



**THE ROYAL ASTRONOMICAL
SOCIETY OF CANADA**
**LA SOCIÉTÉ ROYALE
D'ASTRONOMIE DU CANADA**

2024

**Annual Report
Rapport Annuel**

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Royal Astronomical Society of Canada – as of April 2025

RASC Web Site	rasc.ca
RASC eStore	secure.rasc.ca/RASC/Store/StoreMain.aspx
National Office	203-489 College Street, Toronto ON M6G 1A5, Canada
Phone	416-924-7973
Email	nationaloffice@rasc.ca
Executive Director	Jenna Hinds
Finance and Office Manager	Nawed Asif
Membership and Publications Coordinator	Michelle Bass
Communications Coordinator	Reem Khalifeh

Officers

President	Michael Watson	Michael.Watson@gowlingwlg.com
1st Vice-President	Brendon Roy	novationheart@hotmail.com
2nd Vice-President	Betty Robinson	brstyp@rogers.com
National Secretary	Eric Briggs	ebriggs733@gmail.com
Treasurer	Vacant	
Director	Viktor Zsohar	zsohar@gmail.com
	Katherine Dulong	katherine.dulong@gmail.com
	Randy Attwood	attwood@rasc.ca
	Dennis Lyons	dennis.lyons.3@gmail.com
Past President	Charles Ennis	cuhulain@telus.net

Editors

Journal Editor	Nicole Mortillaro	editor@rasc.ca
Observer's Handbook Editor	James Edgar	james@jamesedgar.ca
Observer's Calendar Editor	Chris Beckett	calendareditor@rasc.ca

2024 Committees

Astroimaging	Kimberly Sibbald
Awards	Charles Ennis
Constitution	Brendon Roy
Editorial Board	Chris Gainor
Education and Public Outreach	Karim Jaffer
Finance	Vacant
History	Randall Rosenfeld
Inclusivity and Diversity	Charles Ennis
Information Technology	Vacant
Light-Pollution Abatement	Bob King
NextGen	Ivan Tockovski
Nominating	Betty Robinson
Observing	Emma MacPhee

Annual Meeting 2025—Agenda

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA



203-489 College Street, Toronto ON M6G 1A5
Phone 416-924-7973
mempub@rasc.ca

Annual Meeting 2025

The Annual Meeting of members will be held on Sunday, June
22, 2025 at 13:00 EDT (10:00 PDT) by Teleconference.

Agenda

1. Call to Order - Approval of the Agenda (13:00 EDT)

2. Approval of Minutes of the 2024 Annual General Meeting (13:05 EDT)

Published in the on-line version 2024 Annual Report, and located on the members-only section
on the website (www.rasc.ca/agm-2024)

3. Report of the President (13:10 EDT)

4. Report of the Executive Director (13:25 EDT)

5. Report of Officers (13:35 EDT)

National Secretary/Recorder (Eric Briggs)
Financial (Michael Watson, Jenna Hinds)

6. Presentation and Approval of Audited 2024 Financial Statements (13:45 EDT)

7. Reports of National Council and Permanent Committees (14:00 EDT)

National Council (Judy Black)	Inclusivity and Diversity (Charles Ennis)
Astroimaging (Kimberly Sibbald)	Information Technology (Vacant)
Awards (Charles Ennis)	Light-Pollution Abatement (Bob King)
Education (Karim Jaffer)	NextGen (Ivan Tockovski)
Editorial Board (Chris Gainor)	Observing (Emma MacPhee)
History (Randall Rosenfeld)	

8. Reports of Other Committees (14:45 EDT)

Dorner Telescope Museum (Randall Rosenfeld)

9. Election of Directors (14:55 EDT)

10. Approval of By-Law Amendments (15:15 EDT)

11. Election of Auditor; Proposed: Fruitman Kates LLP (15:30 EDT)

12. Other Business (15:40 EDT)

13. Adjournment (16:00 EDT)

RASC 2024 Annual Meeting Minutes (draft for approval)

The Royal Astronomical Society of Canada
La Société royale d'astronomie du Canada
Minutes of the Annual Meeting, Sunday, June 23rd at 10:00 PDT.

1. Call to Order

Michael Watson, in the chair, called the meeting to order at 13:04 EDT. He welcomed all members to the meeting.

Mr. Watson presented a territorial acknowledgement. He referred to Mr. Ennis's Land Acknowledgement at the 2023 AGM. He invited members to make their own land acknowledgement based on where they were located, and said:

"The RASC acknowledges that the Head Office of the Society, which is located in the City of Toronto, a dozen kilometres or so from where I am sitting and located right now, is on the traditional territory of many Indigenous nations including the Mississaugas of the Credit, the Anahishaneg chippewa haudenoshaunee and the Wendat people, and is now home to many diverse First Nations and Inuit and Métis peoples as well. We also acknowledge that Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit and the Williams Treaty signed with multiple Mississaugas and Chippewa bands."

Mr. Watson asked members to include with their onscreen names the Centres they were associated with. Ms. Hinds described how the webinar would be run and the rules of the webinar.

Mr. Watson introduced the members of the Society's Board of Directors:

- Michael Watson, President
- Brendon Roy, 1st Vice-President

- Betty Robinson, 2nd Vice-President
- Stuart Heggie, Treasurer
- Eric Briggs, Secretary
- Randy Attwood, Director
- Andrew Bennett, Director
- Katherine Dulong, Director
- Viktor Zsohar, Director

Mr. Watson proposed adding the Executive Director's Report to the draft agenda published in the Annual Report 2023, after the Treasurer's Report and the approval of the annual audited financial statements.

(MOTION AGM2024-1:Lyons/Black) To adopt the agenda as published, with the addition proposed by Mr. Watson. Carried.

Mr. Watson apologized for not asking for discussion of the motion, but because no votes on the poll opposed the motion, he proceeded with the meeting without objection. He said that under Agenda Item #8 for the Election of Directors, because he was standing for re-election, he proposed that Mr. Roy, whose term of office was continuing, move into the chair for that item.

2. Approval of Minutes of the 2023 AGM

Mr. Watson thanked Mr. Briggs for preparing the draft minutes of the previous year's AGM. He had replied to the National Council list with suggested edits to the draft minutes. Mr. Briggs recommended that the suggested edits be folded back into the Annual Report 2023 instead of carried forward into next year's document.

(MOTION AGM2024-2:Ennis/Hurley) To approve the minutes, subject to minor revisions for clarity, of the Annual Meeting 2023 as published in the Annual Report 2023. Carried.

3. Report of the President

Mr. Watson referred to his previously circulated written report, included in the Annual Report. He spoke in more detail about the state of RASC finances, further to the discussion of this by attendees at the 2023 AGM. He said the Board had consulted with National Council extensively over the past year, and made it a practice at the Board level not to approve significant measures without first consulting National Council and getting feedback. He thanked Ms. Black in her role as National Council Chair and others at National Council for their support and guidance over the past year. He said that the Board reviews the Financial Statements at every Board meeting, on a monthly basis, and shared them with National Council whether or not the Council met in a given month. He briefly described

the winding up of SkyNews Magazine, the Robotic Telescope and the reduction of National Office staff. Mr. Watson thanked Mr. Attwood and Ms. Hinds for their work as Executive Directors consecutively. He thanked Nawed Asif for his work as Office and Finance Manager, and Renée Drummond as outgoing Membership and Publications Co-ordinator. He briefly described the Board meeting schedule. He described how the Board had cut expenses while maintaining the Society's essential functions. He described the upcoming \$10 fee increase would keep pace with the Consumer Price Index (CPI.) He referred to considerable donations received during the year. He said the start of the next budget process was being moved to earlier in the year.

4. Reports of the Officers

Secretary's Report

Mr. Briggs referred to the previously circulated written report in the Annual Report 2023. He said that there had been no policy changes or By-law amendments during the previous year. He sent a link to the RASC Policy Manual to the chat window for the meeting, and briefly described policy changes expected to take effect in the next year, specifically Policy C11 National Council Terms of Reference.

He offered condolences to the families of the following members who passed away during the reporting period:

- Ken Allen (Calgary Centre)
- Dr. Nicholas David (Calgary Centre)
- Philip Johnson (Calgary Centre)
- David Lane (Halifax Centre, National President 2008-2010)
- Tom Glinos (London Centre)
- Stephen B. Sharpe (London Centre)
- Harold Tutt (London Centre)
- Terry Hardman (Mississauga Centre)
- Andrew Motyliwski (Mississauga Centre)
- Roy Swanson (Mississauga Centre)
- Geoffrey Cockhill (Ottawa Centre)
- Gerald Gruber (Ottawa Centre)
- Lathif Masood (Ottawa Centre)
- Allan Reddoch (Ottawa Centre)
- Phil Holloway (Regina Centre)
- Merlyn Melby (Saskatoon Centre)
- Florence McNealy (St. John's Centre)

- Dr. John Lewis (St. John's Centre)
- Geoff Brown (Toronto Centre)
- Blake Nancarrow (London and Toronto Centres)
- Guy Nason (Toronto Centre)
- Gordon Skerratt (Toronto Centre)
- Ted Gervais (Windsor Centre)
- Dave Parton (Windsor Centre)
- Anthony Gucciardo (Yukon Centre)

Mr. Briggs suggested that because some members of the RASC had passed away after the end of the reporting period, and would be remembered at the Annual Meeting 2024, members may wish to remember those members in the chat window for the time being, and asked for a moment of silence to remember our friends.

Treasurer's Report

Mr. Watson introduced Mr. Heggie, who had stepped into the role of Treasurer partway through the year after being elected a Director to the Board at the 2023 AGM.

Mr. Heggie introduced himself. He reviewed his previously circulated written Treasurer's report, and reminded the attendees of the adage that "you can't cost-cut your way to prosperity." He said Ms. Hinds and Mr. Asif had done Pareto Analysis (named for Italian economist Vilfredo Pareto) of the financial instruments to identify the key things that make the difference between being above and being under water. Ms. Hinds and Mr. Watson thanked Mr. Heggie for his report.

Executive Director's Report

Ms. Hinds thanked Mr. Watson and Mr. Heggie for their support and engagement compared to her past experience with not-for-profit boards. She also thanked the volunteers outside of the Board for their time. Apart from her previously circulated written report, she spoke in more detail about the Society's finances.

She spoke in detail about the Society's top seven expense items over the past three years, in decreasing order of dollar amount:

- Office salaries
- Corporate and financial services
- Freight and postage paid
- Membership services
- Building expenses
- Other expenses
- Journal expenses

She said that the price of the printed and mailed edition of the RASC Journal, not the electronic Journal, would be increased in July from \$30 to \$70, because the cost of each printed copy exceeds the fee to cover the cost of printing and mailing.

She spoke in detail about the Society's top seven revenue items over the past three years, in decreasing order of dollar amount:

- Grants and donations
- Membership fees
- Observer's Handbook revenue
- Miscellaneous income
- Journal revenue
- Investment income
- Freight and handling

Ms. Hinds responded to a question from Morrie Portnoff (Montreal Centre) about the reprinting of Moon Finders: the Society had not recently reprinted these items, and future print runs would depend on demand.

Tom Sobocan (Windsor Centre) thanked Mr. Watson for his recent visit to a Windsor Centre meeting and a discussion of core services.

Ms. Hinds briefly responded to a chat question from Arnold Brody (Toronto Centre) asking if the eStore was a good revenue stream, by saying that it was not a big revenue stream.

5. Presentation and Approval of the Audited 2023 Financial Statements

Mr. Heggie presented the Review of the 2023 Audited Financial Statements, published in the Annual Report 2023, including the cover letter from the Society's auditor, Tinkham LLP. The Changes in Net Assets was \$1,689,184 vs. \$987,557 in 2022. Growth in revenue was up over 2022 but entirely due to donations. Expenses were down substantially. Earnings were \$255,027 vs. a loss of \$982,952 in 2022. Mr. Watson pointed out that in the aftermath of discussion at the 2023 AGM of the possibility of having to liquidate some assets, that was not necessary and did not happen in the ensuing year.

Mr. Watson responded to a question in the chat from Greg Beaton (Montreal Centre) about why fees would be raised, given the positive financial report. He

reminded members that the surplus of \$200,000 was due to the receipt of a one-time \$400,000 donation, during a year when the expected outcome was for a small deficit in a year of recovery after a large deficit. Tom Sobocan asked what RASC membership fees should be to cover costs. Mr. Watson replied that the fees should probably be 50% higher than they are at present in order to cover the Society's expenses.

(MOTION AGM2024-3:Heggie/Hurley) that the audited financial statements be approved as presented in the Annual Report. Carried.

John Hurley (Kingston Centre) asked for a roll call. Mr. Watson said 98 members were in attendance.

6. Reports of National Council and Permanent Committees

National Council

Judy Black, National Council Chair (Halifax Centre), thanked Jim Fairles and Eric Klaszus for their work as outgoing Vice-Chair and Council Recorder, respectively. She said the National Council Terms of Reference had been forwarded to the Board for approval in the autumn of 2023. She directed members to refer to the Centre Operations Manual (<https://rasc.ca/centreopsmanual>) and thanked Lauri Roche (Victoria Centre) for her work on that. She thanked Randy Attwood and Victoria Kramkowski for the 2024 Eclipse Team work. She spoke about how the Board and National Council had collaborated during the year and thanked National Councillors for their work.

Astro-Imaging Certificate Committee

Kimberly Sibbald was not present, but Mr. Heggie spoke briefly, thanking the committee members.

Awards

Charles Ennis (Sunshine Coast Centre) encouraged the membership to make nominations for the Society's awards before December 31st. Mr. Watson said the awards for the past year were announced at the General Assembly on the weekend of May 4th.

Constitution Committee

Brendon Roy (Thunder Bay Centre) had no report because there had been no amendments proposed to the Society's By-law.

Education and Public Outreach Committee

Lauri Roche spoke about how the committee was starting to make new resources and develop activities, such as printing, after a year of austerity. She asked if the committee could be added to the agenda of any Strategic Planning exercise during the coming year.

Arnold Brody (Toronto Centre) asked about the lack of outreach materials for use at star parties, schools and cubs and scout meetings. He said that those items were available for purchase from the eStore and asked if the price of them covered the cost. Ms. Hinds said that it only just covered the cost.

Ron Macnaughton (Toronto Centre) thanked Ms. Roche for her work on the committee. He said the Education Committee activities were all charitable and would be counted toward the Society's charitable activities, specifically printed educational materials, which would be all to the good. Mr. Watson said the current financial situation was only 18 months old and the budget did not include committee or travel expenses as a part of that fiscal conservatism. He said it may be possible to exhale a little during the next year and use some of the

Northcott Fund for new activities.

Mr. Watson called for a 5-minute recess.

Editorial Board

Dr. Chris Gainor (Victoria Centre) referred to the previously circulated written committee report, and spoke briefly about succession planning for the editors who work on the publications. He briefly described the planned biography of Helen Sawyer Hogg by Dr. Maria Cahill. He said that changing paper publications to e-pubs had been tried but generally did not work.

Jay Anderson (Winnipeg Centre, and past RASC Journal Editor) said in the chat that the quality of the JRASC paper was excellent and asked if it could be changed for a cost saving. Ms. Hinds and Mr. Watson said that would be considered.

History Committee

Randall Rosenfeld was not present, and Mr. Watson referred the membership to the previously circulated written report in the Annual Report.

Inclusivity and Diversity Committee

Mr. Ennis said that the committee had presented at the General Assembly about making Centre facilities more accessible, and that the Sunshine Coast Centre participated in Pride events for the first time and received a very positive response.

Information Technology Committee

Ms. Hinds spoke for Walter MacDonald, who had stepped back from chairing the committee. She thanked Mark Kaye and others for their activities. She responded to a question from Erin Campbell (Regina Centre) whether the RASC website would be updated from Drupal 7. Ms. Hinds said that any parts of the website concerning membership login, or public-facing, would be updated to a WordPress site for security reasons, and archival materials would be left on the Drupal site.

Light Pollution Abatement Committee

Bob King (Calgary Centre) thanked Victoria Kramkowski, Andrea Girones and Lauren Knowles for their past work with the committee. He described the committee report written in the Annual Report. He mentioned the new Johns Family Nature Conservancy Nocturnal Preserve near Kelowna. He reported on the decertification of the McDonald Park Dark Sky Preserve near Abbotsford, BC. He also described the collaboration with the University of Calgary and RASC Calgary Centre on the presentation of the 8th international Artificial Light at Night conference. He described a conversation not in the written report between himself and John

Barentine of Dark Sky International, about the former International Dark Sky Association shifting towards responsible lighting ideas like those held by the RASC years before.

NextGen Committee

Ivan Tockovski was not present, but Ms. Hinds drew attention to the written committee report.

Nominations Committee

Mr. Watson described how the Board had decided that the Nominations Committee would consist of all members of the Board, operating as a Committee of the Whole.

Observing Committee

Emma MacPhee was not present, but Ms. Hinds drew attention to the written committee report, and thanked members who were in the process of completing the Society's observing projects. She expressed regret for the loss of Blake Nancarrow, and noted that Mr. Nancarrow had objected to naming observing lists after people, including himself.

Dorner Telescope Museum

Mr. Watson said Mr. Rosenfeld, the Director of the Museum, was not present.

7. Reports of Other Committees

Dorner Telescope Museum

Mr. Watson said Mr. Rosenfeld, the Director of the Museum, was not present.

Solar Eclipse Committee

Victoria Kramkowski reported on the committee's collaboration with members of all RASC Centres. This committee did not contribute a written report to the Annual Report. She described collaboration with the Fédération des Astronomes Amateurs du Québec (FAAQ), the American Astronomical Society Eclipse Committee, the Ontario Eclipse Taskforce,

the Ontario Provincial Emergency Management Eclipse Working Group and the Niagara Region Eclipse Emergency Management Working Group, and the Buffalo and Rochester, NY, Eclipse Working Groups, and Discover the Universe/Découvert l'Univers. She said that she and Mr. Attwood were soliciting Centres to report their Eclipse 2024 activities with the hope of publishing those reports in an appropriate way.

Mr. Watson asked for an additional poll to ask members if they observed the solar corona on April 8th. 62% of respondents responded in the affirmative.

8. Election of Directors

(MOTION AGM2024-4:Zsohar/Robinson) that Brendon Roy be appointed as chair of the meeting for the Election of Directors portion of the meeting. Carried.

Mr. Roy described the election process. The three candidates for election were Randy Attwood, Betty Robinson and Michael Watson. Mr. Roy asked for

any members who were interested in running for a position on the Board to volunteer. No nominations being received, and because the number of candidates was equal to the number of positions available, the three candidates were acclaimed. Mr. Roy thanked the candidates for their service and returned the chair to Mr. Watson.

9. Appointment of the Auditor

(MOTION AGM2024-05:Heggie/Tim Bennett)
That Tinkham LLP be re-elected as auditor for the forthcoming year. Carried.

10. Other Business

Dennis Lyons (Winnipeg Centre) asked in the chat after an item from the 2023 AGM asking the Finance Committee to review the choice of auditor. Mr. Heggie said that had not happened since he had started as Treasurer, and he suggested deferring the matter until the Finance Committee was ready to assess this.

Mr. Watson spoke briefly about how the revenue and expense portions of the monthly financial statements that the Board reviewed include the gains and losses in value of the Society's investments, even though such gains and losses affect the Society's cash position, and are properly a balance sheet item. He said that he expected this to be dealt with

and changed in consultation with the auditor in the coming year. He stated his view that it was a good idea to retain Tinkham LLP during that process.

Lauri Roche asked what the next steps were for the Board to get people in new positions in committees. Mr. Watson responded briefly. Mr. Attwood said plans were in work to bring new blood onto committees and to formalize the process of commissioning the committees for the coming year.

Dennis Lyons thanked the Board for their work, and especially Ms. Hinds.

(MOTION AGM2024-05:Watson/Gary Fairfoul) that the Society express its great gratitude to the Executive Director for all of the efforts that she has put into the Society in the past year. Carried unanimously.

11. Adjournment

(MOTION AGM2024-6:Attwood/Lyons) to adjourn the meeting. Carried.

The meeting was adjourned at 15:31 EDT.

Respectfully Submitted,

Eric Briggs

Secretary

President's Report

This is my second and last annual report to members of the Society before I turn the Presidency over to another member of the Board of Directors. Because of my impression that many members may skip by the President's column near the front of the Society's Journal in order to get to the much more interesting articles, in this report I am going to reproduce some things that I have written in my Journal columns over the last year.

To begin: Looking back at last year's Annual Report, for the year 2023, I vividly remember the serious financial situation in which we found ourselves at the end of 2022, and the urgent steps that we undertook in 2023 to return the Society to a more stable financial position.

The year 2024 saw a continuation of our efforts to contain costs and run an efficient head office. The number of head office staff has held steady at three full-time employees, under the extremely capable leadership of Executive Director Jenna Hinds. The Board of Directors continues to review the most recent financial statements at the beginning of every monthly Board meeting, in an effort to ensure that we identify any trends in the Society's ongoing financial performance that require attention and action. We also report on the Society's current financial condition at every meeting of the National Council (NC) so that the NC Representatives, and through them their Centres and their membership, are kept current on RASC finances.

As the audited financial statements that are included a little later in the Annual Report show, these efforts have resulted in the Society's revenues and expenses being almost equal in 2024 – actually, a small surplus on operations of about 1% of revenues. The \$277,000 surplus from the previous year (2023) that is shown in the statements was, of course, the result of a one-time donation of \$451,853 received in October 2023. This makes a comparison of the surpluses in 2023 and 2024 not very meaningful.

Last year I wrote about the difficulty in finding a suitably experienced, skilled and willing member of the Society to fill the position of Treasurer. This is part of a larger challenge that we face in finding suitable candidates to stand for election as directors of the Society. As provided for in the Society's By-Law, every year the terms of three of the nine directors expire, and candidates must be found to be elected to those positions at the annual meeting. There are undoubtedly several reasons for the difficulty in finding candidates, but two occur to me: First, members who have sufficient knowledge of the operations of the Society to make good directors are usually very active in their Centres, where they fill various positions and are kept busy with Centre

work. They often feel, with some real justification, that they have insufficient time to devote to helping run the national Society as well. Second, and related, is the time commitment. While helping to run a Centre may well be more time-consuming than being a director of the RASC, the fact remains that an RASC director is in office for a (renewable) three-year term. The Board meets every month for an hour and a half (with two of the meetings being day-long on a Saturday, in October and March), and directors have to read and absorb reports from head office, review and comment on monthly financial statements, and act as liaisons to the Society's various committees. Either four or five of the nine directors are also elected by the Board to act as officers, which entails additional time.

Nonetheless, I can say without hesitation two things: First, serving at the national level on the Board is one of the most rewarding things that I have had the privilege of doing done in my 55 years as a member of the RASC. Second, the opportunity to work with talented and enthusiastic directors from across the country makes the work more than worthwhile.

Moving on: RASC members sometimes ask what benefits they receive for their membership fees, apart from the fellowship with like-minded astronomers and the meetings that they are able to attend at their Centres. The following is a partial list of these benefits, which sometimes we take for granted and forget when it comes time to renew our memberships:

- The annual *Observer's Handbook* and bi-monthly *Journal of the RASC* in digital form (printed copies available by subscription), and Centre bulk pricing for the *Observer's Calendar*
- The annual two-day weekend General Assembly, featuring well-known speakers from around North America, talks by Society members from across Canada, and presentation of the Society's awards
- Insurance for RASC outreach events
- Certification for observing, astro-imaging, and laser pointer usage, and laser pointing training (avoiding the necessity of completing Transport Canada forms with for each Society event)
- Archives, both digital and in person by appointment at head office
- Weekly newsletter and monthly bulletin, allowing Centres to share information across the Society sharing nation-wide astronomy events, including online Centre meetings that are open to non-Centre members
- Outreach support, such as printed outreach materials and the NOVA program

- Nation-wide volunteer support through NC, the Presidents' list, and office staff
- Zoom accounts for Centre meetings and events, including webinar capability, saving Centres a good deal of money
- Online discussion forums
- Member support from head office staff during working hours, for password and technical support, membership renewal, directing monetary and in-kind donations, and answering a broad array of questions that members pose to head office
- Centre financial management assistance for donations and membership fees
- Management of membership and donor database, including updating member information, cleaning duplicate entries, managing add-ons, fixing errors and working with database software company

I can't finish without speaking about the NC, to which I devoted my April 2025 *Journal* column. The NC acts as an advisory body to the national Board of Directors and lends significant support to the

Centres, and in 2024 it continued to be instrumental in the running of the Society, under the leadership of Chair Judy Black. Among other endeavours, the NC drafted and in consultation with the national Board completed a new policy titled "National Council Terms of Reference", which has now been approved.

The NC fulfills an important and possibly underappreciated role in the RASC, and deserves the membership's attention and gratitude. Centres and their members can get the most out of the NC by ensuring that their National Council Representatives provide regular detailed reports on NC activities at Centre meetings and through Centre newsletters. That is one of the best ways to keep abreast of what is happening in the Society.

I want to end my term as President by saying that it has been a honour, a privilege and a real pleasure to get to know so many dedicated volunteers in the Centres and on the both National Council and the Board of Directors, and to work with them for the betterment of the astronomy club that we all love.

Quo Ducit Urania,

Michael Watson, FRASC
President

Secretary's Report

During the year starting with the 2024 Annual Meeting on June 23rd, by the time of writing there have been 5 National Council meetings with 1 more scheduled, and 10 Board meetings with 1 more scheduled.

The following policy changes or by-law amendments have been made since June 23rd, 2024:

On October 26th, the Policy Manual was updated by Board motion BOD24-08-04: Revised G3 (Schedule of Membership Fees), G4 (Membership Benefits), G7 (General Assembly), G8 (Annual General Meetings of the Society), G10 (Editors' Leadership Roles and Responsibilities), G11 (Financial Management), G12 (Liability Insurance), G13 (Society Discussion Lists and Social Media), G19 (Travel Policy - General). Removed G21 (National Council Travel Policy) and C13 (Fundraising Committee).

On October 26th, By-Law #1, Article 4, Section 3.3, was amended by the Board: "All members shall be notified in writing at least 60 days before their membership renewal dates. Members who do not pay the required fee and renew their memberships by their membership renewal dates shall automatically cease to be members of the Society."

On January 29th, By-Law #1 was amended by the Board:

Replace "annual general meeting" and "AGM" with "annual meeting" and "AM" throughout the By-Law.

Replace "1st Vice-President" and "2nd Vice-President" with "First Vice-President" and "Second Vice-President" throughout the By-Law.

By-law amendments take effect upon Board approval but require ratification by a special majority at the next annual meeting of the membership.

We offer condolences to the families of the following members who have passed away:

- Prof. Ian Affleck (UBC)
- Fred Barrett (Kingston Centre)
- Dr. Alan H. Batten (Victoria Centre, National President, 1972-74)
- Sam Casoria (Sunshine Coast Centre)
- Mark Clitsome (Ottawa Centre)
- Dr. David L. Crawford (Honorary Member)
- Attila Danko (Ottawa Centre)
- Michael P. Edwards (Halifax Centre)
- Kent Goranson (Ottawa Centre)
- Dr. Rick Goulding (St. John's Centre)
- Terry Hicks (Kingston Centre)
- Dr. John Hutchings (Herzberg Astronomy and Astrophysics Research Centre)
- Lee Johnson (Vancouver Centre)

- Dr. Clifford Levi (Winnipeg Centre)
- Bruce McCurdy (Edmonton Centre)
- Roger Taguchi (Ottawa Centre)
- Stephen Tancock (Halifax Centre)
- Stephen J. Wilton
- Bruce Engels (Efstonscience)

Eric Briggs
National Secretary

Membership statistics as at December 31 2024

Centre	Membership
Belleville Centre	33
Calgary Centre	547
Centre francophone de Montreal	19
Edmonton Centre	259
Fraser Valley Centre	22
Halifax Centre	154
Hamilton Centre	149
Kingston Centre	68
Kitchener-Waterloo Centre	183
London Centre	85
Mississauga Centre	229
Montreal Centre	151
National	300
New Brunswick Centre	74
Niagara Centre	73
Okanagan Centre	85
Ottawa Centre	440
Prince George Centre	50
Regina Centre	75
Sarnia Centre	11
Saskatoon Centre	59
St. John's Centre	70
Sudbury Centre	34
Sunshine Coast Centre	50
Thunder Bay Centre	26
Toronto Centre	605
Vancouver Centre	195
Victoria Centre	224
Windsor Centre	91
Winnipeg Centre	256
Yukon Centre	33

Membership by type

Type	Number	% of Total
Regular	3933	84.4%
Life	268	5.7%
Youth	449	9.6%
Honorary	(12)	2.6%

Membership by country

Country	Number	% of Total
Canada	4458	95.9%
US	156	3.3%
Other	36	0.8%

In addition to our Canadian and American members, the RASC has members from Australia, Belgium, Brazil, Chile, Colombia, Cuba, Germany, Greece, Hong Kong, India, Iran, Italy, Japan, Luxembourg, Mexico, Portugal, Spain and the UK!

Executive Director's Report

2024 was quite a year for the entirety of the RASC. With a stunning solar eclipse visible in some capacity from all but one Centre of the RASC to start us off, the year had a certain excitement and recovery to it. Many Centres held events leading up to the eclipse and on the day of the event, reaching thousands of Canadians. This was a test of endurance and volunteer strength for the RASC. I would like to thank the many volunteers that made this eclipse such a memorable one for so many people. It is not often we get events like this that bring out so many astronomy enthusiasts.

From the National Office's perspective, we spent this year returning to sustainability. With last year being a year of making changes, this year was intended to get us to a point where we could maintain our office indefinitely.

The 2024 General Assembly was made possible by the help of some key National volunteers and many of our Centre volunteers who offered to provide talks. It was an opportunity to share ways in which the Centres are creating new and interesting experiences for their members, so as to inspire other Centres to try something new. I am very grateful to our volunteers who helped the GA go off without a hitch on quite short notice. With the eclipse preceding the GA by a month, the GA was a bit of a scramble!

We welcomed our new Membership and Publications Coordinator, Michelle Bass, in July, and she jumped right into the RASC with enthusiasm and excitement. If you have not yet called the office for assistance with your membership, I recommend you do so just to chat with Michelle.

We are now at similar staffing levels to the RASC of 2018, with a permanent staff of three full-time

employees and one part-time employee. The office is stable at this staffing level and we are able to deliver on all of our standard programming.

Moving into 2025, we are focusing on bringing back programming that we stopped in 2023 in a sustainable way. We are being very careful not to outpace our income as we do this, especially as we take the state of the economy into consideration.

In early 2025 we brought back our comped outreach materials for Centres, which included the first print run of Moon Gazers since we ran out in 2022.

The 2026 *Observer's Handbook* and *Observer's Calendar* are both on schedule and we look forward to bringing you another year full of astronomy publications. For those who have not bought one of our calendars yet, I encourage you to give it a try this year. The *Calendar* is full of astronomical goodies, with everything you could possibly need to know about the sky for your observing sessions or astronomy vacation planning. It's easy to reference and beautiful to look at as it shows off the astrophotographical work of RASC members.

As we continue on through 2025 and beyond, we will seek out ways to support our Centres in all that they do. Our Centres are where the magic happens and where our mission as a Society is fulfilled. We will continue to consider ways we can provide more value to our Centres through our standard offerings like insurance, laser pointer usage and complimentary Zoom access, to new offerings such as trainings, outreach programs and citizen science opportunities.



Jenna Hinds
Executive Director

Financial Report

This year saw a return to normalcy and balance for the Society. Vigilance and caution have been key factors in the Society's finances this year, leading us to a relatively stable position as we head into 2025.

The Society seized the opportunity to provide solar glasses to Centres as well as selling directly to groups outside of the RASC, allowing us to purchase glasses in larger quantities than we may otherwise have been able to. This provided modest income for the Society that, while may not be repeatable, allowed us more room to recover from the financial instability of 2022 and early 2023.

The Board continues to meet monthly in order to review the Financial Statements as they become available and discuss potential concerns as they arise.

As concerns about economic uncertainty loom in the future, we are in a uniquely versatile position when compared to other non-profits. With about 40% of our income coming from membership revenue, 40% from publication sales, and 20% from donations, we have a more diverse income stream than most non-profits. This leaves us less vulnerable to shifts in the market as we are not overly reliant on one source of funding.

We are pleased with the RASC's recovery and cautiously optimistic about the future. We look forward to increasing involvement by the Finance Committee and continued oversight from the Board.

Michael Watson and Jenna Hinds
RASC President and Executive Director

D C Tinkham FCPA FCA CMC LPA
P J Brocklesby CPA CA LPA
M Y Tkachenko CPA CA
M W G Rooke CPA CA LPA
A C Callas CPA CA LPA
G P Kroeplin CPA
H S Grewal CPA
R T Bui CPA
N R Shishis CPA

300 - 2842 Bloor Street West
Toronto Ontario M8X 1B1
Canada

TEL 1 416 233 2139
FAX 1 416 233 1788

TINKHAMCPA.COM

May 7, 2025

The Board of Directors
The Royal Astronomical Society of Canada
La Société Royale D'Astronomie Du Canada
203-489 College Street
Toronto ON M6G 1A5

Attention: Mr. Michael Watson, President

Dear Board of Directors,

We are pleased to report on the results of our audit examination of the financial statements of The Royal Astronomical Society of Canada / La Société Royale D'Astronomie Du Canada (the "Society") for the year ended December 31, 2024. In our view, a direct line of communication between our firm and the Society's Finance Committee and Board of Directors is essential to the proper exercise of our respective responsibilities.

The purpose of this letter is to review our responsibilities as auditors in accordance with the terms of our audit engagement, and in the attached memorandum we report on the year end and various elements of the audit examination.

We have performed an audit examination of the Society's financial statements for the year ended December 31, 2024, in accordance with Canadian generally accepted auditing standards. We have performed the audit to obtain reasonable assurance about whether the financial statements present fairly, in all material respects, the financial position, results of operations and cash flows in accordance with Canadian accounting standards for not-for-profit organizations.

We have also considered the Society's internal control over the financial reporting solely for the purpose of determining the nature, extent, and timing of auditing procedures necessary for expressing our opinion on the financial statements. Our work does not provide assurance on the internal control structure and does not necessarily consider all control systems upon which management may be relying. As a result, this consideration will not be sufficient to enable us to render an opinion on the effectiveness of internal control over financial reporting.

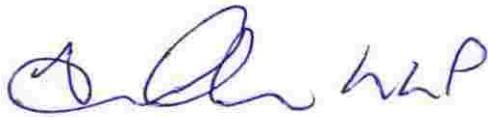
The detailed terms of our engagement are outlined in our engagement letter. Also, as part of our audit engagement, we have requested a letter of representation from the Society's management confirming representations made to us orally during our audit as well as representations implicit in the Society's records.

Our appointment as auditors involves the responsibility on our part to call to your attention any significant matters which we believe require your consideration. We report in the attached memorandum on the results of our audit for the year ending December 31, 2024, including the following:

- Audit Report;
- Engagement Team and Statement on Independence;
- Audit Approach;
- Materiality;
- Significant Accounting Policies;
- Significant Management Judgments and Estimates;
- Related Party Transactions;
- Recommendations Arising from the Audit Examination;
- Management Co-operation;
- Adjusting Journal Entries;
- Summary of Audit Differences; and
- Developments in Accounting Standards

The accompanying report is intended solely for the use of the Finance Committee, the Board of Directors and management, and presents information regarding our examination, which we believe, will be of assistance to the Society.

Yours very truly,



TINKHAM LLP

Encl.

**The Royal Astronomical Society of Canada
La Société Royale D'Astronomie Du Canada
Audit Results
December 31, 2024**

Audit Report

We will issue our audit opinion following approval of the financial statements by the Board of Directors and completion of the following outstanding audit issues:

- receipt of the signed representation letters; and
- completion of subsequent events review procedures to date of approval by Board of Directors

Engagement Team and Statement on Independence

We continue to serve you with a team of professionals who offer industry expertise, engagement continuity with the Society and many years professional audit experience. We believe that the following professionals have provided responsive, innovative, and forward-looking service and we note the high level of expertise engaged on your audit:

Paul Brocklesby, CPA, CA, LPA	Engagement Partner
Dale C Tinkham FCPA, FCA, CMC, LPA	Concurring Partner
Robert Bui, CPA	Engagement Principal
Nabiha Mubasshira	Engagement Principal
Joyce George	Engagement Manager

It is a fundamental principle that auditors providing assurance services be objective with unimpaired professional judgment in the eyes of a reasonable observer. We confirm that we are independent with respect to the Society within the meaning of the CPA Ontario Code of Professional Conduct Rule 204.

Audit Approach

Our audit approach is a risk-based approach that focuses on your operations, the associated risks, and their potential effects on financial statement accounts. Our audit approach emphasizes the importance of understanding the Society's operations. We also reviewed and considered management's assessment of the internal control environment.

The audit included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation.

We have reviewed and evaluated the overall internal control environment, assessed the computer environment, and the specific internal controls upon which we place reliance in expressing our opinion on the financial statements. In the current year, we identified and tested selected internal controls for the disbursement transaction stream to obtain evidence that key controls were operating as expected and were effective. Based on the results of our testing, we modified our audit plan for the year end to reduce substantive work where the tests of internal controls justify reliance and reduced our year end substantive testing in this area.

We used primarily substantive audit procedures on year end balances for assets, liabilities, revenues, and expenses. In addition, we confirmed the Society's cash and investment balances.

Our audit was carried out in accordance with our plan.

Materiality

Our evaluation of areas of audit significance is made relative to materiality. An understanding of what is significant or material in relation to the overall results of the Society is critical to the performance of an effective and efficient audit. An item is considered material if its impact might reasonably be expected to affect the decisions of a reader of the financial statements.

