

2023

Annual Report Rapport Annuel

# Contents

Royal Astronomical Society of Canada - as of May 2024	1
Annual General Meeting 2024-Agenda	2
RASC 2023 Annual General Meeting Minutes (draft for approval)	3
President's Report	.10
National Secretary's Report	
Executive Director's Report	
Treasurer's Report	
Audited Financial Statements	
Reports of Permanent Committees	
Astro-Imaging Committee Report	
Awards Committee Report	
Fellowship Award: Robyn Foret	
Simon Newcomb Award: Dr. Chris Gainor	
Chant Medal: Warren Finlay	
Qilak Award: Tony Schellinck	
Service Awards - James MacWilliam, June MacDonald, Heather Laird, Charles Ennis	
President's Award: J. Randy Attwood	
Dorner Telescope Museum	
Education and Public Outreach Committee	
Editorial Board	
History Committee	
Inclusivity and Diversity Committee	
Light Pollution Abatement Committee	
NextGen Committee	
Observing Committee	
National Council Report	
Annual Reports Of Centres	
Belleville	
Calgary	
Edmonton	
Halifax	
Hamilton	
Kingston	
Kitchener-Waterloo	
London	
Mississauga	
Montreal	
Niagara	
Okanagan	
Ottawa	
Prince George	
Regina	
Saskatoon	
St. John's	
Sunshine Coast	
Toronto	
Vancouver	
Victoria	
Windsor	
Winnipeg	
Yukon	
2023 Centre Treasurer Reports	
2024 Award Winners	
Past Award Winners	
Donations 20231	101

## Royal Astronomical Society of Canada – as of May 2024

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 Marketing Coordinator	Renee Drummond
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	brstype@rogers.com
National Secretary	Eric Briggs	ebriggs733@gmail.com
Treasurer	Stuart Heggie	stuart.j.heggie@gmail.com
Director	Vikki Zsohar	zsohar@gmail.com
	Katherine Dulong	katherine.dulong@gmail.com
	Randy Attwood	attwood@rasc.ca
	Andrew Bennett	Andrew.Bennett@chevron.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	Lauri Roche
Finance	Stuart Heggie
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 General Meeting 2024–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 General Meeting 2024**

The Annual General Meeting of members will be held on Sunday, June 23rd 2024 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 2023 Annual General Meeting (13:05 EDT)

Published in the on-line version 2023 Annual Report, and located on the members-only section on the website (<u>www.rasc.ca/agm-2024</u>)

### 3. Reports of the President (13:10 EDT)

### 4. Reports of Officers (13:25 EDT)

National Secretary/Recorder (Eric Briggs) Treasurer (Stuart Heggie)

### 5. Presentation and Approval of Audited 2023 Financial Statements (13:40 EDT)

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

National Council (Judy Black) Astroimaging (Kimberly Sibbald) Awards (Charles Ennis) Constitution (Brendon Roy) Education (Lauri Roche) Editorial Board (Dr. Chris Gainor) Finance (Stuart Heggie)

Inclusivity and Diversity (Charles Ennis) Information Technology (Vacant) Light-Pollution Abatement (Bob King) NextGen (Ivan Tockovski) Nominating (Betty Robinson) Observing (Emma MacPhee)

#### 7. Reports of Other Committees (15:15 EDT)

Dorner Telescope Museum (Randall Rosenfeld) Solar Eclipse (Victoria Kramkowski)

## 8. Election of Directors (15:30 EDT)

- 9. Election of Auditor (15:45 EDT)
- 10. Other Business (15:55 EDT)
- 11. Adjournment (16:00 EDT)

2

# RASC 2023 Annual General Meeting Minutes (draft for approval)

The Royal Astronomical Society of Canada La Société royale d'astronomie du Canada Minutes of the Annual General Meeting, Sunday, June 25th at 10:00 PDT.

## 1. Call to Order

Charles Ennis, in the chair, called the meeting to order at 10:06 PDT.

(MOTION AGM2023-1:Ennis/Watson) To approve the agenda with Mr. Ennis's outlined changes from that circulated in the Annual Report 2022. Carried.

Mr. Ennis presented a territorial acknowledgment:

"I am gratefully joining you today from traditional territory of the unceded lands of the Sechelt First Nation where I live and observe the skies. I would like to express my concern and support of the people of Sechelt First Nation who recently learned that unmarked childrens' graves had been found at a former residential school there. You are joining us from other parts of Canada or beyond, which is home to many diverse First Nations, Inuit, Métis and indigenous peoples from across Turtle Island. I encourage you to learn more about the history of the land and peoples in your area. We recognise the significance of these lands of indigenous peoples past and present and as we engage in astronomy here, we respect, learn from and honour the deep relationship between indigenous peoples, the sky and the earth. Today I am wearing my Sylvaya paddle from the reconciliation movement and is a coast Salish word which means "together". On the back it says "We are in this we journey together and the message is we are all in the same boat. We hope to arrive safely at our destination. We must be a team that paddles together."

Mr. Watson said some members had asked for the voting to be done via Zoom polling. Mr. Ennis asked Ms. Hinds to describe voting procedures, which Ms. Hinds proceeded to do. Mr. Watson and Mr. Ennis agreed to run a poll for the agenda.

Motion AGM2023-1 was carried.

Mr. Ennis introduced the Board members:

Charles Ennis, President

Michael Watson, 1st Vice-President

Brendon Roy, 2nd Vice-President

Catherine Carr, Treasurer

Eric Briggs, Secretary

Betty Robinson, Director

Katherine Dulong, Director

Jenna Hinds, Executive Director

Mr. Ennis referred to his written report submitted as part of the Annual Report 2022. He thanked all the directors for their participation on the Board. He thanked all the centre treasurers for their participation with the national finance committee. He thanked Judy Black, Eric Klazsus and Jim Fairles for their work chairing the National Council.

## **Discussion of the State of RASC Finances**

Mr. Ennis started the discussion, part of a new process of engagement between the Board, national councillors and centre leadership. He introduced the Treasurer, Ms. Carr. In 2022, she said the Society experienced heavy losses, as reported in the Audited Financial Statements in the Annual Report 2022. The scope of the loss became apparent in December 2022. She said she bore responsibility and apologized, but said the Society had made a lot of progress since December. She invited comments from other Board members. Mr. Watson said he thought it was appropriate to say the entire Board shared the responsibility, including himself. He said the Board had lost focus on core responsibilities and functions of the society, serving members and centres. Some projects such as the Robotic Telescope had drained limited staff time and effort that would have been better spent attending to the core of the Society mandate. Ms. Carr asked if she should proceed with the Audited Financial Statements. Mr. Ennis said that was probably correct, if the discussion was over. He expressed how two-thirds of centres were often represented at National Council meetings and the other third of centres usually did not participate.

David Lane said this was a meeting for members and not for National Council, and that centre councils who were in the picture may not have shared National Council proceedings with their members. He expressed concerns with the state the Society found itself in and how to ensure it would not happen again. In particular he questioned the true nature of the Dorner Telescope Museum and the result of the promise of it that was made at the 2019 General Assembly, when \$1 million of it was not sitting in an account and no income had been reported by it in 2022, and the large size of the new National Office and its 10-year lease, and the Dorner Telescope Museum commitment not to pay rent.

Mr. Ennis said an after-action report was being composed alongside the recovery. He asked Ms. Carr to speak about the Dorner matter. Ms. Carr said she had been in touch with the executor of the estate, which was currently tied up with the Canada Revenue Agency. She said Mr. Dorner donated CIBC shares to the Society that would generate dividend income, depending on performance \$35,000 to \$40,000 per annum. Mr. Lane asked if the shares would appear on the Society balance sheet, or if it was a trust that would have an annual income, and was there a donor agreement committing the Society to certain responsibilities. Ms. Carr said it was not expected to be a trust, that the Society would receive the share donation directly on the balance sheet. She said once income from the Museum Fund was being received, she expected a reasonable allocation of the revenue towards the Museum's square footage would be permitted, to the best of her knowledge. She said the Dorner Telescope Museum section in the RASC Policy Manual was the limit of the principles of the Museum. Mr. Ennis said it had been hoped that the Museum could be housed in a monetized space, but that it was an unrealistic expectation, but that there were other options of sharing the space.

Mr. Ennis responded to a question from the chat asking if the Robotic Telescope had not been perceived as serving the membership. He referred to a poll that was circulated to centres at the time of the February 5th National Council meeting asking about options for cutting and the unanimous response of centres was to cut the Robotic Telescope.

Mr. Lane asked if the Society were in touch with the executor, that the Will should identify the RASC as a beneficiary, to make the entitlement legal. He understood that in past years some annual payments were made by Mr. Dorner to start the Museum as a going concern, with the stipulation of no rent.

Ron MacNaughton said Education and Public Outreach Committee had planned to incur some expenses that were curtailed by RASC finances and asked when committee expenses toward RASC goals could continue. Ms. Carr said she thought committee expense requests should be submitted to the Board and Executive Director on a case by case basis to maintain the Society's core operations. Mr. Watson said the Board had spent the first half of the year reducing expenses, specifically by ending SkyNews, the Robotic Telescope and office staff. He described how revenue received from grants and donations had grown in recent years from no more than 17% to close to 40%, and that grant programs required new staff, not always paid for by the grants. He described the at-most three staff positions

currently planned: The Executive Director, Finance and Office Administrator, and Membership and Publications Manager. Mr. Ennis thanked Mr. Watson for his comments and mentioned that the Robotic Telescope had been recently sold. Mr. Watson clarified the status of the sale. Ms. Hinds thanked Mr. Watson for his description of the leaner state of the Office, and she thanked the volunteers for their activities which helped to preserve the Society.

Mr. Ennis responded to a question about the Special Projects Fund being suspended. Mr. Ennis referred to Ms. Carr's comment that requests would be approved on a case-by-case basis.

Mr. Lane asked about SkyNews being a separate corporation to which the RASC had loaned money, had the Society let the magazine's obligations to its creditors not be the RASC's problem? Mr. Ennis said the matter was still developing. Mr. Watson clarified the ownership of SkyNews Inc. as a wholly owned subsidiary of the RASC. The RASC is a withoutshare-capital charitable corporation, SkyNews is a for-profit corporation with its own Board of directors emplaced by the RASC Board. The SkyNews Board retained their own legal counsel, an expert in insolvency, to advise them. Mr. Watson and Mr. Ennis had met with the SkyNews Board. The Society as shareholder was not legally bound to pay any of the liabilities of SkyNews, as a common element of corporate law in Canada, however as a matter of goodwill Society is paying the printing bill for the last issue of the magazine, although not legally obliged to do that. The magazine subscribers had been offered to take up the Journal of the RASC or a free membership in the Society to use up the remainder of their equity. In short, the RASC chose to pay off the obligations of SkyNews without the legal compulsion to do so, within the wherewithal of the Society. Mr. Lane summarized the situation in his own words and Mr. Watson agreed.

Mr. Lane described the portion of the Membership who really liked SkyNews and asked what was being done to service those members, in terms of the way the Society recognizes deferred revenue of membership fees for the next year. Mr. Ennis said some features of SkyNews were being put into the Journal. Ms. Hinds, Mr. Ennis and Mr. Watson briefly discussed membership numbers.

Mr. Lane asked about the Auditor comment about the lack of balance between the Society's Quickbooks accounting and the numbers from Driven, the online payment and membership management and sales service (Part of Recommendations Arising from the Audit Examination in the Annual Report 2022.) Ms. Hinds said Driven discrepancies were small. Ms. Carr said the dollar value of the discrepancy was less than \$5000, and the interface between Driven and Quickbooks was complex. She said bookkeeping was outsourced to Charity Accounts, and a bookkeeper-finance manager was being sought to take on this responsibility to reduce that expense.

Mr. Ennis responded to a question about membership fees, saying that National Council was being consulted on that matter.

Mr. Lane said he had been involved in the revitalization of the Journal 15 years earlier, and he was glad to hear that content was being consolidated in the Journal. He suggested dusting off the report to rename the Journal to Polaris. (ref. JRASC Vol.92 pp.51, April 1997, also the National Bulletin of August 1995, also Appendix 4.5.1 to the National Council minutes of November 25th, 1995.)

Mr. Roy said that the Auditor had advised the way the Society reported its finances was overly complex for an organization of this scale. Mr. Ennis described how a proposal to reduce the number of cheque runs to reimburse centres their membership fees from one per month was rejected by centres, some of which could not maintain cash flow with

## 2. Reports of Officers

## Secretary's Report

Mr. Briggs referred to the previously circulated written report in the Annual Report 2022. He briefly described policy changes and by-law amendments during the previous year, and offered condolences to the families of the following members who passed during the reporting period:

- Terence Dickinson
- Bill Almond, Dave Bennett (Victoria Centre)
- Mark Coady (Kingston Centre)
- Dr Peggy Dixon (St John's Centre)
- Rudolph Dorner (Kitchener-Waterloo Centre)
- Rev. Robert O. Evans (Honorary Member)
- Dr. J. Donald Fernie (National President 1974-76)
- Prof. Owen Gingerich (Honorary Member)
- Dr. David F Gray (Western University)
- Hon. Donna Jean Haley, Q.C. (former Solicitor, 1969-82)
- Patrick Heinz, Franklin Loehde, Michael Noble (Edmonton Centre)
- Carl Jorgenson, Constantine Papacosmas (Montréal Centre)
- William Allan McDonald (Winnipeg Centre)
- Prof. Jay M. Pasachoff (Honorary Member)
- Prof. Judith L. Pipher, Tony dos Santos (Toronto Centre)

reimbursements at a slower rate.

