



The Royal Astronomical Society of Canada NATIONAL NEWSLETTER

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MARS AND SATURN WITH THE MILKY WAY, shot from Palo Duro Canyon, in the Texas Panhandle, near Amarillo. This 180-second exposure of the night sky was taken using a Nikon D810A 24-70mm f/2.8 lens at f/4 and 29mm, ISO 1000.

—Malcolm Park, Kingston Centre

EDITOR'S CORNER

The Importance of First Night Out

The other night, I was peering through my telescope with my neighbour. It was his first time looking through a telescope, and he seemed uncertain about what to expect. As we were searching for near-Earth asteroids, I just happened to mention that asteroid Bennu is considered a potentially dangerous near-Earth object that might crash into Earth some day. He looked at me somewhat incredulously and said, "How do you know that?"

"Well," I replied amused, "that's what I saw on a YouTube video. It could wipe us all out." Now my neighbour is somewhat of a "show me" rather than a "tell me" type person, and I could see that my comments were just not registering. He sat quietly staring through the eyepiece, turning the focus in and out. After a few minutes, he got up and started to leave. "Giving up already?" I asked.

"I'll be back," he grumbled, "when it gets closer. I want to go see that video." As I sat there by myself, I realized that I shouldn't scare them off before they get started. Maybe I'll invite my neighbour to a star party, where he can see that a lot of people are interested in the beauties of the night sky. Maybe I'll just start with the RASC Newsletter so that he can get a better idea of what we're all about.

—David Garner, Editor

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CONTRIBUTORS

David Garner, Editor

Janice McLean, Design

with contributions from:

Malcolm Park
Kingston Centre

David L. Clark and Peter Jedicke
Co-Chairs, GA2016/AstroCATS

Roland Dechesne
Chair, Membership and
Development Committee

James Edgar
Past President, RASC

Alan Whitman
Chair, RASC Observing
Committee

John Percy
Honorary President, RASC

CONTACT US

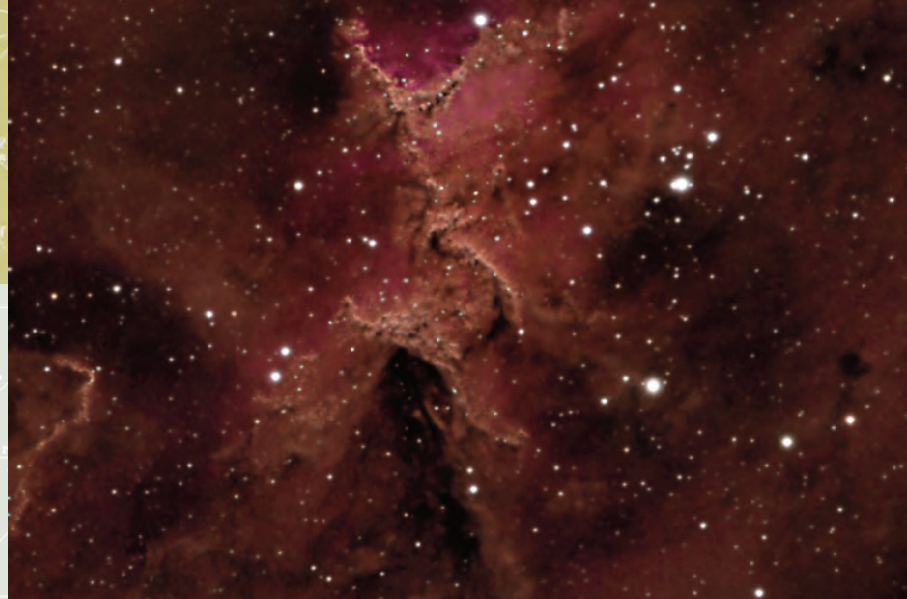
We invite all Centres to contribute articles about their latest activities. Have you had any public star parties, award ceremonies, special events or observatory activities? Photos are welcome. Please send articles and pictures to newsletter@rasc.ca.