Our assessment of materiality considers the CPA Canada guidelines but is also affected by the size and nature of potential misstatements, as well as our knowledge of the Society's business. We have set quantitative materiality for the purposes of this examination at \$53,000 or 5% of gross revenue.

Significant Accounting Policies

Our audit also includes assessing the Society's accounting policies. The preparation of financial statements may require management to select from more than one acceptable approach to accounting.

Please refer to the summary of accounting policies in the notes to the financial statements for a detailed description of the Society's accounting policies.

The accounting policies selected are appropriate for the Society's reporting purposes and reflect best practices.

Significant Management Judgments and Estimates

The preparation of financial statements requires the use of accounting estimates. Certain estimates are particularly sensitive due to their significance to the financial statements and the possibility that future events may differ significantly from management's expectations. Management is responsible for applying sound judgment in preparing estimates and disclosures and assessing the impact of misstatements on the fair presentation of the financial statements.

Inventory on hand recorded in the accounts as at December 31, 2024 totaling \$45,123 (2023 - \$50,306) is recorded at the lower of cost and net realizable value. Any items considered obsolete or unsaleable have been removed or the value appropriately reduced..

Charges for amortization of capital assets are based on the estimated useful lives of the assets which are disclosed in the detail of the notes to the financial statements.

Canada Revenue Agency ("CRA") is conducting an "Educational Review" of the Society's HST filings for the period January 1, 2020 to June 30, 2021. Results from the review have not been received to date. Management does not anticipate any liability to result from the review.

It is management's opinion that the Society complies with the terms of all grants received.

Based on our audit procedures, we have concluded the estimates and judgments are reasonable in the context of the financial statements when taken as a whole. Financial results as determined by actual events could differ from those estimates and it is reasonable to assume such differences may be material.

Related Party Transactions

During our audit, we conduct various tests and procedures to identify transactions considered to involve related parties. Related parties exist when one party has the ability to exercise, directly or indirectly, control, joint control or significant influence over the other. Two or more parties are related when they are subject to common control, joint control, or common significant influence. Related parties also include management, council members and their immediate family members and companies with which these individuals have an economic interest.

We have not identified any material related party transactions during the audit.

Management has advised that no significant related party transactions have occurred that have not been disclosed to us. Management is required to advise us if they are aware of or suspect any other related party transactions have occurred, which have not been disclosed in the financial statements.

Recommendations Arising from the Audit Examination

Our examination of the financial statements for the year ended December 31, 2024 would not necessarily disclose all areas where the systems can be improved because it was based on selective tests of accounting records and related data.

Minutes of the Finance Committee Meetings

The Finance Committee did not record any meeting minutes during the year. We recommend as best practice that the Society minute all meetings and significant decisions are documented appropriately.

Dorner Telescope Museum Policy

The intention of the Society is to hold for public exhibition, education and/or research the items acquired and displayed in the Dorner Telescope Museum. We understand management is formalizing a policy to protect, care for and preserve the collection.

Cyber Coverage

The finance committee should consider cyber insurance coverage to reduce the risk of loss in the event of a cyber-attack.

Strategic Plan

The Society's strategic plan is dated June 2017 and has not since been updated.

We recommend the Society endeavor to update its strategic plan to focus the discussion of the future of the Society and to guide the business forward.

Investment policy

We understand that the Society does not have a formal investment policy. We recommend as a matter of best practice that the Society develop a policy based on the Society's risk appetite which outlines and defines the eligible investment types.

Other immaterial issues were discussed with management during the audit process.

Management Co-operation

We have received full co-operation from management and staff, and there have been no disagreements on any issues. There were no restrictions placed on the approach to or extent of our work. We were provided complete and timely access to all books and records, documents, and other supporting data that we required.

Adjusting Journal Entries

Adjustments made to the records of the Society are attached and have been approved by management.

Summary of Audit Differences

During our audit, we accumulate differences between amounts recorded by the Society and amounts that we believe are required to be recorded under Canadian generally accepted accounting principles.

There are no remaining unadjusted items greater than a trivial amount, nor have we found material misstatements that would likely cause future financial statements to be misstated.

Details of all Audit and Non-Audit Services

In addition to preparing the audited financial statements and our audit opinion, and a letter reporting the significant audit results arising from our examination, we also prepare the Registered Charity Information Return (T3010) for filing by management with the CRA, Charities Directorate.

Financial Statements of

**THE ROYAL ASTRONOMICAL
SOCIETY OF CANADA**

**LA SOCIÉTÉ ROYALE D'ASTRONOMIE
DU CANADA**

December 31, 2024

TINKHAM LLP

CHARTERED
PROFESSIONAL
ACCOUNTANTS

D C Tinkham FCPA FCA CMC LPA
P J Brocklesby CPA CA LPA
M Y Tkachenko CPA CA
M W G Rooke CPA CA LPA
A C Callas CPA CA LPA
G P Kroeplin CPA
H S Grewal CPA
R T Bui CPA
N R Shishis CPA

300 - 2842 Bloor Street West
Toronto Ontario M8X 1B1
Canada

TEL 1 416 233 2139
FAX 1 416 233 1788

TINKHAMCPA.COM

INDEPENDENT AUDITOR'S REPORT

To the Members of
The Royal Astronomical Society of Canada /
La Société Royale D'Astronomie Du Canada

Qualified Opinion

We have audited the financial statements of The Royal Astronomical Society of Canada / La Société Royale D'Astronomie Du Canada ("the Society") which comprise the statement of financial position as at December 31, 2024, and the statements of operations, changes in net assets, and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, except for the possible effects of the matter described in the *Basis for Qualified Opinion* section of our report, the accompanying financial statements present fairly, in all material respects, the financial position of the Society as at December 31, 2024, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Qualified Opinion

In common with many charitable organizations, the Society derives revenue from donations, the completeness of which is not susceptible of satisfactory audit verification. Accordingly, our verification of these revenues was limited to the amounts recorded in the records of the Society and we were not able to determine whether any adjustments might be necessary to donation revenue, excess of revenue over expenses (expenses over revenue), and cash flows from operations for the years ended December 31, 2024 and 2023, current assets as at December 31, 2024 and 2023, and unrestricted net assets as at January 1 and December 31 for both the 2024 and 2023 years. Our audit opinion on the financial statements for the year ended December 31, 2023 was modified accordingly because of the possible effects of this limitation in scope.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Society in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Society's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Society or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Society's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Society's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast doubt on the Society's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Society to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

TORONTO, Ontario
May 1, 2025

Licensed Public Accountants

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA
Statement of Financial Position

As at December 31	2024	2023
Assets		
Current		
Cash	\$ 461,690	\$ 575,562
Accounts receivable	68,107	45,697
Public service body rebate receivable	12,251	2,616
Helm Fund receivable	56,502	2,234
Inventory	45,123	50,306
Prepaid expenses	28,705	37,043
	672,378	713,458
Long term		
Investments (note 4)	1,355,063	1,068,684
Capital assets (note 6)	38,361	58,890
Collections (note 7)	65,787	59,158
	1,459,211	1,186,732
	\$ 2,131,589	\$ 1,900,190
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	\$ 42,672	\$ 52,146
Deferred revenue		
Membership fees for ensuing years	144,951	136,168
Journal subscriptions	21,821	17,391
Deferred Contributions		
Dorner Fund (note 10)	222,052	-
Unamortized life membership fees (note 8)	2,651	5,301
	434,147	211,006
Net Assets		
Unrestricted	575,237	608,120
Dorner Fund (note 10)	446,600	446,600
Internally restricted (note 12)	675,605	634,464
	1,697,442	1,689,184
	\$ 2,131,589	\$ 1,900,190

Contingency (note 5)
Commitments (note 11)

On behalf of the Board:

____ President

____ Treasurer

See accompanying notes to financial statements.

3

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA
Statement of Changes in Net Assets

Year ended December 31	Dorner Fund (note 10)	Internally Restricted (note 12)	Unrestricted	2024	2023
Balance, beginning of year	\$ 446,600	\$ 634,464	\$ 608,120	\$ 1,689,184	\$ 987,557
Excess of revenue over expenses for the year	-	-	8,258	8,258	255,027
Contribution (note 10)	-	-	-	-	446,600
Transfers (note 12)	-	41,141	(41,141)	-	-
Balance, end of year	\$ 446,600	\$ 675,605	\$ 575,237	\$ 1,697,442	\$ 1,689,184

See accompanying notes to financial statements.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA
Statement of Operations

Year ended December 31	2024	2023
Revenue		
Membership fees	\$ 290,793	\$ 298,891
Publication sales	260,994	217,478
Miscellaneous	112,010	77,724
Donations (note 9)	97,302	540,779
Investment income	65,859	40,732
Grants (note 9)	-	4,316
	826,958	1,179,920
Expenses		
National operations (note 13)	304,695	365,818
Publications	223,768	264,243
Member services (notes 5 and 13)	215,041	178,731
Programming		
Centre support / public outreach (note 13)	69,652	69,863
Youth Outreach and education	3,011	9,902
General assembly	1,996	1,566
Telescope museum	537	4,018
Light pollution prevention (note 13)	-	8,587
Robotic telescope	-	216
	818,700	902,944
Excess of revenue over expenses before undernoted	8,258	276,976
Impairment loss - SkyNews Inc. (note 5)	-	(21,949)
Excess of revenue over expenses for the year	\$ 8,258	\$ 255,027

See accompanying notes to financial statements.

5

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA

Statements of Cash Flows

Year ended December 31	2024	2023
Cash provided (used) by operating activities		
Excess of revenue over expenses for the year	\$ 8,258	\$ 255,027
Charges not requiring a current cash payment or receipt		
Amortization of capital and intangible assets	20,527	23,071
Amortization of life membership fees	(2,650)	(2,650)
Gain on disposal of capital and intangible assets	-	(27,254)
Write off of capital and intangible assets	-	873
	26,135	249,067
Changes in non-cash working capital components		
Accounts receivable	(22,410)	62,686
Public service body rebate receivable	(9,635)	71,060
Accounts receivable from SkyNews Inc.	-	21,949
Inventory	5,183	2,567
Prepaid expenses	8,338	(8,284)
Accounts payable and accrued liabilities	(63,740)	(23,563)
Deferred revenue	235,265	(16,761)
	179,136	358,721
Cash provided (used) by investing activities		
Purchase of investments	(286,379)	(40,622)
Purchase of capital and intangible assets	-	(8,716)
Sale of capital assets	-	40,241
Purchase of items for collections	(6,629)	(4,079)
	(293,008)	(13,176)
Cash used by financing activities		
Repayment of loan	-	(40,000)
Increase (decrease) in cash during the year	(113,872)	305,545
Cash, beginning of year	575,562	270,017
Cash, end of year	\$ 461,690	\$ 575,562

See accompanying notes to financial statements.

**THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA**

Notes to Financial Statements
December 31, 2024

1 Organization

The Royal Astronomical Society of Canada / La Société Royale D'Astronomie Du Canada ("the Society") is a Canadian corporation without share capital and a registered charitable organization, incorporated for the purpose of stimulating interest in and promoting astronomy and related sciences. The Society is not subject to income taxes pursuant to exemptions accorded to registered charities in the income tax legislation.

2 Significant accounting policies

These financial statements have been prepared by management in accordance with Canadian accounting standards for not-for-profit organizations.

a) Cash

Cash includes cash on hand and deposits in financial institutions.

b) Investments

The Society has elected to value all investments, with the exception of the investment in SkyNews Inc., at fair value, which is based on quoted market values.

c) Investment in SkyNews Inc.

As stated in Note 5, the Society purchased 100% of the common shares of SkyNews Inc., a for-profit corporation incorporated under the Business Corporations Act (Ontario), on June 29, 2015 to further the Society's mission. SkyNews Inc. published a highly regarded magazine that provided an excellent source of educational information on astronomy and allied sciences to the public.

d) Inventory

Inventory is comprised of publications and promotional items for re-sale and is carried at the lower of cost and net realizable value. Cost is determined on an average cost basis.

e) Collections

Collections are capitalized in the Society's statement of financial position but not amortized. Collections consist of a library and the Dorner Telescope Museum. The library is recognized at a nominal value. The museum collection is recognized at cost as items are purchased. Costs incurred to maintain these collections are expensed as incurred.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA

Notes to Financial Statements
December 31, 2024

2 Significant accounting policies continued

f) Capital assets

Capital assets are recorded at cost. Cost comprises the purchase price and any directly attributable cost of preparing the asset for its intended use.

When conditions indicate a capital asset no longer contributes to the Society's ability to provide services or that the value of future economic benefits or service potential associated with the capital asset is less than its net carrying amount, its net carrying amount is written down to its fair value or replacement costs. As at December 31, 2024, no such impairment exists.

Amortization is provided over the estimated useful lives of the assets using the straight-line basis as follows:

Tangible assets:	Computer hardware	3 years
	Office furniture	10 years
	Leasehold improvements	15 months
Intangible assets:	Software	5 - 10 years
	Website development	3 years, 1/2 in year of acquisition

g) Revenue recognition

i) Membership fees

Membership fees are recognized as revenue in the period to which these fees relate. Fees received in the current year, applicable to a subsequent year are recorded as deferred revenue in the statement of financial position and will be accounted for in revenue in the year to which they pertain. The Society previously offered life memberships to members. Life memberships received in prior years were credited to unamortized life membership fees liability account, as described in note 8. The unamortized life membership fees are being recognized as revenue evenly over 10 years to 2025.

ii) Contributions

The Society follows the deferral method of accounting for contributions, which include grants and donations. Unrestricted contributions are recognized as revenue when received or receivable, if the amount to be received can be reasonably estimated and collection is reasonably assured.

Endowment contributions, where donors have restricted the original contribution to be maintained in perpetuity, are recognized as direct increases in endowment net assets. Income earned on endowment funds is restricted in use pursuant to the donors' instructions and is recorded in deferred revenue until the related expense is incurred.

iii) Investment income

Investment income is recognized on an accrual basis. Changes in the unrealized gain or loss on investments, being the difference between cost and fair value, is recognized in investment income for the year. Investment income related to the Dorner Fund is recognized directly in the fund.

iv) Subscriptions and publications

Journal subscription revenues are amortized into income over the subscription period. Publications are recognized as revenue when shipped.

h) Contributed goods and services

The value of goods and services is recorded as revenue and an expense in the financial statements when the fair value can be reasonably estimated and when the goods and services would otherwise be purchased if not donated.

The Society is dependant on the voluntary services of many individuals. Since these services are not normally purchased and because of the difficulty of determining their fair value, donated services are not recognized in the financial statements.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA

Notes to Financial Statements
December 31, 2024

2 Significant accounting policies continued

i) Allocation of common expenses

The Society allocates a number of its expenses by function: national operations, member services and certain programming. The costs of each function include an allocation of the costs of personnel, fundraising and computer and IT costs.

Personnel costs are allocated based on the number of hours spent on each function; fundraising expenses are allocated primarily to national operations as the majority of cost relates to general fundraising activities. Smaller portions are allocated to member services and public outreach for expenses related to fundraising for Centres and communications with members. Computer and IT costs are allocated based on the estimated usage of technology by each function.

j) Management estimates

The preparation of financial statements in accordance with Canadian accounting standards for not-for-profit organizations requires management to make estimates that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant estimates include the impairment of financial assets and the useful lives of capital assets. All estimates are reviewed periodically and adjustments are made to the statement of operations as appropriate in the year they become known.

k) Financial instruments

i) Measurement

The Society initially measures its financial assets and financial liabilities at fair value. The Society subsequently measures all its financial assets and financial liabilities at amortized cost except for its investments, excluding SkyNews Inc., which are measured at fair value. Changes in fair value are recognized in the statement of operations for the year.

ii) Impairment

At the end of each reporting period, the Society assesses whether there are any indications that a financial asset measured at amortized cost may be impaired.

iii) Transaction costs

Transaction costs are recognized in the statement of operations in the period incurred, except for financial instruments that will be subsequently measured at amortized cost. Investment management fees associated with the Scotia McLeod managed portfolio are expensed as incurred.

3 Helm Fund

The Society is trustee of an endowment fund created by Mr. Walter J. Helm (a former Royal Astronomical Society of Canada member) who died on June 5, 1960. In his will, he provided a bequest to the Society, the clear income from which was to be used for the general purposes of the David Dunlap Observatory (DDO) in Richmond Hill, Ontario. Under the terms of a 2010 Ontario Superior Court order, and a court-approved agreement between the Society and the Toronto Centre of the Society, as revised by a September 2024 agreement between the same parties, the net income of the Helm Fund is used by the Toronto Centre of the Society for its ongoing operations at the DDO.

The fair value of the total assets of the Helm Fund under administration by the Society at December 31, 2024 is \$1,032,272 (2023 - \$943,544) and is excluded from the Society's financial statements as the Society is not the legal owner or beneficiary of the Fund.

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4 Investments

As at December 31	2024	2023
Managed portfolio at Scotia McLeod		
Fixed income investments	\$ 298,066	\$ 287,222
Canadian equity investments	852,948	627,202
U.S. equity investments	161,848	135,983
Cash	34,201	10,277
Non-redeemable guaranteed investment certificate		
RBC, matures April 8, 2025, 4.00% interest		
(2023 - matures April 8, 2024, 3.00% interest)	8,000	8,000
	\$ 1,355,063	\$ 1,068,684

The fixed income portfolio is comprised of government and corporate bonds with stated interest rates ranging from 1.55% to 5.22% (2023 - 1.55% to 5.22%), maturing on dates ranging from March 4, 2025 to June 11, 2029 (2023 - June 3, 2024 to June 14, 2028).

The Canadian equity investments is comprised of share and trust units of 41 Canadian entities of which the single largest holding is 7,000 shares of Canadian Imperial Bank of Commerce with a market value of \$636,510 (2023 - share and trust units of 39 Canadian entities of which the single largest holding is 7,000 shares of Canadian Imperial Bank of Commerce with a market value of \$446,600). The 7,000 shares of Canadian Imperial Bank of Commerce are held in the Dorner Fund.

The U.S. equity investments is comprised of share and trust units of which the single largest holding is 17 shares of Microsoft Corp. with a market value of USD \$7,166 (2023 - 20 shares of Microsoft Corp. with a market value of USD \$7,521).

The fixed income and equity investments have been recorded at market values based on pricing information provided by Scotia McLeod.

5 Related party transactions

As stated in Note 2(c), the Society purchased 100% of the common shares of SkyNews Inc. on June 26, 2015.

In 2023, SkyNews Inc. ceased operating and the Society has written off all amounts receivable from SkyNews Inc. totaling \$21,949. There is no expectation of recovery.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA
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Notes to Financial Statements
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6 Capital assets

As at December 31	2024		2023	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
Tangible assets				
Computer hardware	\$ 33,532	\$ 32,581	\$ 33,532	\$ 29,054
Office furniture	6,094	5,055	6,095	4,708
Leasehold improvements	2,147	2,147	2,147	2,147
Intangible assets				
Software	106,300	74,287	106,300	60,538
Website development	22,431	18,073	22,431	15,168
	\$ 170,504	\$ 132,143	\$ 170,505	\$ 111,615
Net book value		\$ 38,361		\$ 58,890

7 Collections

As at December 31	2024	2023
Dorner Telescope Museum	\$ 65,786	\$ 59,157
Library	1	1
	\$ 65,787	\$ 59,158

During the year the Society spent \$ 6,629 on additions to the Dorner Telescope Museum.

8 Unamortized life membership fees

	2024	2023
Life membership fees as of January 1	\$ 5,301	\$ 7,951
Deduct: Amortization to income	(2,650)	(2,650)
Balance, December 31	\$ 2,651	\$ 5,301

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA**LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA**

Notes to Financial Statements

December 31, 2024

9 Donations and grants

No bequests were donated in 2024. In 2023, donations included a single bequest of \$451,853 received in October 2023.

No grants were received in 2024. In 2023, included in grants is government assistance totalling \$4,316.

10 Dorner Fund

In 2023, the Society received a bequest of 7,000 common shares of Canadian Imperial Bank of Commerce, with a value of \$446,600, to be invested and held in a restricted perpetual fund, the income of which shall be used solely for the purpose of supporting the activities of the Dorner Telescope Museum, as determined by the director of that museum. These investments are recognized at fair value and the unrealized gains of \$196,852 as at December 31, 2024 are reported directly as deferred contributions on the statement of financial position.

11 Commitments

The Society leases space for offices and the Dorner Telescope Museum which expires on December 31, 2031. The minimum annual payments, excluding HST, for each of the next five years and thereafter are as follows:

2025	\$	61,560
2026		63,504
2027		65,448
2028		67,392
2029		69,336
Thereafter		144,504
Total	\$	<u>471,744</u>

12 Internally restricted net assets

The Society has internally restricted certain funds. The Dorner Telescope Museum Fund was established in 2021 for the purpose of assisting with the costs of maintenance of the Museum (note 7). The Ruth Northcott Education Fund was established in 1969 and funds are used for a variety of specified purposes related to public education and outreach. The RASC Legacy Fund was established in 1990 for the purpose of providing for the long-term growth of the Society.

An amount equal to the investment income for the year is transferred to Northcott and Legacy funds annually on a proportionate basis. All disbursements from these funds must be approved by the Board of Directors.

	2024				2023
	Dorner Telescope Museum Fund	Ruth Northcott Education Fund	RASC Legacy Fund	Total	Total
Balance, January 1	\$ 24,776	\$ 262,003	\$ 347,685	\$ 634,464	\$ 622,101
Transferred from unrestricted net assets:					
Investment income	-	18,342	24,340	42,682	12,363
Expenses	(1,541)	-	-	(1,541)	-
	(1,541)	18,342	24,340	41,141	12,363
Balance, December 31	\$ 23,235	\$ 280,345	\$ 372,025	\$ 675,605	\$ 634,464

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13 Expense allocations

Personnel, fundraising and computer and IT costs were allocated as follows:

Year ended December 31	2024			2023		
	Personnel costs	Fundraising expenses	Computer & IT costs	Personnel costs	Fundraising expenses	Computer & IT costs
National operations	\$ 54,419	\$ 692	\$ 2,753	\$ 50,543	\$ 17,580	\$ 3,400
Member services	117,936	86	5,505	111,637	2,198	6,800
Centre support / public outreach	63,002	86	2,753	59,946	2,198	3,400
Light pollution prevention	-	-	-	8,465	-	-
	\$ 235,357	\$ 864	\$ 11,011	\$ 230,591	\$ 21,976	\$ 13,600

14 Financial instruments

The Society is exposed to various risks through its financial instruments. The following analysis provides a measure of the Society's risk exposure and concentrations.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Society is exposed to credit risk through its cash, accounts receivable, loan receivable and investments. Credit risk related to cash is minimal as funds are fully insured and held by credit-worthy parties. Accounts receivable are generally unsecured. The investment policy requires diversification of investments within categories, and sets limits on exposure to individual investments.

Liquidity risk

Liquidity risk is the risk that the Society will not be able to meet a demand for cash or fund its obligations as they come due. The Society meets its liquidity requirements by ensuring adequate cash is maintained and investments are available to be converted to cash if and when required.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk is comprised of currency risk, interest rate risk and other price risk.

Currency risk

Currency risk reflects the risk that the Society's earnings will decline due to the fluctuations in foreign exchange rates. The Society has cash, investments and accounts receivable denominated in U.S.\$ totaling USD \$145,039 at December 31, 2024 (2023 - USD \$154,115). The exchange rate used to convert US\$ assets at December 31, 2024 is \$1 US = \$1.4389 CAD (2023 - \$1.3226 CAD).

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Society is subject to interest rate risk to the extent of its fixed income investments and cash on deposit with financial institutions that earn interest at market rates. The Society manages its exposure to the interest rate risk of its cash by maximizing the interest income earned on excess funds while maintaining the liquidity necessary to conduct operations on a day-to-day basis. Fluctuations in market rates of interest on cash do not have a significant impact on the Society's results of operations.

The primary objective of the Society with respect to its fixed income investments is to ensure the security of principal amounts invested, provide for a high degree of liquidity, and achieve a satisfactory investment return.

14 Financial instruments continued

Market risk continued

Other price risk

Other price risk refers to the risk that the fair value of financial instruments or future cash flows associated with the instruments will fluctuate because of changes in market prices (other than those arising from currency risk or interest rate risk), whether those changes are caused by factors specific to the individual instrument or its issuer or factors affecting all similar instruments in the market.

The Society is exposed to other price risk because of its equity investments.

Changes in risk

There have been no significant changes in the Society's risk exposures from the prior year.

Reports of Permanent Committees

ASTRO-IMAGING COMMITTEE REPORT

The RASC Astro-imaging Committee continues to evolve and expand its reach across Canada, fostering collaboration and sharing expertise among astroimagers of all levels. Building on the momentum from previous years, our renewed nationwide focus aims to advance the art and science of astroimaging while providing valuable mentorship and support to newcomers.

Host winning portfolios at: <https://rascastroimaging.zenfolio.com/imagegalleries>.

Membership

Following the restructuring in 2023, our committee now comprises dedicated members committed to nationwide coverage:

Western Canada: Kimberly Sibbald (Chair) & Luca Vanzella

Central Canada: Stuart Heggie & Andrea Girones

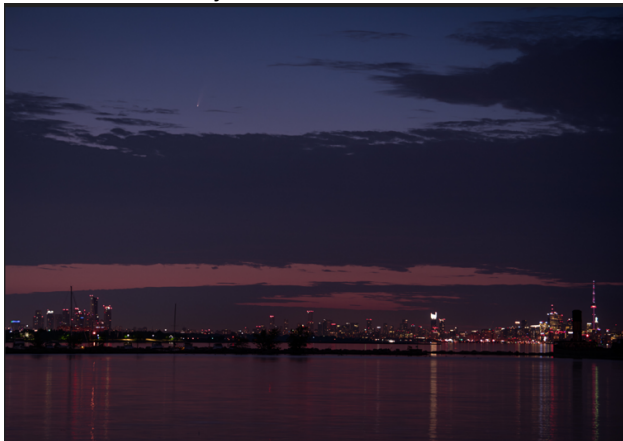
Eastern Canada: Fiona Morris & Jason Dain

This diverse team remains at the forefront of promoting astroimaging through RASC electronic media, social media engagement, and local club presentations.

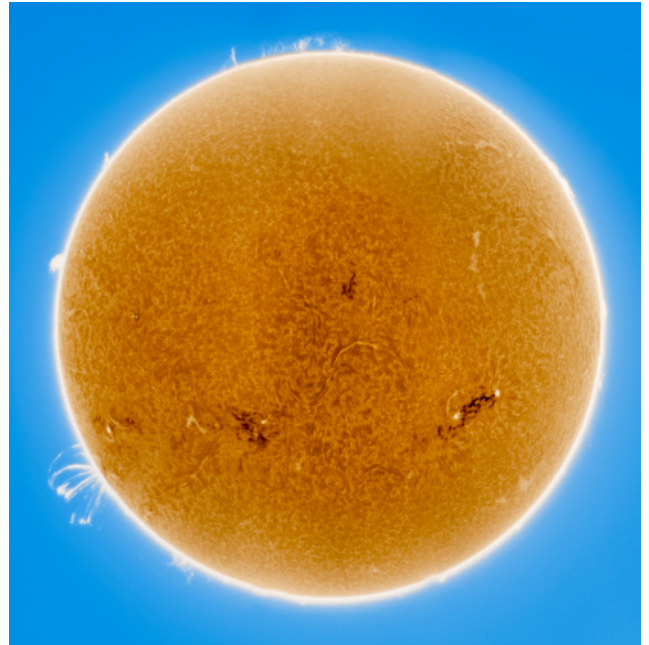
2024 Objectives/Projects and Results/Activities

In 2024, our primary focus was to enhance our established objectives from 2023 by incorporating a mentorship-driven approach. Recognizing that technical proficiency is only one aspect of success in astroimaging, we emphasized the importance of nurturing talent, sharing expertise, and building a supportive community. Highlights from the past year include:

- **Mentorship and Education:** We provided constructive critiques for submitted works and actively promoted learning opportunities within the community.



Gary Crawford - Wide Field Application Image, "Neowise from Port Credit"



Katelynn Beecroft - Solar System Application Image, "Sun in Ha"

- **Outreach:** Our committee continued to engage audiences through social media, local club meetings, and online platforms, showcasing winning portfolios on our Zenfolio site.

2024 Metrics

- **Deep Sky:** 3 certificates awarded to: Carl Fleck, Curtis Breslin, Gary Crawford
- **Solar System:** 1 certificate awarded to: Katelyn Beecroft
- **Wide-Field:** 2 certificates awarded to: Gary Crawford, George Pucula

Congratulations to Gary Crawford for completing two certificates!

2024 Challenges

While we made significant strides, 2024 presented similar challenges:

1. **Lack of Awareness and Education:** Despite our outreach, many potential enthusiasts remain unaware of the rewarding nature of astroimaging. Expanding public outreach through events, workshops, online tutorials, and social media is essential.
2. **Time and Commitment:** Astroimaging is a discipline that demands significant time and dedication. Enhancing support networks and mentorship opportunities remains a priority to help newcomers navigate the learning curve.

3. **Cost of Equipment:** High equipment costs continue to be a barrier for many. Promoting equipment rental programs and suggesting entry-level packages can help lower these barriers and make astroimaging more accessible.

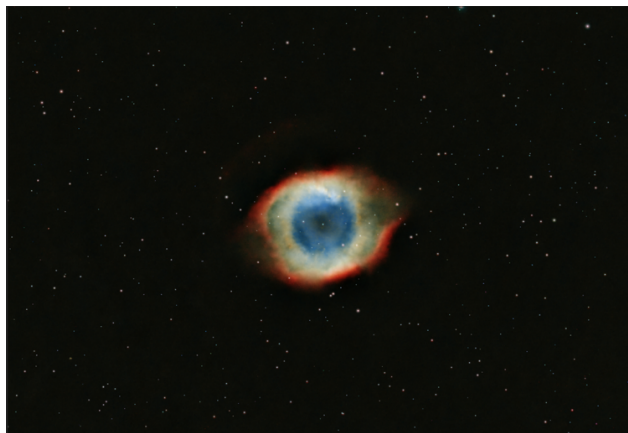
2025 Plans/Focus

Looking ahead to 2024, our committee will concentrate on the following initiatives:

Knowledge Exchange: Facilitate the sharing of experiences and techniques between seasoned astroimagers and newcomers.

Mentorship Circles: Establish structured mentorship circles that connect mentors and mentees with shared interests and goals, fostering a collaborative learning environment.

Equipment Accessibility: Actively promote equipment rental programs and recommend cost-effective, entry-level equipment packages to lower



Carl Fleck – Deep Space Application image, “Helix Nebula”

the financial barrier for beginners.

By focusing on these key areas, we aim to cultivate a thriving, inclusive community that continues to push the boundaries of astroimaging.

AWARDS COMMITTEE REPORT

The Awards Committee is pleased to present the 2024 Award Recipients. These awards recognize the extraordinary efforts of the named individuals and on behalf of the Society, we thank and congratulate all recipients for this good work.

FELLOWSHIP AWARD - PAUL GRAY

On behalf of the RASC Halifax Centre, we hereby nominate Paul Gray for the designation Fellow of The Royal Astronomical Society of Canada (FRASC). The Fellow of the RASC award is intended to be the Society’s most senior award and the highest honour the Society can pay to a member. The service and contributions to the Society must have had a significant positive impact on the work of the Society over an extended period beyond that of the Service Award, and they must have contributed to the Society’s success in attaining its stated objectives, mission, and vision.

Since the age of fifteen, when he first became a member, Paul Gray has been giving freely of his time and ever-growing expertise in many ways, to further the objectives of the RASC. We believe that Paul Gray more than qualifies for the Fellow of the RASC (FRASC) Award and offer the following information in support of our nomination.

Paul, a technologist with the Municipality of Kings County, resides in South Greenwood where he is an avid observer and astro-imager. He received three RASC Observing Certificates – Messier Catalogue (1994), Finest NGC Objects (2001), and Explore the Universe (2016).

He became a member of the RASC Halifax Centre in January 1988. Paul is a natural leader and an inspiring mentor to novice and experienced observers alike, including his own children. Two at age 10 were recognized internationally for their discoveries of supernovae. He attended the international Starmus Festival three times: in Norway, Canary Islands, and Switzerland with his family. Each time he informally acted as a worthy ambassador for the RASC.

Paul gave substantial and exemplary service in many roles both at the Centre and national level and consequently received the RASC Service Award in 2016. The original submission for Paul’s Service Award nomination which includes his activity prior to 2016 is attached.

Service to the RASC Halifax Centre:

In the RASC Halifax Centre, Paul served as a director in 1997 and again in 2019, its President 2015-2018, and its Vice-President in 2020. He has served since 2015 on the Nova East Planning Committee (our Centre’s annual star party) where at various times he has also been a speaker, lead organizer of the barbecue and the Astronomer’s Breakfast, and liaison with Smileys Provincial Park where the event is still being held.

He is very knowledgeable of our Centre’s history, has a vision of what it can become, and takes pride in what has been accomplished to date. He and Dr. Roy Bishop, FRASC, presented Roy’s compiled 1951-2019 history of our Centre at our January 2015 member meeting. His love of observational

astronomy is evidenced by the many presentations he has made at Member and Public meetings, including this sample of talks since 2016:

- 2016: "The Great American Eclipse in August 2017"
- 2017: "How to Clean Optics"; "Family Trip Travelog" (trip to 2017 Solar Eclipse)
- 2018 (at RASC Halifax Centre AGM): "The Roar of the Draconids!"
- 2019: "Dark Nebulae in New Light"
- 2020: "Meteors"; "How to Observe and record variable star observations"; "The RASC Calendar – Front to Back and Back to Front" (at RASC Halifax Centre AGM)
- 2024: "Solar Eclipse 2024: where best to view it, things to consider"; "Member Eclipse Stories" (his trip to watch the eclipse with New Brunswick Centre friends)

He has been actively involved with our Centre's St. Croix Observatory (SCO) since its conception. In 1996, he drew the site plot after an exhaustive day of surveying the site and was involved in the clearing of the land and construction of the buildings prior to its official opening on June 21, 1997. Over the years, he has assisted with site and building maintenance and, despite the distance from home, has also been present for the Annual SCO BBQ and occasionally for member observing nights.

Paul volunteers at the annual Dark-Sky Weekend (DSW) hosted by Kejimikujik National Park and National Historic Site (the Park's most popular outreach program) and has been involved in the DSW planning and implementation.

Service to the RASC New Brunswick Centre:

He was an active member with the RASC New Brunswick Centre (2004-2011). He led and coordinated By-Law revisions to have the Moncton Centre name changed to New Brunswick Centre – Centre du Nouveau Brunswick. He also served as Editor of their newsletter Horizon 2008-2010. He was the National Council Representative for New Brunswick Centre. He also served on their Council for four years. While there, he successfully led efforts to achieve Dark-Sky Preserve (DSP) designation for both Mount Carleton Provincial & Kouchibouguac National Park (2009) and Fundy National Park (2011). He promoted and organized their star parties at Mactaquac Provincial Park.

Service to the RASC

Paul has always been a strong supporter of the RASC. His interest in observing is exemplified in his RASC national involvement for more than two

decades. He was the Editor of the RASC Observer's Calendar in 2012-2022. With a special interest in E.E. Barnard's Dark Nebulae, he has contributed the section Dark Nebulae in the RASC Observer's Handbook since 2004 – 22 editions! He and co-author Don Kelly had their article regarding New Brunswick Centre's grant report published in JRASC in the June 2008 edition.

In addition to contributions to the Society's publications, he took on administrative roles as outlined in his Service Award nomination, serving as a Board Director and as a member of the Board Pilot Committee, acting as the liaison to the Observing Committee then chairing it, and serving on several committees (Observing, Publications). In 2013, he served on the RASC Board of Directors.

While in New Brunswick, he served as Chair of the 2010 RASC New Brunswick GA Committee where his drive and experience was responsible for the highly successful GA. His energy and drive were shown again when he served on the GA Advisory Group and acted as Treasurer for the 2015 Halifax GA.

Summary

For almost four decades, Paul has been an educator to many RASC members and non-members, a mentor to youth interested in astronomy and to novice amateur astronomers and a firm believer in the goals and mission of the RASC.

Instead of promoting just the better-known aspects of astronomy, he chose to focus on meteors and meteor showers, planets, and dark nebula – to have an "oh wow" moment watching a fireworks-like display, to observe changing planetary appearance through the seasons (and their moons), and the latter to inspire members to look for, to understand, and to be in awe of these supposed empty spaces in our night skies.

We the undersigned, nominate Paul Gray for the designation Fellow of The Royal Astronomical Society of Canada (FRASC). The RASC Halifax Centre is very proud to have him as one of our members.

Respectfully Submitted,

Judy Black, Secretary, RASC Halifax Centre
 Mary Lou Whitehorne, FRASC
 James Edgar, FRASC / Editor Observer's Handbook / Associate Member RASC Halifax Centre
 Dave Chapman, FRASC
 Patrick Kelly, FRASC
 Board of Directors, RASC Halifax Centre

SIMON NEWCOMB AWARD - BETTY R. ROBINSON

Betty Robinson has dedicated her career to spreading scientific knowledge, particularly the science of astronomy. As a professional educational science editor and writer, Betty has worked on many publications on astronomy for major educational publishers. She is also writing a series of STEM books for girls, following the adventures of a young science enthusiast named Elizabeth -- two of which are about astronomy.