Mr. Ennis responded to a question from Dr. Ralph Chou asking why the proceeds of the Helm Fund had not been used to fund the operations of David Dunlap Observatory via the Toronto Centre. Mr. Ennis said that the Trustees of the Helm Fund was awaiting advice from legal counsel. Mr. Watson said it was fair to say there was a difference opinion between the Trustees of the Fund and the Toronto Centre that was known to Dr. Chou. Mr. Lane, speaking as one of the Trustees, said that they had just received a draft legal opinion but had not reviewed it yet.

Mr. Watson described the Board's decision to host this discussion before proceeding with the agenda. Mr. Ennis asked members whos question had not been answered to bring their questions back to the Society after the meeting.

- Bjarni Tryggvason (Canadian astronaut)
- Stephen B. Sharpe (London Centre)
- Geoffrey Cockhill (Ottawa Centre)
- Anthony Gucciardo and Michael Burdett (Yukon Centre)

After a moment of silence, 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, that members may wish to remember those members in the chat window for the time being.

(MOTION AGM2023-2:Briggs/Lane) To approve the minutes of the Annual Meeting 2022 as published in the Annual Report 2022. Carried.

## **National Council**

Mr. Ennis introduced Judy Black, Chair of National Council. Ms. Black thanked everyone for the opportunity to speak. She referred to the written report on p.56 of the Annual Report 2022. She thanked Jim Fairles and Eric Klazsus who also served as officers of National Council. She also thanked National Councillors who diligently participated in meetings. She thanked the Board for dealing with what was "on fire", specifically Mr. Ennis and Mr. Watson for keeping her "in the loop". She said quarterly financial outlooks would furthermore be provided to National Council by the Board. She thanked Dennis Lyons for stating four phases to the collaborative plan being developed:

• Linda Pulliah (Sudbury Centre)

- Controlling expenditures
- Realistic budget for the coming year
- Review what happened
- Future operations

Ms. Black invited RASC members to get involved in activities in the coming year. She said the National Council Terms of Reference policy was expected to be redefined during the coming months, and invited members to review the circulated National Council minutes on the website (https://rasc.ca/nc/minutes/2020s).

## **Treasurer's Report**

Ms. Carr presented an overview of the written report and Finance Committee Report that was presented in the Annual Report 2022. She began with the Statement of Operations on p.26. She commented that there were no huge swings under membership fees or publications. Grants revenue declined from \$230,000 to \$98,000. Donation revenue was lower in the reporting period, even if the large bequest in 2021 from Mr. McDonald was considered an outlier. Ms. Carr said Ms. Hinds was undertaking new initiative to reduce grants and increase donations. Ms. Carr noted a \$17,000 Investment loss, strictly an investment with Scotia McLeod and not reflective of the decision to close SkyNews Magazine. SkyNews was covered at the bottom of the statement in an explicit line, reflecting the impairment of the investment in note 5 to the Financial Statements.

She noted that expenses increased year-overyear, in part due to compensation, as staff grew to unsustainable levels. She said it had been realized too much was being spent on shipping and handling, and fulfilment of shipping of the 2022 Observer's Handbook was problematic. At the end of the day, the Society experienced an operational loss of \$690,000 in 2022. One of the decisions resulting was the winding down of SkyNews. This resulted in what is known as an impairment loss of \$292,000. SkyNews had built up some amounts payable to the RASC. Staff had spent some of their RASC time working on SkyNews matters, and money had been loan and an accounst receivable balance had accumulated which had to be written off during the year 2022, agreed-upon during the audit process in early 2023. The impairment loss was for receivables to the RASC that could not be repaid and the initial

purchase of SkyNews as an investment. The excess of revenue over expenses was \$983,000.

Ms. Carr presented the Statement of Financial Position (the Balance Sheet.) As of December 31st, 2022, the cash position was \$270,000, down from \$1,110,000 at the end of 2021, taking into accounthe McDonald bequest. The accounts receivable balance was for institutional subscribers to the Journal of the RASC in part. The Public Service Body Rebate Receivable was for HST rebates which the Society was due. The accounts receivable for SkyNews was zero for the end of 2022, down from \$35,000 at the end of 2021, reflecting the impairment. She showed that the Society's long-term investment at Scotia McLeod experienced some loss in 2022 from market activity, not liquidation of assets. The Dorner Telescope Museum assets were listed as Collections, with note 7 to the Financial Statements, as a \$55,079 asset at the end of both 2021 and 2022. Under liabilities there was a decrease in accounts payable, such a decrease often due to unlucky timing of scheduled expenses. She described the Canada Emergency Business Account loan of \$60,000 interest-free (note 9) on the condition that 2/3rds of it is repaid before the end of 2023. After presenting the Net Assets, she concluded her presentation and encouraged members to read the notes to the Financial Statements. She thanked the Finance Committee members for their work.

Randall Rosenfeld asked about the breakdown of the expense of the Dorner Telescope Museum. Ms. Carr said she would share that with him.

David Lane said he was concerned about the cash situation, because a significant portion of available funds was tied up in restrictions, and asked how long the situation could last. Ms. Carr said that the rest of the calendar year 2023 could be completed without running up against internal restrictions. Mr. Lane asked about the 1st Quarter report for 2023. Ms. Carr said that report was complete up to the end of May and she had just posted it to National Council also on June 25th.

Mr. Ennis recessed the meeting for five minutes. Mr. Watson asked Mr. Ennis to shorten committee reports from five minutes each to two minutes due to running behind schedule. Mr. Ennis agreed.

## 3. Reports of Permanent Committees

Ms. Hinds introduced Stuart Heggie who spoke briefly about the activities of the Astro-imaging Certificate Committee, referring to the written report in the Annual Report 2022.

Ms. Hinds introduced Robyn Foret to speak about the Awards Committee proceedings. Mr. Foret referred to the written report of the committee in the Annual Report 2022.

Ms. Hinds introduced Mr. Watson, who spoke very briefly about the Constitution Committee, which was expected later in the agenda.

Ms. Hinds introduced Lauri Roche, who spoke about the Education Committee activities, and referred to the written report of the committee in the Annual Report 2022.

Ms. Hinds introduced Dr. Chris Gainor, who spoke about the Editorial Board activities, and referred to the written report of the committee in the Annual Report 2022.

Ms. Hinds said the reports of the Inclusivity and Diversity, Information Technology, Light Pollution Abatement and Next Generation Committees stood by themselves because their chairs were not present.

Mr. Rosenfeld said the Astronomical Landscape of Canada project would go online the next week, and referred to the History Committee's written report in the Annual Report 2022.

Ms. Hinds introduced Mr. Watson on behalf of the Nominating Committee, which is composed of the Board of Directors as a Committee of the Whole. Mr. Watson spoke about the contested election for the

## 4. By-Law Amendments

Mr. Ennis asked Mr. Watson to describe the By-law Amendments for ratification. Mr. Watson presented the first amendment, with an unusual request to add three words to the amendment.

8.5 The chair and vice-chair {and council recorder} of the National Council for the forthcoming year will be elected by the National Council Representatives from among their number at the meeting of the National Council before June 30 in each year. Any vacancy in the position of chair or vice-chair may be filled by election of the National Council Representatives at any meeting of the National Council.

(MOTION AGM2023-4:Lyons/Wallace) To amend the by-law amendment No.1 concerning Section 8.5 to add the words "and council recorder". Carried.

Mr. Lane and Mr. Watson agreed that the

incoming three directors.

Ms. Hinds introduced Blake Nancarrow, to speak about the Observing Committee report. Mr. Nancarrow described the Observing Certificate programs and referred to the written committee report in the Annual Report 2022.

Ms. Hinds introduced Mr. Rosenfeld to speak about the Dorner Telescope Museum. Mr. Rosenfeld invited e-mail inquiries from members interested in visiting the Museum.

Ms. Hinds thanked Gary Fairfoul and Stuart Heggie for their assistance in closing the Robotic Telescope project.

Ms. Hinds introduced Randy Attwood, who spoke about the Solar Eclipse Taskforce activities, which were not described in the Annual Report. He described the preparations for the Total Solar Eclipse of April 8th, 2024 including procurement of safe solar viewers, and planned meetings with centre representatives from along the path of totality. He thanked Victoria Krankowski and Ms. Hinds and the Education Committee for their activities in this area, and also Julie Bolduc-Duval.

Mr. Attwood also spoke briefly about the Upcoming General Assemblies initiative.

Mr. Nancarrow also spoke about ongoing astronomy software training for members using Stellarium. ( https://rasc.ca/astronomy-software-training) He thanked Kersti Meema, Ian Bain and AI McCue for participating as trainers. Ms. Hinds thanked him for this program.

amendment is required to pass by special resolution.

(MOTION AGM2023-5:The Board) To amend Section 8.5 of By-law No.1 as above. Carried by special resolution.

5.3 The agenda for the AGM shall be set by the Board of Directors, and shall include the following matters, in such order as may be appropriate:

(a) approval, or amendment and approval, of the agenda for the AGM;

(b) consideration and approval of the minutes of the last AGM and of any special meeting and meeting by requisition held since the last AGM;

(c) consideration and approval of the reports of the Board, the officers of the Society, and any committees;

(d) presentation of the audited financial statements;

(e) consideration of any matter, including any amendment to this By-Law, proposed to be adopted by special resolution of the Society;

(f) election of Directors of the Society;

(g) election of the auditor of the Society;

(h) consideration of any member proposal made under section 163 of the Act and section 5.2 of this By-Law; and

(i) other business.

(MOTION AGM2023-6:The Board) To amend Section 5.3 of By-law No.1 as above. Carried by special resolution.

3.6.3 Any member who has been expelled or suspended from membership in the Society is prohibited from attending any meeting or event that is organized or held by the Society or by any Centre of the Society, including the Society's General Assembly and Annual General Meeting, whether the meeting or event is held in person or virtually and whether or not the event is open to the public.

Patrick Kelly said he felt this article was unenforceable. Mr. Watson said the ease of enforcement of the by-law was not a consideration, that the rules stand to be justified. Mr. Foret said that when the Calgary Centre holds a public event, they reserve the right to not admit any person, and they had law enforcement support. Mr. Lane also briefly discussed the proposal with Mr. Watson and Mr. Ennis. Ms Black asked if the membership would be apprised in future of people not to be admitted. Mr. Watson said that idea was worthy of further discussion later.

(MOTION AGM2023-7:The Board) To amend Section 3.6.3 of By-law No.1 as above. Carried by special resolution.

Mr. Ennis briefly spoke about the Trespass Act based on his experience working with police.

Mr. Watson spoke about the proposed amendment to the By-law concerning the Treasurer role. The intent was to remove the requirement that the Treasurer be a Director of the Society, while retaining the requirement that the Treasurer be a member of the Society, for the following reasons:

 The Treasurer, alone among the listed officers, must have a special set of skills (in this case, of course, financial skills) in order properly to discharge the Treasurer's duties in order to keep the Society in the best financial condition possible. Holders of the other offices do not require the same specific skills in order to discharge their responsibilities properly.

- 2. The Board has had extreme difficulty over the years in finding suitable members who (i) are prepared to put their names forward for election as Directors, (ii) are prepared to take on the heavy responsibilities of Treasurer, and (iii) have the necessary skills and experience to perform the Treasurer's role properly.
- 3. The Society would benefit immensely by having a much wider universe of potential candidates for Treasurer (the approximately 4,500 members of the Society) than only the nine members of the Board, none of whom may have either the desire or the skills to take on this position.
- 4. The Board is of the view that the person filling this one officer role does not have to be a Director. The Treasurer would, however, usually be invited to attend all or part of every Board meeting, in the same way as the Executive Director has always done.

All officers of the Society, just as all Directors, are covered by the Society's Directors and Officers insurance policy. The Board has also passed an amendment (section 9.4.14) that would extend the prohibition on Directors receiving remuneration for their services to officers as well, which would then cover any Treasurer who was not also a Director.

9.10.6 Treasurer – The Treasurer shall be a member of the Society, but need not be a Director,. The Treasurer shall have the custody of the funds and securities of the Society, shall oversee the financial operations of the Society to ensure that full and accurate accounts of all assets, liabilities, receipts, and disbursements of the Society are kept in the books belonging to the Society, and shall deposit all monies, securities, and other valuable effects in the name and to the credit of the Society in such chartered bank or trust company, or, in the case of securities, in such registered dealer in securities as may be designated by the Board from time to time. The Treasurer shall disburse the funds of the Society as may be directed by proper authority taking proper vouchers for such disbursements,. At the request of the President or the Board, the Treasurer shall present to the President and the Board at meetings of the Board, or whenever they may require it, an accounting of all the transactions and a statement of the financial position of the Society. The Treasurer shall also perform such other duties as may from time to time be directed by the Board.

9.4.14 Directors and officers shall serve without remuneration, and no director shall directly or indirectly receive any profit from his or her position as such, provided that a Director or officer may be reimbursed for reasonable expenses incurred in the performance of his or her duties. A Director or officer shall not be prohibited from receiving compensation

## 5. Election of Directors

(MOTION AGM2023-9:Ennis/Chou) To appoint Judy Black as chair of the meeting for the duration of the election of directors. Carried.

