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David Garner, Editor

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

A PDF version of the *Bulletin* is available [here](#).

A Web-based version of the *Bulletin* is available [here](#).

► Editor's Notebook by David Garner

December's Sky

The winter solstice occurs Sunday, December 21st. Watch for the Geminid meteors to peak on the 14th, the lunar occultation of Uranus December 2nd and again on the 29th. Double shadow transits of Jupiter occur on the 9th, 12th, and the 16th. Venus and Mars appear low in the evening twilight; Jupiter rises mid-evening and Saturn reappears in the morning twilight. We have a full Moon on the 6th and a new Moon on the 22nd. For more details check the *2014 Observer's Handbook*. Don't forget to check out Gary Boyle's [Northern Skies](#).

► News @ RASC.ca

News from the Society Office

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

An electronic *Observer's Handbook*.

For the first time in its 107 years of publication, the *Observer's Handbook* is available in a downloadable version. Available to members only, it costs \$10 to download a copy of the Handbook to your computer or tablet.

To view the eBook you will need a special free PDF reader called Javelin, which is available from the site where you purchase the Handbook. Copies of the Handbook are available for mainstream Window PCs and Mac OSX computers (OSX 10.6 or later), and for iPADS (IOS6 and later) and Android devices (ideally OS4 and later).

You may order a copy here <http://www.rasc.ca/rasc-member-benefit-programs>.

Thanks to National President and Handbook Assistant Editor James Edgar for making this possible.

The February 2015 issue of the Journal

All members will receive a print version of the February 2015 issue of the Journal. It has been several years since the print version has been an option of membership. Since then, the Journal Editor Jay Anderson and Production Manager James Edgar have turned the Journal into an admirable and valuable publication. All members receive a link to an online version via email but we know not everyone reads it! There is valuable information in each Journal. We are hoping that all members will consider spending the \$21 (average cost) on a subscription to the print version of the Journal. A real bargain @ \$3.50 an issue! To order a print version of the Journal call the Society Office at 1-888-924-7272 during business hours.

Coverage of the Philae Landing

During the November Rosetta mission which included the landing of the small lander Philae on the comet 67P/Churyumov–Gerasimenko, several RASC members were busy helping out the media. Vice-Presidents Dr. Chris Gainor and Colin Haig were called upon for several interviews on national news programs as were Andrew Fazekas, Yvan Dutil, Alan Dyer, Don Hladiuk and Randy Attwood. (apologies if we missed anyone!)

Congratulations Dr. Gainor

Vice-President Dr. Chris Gainor has been selected to write the NASA History about the Hubble Space Telescope (HST).

It is a 3-year contract which includes producing an online archive of historical information on HST. The history will deal with the Hubble story from the time of its launch in 1990. The book will include many things, including Hubble's defective mirror and the repairs that overcame this problem, Hubble's revolutionary scientific findings, and the public response that caused NASA to overturn its decision against a final HST repair mission before the shuttle program ended.

Congratulations Chris!

Where will you be 2017 August 21?

The last time a total solar eclipse was visible from Canadian soil was in February 1979. The next one will be in just under ten years, in April 2024. Normally you have to fly half way around the world to see one of these wonderful events. Fortunately, we don't have to wait long for a total eclipse which can be reached by car.

On 2017 August 21, the shadow of the Moon will cross the continental USA. The last nationally organized expedition to observe an astronomical event was in July 1991 where 165 members flew to Baja California to observe a total solar eclipse. Plans are under way to run another national RASC eclipse expedition for the 2017 eclipse. Imagine observing this eclipse with several hundred fellow Rascals?

More information to come in early 2015 - we will be taking reservations by next spring. Stay tuned to the *Bulletin* for more details.

Fundraising Campaign 2015

In the New Year, the RASC will be running a major fund raising campaign to support various projects.

In the past, members have been generous with their donations to the Society.