Betty's most recent Elizabeth book was about the April 8, 2024, total solar eclipse: *Elizabeth's First Total Solar Eclipse*. In addition to informing readers about what happens during an eclipse, this book focused on the eclipse path through Canada. Betty also wrote *Elizabeth's Guide to Watching a Total Solar Eclipse*, which is a free handbook describing how anyone can be a citizen scientist and make real scientific observations and data recordings during a total solar eclipse. *Elizabeth's First Total Solar Eclipse* quickly sold out on the RASC's online shop. Her first Elizabeth book was about the technology that has to be in place in order for people to visit Mars: *Elizabeth Goes to Mars!*

When the Province of Ontario issued a new science curriculum in 2022, Nelson Education contracted Betty to write the Ontario Grade 6 Space unit for their Edwin platform, as well the Alberta Grades 4, 5, and 6 Space units.

Betty has also written two science readers for Rubicon Publishing: *Earth's Patterns and Space* and *Waves and Information*. In her role as a skilled book editor, Betty has helped many other writers clearly explain scientific concepts to their readers.

For all of the above, especially for *Elizabeth's First Total Solar Eclipse* and the free eclipse handbook, we nominate Betty R. Robinson for the 2025 Simon Newcomb Award.

Respectfully submitted,

Chris Gainor, Victoria Centre
Lauri Roche, Victoria Centre

QILAK AWARD - GEOFF ROBERTSON

Committee Chair, and Public Education director to name a few. His most recognizable contribution has been conducting the "What's Up Over Edmonton" program. Geoff spent an enormous amount of time putting together an outstanding 1 hour educational session for members and the general public. All sessions eventually being posted on the RASC, Edmonton Centre Youtube Channel. Each with hundreds of views.

The amount of time and effort it took to put this program together is nothing short of remarkable. After several years of providing this wonderful

service, Geoff has decided to hang it up after Dec 4, 2024.

We think the Qilak Award is an excellent award recognizing Geoff's contribution to the RASC as well as Astronomy Public Education.

Respectfully submitted,

Jay Lavender, President, Edmonton Centre
Tom Owen, Past President, Edmonton Centre

SERVICE AWARDS - CHRIS BECKETT, DAVID LEE, ROBERT LENZ, DENNIS LYONS

Chris Beckett - Kitchener-Waterloo Centre*

Preamble:

The undersigned hereby nominate RASC member Chris Beckett, for the distinction of an RASC Service Award, in recognition for his long and steadfast service to the RASC. This includes his service as National Council Representative for two Centres, President of RASC Regina Centre, Chair of the RASC Observing Committee, Editor of the RASC Observer's Calendar, contributor to the RASC Observer's Handbook, membership of several RASC committees, participation in the Dark-Sky Program, and countless episodes of volunteer outreach.

Membership:

- Chris Beckett joined RASC Halifax Centre in September 2002. Subsequently, he became a member of both RASC Regina Centre and RASC Kitchener-Waterloo Centre. The year 2025 will mark his 23rd year of continuous RASC membership. He has been an active member of the RASC at the Centre and National level throughout that time.

Leadership and Representation:

- Chris served as NC Representative for both KW (2006–08) and Regina (2009–12).
- President of Regina Centre (2013–14).
- Chair of the RASC Observing Committee (2009–13) and is a long-standing committee member.
- Member of the RASC History Committee since 2016.
- Member of informal Committee Chairs group that developed RASC programs for the 2012 Transit of Venus

RASC Publications:

- Observer's Calendar—Chris has been Editor of the Calendar since 2023.
- Observer's Handbook—contributed Wide-Field Wonders since 2013 and Feature Star Field (with Randall Rosenfeld) since 2014.
- Journal—Contributing Editor (Observing Tips) 2018–24.
- Editorial Board—a member since 2023.

Outreach and Presentations:

- Chris (with others) help establish the Dark-Sky Preserve at Grasslands National Park in 2009 and regularly leads night sky activities there.
- Since 2020 Chris has co-hosted (with Shane Ludke) the Actual Astronomy audio podcast, numbering over 460 episodes, engaging amateur astronomers around the globe.
- Chris is a long-standing astronomy instructor at the Lifelong Learning Centre at the University of Regina.
- Chris is an accomplished and effective speaker who has presented at multiple General Assemblies, Centre meetings, and star parties.

Impact:

Chris Beckett is enthusiastic about visual observing and has devoted much of his volunteer time both inside and outside RASC inspiring observers of all experience levels to explore the night sky. He is one of a few RASC members whose service spans multiple Centres and Committees of the National Society, people who are often overlooked when individual Centres consider Service Award nominations. The undersigned nominators reflect a broad base of support from across Canada for his Service Award.

A RASC Service Award for Chris Beckett is long overdue!

Respectfully Submitted:

Dave Chapman, FRASC (Halifax)

Paul Gray (Halifax)

Clark Muir (KW)

Randall Rosenfeld, FRASC (National)

James Edgar, FRASC (Regina)

Bill Weir (Victoria)

*but currently a resident of Regina.

David Lee, Victoria Centre

In the dictionary the word service means “an act of helpful activity.” The National RASC Service Award is given to a member who has made a significant contribution to the life and vitality of the Society over an extended period. The RASC Victoria Centre cannot think of a better statement that defines our member of long standing, David Lee, and we are pleased to put forward this nomination for 2024/2025.

David became a member of the Society in 1993. Since then, he has been involved in every aspect of the Victoria Centre: leadership, mentorship, management, innovation, and technical wizardry. Wherever and when ever there is a need for someone to help with a special event, a local program or to work through a problem, David is there for us. David is a true Renaissance person. His interests lie, just as examples, in art, photography,

graphic design, audio and video production, IT, project management, data analysis, adult education and, of course, astronomy.

In his former life, before retirement, he worked for the BC Provincial Government at the beginnings of the IT movement, honing many skills that we now use much to our advantage.

We could list off the tasks he has taken on for the Victoria Centre, but it would fill paragraphs. In his earlier years with the Centre, he took on the roles of Secretary, President, and then our Representative on the National Council for several years. David was also the Centre’s webmaster when the Victoria Freenet was started in the 1990s. Three decades later he is on Council again, instrumental as part of the technical committee and a committed Member at Large.

He was involved in the initial planning and setting up our Victoria Centre Observatory, has trained and mentored many new observers, and has recently supported the regeneration of our newest equipment on the site, providing leadership with the computer and software configuration.

He has been active in photography for many years and quickly adopted astrophotography to his repertoire. You can see many of his stunning photos on the Victoria Zenfolio site. He particularly enjoys widefield and landscape imaging but will also be found with his trusty telescope and camera out at any hour to catch a conjunction, an occultation or the first sighting of a comet. He is (impatiently) waiting to capture the brightening of the recurrent nova, T Coronae Borealis. We can depend on him to get images the rest of us can only wish for.

He has been the lead on many events and projects over the decades: International Astronomy Days, Annual Star Parties, our Victoria Regional Lighting Survey, and hosting Astro Café’s. During the pandemic David suggested starting up Special Interest Groups, or SIGS, for Beginners, for Makers, Citizen Science and Astrophotography and then went ahead and made them all happen. He is presently guiding us through some website and Google Drive renewal. In fact, it is difficult to think of a program or activity that he is not involved with and providing a leading role in our Centre.

David was regularly active at the beginning of the New Observer’s to Visual Astronomy programme (NOVA) at the National level and has been a constant source of support for its development and launch in the near future.

He has been a faithful volunteer up at the Dominion Astrophysical Observatory for many years and supports the visitors and the Friends of the DAO by helping with telescopes, audio, and visual production, and making presentations.

The Victoria Centre honoured him with our most coveted prize, the Newton-Ball award, back in 2007 and he has many certificates of thanks and appreciation in the years since but we feel that he needs much more recognition now for his three decades of service.

David is a positive force for our organization and radiates enthusiasm as he so willingly shares his knowledge and skills with others. We are so lucky to have David Lee as a Victoria Centre member and are proud to put his name forward for the National Service Award with the RASC.

Respectfully submitted,

Lauri Roche, Victoria Centre
Chris Gainor, Victoria Centre

Robert Lenz, Niagara Centre

Robert Lenz joined the Niagara Centre in 1987. Not content to sit on the sidelines, Rob got involved quickly becoming a director in 1988. In the early 90's he also became the Observers Group Chairman, a position he held for a decade. He has made several submissions to the Niagara Whirlpool, the club newsletter. He was also quick to volunteer on special projects such as building the RASC Niagara's observatories.

Rob has contributed to the club in many ways over the years but he has been outstanding in Community Outreach. You can always count on Rob showing up at a public event with one of his telescopes, engaging and educating adults and children. He never stops promoting the Niagara Centre and the science of astronomy.

Rob is an accomplished astrophotographer and loves camping. He has been going to Starfest since its inception.

Respectfully submitted,

Robert Lewis, Niagara Centre
Stan Sammy, Niagara Centre

Dennis Lyons, Winnipeg Centre

The Winnipeg Centre is pleased to nominate Dennis Lyons for the Society's Service Award. Dennis has been a long-time member of the Winnipeg Centre, and has served on the Centre's Council for many years, most recently for two terms as President of the Centre, agreeing to stay on an extra term to complete the renewal of the Centre's Bylaws and incorporation as a not-for-profit corporation in the province of Manitoba. In addition to hosting regular meetings and handling his Council duties, Dennis is active in Centre outreach and is always there with a scope and a smile at public events. Dennis has served as Winnipeg Centre's National Representative for several years, and it was in part due to his diligence and probing questions that the Society's financial issues were brought into the light to be faced. Despite splitting his work time between Winnipeg and various locations in British Columbia, he manages to keep Council on task, spearheading a major revision to the Bylaws; Incorporation; administration of funding for flood damage to the Centre's Glenlea Observatory; a revamp of the Observatory Committee; assisting in the creation of a new Dark Sky Preserve in Manitoba (with a second on the way); and many other tasks which often go unnoticed.

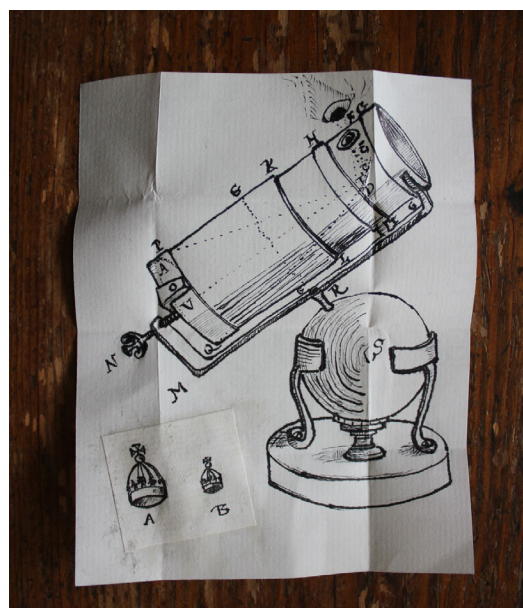
We feel that Dennis' efforts to improve the Society and to the Winnipeg Centre are deserving of the Society's Service Award.

Respectfully submitted,

Scott D. Young, Winnipeg Centre
Judy Anderson, Winnipeg Centre

Charles Ennis, he/him
Chair, Awards Committee

- DTM 96.20241028, The Marquis de Chabert's temporary Observatory at the Fortress of Louisbourg 1750–1751, after the Marquis de Chabert (=Joseph-Bernard de Cogolin), *Voyages fait par ordre du Roi en 1750 et 1753, dans l'Amérique septentrionale...* (Paris: De l'Imprimerie Royale, 1753), p.1, by R.A. Rosenfeld, 2008, gift of R.A. Rosenfeld
- DTM 97.20241028, Bill of lading (London to Halifax) with astronomical equipment from James Champness for Joseph Frederick Wallet DesBarres' Castle Frederick Observatory, 1767, handmade copy by R.A. Rosenfeld, 2024 October, gift of R.A. Rosenfeld
- DTM 98.20241028, John A. Brashear, drawing of a Great Sunspot, 1898 September 10, handmade copy by R.A. Rosenfeld, 2024 October, gift of R.A. Rosenfeld
- DTM 99.20241028, John A. Brashear, drawing of a Great Sunspot, 1898 September 12, handmade copy by R.A. Rosenfeld, 2024 October, gift of R.A. Rosenfeld
- DTM 100.20241028, John Mellish, drawing and explanation of pitch lap sent to A.R. Hassard, 1908, handmade copy by R.A. Rosenfeld, 2024 October, gift of R.A. Rosenfeld
- DTM 101.20241028, John Mellish, telescope plan sent to A.R. Hassard, 1908, handmade copy by R.A. Rosenfeld, 2024 October, gift of R.A. Rosenfeld



DTM 94.20241028 Mr. Newton's telescope

- DTM 102.20241028, diagram of the orientation of objects in various telescope types, in late-19th-early 20th-century style, by R.A. Rosenfeld, 2024 October, gift of R.A. Rosenfeld
- DTM, 103.20240127, collection of telescope making materials (various grades of carborundum & emery for grinding, and rouge [=cerium oxide] for polishing, and pitch) by A. Jaegers Optical Corp. of Lynbrook, NY (probably supplied as one of their “Astronomical Mirror Grinding Kits”), ca. 1960s–1970s, gift of Alice Orr
- DTM 109.20241110, a portrait medal of Fr. Pierre Gassendi by Ursines-Jules Vatinelle (1798–1826), for the *Galerie métallique des grands hommes français*, Paris France, 1818, gift of R.A. Rosenfeld.
- DTM 110.20241114, Plaskett Telescope of the DAO (1918), illustrated by a cigarette card issued by Will’s Cigarettes (a division of Imperial Tobacco from 1901) in their series of “Engineering Wonders”, card no. 24 of 50, lithograph on card stock, 1927, gift of R.A. Rosenfeld

The Director of the DTM wishes to thank the following for their contributions towards the museum, in the form of valued advice, donations, and volunteer labour. Their efforts are much appreciated:

Michelle Bass, Bart Fried, John Briggs, Dr. Roger Ceragioli, Steve and Patrick Dodson, Luis Gao, Alister Ling, Clark Muir, Alice Orr, Peter Pekurar,



DTM 94.20241028 Galileo's Moon

Eldon Phillips, Dr. Patricia Raby, Dr. Sara J. Schechner, FAAS, Matteo, Frank, and Kitsa Statti, Dr. Michael Szpir, and Alan Ward.

Particular thanks is owed to members of the Sudbury and the K-W Centres—two RASC nodes distinguished by the skilled telescope makers amongst their membership.

EDUCATION AND PUBLIC OUTREACH COMMITTEE

Chair:

Karim Jaffer	Montreal
Victor Abraham	Hamilton
Ron Macnaughton	Toronto
Lauri Roche	Victoria
Jo Ann Salci	National
Kirsten Vanstone	Toronto
Christa Van Laerhoven	Yukon (rep: CASCA & IAU-NAEC)

Board Liaison:

Betty Robinson	Mississauga
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National Office:

Jenna Hinds	Calgary
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Terms of Reference:

The Education and Outreach Committee’s purpose is to oversee, in accordance with the policies determined by the National Board of the RASC, the activities of the Society in the field of education for RASC members, Centres, and the public. The committee recommends and develops tools, materials and events for Centres to promote knowledge and understanding of astronomy in general and Canadian astronomy in particular.

We are accountable to and report to the National Board of the RASC.

Meetings in 2024

- Friday, March 8
- Sunday, November 17

2024 Goals and Projects

Eclipse Task Force: The EPO Committee supported the work of the Eclipse Task Force in planning for the April 8, 2024, Total Solar Eclipse, including communication for distribution of eclipse glasses and sharing information and supporting schools according to decisions made by provincial governments.

Huge appreciation and kudos for all Centres who ran public events to provide safe and informative views of the phases of the eclipse and for those who were able to experience totality. Reviews of the eclipse events are being gathered by the National Office for future use.

NOVA Course: The NOVA course modules were reviewed to update images and graphics for copyright and to try to bring some additional content structure parallels between modules. Huge thanks to Lauri Roche and Betty Robinson for an incredible amount of work put into these edits. Piloting of the content was done in the fall of 2024 by the Montreal Centre, and is planned for early 2025 by the Victoria Centre. Cost breakdown was determined for different program structures—whether Centres choose to deliver 6 modules per course or all 12, with an 80%–20% split between Centres and the National Office—sent to the Board for approval.

School Astronomy Clubs: The EPO Committee continues to work on support resources for middle schools or high schools that wish to form and maintain astronomy clubs. The Astronomy Club Resources list that was developed in previous years was updated, and in early 2025 will be sent to several new student clubs for evaluation and feedback regarding formats to use to deliver the resources to this audience.

Seasonal Beginners' Observing Activities: The draft Novice Program materials were revised and consolidated to create star-hopping outreach activities that can be used by Centres throughout the year. Additional work is needed to finalize these, and we hope to share the first season (summer) during the 2025 GA. Thanks to past EPO Committee member Tony Shellinck for continuing work on these activities.

General Assembly 2024: The EPO Committee supported the General Assembly Planning Committee by offering speakers, hosts, and volunteers for the event.

Outreach Materials: After a temporary suspension on all budgetary costs and planned activities, in fall 2024 the EPO Committee was finally in a position to provide Star Finders and Moon Gazer Guides to Centres for the 2025 observing season. After some work was put into examining local printing and shipping cost comparisons, it was decided to use the existing printed stock and do bulk printing

when needed. In early 2025, the National Office will invite orders from all Centres and arrange for bulk mailing of these materials to those Centres. The EPO Committee also looked into star finders for RASC members living in northern Canadian latitudes, shared with the Yukon Centre for evaluation.

2024 Challenges

Thank you to all current and recent members of the Committee who continued to work on various projects throughout the year while much of the coordinated Committee work was still impacted by the suspension of funds for working on projects (as for all other Committees), and without a National Outreach Coordinator to help push projects forward in a timely fashion. Huge thanks to Jenna for her continued support for the proposed Outreach programs, and to the Board for helping bring the NOVA program closer to deployment nationally. This past year we only had two official meetings, which did make it more difficult to keep the momentum for projects going, but while both the Chair and the Board liaison were giving all their time to NOVA revisions and the other members were spending incredible amounts of time on the Total Solar Eclipse on April 8, it was difficult to push forward on past projects. We are also awaiting the new website setup to determine how the EPO materials can be best displayed for RASC and for the general public and education community in Canada to access. In our November meeting we spoke about the need to bring some of the existing projects to completion and began to look toward the areas of need in RASC that the EPO Committee can serve.

2025 Plans and Focus

1. NOVA Program
 - A. Complete revisions on remaining modules for image/graphics copyright concerns
 - B. Pilot feedback from Montreal and Victoria Centres
 - C. Receive Board guidance/approval for NOVA cost structure, based on pilot feedback
 - D. Create a subcommittee to work with EPO Committee member(s) to edit modules based on feedback
 - E. Prepare GA sessions on NOVA to launch the program across all interested Centres
2. Citizen Science (CS)
 - A. Create a subcommittee to work with EPO Committee member(s) to identify CS activities suitable and accessible for RASC members at different levels
 - B. Hold EPO Townhall and Workshop(s) to provide information on accessible CS projects, a starting point in CS, and identifying current CS projects being actively

- pursued by RASC members/Centres across the country
- C. Communicate CS opportunities to RASC members
- D. Reach out to Canadian researchers (CASCA / CSA) to provide RASC CS participants with an opportunity to impact Canadian space sciences research
- 3. Seasonal Beginners' Observing Activities
 - A. Set up a subcommittee to work with EPO Committee member(s) to finalize activities
 - B. Add star-hopping activities to all four seasonal activity setups and bring these together into a common format for delivery by Centres during outreach events, and accessible to the public through our updated RASC website
- 4. School Astronomy Club Resources
 - A. Set up a subcommittee to work with EPO Committee member(s) to review the list of resources and identify a format for delivery that will be suitable to the audience
 - B. Connect with new student clubs to review and test resources and provide feedback
 - C. Determine the layout of materials on the new RASC website
- D. Ensure permissions/copyright for the resources to be shared
- 5. Website Review
 - A. Identify EPO Committee content that should be shared on the new RASC website—what should be for members and what should be for the general public
 - B. Find ways to archive any materials that no longer have a need to be on the RASC website but may be useful in the future
- 6. Education Review
 - A. Set up a subcommittee to review the place of the RASC EPO Committee in astronomy education in Canada and how to better place our services to the Canadian (and global) community
 - B. Review different terms of reference for the EPO Committee and propose representative terms of reference guidelines that suit both the mandate and the current needs of the RASC, positioned with the other existing groups in Canada (CASCA, CSA, SEDS, etc.).

Respectfully submitted,

Karim Jaffer, Chair, EPO Committee
karim.jaffer@johnabbott.qc.ca

EDITORIAL BOARD

The RASC Editorial Board is responsible, in cooperation with the Board of Directors, for all aspects of the Society's publications, including their editorial teams, financial arrangements, and marketing and sales efforts. Its membership includes the editors of RASC publications and other interested members appointed by the Board of Directors.

After the tumult of the years around the COVID-19 pandemic that struck RASC publications particularly hard, 2024 was a relatively normal year.

The RASC Editorial Board met four times in 2024, on February 12, May 13, September 23, and November 25. At these meetings, discussions centred on the state of publications and included suggestions for improvement.

A major issue raised at Editorial Board in 2024 and into 2025 is succession for editors and key contributors to our publications. To that end, searches are on for Assistant Editors for the *Journal* and the *Observer's Handbook*, and on improving the work of volunteer committees involved in the *Calendar*. The Editorial Board has asked for job descriptions to be prepared for editors and assistant editors of our publications. RASC publications are not only major benefits of membership in the RASC

Chair:

Christopher Gainor	Victoria
Randy Attwood	Mississauga
Chris Beckett	Kitchener-Waterloo, editor of the <i>Observer's Calendar</i>
Dave Chapman	Halifax
James Edgar	Regina, editor of the <i>Observer's Handbook</i>
Charles Ennis	Sunshine Coast
Robyn Foret	Calgary, editor of the <i>RASC Annual Report</i>
Nicole Mortillaro	Toronto, editor of the <i>JRASC</i> and <i>Night Sky Almanac</i>
Betty Robinson	Mississauga
Randall Rosenfeld	National

Board Liaison:

Michael Watson	National President
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National Office:

Jenna Hinds	Calgary
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but are also important sources of revenue for the Society

The RASC's publications maintained their high quality in 2024, thanks to the great work of the many volunteers who create them, and to the team at National Office headed by Executive Director Jenna Hinds. Late in the year, delivery of our publications had to overcome delays related to a labour disruption at Canada Post.

Publication of the *Journal of the RASC* went smoothly in 2024. Pricing for printed copies of the *Journal* was adjusted in 2024 to bring it into line with mounting costs.

The 2025 Observer's Handbook in editions for Canada and the United States was published on

schedule. The 2025 Night Sky Almanac, published in cooperation with Firefly Books, was produced on schedule and continues to sell well.

The Observer's Calendar continues to be a popular publication, and Editor Chris Beckett continues his work with teams of volunteers to gather data and select images for the calendar.

By the end of the year, production of Dr. Maria Cahill's biography of legendary Canadian astronomer Dr. Helen Sawyer Hogg, *Through the Lens of Astronomer Helen Sawyer Hogg: One Woman's Journey with the Stars*, was well advanced. Publication of this book is due to take place in 2025.

Christopher Gainor, Ph.D., FRASC
Chair, RASC Editorial Board

HISTORY COMMITTEE

Chair:

Randall Rosenfeld	National
J. Randy Attwood, FRASC	Mississauga
Chris Beckett	Kitchener-Waterloo
Dr. Roy Bishop, FRASC	Halifax
Eric Briggs	Toronto
Peter Broughton, FRASC	Toronto
Clark Muir	Kitchener-Waterloo
Dr. Karen Finstad	Ottawa
Dr. Chris Gainor, FBIS, FRASC	Victoria
Andrew Oakes	National
Matteo Statti	Mississauga
Dr. Mark Tovey	London

Board Liaison:

Michael Watson	National President
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National Office:

Jenna Hinds	Calgary
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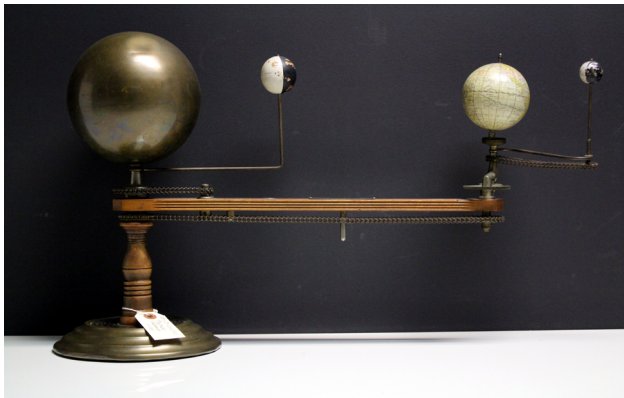
Projects

The most dramatic celestial event of the year was the total solar eclipse of April the 8th, and nearly every member of the History Committee was involved in some way or other with eclipse programing, and efforts to experience the event. Two among several projects exploring the history of

eclipses can give a flavour of Committee members' involvement. The RASC's Archives and Rare Book Collection is particularly rich in eclipse artifacts, some of which are unique. The Society's Archivist, in cooperation with Randy Attwood, the Chair of the RASC 2024 Total Solar Eclipse Task Force, organized a study day for members of the Mississauga Centre and friends on March 24th to explore the range of this fascinating material, to gain some incite into how past eclipses were recorded, and experienced. The opportunity for members to view and handle these artifacts just weeks before this year's eclipse proved invaluable. We are grateful that the owner of the largest collection of historical eclipse viewers in Canada, some of which date back to the early years of the last century, lent some of his artifacts for the event.

The second project revolved around Clark Muir's sensational discovery that the Canadian professional artist, William Blair Bruce (1859 Hamilton ON–1906 Stockholm SE) participated in the 1896 August 9th eclipse expedition to Northern Sweden, and that his remarkable oil sketch of totality survives. Building on Clark's work, the Society's Archivist with help from secondary school volunteer Luis Gao designed and built the exhibition *The Pursuit of Totality: Science vs Spectacle*, featuring selected artifacts from the RASC's holdings to complement the Bruce painting. The *Konstnärshemmet Brucebo* (Gotland SE), the owner of the painting, generously provided a very high-resolution scan from which a life-sized reproduction on canvas was produced. The *Pursuit of Totality: Science vs Spectacle* will go on show in 2025. We thank the donor who covered the expenses for this project.

In regard to last year's major committee project, the *Astronomical Landscape of Canada (ALC)*, experience has show that WordPress would be a more convenient web content management system for its continuance than Drupal, whatever its virtues.



1908 Planetary for showing eclipse phenomena

WordPress would make it easier to build a team to contribute to the success of the project, rather than having to rely on the limited temporal resources of a few people.

Publications

Chris Beckett & Randall Rosenfeld, "Perseus, the Hero", in *RASC Observer's Handbook 2025*, ed. James Edgar (Toronto: Royal Astronomical Society of Canada, 2024), pp. 336–337

Peter Broughton, "The 1860 Eclipse Expedition to Labrador: Context and Contacts", *JRASC* 118, 6 (December 2024), 241–249

Peter Broughton & Wayne Orchiston, "Obituary: Alan Henry Batten (1933–2024)", *Journal of Astronomical History and Heritage* 27, 4 (2024 December), 951–956

Dr. Chris Gainor, "The Unexpected Roots of the Shuttle Remote Manipulator System", *Quest: The History of Spaceflight Quarterly* 31, 3 (2024), 43–45 (on the relationship between the Canadarm and the Hubble Space Telescope)

R.A. Rosenfeld, "Eclipse Viewers—Technology, History", *JRASC* 118, 1 (2024 February), 31–41

R.A. Rosenfeld, "More on Eclipse Viewers", *JRASC* 118, 2 (2024 April), 88–90

R.A. Rosenfeld, "Colours of Saturn—Browning, Elvins, and the Resolution of a Mystery in the "Astronomical and Physical Society of Toronto" Album", *JRASC* 118, 3 (2024 June), 126–131

R.A. Rosenfeld, "J.R. Collins' Competent Moon, and the Great Photographic Void in the Archives", *JRASC* 118, 5 (2024 October), 214–220

R.A. Rosenfeld, "Outside the Radio Quiet Zone" (chapter 10), in Jasper Wall†, Elizabeth Griffin, & Richard Jarrell†, *Radio Astronomy in Canada: Young Science in a Young Country*, Historical & Cultural Astronomy, ed. W. Orchiston, M. Rotherberg, & C. Cunningham (Cham: Springer Nature, 2024), pp. 201–215

Chris Gainor, "Alan H. Batten 1933–2024", *JRASC* 118, 6 (2024 December), 279

Presentations

Peter Broughton, "A Century of Waiting: Observatories and Telescopes in the Toronto Area Before 1935", at the 33rd annual convention of the Antique Telescope Society, David Dunlop Observatory, Richmond Hill, November 9

Eric Briggs, "Problems from the History of Canadian Planetariums", at the 33rd annual convention of the Antique Telescope Society, David Dunlop Observatory, Richmond Hill, November 9

Eric Briggs, "History of Astronomy and Medicine Intertwined in Toronto", at the 33rd annual convention of the Antique Telescope Society, David Dunlop Observatory, Richmond Hill, November 10

Clark Muir, "William Blair Bruce: An Artist's Arctic Eclipse", Kitchener-Waterloo Centre of the RASC, October 11

R.A. Rosenfeld, "The Eclipse Experience through Five Artifacts—and the Problem with Borders", keynote address at the symposium "The Sky Has No Borders: Perspectives on Astronomical Knowledge from Canada, Mexico and the United States", Reddin Symposium in Canadian Studies, Bowling Green State University (BGSU), the Department of History and the Department of Physics and Astronomy, February 22 <https://www.youtube.com/watch?v=YjOu0TOt8Lw>

Other Projects

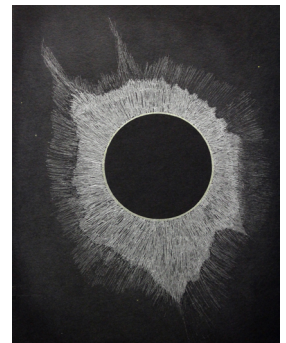
Chris Beckett has continued as co-host of the Actual Astronomy podcast - <https://actualastronomy.com/>

Peter Broughton consulted extensively with Nick Versteeg, a BC filmmaker (DVProductions Inc.), who is producing a documentary based on Peter's celebrated biography of J.S. Plaskett, *Northern Star* (University of Toronto Press, 2018). Chris Gainor wrote the script, and the Society's Archivist has supplied images of artifacts for the project. The current release date for the film is 2025 June.

Chris Gainor in his capacity as Chair of the RASC Editorial Board has been instrumental in guiding Dr. Maria Cahill's *Through the Lens of Astronomer Helen Sawyer Hogg: One Woman's Journey with the Stars* through the publication process, in cooperation with his colleagues. The book should appear in 2025.

As part of the Eclipsing History podcast of the BGSU Department of History, the Society's Archivist was interviewed for the episode "Eclipses and the History of Astronomy in Canada"

<https://casit.bgsu.edu/eclipsinghistory/items/show/40>.



Modern rendering of CA Chant's 1922 Einstein camera eclipse photograph

INCLUSIVITY AND DIVERSITY COMMITTEE

The I & D Committee's World Asterisms Project is now in its fourth year. To date we have recorded 14,619 asterisms including 457 names of the Milky Way and 3,755 telescopic asterisms from over 586 world cultures, and the work is ongoing. 274 asterisms on the list have not yet been positively located in the sky. Names listed for the Sun, Moon, and planets: 1,633 so far. That's a grand total of 16,252. Updating the online page on the RASC website is paused at the moment as the Society migrates material from the old Drupal system to a new Wordpress system. The WAP Google Drive is right up to date if anyone requires information.

The I & D Committee is gathering estimates for translating our observing program documents into French. One of the unanticipated problems is

source documents: Some of these programs are decades old and have passed through the hands of multiple volunteers, so original source documents are sometimes hard to find. Translators find it easier to work with these original documents that more modern PDFs, but it can be done. We will soon have all of our documents and quotes together and will pursue grant money to get this done.

The Sunshine Coast Centre's biggest fundraiser for the year was Pride Under the Stars at their observatory, which was a joint project with Sunshine Coast Pride. If your Centre hasn't tried this, you really should. Contact us for details.

Charles Ennis, Chair, I & D Committee

LIGHT POLLUTION ABATEMENT COMMITTEE

Committee Membership

Chair:

Bob King	Calgary
Peter Brackett	Calgary
Roland Dechesne	Calgary
Bernie Hasselman	Ottawa

Board Liaison:

Brendon Roy	Thunder Bay
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National Office:

Jenna Hinds	Calgary
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The committee membership changed with Victoria Kramkowski (Toronto) leaving and Bernie Hasselman (Ottawa) joining.

Discussion

During 2024, the National Light Pollution Abatement Committee (NLPAC) focused on streamlining the application process for dark-sky site applicants and annual reporting for established dark-sky sites. We also created a new dark-sky site type and delivered several presentations. These efforts are described below:

1. Directional Priority: maintain extensive resources on LPA initiatives:
 - A. Public outreach & education:
 - I. Promoted dark skies through social media: X with 5699 followers (down 7% from 2023), and Facebook with 1283

followers (up 6% from 2023).

- II. Peter Brackett presented an overview of the RASC's LPA program to the Saskatoon Centre on the occasion of the 25th anniversary of the first proclaimed Dark Sky Preserve.
- III. Roland Dechesne spoke about light pollution's impact on birds at the Wings over the Rockies Nature Festival, Invermere, BC.
- IV. Roland Dechesne presented on the topic of light pollution's impact on the natural world as the invited SSSP keynote speaker at the 20th anniversary of the Cypress Hills DSP, SK.
- V. Roland Dechesne was the invited keynote speaker at the Thebacha and Wood Buffalo Dark Sky Festival, NT.
2. Directional Priority: liaison with Dark Sky International (formerly IDA) and other LPA groups
 - A. No activity.
3. Directional Priority: LPA Certificate of Merit programme
 - A. Began the process of redefining the purpose, qualifying criteria, and nomination process for the Certificate of Merit. To be completed in 2025.
4. Directional Priority: conduct research on current light-pollution levels
 - A. No new work undertaken.
5. Directional Priority: sharing of strategies and techniques to effectively engage individuals, companies, and municipalities in adopting

effective measures to reduce light pollution:

- A. Dark-sky site operations:
 - I. Progressed updating the dark-sky site (DSS) application guidelines, creating a companion stage-gate process document that guides applicants and internal RASC processes. New applicants have provided positive feedback on the draft documents and these will be finalised in 2025.
 - II. To assist existing DSS operators, an annual report template was created and distributed. The template ensures all reports have the same scope of commentary and consistent organisation.
 - III. Enquiries from six prospective new dark-sky sites were received and we are working with several to develop formal applications.
 - IV. Created a new kind of DSS, the Nocturnal Sanctuary. A Nocturnal

Sanctuary is a protected, ecologically significant area in a suburban setting that is like a Nocturnal Preserve, but with brighter skies. The first new application is anticipated in 2025.

- V. Working to create another new kind of DSS, the Dark-Sky Community. This designation will recognise rural and urban municipalities that establish strong light pollution bylaws or development approval processes to reduce and minimise light pollution and provide educational leadership about responsible lighting.

B. Create a library of LPA Resources

- I. No activity

Expenditures

The LPAC budget was nil for 2024, and there were no expenditures.

NEXTGEN COMMITTEE

Chair:

Ivan Tockovski	Toronto
Disha Patel	Toronto
Dennis Lu	Toronto

Board Liaison:

Katherine Dulong	Montreal
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National Office:

Jenna Hinds	Calgary
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About

The NextGen Committee’s purpose is to address the needs of current and future RASC youth members (members aged 13-25 years of age, inclusive) as they relate to programs and services of the Society. The committee serves to represent the unique viewpoints, values, and experiences of the Society’s youth members as they apply to their RASC membership, including a core dedication to upholding the ideals of respect, inclusivity, and diversity within the Society.

Objectives, Projects and Activities

In 2024, the NextGen RASC Committee continued its educational and space news outreach on social media through reposts in its stories, sharing the events and opportunities offered by other

RASC entities on social media, and planning the recruitment of new members to maintain consistent progress in larger projects.

- *2024 Total Solar Eclipse Activities.* The NextGen Committee prepared several social media engagements regarding the 2024 Total Eclipse such as sharing safe tips for viewing the eclipse, reposting informational posts by other Centres and creators on its stories, posting diagrams and maps of the best view spots of the event, and sharing photos of the eclipse across its page and stories.
- *Development of Bite-Sized Informational Videos.* The NextGen Committee began preparation of a handful of informational videos to raise awareness about the opportunities and resources the society currently offers for youth members such as accessing telescope loans, tips on observing programs, obtaining observing aids, volunteering opportunities, asking an astronomer, and more.
- *Coding workshops.* Coding has become a revolutionary tool in astronomical and other STEM research areas, and the NextGen Committee plans to run regular workshops for introductory and post-introductory astro-focused coding workshops for members in the society, especially youth members and their families.
- *NextGen Scholarships.* The NextGen Committee made some progress regarding scholarships

it plans to offer to prospective applicants. It did not seek to offer the scholarship in 2024 based on logistical limitations within the Committee, with the focus to raise awareness of the Committee to attract more applicants in the upcoming academic school years, as well as provide supportive funding for youth-led community projects. The NextGen Committee remains determined in its goal to allow the scholarship program to be at least partly self-sustaining by allocating parts of the funds raised through merchandise, developed by the NextGen Committee, toward the scholarships.