Ms. Black presented two slides describing the election process. The candidates' statements had been previously circulated. The five nominees for the three positions available for a term of three years and one position for a one-year term completing the term of a director who resigned during the year were as follows:

- Randy Attwood
- Andrew Bennett
- Stuart Heggie
- Shay Pomeroy
- Brendon Roy

Members in attendance were permitted to vote for up to four candidates. Ms. Hinds conducted the voting by a Zoom poll.

## 6. Appointment of the Auditor

Mr. Ennis asked Ms. Carr to make the motion.

(MOTION AGM2023-10:Carr/Deschamps) that Tinkham LLP be appointed as auditor for 2023. Carried.

## 7. Other Business

Mr. Ennis asked for any other business to be considered. Dennis Lyons asked how long Tinkham had been the auditor, considering the practice of not-for-profit corporations to change auditors every three to five years. Mr. Ennis was not sure how long Tinkham had served. Mr. Briggs noted that Tinkham was also the auditor for the Toronto Centre and also the Royal Canadian Institute for Science, and that he would check how long they had served in that role for the Society. He later found that Tinkham's first year acting as auditor for the Society was in 1983. Mr. Ennis said the Finance Committee would look into the matter.

Mr. Watson said great thanks were due to the retiring directors, Mr. Ennis and Ms. Carr, for their work

for services provided to the Society in another capacity.

(MOTION AGM2023-8:The Board) To amend Sections 9.10.6 and 9.4.14 of By-law No.1 as above. Carried by special resolution.

The following candidates were elected:

- Randy Attwood
- Andrew Bennett
- Stuart Heggie
- Brendon Roy

Ms. Black and Mr. Ennis thanked all the candidates. Ms. Black returned the chair to Mr. Ennis.

Mr. Watson said great thanks were due to the retiring directors, Mr. Ennis and Ms. Carr, for their work through the years, despite the troubles of the year just completed. Ms. Carr and Mr. Ennis expressed their thanks.

Mr. Watson said the Board would meet briefly after the adjournment, before their first proper meeting in a couple of weeks. He said the search for a new treasurer would be considered as the year continued.

through the years, despite the troubles of the year just completed. Ms. Carr and Mr. Ennis expressed their thanks.

Mr. Watson said the Board would meet briefly after the adjournment, before their first proper meeting in a couple of weeks. He said the search for a new treasurer would be considered as the year continued.

(MOTION AGM2023-11:Poole/Weir) to adjourn the meeting. Carried.

The meeting was adjourned at 13:23 PDT.

## **President's Report**

Members of the Society may recall last year's Annual Report, in which the Society's President and Treasurer, and the Executive Director, recounted in their reports the financial difficulty in which the Society found itself at the end of 2022. For various reasons that were explained in detail in those reports, the RASC experienced a loss of \$982,000 in 2022.

As soon as the magnitude of the problem became clear, the Board of Directors, led for the first half of the year by President Charles Ennis before his term expired at the 2023 Annual General Meeting, determined that our mission for 2023 would be to reduce the Society's expenses as much as possible, and to focus on the core function of delivering services to members and to the Centres, which are the lifeblood of the Society. These were some of the key steps that the Board undertook, in consultation with and the support of the National Council (NC) and the Centres:

- SkyNews: SkyNews Inc. is a wholly-owned subsidiary corporation that the Society purchased from its previous owners in 2015. SkyNews Inc. published SkyNews magazine, which was made available to all members as a benefit of membership. For years, however, SkyNews had operated at a loss, and the RASC was required to lend money from its own resources to keep SkyNews afloat. The resulting financial strain on the Society was unsustainable, and the Board made the difficult but necessary decision to ask the directors of SkyNews Inc. (who are appointed by the RASC's Board of Directors) to close the SkyNews business and stop publishing the magazine.
- The robotic telescope: Similarly, the Society's robotic telescope, which it purchased in the year 2018, proved to be a financial drain, was underutilized, and required the diversion of significant head office staff time to keep it operational. The Society therefore sold the robotic telescope half-way through 2023, which has resulted in both financial and head office staff time savings.
- Elimination of full in-person Board of Directors meetings: The Board of Directors of the Society meets for an hour and a half every month. In addition to these monthly meetings, for many years the Board has held full-day or day-and-a-half weekend meetings in person in various locations, twice per year. While these meetings have been valuable for the conducting of the Society's business, the Board concluded that the airfare to transport the directors to

these meetings, together with hotel costs, were expenses that the Society could no longer afford. As a result, the extended weekend meetings are now hybrid, with directors who live in the Toronto area attending in person at the RASC head office, and those from further away attending virtually, resulting in significant savings.

 Head office staff: The steps listed above, and the elimination of other non-essential programs that have generated little or no income but have cost the Society money to operate, have enabled the Society to reduce the number of head office staff to three, including the Executive Director. The leaner head office staff has resulted in further savings, without any significant adverse effect on the delivery of member services. Much credit for this is due to Executive Director Jenna Hinds.

These efforts resulted in a reduction, from 2022 to 2023, of 35% in total expenses, from \$1.4 million to \$903,000.

Frank statements by various members of the National Council in 2022 and into last year made it clear that the national Board of Directors was paying insufficient attention to the NC, and was simply not consulting the NC nearly enough on matters of great importance to the Society. Starting in the latter part of 2022, the Board has made a priority of consulting much more closely with the NC and seeking its advice before making decisions on important matters. During this effort at true collaboration the Board has received great support from the NC and especially from its tireless Chair, Judy Black of the Halifax Centre. I and the Board are indebted to and thank Judy for all of dedication to the NC and the Society as a whole over many and during the challenges of the past two years.

It was also obvious when the state of the Society's finances became clear in December 2022 that the national Board was paying far too little attention to, and failing to monitor on a regular, ongoing basis, the Society's financial condition. One of the most important initiatives that we undertook last year, therefore, was to include on the agenda for every monthly Board meeting an examination of the most recent monthly financial statement and year-to-date financial performance of the Society. We also now present to every meeting of the National Council the most recent financial statement, so that the NC (and all members of the Centres to whom the Centre NC Representatives must report) will be aware on an ongoing basis of how we are doing financially during the year.

On a related note, the 2023 budget setting process was much more rigorous than in the past, with numerous meetings of the Finance Committee, line-by-line examination of all revenue and expense categories, and consultation with the NC.

In 2023 the term of office of the Society's Treasurer came to an end, and we knew that filling the position with a new qualified member would be difficult. The difficulty was exacerbated by the fact that under the RASC By-Law, all officers of the Society, including the Treasurer, had to be members of the nine-person Board of Directors. Our view was the nine members of the Society who have been elected as directors are far too small a group from which to expect a suitably qualified person to agree to volunteer for the time-consuming, challenging position of Treasurer. The Board therefore proposed, and at the June 2023 Annual General Meeting of the Society the membership approved, an amendment to the By-Law so that any member of the Society was eligible to be appointed Treasurer by the Board. In spite of this change, and efforts over the months that followed to search for suitable candidates who would put their names forward for the position, no suitable candidates emerged. The result is that various members of the Board, together with the Executive Director and the Society's new and

## National Secretary's Report

During the year starting with the 2023 Annual Meeting on June 25th, by the time of writing there have been five National Council meetings with one more to happen before the 2024 Annual Meeting, and eleven Board meetings with one more yet to happen.

There have been no changes to policies or by-law amendments since June 25th, 2023.

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

- 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)

extremely capable Finance and Office Manager Nawed Asif, effectively became a committee carrying out the Treasurer's duties. In early 2024 new director Stuart Heggie, who has an extensive business background and familiarity with corporate finances, agreed to take on the role of Treasurer, much to the relief of both the Board and the National Council.

I wish to make a final point about the Society as a whole and its finances. It is apparent that the RASC is, structurally, a highly complex organization, and this complexity accounts for the high cost of providing services to members and the Centres. The Board recognizes the need to simplify the Society's operations, as well as to increase revenues, and these are the Board's primary goals for 2024 and 2025.

It has been an honour, and certainly a challenge, to be the Society's First Vice-President and then President during a tumultuous 2023. But it has also been a pleasure to get to know so many dedicated volunteers in the Centres and on the National Council, and to work with them for the betterment of the astronomy club that we all love.

Quo Ducit Urania,

## **Michael Watson**

President

- 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)

Eric Briggs National Secretary

## **Executive Director's Report**

2023 may have been the most eventful year for the RASC in recent history, at least at the National level.

The RASC had a number of losses in 2023, all in the first half of the year. There was a nearly complete turnover of staff as the Society faced significant budget cuts, leaving, for a period, only two full-time staff members in the office. We have now returned to our 2018 staffing levels of three permanent staff members, plus a single part-time staff member. SkyNews ceased publication in early 2023, with its last issue being the March/April issue. The Robotic Telescope Project was closed and the scope was sold *in situ* at the Sierra Remote Observatories.

With all these cuts, it would have been easy for the Society to lose its way. However, these changes presented a number of opportunities to reconnect with our community and improve upon the base services that National provides and that are a part of our identity as RASCals. The second half of 2023 felt like a return to normal.

The Journal of the RASC added in a few extra pages to fill the gap left by SkyNews, including the centrefold bi-monthly star chart, spearheaded by James Edgar. The Observer's Handbook was delivered on-time to our members to help them prepare for the 2024 eclipse. The Observer's Calendar received a refreshing new look thanks to our designer Michael Gatto, with higher-quality astrophoto prints than ever before thanks to our incredible printers and the Calendar editor, Chris Beckett. The 2023 General Assembly ran smoothly with speakers from across the Society, in great part due to the efforts of former Outreach Coordinator Samantha Jewett who volunteered much of her time.

Our accounting was brought back in-house, giving us a better understanding of the overall functioning

## **Treasurer's Report**

Members of The Royal Astronomical Society of Canada, I would like to add a few words to what Michael Watson, our President, has already shared.

We believe we are turning the corner on the operational performance of The RASC. Costs are coming into line; revenue initiatives are active on multiple fronts; and, we have a renewed energy to make this work for all of our members. That, plus the increased focus on the relationship with the National Council, give me great confidence that we're doing the right things and getting better at those things.

From a finance perspective, my belief is we are focusing correctly on the priorities.

My view is that we need to drive two parallel thinking models to be successful. First, operational effectiveness and efficiency. This means that first of the Society. A focus was placed on training preparation for staff to ensure any transitions in staffing would be well supported. Our core staff team, while small, operates closely with one another.

If any year has been a test of our resilience, it has been this year. This has been in large part due to the work of our many dedicated volunteers. At a time when the National portion of the Society was so busy with making large-scale adjustments to ensure the longevity of the RASC, our Centres carried on doing the work that makes us who we are. They hosted outreach events, held their monthly meetings, ran workshops and supported new members. As the National level stabilized, we returned to doing what we are here to do: supporting the Centres and members, maintaining our identity through our publications, and connecting members across the country.

Finally, I'd like to thank all of the National level volunteers who kept the Society functioning as we adjusted to our new baseline. The National Board of Directors met more frequently than in previous years to manage all of the changes. Committee chairs marched onwards with less guidance and funding than in previous years. New volunteers emerged to help manage publications and our response to the upcoming solar eclipse.

As we continue into 2024, we look ahead to new challenges and learning experiences. We continue to make changes to the National operations to ensure our continued support of all our Centres and members and resilience as a nation-wide organization. We forge on together.

K-HI

Jenna Hinds Executive Director

and foremost, we must be doing the RIGHT THINGS i.e. being EFFECTIVE and then we must be doing those things RIGHT i.e. being EFFICIENT.

Second, we are committed to do all we can to heighten the focus on delivering value to our membership. We must do that with the staff and resources we have. We will need to canvas the membership to assess the value of each of our offerings and ask ourselves: How can we maximize the benefits of membership in The RASC.

To close out, I hope to be impactful in my role. My confidence in Jenna Hinds and her colleagues is VERY high. And, led by Michael Watson, your board is similarly poised to deliver on the legitimately high expectations of all our members.

Stuart Heggie Treasurer

12



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May 13, 2024

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. Stuart Heggie, Treasurer

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, 2023. 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, 2023, 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, 2023, 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,

hhp

TINKHAM LLP

Encl.

14

## The Royal Astronomical Society of Canada La Société Royale D'Astronomie Du Canada Audit Results December 31, 2023

## 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 Dale C Tinkham FCPA, FCA, CMC, LPA Nabiha Mubasshira Engagement Partner Concurring Partner Audit 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 guantitative materiality for the purposes of this examination at \$60,000.

## **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.

There were no changes in accounting policies during the year.

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, 2023 totaling \$50,306 (2022 - \$52,873) 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.

16

## **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, 2023 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.

## Membership Fee Rates

Rates charged to members as membership fee were different from the rates outlined in the Policy Manual.

We recommend that the rates charged to members are reviewed for accuracy and are consistent with the rates determined in the Policy Manual. We understand that management has made this change in 2024.

## 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.

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.

## **Developments in Accounting Standards**

The Accounting Standards Board ("AcSB") has the following active projects which may lead to amendments to existing standards or new standards in future years.

## Contributions - Revenue Recognition and Related Matters

As previously reported to you, the AcSB issued an Exposure Draft on March 30, 2023, proposing to replace Section 4410, Contributions – Revenue Recognition and Section 4420, Contributions Receivable with new Section 4411, Contributions Received by Not-for-Profit Organizations and proposed amendments to Section 4400, Financial Statement Presentation by Not-for-Profit Organizations. Comments were due by September 30, 2023. The AcSB is currently deliberating feedback on the Exposure Draft.