These donations have funded several projects, such as:

- the printing of thousands of Star Finders for the International Year of Astronomy (IYA2009) and for public outreach every year since;
- the Moon Gazer's Guide, a one-page card featuring a Moon map, with descriptions of lunar phases and eclipses;
- the recent collaboration with the people at *SkyNews* magazine to create a pamphlet *Getting Started in Astronomy*. We printed 50,000 of these pamphlets for distribution at outreach events;
- to reimburse travel and accommodation under the Public Speaker Program, where Centres sponsor a speaker to come from out of town to speak on astronomical and related topics;
- the annual support of the Canada-Wide Science Fair by providing two prizes from the RASC as the Award for Excellence in Astronomy, one Intermediate award and another in the Junior category.

With your help, we plan the following in 2015:

- production of a 2017 eclipse poster and handbook;
- funds will be used to hire a consultant to produce educational materials and expand the NOVA Program (New Observers to Visual Astronomy);
- production and distribution of teacher support materials and lesson plans.

Please consider donating to the Society when you renew. And look for a request for donations in the mail in early 2015.

Christmas Gifts

What could be a more wonderful Christmas gift than the universe? Do you have a family member or friend who is a budding amateur astronomer? Why not give them a gift membership in the RASC?

Also consider the Supernova Value Pack of various RASC promotional items - RASC vintage t-shirt, RASC toque, colour RASC sticker and translucent RASC sticker seal, 2 starfinders and 2 moon gazer guides! Value of \$40 + for only \$29.

The Star Cluster Value Pack includes the Observer's Handbook 2015, 2 RASC toques and embroidered crests, 4 colour stickers, 4 starfinders and 4 moon gazer guides! Value of \$81 + for only \$59.



https://secure.rasc.ca/rasc/RASC/Store/Store_PROMO.aspx.

Office closure

The Society Office will be closed from 12:00 noon on Wednesday, December 24th to 8:00 am on Monday January 5th. The staff at the Society Office – Renata, Julia and Randy – wish everyone a great holiday and clear skies in 2015!

World Park Congress, Australia

by [Robert Dick](#), RASC LPAC

I represented the RASC at the World Park Congress in Sydney Australia for 12 days in November. The Congress brought together NGOs, governments, park managers, planners and academics from around the world. The near-final total registration was over 6,000 people. Some of the NGOs in attendance were the WWF, Conservation International, and various divisions of the International Union for the Conservation of Nature (IUCN) - the hosting organization. There were also many National Park Representatives from around the world and environmental organizations and for-profit companies.

We had two goals: to promote a policy that preserves the darkness of night in “Protected Areas” (A.K.A. parks and conservation areas), and to promote the adoption of the RASC Guidelines for Outdoor Lighting as a means to implement that policy.

Although the days were packed with 8 parallel streams of topics, most of these were at a high programmatic level and of limited use for our LPA Program. The value of attending the Congress was in meeting and speaking with the representatives of the attending organizations.

There were only two presentations about the impact of outdoor lighting. My presentation on how parks benefit from adopting “Dark Sky” practices and one by a colleague on the more profound cultural benefit of preserving the night. When the topic of outdoor lighting was raised with most organizations (except Parks Canada and the US Park Service), they were unaware of its detrimental effects.

I was speaking in the Healthy Parks – Healthy People Stream. Speakers only had 10 minutes for their presentations, so I took advantage of the additional option of presenting an E-Poster. Instead of printing and mounting it on a large vertical board, the E-Poster could be viewed on any of six large screens in the expansive display area of the Congress.

During the Congress, with the assistance of the Canadian Consulate in Sydney, I met off-line with a number of park officials from Parks Australia and the Australian State Parks who could not attend the Congress. This involved using the Consulate’s telephone and videoconference facilities, and the Consulate arranged for an insightful personal tour of the Royal National Park south of Sydney by a senior State Park Manager. I was able to point out and identify more lights than they thought existed in the Park, and we agreed that many of them were actually not needed.

I believe our attendance reached our goals of promoting the reduction of outdoor lighting in protected areas and in making our GOL available to many organizations with representatives at the Congress. We have asked that they be distributed to appropriate officials in their organizations.

After the Congress, I visited the Sydney Observatory and helped them review the new draft of the Sydney Outdoor Lighting Policy. You may recall that Sydney was the originating city for Earth Hour. I have supplied our Urban Star Park GOL to the Observatory so they can offer it as a guide for Urban Park lighting.

Non-stop “networking” is not an experience I would like to duplicate, and the follow-up emails and document dissemination will take a few more weeks. But I think it was time well spent.