Challenges in 2024

The NextGen Committee executed two social media-based recruitment campaigns for attaining new members. They did not bring any new interest. It was decided that the application would be simplified and will instead be more far-reaching internally, by seeking the help of the National Board, through Monthly and Weekly Newsletter announcements, reaching out to Centres directly, and bringing more awareness regarding the Committee within the Society. The NextGen Committee had limited progress in larger projects and is also recognizing the continued need to increase awareness of

the Committee across the society to ensure it is connecting and addressing the needs of youth members.

Focus for 2025

The NextGen Committee will send out announcements within the society through National and Centre newsletters in the beginning of 2025, and once the Committee has welcomed a new and full committee, it is expected to continue forward consistently on its larger projects and initiatives including offering scholarships every year, creating several new merchandise lines, suggest improvements for youth membership benefits, increase its social media presence, and engage in educational workshops and outreach. Most importantly, it will seek to collaborate more closely with Centres and other RASC committees to foster new opportunities for youth members across the society and offer support for currently running or planned initiatives. The NextGen Committee will also seek to further highlight and showcase the talent of youth in the society, as it has done in the past. The NextGen Committee will also update its section on the RASC National website as well as reach out to Centres directly to establish and maintain an active line of communication for collaboration and support on events, initiatives, and more. Stay tuned!

OBSERVING COMMITTEE

Chair:

Emma MacPhee	New Brunswick
Dale Armstrong	London
Chris Beckett	Kitchener-Waterloo
Eric Klaszus	Calgary
Dr. Randy Boddam	Belleville
Roger Hill	Hamilton
Murray Paulson	Edmonton
Karol Socander	Kitchener-Waterloo
Jo Vandendool	Mississauga
Bill Weir	Victoria

Board Liaison:

Viktor Zsohar	Yukon
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National Office:

Jenna Hinds	Calgary
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Summary

First and foremost, I would like to take this opportunity to thank the members of the Observing Committee for their help and guidance through the year.

Observing Programs

The RASC national Observing Committee oversees 8 visual observing certificate programs, 9 if you count the sub-types for the EM. See rasc.ca/certificate-programs for more information. We show them below, ranked in increasing levels of difficulty.

1. Explore the Universe (EU) [with pin]
(the only program open to the public)
 - A. Explore the Moon (EM)
 - B. Binoculars (EM-B)
2. Telescope (EM-T) [with pin]
3. Messier Catalogue [with pin]
4. Finest NGC Objects (NGC) [with pin]
5. Double Stars (DS) [with pin]
6. Isabel Williamson Lunar Observing Program (IWLOP, IW LUNAR) [with pin]
7. Deep-Sky Gems (DSG)
8. Deep-Sky Challenge (DSC)

The Observing Committee issued its first certificates in 1981. During the year 2024, a total of 20 certificates were awarded to RASC members and some members of the public across Canada and around the world.

We wish to remind observers that earning a certificate is an individual effort. In other words, the finding or locating (L), examination and observing (E), and logbook text and sketching or recording (R) must be all your own work.

We remind observers that we consider an observation to be a brief log note and/or an annotated sketch. Photos may be included in submissions but logging/sketching must be done from an eyepiece.

We continue to provide additional files for download for observers wanting observing lists for their favourite astronomy software. We have lists in Excel, SkyTools, Stellarium, and SkySafari formats for many of our programs (with supplemental notes as needed).

Certificate Recipients

Certificate:	Recipient
Messier	Murray Hunt, Edmonton
Explore the Universe	Kirsten Pedersen, Victoria
Explore the Moon-T	Kirsten Pedersen, Victoria
Explore the Universe	John Wilmot, Oro-Medonte
Explore the Moon-T	Chris Thompson, Toronto
Explore the Moon-B	Marjie Welchframe, Victoria
Explore the Universe	Luca D'Aliesio, Montreal
Explore the Universe	Nicholas Marum, Ottawa
Isabel Williamson	Denis Pilon, Regina
Messier	Rick Aubrey, Ottawa
Explore the Moon-T	Stephen Biggs, Toronto
Explore the Moon-B	Stephen Biggs, Toronto
Explore the Moon-B	Kirby Alguire, Mississauga
Explore the Universe	James Lane
Finest NGC	Michael McBride, National
Explore the Universe	Marjie Welchframe, Victoria
Isabel Williamson	Chris Vaughan, Toronto
Explore the Universe	Brenda Sopow, Victoria
Explore the Moon-T	Michelle Brodie, Regina

The Observing Committee endeavours to promote our visual observing certificate programs to the RASC membership.

We primarily utilise the monthly RASC Bulletin. Typically, we issue an update with a list of certificates issued in recent months.

We occasionally deliver talks to RASC centres. We remind centre meeting coordinators or local observing committee chairs that we're only too happy to receive requests and invitations to present at their meetings to their local members. It's a great way to update people as to our new programs and recent activities and to build a buzz, get observers excited and invigorated, hopefully inspiring them to undertake a new program or challenge themselves.

The Observing Committee is grateful for the tremendous efforts to refer to our visual observing programs via the Insider's Guide to the Galaxy webinars delivered by live stream and recorded to YouTube. See the RASCANADA YouTube channel for all their videos. The [link here](https://rasc.ca/certificate-programs) specifically connects to the playlist for the Messier Minutes delivered by Chris Vaughan and Samantha Jewett.

Of course, if RASC members haven't otherwise heard of the visual observing certificate programs, we encourage you to visit our web site's main program page for more info, or send us an email with all your questions. We're happy to help.

<https://rasc.ca/certificate-programs>
observing@rasc.ca

There are a total of 6 different pins (figure 3) which observers may acquire.



The lapel pins up for grabs.
 Apologies: the IWLOP is upside-down. But then the Moon appears rotated in a reflecting telescope—so there!

Outlook

The Observing Committee is looking to stay the course, continuing to maintain and promote our existing programs. We constantly update our materials for clarity and inconsistencies, while balancing the needs and expectations of long-time members as well as new people joining RASC.

It is our great honour to assist members in improving their observing and logging skills while having fun and learning at the eyepiece. We're in the business of giving goosebumps and feathers in caps.

Humbly prepared and assembled by Emma MacPhee , Interim Observing Committee Chair.

National Council Report

It has been a busy year building on the momentum of 2023 with activity continuing to clarify the role of the National Council (NC) within the RASC. The National Council and Board of Directors have worked to improve their working relationship, especially during the transition of Board members. The RASC

President Michael Watson, RASC Executive Director Jenna Hinds, other Board members and some RASC Committee representatives regularly attended meetings to provide guidance when needed, updates on Board activities for which NC input was requested, and to discuss NC recommendations.

Meetings

The National Council met six times in 2024 – February 11, April 21, June 9, September 15, October 27, and December 8. Each meeting averaged 26 of the 38 members representing an average of 22 of the 30 Centres. Board members were also strongly encouraged to attend; an average of 7 of the 9 members attended each meeting. Forty minutes of National Council meetings were allotted to Board updates (financial, special projects, staffing, etc.). The NC wishes to thank Lauri Roche (EPO Chair) for EPO updates and to Chris Gainor (Chair,

Editorial Board) for attending to address publication questions raised by the NC.

The February 11, 2024, NC meeting was considered a special meeting at which Centre Presidents were invited as guests to hear the update of the RASC Board of Directors deliberations regarding the 2023 RASC Budget and the proposed 2024 RASC Budget, and to provide the opportunity for positive feedback to the Board regarding the plan of action presented. Twelve Centre Presidents/Vice-Presidents and 26 NC Representatives were in attendance.

Officers & Centre Representatives to the National Council

As Chair, I thank my fellow officers, Charles Ennis (Vice-Chair) of the Sunshine Coast and Adriana Stone (NC Recorder) of Calgary Centre for their support and dedication to ensure the National Council business goes forward. The NC acknowledged the work of outgoing Vice-Chair Jim Fairles and Recorder Eric Klaszus during the challenges of the previous 2 years. As officers, we have high regard for our fellow NC members who guide not only the NC but also the RASC Board of

Directors to determine the path toward a stronger, viable Society.

The NC also wants to thank members for their expertise and input during their tenure on the NC: Victor Abraham (Hamilton), Randy Attwood (Mississauga), Brent Burlingham (Saskatoon), Jim Fairles (Kitchener-Waterloo), Nathan Hellner-Mestleman (Victoria), Eric Klaszus (Edmonton), June MacDonald (New Brunswick), Stephen Nourse (Ottawa), and Mark Tovey (London).

Chair	Judy Black, Halifax Centre (re-elected, June 9)
Vice-Chair	Charles Ennis, Sunshine Coast (elected, June 9) (Jim Fairles, Kitchener-Waterloo Centre)
Council Recorder	Adriana Stone, Calgary Centre (by acclamation, Sept 15) (Eric Klaszus, Calgary Centre)

Belleville	Debi Butler	Hamilton	Andy Blanchard
Calgary	Dan Boychuk		(Victor Abraham)
	Adriana Stone	Kingston	John Hurley
	Garnet Tozer	Kitchener-Waterloo	Ellen Papenburg
	(Eric Klaszus)		(Jim Fairles)
Edmonton	Jon Stolte	London	Peter Jedicke
	Sukrit Ahluwalia	Mississauga	(Randy Attwood)
Fraser Valley	Greg Sebulsky		Allan Connery
Halifax	Judy Black		Kirby Alguire
		CF de Montréal	Patrice Scattolin

Montréal	Frank Tomaras	St. John's	Marcellus Redmond
	Morrie Portnoff (alternate)	Thunder Bay	Andreas Buccholz
New Brunswick	François Therriault	Toronto	Lucy Winnicki
	(June MacDonald)		Ralph Chou
Niagara	Rick Stasiak	Vancouver	Nolan Smith
Okanagan	Jim Failes	Victoria	Bill Weir
Ottawa	Jean-Sebastian Gaudet		Lauri Roche
	(Stephen Nourse)		(Nathan Hellner-Mestleman)
Prince George	Rob Woods	Windsor	Tom Sobocan
Regina	Mark Meadows	Winnipeg	Dennis Lyons
Sarnia	Marty Cogswell		Bryan Stach
Saskatoon	Joelle Sheard-Patrick		(Judy Anderson)
	Lori Tedford	Yukon	Dyson Hale
	(Brent Burlingham)		Christa Van Laerhoven
Sudbury	Alan Ward		(alternate)
Sunshine Coast	Charles Ennis		

Terms of Reference

Beginning in April 2023, Centres were provided opportunities to suggest change to the RASC Policy *C11: National Council Terms of Reference*. A policy draft was reviewed by the Board and the NC to finetune several aspects. I thank Michael Watson for the insightful discussions we had regarding the

NC and its changing role within the RASC. Some aspects such as membership, representation, participation by electronic means, officer election and terms, will require membership approval at the 2025 Annual Meeting.

National Council Welcome Package and Communications

A task team was formed late in 2023 to provide the list of topics to be included in the welcome package for newcomers to the National Council. The package was implemented by Eric Klaszus in mid-2024.

Communications within the Council was addressed. Thanks to Jenna Hinds and Charles Ennis, the National Council Google drive was reorganized to improve accessibility with all minutes and agendas

in one place, making it easier for members to access required documents. The ability for NC members to communicate one-on-one was identified. Judy Black and Jenna Hinds determined an email distribution list containing the current membership would be provided in the National Council Google drive with only current members having access.

Relationship with the RASC Board of Directors

The three Pillars of Trust identified in 2023 – Communication, Collaboration and Transparency – were further strengthened this year. The lines of communication and *collaboration* between the Board and the National Council continued to improve. President Michael Watson, E.D. Jenna Hinds and Board members kept the NC apprised of work accomplished.

Financial statements were shared with NC members at every meeting, ensuring there was *transparency* in financial activity and budgeting and in the change in focus to revenue generation. Explanation of investments and the required use of special funds

(Northcott, Legacy, Dorner) and unrestricted funds were provided. In April, the Board agreed to the NC recommendation to have a draft budget prepared for discussion before January. In October, the Board *consulted* the NC regarding the 2025 budget prior to Board approval.

The Board also consulted the NC and provided the rationale for membership fee increases. Proposed amendments to the RASC By-Law No. 1 affecting membership renewal grace period, meeting funding, and the National Council role and operational procedures were provided for review.

Consultation with RASC Committees & Task Teams

Education and Public Outreach (EPO) Committee members Lauri Roche (Chair), Judy Sterner (Calgary) and Judy Black (Halifax) with Jenna Hinds made final edits to the *Centres Operations Manual (COM)*. The document was subsequently posted to the RASC website. The EPO Committee also kept the National Council apprised of the *NOVA (New Observers to Visual Astronomy)* program development.

Editorial Board Chair Chris Gainor was consulted when NC members questioned the potential of having both the *Observer's Handbook* and the *RASC Observer's Calendar* produced in print and digital formats. It was agreed to not produce both formats due to costs in development of both and the additional work it would place on staff.

The *Eclipse Task Force* through its Chair Randy Attwood and Vice-Chair Victoria Kramkowski kept the NC apprised of its activities, its relationship to

other organizations, and the achievements leading up to and consequent to the eclipse.

First Vice-President Brendon Roy informed the National Council the *Light Pollution Abatement (LPA) Committee* would reach out to Centres and members to gather a group interested in working with the committee to address the increased requests from organizations. NC Representatives assisted with this request.

The NC promoted the need for EPO materials such as *Moongazers* and *StarFinders* for Centre activities and events. Arnold Brody and Ron Macnaughton of Toronto Centre are thanked for their work and expertise to propose a printing strategy for these handouts. Consequently, Centre orders were requested; printing and delivery are expected in early 2025.

Priorities for 2025

- Ongoing: Consultation with RASC Committees and with the RASC Board of Directors.
- Address further improvement to communication mechanisms within the National Council
- NC review of Policy C11: National Council Terms of Reference completed and forwarded to the Board for approval.
- Other business would be prioritized as it arises.

Summary

Needless to say, 2024 was another interesting year, one of strengthening the three Pillars of Trust. The successes achieved were the result of preparation, and the hard work by all the RASC teams (Board of Directors, the NC, Committees, Centres). Many tough decisions were needed to right the RASC ship and they were made.

These successes were also due to improved communication and ongoing collaboration across the RASC. We learned from past experiences and learned from our membership. Our different

perspectives informed the RASC and made it a much stronger Society. Sincere thanks to the RASC members who brought personal and Centre perspectives to the National Council table, the criticisms, the accolades, and suggestions for improvements. All were needed. All were appreciated.

In closing, I again remind all our fellow RASC members stay curious and to look up. The skies, beginning at your feet, are open to explore our Universe.

Respectfully submitted,
Judy Black
 Chair, National Council

Solar Eclipse Reports

Summary of Activities of the RASC Solar Eclipse Task Force

The RASC Total Solar Eclipse Task Force (“the Task Force”) was a true collaboration between Task Force members, RASC Centres, RASC National Office, and many external organizations, agencies, and governments to ensure that Canadians could experience a safe and wondrous total solar eclipse on April 8, 2024.

Over the course of two years, the Task Force developed several resources to help communities, schools, agencies, public facilities, and individuals prepare for the solar eclipse. This included developing a guide for municipalities and public space managers on safety, operational, tourism, and education and engagement considerations and best practices when planning for eclipse day. The eclipse planning guide was also translated into French from the Fédération des Astronomes Amateurs du Québec (FAAQ), and was shared by both RASC and FAAQ with municipalities in the path of totality and beyond. RASC also held an informational webinar on eclipse planning, which drew 115 registrants, many of which were from municipalities, parks, conservation authorities, and other audiences that diverged from typical RASC webinar registrants.

Both Task Force members and numerous RASC Centres held both virtual and in-person presentations, workshops, and educational sessions to share information on the science and experience of a solar eclipse, eye safety requirements, and tips for eclipse viewing. RASC National Office also developed a dedicated total solar eclipse website to house these resources, as well as to develop a list of eclipse-related events, sanctioned viewing sites, and educational resources. Randy Attwood also

worked with Canada Post to develop a magnificent commemorative eclipse postage stamp. Task Force members also responded to various media inquiries leading up to the eclipse.

Task Force members also participated in a variety of other external working groups, committees and task forces in order to share information and collaborate. Task Force members sat on the American Astronomical Society Eclipse Committee, the Ontario Provincial Emergency Management Eclipse Working Group, the Niagara Region Eclipse Emergency Management Working Group, the Ontario Eclipse Task Force, the Buffalo Eclipse Working Group, and the Rochester Eclipse Working Group. These various committees included various partners such as post secondary faculty, science centres and educational facilities and organizations, municipal and provincial staff, and public spaces and park facilities, and were wonderful forums for sharing resources and lessons learned. As part of these collaborations, Discover the Universe, alongside RASC Task Force members and Ontario Eclipse Task Force members, worked together to develop educational materials for the eclipse.

RASC National Office also coordinated a mass order of solar viewers for RASC Centres and the general public, ordering and selling 76,000 solar viewers.

The Task Force members were: Jay Anderson, Stephen Bedingfield, Julie Bolduc-Duval, Ralph Chou, Don Hladiuk, Nathalie Oulette, and Michael Watson. The Task Force was co-chaired by Randy Attwood and Victoria Kramkowski.

Respectfully submitted,
Victoria Kramkowsi and Randy Attwood,
co-chairs of the RASC Solar Eclipse Task Force

Belleville

Location of event:	none held on the day of the eclipse
% totality at location:	100%
Estimated number of attendees:	0
Weather:	75-95% cloud cover, varied by location within region

Weather did not cooperate with cloud cover increasing in advance of the eclipse. Cloud cover was between 75 and 95% for the eclipse and varied by location throughout the region. A number of our members travelled to clearer skies, hoping to view and record the eclipse.

The Belleville Centre put on a number of talks at local libraries and seniors homes, and had public information sessions at the local mall and the Canadian Air Force Museum. We also assisted local radio and web resources by providing information and answering questions on-air.

The Centre purchased 2000 solar viewers from our National organization and sold all of them at \$2.00 per viewer. Our Centre prepared printed fliers (copy attached) which were distributed with the glasses and at local events.

The only difficulty encountered was with limited seating capacities at our library events. In a number

of cases we had to turn folks away and put on additional talks following the scheduled event.

We developed close relationships with the local libraries in our area and have continued with putting on a series of on-going public presentations. Our Centre is establishing telescope loaner programs with the libraries which includes donating the telescopes, putting on periodic lessons on how to use them, and providing on-going equipment maintenance.

We prepared press releases well in advance of the eclipse for print, broadcast and web services which described the eclipse (included location based totality timing), and the times and dates for local information sessions. We had to decline requests for providing colour commentary during livestreaming of the event due to limited local resources.

Lessons Learned

Double your high side estimate for solar viewers.

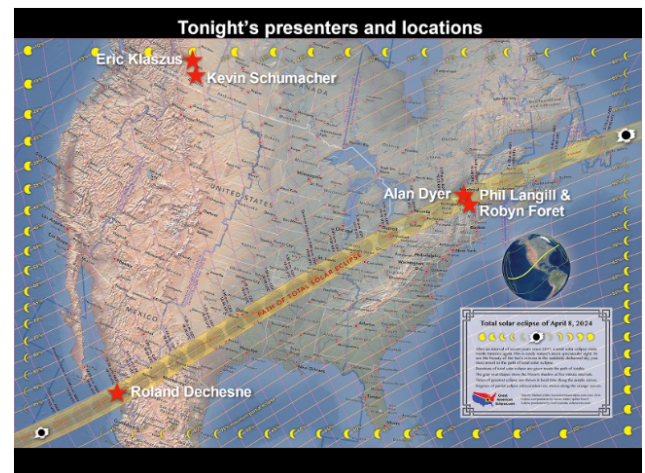
Calgary

The Calgary Centre supported local partial eclipse viewing and also had a number of members travel to destinations along the path of totality. While it's unknown how many members traveled, Alan Dyer, Robyn Foret, Phil Langill, Roland Dechesne, Eric Klaszus and Kevin Schumacher all presented at the Centre's April General Meeting who's primary topic was Eclipse Round Up.

While everyone who has witnessed a total solar eclipse will try and explain their exhilaration every time they get to witness one, it is the journey and the stories associated with the eclipse that captivates audiences.

Alan Dyer illustrates here where each of our presenters attended the event.

Springtime is always a challenge and 2024 didn't deviate from that. What began as a favourable forecast for Texas and some major cities along the path of totality, the changing forecast saw Alan drive into Montana on route to Texas, a 29 hour trip, pivot to return to Canada for a trip Eastward with a watchful eye on the changing weather patterns, heading to southern Ontario and then diverting to Quebec, logging 46 hours of driving (he drove as he has more equipment than anything other than a private jet will allow). One of his many amazing



Location of Calgary Centre presenters during the 2024 Total Solar Eclipse

images is offered here too.

Unbeknownst to us or to Alan Dr. Phil Langill and I along with our wives, were off to Montreal for the eclipse. With Phil's brother-in-law and our daughter living the area, we thought we would take a chance on Quebec for the eclipse, even though it was forecast to be heavily overcast, as we would still get quality time with family. Upon arriving, Phil and his crew took in the news from the media about expected traffic congestion on the path of totality



Totality, as captured by Calgary Centre member Alan Dyer

and they ended up joining us at our planned site at my friend's ranch in Sutton Quebec.

Here is my first taste of the corona and Phil's expression says it all. And the last image is me and my crew!



Alan also had our friends on the ISS take our photo as we were observing the eclipse; I can't quite make us out but we are definitely in this photo: (bonus question – how much time elapsed between this image and the one at the end of this article? The ISS plays a role in both of them)



Roland Dechesne traveled South for his eclipse chase, and had an incredible experience in Mazatlan, Mexico. During totality Roland had a video illustrating the light cloud cover that was moving across the face of the Sun; thankfully it did not

impair the viewing at all as you can see here cloud mixed with corona. Here are a couple of eclipse chasers mixed with corona too.



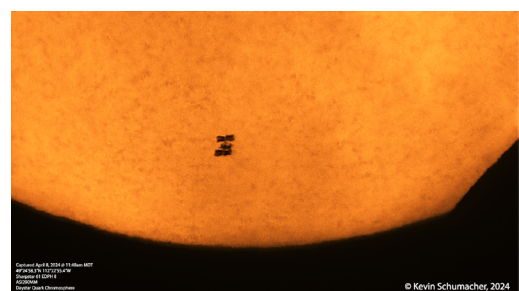
As always, eclipse chasing is about more than the eclipse and the shared experience has to be experienced as that defies words. As one of Roland's eclipse pals states "I have to admit the highlight for me was not the eclipse but rather getting to meet every single one of you on this trip. I enjoyed every conversation I had with every one of you, what a great crew. And the eclipse was cool too, I would totally chase another eclipse with this awesome group of individuals.

Kevin Schumacher had one of the most unique eclipse chasing journeys and this one is likely new to most of you. As you saw in Alan's map at the beginning of this report, Kevin is on the path of a partial eclipse, but his journey was one with specific purpose and could only occur in a very specific place.

Using a website called ISS Transit Finder, he realized that there would be an ISS transit of the eclipsing Sun only an hour's drive from his home. But after he had his plan in place, Soyuz MS-25 launched to the ISS which caused a change in the orbital rate of decay which in turn changed where he had to be in order to capture this illusive transit. Illusive is an understatement; his field of view is only 13.8 arc minutes and the duration of the transit in this FoV is 0.32 seconds.

With a GEM28 mount, a Sharpstar61, an ASI290MM, a Daystar Quark Chromosphere and ASI Air Pro; he arrived 30 before the transit.

He shared a video of the transit and that 0.32 seconds is shorter than a blink of the eye. From that video he was able to capture 2 frames, and with a bit (understated on purpose) of post processing here is the ISS transiting the partially eclipsed Sun on April 8, 2024. Wow!



© Kevin Schumacher, 2024

Hamilton

On April 8, 2024, our Centre hosted an extraordinary viewing event at Limeridge Mall. Residents of Hamilton were treated to an all-day gathering featuring professional telescopes equipped with safety filters, educational activities for families, and expert guidance for those bringing their own viewing equipment. Hamilton provided an ideal vantage point for experiencing the total eclipse, which began at 2:03 pm and concluded at 4:31 pm. There were over 300 people in attendance at the peak of the event and an estimated 200 people that came from neighbouring businesses to obtain solar glasses.

Kingston

For many it was their first Total Solar Eclipse. Preparations by many cities and towns along the path had been planning for a couple of years before this date. Of course the only unpredictable element was the weather itself. Being Canada and April there were lots unknowns.

Kingston was on the centre line of the Eclipse with a total of 3 minutes. 4 seconds of totality. The RASC Kingston Centre did not hold any Centre related activities, as we partnered with Queen's University, and many local groups along with the City of Kingston to help at the many events in different locations around the area. The Kingston Airport was a location for many of the public to view the eclipse, as well at the Queen's University Campus, and MacLachlan Woodworking Museum in Kingston East was another location.

The Centre did hand out Solar Eclipse Glasses in 2023 for the October 14, 2023 partial Solar Eclipse

We distributed over 1,100 solar glasses on the day of the event. We were able to showcase the event throughout the day with several media outlets.

After the event we engaged in collecting solar glasses back with the intent to redistribute them in partnership with Astronomers Without Borders. In July 2024, we successfully shipped 52,300 glasses to the South African Astronomical Observatory. These glasses were distributed to various organizations at the IAU AGM held in Cape Town.

(RASC KC also helped Queen's University with their Outreach event), and again handed out many to members who were holding neighbourhood events. Each of these separate events ranged from 4 to over 50 individuals observing the event.

Some members travelled along the 401 and even went to Quebec, to escape the clouds for an outstanding clear Eclipse.

Queen's University handed out over 100,000 Solar Glasses to all schools in the Limestone School district area and Libraries in the Kingston Frontenac Lennox & Addington. These were available for the public to pick up.

The event was a success despite the cloud. It cleared at the peak times, and many witnessed prominence's and the changing skies . The next Total Solar Eclipse in Canada will be August 22, 2044!

Mississauga

Ten Members of the RASC Mississauga Centre set out to observe the 8 April 2024 eclipse under optimal conditions. This meant a three month planning process and the booking of accommodation along the line of totality from Texas to New Brunswick. Failure was not an option!

We ended up going on a four day eclipse chasing trip to Quebec due to the most favourable weather conditions. Our selected observing location was Johnville PQ (slightly east of Sherbrooke). We observed 100% totality for three and a half minutes under perfect weather conditions at their Community Centre lower parking lot. We communicated with and were joined by the Montreal RASC (10), staff and friends from the Weather Network (5) and a few local residents (3). The local community generously opened the Centre for us to give us access to washrooms and Wi-Fi.

Our four day Drummondville PQ motel stay was punctuated with a few public education sessions on eclipses. In exchange, we were treated with cake and pizza. We also met a few Americans, who like us, were originally going to observe in Texas.

Everyone in our Mississauga group had an equally important role to play whether it was predicting the weather, booking reservations, driving, researching sites, finding places to eat, things to do, connecting with the public, sharing knowledge, and supporting each other... truly an awesome and unforgettable effort.

Here's the link to a highlight reel put together by Robin Metcalfe that gives a sense of what we experienced - <https://www.youtube.com/watch?v=VVvk7UjPciA>

Photo included on next page.



Montreal

Location of event:	John Abbott College
% totality at location:	100%
Estimated number of attendees:	5,000-6,000
Weather:	Partly cloudy throughout but totality was clearly visible through thin clouds!

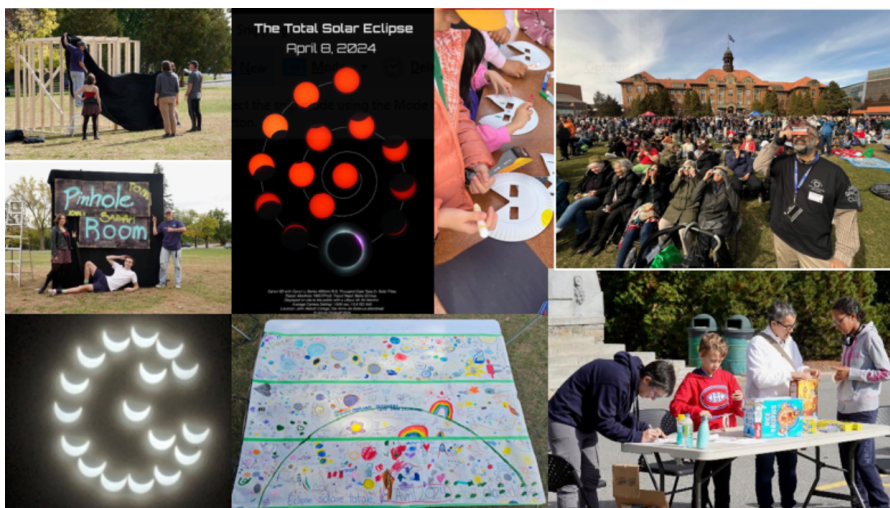
RASC Montreal worked with our partners at John Abbott College (JAC Space Club), McGill University (Let's Talk Science & the Macdonald Campus) and MDA Space to offer a fantastic Eclipse event and a chance for all members of the community to experience the eclipse safely. Altogether over 4000 eclipse glasses were provided free-of-charge to those on-site, not accounting for those that had been picked up in advance by RASC Montreal members and JAC Science students. Additionally 2 large pinhole projection booths were built and animated by JAC Arts & Sciences students to talk about the history of optics and the camera obscura, and a station was setup for kids to make their own pinhole projections and eclipse glass masks. There was also Citizen Science featured with sensors measuring the insolation, temperature and humidity leading into totality, along with RASC Montreal members sharing safe views through telescopes.

RASC Montreal provided some talks to different groups and schools in the weeks and months leading up to the eclipse as well as a virtual visit to a local private school that morning and an Outreach talk right after totality with SkyNews UK to share the experience with the worldwide audience.

There were many concerns about the size of the event becoming too large when the government decided to close schools and there was pressure to make it a closed event, but the reputation of RASC Montreal events helped the students and JAC faculty push for the event to proceed. Media coverage was controlled by the college.

Lessons Learned

Make the event large enough and detailed enough with lots of strong support and it's hard to completely stop when the government gets antsy?



New Brunswick

Location of event:	Fredericton
% totality at location:	100%
Estimated number of attendees:	2,500-3,000
Weather:	Clear

Eclipse presentations were given to schools, nature clubs, radio clubs and communities in the year leading up to eclipse day. Two members in Fredericton offered eclipse observing at seniors' complex, and four members provided telescope eclipse viewing among a crowd of 6000+ in downtown Fredericton.

We purchased 2000 eclipse glasses with the intention of splitting them freely among each of four urban areas, two of which were within totality. Many communities and organizations within the province purchased their own supply. The Centre glasses were given out during presentations, used to supplement community events, and given to individuals who requested them in the few weeks before the event.

One member was the originator of the Balloon Project, which was launched from Florenceville-Bristol near the centreline of the umbra to image and videotape the eclipse, and to provide a live-feed if the sky was cloudy. Several years of planning, with several partners and test-runs, were required to have a successful launch. Wind speed and



direction was the final challenge, resulting in a half-hour delay. Members supported other events but the organizational challenges were handled by the communities.

Pre-eclipse presentations were given at various libraries and a museum. Members were part of some community event planning committees, and supported events organized by a member-owned astro-tourism company.

Media outreach was handled through community planning committees. Media contacted some members for interviews and articles were submitted to newspapers.

Lessons Learned

None identified.

Regina

Location of event:	Saskatchewan Science Centre
% totality at location:	41% coverage, 51% magnitude
Estimated number of attendees:	1,100
Weather:	The Regina weather was perfect with a clear sunny sky, a temperature of 15C, and a light breeze

Several of our members who travelled to the path of totality also held their own events.

- Port Burwell, Ontario in coordination with the local Legion – 126 people.
- Tillsonburg, Ontario – 13 people.
- Arizona – 64 people.
- Parks, Arkansas – 14 people.

- Mazatlán, Mexico – 12 people.
- Some even held workplace events.
- Sask Polytechnic – 75 people.

The University of Regina held a separate event led by Dr. Samatha Lawler who is a Regina Centre member. It drew another 1,000 people.

The event was highly promoted by the Science Centre and the local media. We had 9 volunteers present with at least 7 telescopes and binoculars set up. We made eclipse glasses available for cost recovery of \$2.00 or a donation. We sold out very quickly even restricting them to 1 pair per family.

We had extensive media coverage. We were approached in advance by CBC Radio for us to do pre-planned segments on The Morning Edition (Kevin Fenwick) and Blue Sky (Pierre Schierle) shows. We also had all the local TV stations show up (CBC TV News, CTV News Regina, Global

News Regina) with Kevin Fenwick handling those interviews. We also made the front page of The Leader Post our local newspaper.

Lessons Learned

- Even a partial eclipse will draw a huge crowd.
- The public began arriving hours before the announced event time.
- It is a challenge to get local volunteers when many travel to the path of totality.

St. John's

Location of event:	Various
% totality at location:	100% from Clarenville, NL to Codroy Valley, NL
Estimated number of attendees:	N/A
Weather:	Variable

Prior to the eclipse, Randy Dodge gave eclipse presentations at the Johnson GeoCentre, the Manuels River Interpretation Centre, and to the Memorial University Pensioners Association. Free solar eclipse glasses (~1500) and an information brochure were distributed at these events. Randy Dodge, Garry Dymond, and Anna O'Grady participated in at least 8 radio interviews across the province. For people staying in St. John's (about 99% totality), the Johnson GeoCentre organized a viewing event. Hilding Neilson (Memorial University), in collaboration with Let's Talk Science, College of the North Atlantic, and the Town of Gander, organized a three-day Solar Eclipse Soiree in Gander (100%). Over a dozen members were in Gander on the eve of the eclipse. Five remained in Gander with at least two solar telescopes to support the event there. Attendance at the Gander event was over 1000. Views of the partial eclipse were intermittent but clouds at the event site thickened just before totality. Members in other parts of Gander did see some totality. On the morning of the eclipse, many members spread out across the path of totality. About 11 members traveled to the west coast of Newfoundland (Codroy and Cape Anguille) and obtained views of totality. 4 members traveled down the Bay d'Espoir highway and got excellent views of totality. Other members were spread along the Trans-Canada Highway from just south of Gander, through Terra Nova National Park, to Clarenville and the northern Burin peninsula. Most got glimpses of totality. At every observing venue, Centre members interacted with members of the public to provide advice and interpretation as appropriate. Weather was a challenge for most with snow on the highway on the morning of the eclipse and intermittent cloud throughout the day at all sites. This photo by Jim

Stacey is from the Bay d'Espoir Highway. A mug with this image was produced for sale to members and as a thank-you gift to media contacts.

Lessons Learned

We expected weather to be an issue and it was. Forecasts indicated that the main population centre near the centre-line (Gander) was very likely to be clouded out. It was expected that the majority of members would travel in search of elusive clear skies. With a large event already planned for Gander, we indicated that some of us would stay in support of that event but that we would not be a primary sponsor. Managing the event in Gander, which is a small town, required the resources of two post-secondary institutions and the municipality as well as smaller partners like *Let's Talk Science*, the GeoCentre, and our members. Our centre would not have had the resources to lead such an initiative, particularly if it was in a larger population centre.



Jim Stacey

Victoria

Victoria B.C. was located thousands of miles away from the path of totality during the April 8, 2024 solar eclipse, and the Moon covered no more than 17 percent of the solar disc that day as seen from Victoria on what was a very cloudy day.

Yet the eclipse was still a notable event for the Victoria Centre of the RASC.

Many Victoria Centre members stayed home, some of them having enjoyed the August 2017 total solar eclipse from a relatively nearby path of totality under clear skies in Oregon.

The 2024 eclipse was widely publicized across Canada, and some RASC members and members of the public couldn't resist taking part from Victoria. The Friends of the Dominion Astrophysical Observatory (FDAO), which includes many Victoria Centre members, organized an eclipse watching party on Observatory Hill.

On Monday evenings, the Victoria Centre holds Astronomy Café get-togethers, which moved to Zoom during the pandemic. By 2024 the Astro Cafes were hybrid, but for the evening of April 8, the proceedings took place completely online. Many of its participants were far away to be on the path of totality that day.

Astro Café that evening was a big debriefing session on the eclipse, bringing together the lucky and unlucky eclipse chasers with those who stayed home. Here are some highlights from the day's reports at that virtual get-together.

Jim Cliffe hosted the Astro Café and reported seeing "nicks" of the eclipsed Sun from Victoria with the thick clouds interfering with the view.

"The turnout today, in spite of the weather, was really great," Kirsten Pedersen reported on the FDAO event. The Centre of the Universe visitors centre was full for streamed reports on the eclipse and other presentations, and the observatory gates had to be closed when parking filled up at the top of Observatory Hill.

David Lee and Dennis Crabtree greeted the public out on the observing deck, and many people came out to get any glimpse they could at the eclipsed Sun, which was occasionally visible through the clouds. They also appeared on television that day on CHEK TV and the local CTV news.

The long-term weather predictions for the path of totality called for clear skies in Mexico and Texas, and clouds in the northern states and Eastern Canada. In many cases, the predictions weren't borne out. That meant that many people who chose to view totality from eastern Canada got lucky, while others abandoned their plans to go south and instead also enjoyed totality from Canadian skies.



Totality began over Mexico, and several Victoria Centre members had booked eclipse cruises off the Mexican coast. Joe Carr and Bill Weir enjoyed near perfect conditions on board the Discovery Princess 150 miles off of Mazatlan, and their results were reported to the Astro Café through internet postings.

Leslie Welch was driving toward Texas, but following the weather forecasts, he chose to catch totality under clearer skies at a highway rest stop in Arkansas.

Nathan Hellner-Mestelman had also planned to go to Texas, but as the forecasts changed, he followed family members to Ontario but finally saw the eclipse from the Port of Montreal. Because the Montreal Metros were full, he had to walk a long distance from the place he was staying south to the Port, carrying a telescope that he used to share the spectacle with many members of the public.

