</sup>

In order to correct this problem a working group under Society Director Heather Laird, with the legal assistance of Director and legal counsel Michael Watson, got down to work revising section G24, Anti-Harassment Policy, in the RASC Policy Manual. In time for the sesquicentennial of the Society, the Board has just approved this amendment. This policy applies to and protects all members, guests, staff, contractors, exhibitors, and others who attend or participate in any meeting or other activity of the RASC.

It is the policy of the RASC that all Participants in Society or Centre meeting and other activities will enjoy an environment free from all forms of harassment and discrimination. This includes being free from retaliation for making a complaint or participating in an investigation of a complaint made under this policy. The RASC is committed to providing an atmosphere that encourages free expression and the exchange of ideas. In pursuit of that principle, the RASC is dedicated to

---

<sup>6</sup> E mail from private correspondent, 2016 June 14.

<sup>7</sup> Mary Lou Whitehorne. June/July 1993. RASC Journal, Reflections- Where are the Women?, page 1.

equality of opportunity and treatment for all Participants, regardless of sex, gender identity or expression, sexual orientation, race, national or ethnic origin, religion or religious belief, age, marital status, disabilities, or any other characteristic that is not related to scientific merit. These are collectively referred to in the policy as “Protected Characteristics”. Harassment, sexual or otherwise, is misconduct that undermines the integrity of the RASC and is disruptive of Society activities. Such misconduct is prohibited, and violators of this policy will be subject to discipline.

The amendments to G24 more clearly define harassment and separate it from section G23 Conflict and Complaint Resolution which is an entirely different and separate process. The amended policy allows Centres to resolve harassment issues and provides an appeal to the Society’s Board of Directors. The new policy provides more outcomes for disciplinary action than the previous version, including warnings, exclusion from Centre activities, or termination of membership. The new policy specifically provides direction in dealing with emergency situations and makes retaliation an offense. The updated Policy Manual Version 5.5 has been uploaded to the national website.

As we move into our next half century, our Society needs to work harder to address inequities and provide a safe environment for all. We can’t expect women or members of minorities to feel comfortable joining, actively participating, and enriching the Society until we achieve this. Our Society should be setting an example to the rest of Canada on how such equality can be achieved.

## **RASC Fundraising**

by **Lisa Di Veto**, RASC Fundraising Consultant

Over the past few months, I’ve been able to connect with RASC members and donors across the country and have been struck by the significant amount of time and expertise volunteers dedicate to Centre and Society operations. Publications, special events, outreach, meetings and committee work: RASC alumni give hundreds of hours each year to encourage and engage interest in the field of

astronomy and the numerous programs and services offered. It's an impressive charitable operation and I'm honoured to be a part of the team.

My role involves seeking financial support for RASC charitable operations and new ways for individuals to contribute have been introduced including the opportunity to enrol in monthly giving or to make a donation of stocks or securities. The organization has been the grateful recipient of generous bequests and legacy gifts – please don't hesitate to contact me if you need assistance in wording your gift in a will, naming RASC as a life insurance beneficiary or any other question you have regarding arranging your support.

Please contact me directly at 519-754-1803 or [ldiveto@rasc.ca](mailto:ldiveto@rasc.ca) if I may provide further information or assist you in arranging your gift. I look forward to hearing from you!

## **RASC 2018 – Calgary Centre Call for Paper and Poster Presentations**

by **Judy Sterner**, Chair, Paper and Posters sub-committee, Calgary GA 2018

We invite you to submit a proposal for a paper or a poster to be presented during the 2018 General Assembly in Calgary. We are celebrating 150 years of the RASC and 60 years of the Calgary Centre, so presentations with a historical focus are particularly apt. The abstract deadline is April 30. You will be notified by May 20 if your paper or poster topic has been accepted.

Further details regarding abstract submission and on paper and poster sessions will be posted on the GA 2018 website. Paper length will be in the 15 - 20 minute range. Posters should fit a 4 x 4 foot (120 x 120 cm) board.

Contact: Judy Sterner  
Chair, Paper & Posters sub-committee Calgary GA 2018  
([judy.sterner@gmail.com](mailto:judy.sterner@gmail.com))



## **RASC 150th Imagining the Skies**

### **RASC 2018 Working Group**

by **Randall Rosenfeld**, RASC Archivist

Throughout Canada amazing photographers and creative artists abound. Why not join in a celebration of our beautiful skies through active imaging? What better way for us to mark the 150th anniversary of the Society than by submitting our astronomical images, as well as encouraging friends, neighbours, co-workers, and others of all ages and levels of experience, to participate?