## Revenue – Upfront Non-refundable Fees or Payments

As reported to you last year, the AcSB issued amendments to CPA Canada Handbook – Accounting: Section 3400 - *Revenue* which are effective for fiscal years beginning on or after January 1, 2022, and are applicable retroactively. The amendments relating to upfront non-refundable fees or payments however were deferred to January 1, 2025, due to concerns raised by member benefit organizations about the usefulness of deferring upfront non-refundable fees over long member durations as well as the cost of applying the amendments.

After conducting further research, the AcSB issued an Exposure Draft to indefinitely defer the effective date of these amendments, with early application permitted, until the project on *Evaluating the Preface* is complete. The Exposure Draft also proposes a new disclosure requirement for entities recognizing upfront non-refundable fees or payments in revenue entirely up front. The Exposure Draft was issued November 2023 with comments due by January 31, 2024

## Evaluating the Preface & Scaling the Standards

The AcSB is researching issues with the current Preface of the CPA Canada Handbook – Accounting to assess whether the applicability of each framework to each reporting entity category meets current needs. This project is linked to the AcSB's project Scaling the Standards as both projects are focused on ensuring the diverse landscape of Canadian entities and financial statement users are best served by the Preface and current standard setting frameworks. The AcSB issued a Consultation Paper in March 2023 on Scaling the Standards and is now deliberating feedback.

19

Financial Statements of

## THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

## LA SOCIÉTÉ ROYALE D'ASTRONOMIE DU CANADA

December 31, 2023

## TINKHAM LLP

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 C R Braun CPA CA H S Grewal CPA 300 - 2842 Bloor Street West Toronto Ontario M8X 1B1 Canada

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## 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, 2023, 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, 2023, 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, 2023 and 2022, current assets as at December 31, 2023 and 2022, and unrestricted net assets as at January 1 and December 31 for both the 2023 and 2022 years. Our audit opinion on the financial statements for the year ended December 31, 2022 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 gualified 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.

All HLP

Licensed Public Accountants

TORONTO, Ontario May 13, 2024

**Audited Financial Statements** 

2

Statement of Financial Position

As at December 31	2023	 2022
Assets		
Current		
Cash	\$ 575,562	\$ 270,017
Accounts receivable	45,697	130,332
Public service body rebate receivable	2,616	73,676
Inventory	50,306	52,873
Prepaid expenses	 37,043	 28,759
	711,224	 555,657
Long term		
Investments (note 4)	1,068,684	581,462
Capital assets (note 6)	58,890	87,104
Collections (note 7)	59,158	 55,079
	 1,186,732	723,645
	\$ 1,897,956	\$ 1,279,302
Liabilities	×	
Current liabilities		
Accounts payable and accrued liabilities (note 5)	\$ 49,912	\$ 73,474
Deferred revenue	100 100	450 400
Membership fees for ensuing years	136,168	152,103
Journal subscriptions	17,391	18,217
Unamortized life membership fees (note 8)	5,301	 7,951
	208,772	251,745
Loan payable	-	 40,000
	208,772	 291,745
Net Assets		
Unrestricted	608,120	365,456
Externally restricted (note 10)	446,600	- 1
Internally restricted (note 12)	634,464	622,101
	 1,689,184	987,557
	\$ 1,897,956	\$ 1,279,302

Contingency (note 5) Commitments (note 11)

On behalf of the Board:

mmo President Treasurer

See accompanying notes to financial statements.

**Audited Financial Statements** 

Statement of Changes in Net Assets

Year ended December 31	Externally Restricted (note 10)	Internally Restricted (note 12)	Unrestricted	2023	2022
Balance, beginning of year	5 -	\$ 622,101	\$ 365,456	\$ 987,557	\$ 1,970,509
Excess of revenue over expenses (expenses over revenue) for the year	ır –	-	255,027	255,027	(982,952)
Contribution (note 10)	446,600	-	-	446,600	-
Transfers (note 12)	-	12,363	(12,363)	-	-
Balance, end of year	6 446,600	\$ 634,464	\$ 608,120	\$ 1,689,184	\$ 987,557

See accompanying notes to financial statements.

Statement of Operations

Year ended December 31	2023	2022
Revenue		
Donations (note 9)	540,779	53,372
Membership fees	\$ 298,891	\$ 283,656
Publication sales	217,478	269,894
Miscellaneous	77,724	21,272
Investment income (loss)	40,732	(17,682)
Grants (note 9)	4,316	97,582
	1,179,920	708,094
Expenses		
National operations (note 13)	365,818	459,328
Publications	264,243	256,847
Member services (notes 5 and 13)	178,731	368,586
Programming		
Centre support / public outreach (note 13)	69,863	143,509
Youth Outreach and education	9,902	40,043
Light pollution prevention (note 13)	8,587	47,299
Telescope museum	4,018	49,586
Robotic telescope	216	28,447
General assembly	1,566	5,093
	902,944	1,398,738
Excess of revenue over expenses (expenses over revenue) before undernoted	276,976	(690,644)
Impairment loss - SkyNews Inc. (note 5)	(21,949)	(292,308)
Excess of revenue over expenses (expenses over revenue) for the year	\$ 255,027	\$ (982,952)

See accompanying notes to financial statements.

Statements of Cash Flows

Year ended December 31	2023	2022
Cash provided (used) by operating activities		
Excess of revenue over expenses (expenses over revenue) for the year	\$ 255,027	\$ (982,952)
Charges not requiring a current cash payment or receipt		
Amortization of capital and intangible assets	23,071	26,521
Amortization of life membership fees	(2,650)	(2,651)
Gain on disposal of capital and intangible assets	(27,254)	-
Write off of capital and intangible assets	873	-
Impairment loss - SkyNews Inc.	-	238,529
	249,067	(720,553)
Changes in non-cash working capital components		
Accounts receivable	62,686	(56,644)
Public service body rebate receivable	71,060	(50,610)
Accounts receivable from SkyNews Inc.	21,949	34,983
Inventory	2,567	(21,114)
Prepaid expenses	(8,284)	(5,951)
Accounts payable and accrued liabilities	(23,563)	(43,543)
Deferred revenue	(16,761)	13,683
	358,721	(849,751)
Cash provided (used) by investing activities		
Investments (net)	(40,622)	20,906
Purchase of capital and intangible assets	(8,716)	(10,886)
Sale of capital assets	40,241	-
Purchase of items for collections	(4,079)	-
	(13,176)	10,020
Cash provided (used) by financing activities		
Cash provided (used) by financing activities Repayment of loan	(40,000)	-
Increase (decrease) in cash during the year	305,545	(839,731)
Cash, beginning of year	270,017	 1,109,748
Cash, end of year	\$ 575,562	\$ 270,017

See accompanying notes to financial statements.

Notes to Financial Statements December 31, 2023

## 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.

The Society elected to account for the investment using the equity method.

In early 2023, the Board of Directors of SkyNews Inc., which is appointed by the Society as sole shareholder, agreed to comply with the Society's request that SkyNews Inc. cease all of its operations, including publication of the SkyNews magazine, which it then immediately did. As at December 31, 2023, SkyNews Inc. was in the process of collecting receivables owed to it and discharging its liabilities to the extent that it had funds to do so.

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.

Notes to Financial Statements December 31, 2023

## 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, 2023, no such impairment exists.

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

Tangible assets:	Telescope	7 years
	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. Contributions to an endowment fund are recognized directly in the fund.

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 endowment 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 dependent 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.

Notes to Financial Statements December 31, 2023

## 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, 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, 2023 is \$943,544 (2022 - \$890,626) and is excluded from the Society's financial statements as the Society is not the legal owner or beneficiary of the Fund.

Notes to Financial Statements December 31, 2023

## 4 Investments

As at December 31	2023	3	2022
Managed portfolio at Scotia McLeod			
Fixed income investments	\$ 287,222	\$	276,147
Canadian equity investments	627,202		169,520
U.S. equity investments	135,983		117,155
Cash	10,277		10,640
Non-redeemable guaranteed investment certificate			
RBC, matures April 8, 2024, 3.00% interest	8,000		-
RBC, matures April 8, 2023, 1.25% interest	-		8,000
	\$ 1,068,684	\$	581,462

The fixed income portfolio is comprised of government and corporate bonds with stated interest rates ranging from 1.55% to 5.22% (2022 - 1.55% to 3.80%), maturing on dates ranging from June 3, 2024 to June 14, 2028 (2022 - May 1, 2023 to June 2, 2027).

The Canadian equity investments is comprised of 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 (2022 - 74 shares of Royal Bank with a market value of \$9,420). The 7,000 shares of Canadian Imperial Bank of Commerce are held in the Endowment Fund.

The U.S. equity investments is comprised of share and trust units of which the single largest holding is 20 shares of Microsoft Corp. with a market value of US D\$7,521 (2022 - 23 shares of Microsoft Corp. with a market value of USD \$5,516).

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.

During the year, 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.

Notes to Financial Statements December 31, 2023

## 6 Capital assets

As at December 31			2023			2022
	Cost		cumulated	Cost		cumulated nortization
Tangible assets Telescope Computer hardware Office furniture Leasehold improvements	\$ - 33,532 6,095 2,147	\$	- 29,054 4,708 2,147	\$ 51,947 33,532 6,969 2,147	\$	35,250 25,527 4,362 1,861
Intangible assets Software Website development	 106,300 22,431		60,538 15,168	 106,300		46,791 13,715
Net book value	\$ 170,505	\$ \$	111,615 58,890	\$ 214,610	\$ \$	127,506 87,104

## 7 Collections

As at December 31	2023	2022	
Dorner Telescope Museum Library	\$ 59,157 1	\$	55,078 1
	\$ 59.158	\$	55.079

## 8 Unamortized life membership fees

	2023	2022
Life membership fees as of January 1 Deduct: Amortization to income	\$ 7,951 (2,650)	\$ 10,601 (2,650)
Balance, December 31	\$ 5,301	\$ 7,951

Notes to Financial Statements December 31, 2023

### 9 Donations and grants

Included in donations is a single bequest in the amount of \$451,853 received in October 2023.

Included in grants is government assistance totaling \$4,316 (2022 - \$30,885).

## **10 Dorner Telescope Museum Fund**

During the year, the Society received a bequest of 7,000 common shares of Canadian Imperial Bank of Commerce, with a value of \$444,500, 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.

## **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:

2024	\$	59,616
2025		61,560
2026		63,504
2027		65,448
2028		67,392
Thereafter	_	213,840
Total	\$_	531,360

### 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.

						2023	2022
		Dorner elescope Museum Fund	-	Ruth Northcott Education Fund	RASC Legacy Fund	Total	Total
Balance, January 1	\$	24,776	\$	256,690	\$ 340,635	\$ 622,101	\$ 624,607
Transferred from (to) unrestricted net as	sets:						
Investment income (loss)		-		5,313	7,050	12,363	(5,604)
Donations		-		-	-	-	4,598
Expenses		-		-	-	-	(1,500)
		-		5,313	7,050	12,363	(2,506)
Balance, December 31	\$	24,776	\$	262,003	\$ 347,685	\$ 634,464	\$ 622,101

Notes to Financial Statements December 31, 2023

## **13 Expense allocations**

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

Year ended December 31					2023					2022
	F	Personnel costs			undraising expenses	·				
National operations Member services Centre support /	\$	50,543 111,637	\$	17,580 2,198	\$ 3,400 6,800	\$ 89,682 189,341	\$	46,433 5,804	\$	7,833 15,665
public outreach Light pollution prevention		59,946 8,465		2,198 -	3,400 -	126,408 42,415		5,804 -		7,833 -
	\$	230,591	\$	21,976	\$ 13,600	\$ 447,846	\$	58,041	\$	31,331

### **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 it 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 \$154,115 at December 31, 2023 (2022 - USD \$167,520). The exchange rate used to convert US\$ assets at December 31, 2023 is \$1 US = \$1.3226 CAD (2022 - \$1.3544 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.

Notes to Financial Statements December 31, 2023

### 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

#### Terms of Reference:

Promote the program through RASC electronic media, engage on social media platforms, and present at local club meetings. Provide constructive critiques for submitted works.

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

#### Membership:

The committee underwent restructuring in 2023. With a renewed focus on nationwide coverage, our committee is dedicated to fostering collaboration, sharing expertise, and advancing the art and science of astroimaging across diverse communities.

- Western Canada Kimberly Sibbald (Chair) & Luca Vanzella
- Central Canada Stuart Heggie & Andrea Girones
- Eastern Canada Fiona Morris & Jason Dain

#### 2023 Objectives/Projects and Results/Activities

Our approach involves augmenting the objectives set for 2022 and strengthening a mentorship-driven approach in 2023. The goals within the field of astroimaging will be enriched by a commitment to mentorship. We recognize that while technical proficiency is crucial, mentorship plays a pivotal role in nurturing talent, sharing expertise, and fostering a sense of community within the astroimaging realm.



Nishat Khan - Solar System Application image "Jupiter and Europa Transit"



Rick Routledge - Deep Space Application image "Dumbbell Planetary Nebula"

#### 2023 Metrics

Deep Sky: 4 certificates awarded to: Scott Johnstone, Stephen Biggs, Bill Gardner, Rick Routledge

Solar System: 3 certificates awarded to: Rob Nichols, Stephen Biggs, Nishat Khan

Wide-Field: 1 certificate awarded to: Stephen Biggs

Congratulations to Stephen Biggs for completing all three certificates!