The first Victoria Centre member to see totality from Canadian soil was the author of this report and the Centre President, Chris Gainor. He travelled to Windsor, Ontario, which was just outside the path of totality, with a plan to cross the border and travel south to the centreline in Ohio. On the morning of April 8, the weather seemed to be just as good on the Canadian side, so he drove south to Colchester Harbour on Lake Erie, where he knew many members of the RASC Windsor Centre would be watching the eclipse. As in much of Ontario, the view of totality was only slightly affected by a thin cloud layer.

Brian Mestelman got a similar view of the eclipse from St. Thomas, Ontario. Lauri Roche at Brock University in Catherines and Jill Sinkwich in Niagara on the Lake missed totality due to thick clouds. After considering several places to go, Chris Purse went to Kingston on the eve of the eclipse. But the forecast on the day was not promising, so by the time of totality, he was in Beauharnois, Quebec, just west of Montreal, where he got a good view of totality.

Centre Past President Randy Enkin viewed the eclipse from a rooftop in the Plateau district of Montreal, and he and a group of eclipse watchers were photographed for the CBC News website.

The special Astro Café was rounded out by our resident Meteorologist Reg Dunkley, who stayed home but explained what the weather had done that day in North America. As it turned out, clouds in

Texas and other parts of the U.S. defied the long-term predictions for eclipse day, and so did the clear skies in much of Quebec and New Brunswick.

The events of that eclipse day as seen by Victoria Centre members are preserved on the video of that Astronomy Café, which can be found on the Victoria Centre's YouTube Channel, and on RASC Victoria's image bank on Zenfolio.

Windsor

Locations with totality:

- Point Pelee National Park (West Beach, Point and parking lot)
- Jack Miner Bird Sanctuary, Kingsville
- Colchester Beach, Colchester
- John R. Park Homestead Conservation Area, Harrow

Estimated number of attendees: 4,000-5,000

Weather:

Rain & clouds the night before. Sky mostly clear during most of the eclipse with some light wispy clouds at totality.

Numerous free public presentations were given at public libraries and community centres by RASC Windsor members Steve Pellarin, Mahayarrahh Livingstone, Mike Mastronardi & Tom Sobocan. Radio and TV interviews were conducted both prior to the eclipse and on eclipse day. A comprehensive website on the solar eclipse was made available to the public. Dr. Susan Sawyer-Beaulieu shared presentations on making solar eclipse filter housings and on solar eclipse photography.

We were involved with the purchase, sale and donation of thousands of pairs of solar eclipse glasses. Partners included Point Pelee National Park, the Essex Region Conservation Authority, Jack Miner Bird Sanctuary, Towns of Colchester & Kingsville, the Fogolar Furlan Club, local libraries & businesses, the Student Alliance at the University of Windsor. Articles were published in the *Windsor Star* (photos & interview with Steve Pellarin).

The local francophone Scout troop crafted solar eclipse viewers with eclipse glasses, paper plates, tape & markers, which they used on April 8. In Colchester, only a km from where the shadow of totality first made landfall in Canada, Windsor Centre members Mike Mastronardi, Sandy van Gaalen, Juliana Grigorescu and Grant Maguire, as well as Chris Gainor (Victoria Centre) witnessed totality.

Lessons Learned

Much outreach, community partnerships and many volunteers with solar filtered telescopes are required to prepare for a total solar eclipse. A website for the event and distributing stickers with QR codes to link people to the website were beneficial. Phone apps, such as Solar Eclipse Timer, explained the different aspects of the eclipse.

Photos available here: <https://drive.google.com/drive/folders/1EJBpD3Xmax2DQ7hQDiWUzoE4mHXBGu5>



Essex Ward 3 Councillor Brad Allard, Mayor Sherry Bondy, Essex ACT committee member Nicole Lin, and RASC members Michael Mastronardi, Grant Maguire, and Sandra van Gaalen welcomed visitors to the eclipse watching event.

Winnipeg

Location of event:	Community Garden, Assiniboine Park, Winnipeg, MB
% totality at location:	57%
Estimated number of attendees:	8,000
Weather:	partially cloudy for first hour, then clear enough

The Winnipeg Centre partnered with the Manitoba Museum's Planetarium and the Assiniboine Park Conservancy for our eclipse activities. We purchased 800 eclipse glasses to give to our members and to sell to the public (the Planetarium also sold several thousand pair through their own sources). Social media promotion and a press release brought a large amount of media attention, and several Centre members were interviewed on local television. The Planetarium also live-streamed the event to over 120,000 viewers over the course of the event. Centre members and Planetarium staff set up 15 or so telescopes for the event, and thousands of people attended the event. The location also has high walk-by traffic so even people who didn't know about the observing event were able to safely observe the eclipse. Assiniboine Park Conservancy provided several volunteers to handle traffic control, which turned out to be very necessary as the event progressed.

In terms of challenges, the main challenges were crowd control and parking at the site. Some schools came in busses to attend the event, but most divisions gave students the day off to avoid liability issues. (Many students came with their parents.)

The other challenge was the lack of eclipse glasses available at the event. The planetarium was sold out three days beforehand (having sold 4,000 pair) and the Centre had a few left but collecting funds in a big crowd wasn't ideal.

Another issue encountered was the issue of using public wifi for live streaming and for viewing totality from other locations. With that many people, the network was saturated and bandwidth was not able to keep up with the levels needed for a proper stream.

Lessons Learned

- Have a good pinhole projector available for people to build in advance (many people had ones that didn't have enough "focal length")
- Have enough eclipse glasses (impossible)
- Have neon vests or shirts for traffic control people
- Walkie talkies for key staff
- Private wifi network for any live stream



Image by: Scott Young

Annual Reports Of Centres

Belleville

JANUARY 2024

Topics:

- Upcoming April 8, 2024 total solar eclipse workshop
- Observing reports
- Greg Lisk: "Bowl of Night" planisphere, designed in 1950s and how to use it.
- Greg Lisk: "Voyager 1 and Voyager 2 spacecraft"

FEBRUARY 2024

9 members present

Topics:

- 2024 Total Solar Eclipse Planning; "Solar Eclipse Timer" app.
- Wellington Arena Family Day: eclipse information for the public
- What's Up" for February
- Greg Lisk: "19 galaxies from James Webb Telescope"

MARCH 2024

12 present

Topics:

- March 2, 2024: Picton Library public eclipse information
- March 19, 2024: Quinte West Library eclipse information
- March 23, 2024: Quinte Mall eclipse information
- March 30, 2024: Belleville Library eclipse information for the public
- Video: "Video of Light"
- Greg Lisk: "Hydrogen Alpha filters"
- Greg Lisk: eclipse presentation at Air Force Museum for Family Day

APRIL 2024

16 present

- Greg Lisk: "April 8 upcoming total solar eclipse"
- Quinte Science Fair, club gives prizes for astronomy-themed projects
- April 8, 2024, total solar eclipse goes through the Quinte region; thousands watch
- eclipse is livestreamed from Meyers Pier, Belleville

MAY 2024

- Eclipse reports from members; some viewed from as far east as Montreal area
- May 10 mega aurora

JUNE 2024

- Photos from May 10 aurora
- Guest speaker: David Cotterell:
- "April 8 total solar eclipse viewed from Quebec"

JULY 2024

- "Responsible Lighting" brochures
- Greg Lisk: meteorite talk and presentation at Bancroft Gemboree
- July 16 talk at Quinte West Library
- astrophotos by Steven Burr
- Greg Lisk: "Herschel Wedge"
- Greg Lisk: aurora photos
- "What's Up" in July
- public viewing at Presquile Provincial Park July through August

AUGUST 2024

- South Shore Joint Initiative aims to have a permanent dark sky viewing area in Prince Edward County
- astrophotos by Steven Burr
- Rochester, New York "RocheStar Star Party" attended by 2 members
- evening public observing session at Sandbanks Provincial Park

SEPTEMBER 2024

- laser pointer safety video and exam
- joint RASC Belleville and RASC Kingston star party
- SeeStar scopes

OCTOBER 2024

- October 10 --- another spectacular aurora display
- Robert Mindenhall --- aurora photos from May

NOVEMBER 2024

- Steven Burr aurora photos from October 10
- Speaker: Don Town, "September Okie-Tex Star Party"
- Greg Lisk: "AM3 astrophotography mount"
- "What's Up in November?"

DECEMBER 2024

- Annual club Xmass dinner
- Observing reports
- upcoming talks for the new year
- Greg Lisk astrophotos
- other member photos

Calgary

Centre Executive- through November 16, 2024

Name	Role(s)
Phil Langill	Honorary President

Executive:

Robyn Foret	President
Steve Donaldson	1st Vice Pres
Heather Laird	2nd Vice Pres
Nisha Valckx	Treasurer
Derek Euale	Secretary
Simon Poole	Past President

Council

Phil Tracey	Councilor
Andrew Bennett	Councilor
Adriana Stone	Councilor
Patricia Jeffery	Councilor
Myrna Fleury	Councilor
Daniel Boychuk	Councilor
Russ Dueck	Councilor
Shabana Ahmad	Councilor

National Reps

Eric Klaszus	National Council Rep - Ntl Secretary
Adriana Stone	National Council Rep
Garnet Tozer	National Council Rep

Centre Executive- Current (2025)

Name	Role(s)
Phil Langill	Honorary President

Executive:

Robyn Foret	President
Eric Klaszus	1st Vice Pres
Heather Laird	2nd Vice Pres
Nisha Valckx	Treasurer
Derek Euale	Secretary
Simon Poole	Past President

Council

Myrna Fleury	Councilor
Steve Donaldson	Councilor
Daniel Boychuk	Councilor
Judy Sterner	Councilor
Pat Jeffery	Councilor
Shabana Ahmad	Councilor
Adriana Stone	Councilor
Russ Dueck	Councilor

National Reps

Adriana Stone	National Council Rep - Ntl Secretary
Daniel Boychuk	National Council Rep
Garnet Tozer	National Council Rep

Centre Contact Information

Centre name: Royal Astronomical Society of Canada, Calgary Centre

Centre address: R.A.S.C., Calgary Centre
PO Box 22099
Calgary RPO Bankers Hall, Calgary, AB, T2P 4J5

Centre Telephone: 403-803-1075 Centre President

Centre email: inquiries@calgaryrasc.ca
president@calgaryrasc.ca
secretary@calgaryrasc.ca
treasurer@calgaryrasc.ca

Centre websites: <http://calgary.rasc.ca>

Secretary's Annual Report 2023

Respectfully submitted by:	Robyn Foret, President
Established:	1958
Membership:	550 as of December 31, 2024
Assets:	Meetings held at the Calgary Central Library and TELUS Spark Infinity Dome Wilson Coulee Observatory – just north of Okotoks- Multiple Scopes on site Eccles Ranch Observatory- Conservation Easement- yearly Star Party site and Members dark sky/camp site Ralph Klein Park Observatory- planning and fundraising Extensive Telescope and Binoculars for members program
Partnerships:	Rothney Astrophysical Observatory - University of Calgary TELUS Spark Science Centre Calgary Central Public Library Ambrose University Mount Royal University Community Associations, Municipal Libraries, Special Interest groups
Outreach:	11 General Meetings open to the public 26 Member Events including Observers Group, NOVA, Youth Group, Star-B-Q and Alberta Star Party 126 Public Events, i.e. Outdoor Adventure Travel Show, Earth Science for Society, etc. On-Line Kids Program Pop-ups

Centre Activity Report Nov 2023 - Nov 2024

2024 was a busy year for the Centre focused on increasing Value to the Public , Value to Members, Value to the Scientific Community and doing so in a financially sustainable manner.

General meetings continued in a hybrid format with attendees participating in-person at the Calgary Central Public Library (CPL) and TELUS Spark Infinity Dome and virtual attendees participating via Webex. Going forward, the in-person meetings will be held in the TELUS Spark Infinity Dome, offering an amazing venue for our in-person audience.

Value to the Public is provided through our **Education and Public Outreach** saw a great comeback in 2023 with the regular events such as the Outdoor Adventure and Travel Show and the Earth Science for Society conference and Star Nights and Public Observing at the Rothney Astrophysical Observatory and TELUS Spark. The Centre hosted 126 events, 96 of which included lectures, 82 included telescopes, 27 were held at libraries, and 8 included our inflatable planetarium. This totaled 480 hours of outreach time, reaching 14,600 attendees with all of this provided by 80 volunteers. While the outreach is amazing in and of itself, **Marketing** and **Volunteer Coordination** is critical to the Centre's success in these endeavours.

Value to Members also known as **In-reach** continues with lots of activity at the Centre's Wilson Coulee Observatory (WCO), with Jack Milliken's Observer Group and NOVA programs, with Dough Thorp's Youth Group and the ever-popular Telescopes for Members program run by George Grant, Daniel Boychuk and Derek Euale where members can rent from a well-stocked pool of Centre-owned telescopes. The C14 at the WCO's domed observatory has undergone significant upgrades thanks to the leadership of Mark Simpson. The C14 is now a go-to scope with improved tracking and imaging capabilities and real-time broadcast to the large screen TV in the main building. In addition to Mark's incredible work, his appeal to members for donations to complete the upgrade saw members come forward with about \$10,000.00 in donations. Not only is the Centre providing great value to our members, but our members are investing in the Centre to the benefit of all members and the public we serve.

Behind the scenes, is a tireless group of volunteers on our Website Committee providing value to members with their work. The Centre's administrative and management tasks are all moved to Google Workspace housing our Public Accounts and our

Business Accounts. This streamlined approach for communication and collaboration ensures that our Executive, Council and Volunteers are able to efficiently and transparently perform their tasks and engage fully.

The Centre communicates regularly with its Members and the Public through its monthly newsletter, The StarSeeker, edited by Carole Benoit, through its website at <https://calgary.rasc.ca/wp/>, and through its social channels on facebook, twitter, youtube and meetup.

The Marketing Committee, headed by Myrna Fleury continues the important role of Centre branding, messaging and communications and in 2024 engaged with a University Marketing project targeting RASC Calgary Centre with a capstone project encompassing branding, communication and social media strategy.

Value to the Scientific Community manifests itself in our PARSEC program and with our serious gang of occultation chasers. In one particularly significant occultation, the RASC Calgary Centre teamed up with Peter Ceravolo and 6 students from Penticton Secondary School and all are named as the discoverers of a new double star as published in the JDSO (the Journal of Double Star Observations).

Financial Sustainability is always a challenge and our Treasurer diligently keeps us on track. Having the benefit of a Casino Fundraiser every 18 months or so allows us to plan our capital expenditures 2 years in advance and coupled with fees, donations and grants, the Centre continues to prosper.

Membership

Mid December 2024 saw the Centre membership @ 550 strong.

Social Media platforms continue to attract interested surfers and the Meet-up group is a regular source of attendees at Centre events.

General Meetings

The Calgary Centre continues with the tradition of offering free public lectures most months of the year. These GM's offer interesting speakers, an opportunity to socialize with like-minded individuals and gives the Centre a showcase for our local merchandise and the RASC's publications.

General meetings were held on the third Thursday of the month in-person at the Calgary Public Library or the TELUS Sparck Science Centre and online. 2024 featured the following speakers and topics:

General Meeting Speakers and Topic	
Date	Speaker(s)-Topic
18-Jan-24	Dr. Sara Mazrouei – <i>Rendezvous with the Ancients: Unveiling the Mysteries of Asteroids Itokawa and Bennu</i>
15-Feb-24	Ashley Stock – <i>Using Pulsars to Measure Small Interstellar Clouds</i>
20-Mar-24	Dr. Samantha Lawler – <i>Kuiper Belt Objects, Planet 9 Theory & Starlink</i>
21-Mar-24	Rebecca Booth – <i>DRAGONS Unleashed: How Radio Astronomy is Helping to Understand the Milky Way's Magnetic Field</i>
18-Apr-24	Solar Eclipse Roundup – <i>Alan Dyer, Robyn Foret, Dr. Phil Langill, Roland Dechesne, Eric Klaszus and Kevin Schumacher</i>
16-May-24	Jason Nishiyama – <i>Radio Astronomy – a primer</i>
20-Jun-24	Dr. Erik Rosolowsky – <i>Cosmic Ecosystems</i>
19-Sep-24	Bob King – <i>LATEST OUTLOOK COMET TSUCHINSHAN-ATLAS: CAUTION AND ANTICIPATION</i>
17-Oct-24	Jeanine Holowatiuk – <i>Capturing the Beauty of the Aurora All Year in the Canadian Prairies</i>
21-Nov-24	Annual General Meeting
19-Dec-24	Roland Dechesne – <i>The Astronomy & Cultural Significance of the Longest Night</i>

Special Projects: RALPH KLEIN PARK OBSERVATORY budgeted to cost \$650,000.00.

Update – The City of Calgary has offered to provide remaining funding for the observatory. Development Permit process is underway along with the engineering drawings' completion.

3 telescopes secured so far; an 8" f/10 refractor from the original Centennial Planetarium, a 15" Phil Johnson truss tube Dobsonian with a Barry Arnold mirror, and a Starfield GEAR115 refactor.

Edmonton

The RASC Edmonton Centre (RASC EC), established in 1932, exists to promote the advancement of astronomy and allied sciences as well as to increase public awareness of astronomy as an enjoyable hobby and as an important scientific endeavour.

Membership

- 257 members (report generated as at December 7, 2024)

Assets

- 5 telescopes at RASC Observatory at the TELUS World of Science Edmonton (TWOSE) south lawn
- 12 telescopes in the Loaner Program
- a 32" folded Newtonian called Unyk-Drew Telescope (UDT) and an 18" Newtonian at the Black Nugget Lake Observatory (BNLO)

Partnerships

- TWOSE (monthly meetings at M. Zeidler Star Theatre)
- University of Alberta (guest speakers; BNLO dome)
- Edmonton Regional Science Fair (sponsorship / judges)
- Tourism Jasper (event: Jasper Dark Sky Festival [JDSF])
- Beaver Hills Dark Sky Preserve Annual Star Party / Parks Canada (event: Milky Way Days)
- Beaver County (where the BNLO is located)

Outreach

- Astronomy Day
- Sidewalk Astronomy
- Edmonton Regional Science Fair
- Beaver Hills Dark Sky Preserve Annual Star Party
- Northern Prairie Star Party
- Jasper Dark Sky Festival

Special Projects

- Completion of Volunteer Logistics (Volgistics) pilot project, which led to the decision to renew the subscription in 2025
- Planning for the PlaneWave Robotic Telescope Project to be housed at the BNLO

Highlights

- *Northern Prairie Star Party (NPSP)*
The 2024 NPSP was held at the Black Nugget Lake Campground, located southeast of Toffield, Alberta, from Tuesday, September 3 to Sunday, September 8, 2024. An estimated 90 people attended over the five days: with warm

Centre Executive

Honorary President	Sir Douglas Hube
President	Jay Lavender
Past President	Tom Owen
Vice President	Clayton Knoll
Treasurer	Jeff Wyton
General Secretary	Daisy Alferez
National Council Rep	Jon Stolte
Public Education Director	Geoff Robertson
Fundraising Coordinator	Luca Vanzella
Councillor	James McNiece
Councillor	Mike Szelewicki
Councillor	John Woolley
Councillor	Alister Ling
Councillor	Chris Meerveld
Internal Communications Officer	Michael Ward
Observing Group Director	Jon Stolte
Membership Secretary	Sharon Morsink
New Member Advisor	Murray Paulson

summer temperatures, four nights of excellent viewing, lots of new attendees, two animated Friday workshops, BNLO viewing and tour, three interesting Saturday afternoon talks, swap and shop, solar and night-time viewing, sky tours – and lots of buzz! A more complete report on the 2024 NPSP, including photos, is found in the October 2024 issue of Stardust, the RASC Edmonton Centre's newsletter, at: <https://edmontonrasc.com/stardust/stardust202410.pdf>

- *Ongoing work on Smokey Lake and Métis Crossing dark sky preserve designations*
Activities toward assisting Metis Crossing with their application to become a Dark Sky Preserve (DSP) have been on hold this year. In 2023, Metis Crossing submitted their initial application to the RASC National Office, and the National Office responded with a number of issues in the application that need addressing. The goal for 2024 was to address these issues and submit a revised application to the National Office. Unfortunately, the attention staff at Metis Crossing has been wholly concerned with the operation of Metis Crossing, and they have not been able to work on addressing the outstanding issues with their DSP application.

- Monthly Events: Regular meetings; What's Up Over Edmonton; Observers' meetings; Astro Café
- RASC EC Council members had the pleasure of meeting RASC President Jenna Hinds for dinner on October 2, 2024.

Challenges

- Membership recruitment and retention (Status: ongoing)
- Coordination with Jasper National Park regarding post-fire rebuilding as it relates to DSP (Status: hit a roadblock)
- Implementing Google Workspace for non-profit (S: resolved)



Looking forward - 2025/beyond

- Offering Membership Fee Benefit Program
- Offering advanced astroimaging workshops (follow up to the introductory workshop held in 2024)
- PlaneWave Robotic Telescope Project

Halifax

About

Established in 1951 as the Nova Scotia Astronomical Society. In 1970, reformed and renamed the *RASC Halifax Centre*. Our membership as of November 2023 was 137 down from 159 the previous year.

Assets

The Centre hosts hybrid meetings at Saint Mary's University in Halifax on the first Saturday of each month (except July, August, and holiday weekends). The University provides free meeting space.

We operate the St. Croix Observatory (SCO) with a roll-off-roof, a 16" (40.6 cm) Sky-Watcher f/4.4 GoTo Dobsonian Reflector Telescope, the Howard 200mm EdgeHD Hyperstar f1.9 telescope with an attached Raspberry Pi4 for astrophotography, a warm room, and storage room/toilet. Members can access the Thurlow achromatic doublet binoculars (named after Dr. Bill Thurlow) and its parallelogram mount. No equipment rental. Four Adirondack chairs were donated by Michelle and Dave Lane.

Kejimikujik National Park Dark-Sky Preserve, Acadian Skies & Mi'kmaq Lands (UNESCO Starlight Reserve) and the Southwest Nova Biosphere Reserve are within 3 hours of SCO. We have a formal partnership with *Parks Canada* regarding the annual Dark-Sky Weekend (DSW). We have partnered with *The Discovery Centre* in Halifax to conduct outreach events.

Outreach

Our partnership with Parks Canada resulted in the Dark-Sky Weekend (DSW) held the nights of August 2-4 at Kejimikujik National Park. Twelve volunteers from RASC Halifax Centre engaged 609 campers of

Centre Executive, 2024

President	Tony McGrath
Vice-President	Judy Black
Treasurer	Gregg Dill
Secretary	Peter Hurley
Board member	Jeff Donaldson
Board member	Matthew Dyer
Board member	David Hoskin
Board member	John Nangreaves
Board member	Dave Robertson

all ages attending two nights of sky tours and stories and access to telescopes and binoculars. Two Astronomy Drop-In sessions saw 80 in attendance.

Our partnership with the Discovery Centre resulted in three co-sponsored events:

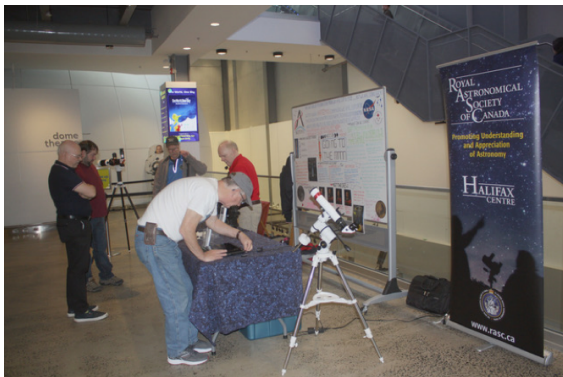
- April 8 Solar Eclipse: provided telescope views of the Sun to approximately 800 public visitors.
- As part of Space Camp, live views of the Sun were provided.
- Display for International Astronomy Day; 6 volunteers engaged about 200 members of the public.

Members residing in New Jersey also held one public event. Thirteen additional outreach events conducted by RASC Halifax members engaged with 300 members of the public through in-person and on-line presentations.

Special Projects

RASC Halifax Centre continues to invest in their observatory at St. Croix. On September 21, there was a private Celebration of Life for Dave Lane. Michelle Lane established the Dave Lane Memorial St. Croix Observatory Property Endowment (SCOPE) Fund with an initial substantial gift for future management and projects at SCO. Members participated in the general maintenance of the buildings and grounds and made repairs to doors, the gate lock and GFCI breakers. Further improvements to the site are expected in 2025. The Annual SCO BBQ, held September 14 in lieu of our public meeting, celebrated International Observe the Moon Night (InOMN). Minas Energy made improvements to the road flooded last year.

Thanks to input from members, the Centre developed a plan with member retention and acquiring new members as priorities. A second round of laser pointer training was conducted by Dennis Lyons and a few one-on-one training sessions conducted by Peter Hurley.



May 18: Volunteers setting up for International Astronomy Day at The Discovery Centre

Highlights

Our Centre annually publishes 5 editions of our newsletter, Nova Notes, thanks to Editor Lisa Ann Fanning and Copy Editor John McPhee. Each edition averages 24 pages in length.

Eleven Board of Directors meetings and one Board Meeting by Requisition were held using Zoom. Eight Public Meetings were held as hybrid meetings. Volunteers Jerry Black, Peter Hurley and Bob Russell managed the technology for the hybrid meetings, including our AGM held December 7.

All policies and position descriptions were revised where necessary. Minor By-Law No. 1 amendments were approved by special resolution at our December AGM.

The 36th annual Nova East Star Party was held August 9-11 at Blomidon Provincial Park; poor weather contributed to lower attendance. Participants and campers enjoyed the speakers

and events offered. Tony Schellinck conducted an Ace Amateur Astronomer program one evening. We were treated to an unexpected display of the Aurora Borealis.



July 27: Friends remember Dave Lane at the St. Croix Observatory (hosted by Michelle Lane)

Challenges

Valiant attempts were made to hold our Annual BBQ in September and again in October associated with viewing the partial annular eclipse, but the weather didn't cooperate. Acquiring "new" volunteers to assist with events remains a challenge that we hope to address in 2025.

Between cloudy nights and smoke from local fires and those further afield, observing sessions (personal and outreach) were greatly hampered over the past year.



August 9-11: Attendees of Nova East Star Party – Stars & Birds – at Blomidon Provincial Park

Looking forward - 2025/beyond

Hopefully the 37th Nova East Star Party at Smileys Provincial Park won't again be dampened by the weather. Most importantly, may there be many cloudless, smokeless skies and no hurricanes affecting our events in 2025!



September 14 – Annual Centre BBQ Barbecue at SCO & celebration of InOMN. Warm Room (right) and adjacent Observatory roof open

Hamilton

Year established

Originally founded as the Hamilton Astronomical Society in 1901, and later established as a RASC Centre in 1908, it remains one of the longest standing scientific organizations in the greater Hamilton region. Although we are referred to as the Hamilton chapter of the Royal Astronomical Society, we serve members in Hamilton and Halton Regions.

Membership: 143 (as of Dec 2024)

Assets

The club maintains and operates an observatory in Flamborough, Ontario which was established in 1974. It has a variety of telescopes available for members to borrow free of charge. The club also maintains a substantial library. Meetings, which are open to the public, are held once a month at 'St. Mathews-on-the-Plains Church' with both an in-person and Zoom component. The meetings generally feature an invited speaker, either in-person or via Zoom, and other topics such as upcoming outreach activities.

Partnerships

Hamilton RASC partners with The Bronte Astronomer to deliver outreach events to the public.

Outreach

Hamilton RASC runs 'Friday Night Sights', an outreach event at our observatory during the spring/summer/fall months. This is open to both members and the general public and encourages people to come out and experience learning the night sky, through information shared by our club's members, and viewing through telescopes.

Special Projects

The observatory was vandalized in July 2023, with repairs beginning in April 2024. As of Spring 2025, the observatory will be restored to full working order.

Highlights

Providing multiple outreach sessions to the public (summary on page 3).

Centre Executive

President	Jane Tumbin
Vice President / Outreach Director	Victor Abraham
Past President	Andy Blanchard
Treasurer	Tracy Parsons
Membership	Dan Copeland
Secretary	Erin Vassair
Maintenance Director	Bruce Cornelius
Social Media Co-ordinator	Nabira Rashid
Webmaster	John Devonshire
Member at Large	Shail Choksi



Challenges

The vandalism of the observatory required us to pivot to a new approach and use different equipment within our facility. However, we managed to continue our Friday Night Sights viewing sessions and many members brought their own telescopes for public viewing usage.

Looking forward – 2025 and beyond

We are looking forward to a fully operational observatory, and running our Friday Night Sights observing sessions, beginning again in April/May. We are working on several new initiatives that we hope will bring further interest from the public in attending our events, while also increasing our membership.



Outreach

- Detailed account of all our activities in the 2024 year can be found here: <https://docs.google.com/spreadsheets/d/1cnBqeN3nfb-f1S0ly6lyJal4exbX0gUu21PaG2Rw1s/edit?usp=sharing>
- Summary of astronomy activities: As of Dec 31st we had 44 unique engagements this year with an estimated total attendance of 3,557 people
 - Bronte Astronomer & Other Outreach (6 events) ~630 people
 - Friday Night Sights (6 events) ~225 people
 - L3 Harris / Wescam ~100 people
 - Various public speaking engagements (6 events) ~215 people
 - Ed Mizzi - Algonquin (4 events) ~225 people
 - Ed Mizzi - Schools (7 events) ~2160 people

Equipment

- Summary of donations: Detailed account of all items donated can be found here: <https://docs.google.com/spreadsheets/d/102iEFESXQVjvRP0Xzjl8Y6peeht2Bt3GL5DbIIVs6w/edit?usp=sharing>

- Vintage 8" SCT, various mounts and accessories donated by Jean Farquharson
- Altair GP IMX290 Colour Camera, Antares Eyepieces donated by Steven Malia
- Vixen VMC260L donated by Dalton Fowler
- Meade ETX90 and various accessories donated by Alan Holdway
- Summary of equipment purchased:
 - Seestar S50
 - Lunt 40 Solar Scope
 - Rolling Stairs for Danko Scope
 - 2" Farpoint Scientific Laser Collimator & Howie Glatter Tublug
- Summary of maintenance: Detailed account of most repairs can be found on the forum under Centre Equipment (<https://hamiltonrasc.ca/forum/index.php?board=33.0>)

Kingston

Centre Executive

President:	Kim Hay
Treasurer:	Susan Gagnon
Secretary:	Elena Zanetti
Vice President:	Malcolm Park
Editor:	Andrew Godefroy
Librarian:	Kim Hay
NC Rep:	John Hurley



RASC-KC

c/o 76 Colebrook Road, RR#1
Yarker, Ontario
K0K 3N0 Canada

Email: kingston@rasc.ca

Web: kingston.rasc.ca

Facebook: RASC Kingston Centre

Honourary President: David Levy

Established in June, 1961, and in our 63rd year, the Kingston Centre has grown from 20 members in September, 1961, to 68 members in September, 2024. Queen's University was the site for our ten Regular meetings held in the past year with monthly presentations and guest speakers. Our members weekly socials by Zoom were well attended throughout the entire year. The writing of Bylaws and Letters Patent, to comply with ONCA, kept a few key members and the executive team busy for the last 3 years. With the membership fully behind us, the new documents were successfully submitted. This contributed to a higher number of executive meetings than normal, 9 in total.

Volunteers from our Centre attended outreach events including Queen's University Observatory monthly open houses, judging at the Frontenac Lennox and Addington Science Fair, Total Eclipse events, hosting an information table at Science Rendezvous, presentations and observing sessions at various parks.

Our email chat list remains very active with members sharing images, questions, observations, and alerting us to news and events in the sky. One of the highlights of the year, the April 8th Total Solar Eclipse, allowed all of us to share our experiences this way for the enjoyment of all, even those clouded

out. Members and guests were welcome to all our Regular meetings and many of these may be found on our Kingston Centre YouTube channel. In the spring, we resumed our pre-meeting dinners at a local pub.

January 10, 2024, by Zoom. Andrea Girones, "Sunspots and the Aurora – How to take Pictures of Them".

February 14, 2024, by Zoom. Mike Haines, "Eclipses – The Good, the Bad and the Ugly".

March 13, 2024, in-person. Shelley Jackson, "My Journey to the Dark Side".

April 10, 2024, in-person. Member Eclipse presentations.



May 8, 2024, in-person. Dr. Sarah Sadavoy, "The Far-Infrared Sky:" A Look Back with the Herschel Space Observatory".

June 12, 2024, in-person. Andreas Gada, "Remote DSLR Imaging System".

September 11, 2024, in-person. Member reports.

Fall'N'Stars, September 27-29, 2024, a joint camping event with the Belleville Centre in Prince Edward County.

October 9, 2024, in-person. Roger Hill, "Optics and Telescopes".

November 13, 2024, Tim Trentadue, "L&A Dark Sky Viewing Area".

December 11, 2024. Alan Chan, "Dark Energy and Gravitational Waves".

Elena Zanetti
Secretary

Kitchener-Waterloo

About

Year established: 1952

Membership: ~170 members

Assets

Small telescope library, including solar scopes, some small investments.

Partnerships

- Tilker's Dark Sky Site, for club members in partnership with local farmer
- Telescope Time with Kitchener and Waterloo public libraries
- Sky Tours and Talks at University of Guelph Arboretum
- Summer Star Parties at Conestogo Lake Conservation Area

Centre Executive

President	Michael Wright
Vice Presidents	Gary Cameron Ellen Papenburg
Treasurer	Joshua Shabtai
Secretary	Roseanna Rigo
National Council Rep	Ellen Papenburg
Webmaster	Karol Socander



Gary Cameron, Quinn and Preston Drennan and Bryan Hollander's 3D printed telescope at Bayfield Spring Star Party

Outreach

Over 30 events in 2024, with about 900 participants

Highlights

Kitchener-Waterloo Centre had a spectacular year with the total eclipse, the two spectacular nights of aurorae in May and October, and a naked-eye comet. So many of our members were able to experience these wonderful celestial special events, and the camaraderie both during the events and at the club meetings following them was awesome.

At our meetings last year we were able to host quite a few young researchers – graduate students and postdoctoral scholars from the University of Waterloo and University of Guelph – as our guest speakers. They were able to introduce us to cutting-edge areas of research on the expansion of the universe, stellar evolution, galaxy evolution, and more.

Our Bayfield star parties in Spring and Fall had lower attendance this year due to mostly poor weather during the days of the parties, though each event had at least one night with a clear period for observing. As usual, participants enjoyed the social time as much as the observing and spirits were high.

The annual Astrophotography and Sketching Contest continues to be a highlight, with some newer members and newer participants winning in some categories, showing the continued growth in the club of our astroimaging and sketching talents.

Challenges

One of the biggest things Kitchener-Waterloo Centre struggled with this year was the weather! We had the cloudiest January on record, and the rest of the year was considerably more cloudy during overnight periods than past years. As such, our outreach efforts were considerably depressed compared to previous years as there just weren't enough nights with clear skies when volunteers were available.

It became clear that the support was not there for the Lisa Lynn Bissett Memorial Observatory within



Member Darryl Archer's photo of the Diamond Ring during 2024 total eclipse, viewed from a Mexican cruise



Christie Beatty and Family watching the Eclipse

the club – there were very few subscribers, so the Board chose to abandon the project. Since the facilities and equipment were being maintained by a club member for personal use with the intention of handing them over to the club when he passed, there was no large financial loss to the club for this failed initiative, but we are disappointed it did not work out.



Aurora Photo By Trevor Chandler

Looking Forward - 2025 and Beyond

For 2025, we are hoping to have good outreach events for Mars opposition, host a seminar on getting started in visual astronomy and choosing a first telescope, and renewing some old members events that used to happen before COVID, such as a members banquet. We are looking into doing some planned outreach in the outlying villages and towns surrounding KW/Cambridge/Guelph, such as New Hamburg, Elmira, Fergus, and more, as these small communities surely have people interested in astronomy that are not necessarily getting the attention they deserve.

London

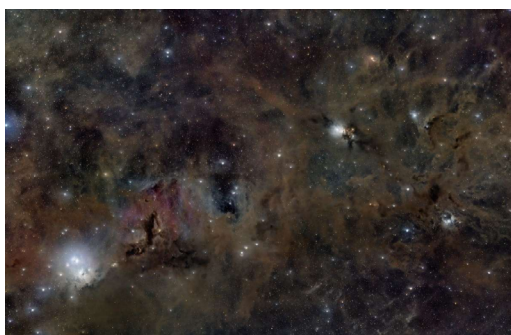
Introduction

The London Centre meets regularly at the Hume Cronyn Observatory, on the campus of Western University, every third Friday of the month. An in-person/on-line “hybrid” format continued throughout the year, and our executive committee worked to improve our assets and techniques to ensure a seamless experience.

Outreach and group observing activities continued to take place throughout the year, mainly in support of Public Nights at the Hume Cronyn Observatory.

Our financial statements reflected a negative net income for the year: a small loss mainly due to the purchase of new equipment to support the hybrid meetings.

As of year-end, our current membership stood at 74 active members.



Frank Sowa composed this four panel mosaic which includes Ngc1333, IC348 and lots of great dust!

Regular Meetings

The London Centre held twelve meetings in 2024, convened upon the third Friday evening of every month. Eleven of these meetings were conducted at the Hume Cronyn Memorial Observatory, located on the campus of Western University, and one was an annual banquet, held at a local restaurant.

The meeting topics and guest speakers (where appropriate) are listed below:

- January 19. James Lane, “Milky Way Galaxy, Our Home.” The presentation was given online, with no in-person component due to the weather.
- February 16. Pierre Paquette, “How an amateur astronomer can start building and using astrolabes.” The presentation was given online.
- March 15. Members night, “Eclipses!” The meeting was a chance for members to discuss plans for the upcoming total solar eclipse.
- April 19. Members night, “Solar Eclipse Recap.” The meeting was a chance for members to discuss their experiences and first images from the recent total solar eclipse.