PULL OUT NEWSLETTER TO VIEW SKYNEWS STAR CHART

GA2016/AstroCATS in London

It's the 21st century, and something's not real until it's posted on social media. RASC member Sharmin Chowdhury wrote: "My first RASC General Assembly was absolutely worthwhile. What an event it has been. I have enjoyed all the exhibits and presentations, as well as the conversations with fellow members from all over Canada. It was also interesting to attend the RASC's official meetings to observe how the Society's business is conducted."

That sums up the recent GA2016/AstroCATS event, hosted by the London Centre at Fanshawe College. For the first time ever, an RASC General Assembly was held in conjunction with the Canadian Astronomy Telescope Show, featuring vendors and exhibitors from across Ontario. GA2016/AstroCATS took place over the Victoria Day weekend, beginning on Thursday, May 19, with a Golf Outing and a Teachers' Workshop, as well as a public lecture about "Earth's Mini-Moons" by Niagara Centre member Robert Jedicke. On Friday, there was the obligatory meeting of National Council, along with two workshops—one on building paper models of spacecraft and the other on sketching astronomical targets—an open house at Fanshawe College's aviation technology facility and the traditional Welcome Reception. The reception (a.k.a. Wine & Cheese) was held in the beautiful, spacious atrium called Oasis at the Fanshawe College Student Centre. During the Welcome Reception, there was a sequence of five-minute presentations, in-



MELOTTE 15 This 7-hour narrowband image was taken using an 11-inch EdgeHD Schmidt-Cassegrain telescope with a QSI 583wsg CCD camera.

—Dan Meek, Calgary Centre

cluding a tongue-in-cheek tribute to RASC traditions by longtime Detroit-area member G.M. Ross.

Saturday's program was the most ambitious. There were eight lectures, beginning with an inspiring talk by Canadian Space Agency astronaut Jeremy Hansen. Jeremy was a total trooper, spending time visiting AstroCATS and dropping in on the hardworking volunteers at the registration desk. Further talks were given by Tina Pollman, Robert Jedicke, David H. Levy, Stan Metchev, *Astronomy* magazine contributing editor Erika Rix and Peter G. Brown, with the highlight being the Helen Sawyer Hogg Memorial Lecture by Ann Hornschemeier of NASA's Goddard Space Flight Center. Ann's topic was "All the X-Ray Binaries in the Universe." In the evening, three buses lumbered off the Fanshawe campus and made their way to the Fingal Observing Site, where the London Centre operates two observatories. A feast in the forest, called Pig Out Under the Stars, was set out. Outgoing RASC President James Edgar welcomed new RASC Fellows and paid tribute to President's Award Winner and *SkyNews* editor emeritus Terence Dickinson for his decades of service to astronomy in Canada. Terry is the most respected astronomy communicator this country has ever seen.

The RASC Annual General Meeting took place on Sunday morning, followed by the mercifully brief second National Council meeting. Then there were four more presentations, by Charles Ennis, Randall Rosen-

feld, Ron Macnaughton and Michael Watson, before the AstroCATS prize ceremony began. Another highlight was an outstanding display of meteorites by Phil McCausland and David Gregory. Alongside that was the Hubble Space Telescope artifact that was won from NASA by Halifax Centre members and Simon Newcomb Award winners Halley Davies and Martin Hellmich. After that came the traditional group photo and the Gala Banquet, also in the Oasis atrium. James Edgar presented the Isabel Williamson Lunar Observing Certificate to Ottawa Centre member Rick Wagner and introduced Service Award winners Paul Gray (Halifax Centre and New Brunswick Centre), Chris Teron (Ottawa Centre), Gary Bennett (Hamilton Centre) and Andy Blanchard (Hamilton Centre), as well as new RASC President Craig Levine.

On Monday, the final official day of the GA, those who stayed an extra day went to the Jet Aircraft Museum at London's airport complex to sit in a fully fuelled, ready-to-fly CT-133 and to view other static displays, including the last CF-101 Voodoo to fly.