Plan to go out in 2018 and embrace the inspiration of astronomical phenomena by recording what you see of the visible cosmos!

If you've ever wanted to try astrophotography or astronomical sketching, now's the time. You need nothing more than the smart-phone you carry, or the pencil in your pocket. The art of capturing realistic images of celestial phenomena has been practiced in the RASC since its founding, with each generation imaging space anew through the filter of the astrophysics of their day, using available technologies. If they could do it, so should we! If your tastes run to transforming what you see in the eyepiece to represent celestial phenomena in the graphic, plastic, and textile arts, indulge them by submitting your work to Imagining the Skies. Whether you are a budding novice, or a seasoned expert, we want your images in our sesquicentennial contest!

When visiting Imagining the Skies, remember to vote for your favourites in each category throughout the year. Votes for the most popular images will be announced quarterly. Check out the novice submissions, as well as those from more experienced imagers—and vote often!

For more details, visit <http://imaginingtheskies.ca/>.

For more details on the full range of programming for RASC 150, visit <https://www.rasc.ca/2018>. New material is added monthly.

## Two New Dark-Sky Preserves

by **Robert Dick**, Chair, LPA Committee

The RASC has two more Dark-Sky Preserves!

Terra Nova National Park is the first DSP for Newfoundland. It has 39,900 hectares located north west of St. John's.

The second is in Ontario. The Killarney Provincial Park has 48,500 hectares on the northern shore of Georgian Bay - off the NE tip of Manitoulin Island, and south of Sudbury.

The Maps are from Google Maps. This brings the Canadian total of dark-sky protected areas to 20 DSPs, 2 USPs and 2 Nocturnal Preserves covering over 6.5 million hectares. To put this into a global perspective, this is significantly more than any other country in the world.



## Observing News

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

In February and March of 2018, RASC awarded the Explore the Universe observing certificate to Samuel Crane (Hamilton), Forest Pearson (Yukon), and Victoria Kayser-Derenne (Unattached, Toronto). Peter J. Holden (Sunshine Coast) earned Explore the Moon–Telescope. Messier Certificates went to Charles Ennis (Sunshine Coast) and Shane Grassing (Unattached, Pilot Butte, Saskatchewan). This is an auspicious start to the year 2018, the RASC 150th Anniversary Year.

So far, 26 of 28 RASC Centres have confirmed their participation as Local Certification Centres for the Explore the Universe certificate and pin (see [www.rasc.ca/participating-centres](http://www.rasc.ca/participating-centres)).

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

During this anniversary year, we encourage members to create social media posts with photos or brief videos of all kinds of people enjoying astronomy, including the hashtag **#TheStarsBelongToEveryone**, to show the world that anyone can enjoy astronomy.

## RASC Astrophotography Certificates

by **James Edgar**, *Observer's Handbook* Editor

Astroimagers - earn a certificate while you learn your craft. You can apply for three different certificates: Wide Field, Solar System, and Deep Sky. A certificate suitable for framing comes with a showcase of your winning photos on the RASC Zenfolio site. Have a look at some of the certificate earners' great images at <http://rascastroimaging.zenfolio.com>.

Go to [www.rasc.ca/astro-imaging-certificate](http://www.rasc.ca/astro-imaging-certificate) for the different category requirements and submission details.

## Where are the Women Imagers

by Paul Gray, *Observer's Calendar* Editor

Where are the women imagers? Much like the question of "where are the women in astronomy?" there seems to be a dearth of women doing imaging. In six years of editing the RASC *Observer's Calendar* I can count the number of images for consideration by women on my two hands. Surely there must be more women out there doing imaging.

So, where are they? Could it be that they prefer to display their work at home and are content with the satisfaction of simply producing results and enjoying it themselves? Is it that unlike men they are just not interested in showcasing their work in a public forum where men are more competitive and like to show off their work? Maybe and unfortunately too many of them have had a bad experience in how their work was received by men, who as we all know are the majority of those in our hobby.

The RASC has two publications that provide our members with a chance to display their work to the 5000 plus membership in the printed forum. The *Journal* and the *Observer's Calendar* both display images in colour and black-and-white formats. I would like to invite all women imagers to please contribute some of your work for consideration in the *Observer's Calendar*.