Centre Executive

London Centre executive met ten times during 2024. The Executive team consisted of the following:

President	Mark Tovey
Vice President	Tyrone Klassen
Treasurer	Normal McCall
Secretary	Andrew Peters

Council Members:

National Council Rep	Peter Jedicke
Observer’s Chair	Dale Armstrong
Honorary President	Peter Jedicke
Past President	Bill Gardner
Higher Education Liaison and Librarian	Robert (Bob) Duff
Youth Programs / Women’s Programs	Heather MacIsaac
IT System Administrator	Tyrone Klassen Priyank Panchal
Councillor at Large	Katelyn Beecroft
Councillor at Large	Chris Boltë
Councillor at Large	Steve Imrie

- May 17. Les Nagy, “My Adventures in Chile.” The presentation was given in person.
- June 21. Nicole Mortillaro, “Behind-the-scenes producing the Journal and the annual Almanac.” The presentation was given online.
- July 19. Annual Banquet, “30th anniversary of Comet Shoemaker-Levy 9’s impacts on Jupiter.” Peter Jedicke and Dale Armstrong shared personal recollections and the history of the impactful event. The meeting was held at Angel’s Diner in London.
- August 16. Members’ night, “Solar Eclipse Recap, Part 2.” The meeting was another opportunity for members to discuss their experiences and share their final images from April’s total solar eclipse.
- September 20. Members’ night, “Starfest 2025.” The meeting was an opportunity for Katelyn Beecroft to discuss the history of Starfest, and for her and others to share their experiences and images from this year’s gathering.
- October 18. Dave McCarter, “Time: Determination and Distribution.” The presentation was given in person.

- November 15. Kerry-Ann Lecky Hepburn, “The Best Place On Earth for Night Sky Photography.” The presentation was given online.
- December 20. Member’s night with Craig Levine and Dale Armstrong, “Gear, and comet C/2023 A3 Tsuchinshan-ATLAS.” The meeting was a chance to discuss Craig’s new astrogear collection as well as a presentation by Dale on C/2023 A3.

Assets

The London Centre operates centre-owned telescopes at the Hume Cronyn Memorial Observatory at Western University in support of public outreach events held at the Observatory. In addition, the Centre maintains a dark sky observation site near the shores of Lake Erie with two observatories and a utility “warm-up” structure. This allows members to gather for monthly Club Observation weekends and to use the observatory-based telescopes as a resource. The associated observing telescopes and support equipment represents the bulk of the Centre’s assets.

Outreach Activities

The RASC London Centre has an excellent partnership with Western University’s Department of Physics and Astronomy in which members volunteer in support of public outreach events at the Cronyn Observatory and the annual Science Rendezvous in Alumni Stadium. This is in addition to the London Centre’s other outreach events.

Cronyn Observatory, Western University, Public Nights and Special Events, 2024—Summary

There were in total 57 RASC London Centre Star Night, Public Outreach and Cronyn Observatory Events, January 10—November 25, 2024, involving 4,568 Members of the Public (3,369 Adults & 1,199 Youth). This included 27 RASC London Centre Public Outreach Events, January 10—November 25, 2024. These included 23 Slide Presentations, 3 Star Nights and the London Public Library’s “Join the Club” event held at the Central Library on Saturday, May 25, 2024. There were 1,119 Members of the Public (721 Adults & 398 Youth) who participated in these events. RASC London Centre were also involved with 30 Public Nights and Special Events hosted

The Centre’s Member meeting Attendance is shown in the table below.

Date	Attendance
2024-01-19	17
2024-02-16	19
2024-03-15	28
2024-04-21	32
2024-05-17	22
2024-06-21	21
2024-07-19	26
2024-08-16	12
2024-09-20	24
2024-10-18	22
2024-11-15	26
2024-12-20	17

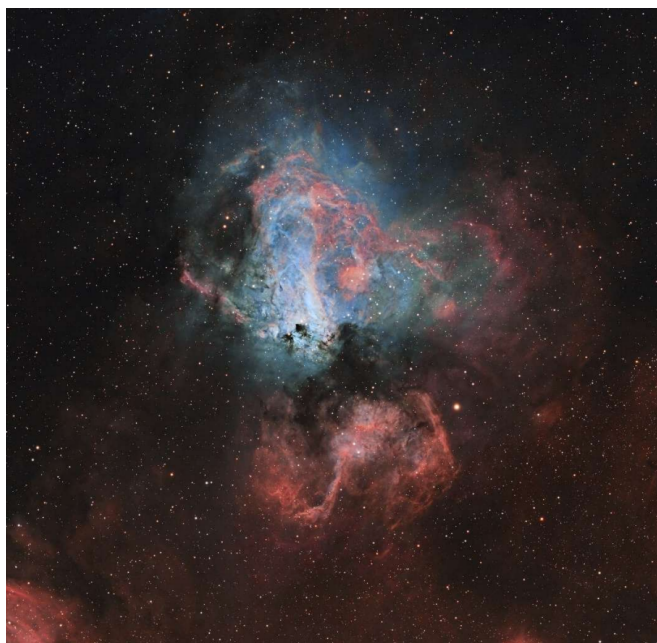
by Western University’s Hume Cronyn Observatory, January 13—November 16, 2024. This included Science Rendezvous, with Solar Observing in Alumni Stadium, May 11; Science Rendezvous Cronyn Observatory Public Night, May 11; International Observe the Moon Night, September 14; and Cronyn Observatory Comet C/2023 A3 Special Public Night, October 5, 2024, and other noteworthy events. There were in total 3,449 Members of the Public (Visitors), including 2,648 Adults and 801 Youth, at these Cronyn Observatory Public Nights and Special Events.

A total of 13 RASC London Centre members participated in one or more of these 57 events for a RASC Members Participating / Participation Rate = 13 / 154. Total Amateur Telescopes Used / Usage Rate = 12 / 61. Sunspotter Used / Usage Rate = 1 / 1. “Star Finder” planispheres distributed = 48. “London Astronomy Club” flyers distributed (Counted) = 19. There were 1600 Solar Eclipse Glasses distributed for the Total Solar Eclipse April 8, 2024. Total RASC London Centre Person Hours = 330.18 Person Hours

Member Images

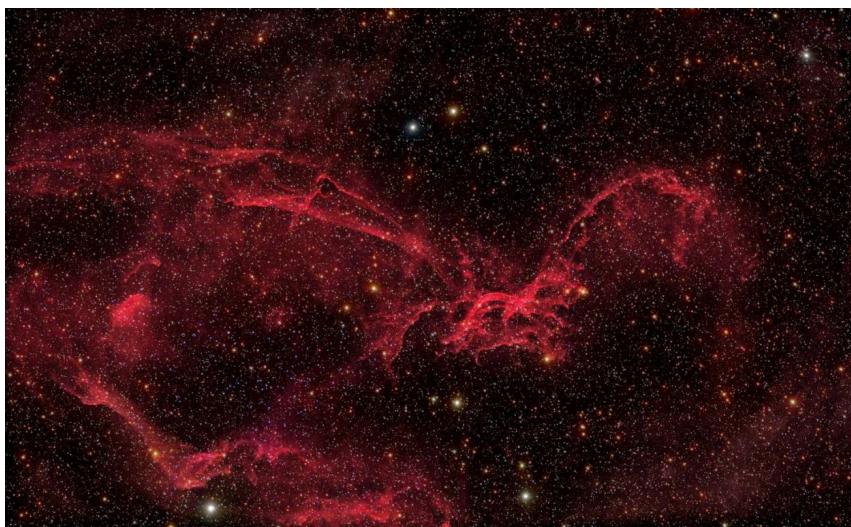
This year's photographs were very unsurprisingly dominated by April's phenomenal total solar eclipse, as well as abundant solar and aurora activity, in addition to the "Great Comet of 2024", Comet C/2023 A3 (Tsuchinshan-ATLAS). Beyond these topics, our members managed to train their sights on astronomical objects when the skies permitted.

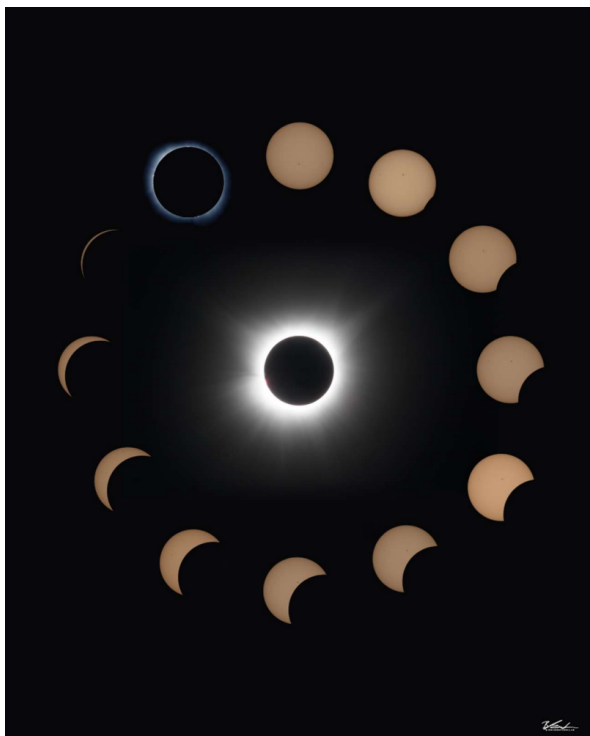
Our observing committee chair, Dale Armstrong, managed to see most of the important astronomical events of the year, always recording his observations and often capturing them in images. This image from the total solar eclipse, while intentionally "blown-out" allows the viewer to see the Earthshine reflected back upon our neighbour.



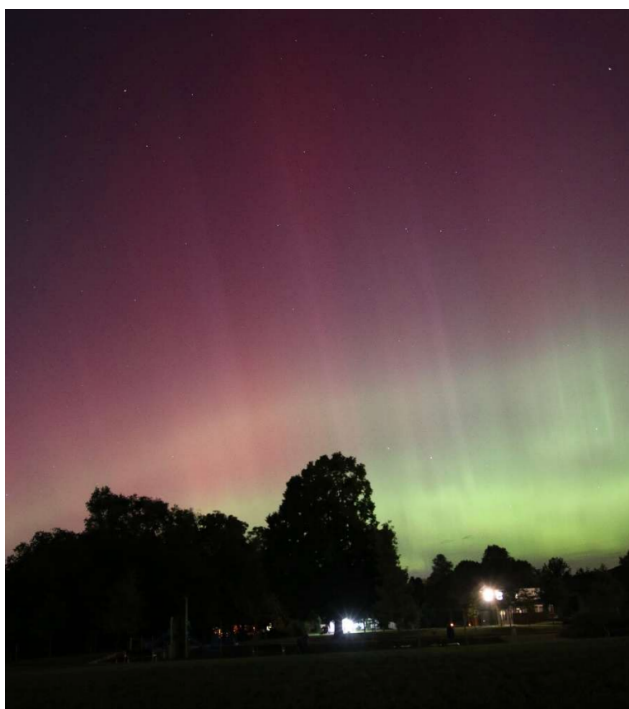
Once again, our member Katelyn Beecroft had an astrophoto selected for the 2025 RASC Observer's Calendar. They were obviously impressed with the contrast and depth of the complex structures in the Rosette Nebula that she captured to include it as February's image. Adding to this accomplishment Katelyn also earned a spot in November 2024's edition of Astronomy magazine with this stunning image of M17.

Ewa Pasiak did a fantastic job of capturing Sh2-114, one of her favourite objects to image, and it's easy to tell why!

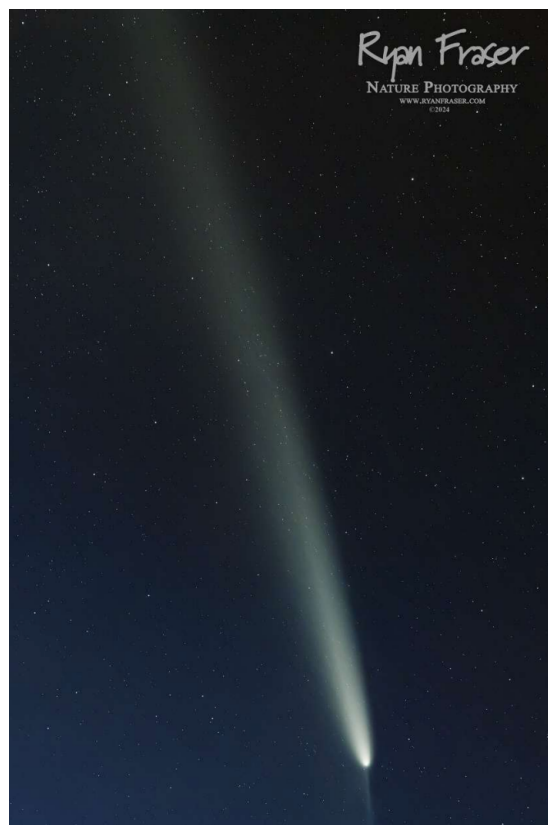




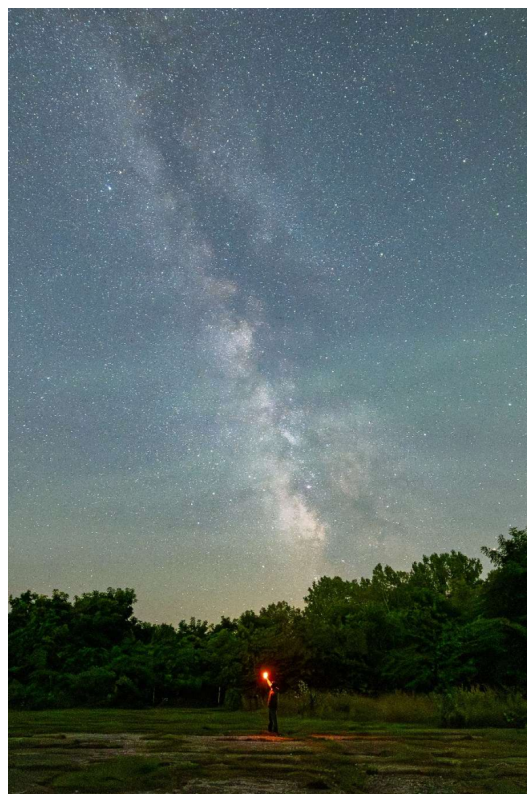
Capturing the many aspects of the total solar eclipse was done so very well by Bill Gardner, and presented very nicely in this composite image.



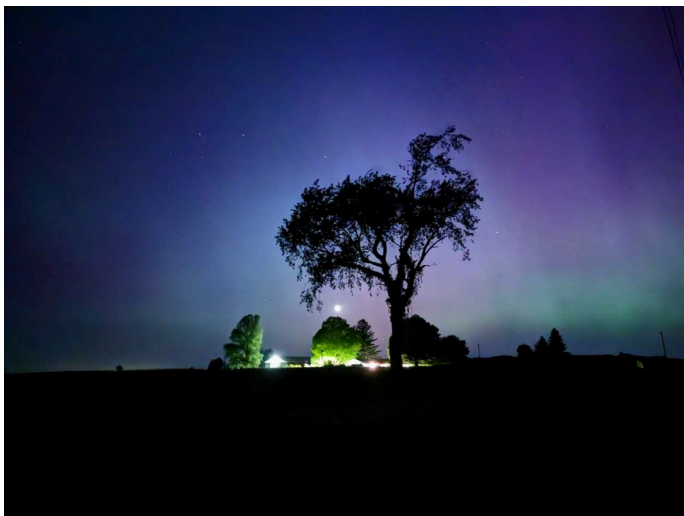
Heather MacIsaac jumped on the aurora grabbing some nice colours from within the city with this one.



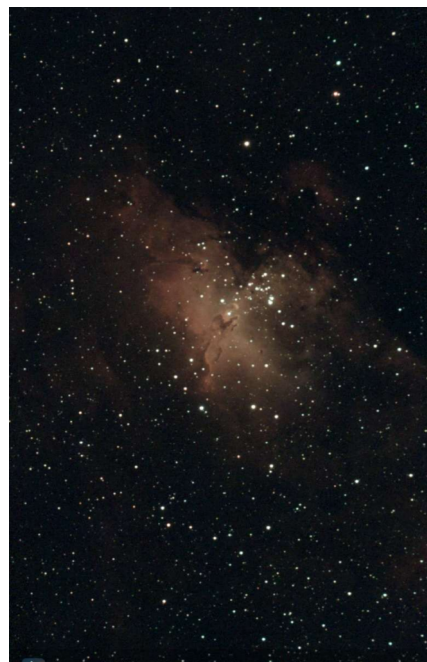
Ryan Fraser always produces a bevy of fantastic astrophotos, but this photo of Comet C/2023 A3 at twilight was one of the early ones made by our club, and captures the anti-tail so nicely.



Mohammed Mubeen continued his passion for photography, generating milky way photo with his astro-modified Canon R6ii and 14mm Rokinon lens.



Andrew Peters used his Pixel 7 phone to capture some nice aurora colours behind a country farmhouse on May 10th.

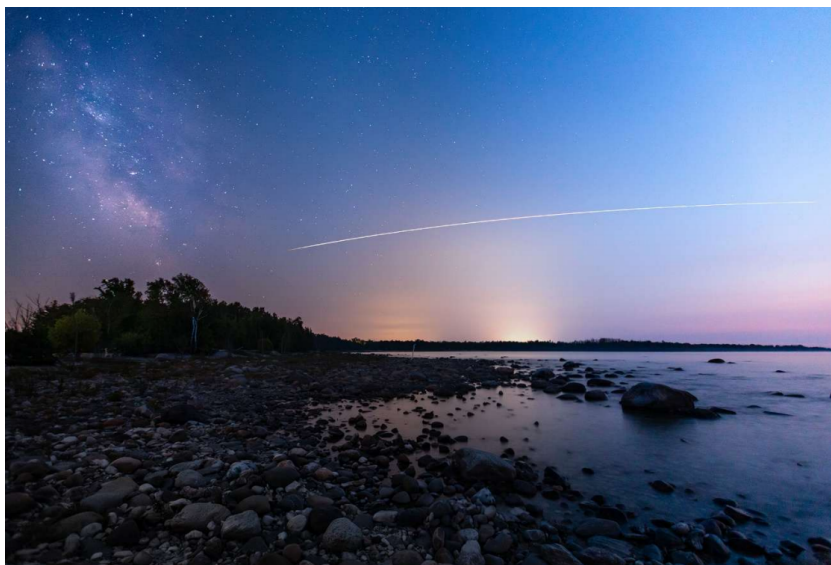


Mike Roffey put his new little Seestar S50 to work on the Messier objects at Starfest this past year, and presented us with his image of M16.



Patrick Whelan reminds us to keep our eyes looking up, with this quick snap of the ISS as it passed overhead in January. It is a 15 second image with his Tamron 28-75 at ISO 100. The Pleiades, Hyades and Orion are visible in the image as well as the space station.

One of our newest members, Hazel Whorley, has shared many gorgeous photos with us. While it was hard to not select one of her amazing aurora photos, this image of the ISS passing overhead from MacGregor Point on July 29th was so well composed. It's 3 photos taken between sunset and the end of twilight merged together in a gradient. The ISS took ~16 exposures to get the whole trail over 5 minutes.



Submitted by Andrew Peters, RASC London Centre Secretary

Mississauga

The year 2024 was a busy one for the Mississauga Centre. Friday meetings were all in-person, with some speakers on Zoom. The Centre is grateful to Dr. Ulrich Krull and to Dr. Lea Hirsch of University of Toronto Mississauga (UTM) for enabling us to use a room free of charge, and to Randy Attwood and Swapna Shrivastava for their contact with UTM.

On Speaker Nights, an expert in astronomy or a related topic gives a presentation. On Potpourri Nights, members of the Centre give shorter presentations on astronomy and space-related topics. The year was especially notable with the path of the April 8 total solar eclipse passing immediately to the south of the City of Mississauga, two nights with spectacular aurorae, and a beautiful comet.

Friday Meetings

In 2024, there were seven Speaker Nights as follows:

- January 26 Zoom speaker: Dr. Christopher Herd, professor and curator of the Meteorite Collection at the University of Alberta; The Search for Life on Mars: NASA's Perseverance Rover Mission
- February 23 Annual General Meeting; Randy Attwood; Some Recent Solar Eclipses
- April 26 Dr. Leo Yvonne Alcorn; Jellyfish in the Sky; Ram-Pressure Stripping in Galaxy Clusters
- May 24 Dr. John Moores; Our Celestial Rosetta Stone: Exploring our Family of Planets to Understand Processes Across the Cosmos
- June 2 Dr. Kim Tait of the ROM; To Benu and Back: The OSIRIS-REx Mission and the Significance to Canada
- October 18 Dan Falk; In the footsteps of Edmond Halley
- November 22 Zoom speaker Prof. Arun K. Misra; Asteroids and Spacecraft Missions to Asteroids

There were 11 Potpourri Nights covering a variety of topics:

Many talks were about the total solar eclipse: observing plans, preparing for the eclipse, historical eclipse predictions, observing the eclipse and the flash spectrum, solar filters, and member talks after the eclipse. A number of talks were given by UTM students on light pollution, searching for stellar streams, and VLBI (Very Long Baseline Interferometry). There were also talks about the aurora borealis, Starfest, astrophotography (including the Astrophotography Contest), astronomy travelogues, the Antique Telescope Convention, book reviews, dark-site observing, Apollo missions, Canada's first astronaut, Steven Hawking, light

Centre Executive

President	Allan Connery
Vice President	Kirby Alguire
Treasurer	Anil Mathur
Secretary	Chris Malicki

Council Members:

Past President	Randy Attwood
Honorary President	Dr. Ullrich Krull
Councillor	Betty Robinson
Councillor	Keith Jarvie
Councillor	Val Connery
Councillor	Swapna Shrivastava
Councillor	Rob Neill
Councillor	Robin Metcalfe

pollution abatement, wind tunnels, dwarf galaxies, and myths in astronomy, as well as astronomy trivia quizzes.

There was a New Members Welcome on Monday, April 29.

Observing

Astronomical observing is an important activity of the Centre. The Centre partners with the Riverwood Conservancy for public outreach observing events. The Riverwood events were very well attended by the public, with numbers ranging from 150 to 200 (full capacity), and with the support of many volunteers. A summary of Riverwood events is as follows:

April 17 High level cloud; Moon and Sirius visible.

May 14 151 attendees and 13 volunteers.

June 18 Cancelled due to weather.

July 16 Great night, large crowd, including many very smart kids! Also, the volunteers were very helpful and enthusiastic. Fred the Telescope (aka the "Yard Cannon") made a very successful debut. Many thanks to Allan Connery for the setup assistance and Matteo Statti for the emergency collimation procedure.

August 13 Great evening with 191 participants and 19 volunteers, likely a new record. Phil Mozel suggested re-introducing the phone camera adapters.

September 10 Cirrus clouds; the Moon, double stars and Saturn observed.

September 25 Riverwood members-only observing night; cancelled due to weather.

October 8 Crisp and clear; 176 participants.

Other Observing Events

At the annual Starfest event, August 8 – 11, the Mississauga Centre again had a good presence.

Kirby Alguire arranged observing events at two “darkish” sites, Binbrook Conservation Area near Hamilton where members observed on August 3, and Upper Credit Conservation Area north of Mississauga with observing on October 4 and 5, and cancellations September 6-8, November 29 and 30, and December 21-28 due to weather. Kirby and members determined that Upper Credit is a darker site, and bookings will be made for the following year.

The Mississauga Centre again hosted an observing night for UTM students (of Dr. Lea Hirsch and others) on October 16, which was a great success with over 100 people. It was possible to see Comet A3 from this UTM site.

As mentioned, the total solar eclipse on April 8 was the event of the year, with an “official” Mississauga Centre expedition to Quebec, and many observations by members from Mexico, the United States, Ontario and Quebec. On May 10 and October 10, many members observed the spectacular aurorae from outside the City and even from the downtown. Many also enjoyed the bright comet Tsuchinshan-ATLAS (C/2023 A3) in October.

The Centre again held a well-attended annual Picnic and Awards Presentations at Meadowvale Conservation Area, on June 8. Special thanks to Val Connery for organizing the food and the ice-cream truck, and to Swapna Shrivastava for arranging the AstroExchange.

At the picnic, the following awards were announced and presented:

- Kirby Alguire, Observing Award.
- John Marchese, Ron Macnaughton, and Fred Benedik, Special Projects Award for organizing the successful Mississauga Centre eclipse expedition to Quebec.
- Allan Connery, President’s Award (first recipient of the Centre’s newest award).

- The Astrophotography winners for 2023 (awarded in 2024) were the following:
- Michelle Rainville (1st, 2nd and 3rd in General DSO; 1st in General Solar System)
- Kirby Alguire (1st in General Astroscape; 2nd in Master Astroscape and Master Solar System)
- Rick Veregin (1st, 2nd, and 3rd in Master DSO; 3rd in Master Solar System)
- Shakeel Anwar (1st in Master Astroscape and Master Solar System; 3rd in Master Astroscape)
- Robin Metcalfe (2nd in General Astroscape)
- Matteo Statti (1st in youth)

Other Activities and Events

In March, Randy Attwood organized a four-week introduction to astronomy course at the Riverwood Conservancy. A number of Centre members taught astronomy on various evenings.

On March 24, National Society Archivist Randall Rosenfeld invited Mississauga Centre members to the National Office in Toronto for a special display of eclipse-related archives and memorabilia as well as a tour of the Dornier Telescope Museum. About 20 members attended.

In April and May, Dennis Gasparotto conducted an astrophotography course for members.

Dennis Lyons of the Winnipeg Centre and National Council taught a course to interested RASC members on Laser Pointer User/Spotter on August 14.

Prof. Hyde and students of York University generously donated their time to give a tour of the Allan I. Carswell Astronomical Observatory on December 11. There was a good turnout despite the stormy, snowy weather.

The Centre continued to financially support the Clear Sky Clock for Mississauga.

Submitted by Chris Malicki,
Secretary, Mississauga Centre

Montreal

Year Established - 1918

Membership - 138

Assets

Main meeting places are the Morgan Arboretum (hosted by McGill Morgan Arboretum) where our Bellevue Observatory is located and John Abbott College graciously hosts us where we have The Isabel Williamson Library, other observing sites are "Woolly Woods Observatory", our dark sky site located about 60 minutes south of Montreal where one of our members hosts us on their property and Thomson Park in Hudson just off the western tip of the Island of Montreal. The Bellevue Observatory houses our 14" LX200 Meade RCX (Modified Richey-Chretien), we have 16" Explore Scientific Dobsonian outfitted with Nexus Encoder (affectionately called the BumbleBee), Coronado 70mm NearStar h-Alpha for solar observing, we also have other misc. telescopes include 2 8" Dobs. One of the 8" Dobs as well as two refractors are loaner scopes for our members.

Partnerships

John Abbott College, JAC Space Club, McGill University Morgan Arboretum, Montreal Aviation Museum, Espace pour la vie, Trottier IREx, University of Guelph Physics Dept, Let's Talk Science McGill MacDonald Campus, Concordia University Physics Dept, SEDS Canada, Explore Alliance and Explore Scientific.

Outreach

The number of volunteers varies per event based on a volunteer team of 20+, there were 4 events with approximately 1,355 participants.

Public Outreach

15 Public Events featuring the total solar eclipse observing event (reported separately), 2 online only events, 2 meteor shower public viewing nights, a partial lunar eclipse, 2 comet Atlas public observing



Nicole Laporte, Director of Members' Liaison holding court during the solar eclipse event at John Abbott College

Centre Executive

President	Morrie Portnoff
Vice President	David Shuman
Treasurer	Terry Ladd
Secretary	Earl Wyllie

Council Members:

Recording Secretary	Terry Doucet
Director of the Observatory	Karl Petruch
Public Events Coordinator	Karim Jaffer
Director of Outreach	Nader Daou
Director of Special Projects	Karl Petruch
Webmaster	Richard Trottier
Director of Observational Events	Santiago Lopez
National Representative	Frank Tomaras
Director of Members' Liaison	Nicole Laporte
Skyward Editor	Gerald MacKenzie
Director of Social Media	Alexei Weins
Director of Special Events	David Shuman
Librarian	Earl Wyllie
Director of Research and Development	Karl Petruch

nights + International Observe the Moon Night and several in-person speakers highlighted by our 2024 Townsend Speaker Dr. Jonathan Gagne. Attendance for observing events is 70-150 each night (and 5,000-6,000 people for our total solar eclipse event), for talks attendance is 45-80 in-person plus 40+ online and more than 100 views on YouTube.

Special Projects

Member presentations and workshops on astrophotography and moongazing. Ongoing projects with Dr. Higgins of McGill University and a project with Concordia University Physics featuring a radio telescope project.

Highlights

We have had numerous amazing presentations by our members from workshops on astrophotography and observing the moon to numerous guest presenters. Of course, observationally the total solar eclipse as well as the amazing display of auroras were breathtaking.

Challenges

As always there were challenges which brought many successes. We are engaging more of our members to become volunteers at events. Hopefully some will consider becoming part of the Board of Directors and Executives.

Looking Forward - 2025 and Beyond

We look forward to continuing to build upon our main partnerships with John Abbott College and The Morgan Arboretum with more co-events.

New Brunswick

Year Established - 2000

Membership (end 2024) - 77

Assets

RASC NB has access to a Coronado PST, Herschel wedge, several astronomy books and a projector for Centre members.

Partnerships

Centre members are committed to annual public star parties (weather permitting) at the three RASC Dark Sky Preserves in New Brunswick; Kouchibouguac National Park (late spring and autumn), Mount Carleton Provincial Park and Fundy National Park; as well as two public observing events at the RASC Urban Star Park (Irving Nature Park) in Saint John. Partnerships were formed with several municipalities, libraries and museums in relation to the total solar eclipse which covered the central half of the province. In addition, member David Hunter partnered with the University of New Brunswick Engineering students and faculty in designing the payload for a balloon launch to record the total solar eclipse: <https://eclipseplus.ca/About/Team/>

Outreach

Centre volunteers participated in 186 outreach events during 2024, with an estimated volunteer time of more than 2300 hours. This matches the mean number of Centre outreach events over the past ten years (range 114 to 248). The total includes 101 presentations, 33 school talks, 31 observing events, 15 youth group visits and 6 booth events. An estimated 12,300 people attended in-person events, of which 6800 were youth. Note that we include online talks to a known audience in this statistic, the majority of which are school presentations. Another 12,300 people tuned in to live feed events online, most of which were through the Sunday Night Astronomy Show over Facebook and YouTube.



Nader Daou, Director of Outreach engaging with the public at the annual AstroFest held at the Rio Tinto Alcan Montreal Planetarium

Centre Executive

President	Curt Nason
Vice President	June MacDonald David Hunter
Treasurer	Yolanda Kippers
Secretary	Emma MacPhee

Council Members:

Councillor:	Jeff Leger
Councillor:	Alan Legere
Councillor:	Yves St. Germain
Councillor:	François Thériault

Highlights

The total solar eclipse of April 8, 2024 marked the first time in 11 centuries that the Moon's umbra crossed the central part of New Brunswick, and we won the weather lottery with clear skies and relatively warm temperatures. The maximum length of totality was 3 minutes, 21 seconds. In the months prior to the eclipse members gave more than three dozen presentations on viewing the eclipse to various organizations and municipalities, and the Centre purchased and distributed 2000 eclipse glasses. In Miramichi members participated in a three-day exhibition with a trade show and observing, and the city hosted 3000 visitors to view the eclipse. Florenceville-Bristol in northwestern NB featured a presentation by Chris Hadfield and the balloon launch to photograph and record the eclipse. The streets of downtown Fredericton were opened to more than 6000 residents and visitors for eclipse viewing, where some members had set up filtered telescopes for safe observing. Unappealing weather forecasts in normally clear-sky areas of the USA prompted a large number of eclipse chasers

to alter plans and proceed to New Brunswick. In December the Centre was contacted by BBC Sky at Night Magazine about being featured in their *Society in Focus* section. A 200-word article was submitted and accepted for their April 2025 issue.

Challenges

Retaining membership in times of fee increases has been a challenge but numbers appear to be steady following a 30% drop from a pre-pandemic high of approximately 110. As with many clubs, we have experienced a lack of interest among members in attending meetings and volunteering for office. This has always been a challenge, but the core of actively-participating members is aging.

Niagara

The Niagara Centre had one of its busiest years ever. It was a big year for astronomy in Niagara. Here's some highlights. April 8 - Total eclipse of the Sun. May 10 - Northern Lights. September 17 - Penumbral Lunar Eclipse. October 10 - Northern Lights. Mid-October - Comet Tsuchinshan-ATLAS. October 21 - Bright Fireball.

Our monthly meetings were held at Heartland Forest in Niagara Falls. It looks like it will be our home for the next few years. The meeting room is very good and we can also hold public star nights there. We felt that we had a great variety of guest speakers, some on Zoom, most in person.

Our membership jumped up and down in the 70s and 80s. This reflected members leaving the club, as well as gaining new members, and former members rejoining the club.

Our members' observatory was open and ready to go, although we feel that it is underused. Monthly members' nights at the observatory are scheduled, several nights had good turnouts.

We continue to have many public events from March to November. These events are held at Heartland Forest, other parks, schools and community centres. One of our long time favourite locations, Firemen's Park in Niagara Falls, has been ruined by added lights. It is unlikely we will go there any more.

Brian Pihack retired from leading our beginners' sessions, which were held before our monthly general meetings. Brian ran the well attended sessions for over 15 years. Rylan Wakeman, a Youth member, has taken over the position.

We created an online group for members to text and chat using the Signal app. 17 were signed up at year's end. It is a useful way for members to chat about astronomy and astrophotography, send club event reminders, and issue alerts for aurora and other sightings.

Looking Forward

We plan to have hybrid meetings in partnership with local astronomy clubs, which hold separate meetings and include Centre members among their core group. Such clubs are often feeders for RASC membership. RASC NB is now incorporated with charitable status. A fundraising committee is being established to determine short-term and long-term goals. Also, steps are being taken to revive a light pollution abatement committee. As always, astronomy outreach remains the focus of our Centre.

The total eclipse passed right over Niagara on April 8. All of our Region was in the totality zone. The hype was pretty huge, with the City of Niagara Falls predicting up to 1 million visitors. We did not hold an official event. We did not have enough members to help with hosting all the events and parties that took place in Niagara. We helped every organization that we could with our advice and expertise. We also gave many eclipse presentations before the event to local organizations and conducted interviews with the media. We sold about 3000 eclipse glasses, which was a healthy bump for our treasury.

Unfortunately, eclipse day was very cloudy in Niagara. We were one of the cloudiest locations along the entire eclipse path. Some of our cities had enough breaks in the clouds to enjoy the partial phases and portions of totality. The QEW highway, which connects us with Toronto, was extremely busy, but due to the clouds, less than anticipated. The total number of visitors to Niagara was in the low hundred thousands.

We published our own 2024 calendar, featuring pictures from our members. Fifty copies were sold.

We updated our club's bylaws, constitution and letters of patent, due to changes in Ontario's Not For Profit laws. We thank the Kingston Centre and Jenna Hinds for their valuable help with bylaws.

Two long-time members died in 2024, Glen Pidsadnick and John Dean. They joined the Niagara Centre in the 1990s. Glen was a past President of the Niagara Centre. Despite being legally blind, he never let his low vision stop him from enjoying observing and astrophotography in his backyard observatory. John lived in Buffalo, NY, but always said he preferred our company over the Buffalo club.

Let's hope 2025 is equally dazzling.

Niagara Centre guest speakers 2024

January - Bob Lewis "The Voyager Missions" slideshow with actual slides

February - Rod Spence and Justin Blanchard "Tuning Into the Stars: Exploring Space Through Radio Waves"

March - Eclipse preparation roundtable, various members.

April - Eclipse roundup, various member talks and pictures.

May - Northern Lights slideshow, various members.

June - Summer astronomy camping and star parties. Various members.

October - John Read, "The Abbey Ridge Observatory"

November - Michael Watson "Under the Southern Sky"

December - Trevor Jones, Ashley Northcote, Astrobackyard. "Beginners Astrophotography" and "Light Pollution"

Okanagan

About

Founded: 1996

Membership: 99 (down from 137 end of 2022)

Assets

RASC OC continues to operate the Okanagan Observatory on Big White Road with the 25" Gamble telescope and the 5.1 Tisdale Astro Physics available for public outreach and member use. Sadly, we had a break-in during the summer that resulted in the loss of some equipment including our articulating ARE-125 eyepiece for outreach events.

Outreach

Led by Outreach Program Director, Colleen O'Hare, the group handled 25 outreach events in 2024 with 1000 guests (including 400 under the age of 21) being exposed to astronomy education and observing of the night sky wonders. This year included the usual array of school events, kids' camps/groups, adult groups and a Dark Sky event to highlight a few. Each Friday night, weather permitting, the Centre hosts a public night at the Okanagan Observatory that is usually staffed by the Kelowna members. The cloudy weather this year meant a lot of No Go's, but we still managed 8 clear sky Friday public evenings, hosting 450 guests.



Comet Tsuchinshan – Atlas Oct 2024 – Photo Rob Nichols

Centre Executive

President	Olaf Lutz
Vice President Penticton	Sally Kilburg
Vice President Kelowna	Greg Mohammed
Treasurer	Irene Pett
Secretary	Grant Rice

Council Members:

Jim Failes
Colleen O'Hare
Terry Bridges
Mark Force
Kevin Douglas

Our mobility bus service, the Skygazer Shuttle, ran once this year with 13 appreciative guests. This service allows wheelchair bound individuals and those that have difficulty driving at night access to the Observatory. This community service has been recently supported by a local business for 2 years.