It was all over too soon. Incoming Treasurer Susan Yeo wrote: "Thanks for a seamless and enjoyable event. As always, it was great to connect face-to-face with my fellow RASCals in such a nice venue." The joy of this 57th edition of the RASC General Assembly was on everyone's face, both the hosts and the guests. Onward to the Ottawa Centre in 2017!

—David L. Clark and Peter Jedicke
Co-Chairs, GA2016/AstroCATS

RASC NEWSLETTER



POTENTIAL ASTRONOMY OUTREACH EVENTS FOCUSED ON THE MOON

After the summer star party season has ended in Canada, the earlier onset of twilight in the fall provides ideal situations for public outreach events with reasonable hours for families. Classically, astronomy clubs select an evening near a first-quarter Moon to provide visual interest for guest observers of all abilities in a sky that is dark enough for some of the brighter deep-sky objects. One such opportunity is International Observe the Moon Night on October 8, promoted by the Lunar and Planetary Institute. This event has its own Twitter account (@observethemoon) and social media tag (#observethemoon). The website (www.lpi.usra.edu/observe_the_moon_night) has promotional and outreach materials.

But why not try a less traditional outreach situation? While many astronomers shun observing on full Moon nights, the public is fascinated by the bright orb of our nearest celestial neighbour. Take advantage of this with an event built around the Harvest Moon or the Hunter's Moon.

The full Moon closest to the autumn equinox is known as the Harvest Moon (this year, September 16), and the Hunter's Moon is the full Moon of the following lunation (October 15). A successful event for these full Moons requires a good view of the eastern horizon for moonrise and only modest optical equipment—a few small telescopes or binoculars mounted on tripods. Encourage guests to bring their own binoculars.

A session like this can be conducted in an hour or two and makes an ideal first outreach event to engage new RASC members who might have limited equipment. Discussions about the seasons, the times of moonrise as the Moon moves rapidly northward in the sky from night to night (a consequence of being opposite in the sky to the Sun, which is moving quickly southward) and the significance of the minimal span of twilight before moonrise will enlighten your guests. A crowd-pleaser is the so-called Moon illusion, when the Moon looks outlandishly

large near the horizon; bring a long cardboard tube to sight through to dispel this illusion.

Because these lunar events represent a process that takes a few days to fully appreciate, there is a two- to three-day window to host your event in case of inclement weather. However, a few clouds won't spoil the experience and may even enhance the spectacle. Be sure to point out Venus's Girdle, the grey and pink band in the eastern sky that represents the Earth's shadow on our atmosphere. When I do, I underscore that night does not "fall"—it rises.

The RASC has some excellent outreach materials for Moon-centric public events, like the *Moon Gazer's Guide/Guide D'Observation Lunaire* available for purchase, so make sure you are stocked up in advance. Additionally, a number of printable brochures regarding the Moon can be obtained through the Calgary Centre (<http://calgary.rasc.ca/downloads/index.htm>).

—Roland Dechesne, Chair
Membership and Development Committee

NEWS FROM THE BOARD

The General Assembly in London on the long weekend in May included a new experimental program that had an astronomy trade show—AstroCATS (the acronym for Canadian Astronomy Telescope Show)—operating alongside the usual activities of the GA. According to the organizers, particularly Andy Blanchard (Hamilton), it was a resounding success. Kudos to the planners and the GA Committee.

Also at the GA, the Board of Directors met on the Thursday evening for some routine matters and joined with the National Council on Friday for a great morning and early-afternoon brainstorming session directed toward a new Strategic Plan for the Society. The exercise was considered a huge success by all, leading to a more inclusive planning session in early September in Calgary, where the Board will meet with other volunteers and a professional facilitator to finalize a new Strategic Plan for 2017 to 2020.