#### 2023 Challenges

- 1. Lack of Awareness and Education Many people may be unaware of the possibilities and rewards of astroimaging as a hobby. Increasing public outreach efforts through events, workshops, online tutorials, and social media campaigns can help raise awareness about astroimaging and attract new enthusiasts to the hobby.
- 2. Time and Commitment Astroimaging requires significant time and dedication to learn and master. Providing support networks, mentorship opportunities, and encouragement can help newcomers navigate the learning process and stay motivated on their astroimaging journey.
- Cost of Equipment Acquiring the necessary equipment for astroimaging, such as telescopes, cameras, and tracking mounts, can be prohibitively expensive for some individuals. Continue to promote equipment rental programs, or entry-level equipment packages suggestions can help lower this barrier and make astroimaging more accessible to a wider audience.

#### 2024 Plans/Focus

- Facilitate the exchange of knowledge and experience between seasoned astroimagers and newcomers to the field.
- Establish mentorship circles within the astroimaging community, bringing together mentors and mentees with shared interests and objectives.
- Promote equipment rental programs to help beginners overcome the equipment commitment.



Stephen Biggs - Wide Field Application image "Crescent Moon and Venus"

# 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 - ROBYN FORET

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.

This is a major, and senior, national award. It is intended to be the Society's most senior award and the highest honour the Society can pay to a member.

Robyn Foret first made a significant mark in the Calgary Centre in 2000 by becoming a key volunteer at the weekly Friday night public stargazing sessions held on the observing deck at the Science Centre. In 2003 he took on the role of volunteer coordinator for the observing deck and morphed it into volunteer coordinator for all public outreach events, a role he continues to this day. Robyn signed on in 2001 as one of the 'instructors' of the Youth Group.

Robyn was not only the overall coordinator and host for Calgary-hosted RASC General Assembly 2018 planning Committee, he hosted organizing meetings at his work office and arranged for the famous Calgary Stampede Pancake Breakfast Team to provide a true 'western' welcome for delegates.

Robyn worked to get an Alberta Government gaming license to participate in the public casinos run by provincial not-for-profit organizations. Each casino has allowed the Calgary Centre to earn thousands of dollars for honoraria for public speakers, purchasing equipment for public outreach and, most significantly, for a new public observatory within the City of Calgary. Robyn has done almost all the legwork to win support from the City, choose a location, hire a team to design the building and lobby the provincial government and donors to bring this project forward.

Robyn has been awarded the Calgary Centre's President Award for meritorious service twice, in 2011 and 2017. He also garnered a RASC National Service Award in 2019. Robyn has been the President of the Calgary Centre twice, in 2014-2016 and in the current term (2023-2025). He has served in other roles on the Calgary Centre executive.

At the National level, Robyn Served as Chair of the Education and Public Outreach Committee before joining the Board of Directors in 2014. In eight years on the Board, he served on various committees and as first and second vice-president before serving as National President in 2020 to 2022. During those two years, the Society faced numerous challenges arising from the COVID-19 pandemic, including staff changes and the need to move the National Office. During that time, Robyn took on the job of managing production of the RASC's Night Sky Almanac, a role he continues to the present day.

Nominated by: Roland Dechesne, Dr. Chris Gainor

#### SIMON NEWCOMB AWARD - DR. CHRIS GAINOR

The Simon Newcomb Award is intended to encourage members of the Royal Astronomical Society of Canada to write on the topic of astronomy for the Society or the general public, and to recognize the best published works through an annual award.

Dr. Chris Gainor FRASC Ph.D has long been a

supporter and close follower of the Canadian and international space programs. As a historian, he has written several books and articles about various aspects of the exploration of space.

His first book was *Arrows to the Moon: Avro's Engineers and the Space Race.* This book is a thorough look at how Canadian engineers supported the Apollo manned lunar landing program. In 1959, when the Avro Arrow program was cancelled, NASA hired over 30 Avro Arrow engineers and moved them to Virginia. They ultimately worked on the Mercury, Gemini, and Apollo programs.

Chris has written several important articles on the history of space exploration. He is currently the Editor of *QUEST: The History of Spaceflight Quarterly*. This excellent publication features indepth articles on the history of the space program.

The fact that NASA hired Dr. Gainor to write a book about the history of the Hubble Space Telescope – *Not Yet Imagined: A Study of Hubble Space Telescope Operations* – clearly demonstrates that Chris has the respect of a space historian.

In addition, he has written numerous other books: Canada in Space:

The People & Stories Behind Canada's Role in the Exploration of Space (2006)

Who killed the Avro Arrow? (2007)

To a Distant Day: The Rocket Pioneers (2008)

The Bomb and America's Missile Age (2018)

From the RASC Journal:

Amateur Astronomers and the Hubble Space Telescope (2021)

Apollo Geological Training in Canada, 1970–1972 (2022)

The Apollo 11 Astronauts Visit Canada (2022)

Canadian Visits of Early Spacefarers (2022)

The Canadian Astronomy Data Centre: Canadian Astronomy and the Beginnings of Big Data (2023)

For all of the above, and especially for the book *Not Yet Imagined*, we believe Dr. Chris Gainor is most deserving of the Simon Newcomb Award 2024.

Nominated by: J. Randy Attwood, FRASC, James Edgar, FRASC

#### **CHANT MEDAL - WARREN FINLAY**

The Chant Medal of the Society was established in 1940 in appreciation of the great work of the late <u>Prof. C. A. Chant</u> in furthering the interests of astronomy in Canada. This medal is awarded, not more than once a year, to an amateur astronomer resident in Canada on the basis of the value of the work carried out in astronomy and closely allied fields of the original investigation and specifically not for the services of the Society, worthy though these may be.

Warren Finlay's wide ranging, unique and impressive achievements in astronomy over the past 25 years firmly place him among the most accomplished amateur astronomers in Canada. In 2023 he completed observing the Herschel 2500 list - approximately 2500 objects, a feat that took him 22 years. In total, he has observed more than 3,300 NGC objects, in addition to more than 500 supernovae, comets, and other deep sky objects. In 2022 he created the "Brightest 2500 Northern NGC" list. He is the inventor of the astronomy bimarathon which involves the twin tasks of observing 110 deepsky objects and running a regular marathon (42.195 km) between sunset and sunrise in a single night. He is the only person known to have completed a bimarathon. In 2016 he completed a Messier bimarathon by star hopping with a 10" Dobsonian and binoculars. In 2018 he repeated that difficult feat in Australia but instead with all southern deep-sky objects. He is the inventor of the Herschel marathon which requires observing 110 Herschel objects in a single night. He completed his Herschel marathon by observing a selection of the dimmest Herschel 2500 objects on March 16/17, 2023. Details of his observations have been shared with other RASC members.

Warren is the author of the book *Concise Catalog* of *Deep Sky Objects: Astrophysical Information* for 550 Galaxies, *Clusters, and Nebulae* (Springer). Now in its 2nd edition, the book has sold more than 5000 copies. From 2006 to 2008 he co-authored with Dr. Douglas Hube the bimonthly *Deep Sky Contemplations* column in the *Journal* of the Royal Astronomical Society of Canada.

In 2004 he founded the Northern Prairie Star Party, a popular annual amateur astronomy gathering in Alberta. He was its Director until 2009 and has been a member of its organizing committee ever since. He is also the visionary behind the Black Nugget Lake Observatory, conceived by him nearly 20 yeaers ago. Over the past seven years he managed the team that built the 14-foot domed observatory, a visitor's centre, and a 32-inch diameter Unyk-Drew Telescope (UDT) that saw first light in 2023. The UDT is one of the largest telescopes at a dark site in Canada that is available for public viewing.

Warren is also an award-winning astrophotographer, having received the SkyNews' Grand Prize Annual Astrophoto Award (2004) and Best Tripod-Mounted Unguided Photo (2021): as well as Honorable Mention in Canadian Geographics' Skyward Photo Contest (2014). His nightscape photos have been selected for inclusion in the annual RASC Observer's Calendar. Warren was a recipient of the RASC's Simon Newcomb Award (2006) and the RASC Edmonton Centre's President's Award (2019), Observer of the Year Award (2020 and 2016), Franklin Loehde Project of the Year Award (2016, 2005, and 2003), Bryce Hartwell Memorial Award for Excellence in Astroimaging (2014), and the George Moore's Memorial Award for Excellence in Public Education (2007). It would be difficult to imagine a more deserving recipient of the RASC Chant Medal.

Nominated by: Douglas P. Hube, Alister Ling

#### **QILAK AWARD - TONY SCHELLINCK**

Established in 2011, this award is intended to recognize individual Canadian residents, or teams of residents, who have made an outstanding contribution, during a particular time period, either to the public understanding and appreciation of astronomy in Canada, or to informal astronomy education in Canada, and to promote such activities among the members of the sponsoring organizations.

The undersigned hereby submit the following citation to support presenting the RASC Qilak Award to Douglas Anthony (Tony) Schellinck, member of the RASC Halifax Centre, in recognition for his long-standing, diverse, and innovative astronomy outreach activities in Nova Scotia.

Tony Schellinck's education and outreach work is utterly unique and unlike anything else done in Canada. It is remarkably creative, delivered with energy, passion, and humour. Its variety, depth, breadth, scope, and success are astonishing. It meets peoples' interest and curiosity "where they live." Tony engages peoples' hearts and minds at their level, and enables people to engage with the universe immediately, joyously, and personally. Tony brings the Universe to people at ground level—his audiences are expertly and efficiently guided to a key understanding, that the stars, as Helen Sawyer Hogg always said, really do belong to everyone!

Tony joined the RASC Halifax Centre in 2006 and rapidly became an active member. He earned the following observing certificates: Explore the Universe (2017), Explore the Moon—Telescope (2020), Messier (2016), Finest NGC (2020); and all three astroimaging certificates: Wide-Field (2017), Deep-Sky (2017), Solar System (2017). This strong background in observing and imaging the sky, combined with his natural teaching ability (retired professor) allowed Tony to translate his love of astronomy into a series of outreach initiatives to engage others, especially beginners. During that time, he also edited the Centre newsletter, Nova Notes (2015–17) and served on the Centre Board of Directors (most years 2015–present). To cite the instances of Tony's outreach activities event-by-event would take too long to relate. The evidence below is aggregated by topic, but to give a temporal sense of Tony's activity, here in his own words is a report to the Centre representing a single year (2016):

On a personal note. I have been guite busy with outreach this year. I have put on nine shows at the Halifax Planetarium, six SCANS classes, two Liverpool Astor Theatre flat-screen planetarium shows with Wayne Mansfield and two similar shows at the Margaret Hennigar Public Library in Bridgewater with Jerry Deveau. I set up my binoculars table for three nights at Keji DSW and two nights at Nova East. I mounted the play The Star Trek Universe: Where Empires Exist at the Halifax Central Library on the fiftieth anniversary of Star Trek, and then again at CaperCon in Sydney. There was also a Breakfast Morning segment associated with these plays. I was quest speaker at a Sunday Assembly held at the Halifax Central Library. Other observing nights-four with SCANS students. Smileys Provincial Park (post Nova East), Privateer Days in Liverpool. I manned the table at HalCon for Sunday afternoon. Perhaps one of the more unusual nights was working with professional photographers from Quebec who were using Keji as a backdrop for a cover photo of a Subaru in the foreground and the Milky Way in the background. All told I gave 36 outreach presentations/shows/sessions this year with audiences ranging from 3 to 85 each time. Many of these shows required days of preparing and coordination to put on. When you add on the number of days required to put out Nova Notes and tend to RASC council matters, not to mention the nights I go out to my observatory in Port Mouton, you begin to get an idea why my spouse is starting to kindly suggest I may be spending too much time on astronomy.

#### On to the evidence...

Disclaimer: The following evidence was mined from email chat lists and Nova Notes newsletter accounts and may be incomplete and/or contain minor errors of detail. Tony was not consulted in the preparation of this nomination, but we did use information from his 2018 JRASC article. We also consulted his wife, Heather (in confidence) to confirm some details.

#### **Innovative Outreach Initiatives**

Tony has created several innovative activities for astronomy outreach. These were outlined in his article "RASC Outreach: Endless Opportunities for Creative Engagement with Novice Observers," published in JRASC February 2018 (pages 18–21).

 Binocular Table – 10 to 25 individuals borrow binoculars from a table set up in a dark-sky observing location and are coached by the session leader on how to use the binoculars. Then they try to find easy-to-find objects on their own. The leader might help guide them to more difficult targets with a strong narrow light beam pointed into the sky. Sessions last about 30-45 minutes and can be repeated. The idea came to Tony when he discovered that he could find 60 of the 110 Messier objects with binoculars. The Binocular Table has been deployed more than 20 times at outreach events.

- Telescope Plaza—similar to the above, but with a smaller number of 6" or 8" Dobsonian telescopes, with 1–3 people sharing a telescope (introduced in 2019).
- Ace Amateur Astronomer participants

   (especially youngsters) engage in a Binocular
   Table activity with a 20-object guide sheet
   appropriate to the month. If they find at least 5
   listed objects, they are issued an Ace Amateur
   Astronomer certificate on the spot. A description
   is posted on the <u>RASC website</u> and was
   presented at the 2022 online RASC General
   Assembly. Tony has issued up to 40 AAA
   certificates in one night.
- Flat-Screen Planetarium basically a nightsky tour with a twist: fish-eye astrophotos are projected onto a flat screen and participants sit well back from the screen while the presenter points out stars and constellations. With coaching, from the presenter, they look for asterisms, star clusters, nebulae, and galaxies in the projection using supplied binoculars. Photos of various scales are used, ending up with closeups. Weather permitting, these shows are followed by outdoor observing sessions (introduced in 2016).
- Star Trek Play-In 2015, Tony created, wrote, produced, and acted in the live-action and multi-screen play The Night Sky According to Star Trek-Where Empires Exist. In this play, several characters from the TV series described how to find constellations and deep sky objects on the way to their various empires. The play was presented at Hal-Con, the sci-fi and comic convention in Halifax, Caper-Con in Sydney, and finally at the Central Library in Halifax (2016), on the occasion of the 50th anniversary of the original Star Trek television series. The play grew out of the earlier presentations The Secrets of the Universe as Revealed by Star Trek (2012). Everything We Knew About Astronomy We Learned from Star Trek, Where in the Sky is the Klingon Empire, and The Night Sky According to Star Trek (2015).