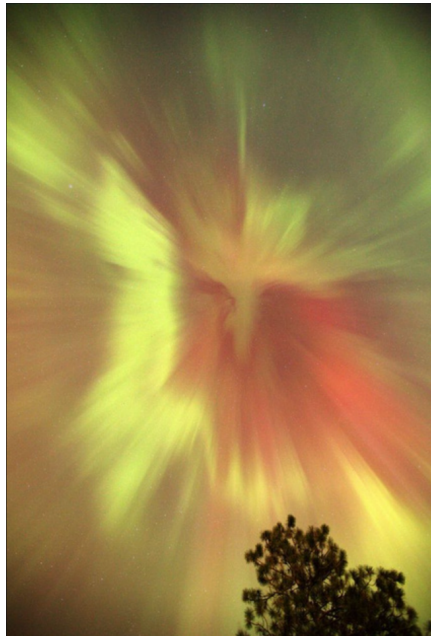
Total: Volunteers 20, Volunteer Hours 413, Events 25, Guests 1000

Okanagan Observatory: Events 8, Observatory Guests 450, Mobility Bus Guests 13

We had 18 No Go's, 16 of these were for the Observatory which reflects the flexibility we have in our volunteers to set aside their time and resources on weather dependent activities. We continue to hear from excited guests that they have lived here their whole life and didn't know the Observatory existed.

Highlights

Our Astro Picture of the Month Program continues to produce wonderful compositions and works of art. Our POM committee reviews member submissions. The full range of astro imaging by our members can be found in our Zenfolio gallery at <https://rascoc.zenfolio.com/>



Oct. 10/24 Aurora – Photo Jim Failes



2024 Okanagan Star Party – Photo Colleen O'Hare

Honorary President Dr. Sara Seager was able to attend our 2024 AGM and give an amazing presentation.

We hosted our 2nd Star Party at the Okanagan Observatory over 4 days in September under some amazing clear skies and a truly spectacular Aurora on the first night. The organizing committee did a great job with registering and daily welcoming of our 14 guests.

Awards

The following awards were presented for the year 2024:

- Member of the Year: Penny Nile
- Lifetime Achievement: Hugh Pett
- Friends of the RASC-OC: Okanagan College Penticton and Kelowna

Challenges

Our membership numbers are not what they once were. Next year can be a time of new direction and member passion with New Observer sessions to start each general meeting, a 3rd Okanagan Observatory Star Party, and continued member knowledge sharing in person and on our group forum.

Looking forward 2024/Beyond

We look forward to growing our membership and outreach events within our three city meeting group areas of Penticton, Vernon, and Kelowna.

Ottawa

President's Report

It has been my pleasure to serve you as President during 2024.

It was an exciting year in terms of astronomical events. It was very rare to have a total solar eclipse within driving distance of Ottawa. Many of the members actively participated in outreach for this event:

- Andrea Girones graciously donated 3000 solar eclipse glasses
- Simon Hanmer held a neighbourhood watch party and was on CBC
- Dave Chisholm visited many schools teaching eclipse safety and built four solar eclipse projection viewers (two were given to CASM, one was loaned to Simon and one was brought to Kingston)
- A number of our other members were also active on local media channels promoting eclipse safety.

With the Sun in its active cycle, we were treated to some amazing aurora displays and in particular the Friday of Mother's Day weekend. It happened to coincide with our Public Star Party in Carp which resulted in an unexpected influx of visitors. Thanks to Katie Francis and the rest of the Star Party team in managing this event!

We continue to meet at CASM in person with Zoom available for those who cannot make it. Zoom has remained very popular with about one half of our attendees joining us virtually. The other advantage to Zoom is that we can bring in speakers from all over the world to present at our monthly meetings.

Thanks to the efforts of Katie Francis, we were able to have successful Star Parties at the Diefenbunker in Carp. The weather cooperated for the most part in 2024.



The Fred Lossing Observatory continues to be popular with our membership. Thank you to Rick Scholes and the myriads of volunteers for their continued support in keeping this facility running smoothly. Rick could always use some more volunteers on the upkeep of the property.

We continued our outreach efforts to Scouts, Guides, Libraries and the general public. Thank you to Asser ElGindy for his continued support as our Outreach Coordinator. I am pleased to recognize his efforts this year by presenting him with the RASC Ottawa Service Award.

Apart from my keen interest in astronomy, the main reason I keep active in the RASC is the people. We have some amazing people in our centre who are willing to volunteer their knowledge in so many ways.

At this time of year, I am pleased to recognize one of these volunteers for his ongoing support of RASC Ottawa Centre. This person has been very active in RASC Ottawa for many years. Since he joined in 2009, he has had many roles within the Centre. Most recently he has coordinated the member-only star parties at our Fred Lossing Observatory and has

been the editor of our local Astronotes newsletter. I am pleased to announce that Gordon Webster will be receiving the RASC Ottawa Centre's President's Award.

Your Council spent significant time this year working on updating our bylaws and regulations to comply with the Ontario Government's new Ontario Not-for-Profit Corporations Act. The result of this work will be presented at our Annual General Meeting on December 6th this year for your approval.

As I finish my term as President, I would like to thank the members of council for their guidance and support for these last two years.

As I conclude this report, I would like to recognize RASC Ottawa Centre members who have passed away: Roger Taguchi, Attila Danko, Kent Goranson former owner of Focus Scientific and Mark Clitsome (died in 2023 but we just learned of this recently).

Clear Skies!

Dave Chisholm, President
RASC Ottawa Centre

Prince George

Our community outreach program has evolved and improved over the past 43 years. We are a science resource for our community and service the public in several ways:

We are a nonprofit organization, operating and maintaining the observatory with volunteers dedicated to the advancement of astronomy and science in Prince George and the neighbouring Northern Canadian communities.

Program Activities delivered: Scheduled tours, lectures, Friday evening public open houses (in season), solar viewing, eclipse and meteor shower activities. Child oriented astronomy related craft activities.

We serve the general public, school groups, church groups, boy scouts, girl guide groups and service groups. Members occasionally provide off-site talks in local communities.

1305 people attended our Friday evening public open houses, tours, and special events during the 2023-2024 period.

A craft table focusing on the presentation topic is set up with supplies to invite and foster engagement among young children. At Open Houses, we offer a lot of free educational material to the participants. We try to make sure that everyone leaves with something in their hand: a sky map or a planisphere, perhaps a SkyNews magazine, but always something that will get them back out under the sky with a parent or a friend.

On clear Open House nights, the emphasis is on a hands-on exploration of the sky. We have a large number of small telescopes for participants to use, as we understand that it is much more satisfying for the individuals to learn the sky and find celestial deep-sky objects on their own, rather than just to be shown things.

Our laser pointer tour of the current constellations is a big hit, with the added bonus of assisting new observers in locating deep sky objects with the telescopes we provide on the viewing deck.

We are the only local go-to organization that offers the community access to astronomically relevant information and education. PGO is the leading niche science destination in Prince George and surrounding communities up to and including Dawson Creek, and is continuing to provide outreach to the community.

We are all inclusive and welcome anyone interested in astronomy to attend our public open house and special events. We have no barriers to any group wanting to schedule a tour.

Accessibility is available in the classroom via a projection screen for individuals who may be unable to navigate the stairs to the viewing deck, or are susceptible to cold temperatures. They can observe live feeds of the telescopic object that others are viewing visually from the main telescope.

Various social media sites and our website routinely announce dates and presentation topics, and up-to-

date news of any changes that might be necessary. We publicize special events such as meteor showers, solar and lunar eclipses, and solar sunspot viewing. These observatory-based events feature informative audio-visual presentations, knowledgeable personnel on hand to answer questions, and astronomical equipment ready for use.

One of our members provides occasional CKPG Today television interviews covering various astronomical subjects. [‘Our Night Sky’](#) is a weekly radio broadcast that explains facets of astronomy to the general public. The text from all broadcasts is archived on the ‘Our Night Sky’ web page.

On-site interviews by Television and Radio station personnel have provided an important method of advertising the observatory and its contribution to the community.

The community supports us with their donations at public events. Occasionally, people will donate their unused telescopes to the organization.

We are collaborating with the local university UNBC, College of New Caledonia, municipal and regional district governments, and the Prince George Native

Friendship Centre to establish an urban star park. This will enable the public to enjoy dark skies within the municipality.

The Prince George Astronomical Observatory envisions a dynamic and immersive classroom experience for young learners that sparks curiosity about the night sky. For younger children, the upcoming year will feature age- appropriate, interactive activities that explore planets, stars, and constellations; deep sky objects, and Aurora Borealis through storytelling, hands-on demonstrations, and space-themed arts and crafts. Self-directed stations will invite children to create art inspired by the monthly observable sky objects—like creating constellations and recording their observations in an observers’ diary.

For older youth and young adults, a dedicated maker station will encourage deeper exploration through hands-on projects in electronics, coding, and constructing basic astronomy tools like star trackers or small telescopes. This vision aims to inspire curiosity and develop skills that nurture a lifelong interest in science and exploration.

Regina

Year established - 1910

We have a “100 Years of Astronomy in Regina” history book (712 pages) available documenting the first 100 years of our Centre and our activities in southern Saskatchewan.

Copies are available for \$110 for members, and \$125 for non-members.

Membership - 77

Assets

This only includes fixed assets on our financial statement.

- Wireless microphone and mixer sound system for Centre meetings.
- Davin Observatory Land – this is a now a Bortle 4 – 5 location outside the city. This was a very dark site when it was acquired in 1990, but the city and rural light pollution has increased significantly over the last 35 years.
- Investments being held to purchase new land to replace the Davin Observatory in a darker / less light polluted location.
- Artwork in the Kalium Observatory located in the Saskatchewan Science Centre.
- 2x Lunt LS60T Ha 60 mm solar scopes used for summer public outreach.
- Comet Petriew Cairn – commemorates the

Centre Executive

President	Pierre Schierle
Vice President	Rick Saunders
Treasurer	Ken Luciak
Secretary	Kevin Fenwick
National Council Rep	Mark Meadows
Past President	Vance Petriew

Council Members:

Fred Cawsey
Erin Jezegou-Campbell
Curtis Tuplin

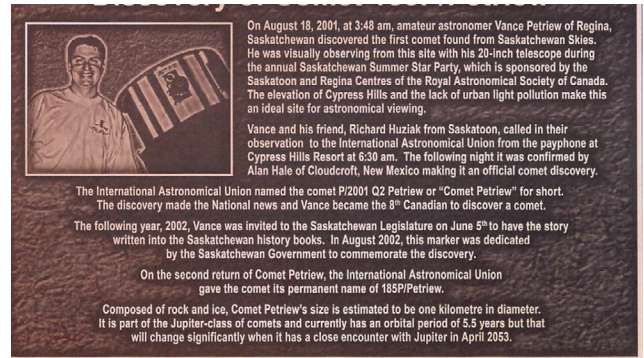
discovery of Comet Petriew by one of our members Vance Petriew. It is located at the Cypress Hills Dark Sky Preserve.

- In addition, we have several loaner telescopes available to members at no charge.

Partnerships

- Saskatchewan Science Centre – established in 1989
 - The Regina Centre’s Kalium Observatory is located on the roof of the Science Centre.
 - This is our primary public outreach location open twice a month at no charge.

- Our monthly Centre Meetings are held in the Science Centre Theatre and on Zoom. They are open to the public at no charge.
- Each meeting has an introduction on recent astronomy related research, a feature presenter (typically from a university, major observatory, or space science program), along with a section on what's up in the sky.
- We also provide several special events for the Science Centre each year to help them with their mission and fundraising.
- It contains a 25-year-old Meade LX200 12" SCT driven by a computer.
- Saskatchewan Summer Star Party (SSSP) – established 1997
 - This is a partnership between the Regina and Saskatoon Centres and is the premier star party in western Canada held over new moon in August each year at the Cypress Hills Dark Sky Preserve.
- Cypress Hills Interprovincial Park (CHIPP) – established 1997
 - The partnership with CHIPP grew out of the SSSP
 - In 2004, the CHIPP was designated a DSP with support from the Regina and Saskatoon Centres.
 - We subsequently helped the park develop their astronomy program and facilities.
 - In 2021, following the pandemic, the provincial park system defunded the CHIPP astronomy program. See the University of Regina partnership for how this was re-established.
 - We are currently working with the park on the redevelopment of their facilities.
- University of Regina – established 2018
 - The relationship with the University of Regina was reestablished in 2018 and focused on helping them with redeveloping their astronomy labs. That was interrupted by the pandemic.



- We are currently supporting the university in a fundraiser to redevelop their astronomy labs.
- The university runs a program called EYES (Education Youth in Engineering and Science) that is used to recruit new students to the university and develop new STEM educators.
- In 2022, a three-way partnership between CHIPP, U of R EYES, and the Regina Centre was established to re-establish the astronomy outreach at CHIPP.
 - * CHIPP provides the observatory and support for the program.
 - * EYES provides the students that lead the outreach programs from June to August that include nightly observing, and education on the sky and LPA, and weekend solar viewing.
 - * The Regina Centre provides training for the EYES team and maintenance of the telescopes.

Outreach

- The Regina Centre may be relatively small, but we are very mighty when it comes to outreach. We held 62 events, run by 34 volunteers (over 40% of our members), reaching 2,664 children and youth, plus 3,542 adults for a total of 6,206 people given in-person views of the night sky and sun.
- The events were as small as 2 or 3 on cloudy nights at the Kalium observatory to over 1,900 on Canada Day for solar viewing in the Family Fun Zone.
- We reached a further 4,307 people through our partnership with CHIPP and EYES for a total of 10,513 people reached.

Special Projects

We are currently working on restoring the Comet Petriew Cairn at CHIPP which is why our donations have been unusually high in 2023 / 2024. This will be completed in the summer of 2025.

Highlights

- An amazing year of outreach (see above) and a strong line-up of speakers at our Centre meetings.
- Denis Pilon was awarded the Isabel Williamson Lunar Observing Program (IWLOP) Certificate with honourable mention for completing all 267 required observations, 8 of the Libration Challenge features, and 4 of the Craters with a Canadian connection. More impressively he completed 144 of the Challenge features and sketched every single one of his 414 observations.
- Celebration of the 20th anniversary of the Cypress Hills Dark-Sky Preserve designation.

Saskatoon

Submitted by Lorie Tedford, Secretary

Year established - 1968

Membership - 62 members

Assets

Sleaford Observatory & dark-sky site, Meade 12" scope, 12" Dob., 3 x 8" Dob. telescopes for rent.

Partnerships

University of Saskatchewan, Grasslands National Park DSP, Cypress Hill Provincial Park DSP, Meewasin Valley Authority, Tourism Saskatchewan.

Awards & Honours: None.

Activities & Outreach

The Saskatoon Centre hosted numerous public outreach events in 2024. These events were held alongside the Meewasin Valley Authority lead by Tim Yaworski as well as a few events within the community who requested the RASC. Meetings were continued to be held as a hybrid format with the optional Zoom participation. The late Ike Thiessen ran a very successful telescope rental program again in 2024. The Sleaford Observatory hosted numerous observation sessions as well as the reinstated imaging sessions. Darrell Chatfield took care of the Sleaford site maintenance with his crew.

This year we held our **27th Saskatchewan Summer Star Party** at Cypress Hills Inter-Provincial Park on August 7th to 11th. We had an attendance of 307 which is higher than the previous year. This year was the anniversary of the Dark Sky Preserve Declaration. The park had a cake prepared for the BBQ to celebrate. There were several speakers presenting talks that included Pierre Schierle, Jeanine Holowatiuk and Roland Dechesne. A Green Laser Pointer certification clinic was given by Pierre Schierle. There were several clinics held by Pierre Schierle, Denis Pilon and Tim Yaworski. A kid's

Challenges

We run so many outreach events that it is challenging to cover them all with volunteers. We had to decline some major events in 2024, or our numbers would have been even higher.

Looking Forward - 2025 and Beyond

We are currently working with the Saskatchewan Science Centre on refurbishing the Kalium Observatory. As part of this we need to find a new corporate sponsor that would obtain naming rights for the observatory. This is a complicated / slow process because the building itself is owned by SaskPower, a crown corporation.

Centre Executive

President	Brent Burlingham
Vice President	John Takala
Treasurer (acting)	Les Dickson
Secretary	Lorie Tedford
National Council Rep	Joelle Sheard-Patrick

workshop was held by Jennifer Petriew and Joelle Sheard-Patrick. Other SSSP programming included Astrophoto, Sketching and Art Contest awards, short talks, door prize draws, 10-, 20- and 25-year awards, and a banquet. The star party also included sessions for public outreach within the park for solar observing and the star-night on Friday and Saturday at Cypress Observatory.

Outreach Events

February 23rd: Kona Winter Festival. Joint event with the U. of S. Engineering Physics Dept and SuperDARN (Super Dual Auroral and Radar Network).

April 8th: Partial Solar Eclipse Viewing. Joint event with the U. of S. Engineering Physics Dept., SuperDARN. Two members from the RASC Saskatoon Centre, Ike Thiessen and Brent Burlingham, set up telescopes and answered questions to approximately 300 members of the public. Public interest was high, but unfortunately the weather did not cooperate. Only a few glimpses of the partial eclipse were visible through the heavy clouds. U. of S Astronomy program graduate students and members of the SuperDARN also provided a large screen TV view of the full eclipse broadcast remotely and answered questions in the historic U. of S Observatory building.

May 7th: *Wildwood School Star Party* with Wildwood Elementary school coordinated by Joelle Sheard-Patrick (RASC Saskatoon Centre). Lots of engagement with the kids.

September 7th: *Broadway Street Fair* hosted by Saskatoon coordinated by Lorie Tedford (RASC Saskatoon Centre). Lots of engagement with the public, had telescopes set up for solar viewing and handed out various outreach materials.

September 14th: *International Observe the Moon* event hosted by Tim Yaworski (RASC Saskatoon Centre). Had members join with scopes to view the moon through some clouds.

September 27th: *Nuite Blanche Festival* joint event hosted by the U. of S. Department of Art and Art History, Canadian Light Source, U. of S. Observatory, Museum of Natural Science, Museum of Antiquities, USask Art Galleries, Nuite Blanche Saskatoon. Brent Burlingham (RASC Saskatoon Centre) set up a telescope and had lots of engagement from the public with over 300 people viewing Saturn.

There was no open house hosted this year due to time constraints and not having participation with the U. of S partnership. Instead, there was a potluck held during the observing session for October.

General Meetings Programming was as follows: (No meetings held in July, August and December)

Jan. *Celestron Polar Scope Improvements, Celestron Starsense Autoalign* – Brent Burlingham (RASC Saskatoon Centre President).

Feb. *The 25th Anniversary of the RASC Dark Sky Site Program* – Peter Brackett (RASC Calgary Centre),

member of the RASC Light Pollution Abatement Committee.

Mar. *Solar, Lunar and Deep Sky Imaging Using the Revolutionary ZWO Seestar S50 Telescope* – Tim Yaworski (RASC Saskatoon Centre).

Apr. *Centre for Backyard Astronomy and Beer Garden* – Jeff Swick (RASC Saskatoon Centre).

May *James Webb Space Telescope Update* – Dr. Michelle Thaller.

Jun. *Astronomical Holiday in the Atacama Desert* – John Takala (RASC Saskatoon Centre Vice President).

Sep. *Imaging Group Update* – Jeff Swick (RASC Saskatoon Centre).

Oct. *Experiences as a Manufacturer of Starfield Optics Astronomy Equipment* – Steve Mallia from Ontario Telescope

Nov. *“Everyone Always Gives a Bad Explanation of the Twin Paradox” Implications and Misunderstandings of the Theory of Special Relativity* – Dr. Daryl Janzen, U. of S. Department of Engineering Physics.

PANP Aurora Worksop – Tim Yaworski (RASC Saskatoon Centre).

Nov. continued Member Social Dinner

Colin Chatfield (RASC Saskatoon Centre) gave *The Upcoming Sky* talks at each meeting held in 2024 to highlight any celestial and noteworthy events taking place during the month.

St. John's

Year established - 1966

Membership - 65

Assets

Seven telescopes, accessories for member borrowing. Access to Butterpot Provincial Park for darker sky observing. Members-only chat group (RASCNLTalk on groups.io) for shared observations, alerts, and advice (about 4200 postings in 2023-2024).

Partnerships

Memorial University Physics (meeting space), Johnson GeoCentre, Terra Nova National Park, Butterpot Provincial Park.

Outreach

In 2024, the Centre carried out in-person Public Observing Events at the Johnson Geocentre, at Butterpot Provincial Park, and at Terra Nova National Park. Each involved 5-10 volunteers and visitors ranging from tens to hundreds. For *International*

Centre Executive

President	Michael Morrow
Vice President	Robert Babb
Treasurer	Jim Johnston
Secretary	Randy Dodge

Council Members:

Garry Dymond
Doug Grouchy
Craig Peterman
Marcellus Redmond
Chris Stevenson
Jon Nugent

Astronomy Day (May 18, 2024, Johnson GeoCentre), we had solar viewing, an information display, planetarium shows, and a telescope workshop. Two members, Jim Stacey and Nikolay Damyanov, also gave talks about their experience of the 2024 Solar Eclipse. Our *Butterpot Star Party* (August 9-11, 2024) had afternoon solar viewing and evening public observations. Member astrophotography images from the previous year were shown as a looping slide show. Five members participated in the *Terra Nova Night Sky Celebration* (August 23-25, 2024). Rain disrupted evening observing but there was an indoor event at the Park Activity Centre on Friday night and solar viewing at the Park Visitor Centre on Saturday and Sunday. There was also a solar system hike at the Activity Centre on Saturday. For *International Observe the Moon Night* (September 13, 2024), we ran public viewing at the Johnson GeoCentre (13 members, 9 telescopes, a few hundred visitors). At the August Star Party and Terra Nova National Park events, we distributed 200 copies of the *Night Sky Almanac* (generously donated by Firefly Press) to interested visitors. Over 30 presentations were delivered to youth groups (Scouts, Guides, etc.) and



Robert Babb

International Astronomy Day. Credit: Robert Babb

community groups, mostly by Garry Dymond at the Memorial University Marine Institute Planetarium. Prior to the 2024 Solar Eclipse, Randy Dodge gave eclipse presentations at the Johnson GeoCentre, the Manuels River Interpretation Centre, and to the Memorial University Pensioners Association. Local media interviewed Centre members on topics including the Solar Eclipse (8 interviews on radio stations across the province), the Perseids Meteor Shower, the “Blue Super Moon”, and “International Observe the Moon” night. A slide show highlighting member astrophotography was added to the Johnson GeoCentre’s *Our Future and Space* exhibit.

Highlights

In addition to outreach events described above, the 2024 highlight was the Solar Eclipse (details provided in a separate report). Presentations at our 10 monthly meetings (hybrid) included talks by



Randy Dodge

International Astronomy Day. Credit: Randy Dodge

members (Randy Dodge in January previewing the 2024 Solar Eclipse, Nikolay Damyanov in February on “Weather and Climate for the 2024 Newfoundland Total Solar Eclipse”, Garry Dymond on his trip to New Zealand) and two talks by outside experts (Dr. Anna O’Grady (McWilliams Scholar, Carnegie-Mellon University and former Centre member) on “The Missing Link: Identifying Yellow Supergiant Binaries in the Magellanic Clouds” and Michael Power (Memorial University) on “Star Formation: The Story So Far”. At meetings in November and May, members gave short talks about interests and activities. The April meeting reviewed member experiences of the 2024 Solar Eclipse. Garry Dymond also hosted two

members-only planetarium shows in 2024. Jim Stacey’s image, “Striding Amidst Starfields and Blue Skies”, won 1st place in the Landscape Division of the Canadian Association for Photographic Art 2023 Nature Competition. In March 2024, Dr. Anna O’Grady presented the Memorial University Elizabeth R. Laird Public Lecture, “Twists and Turns While Searching for Strange Stars” at the Johnson GeoCentre of Memorial’s Signal Hill Campus.

Challenges

Our monthly meetings remain hybrid to accommodate remote members. We have mostly dealt with associated technical challenges. One



Craig Peterman

International Observe the Moon Night. Credit: Craig Peterman

remaining challenge is that some local members choose to join online rather than in person. Having an online option likely allows us to engage members who might not participate otherwise but it does limit social interaction that was typical in pre-pandemic meetings. Membership gains continue to balance losses, and newer members are starting to take on leadership roles. Nevertheless, as the members most active in public outreach age, it becomes a challenge to recruit for more distant outreach events (like the Terra Nova Park event) that involve significant driving and accommodation challenges. We see positive signs that younger members are becoming more engaged, though, and are hopeful for the future of our outreach programs. In 2023-2024, the St. John's Centre was saddened by the passing of three former members, Mike Wilkshire, Michael Power, and Florence McNeilly, a former executive member and treasurer.

Looking Forward - 2025 and Beyond

One focus for 2025 is strengthening our partnership with the Johnson GeoCentre. There are plans to increase the Centre's profile in the GeoCentre's *Space and Our Future* exhibit and we are planning an observing event for delegates to the *Canadian*

Sunshine Coast

Year established - 2004

Membership - 40

Assets

The club maintains and operates an observatory at Sechelt Airport and has several telescopes available for members to borrow free of charge. The club also maintains a substantial lending library.

Meetings, which are open to the public, are held once a month at the Sechelt library with both an in- person and Zoom component. The meetings generally feature an invited speaker, either in-person or via Zoom, and the popular Sky-This-Month feature presented by a member of the executive committee.

Partnerships

The observatory is located on land at Sechelt Airport made available by the District of Sechelt.

Outreach

We open the observatory at weekends weather permitting and at other times when there is a demand. We also hold a monthly Astrocafé, where members can socialize, which is followed by an informal observing session on the seafront, weather permitting. We also maintained booths at various community events, such as Canada Day.

See the attached spreadsheet for attendance and volunteer records. In general, the attendance has



Randy Dodge

International Observe the Moon Night. Credit: Randy Dodge

Association of Science Centres conference being hosted by the GeoCentre in June. The emergence of smart telescopes like the SeeStar S50 is an interesting development. These reduce the barrier to doing astrophotography and about 6 members have started using smart telescopes and participating enthusiastically in the *Observation Reports* section of our monthly meeting. We expect this trend to grow and possibly help to attract and retain new members.

Centre Executive

President	Charles Ennis
Vice President	Michael Bradley
Treasurer	Bruce Fryer
Secretary	Richard Mitchell

Council Members:

Laurel Ennis
Daniel Skazleski
Richard Corbett

Volunteers working on the installation of the wiring to the warm room at the observatory from storage facilities including a generator.



at events has been growing in large part due to promotional activities undertaken by our publicity coordinator.

Special Projects

The installation of pads and pathways to make the observatory facilities friendly for the mobility challenged, made possible by a New Horizon's grant, has been completed. Work continues on providing a warm room and additional storage facilities.

The club has also made representations to Sechelt Council resulting in Sechelt working towards registering as a dark sky community.

Highlights

We held a well-attended four-day star party over several days in August at the observatory.

Challenges

The continuing challenge is to maintain and grow our membership. We continue to have a dedicated speaker coordinator/fundraiser who has been successful in raising substantial funds from the local community to support the speaker program

Toronto

Introduction

It's been another very busy year for the Toronto Centre of the RASC. due to the closure of Ontario Science Centre, our meetings were moved from Ontario Science Centre to York University and so did our official address. As a result of the closure the AV Committee had to move all the equipment needed to begin broadcasting at York University. All display boards, handouts and other items were placed into storage or distributed to EPO and DDO.

Observing Programs

- City Star Parties
 - Monthly City Star parties returned to Bayview Village Park.
 - Long Branch Park was the site of several informal Star parties.
 - Dark Sky Star Parties have not resumed since Conservation Areas are closed at night.
- Annual Algonquin Adventure
The 2024 Annual Algonquin Adventure took place 5 to 8 September. Despite rain the AAA was an overall success with 30 to 40 participants. The Park Administration worked



One of our Astro Café meetings followed by an observing session on the sea front.

and the observatory maintenance. While our events are well attended, one challenge is to translate this attendance into increased membership.

Looking forward - 2024/beyond

We are looking forward to having more sessions at the observatory and making full use of the enhanced facilities.

Centre Executive 2023-2024

Honorary President	Dr. Roberto Abraham
President	Tom Luton
1st Vice-President	Alexander Masterton
2nd Vice-President	Dr. Elaina Hyde
Treasurer	Denis Grey
Secretary	Lucy Winnicki
Recorder	Andy Beaton
Council Members:	
Councillor	Reza Mohammed
Councillor	Ed Treijs
Councillor	Kirsten Vanstone
Councillor	Charles Darrow
Councillor	Diana Salerno
Councillor	Charles Yung
Councillor	Doug Carman
Councillor	Frank Dempsey
Councillor	Tanya Oleksuik
1st Past President	Dr. B. Ralph Chou
2nd Past President	M. Tony Horvatin

with the Observing Committee to promote in local news and provided positive feedback.

Education and Public Outreach

The state of the Education and Public Outreach (EPO) arm of the RASC Toronto Centre is quite strong with excellent volunteers. While still below pre-pandemic levels, compared to 2023 there was an increase in number of events, volunteer hours and participants. Highlights;

- Two events were held during the March Break where children participated.
- Two events were held with Scouts and Guides, each attracting around 25 children.
- As a new initiative EPO engaged with Caledon library.
- EPO conducted outreach to the Senior Community at Saint Clair and O'Conner.
- Well established, highly popular events in Durham Region, David Dunlap Observatory, and EPO at the Carr Astronomical Observatory continue to thrive.

New initiatives on the horizon include:

- Sessions for The New Observers to Visual Astronomy (NOVA) course.
- Working with the Toronto Public Library (TPL) to host a few general astronomy presentations in 2025.
- A dark sky site is also being explored. More specifically, the site of Torrance Barrens has been assessed.

David Dunlap Observatory

The DDO Committee continues to offer a full schedule of programs both in person and online in cooperation with the City of Richmond Hill. A new 3-year agreement has been reached with the City to continue our programs, and settlement of the Helm Fund dispute means that the Toronto Centre will once again have funding to help support them.

CAO

The Committee conducted most of its business on the email forum and by Zoom sessions. Activities at the CAO during the 2023-2024 fiscal year were comparable to last year.

- Delivered New user orientations to 5 members, logged 384 bookings for bedroom use, 55 camping stays and 287 day visits this year.
- The fall work party on 21 October 2023 was attended by members of RASC Toronto and students from the UofT.
- The spring work party on 4 May 2024 with members of RASC Toronto and UofT.
- My Own Dome Lot(MODL) station was built bringing the tally to seven.

- The annual Open House and Awards Picnic with awards, dinner and observing.
- The CAO continues to receive generous donations of funds and equipment.
 - A special Celebration of Life was held for Blake Nancarrow. Toronto Centre received over \$11,000 in donations.
 - A Newtonian telescope, Coronado PST and Star Adventurer kit was donated to CAO.
- David A. Dunlap Department of Astronomy and Astrophysics of the University of Toronto completed the installation of their 20-inch Planewave Cassegrain telescope in February.
 - Remotely controlled as well as locally.
 - 24 students began using the telescope.
 - A course instructor and up to 3 students are available from Monday through Thursday for training and research.
 - Bedrooms are still available during the week for members.
 - The presence of the U of T at the CAO has great benefits to our members.

The CAO continues to deliver outreach programs. There were 8 events with 250 participants.

Date	Group
10-12 November	1st Streetsville Scouts
23-25 February	101st Toronto Scouts
17 July	Probus Collingwood Gateway Club
8 August	L.E. Shore Public Library tour
13 August	Beaver Valley Bruce Trail Association
14 August	Collingwood Gateway Probus Club
9 September	Beaver Valley Probus Club
10 September	Probus Four Seasons of Collingwood

Web Team and Social Media

For 2024, 101 events were posted on the website, with the biggest event was for the April 8 Solar Eclipse.

256 contact form submissions were processed from RASCTO members generally asking about solar eclipse details, volunteering, RASCTO events, and other astronomical events.

As per Google Analytics from August the website saw about **3600** visitors monthly.

AudioVisual

The AV Committee has again had a busy year. Here are the Highlights.

- 22 streaming events to our YouTube channel – RASC Toronto.
 - 4 Recreational Astronomy Night (RAN) Meetings with 1459 views
 - 8 hybrid meetings,
 - 8 Speaker's Night with 1,406 views
 - 2 were the Blake Memorial and the Open House.
 - 205 people in total attended in-person
 - 8 in-person meetings with 2,973 online views.
 - From 9 RAN Events, 29 individual presentations uploaded to generate more views resulting in 62,800 views, a total of 8,700 hours watched and 542 new subscribers for a current total of 3210.
 - Most popular video for the year
 - * Big Binoculars with 14,350 views
 - * Dr. Sarah Symons "It's Sirius O'Clock: Astronomical Timekeeping in Ancient Egypt" with 5,138 views
 - * Dave Lane's Mini Robotic Observatory with 3,502.
 - Some of our YouTube viewers have come from the United Arab Emirates, Lebanon, Argentina, UK, Germany, Florida, Brazil, Chile, Sweden, California, Oklahoma, North Carolina, British Columbia, Georgia, etc.

Telescope Loan Program

Telescope Loan Program continues. Larger telescopes such as Meade LX10 200 mm SCT and the Skywatcher 200 mm Dobsonian scope each were loaned out for over 60 days.

Library

The library committee received a donation of several boxes' worth of books and magazines from the estate of former Toronto centre member Guy Nason.

Member Advisor

Our Member Advisor, has mailed out 122 Welcome packages to new members. They fielded enquiries regarding general membership, CAO, Eclipse, Telescope Loaner Program, NOVA and National's Certificates, OHAP and regarding Blake's celebration of life.

Awards

This year the following awards were presented to members of the Toronto centre.

- Andrew Elvins Award: members who run the OSC solar observing sessions each month, including Eric Peters, Arnold Brody, Sue Kralik, and James Luo
- Bertram J Topham Award: Lucy Winnicki and Ed Treijs for locating the site and promoting the Long Branch observing parties
- Ray Thompson Award: Julian Samuel for his astronomy-themed paintings
- Jesse Ketchum Award: no recipient
- Ostrander-Ramsay Award: Eric Briggs (nominated by Mark Doyle) in recognition of his service as Editor of Scope
- Charlene Norgrove Award: (up to 3 per year) Denise Chilton for her mentoring of the DDO team and James Luo for his cheerful and enthusiastic support and encouragement of TC volunteers' use of the website
- Winearls Award: Ralph Chou, for over 50 years of service to the RASC Toronto Centre
- In addition to the Toronto Centre awards, several members received Volunteer Service awards from the Province of Ontario
- Youth: Arushi Nath, Artash Nath
- 5 year: Adrian Aberdeen, Andrew Reid, Betty Reid
- 10 year: Genevieve Seabrook
- 25 year: Scott Masterton

Council

Behind the scenes council has been busy this year.

The agreement with Richmond Hill regarding the DDO was renewed for another three years.

A long-standing dispute regarding the Helm Fund between the Toronto Centre and the trustees of the Fund has been resolved after mediation. After the closure of the Ontario Science Centre, evaluated potential new homes and settled on York University.

Missing Friends

We have lost a friend this year, life member and former RASC Toronto President Guy Nason passed away on March 5.

Vancouver

Year Established - 1931

Membership - 174 as of February 2025

Assets

VRO Observatory including imaging equipment, 5-6 telescopes for loaner program, Jim Bernat Meteorite Collection

Partnerships

SFU, H.R. MacMillan Space Centre

Outreach

Friday night Starry Nights in collaboration with SFU, Astronomy Day at SFU, various school presentations, Monthly meetings with guest speakers at SFU Burnaby campus*, Imaging sessions led by Marla, Alan and Rick, NOVA newsletters, Maple Ridge Library event and Canada Day Event, Hope Event

Special Projects

Washtock star party to replace Merritt Star Party



Highlights

- The VRO Observatory had many upgrades which led to various events there
- Renewed relationship with the H.R. MacMillan Space Centre
- Excellent Monthly speakers (see below for topics and presenter names)
- We're laying the groundwork for a new Vancouver hosted star party to replace the Merritt Star Party
- We had quite a few great telescopes donated for our loaner program

Challenges

- We lost our education co-chair and chair for 2025 so that role will need to be shared amongst the council members.
- Light pollution at SFU due to construction
- Volunteer fatigue – most of the volunteers for our events are coming from council members

Centre Executive

President	Robert Conrad
Vice President	Nolan Smith
Treasurer	Phil Lobo
Secretary	Kyle Dally

Council Members:

National Council Rep	Nolan Smith
Speakers Chair / PR	Andrew Ferreira
Events	Vacant (previously Suzanna Nagy)
Observing Chair	Robert Conrad
Education Co-chairs	Robert Conrad Andrew Krysa
Membership	Marla Daskis
Merchandise	Kyle Dally
Imaging Chairs	Marla Daskis, Alan Jones, Rick Schneider
Librarian	William Fearon
NOVA Editor	Gordon Farrell
LPA Chair	Leigh Cummings
Webmaster	Martin Curic
VRO Observatory	Alan Jones
Members at Large	Karl Miller, Gordon Bosch, Michael Levy

2024 RASC Monthly Meeting Topics

January (Matthew Borghese – NASA Ambassador) – Looking back on 2023, Looking ahead to 2024.