I thank the RASC Board of Directors and the National Council for sponsoring my attendance at this meeting.



The image above shows a portion of the displays area at the World Park Congress in the Sydney Olympic Park in Australia. There were over 6,000 delegates in attendance. The WPC is sponsored by the IUCN (International Union for the Conservation of Nature) and is held each decade. The IUCN advises the United Nations and membership countries on environmental matters.

Nomination Deadline for RASC National Awards is December 31

by [Glenn Hawley](#), Awards Committee Chair

This is a friendly reminder that nominations for the 2015 awards are due by 2014 December 31. Summary information is below. More detail, including eligibility and nomination requirements for each award can be found at <http://www.rasc.ca/awards>. Click on the links to individual awards for full information. Not sure how to write a nomination? There are many examples of successful nominations on

the awards pages of the Web site. Think about the contributions of those hard working RASC members that you know and whom you believe qualify, and nominate them for an award.

Now is the time! Nominations are due on 2014 December 31.

RASC National Awards

The RASC sponsors several annual national awards that recognize achievement or service by our members. These awards include:

- The award of **Fellow of the RASC (FRASC)** acknowledges the work of long-serving members. It recognizes those outstanding members who have made extraordinary contributions to the Society over the long term, much of which service has been rendered at the national level.
- The **Chant Medal** is awarded, not more than once a year, to an amateur astronomer resident in Canada on the basis of the value of the work carried out in astronomy and closely allied fields, for original investigation, and specifically not for services to the Society, worthy though these may be.
- The **Ken Chilton Prize** is awarded annually to an amateur astronomer resident in Canada, in recognition of a significant piece of astronomical work carried out or published recently.
- The **Qilak Award** for Astronomy Outreach and Communication recognizes 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.
- The **Service Award** is given to members in recognition of outstanding service, rendered over an extended period of time, where such service has had a major impact on the work of the Society and/or of a Centre of the Society.
- The **Simon Newcomb Award** is intended to encourage members to write on the topic of astronomy for the Society or the general public, and to recognize the best published works through an annual award.

The deadline for nominations is 2014 December 31. Send your letters of nomination or questions about the awards program to awards@lists.rasc.ca

On a related note, the Awards Committee would like to find out what Centre awards are given out by the various Centres, either for service at the Centre level, for contributions to newsletters, for astro-imaging, or for whatever other worthy endeavour a Centre might wish to encourage.

Richard A. Jarrell Fund

by [R.A. Rosenfeld](#), RASC Archivist

Richard Jarrell was a long-time member of the RASC, and the architect of the prime narrative of our cumulative national achievement in astronomy. Naturally, the story of the RASC figures in his *The Cold Light of Dawn: A History of Canadian Astronomy* <http://articles.adsabs.harvard.edu/full/seri/JHA../0021/0000307.000.html>, as well as in his other astronomical research projects. Professor Jarrell took communicating, analysing, and debating the culture of science seriously. His commitment to the discourse of science in society was evident when he spoke at RASC Centre meetings, and in his teaching.

To acknowledge his multifaceted work, and continue his legacy in thinking about science in the widest possible context, York University has established the Richard A. Jarrell Scholarship Fund Supporting Undergraduate Students in Science and Technology Studies. Professor Jarrell was one of the key people behind the creation of York's newly established Department of Science and Technology Studies <http://ists.news.yorku.ca/about/>.

Any members wishing to make a donation can do so at: richardjarell.ca.

For more information on the Richard A. Jarrell Scholarship Fund Supporting Undergraduate Students in Science and Technology Studies, please contact: tmclagan@yorku.ca.

For an account of Prof. Jarrell's contributions to astronomy, see the August 2014 issue of the *Journal* <http://www.rasc.ca/jrasc/recent>.

➤ Bulletin Photo of the Month

IC1848 The Soul Nebula

by [Dan Meek](#), Calgary Centre



IC1848 is 7500 light-years from Earth in the constellation Cassiopeia. This is a 270 minute narrowband image taken with a NP127 telescope and QSI583wsg camera.

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. <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 Web site. Thanks to **Gary Boyle** for keeping us all in the know.



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