Saturday at the GA usually doesn't include any Board or Council meetings, but this year, the Board of Directors met over the lunch hour to elect a new president. The rest of the

officers were appointed by acclamation. The executive now looks like this:

- President: Craig Levine (London)
- 1st Vice-President: Dr. Chris Gainor (Victoria)
- 2nd Vice-President: Robyn Foret (Calgary)
- Treasurer: Susan Yeo (Calgary)
- National Secretary: Charles Ennis (Sunshine Coast)
- Director: Dr. Randy Boddam (Belleville)
- Director: James Edgar (Regina)
- Director: Colin Haig (Hamilton)
- Director: Heather Laird (Calgary)
- Executive Director*: Randy Attwood (ex officio)

*non-voting

This newly elected Board is poised to take on new challenges, continue ongoing activities and serve you, the Society members, the best way it can.

—James Edgar, Past President, RASC



RASC NEWSLETTER

A Clarification: Descriptions Are Required for Messier and Finest NGC Observing Certificates

The RASC national website always stated that detailed written observations or sketches were expected in order to obtain the Messier and Finest NGC observing certificates, and the observing forms supplied included a space for your written notes and sketches. But one line on the old application form required that there be a “logbook or record of observations giving the date and time and the instrument used for each of the 110 Messier objects.”

Somehow, the false notion took hold among a minority of people that only the date, time and instrument used were required. These three simple things do not constitute an observing record, and the sentence has now been amended to include “and a detailed description or sketch for each” Messier or Finest NGC.

I recognize that some people may be nearly finished their Messier list and, on the advice of a senior member of their Centre, may have recorded just the date, time and instrument used. So Messier applications that provide only that limited information will be accepted until December 31, except that Messier observations made after you receive this Newsletter must include a detailed written description or a sketch for each object, made at medium to high power. The clarified rules apply to Finest NGC applications immediately, because the more experienced observers who are working on that list must surely know what constitutes an astronomical observation.

Requiring a description or a sketch is not a change in the rules—it is simply clarifying a requirement that was always expected. Indeed, most members currently include detailed descriptions or sketches with their applications.



A description of a Messier galaxy with a typical 8-inch telescope might be something like: “elongated 3:1, gradually brightening in the middle with a faint nucleus.” A description of an open star cluster should indicate how well it stands out from the surrounding star field, where double or coloured stars are located and the general form of the cluster, which might be round,

triangular, rectangular or in several discrete clumps of stars. It should also state approximately how many cluster members your telescope reveals at an appropriate power.

Messiers will reward repeat visits whenever you have a chance to observe one under superior dark skies or with a large aperture. Enough detail is visible in the finest of these splendours to fill an entire observing article devoted to a single Messier object. So don't be in a rush to plow through the list as you would on a Messier Marathon.

—Alan Whitman, Chair
RASC Observing Committee

The More Things Change...

The more things change, the more they stay the same. I joined the RASC in 1961 and soon became active nationally. The National Council grappled with fundamental questions: Could the RASC serve both professionals and amateurs? Could it be truly bilingual? Could it balance between national, Centre and individual activities? How could we give members value for money? Was Toronto the centre of the (RASC) universe? And the eternal question: What was the role of the *Journal*?

The first question was alleviated by the formation of the professional Canadian Astronomical Society (CASCA), the second by an effective, respectful partnership with Fédération des Astronomes Amateur du Québec (FAAQ), thanks especially to International Year of Astronomy 2009. To address the other questions, the Committee on Coordination of Centre Activities (COCOCA), with me as Chair, created the National Newsletter (NNL) in February 1970 as a “green pages” insert to the *Journal*, a forum “to which all can contribute, and from which all can benefit.” As the *Journal* (and the Internet) evolved, the NNL morphed into the Bulletin, but its need is still there. I'm delighted to see the NNL's return, and I wish the editors success and lots of contributions.

On May 20 at the 2016 GA, I attended a National Council meeting and strategy session—very ably run by Denis Grey—at which many of the same old questions were examined: relations with CASCA and FAAQ, serving the public and the Centres and the individual members and doing so while being fiscally responsible. I was impressed by the energy and effectiveness of the RASC leadership, by the reports of committees that reflected action, not talk, and by the informal reports from Centres that demonstrated a high level of creativity, partnership, service and volunteership across the country. Centres and members, keep up the good work, and share it through the NNL!

—John Percy, Honorary President, RASC