February (Dr. Tanya Harrison) – What's up on Mars (Paul Sykes lecture)

March (Robert Conrad) – Show and Tell Telescope and Observing Basics

April (Dr. Michelle Kunimoto) – A Planet Hunter's Guide to the Galaxy

May (Jennie King – NASA Ambassador) – Lucy in the Sky with Trojans: Fossils of the Early Solar System

June (Dr. JJ Kavelaars) – NASA's New Horizon's Spacecraft

July (Robert Conrad) – Project S.O.S. (Starhopping on Steroids)

September (Dr. Elias Aydi) – Supernovae/Novae

October (Vicky Derksen) – The Enchantment of Evening Twilight

November (Dr. Franck Marchis) – SETI

December (Bryon Elliott) = Pitcairn Islands Observatory

Victoria

Year established - 1914

Membership - 224

The RASC Victoria Centre began its twelfth decade in 2024 with a full year of activities that largely moved beyond the shadow of the pandemic earlier in the decade. The centre hosted 103 events with more than 10,000 in-person Galileo moments and 29,000 on-line Galileo moments.

On February 12, the centre held an on-line Annual General Meeting which saw the election of this executive and council, listed to the right.

Two weeks later Centre members gathered at the Four Mile Brew Pub for our Annual Dinner, which marked a successful return to a venue where we had last gathered in the 1990s.

By then, our regular Monday night Astro-Café sessions had got under way and continued through the year, except for breaks on holidays and for the summer months. There were 27 Astro-Cafés in 2024, with an average attendance of 32 people. Astro-Cafés are hybrid events, with many people gathering at the Fairfield Community Centre and a larger number joining on Zoom. While Astro-Cafés are usually informal chat meetings, they often feature special guest speakers. On April 8, with many Victoria Centre members dispersed around Eastern Canada, the U.S. and Mexico for the total solar eclipse, many compared notes that evening on a special Zoom Astro Café event. Astro-Cafés are all available for viewing on the RASC Victoria Centre YouTube Channel, along with other centre events.

2024 was the first year since 2019 with a full schedule of monthly meetings at the University of Victoria with guest speakers:

January 10, 2024 – Revealing the Invisible Universe with Radio Telescopes – Dr. Jennifer West, NRC Astronomer

March 13 – Galaxies at the Dawn of Time with the James Webb Space Telescope – Dr. Leonardo Ferreira, Uvic Postdoctoral Fellow

May 8 – The Photographic Legacy of the DAO and John Stanley Plaskett – Dr. Dennis Crabtree, retired NRC Astronomer and former Director of the Dominion Astrophysical Observatory

September 11, 2024 – Wombs of Pregnant Stars – Jess Speedie, PhD Candidate, Physics and Astronomy, Uvic

October 9, 2024 – Beyond the Veil, Hidden Stars in Molecular Clouds – Breanna Cromptvoets, PhD candidate, Physics and Astronomy, Uvic

November 13, 2024 – The Habitable Worlds Observatory and Quest to find life signatures outside our solar system – Dr. Christian Marois, NRC

Centre Executive 2024

President	Chris Gainor
1st Vice President	Dan Posey
2nd Vice President	Kirsten Pedersen
Treasurer	Doug Hardy
Secretary	Oliver Robinow
Past President	Randy Enkin
Directors at Large:	
	David Lee
	Myles Morrison
	Jeff Pivnick
	Lauri Roche
	Alex Schmid

Astronomer

December 11, 2024 – North Star to Freedom. Amy Archer, Vice Chair, Friends of the Dominion Astrophysical Observatory.

Two Special Interest Groups met regularly during the year, including the Getting Started in Astronomy SIG coordinated by David Lee and the Astrophotography SIG coordinated by David Payne.

Ten major observing sessions took place at the Victoria Centre Observatory on Little Saanich Mountain, and highlights included sessions for Comet Tsuchinshan-ATLAS in October and an Auroral display that month. The VCO telescope's main computer was replaced, and other important maintenance work was done. Centre members had access to the Plaskett Telescope at the Dominion Astrophysical Observatory (DAO) for four nights, but the weather cooperated only on August 3.

The Friends of the DAO had a very successful year in 2024, selling out most of its Star Parties, hosting thousands of students up at the Centre of the Universe and in schools, inviting people from cruise ships to visit with special tours in the evenings and meeting its mission of bringing the adventure of Astronomy and Space Sciences to a wide audience. The FDAO depended on RASC members to host the Welcome Table and to share their knowledge of the night sky in a variety of roles for Star Party nights.

There were 22 Star Parties in 2024 ranging from our January Games Night, to May the 4th Star Wars, Dinosaurs, Climate Change and Galaxy Mergers. We hosted International Astronomy Day, a Telescope workshop with RASC members presenting information and helping with setting up equipment, VOX in the Stars in September and finally the Winter Solstice Waffle Breakfast.

International Astronomy Day was celebrated on May 18 with a full slate of activities during the day at the Royal BC Museum in the heart of Victoria and in the evening at the DAO and the Centre of the Universe. More than 800 members of the public were reached in the various activities and talks during the day, and public interest was encouraged by the major display of Aurora Borealis the previous weekend.

The Island Star Party took place August 9 to 11 at St. Stephen's Church, in Saanichton. The Victoria Centre took control of this venerable event in 2024, after 26 years of sponsorship by our friends in the Cowichan Valley Starfinders. There were about 20 telescopes of all different shapes and sizes set up, and all their operators were very generous with their time and experience for the enquiring public.

Other major public outreach activities included participation in the 2024 Beaveree in June and the Saanich Fair on the Labour Day weekend. Over the three-day fair, 20 volunteers made contact with more than 2,300 members of the public.

Later in September, Bill Weir and Kirsten Pedersen of the Victoria Centre took part in the Huu-Ay-Aht

First Nation Dark Sky pilot for a possible Dark Sky Festival in the nation, whose lands are located in the Barkley Sound region on the West Coast of Vancouver Island, at the entrance to Alberni Inlet. Bill presented the Nation with a gift of an 8-inch telescope, eyepieces and literature on behalf of our Centre, the DAO and a private donor.

At year's end, Sid Sidhu was given the centre's highest honour, the Newton-Ball Award. Over his 40 years of activity in the Victoria Centre, Sid has held almost every job there is to do and is especially known for his work on public outreach. With this award, Sid is the first person to win the Newton-Ball Award a second time.

Certificates of Appreciation were given to Jill Sinkwich and Chris Purse, and to Joe Carr, who this year completed a major upgrade of the Victoria Centre website. Brock Johnston and Randy Enkin won Awards of Excellence in Astro-Imaging and Astro-Sketching, and honorable mentions went to Dan Posey, Zen and Renee Dedekind, Mike Nash, and Joe Carr.

Windsor

Year established - 1945

Membership - Approx. 90

Assets

Hallam Observatory

Partnerships

Point Pelee National Park

Outreach

Monthly Dark-Sky nights at Point Pelee, Private tours at Hallam Observatory, Town of Essex Sidewalk Astronomy events.

Highlights

As the largest astronomical event in recent years, the Windsor Centre became the Go-To for expertise and information by the media and communities of Windsor-Essex. Windsor Centre hosted info sessions, solar glasses sales and watch parties throughout the region, involving hundreds of people and allowing them to enjoy one of the wonders of our solar system in real-time. See the separate "Solar Eclipse" report for more details.

Outreach and education are elements of our core mandate as part of the Royal Astronomical Society of Canada. We definitely excelled in this goal in 2024. Visits to the Hallam Observatory continue to build back to pre-pandemic levels. Donations continue to rise as more visits are scheduled.

Sidewalk Astronomy and Dark-Sky Nights at Point

Centre Executive

President	Mahayarrahh-Starr Livingstone
First Vice President	Steve Pellarin
Second Vice President	Laura Burgess
Treasurer	Michel Collins
Secretary	Sandy French
National Council Rep	Tom Sobocan

Council members:

Joady Ulrich
Cliff Campeau
Donna Ronconi

Pelee National Park continue to be well attended, assuming the weather cooperates. There seem to be more overcast nights than clear ones; something we have no control over! However, volunteers continue to participate in our outreach events despite the uncertainty.

Astrophotography has long been a mainstay of the Windsor Centre. We have many skilled photographers who practice regularly and share their images with the membership. I am constantly in awe of the beautiful pictures presented each month.

In terms of advocacy, our members continue

to monitor and report on Light Pollution and its effect on the environment, with a special focus on greenhouses and the new international bridge. Starr Livingstone has been particularly invested in this area and regularly addresses the issue with the municipal councils. We've been working with The Gordie Howe International Bridge Corporation to keep light abatement top of mind. Our members regularly speak with CBC/Radio-Canada, CTV & other SW Ontario news agencies for astronomical event information and insights.

Internally, our Centre has returned to hosting social events, with a well-attended Labour Day BBQ event at the Observatory and a December Social. Donations of silent auction and door-prize items help support the Centre financially while being a fun way to build comradery. Our Centre relaunched the "Aurora" monthly newsletter in September as a tool for information and membership outreach.

Challenges and Looking Forward

We are looking for donation & fundraising opportunities for asset improvement, such as replacing the exterior deck at Hallam Observatory.

Light pollution is a major concern in South-Western Ontario due to the high number of Green House facilities. We have been working with local

Winnipeg

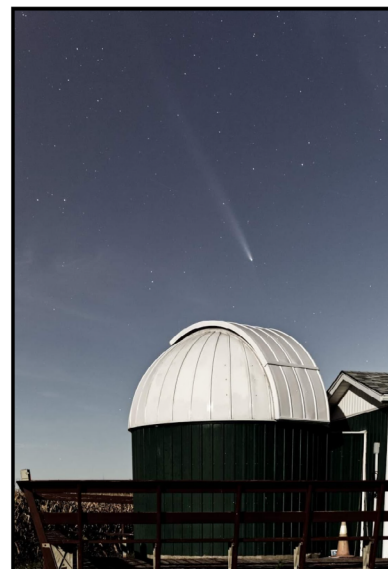
2024 was a banner year for the Winnipeg Centre, with a great line-up of presentations, observing nights, social activities, and outreach events throughout the year.

Centre Meetings

The Centre's monthly meetings have been hybrid in-person/online meetings since 2020, and we hosted a combination of talks by Centre members, local astronomers, and national and international professional astronomers, astrophotographers, and science educators. Our regular meeting begins with a Beginner Session, with presentations alternating between gAIL Wise (on the objects and star features of a single constellation, the legends of which she also relates) and Scott Young (on a variety of upcoming events such as solar and lunar eclipses, Betelgeuse brightening, and the sunspot/auroral cycle). Announcements from the president, Dennis Lyons, typically follow to highlight volunteer opportunities and upcoming outreach events. Bryan Stach, our past-president, gives a "What's Up?" session on planets and phenomena visible in the upcoming month. In 2024, our "What's New?" segment featured presentations on the science of one to a few recent discoveries, by Dr. Michelle Boyce and Dr. Danielle Pahud on alternating months. This sequence sets a pace for the meeting, and

*Photo by Randy
Groundwater.*

*Hallam Observatory with
Comet Tsuchinshan-
ATLAS above the
western horizon, 2024-
10-16.*



municipalities on bylaw compliance and will continue to monitor the situation.

Growing our membership and volunteer capacity is a continuing challenge. Our Centre has a core group of members but are finding it difficult to fulfill all the requests for tours at the Observatory and Dark-Sky Events. We are working on GLP training and continued improvement in Astrophotography.

leads into the featured speaker for each month.

In January 2024, Dr. Allison Man from the Department of Physics and Astronomy at University of British Columbia spoke about Euclid, galaxies and her path to becoming a professional astronomer, and yes, a RASC outreach event helped that happen! In February, Chris Vaughan, the "AstroGeoGuy" spoke enthusiastically about objects Beyond Messier. In March, Dr. Marc Buie from Boulder's South West Research Institute gave the latest results from the Lucy mission and included news on the recent Dinkinesh flyby and new occultation results. In April, Dr. Philip Ferguson from the University of Manitoba STARLab spoke with four of his students on their CubeSat project. In May, we had a full night of member images and stories from their experiences at the total solar eclipse of April 8, 2024 – a great evening of sharing adventures and misadventures. In June, Ron Brecher spoke about his astrophotography and how he got to the level of expertise he has garnered over the years. His fascinating use of remote telescope images really inspired the audience. In July, our members met in the late afternoon at the Glenlea Astronomical Observatory site for a well-attended potluck barbeque and annual walk to the gate and back, before the President carved the traditional. In August, Dr. Tyrone Woods of the Department of

Physics and Astronomy at University of Manitoba spoke about the Canada-wide CASTOR project, and massive scale of planning and coordination that he is leading here. In September, our member Jay Anderson, a Fellow of the RASC, gave a presentation illustrated by his own images on Aurora, their origin and types, how the different colours are created, and some photography tips. In October, James Edgar, another Fellow of the RASC, gave a brief talk on publications of the National RASC. In November, our member and planetary expert, Mike Karakas, gave a really animated and impressive presentation on his own planetary imaging from Curacao, complete with details of site selection, equipment choice and packing for travel. Mike even linked in another expert imager direct from Curacao, Eric Sussenbach, and we're hoping that he might speak in-person to the club this fall. In December, our final speaker of the year was Dr. Gilles Ferand, currently a Research Associate in the Department of Physics and Astronomy, working at the Human-Computer Interaction lab in collaboration with Dr. Jayanne English from the University of Manitoba spoke about his discovery of a new nova and how he developed an imaging algorithm to display all the currently available information about it in a single image. That was a truly impressive way to cap off an exciting roster of speakers for 2024 at the meetings of the Winnipeg Centre!

Observing Events and Star Parties

The Centre hosts a monthly Members Observing Night (MON) at its Glenlea Astronomical Observatory. This event brings members together under the sky, clear or cloudy. On clear nights members observe using the Centre's 12" LX200 telescope or their own gear. Some MONs have a theme, such as the October MON which featured a half-dozen smart telescopes in action side by side.

The Centre's major annual event, the Spruce Woods Star Party, is three nights and days of observing, speakers and socializing with fellow amateur astronomers. Gerry Smerchanski's laser pointer tour of the night sky never fails to impress and the closing ceremony's pancake breakfast was a hit. Approximately seventy RASC members and family members camped-out together in Manitoba's only dark sky preserve, Kiche Manitou Campground

(Spruce Woods). The 23" Dobsonian scope proved to be the gathering point at night, though not to the exclusion of individuals doing visual observing and imaging. The occasional slewing of a scope and coyotes howling in the surrounding hills reminded us that we weren't the only ones awake in the dark. The walking tour of everyone's equipment during the day reminded us of the sheer variety of gear available to hobbyists, much of it at affordable prices. The one night we were clouded out led to an impromptu bonfire where we shared experiences and snacks and enjoyed being surrounded by friends, new and old.

Programs

The Winnipeg Centre has an active loaner telescope program, with telescopes ranging from refractors and Dobsonians to a Coronado hydrogen alpha solar scope. At the end of the year, the Centre decided to add a SeeStar 50 smart telescope to the arsenal as well.

Between meetings, several workshops were produced and presented by members, providing in-depth training in a specific area such as collimation, binocular use, and optical cleaning. More workshops are planned for the future.

Outreach and Public Events

The April solar eclipse was a major event for the year, with thousands of visitors to our observing event at Assiniboine Park. Despite a partially cloudy sky, thousands of visitors saw the eclipse through our members' telescopes, and the associated live stream (in partnership with the Manitoba Museum's Planetarium) had over 120,000 viewers over the course of the event. The Centre sold several hundred sets of solar glasses, providing a welcome boost of revenue to support Centre activities. In addition to the eclipse, Centre members hosted public events for Astronomy Day and as part of Science Rendezvous, as well as on request for schools, daycares, and other groups.

In 2025, the Winnipeg Centre plans additional outreach and partnerships with like-minded organizations. We will also be gearing up to celebrate the 50th anniversary of our Glenlea Astronomical Observatory in 2026.

Yukon

Year established - 2015

Membership - Membership fluctuates between about 25 and 30 people.

Assets

The Yukon Astronomical Society Observatory (small lounge building and a 9.25" telescope in a dome).

Partnerships

We have no formal partnerships at this time but we have a long-standing relationship with Parks Canada (specifically regarding the annual dark sky festival at Kluane National Park) and regularly work with other community organizations.

Outreach

We have two regular programs, both of which are open to the general public:

- **Monthly Regular Meeting:** a monthly meeting in downtown Whitehorse (typically the Whitehorse Public Library), usually featuring a lecture.
- **Night at the Observatory:** a night where we meet at the observatory to either do observing or talk about what observing we would like to do in the coming month. Held monthly from September through March.

We held three star parties in 2022:

- The Spring Yukon Star Party in late March at our observatory.
- The Fall Yukon Star Party in late August at our observatory.
- Northern Nights at Kluane National Park in partnership with Parks Canada.

Centre Executive

President	Christa Van Laerhoven
Vice President	CJ Parr
Treasurer	Forest Pearson
Secretary	Patrick Egan

Council Members:

Viktor Zsohar
Shale Davis
Mark Penner

Highlights

Since building our observatory, we have been struggling to keep up with the related expenses. This observing season (Sept 2024 – March 2025) is the first where we are getting enough visits (and thus donations) to noticeably outpace our expenses.

Challenges

The challenge that comes with increased visits to our observatory is to manage that traffic without burning out our volunteers.

Looking Forward - 2025 and Beyond

Late next year we will start renegotiating the lease for the land our observatory sits on, for renewal in Sept 2026. Ownership of the land has changed since we signed the last lease. The new owners are looking towards developing an aurora/wilderness resort and how we might be involved in that effort is to be determined.

2024 Centre Treasurer Reports

Revenue

Centre	BEL	EDM	KIN	LON	MIS	MTL	NB	NIA	OTT	PG	REG	STJ	SUD	SUN	WPG
Membership Revenue															
Membership Fees- Centre fee	1,257	6,292	1,428	2,364	4,147	4,251	1,529	1,388	9,512	1,116	733	1,840	868	899	4,656
Membership Fee - Affiliate			23												
Membership Fees - Other											574				
Centre Newsletter															
Donations / Fundraising															
Donations		750	1,434	775	1,114		555	2,113	23,650	2,926	2,803		1,322	9,028	268
Fundraising		79,600			1,277		220	209		10,000	1,100		10,000	934	1,315
Sales Revenue															
Sales of Observer's Handbooks															
Sales of Observer's Calendars		2,480	420		750		1,200	30	1,302	769	350	1,034			435
Other Publication Sales															
RASC Promo items	3,946														
Other Sales		2,175	310		1,515			3,871			4,850	1,549		210	
Subscription Revenue															
Astronomy / Sky & Telescope															
Other															
Events Revenue															
Star Parties	203	6,756	2,540								875			300	2,160
Annual Dinner									3,993						
Astronomy Day															
Other Events											1,080				
Miscellaneous Revenue															
Interest and Dividends	1	60	589			1,140		277	2,326		987				563
Advertising															
Observatory site revenue - members								50	460						
Equipment rentals/loans												30			
Public services, events, outreach					3,716	2,340									4,578
Miscellaneous		340			490	1,050		546		593		1,558		3,441	40
TOTAL REVENUE	5,407	98,453	6,744	3,139	13,009	8,781	3,505	8,484	41,243	15,404	13,352	6,011	12,190	14,812	14,014

Expenses

Centre	BEL	EDM	KIN	LON	MIS	MTL	NB	NIA	OTT	PG	REG	STJ	SUD	SUN	WPG
Sales Expenses															
RASC publications		886	402		669		925	29	1,272	624	228	1008			433
Other Publications															
Newsletter			17												
RASC Promo items	1,281														
Other								958		82	3,416			148	
Event Expenses															
Star Parties		10,212	2,336			198	140	50	1,329		32				1,511
Annual Dinner	200					453			7,040						25
Astronomy Day															
BIYA Event							312								
Meetings	212	670	1,407		726		131	925	741		1,368			1,038	1,595
Other Events		3,900	706			63						2,128		1,121	755
Travel Expenses															
GA and Council Meetings															
Administrative Expenses															
Office Administration	24	104	344		689		653	20	598	105	193	271		134	267
Equipment and Supplies	247	712	28				665	192		34	182				
Insurance		787	432		432	1,259	93		2,444	2,402		507	1,374	1,688	1,215
General Expenses and Audit	35	3,984			1,739	343		36	2,915	624		55			40
Awards		325			125				572			227			
Donations	1,150					981	2	200					10,000		
Advertising		1,600							150						
Miscellaneous Expenses	670	17,036	130	3,702	2,238	2,790	855	1,182	12,863	5,858	2,018			9,091	4,248
TOTAL EXPENSES	3,819	40,216	5,082	3,702	6,618	6,086	3,777	3,592	29,924	9,729	7,437	4,196	11,374	13,220	10,090
SURPLUS, (DEFICIT) ON OPERATIONS	1,588	58,237	942	-563	6,391	2,694	-272	4,892	11,319	5,675	5,915	1,815	816	1,592	3,924

Balance sheet summary

Centre	BEL	EDM	KIN	LON	MIS	MTL	NB	NIA	OTT	PG	REG	STJ	SUD	SUN	WPG
ASSETS															
Current assets	11,785	194,028	35,908	11,019	36,527	83,504	3,095	12,665	72,767	3,760	35,277	38,297	11,009	11,479	32,567
Long-term assets	917	611,000		21,454		15,547		16,814	34,036	128,243	5,296			85,892	74,832
Total Assets	12,702	805,028	35,908	32,473	36,527	99,051	3,095	29,479	106,803	132,003	40,573	38,297	11,009	97,371	107,399
LIABILITIES															
Current liabilities									2,856	-1,489					498
Long-term Liabilities															4,582
EQUITY															
Net Equity	12,702	805,028	35,908	32,473	36,527	99,051	3,095	29,479	103,947	133,492	40,573	38,297	11,009	97,371	102,319
TOTAL LIABILITIES AND EQUITY	12,702	805,028	35,908	32,473	36,527	99,051	3,095	29,479	106,803	132,003	40,573	38,297	11,009	97,371	107,399

2024 Award Winners

Simon Newcomb	Betty R. Robinson (Mississauga)	Fellowship Award	Paul Gray (Halifax)
Service Award	Chris Beckett (Kitchener-Waterloo)	Qilak Award	Geoff Robertson (Edmonton)
	David Lee (Victoria)		
	Robert Lenz (Niagara)		
	Dennis Lyons (Winnipeg)		

Past Award Winners

Below is a list of former winners of the Society Awards.

For names before 2000, please refer to “Looking Up—A History of the RASC” by Peter Broughton.

www.rasc.ca/sites/default/files/LookingUp-300-text.pdf For names after 2000, go to the RASC website www.rasc.ca/rasc-awards

Chant Medal

The Chant Medal of the Society was established in 1940 in appreciation of the great work of the late Professor C.A. Chant in furthering the interests of astronomy in Canada. The medal is awarded not oftener 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 of original investigation.

- 2001** Richard Huziak (Saskatoon)
- 2002** Dr. Roy Bishop (Halifax)
- 2006** Ed Majden (Victoria)
- 2008** Dr. Geoff Gaherty (Toronto)
- 2018** Peter Broughton (Toronto)
- 2020** Michel Duval
- 2024** Warren Finlay (Edmonton)

Fellowship Award

Developed jointly by the Awards and Nominating Committees, and approved by the RASC Board of Directors in November 2013, the award of Fellow of the RASC (FRASC) is created to acknowledge 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.

- 2015**
- Robert Dick (Ottawa)
- Dave Lane (Halifax)
- Dr. John Percy (Toronto)
- Mary Lou Whitehorne (Halifax)

- 2016**
- Jay Anderson (Winnipeg)
- Alan Batten (Victoria)
- Doug Hube (Edmonton)
- Franklin Loehde (Edmonton)
- Patrick Kelly (Halifax)

- 2018**
- Peter Jedicke (London)

- 2020**
- David Chapman (Halifax)
- Randall Rosenfeld (National Member)

- 2021**
- Roland Dechesne (Calgary)
- James Edgar (Regina & Halifax)
- Michael Watson (National Member)

- 2022**
- Dr. Chris Gainor (Victoria)

- 2023**
- Colin Haig (Hamilton)
- David Levy (Kingston, Montreal)

- 2024**
- Robyn Foret (Calgary)

Ken Chilton Prize

The Chilton Prize was established in 1977 by the National Council of the Society in remembrance of Ken E. Chilton, an active member of the Hamilton Centre. The 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.

2008

- Eric Briggs (Toronto)
- Debra Ceravolo (Ottawa)
- Peter Ceravolo (Ottawa)
- Lou Cox (Ottawa)
- Steve Gauthier (London)
- Doug George (Ottawa)
- Paul Gray (New Brunswick)
- Walter MacDonald (Kingston)
- Jack Newton (Victoria)
- Ajai Sehgal (Ottawa)
- Jennifer Tigner (Victoria)
- Dave Toth (London)

2009

- Brian Battersby (Prince George)

2010

- Brian Battersby (Prince George)
- Lise Charlebois (National Member)
- Ted Dunphy (New Brunswick)
- Paul Gray (New Brunswick)
- Kim Hay (Kingston)
- Marc Keelan-Bishop (Belleville)
- Don Kelly (New Brunswick)
- Rémi Lacasse

- (National Member)
- Dave Lane (Halifax)
- Damien Lemay (Québec)
- Ron Macnaughton (Toronto)
- Chris Weadick (New Brunswick)
- Jennifer West (Winnipeg)

2012

- Holly Ayles (New Brunswick)

2014

- Kathryn Gray (Halifax)
- Nathan Gray (Halifax)

2020

- Peter Pekurar (Kitchener-Waterloo)

2022

- Normand Amyot (non-member)
- Francois Chevretils (Centre francophone de Montreal)
- Michel Duval (Centre francophone de Montreal)

2023

- Dr Chris Gainor (Victoria)

Plaskett Medal

The Royal Astronomical Society of Canada and the Canadian Astronomical Society together present an award in recognition of the pivotal role played by John Stanley Plaskett in the establishment of astrophysical research in Canada. The award is made to the graduate from a Canadian university who is judged to have submitted the most outstanding doctoral thesis in astronomy and astrophysics in the preceding two calendar years. An award need not be made every year.

2008 Dr. Adam Muzzin (University of Toronto)

2009 Dr. Catherine Lovekin (Saint Mary's University)

2010 Dr. Helen Kirk (University of Victoria)

2011 Dr. Kaitlin Kratter (University of Toronto)

2012 Dr. Pier-Emmanuel Tremblay (Université de Montréal)

2013 Dr. Yasuhiro Hasegawa (McMaster University)

2014 Dr. Andrew Pon (University of Victoria)

2015 Dr. Anne Archibald (McGill University)

2016 Dr. Jonathan Gagné (Université de Montréal)

2017 Dr. Fereshteh Rajabin (Western University)

2018 Dr. Gwendolyn Eadie (Queen's University)

2019 Dr. Alexandra Tetarenko (University of Alberta)

2020 Dr. Simon Blouin (Université de Montréal)

2021 Dr. Ziggy Pleunis (McGill University)

2022 Dr. Deborah Good (British Columbia)

2023 Dr. Deborah Lokhorst (University of Toronto)

2024 Dr. William Thompson (NRC Herzberg Astronomy and Astrophysics Research Centre)

President's Award

Established in 2008, this award is to be given at the President's discretion, usually once a year, to a member who has made an important contribution to the Society, and to be presented by the President either at the General Assembly or during a visit by the President to the home Centre of the recipient.

- | | | | |
|-------------|--|-------------|--|
| 2011 | Mayer Tchelebon
(Toronto) | 2018 | Rick Huziak (Saskatoon) |
| 2012 | Randall Rosenfeld
(National Member) | 2019 | Michael S.F. Watson
(National Member) |
| 2013 | Dave Lane (Halifax) | 2020 | Barry Shanko (Vancouver)
(posthumously) |
| 2014 | Robert Dick
(Ottawa) | 2021 | Renata Koziol
(Society Office) |
| 2015 | Walter MacDonald
(Kingston) | 2022 | Emily Lafleche (Montreal) |
| 2016 | Terence Dickenson
(Toronto) | 2023 | Judy Black (Halifax) |
| 2017 | Dave Garner
(Kitchener-Waterloo) | 2024 | J. Randy Attwood
(Mississauga) |

Qilak Award/Le Prix Qilak

This award is jointly administered by CASCA, the FAAQ, and the RASC, instituted to acknowledge excellence in astronomy outreach and communication. One prize can be awarded annually in each of the three founding societies

- | | | | |
|-------------|--|-------------|---|
| 2012 | Colleen O'Hare
(Okanagan) | 2019 | RASC—Chris Curwin
(New Brunswick) |
| 2013 | Robert Duff (London) | | CASCA—Dr. Jan Cami
(Western University) |
| 2014 | Dr. Howard Trottier
(Vancouver) | | FAAQ—Hugues Lacombe
(Club d'astronomie de
Charlevoix) |
| 2015 | Toronto Centre DDO
Volunteers (Toronto) | 2020 | Not awarded |
| 2016 | Doug Cunningham
(Toronto) | 2021 | Not awarded |
| 2017 | Paul Heath (Halifax) | 2022 | Jenna Hinds (National) |
| 2018 | Dr. Rob Thacker (Halifax)
RASC | 2023 | Wilfred Buck |
| | Mike Moghadam (Ottawa) | 2024 | Tony Schellinck (Halifax) |
| | Daniel Brousseau
(Sherbrooke) | | |

Service Award

The Service Award was established in 1959 and takes the form of a bronze medal presented to members who have performed outstanding service to a Centre or to the National Society. Below is a list of recent winners of the Service Award.

- | | | | |
|-------------|--|-------------|--|
| 2017 | <ul style="list-style-type: none"> • Eric Briggs (Toronto) • Simon Hanmer (Ottawa) • Katrina Ince-Lum (Toronto) • Michael Moghadam (Ottawa) • Charles O'Dale (Ottawa) • Dr. Brian Pihack (Niagara) • Betty Robinson (Mississauga) • Randall Rosenfeld (National Member) • Stan Sammy (Niagara) • Gerry Smerchanski (Winnipeg) • Don Town (Belleville) | 2018 | <ul style="list-style-type: none"> • Colleen O'Hare (Okanagan) • Grant Rice (Okanagan) • Brian Lucas (Sunshine Coast) • Neil Sandy (Sunshine Coast) |
| | | 2019 | <ul style="list-style-type: none"> • Michael Bradley (Sunshine Coast) • Joanne Burns (Belleville) • Phil Chow (Toronto) • Bruce Fryer (Sunshine Coast) • Robyn Foret (Calgary) • Mike Hanes (London) • A.W. Scott Masterton (Toronto) |

- Ed Mizzi (Hamilton)
- Blake Nancarrow (Toronto)
- Roger Nelson (Calgary)
- Vance Petriew (Regina)
- Linda Pulliah (National Member)
- Laurie Roche (Victoria)
- Rick Saunders (London)
- Danny Sklazeski (Sunshine Coast)
- Leslie Strike (Mississauga)
- David Thompson (Sunshine Coast)
- Luca Vanzella (Edmonton)

2020

- Dennis Krause (Okanagan)
- Steve Holmes (Kitchener-Waterloo)

2021

- Diane Bell (Victoria)
- Andrew Bennett (Okanagan)
- Zoltan Boda (Okanagan)
- Darrell Chatfield (Saskatoon)
- Paul Delaney (Toronto)
- Ellen Dickson (Saskatoon)
- Dr. Leslie (Les) Dickson (Saskatoon)
- Blair MacDonald (Halifax)

- Ronald (Ron) Waldron (Saskatoon)
- Ian Wheelband (Toronto)

2022

- Robert Babb (St John's)
- Philip Downey (Niagara)
- Robert Lewis (Niagara)
- Ron Macnaughton (Toronto)
- Merlyn Melby (Saskatoon)
- Tenho Tuomi (Saskatoon)
- Barbara Wright (Saskatoon)

2023

- Chris Young (Halifax)
- Quinn Smith (Halifax)
- Silvia Graca (Winnipeg)
- John Marchese (Mississauga)
- Emma MacPhee (New Brunswick)
- Pierre Schierle (Regina)

2024

- James MacWilliam (Sunshine Coast)
- June MacDonald (New Brunswick)
- Heather Laird (Calgary)
- Charles Ennis (Sunshine Coast)

Simon Newcomb Award

This award was instituted in 1978 to recognize literary ability among non-professional members of the Society.

1994 Michael S.F. Watson (National Member)

1999 Terence Dickinson (Toronto)

2001 Dan Falk (Toronto)

2002 Dr. David Levy (Kingston)

2003 Alister Ling (Edmonton)

2004 Mary Lou Whitehorne (Halifax)

2006 Dr. Warren Finlay (Edmonton)

2007 Alan Dyer (National Member)

2008 Gary Seronik (Victoria)

2009 James Edgar (Regina)

2011 Jay Anderson (Winnipeg)

2012 Randall Rosenfeld (National Member)

2013 Alan Whitman (Okanagan)

2016 Martin Hellmich & Halley Davies (Halifax)

2017 Ivan Semeniuk (Toronto)

2018 Nicole Mortillaro (Toronto)

2020 John A. Read (Halifax)

2022 Chris Vaughan (Toronto)

2024 Dr. Chris Gainor (Victoria)

Young Astronomers Award

The Young Astronomers Award, established in 2023, is awarded to youth members of the RASC who have made significant contributions at the National and/or Centre levels.

2023 Artash Nath
Arushi Nath

Honorary President of the RASC

Dr. Sara Seager (Canada)

Honorary Members of the RASC

Dr. Oscar Álvarez-Pomares (Cuba)

Dr. William Bottke (United States)

Dra. Julieta Fierro (Mexico)

Prof. Andrew Fraknoi (United States)

Dr. Wendy Freedman (Canada-USA)

Dr. Jean Meeus (Belgium)

Dr. P.J.E. (Jim) Peebles (United States)

Dr. Lisa Randall (United States)

Dr. Sara Seager (Canada)

Dr. William P. Sheehan (United States)

Dr. R. Brent Tully (United States)

Past Appointed and Elected Officers of the RASC

Below are lists of former Honorary Presidents, Presidents, Secretaries, and Treasurers of the RASC. For names before 1990, please refer to “Looking Up—A History of the RASC” by Peter Broughton.

Honorary Presidents

1997–2001 Dr. Jack Locke

2001–2005 Dr. Roy Bishop

2005–2010 Dr. Robert Garrison

2010–2013 Dr. James Hesser

2013–2018 Dr. John Percy

2018–2022 Dr. Douglas Hube

2022– Dr. Sara Seager

Presidents

1998–2000 Randy Attwood

2000–2002 Dr. Robert Garrison

2002–2004 Dr. Rajiv Gupta

2004–2006 Peter Jedicke

2006–2008 Scott Young

2008–2010 Dave Lane

2010–2012 Mary Lou Whitehorne

2012–2014 Glenn Hawley

2014–2016 James Edgar

2016–2017 Craig Levine

2017–2018 Colin Haig

2018–2020 Dr. Chris Gainor

2020–2022 Robyn Foret

2022–2023 Charles Ennis

2023– Michael Watson

Secretaries

1999–2005 Kim Hay

2005–2007 Stan Runge

2007–2014 James Edgar

2014–2016 Dr. Karen Finstad

2016–2018 Charles Ennis

2018 –2020 Roger Nelson

2020– Eric Briggs

Treasurers

1998–2004 Michael Watson

2004–2006 David Clark

2006–2007 Alan Whitman

2007–2012 Mayer Tchelebon

2012–2016 Denis Grey

2016–2016 Susan Yeo

2016–2017 Colin Haig

2017–2018 Anthony Gucciardo

2018–2023 Catherine Carr

2024–2025 Stuart J. Heggie

Donations 2024

The Royal Astronomical Society of Canada is a registered charity, BN #119126282 RR 0001
Gifts of \$100 and more are gratefully recognized. Thank you for your generous support!

\$100 - \$249

Adam Bell
Denis Maurice Bergeron
Mr. Jeff Bodenham
Mr. Simon Brooks
Deborah Butler
Mr. Steve Chaplin
Mr. David M F Chapman
Johnnie Chernusky
Mr. David W Chisholm
Ms. Nancy E. Church
Charles Collins
Mr. Terry Curtis
Sarah Dewar
Gordon Falconer
Joyce Feinberg
Pierre Mathias Ferland
Mr. Arthur Fernandez
Mr. Eric Flack
Zhao Tian Gao
Glyn George
Searle Hartman
Dan Hicks
Allan Hogenson
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Donald J. Bradt
Mr. Owen Corus
Mr. Neil Douglas
Leona Harari
Mr. James Hesser
Dr. Douglas P Hube
Mr. Rod Hutson
Bob King
Mr. Calvin Lambie
Wali Li
Ken McGill
Larry Wagner
Alice Wehlau

\$250 - \$499

Mr. Peter H. Ashenhurst
Eric Briggs
Mr. James T Himer
Damien Lemay
Dr. Alan McKeown
Mr. Asbjorn Olsen
Mr. Alexander Schmid
Brand Stellers
Bea Barry
Mr. Dale Ellis
Ralph Fyten
Mr. Rockney Jacobsen
Mr. Neil Anthony Taylor
Nada Tijanic
Mr. David E. Hogg
David Turner
Lawrence Shimmin
Mr. Robyn Foret
Gary Irwin

\$500 - \$999

Mr. Allan Connery
Tina Heal
Mr. Michael MacMillan
Dr. Wallace John McDonald
James T. Skinner
Donald L. Macdonald

\$1,000 - \$2,499

Mrs. Christine Clement
Qin Zou
Peter Jedicke
William Percival

\$2,500 - \$4,999

Ms. Betty R. Robinson
Donald C. Morton
Mr. James Randy Attwood
Mr. James S. Edgar

\$5,000 - \$9,999

Mr. David Levy
Jim Hinds
Sue Weedon

\$10,000 +

The Fleming Foundation