Astronomical images and sketches of all types are invited for consideration for publication in the 2019 *Observer's Calendar* including: deep sky, solar system, 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. 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 web site, send me the link, but please also direct me to your 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 recent years.

Please email submissions to me at [snpgray \(at\) gmail \(dot\) com](mailto:snpgray@gmail.com). While I have a bottomless email box, it's best to send me jpegs first. If your image is selected, I will request a full resolution tiff version. Full resolution tiffs will be required for use in print. The deadline for submissions has been extended to 2018 April 30. If you have any questions, please don't hesitate to contact me at the above mentioned email address.

## **Graphic License Plate Project**

by [Peter Jedicke](#), London Centre

Society members who live in Ontario are probably familiar with the specialty license plates available from the province's Ministry of Transportation. You might have seen personalized plates, where the owner of a vehicle chooses a unique combination of characters from the alphabet or digits. Another popular option is the graphic plates, which have the logo of an organization or something similar like a university. It is also possible to order a personalized graphic plate, although those come with a maximum of six characters (instead of eight). An organization can choose how to sell these to their members or even to the public at large, and the organization receives a small royalty for each sale.

Would you pay to have the RASC crest on your vehicle's license plate? It would look something like the sample plate provided by the Ministry in this image. The cost would be \$83.40 for a graphic plate, and you would still have to pay for the actual vehicle license through the usual channels. Once you pay for a graphic plate, you get to keep it for as long as you want and won't have to pay the graphic plate fee again. Personalized graphic plates are also possible, but they cost \$337.65 and you have to confirm your choice with the Ministry directly.

If this interests you, reply to email address [ONTlicenceplate@rasc.ca](mailto:ONTlicenceplate@rasc.ca) and I will track the response. We need a minimum of 200 orders and you will have to pay

once we activate the project. The deadline will be August 1, and with sufficient interest, the graphic license plates would be ready a few months after that.



## Montreal Centre Upcoming Events

by [Carl Jorgensen](#), Secretary, Montreal Centre

Wednesday, April 4, 7:30 – 11:00 pm: Montreal Centre Members Arbo Clubhouse at the Morgan Arboretum , 150 Chemin des Pins, Sainte-Anne-de-Bellevue.

Saturday, April 7, 7:30 – 11:00 pm: Members Offsite Observing at Coopers Aviation, 1700 Chemin Ste Angélique, Saint-Lazare (weather Permitting).

Wednesday, April 11, 7:30 – 10:00 pm: Public Event “Talk, Text & Tunes – A Nightwatchman’s Journey” by David H Levy at John Abbott College P-204, 21275 Rue Lake-shore, Saint-Anne-de-Bellevue.

Saturday, April 14, 7:30 – 11:00 pm: Members Offsite Observing at Woody – Woods, 45 Rang Saint Antoine, Saint-Chrysostome (weather permitting).

Wednesday, April 18, 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, April 21, 7:30 – 11:00 pm: Public Event “Astronomy in Winter: The Winter Star Party” by Patrice Scattolin (from RASC/SRAC. Centre Français de

Montréal) at the Morgan Arboretum Conservation Center. Public observing afterwards (weather permitting).

Wednesday, April 25, 7:00 – 9:30 pm: Montreal Centre Library Clubhouse at the RASC Montreal Centre Isabel K Williamson Library (Rm H-355), John Abbott College, 21275 Rue Lakeshore, Sainte-Anne-de-Bellevue.

Saturday, April 28, 7:30 – 11:00 pm: Members Arbo Clubhouse at the Morgan Arboretum. Observing afterwards (weather Permitting).



# ALCON 2018

*July 11-14 Minneapolis-St. Paul*

Vendor and Attendee Registration is Open!  
**[alcon2018.astroleague.org](http://alcon2018.astroleague.org)**

HILTON MINNEAPOLIS/ST. PAUL AIRPORT - MALL OF AMERICA  
**952-854-2100** Ask for special ALCON 2018 rates

## *Tours & Field Trips*

Bell Museum & Planetarium,  
Great MAS Observatories,  
Star-B-Q and more!

## *Notable Speakers*

Dr. Pamela Gay, Dr. Phil  
Plait, Bob Berman, Bob  
King, many more

## 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 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](http://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](mailto:nationaloffice@rasc.ca)

Visit Us at: [www.rasc.ca](http://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