#### Halifax Planetarium Shows (2013-2020)

Tony became one of the several presenters at the planetarium at Dalhousie University, and introduced several innovations. With the addition of a data projector, he projects his own images of deep sky objects onto the dome. He also instructs the audience on how to use binoculars. After the show (if clear), he leads a brief observing session outside with participants, looking for the objects highlighted in the show. In the 8-year interval 2013—2020, Tony presented 48 planetarium shows to 1024 adults and 118 children (over 8 years). The planetarium closed when COVID struck and has not yet re-opened for public shows. Show themes include *Love is in the Stars* (Valentine's Day), *Journey to the Centre of the Galaxy, Begin to Observe, The Klingon Empire, Using Binoculars and Telescopes*.

# Flat-Screen Planetarium Shows in Theatres and Lecture Halls (2016-present)

The flat-screen planetarium shows have been presented at a wealth of venues. The inaugural show was *A Practical Guide to Observing the Night Sky*—Astor Theatre (Liverpool, 2016), and became the core of his SCANS multi-week courses (see below). Other one-night screenings were presented in Shelburne and Yarmouth (2017).

#### Kejimkujik Dark Sky Preserve (2010-present)

Tony has been a volunteer presenter at 13 of 14 annual Dark-Sky Weekends (DSW) held at Kejimkujik, either as a lecturer, telescope operator, binocular table leader, or telescope plaza operator. His 2011 keynote lecture was From Here to There, a Personal Journey from Earth to the Farthest Reaches of Space. His Port Mouton home is close enough to Keji that he has managed to represent RASC Halifax there for several individual outreach events, such as The Dark as Keji beer launch (2017), assisting with photo and video shoots relating to the night sky (2016), and presenting to visitor groups (2013, 2019, 2022). Tony was part of the RASC team that negotiated the first Partnering Agreement for a DSP between Parks Canada and a RASC Centre, and represented dark sky issues at a Kejimkujik Management Plan Meeting (2019). In recent years, Tony actively assisted in organizing the DSW. Currently, he is Co-Chair of the RASC Halifax DSP Committee and the principal contact with Kejimkujik.

#### Nova East Star Party

Tony has been a participant in the Nova East star party since he joined RASC. He brought his various outreach activities to the event annually, such as the Binocular Table, the Telescope Plaza, and the Ace Amateur Astronomer. He has also presented talks, such as Observing the Night Sky with Binoculars (2016) and Observing in Nova Scotia—How to Beat the Weather Gods (2018).

# Seniors College Association of Nova Scotia (SCANS) (2016-present)

SCANS is a volunteer run, non-profit organization for members aged 50 and over where instructors teach non-credit academic courses in return for

an honorarium. Tony's SCANS courses began in 2016 at the Astor Theatre in Liverpool. The first 6-week course with 37 senior students was A Practical Guide to Observing the Night Sky Using Binoculars, in effect an expanded version of the Flat-Screen Planetarium shows. In this course he covered observing through the four seasons, lunar observing, and basic sketching. The course included 3 nighttime viewing sessions. A second course was Seeing Is Believing-How the Telescope Changed Who We Are and What We Know (2020). Tony presented SCANS courses in Liverpool (2016), Mahone Bay (2017), Chester (2018), Dartmouth (2018), Truro (2018), Halifax (2020), Dartmouth (2020), and by Zoom (2020)-8 times in all.

#### Instructional Videos

In 2020 Tony produced 7 instructional videos on observing and telescopes, which have earned 1300+ views on the RASC Halifax YouTube Channel (see youtube.com/c/RASCHalifax)

- How to use Binoculars to Observe the Night Skies (2020)
- A Virtual Field Trip to Observe the November Night Sky
- International Observe the Moon Night, Sept. 26, 2020. How to Observe the Moon
- So You Want to Buy a Telescope: Episode 1 Tripods
- So You Want to Buy a Telescope: Episode 2— The Role of a Mount in a Telescope System
- So You Want to Buy a Telescope: Episode 3— Basic Telescopes
- So You Want to By a Telescope: Episode 4— Advanced telescopes and recommendations

#### Miscellaneous Outreach Presentations

- International Observe the Moon Night (Halifax, 2010)
- Explore the Universe at Halifax Central Library (2013) and Bridgewater Library (2013),
- Sidewalk observing (Citadel Hill, Halifax, 2013)
- Star Trek play (Nocturne, Halifax, 2015)
- Impromptu presentation (Smileys Provincial Park, 2016)
- Astronomy on the Cheap (Sunday Assembly, Halifax, 2016)
- Observing sessions (White Point Beach Resort, 2017, 2018)
- Senior Physicians Group (Halifax, 2017)
- Observing session (Keji Seaside Adjunct, 2017),
- Thrive Youth Group (2018)\Chowder & Chat

(Lunenburg, 2019)

- Impromptu presentation (Joshua Tree National Park, 2019)
- Conference and exhibition booth shifts (multiple years at Hal-Con, RV Show, Saltscapes).

#### RASC Education and Public Outreach (EPO) COmmittee (2020-present)

From the Chair of the EPO Committee: "Tony has worked on one of our main projects, the RASC Novice Observing Program with Lucas Kuhn, Francesco Ambrogi and the late Linda Pulliah. He has been a great supporter of using naked eye and binoculars for observing and we support and promote his Ace Amateur Astronomer program. He has helped unwaveringly when we needed something edited or reviewed, works quietly but efficiently, and gets things done. I hope he stays with us as we need his calm demeanour and thoughtfulness on our committee."

The concept of the novice observing program (still in beta test) is to have a downloadable observing program with sufficient detail so that a non-RASC leader could coach novice observers (of all ages). The observing program is designed to be completed in one evening.

#### **Outreach to Underserved Communities**

In the past, RASC Halifax Centre outreach activities have largely served the population of Halifax Regional Municipality and have under-served rural Nova Scotian communities. As a part-time resident of Port Mouton on the South Shore (2 hours drive from Halifax), Tony is in a good central location to visit other South Shore communities and beyond. Tony takes his talks and courses on multiple occasions to the communities of Chester, Mahone Bay, Lunenburg, Kingsburg, Bridgewater, Liverpool, Barrington, Shelburne, and Yarmouth (1.5 hours from Port Mouton).

#### **Final Words**

The Board of the Halifax Centre enthusiastically support this nomination of Tony Schellinck for the Qilak Award, in recognition and celebration of his national-award-worthy achievements in astronomy education and outreach. We believe the evidence shared above more than qualifies Tony Schellinck for the RASC Qilak Award. We'll let Tony summarize in his own words (from his JRASC article):

People have a real hunger to learn about what is in the sky and to have the experience of finding deep-sky objects themselves. I have the ability to help them fulfill this need. Outreach provides me with satisfaction, learning, challenges, opportunities for fulfillment, and a way to give back to the communities in which I live.

Nominated by Dave Chapman, FRASC

#### SERVICE AWARDS - JAMES MacWILLIAM, JUNE MacDONALD, HEATHER LAIRD, CHARLES ENNIS

#### James MacWilliam - Sunshine Coast Centre

The Sunshine Coast Centre nominates its member James MacWilliam for a Service Award. James has been associated with our astronomy Centre since January 1989 when we were the Sunshine Coast Astronomy club: At that time, he was secretary for the club. James was one of the people that showed up in June 2004 to reorganize the club under Bill Clark. James was a regular presenter at club meetings and regular attendee at star parties and observing events with his telescope. James has always been very generous with his scope, showing visitors the skies, very enthusiastic about involving every passersby in viewing the skies and mentoring newcomers. In November 2004 he took charge of the club's brand-new website and in the spring of 2008, he created a Starchasers.ca website to display astrophotography by club members: Again, he used his passion to get other people involved. This web site lasted until 2018 when it was replaced by our current Wordpress website. James went on to be a regular contributor to our new Facebook page and many of the images on our new website are his. He doesn't just bring a telescope to the observatory. He brings his guitar and entertains us all while we are viewing the skies: It is that atmosphere that brings people back over and over. He's constantly acquiring new equipment and sharing what he's learned about it to the membership and the public.

James was one of the members involved in bringing the club into the RASC as a Centre in 2008. James created a full colour Observing Newsletter for the Centre in 2010. In February 2010 James founded our Astro Café event which has taken place on the third Friday of every month ever since except for a brief period during the pandemic lockdown. In November 2010 he became a Director at Large for the Centre. By July 2011 he was the Astro Café Coordinator, Imaging Group Webmaster, and Observing Coordinator. In August 2011 he became part of the committee planning our Centre's observatory. James has not been in formal leadership for a while now, but his informal leadership continues to the present day.

#### Nominated by: Bruce Fryer, Charles Ennis

#### June MacDonald - New Brunswick Centre

June MacDonald joined the RASC New Brunswick Centre in October 2002 and she is in her tenth year as Centre President. She has been the heart of RASC NB during this period and the crazy glue that held us together during the pandemic years, taming her contrary computer long enough to conduct meetings via Zoom and to keep members informed of Centre and Society business. Of particular note, June was the driving force behind the dedicated committee that resulted in the Centre becoming incorporated and obtaining charitable status. During many of these years she was also the Centre Representative on the RASC National Council.

Prior to her consecutive years of presidency June was Centre Secretary for six years, 2VP for two years, and a prominent member of the Organizing Committee for the 2010 RASC General Assembly in Fredericton. She chaired the 2024 Eclipse Committee for the Centre, which included communicating with communities within the zone of totality, working with libraries to schedule information sessions, obtaining eclipse glasses, and organizing the purchase and distribution of eclipse apparel highlighted with a unique New Brunswick design by member Ted Dunphy. In addition, she was a member of the RASC 2024 Eclipse Committee.

Throughout the years June has been a frequent and jovial speaker at meetings, a contributor to the Centre newsletter, and a supporter of outreach events either through observing or working in the background to ensure they run smoothly. It is with great pride that we nominate June MacDonald as a recipient of the RASC Service Award.

Nominated by Curt Nason, Emma MacPhee

#### Heather Laird - Calgary Centre

Heather Laird is a long-serving member of the Calgary Centre who has been engaged in Centre and Society leadership since joining in May of 2013. Heather joined Calgary Council that year and attended her first General Assembly in Victoria in 2014 as one of the Centre's National Advisory Council members. In 2015 she was elected as a Director of the RASC and held that position into 2020. During that time she also became a founding member of the Inclusivity and Diversity Committee.

For the Society's 150th celebration at the 2018 General Assembly, Heather was a presenter on the topic of women in Astronomy as part of the "A Shared Sky: the RASC at 150" initiative. Her research and findings are anticipated to be printed in that published celebration of the Society's first 150 years, highlighting the role of women scientists in our journey.

Presently, Heather is the 2nd Vice President of the Calgary Centre and Chair of the Centre's Social Committee, ensuring that all members, new and old, have opportunity to connect outside of the volunteer activities and formal Centre events as part of a welcoming, inclusive, and diverse Centre. She is also a critical part of the Centre's Marketing initiatives managing all things Social Media ensuring consistent messaging and advertising of Centre events of interest to the public.

At the Centre General meetings, you will find Heather and other volunteers greeting the public, showing off our publications and merchandise, and constantly informing and educating the public of the opportunities and endeavours that the RASC offers and supports.

Always enthusiastic and demonstrably committed to the Society, we are honoured to nominate Ms. Laird for this Award.

Nominated by: Robyn Foret, Craig Levine

#### **Charles Ennis, Sunshine Coast Centre**

Charles Ennis joined the RASC in August 2013 and by 2021 had become the National President, so his energy and interest in promoting astronomy are well known. However, the Sunshine Coast Centre is hereby submitting an application for Charles to receive a Service Award for his outstanding contribution to our local club alone.

He was elected to our executive in November 2013 as the Media coordinator and within months had expanded our online presence, our local advertising and our involvement in outreach astronomy events. He quickly assumed the heavy responsibility for booking speakers—the highlight of our monthly meetings—and in the process generated a prodigious volume of emails, contacts, reports and applications for financial assistance from the National Speakers Program. Soon our club was at the top of the RASC in the use of that program.

The following December Charles was elected president of the club, hosted the monthly meeting and continued his role in promoting the club and soliciting speakers. We were in the middle of designing and building an observatory and Charles interviewed amateur astronomers from across the country and around the world for their insights and perspectives on building a small observatory. He presented the results to the club and later wrote the handbook on small observatories for the RASC.

When the club completed the observatory, it became obvious that the leading user of the telescope was Charles, and he often invited a troop of neighbours and acquaintances to join him. That pattern has continued since restarting the public use of the observatory post-Covid. He wrote a complete manual for the observatory and mentored others to become "Qualified Operators".

A few members of the club started a local television program called "Night Lights" in 2010–13 half hour episodes per year. Charles soon joined the effort, became the host and has continued as the mainstay up to the present—many years worth of effort.

Charles also extended the reach of our club overseas, arranging for shipping one of our telescopes to a student in Uganda.

When Charles joined the National Board he had to resign as President of the Sunshine Coast Centre and so returned to being one of several elected Members at Large. However, he continued to seek out speakers until his duties at the National level became overwhelming.

In the fall of 2022 he successfully applied for a Federal Grant to make our observatory more accessible to Seniors and in this way to allow them to pass on their expertise and enthusiasm to the next generation. This June he solicited bids on the project and negotiated with and supervised the winning contractor. The project is now essentially complete.

Charles has been the indispensable promoter of club programs since his arrival in 2013 and the club owes him a debt of gratitude for his outstanding efforts. He richly deserves a Service Award.

Bruce Fryer

President, Sunshine Coast Centre

**Michael Bradley** 

Vice-president, Sunshine Coast Centre

#### PRESIDENT'S AWARD - J. RANDY ATTWOOD

The 2024 President's Award recipient is well known to any member of the RASC who has been at all active at the national or Centre level at any time in the last half century. Randy, who joined the Society in 1970 and has been a member continuously for the 54 years since then, has held too many volunteer positions with the RASC to count. Many years ago he was President of the Toronto Centre. He is the founder and past President of the Mississauga Centre. He is also president of the Earthshine Astronomy and Space Science Organization, a Mississauga not-for-profit charitable organization, which has partnered with the RASC to run public outreach astronomy programs at Riverwood Conservancy since 2009. Earthshine's mandate is public outreach, and it is working on generating support for a public science education facility in Mississauga, which would feature a planetarium and observatory telescope.

At the national level, Randy has worked in a variety of positions for many years. He is a past President of the Society (1998-2000), and served as Executive Director from 2014 until his retirement in 2019. In early 2023, at the request of the Board of Directors, he came out of retirement to step in and serve as interim Executive Director upon the resignation of the previous Executive Director, and to work with and assist the Society's new Executive Director throughout 2023 and into 2024. His deep knowledge of the operations of the Society, and his connections to members across Canada, have been indispensable in bringing stability to the Society during the difficult process of transition from one Executive Director to the next. Without his help, it would have been extremely difficult to maintain all of the National Office's functions.

More recently randy conceived the idea of a Solar Eclipse Committee to coordinate eclipse preparations and RASC eclipse activities for the recent total solar eclipse that so many RASC members travelled to observe. He also conceived, and was heavily involved in, the idea of Canada Post creating a special stamp to commemorate the April 8, 2024 solar eclipse.

In June 2023 Randy was elected as a director of the Society, and has continued his work assisting National Office staff and with the Society's Editorial Board, which is in charge of RASC publications. Randy's tireless dedication to the RASC's various committees, task forces, and public education has earned him the Society's Service Award (2005), as well as the Society's most significant award and highest honour, Fellow of the RASC (2013). It is difficult to imagine The Royal Astronomical Society of Canada operating as it does without him.

Michael Watson President

> Charles Ennis, he/him Chair, Awards Committee

#### DORNER TELESCOPE MUSEUM

The DTM continues to benefit from the generosity of its supporters, both within the RASC, and in the wider community. This is clearly reflected in some of the outstanding donations it has received. Chief among these are the instruments from Dr. David H. Levy, FRASC, including "Miranda", his classic early 1980s 16-inch Dobsonian reflector. This telescope holds the instrumental record for visual cometary discoveries by a Canadian. It has a further RASC distinction, in that it was made for the discoverer by a friend belonging to the Montréal Centre of the RASC, Constantine Papacosmas. Also notable is David's gift of "Narcissus", his own Explore Scientific David H. Levy Comet Hunter, a 152-mm Mak-Newt OTA. Thanks to Steve Dodson (Stargazer Steve), we now have one of his innovative accessible Dobsonians in the collection. Alan Ward was able to fulfill the wish of Rudolph Dorner that the 6-inch apochromatic refractor he commissioned from Alan would enter the museum. Alan's work won 1st Place Compound MC-Optical, and the 2nd Place Special Award at the 2017 Stellafane Convention. Also due to Alan's generosity, Rudolph's forethought, and the research of Clark Muir of the History Committee, the primary mirror of the largest telescope in Canada ca. 1900 (20-inches), the so-called "Vatican" mirror, made by some Jesuit ATMs in Montréal, is now part of the DTM.

These acquisitions will help us to better tell the story of the telescope in Canada.



DTM 77.20230706, 16-inch Dobsonian ("Miranda") by Constantine Papacosmas, Montréal, built for David H. Levy (1979-1980), gift of David H. Levy



Acquisitions in 2023 include:

- DTM 70.20230408, Stargazer Steve 4.5-inch f8 Dobsonian, Steve Dodson, Sudbury, gift of the maker
- DTM 71.20230408, 20-inch primary mirror (the so-called "Vatican" mirror), Fr. Garais, SJ, and confreres, Montréal (1903), gift of Alan Ward
- DTM 72.20230413, fitted telescope case, Edward George Wood (optician), London (ca. 1860-1893), gift of Randy Attwood
- DTM 75.20230526, Celestron StarSense Explorer Dob 10-inch model (ca. 2022)
- DTM 76.20230601, Portrait of Galileo (1624) after Ottavio Leoni (1578-1630), by R.A. Rosenfeld, in trois crayons technique (2023), gift of the artist
- DTM 77.20230706, 16-inch Dobsonian ("Miranda") by Constantine Papacosmas, Montréal, built for David H. Levy (1979-1980), gift of David H. Levy
- DTM 78.20230706, Explore Scientific (ES) David H. Levy Comet Hunter 152-mm Mak-Newt OTA ("Narcissus"), ser. #02, (ca. 2010), gift of David H. Levy



- DTM 79.20230706, Beer-Can Telescope, David H. Levy, Vail(?) AZ, (ca. 1975), gift of David H. Levy
- DTM 80.20230706, Fork-Mounted Telescope (II), David H. Levy, Vail(?), AZ, recreation of ca. 1970s-1980s original, gift of David H. Levy
- DTM 81.20230706, Explore Scientific (ES) 100-degree 20-mm eyepiece, ser. # 02 (ca. 2010), gift of David H. Levy
- DTM 82.20230706, Tele Vue Nagler Type 2, 20mm eyepiece, (ca. 1986), gift of David H. Levy
- DTM 83.20231021, Alan Ward 6-inch f/10 apochromat, MoonWard, Sudbury, ser. # 01 of 2, (2017 June 1), *olim* Rudolph Dorner
- DTM 84.20230706, Peter L. Manly reproduction of one of the Museo Galilei telescopes of Galileo's, Phoenix AZ, (early 2000s), gift of David H. Levy
- DTM 85.20231219, Larger-than-life plastic prop of Bushnell binocular, one of two formerly on display at Efton Science (ca. 1970/1972?-2010/2012?) in Toronto, (ca. 1970s-1999?), gift of Matteo Statti



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:

Randy Attwood, Bart Fried, John Briggs, Dr. Roger Ceragioli, Steve and Patrick Dodson, David H. Levy, frasc, Peter Pekurar, Dr. Patricia Raby, Dr. Sara J. Schechner, FAAS, Matteo, Frank, and Kitsa Statti, Dr. Michael Szpir, Alan Ward.

# EDUCATION AND PUBLIC OUTREACH COMMITTEE

#### Terms of Reference:

The Education and Outreach Committee's purpose is to oversee, in accordance with the policies determined by the Board, 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.

#### Membership:

#### Chair:

Lauri Roche	Victoria
Victor Abraham	Hamilton
Karim Jaffer	Montreal
Lucas Kuhn	Vancouver
Ron MacNaughton	Toronto
Jo Ann Salci	Unattached
Tony Schellinck	Halifax
Kirsten Vanstone	Toronto
Christa Van Laerhoven	Yukon

#### **Board Liaison:**

Brendon Roy (Jan-Jun)	Thunder Bay
Betty Robinson (Jul-Dec)	Mississauga

#### Meetings in 2023

- January 27th
- February 27th
- June 9th
- November 20th
- and representation at one EPO Rep Townhall

#### 2023 Goals and Projects

**Creation Station:** This webpage on the RASC site (<u>www.rasc.ca/creationstation</u>) is a space dedicated to children's written and artistic creations but has not been active this year. Young people can still access this page if they wish to submit a project.

School Astronomy Clubs: We continue to support middle schools or high schools that wish to form and maintain astronomy clubs. The Astronomy Club Resources webpage that was set up in previous years requires updating and will take some volunteer time to make this active and worthwhile to teachers and students. When extra funds become available to the Committee in the coming years we will send out welcome packages to schools that request our assistance.

Novice Observing Program: The Novice program was revised to have seasonal observing charts prepared for final edits. This certificate program comes under the auspices of the EPO committee. The final versions were to be completed this year but remain unfinished at this time. A small committee has been looking into final edits and we look forward to having this downloaded on the website with communication sent to Centres about the program.

Security Checks Report: The Committee has completed the review of this document and it has been incorporated into the Best Practices Guidelines created by the National Council as part of the Centre's Operation's Manual.

The NOVA Course: The NOVA course was sent back for major committee edits as there were problems with copyright for images and graphics for many of the Modules. Unfortunately, it has taken longer than expected to get the Modules completed but we are looking forward to having the Project running for the Fall of 2024.

Eclipse Task Force: The Committee supported the work of the Eclipse Task Force in planning for the October 2023 Partial Total Eclipse and the April 8th, 2024, Total Eclipse. Thanks to members within their own Centres who have been working for these events.

**General Assembly 2023**: The Committee also supported the General Assembly Planning Committee by offering speakers, hosts and volunteers for the event.

#### 2023 Challenges

Thank you to the members of the Committee who continued to work on various projects throughout the year. It has been a challenging year with the suspension of funds for working on projects (as for all other Committees) and the loss of the National Outreach coordinator, Samantha Jewett, and other staff members that supported our programs with their time, talents, and enthusiasm. We understand and stand by the very difficult decisions that the Board had to make to keep our Society thriving and are very happy to be working alongside Jenna Hinds again in her new role as Executive Director.

This past year we have not met as often and have found it difficult to keep the momentum for projects going. As we are volunteers and can only do what feels right when balancing working lives and family responsibilities, we continued to be challenged with the work that needed to be done and the number of hours that members could commit to tasks. So, as much as we generated great ideas and all believe firmly in the value of public outreach and member in-reach, the ability to complete some of the projects and take on any new initiatives was hindered by both National Society circumstances and time allocation.

#### 2024 Plans and Focus

- Complete Novice Certification Program and send out to Centres
- Continue setting up resources for School Astronomy Clubs, produce and send out Welcome packages to new clubs, and ensure the website is functional when the new system comes onboard.
- Launch the NOVA program and market to

# **EDITORIAL BOARD**

RASC Editorial Board – Annual Report 2023

- Christopher Gainor (Chair)
- Chris Beckett (Editor, Observer's Calendar)
- Dave Chapman
- James Edgar (Editor, Observer's Handbook)
- Charles Ennis
- Robyn Foret (Editor, RASC Annual Report)
- Jenna Hinds (RASC Executive Director)
- Nicole Mortillaro (Editor, *Journal* of the RASC, & RASC *Night Sky Almanac*)
- Blake Nancarrow (Observing Committee Representative)
- Betty Robinson
- Randall Rosenfeld
- Michael Watson (Board of Directors Representative)

The RASC Editorial Board has responsibility 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. Centres and to the general public.

Support the Eclipse Task Force for the 2024 Eclipse with information, resources for the Eclipse website, and facilitate Eclipse Rep all-Centre meetings.

#### **Appreciation and Thanks**

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I would like to extend our appreciation to Brendon Roy who acted as our National Board Liaison for several years. Brendon looked out for us and would come into our meetings in any kind of weather, joining in from his truck, listening in on the road, and often pushed us to see concerns from different points of view. Thank you, Brendon. We now have Betty Robinson as our liaison and look forward to working with her.

We also would like to extend our deep thanks to Samantha Jewett who was a guiding force, a cheerful voice and a relentless worker for our Committee. We wish her well in her new endeavours.

Respectfully submitted,

Lauri Roche, Chair EPO Committee

As the RASC and the wider world continued to emerge in 2023 from the COVID-19 pandemic and its effects such as supply chain problems and inflation, most RASC publications returned to their normal operation. The exception to this was *SkyNews*, which was closed down in February by the board of SkyNews Inc. after the RASC Board of Directors determined that *SkyNews* was no longer financially viable.

The RASC Editorial Board met four times in 2023, on February 21, June 5, October 10, and December 5. During the year, the Editorial Board noted with great regret the passing of *SkyNews* founding editor and prominent author Terence Dickinson, and of Blake Nancarrow, Editorial Board Member, Observing Committee Chair and popular contributor to the *Journal* of the RASC.

The closure of *SkyNews* early in 2023 came after a year when it was rocked by cost, production and distribution problems that increased expenses and reduced revenues. Up to the end, the high quality of SkyNews was maintained by Editor Carina Ockedahl and her dedicated team of writers, photographers and designers.

The year 2023 was also notable due to the high turnover of staff in the RASC National Office and the many difficult financial measures that had to be taken by the RASC Board of Directors. The fact that the RASC's remaining publications maintained their high quality and were produced and distributed as in a normal year is a testimony to the great work of the many volunteers who create them, and to the new team at National Office headed by Executive Director Jenna Hinds.

Publication of the *Journal* of the RASC went smoothly in 2023, and some features from SkyNews such as sky maps were incorporated into *JRASC*. The Editorial Board began discussions about further changes to *JRASC* content in the wake of the closure of *SkyNews*.

The 2024 *Observer's Handbook* in editions for Canada and the United States was published on

# HISTORY COMMITTEE

#### The Astronomical Landscape of Canada

After much planning, preparation, and overmuch delay, the Astronomical Landscape of Canada (ALC) has become a reality (https://www.rasc. ca/astronomical-landscape-canada). It is the Committee's chief project during the period covered by this report. The ALC is a portal to places associated with astronomy in Canada. It is designed as an evolving, information-rich guide to those sites. At the most basic level it will serve to alert users to places of interest for scientific and cultural tourism, education & public outreach (EPO), and research. Like the *Observer's Handbook*, it is a project with the potential to outlast the present members of this committee, and their successors well into the future.

As with the best "citizen-science" projects, the ALC combines the capacity to accept contributions from anyone, anywhere, with the responsibility to curate the material and its presentation (analogous to the *Observer's Handbook* requiring an editor).

In geographical extent the ALC is coterminous with the territorial sovereignty of our modern nation. At first glance this seems to be a clean and unproblematic definition, but in use it proves to be anything but that; the spatial extent of that sovereignty varied depending on the period in question. This definition is used for the ALC because there is simply no definition which is less problematic. The temporal extent of the ALC runs from prehistory to the present (and that prehistory may well turn out to be palaeolithic depending on the "testimony of the spade", *i.e.*, results of archaeological science).

Most of the content of the ALC reflects the "western" scientific tradition which gave birth to the RASC. Given the Society's origins, and the long trajectory of the intellectual commitments and approach stemming from them, this is the natural place to commence the project. The hope is that as the

schedule. The search continues a new assistant editor. The 2024 *Night Sky Almanac*, published in cooperation with Firefly Books, was produced on schedule and has sold well.

The *Observer's Calendar* continues to be a popular publication, and Editor Chris Beckett has recruited a number of volunteers to help gather data and select images for the calendar.

The Editorial Board is moving toward publication of a biography of legendary Canadian astronomer Dr. Helen Sawyer Hogg written by Dr. Maria Cahill.

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

project develops it will be able to include the various ethnoastronomical traditions present in Canada today, as well as in the past.

#### Acquisitions

Acquisitions during the period of this report include the gift from Dr. Michael Attas of F.W. Merchant & C.A. Chant, *The Ontario High School Physics* (Toronto: The Copp. Clark Company, Limited, n.d. [1911]), and F.W. Merchant & C.A. Chant, The Ontario High School Laboratory Manual in Physics, revised edition (Toronto: The Copp. Clark Company, Limited, n.d. [1924]). These were formerly in the Canadian Nuclear Heritage Museum in Deep River, ON, and we are grateful to Michael that these can continue their life as part of the Archives Rare Book Collection.

Dr. Nancy Covington has generously donated materials from her father A.E. Covington's archive. These are particularly valuable to us as Art Covington is considered the father of radio astronomy in Canada, and he was a RASC member throughout his professional life, and into retirement. These documents include correspondence with Grote Reber, a photograph by Reber of the Goth Hill installation from 1949, printouts of Algonquin Radio Observatory observations in the media used to send them south on the rail lines in the 1960s, and an example of Don MacRae's visual humour. We are grateful to Martha Jarrell for transporting the materials from Halifax.

#### Publications

J. Randy Attwood, "Editorial" [solar eclipses]", *RASC Observer's Handbook 2024, ed.* James Edgar (Toronto: RASC, 2023), p. 9

Chris Beckett & Randall Rosenfeld, "Orion", *RASC Observer's Handbook 2024, ed.* James Edgar (Toronto: RASC, 2023), pp. 336–337

R. Peter Broughton, "Charles Smallwood, a Canadian Amateur Astronomer of the Mid-19th

Century (Part 1)", JRASC 117, 6 (2023 December), 235–242

Chris Gainor, "The Canadian Astronomy Data Centre: Canadian Astronomy and the Beginnings of Big Data", *JRASC* 117, 1 (2023 February), 9–19

Clark Muir, "A Personal Reflection on Totality", *JRASC* 117, 5 (2023 October), 189–191

R.A. Rosenfeld, "A Complementary Mode of Doing Science, a Complementary Mode of Doing History— Restaging Astronomical Experiments, Part One", *JRASC* 117, 1 (2023 February), 33–36

R.A. Rosenfeld, "A Complementary Mode of Doing Science, a Complementary Mode of Doing History— Restaging Astronomical Experiments, Part Two", *JRASC* 117, 3 (2023 June), 107, 114–120

R.A. Rosenfeld, "Comet 109P/Swift-Tuttle and a Lost Technique for Astrosketching", *JRASC* 117, 4 (2023 August), 156–159

R.A. Rosenfeld, "The Astronomical Landscape of Canada (ALC)", *JRASC* 117, 5 (2023 October), 216–221

#### Honours

R. Peter Broughton, FRASC, won the 2023 Osterbrock Book Prize, for his Northern Star: J.S. Plaskett (Toronto–Buffalo–London: University of Toronto Press, 2018). This is one of the most



I&D consists of the following RASC Members

- Roland Dechesne
- · Vikki Zsohar
- Judy Sterner
- Simon Poole
- Bill Weir
- Hayley Miller
- Paul Heath
- Aldo Van Eyk
- Katrina Ince-Lum
- Gavin Campbell
- Marina Miller
- · Charles Ennis (Chair)
- · Jenna Hinds; ex officio (Executive Director)

#### Formation of Committee

The new Inclusivity and Diversity Committee was founded in 2018.

#### Terms of Reference

The Inclusivity & Diversity Committee's mandate is to provide equality and fairness to all and not provide less favourable facilities or treatment on the grounds of age, disability, gender, gender reassignment, marriage and civil partnership, pregnancy and



prestigious awards for a significant contribution to the history of astronomy.

Media release: <u>https://aas.org/posts/news/2022/09/</u> r-peter-broughton-receives-2023-osterbrock-bookprize

Citation: <u>https://had.aas.org/awards\_and\_prizes/</u>osterbrock\_book\_prize/2023

maternity, race, ethnic origin, colour, nationality, national origin, religion or belief, or sex and sexual orientation. We are opposed to all forms of unlawful and unfair discrimination.

#### Accountability

The committee is accountable to the Board. The committee will supply copies of its plans, minutes, reports, and other documents to the Board upon request. The committee will provide an annual report to the National Council.

#### Authority

The committee has the authority to:

- encourage the growth of diversity within the Society;
- educate members and Centres regarding issues involving minorities;
- represent the interests of minorities to the Board and the membership of the Society;
- act as a resource for information on minorities to Society members; and
- act as advocates to represent members of minorities and assist in mediation.

#### Summary

Our Committee did not spend any money this year due to the financial state of the Society. This did not mean that we did not get things done.

The World Asterisms Project is coming up to its third anniversary and is very active. Total asterisms listed now 13,398 including 454 names of the Milky Way and 2,655 telescopic asterisms. 270 asterisms on the list have not yet been positively located in the sky. Total sky cultures examined: 578. Names listed for the Sun, Moon, and planets: 1,618 so far. That's a grand total of 15,016. We've had considerable success helping Dr. Shandin Pete at UBC recover Salish sky lore. In partnership with the Sunshine Coast Centre, the I & D committee has helped young amateur astronomers in Uganda set up the Uganda Astronomical Society, supplying them with telescopes, information, and support. This has been funded by community donations.

The Committee is currently seeking grants to fund translation of RASC publications into French and other languages.

Charles Ennis, I & D Chair

# LIGHT POLLUTION ABATEMENT COMMITTEE

#### **Committee Membership**

<b>Chair:</b> Bob King	Calgary
Peter Brackett	Calgary
Roland Dechesne	Calgary
Victoria Kramkowski	Toronto
Jenna Hinds, <i>ex</i> officio	National

#### **Board Liaison:**

Brendon Roy Thunder Bay

#### Discussion

During 2023, the National Light Pollution Abatement Committee (NLPAC) achieved two significant events, co-hosting the international 8th Artificial Light at Night conference and the announcement of our third Nocturnal Preserve. The committee also saw a change in membership and National Office support: Lauren Knowles, Environmental Outreach Coordinator, left the RASC in February and due to financial constraints, it was decided not to fill the position for at least one year. Victoria Kramkowski took a temporary leave of absence and Andrea Girones left the committee. Specific achievements in 2023 include:

- 1. Directional Priority: maintain extensive resources on LPA initiatives:
  - A. Public outreach and education
    - I. Roland Dechesne led a session at the 2022 General Assembly about Talking with Your Neighbour About Their Bad Lighting.

- II. Promoted dark skies through a social media campaign through X with 6160 followers, and Facebook with 1211 followers.
- III. Presented 'The Impacts of Light Pollution on Birds' to Birds Calgary and to the City of Calgary BiodiverCity Committee.
- 2. Directional Priority: liaison with Dark Sky international (formerly IDA) and other LPA groups:
  - A. Participate in select conferences:
    - Organised and co-hosted the 8th Artificial Light at Night (ALAN) conference with the University of Calgary, Aug 10-13. The ALAN conference was attended by 156 researchers, government officials, industry specialists, citizen scientists and a few LPA advocates from 28 countries on 5 continents. 65 papers and 54 posters were presented and discussed at in-person and virtual sessions.
    - II. The NLPAC is indirectly connected to and supporting the next Artificial Light at Night (ALAN) conference of ALAN researchers and select citizen scientists, scheduled for 2023 Aug 10-13.
- 3. Directional Priority: LPA Certificate of Merit programme
  - A. No certificates issued.
- 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:
  - The Johns Family Nature Conservancy Ι. (JFNC) Regional Park Nocturnal Preserve, near Kelowna, BC, was publicly announced 2023 May 3. Official statements of support were provided by the Chair of and staff from the Regional District of Central Okanagan, the President of the Central Okanagan Land Trust, representatives from Sylix Okanagan Nation, and the Chair of the LPAC. About 50 local residents and the media attended the ceremony. After the ceremony, attendees enjoyed some telescopic viewing with members of Okanagan Centre and JFNC staff led groups on nocturnal hikes during which the park, conservation efforts, and the effects of light on local flora and fauna were discussed.
  - II. McDonald Park Dark-Sky Preserve near Abbottsford, BC, was decertified and is

## **NEXTGEN COMMITTEE**

#### ABOUT

The NextGen Committee's purpose is to address the needs of current and future RASC youth members (meaning members between 13 and 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.

#### **COMMITTEE MEMBERS**

Chair: Ivan Tockovski.

*Members*: Disha Patel, Dennis Lu, Keegan Oickle. *Board Liaison*: Betty Robinson.

#### **OBJECTIVES, PROJECTS, AND ACTIVITIES**

In 2023, the NextGen 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, planning the youth-oriented sessions in the General Assembly (GA), building its Discord community server, and planning the recruitment of new members.

i. 2023 GA Sessions. The NextGen Committee organized and led four of the sessions in the no longer an RASC dark-sky site. Since its certification in 2000, its sky has brightened to about 17 mag/arcssec<sup>2</sup> due to development in the area.

- III. Enquiries from three prospective sites were received and formal applications are anticipated.
- B. Create a library of LPA resources
  - I. Talking With Your Neighbour About Their Bad Lighting.
  - II. Lighting and Nighttime Crime: A Primer
  - III. Light Emitting Diodes (LEDs) in the Outdoors, not as environmentally friendly as you might think.

#### Expenditures

The LPAC budget was reduced to nil for 2023, but there was one obligatory item:

 NC Regional Park Nocturnal Preserve certificates printing: \$52.50

2023 GA, including the Coding the Cosmos computational workshop, the Connecting Youth in Astronomy presentation, the Life in the Universe presentation examining implications of the rarity of life on other worlds, and the The Night is a Starry Dome presentation about the importance of using resources such as planetariums in the education of astronomy. Taking into consideration the lower attendance in its 2022 sessions, the NextGen Committee advocated for and supported the decision to broaden the audience scope of sessions to the more general population, while including more youth member hosts. The NextGen Committee saw a greater turnout on its sessions compared to 2022 with, on average, about 30 members per session.

- ii. Meetings. The NextGen Committee held eight general meetings throughout 2023.
- iii. NextGen Scholarship Program. The NextGen Committee did not offer the scholarship this year based on budgetary limitations, with the focus to improve the structure and offering of the scholarship fund to attract more youth members to apply in the future. The NextGen Committee collaborated on ideas to implement in the new program with the goal to become more selfsustaining through merchandise.
- iv. Passport to the Universe. This year, the NextGen

50

Committee reviewed the accumulated progress on the Passport to the Universe, including all materials and designs, and is coordinating to implement its draft completion this year.

#### CHALLENGES IN 2023

The NextGen Committee experienced a continued decrease in committee membership through 2023. This created difficulty in maintaining consistent meetings resulting in limited progress on its larger projects such as the Passport to the Universe and the designing of the Discord community. The NextGen Committee is reflecting on the opportunity to obtain new members and to develop a stronger membership base as one of its main goals for 2024. The NextGen Committee is also recognizing the continued need to increase its reach across the society to ensure it is connecting and addressing the needs of youth members.

#### FOCUS FOR 2024

It is imperative that recruiting new youth members is among the NextGen Committee's main goals for

## **OBSERVING COMMITTEE**

#### Summary

The calendar year 2023 is marked by the passing of Blake Nancarrow, leaving a legacy of information concerning astronomy that will pass on to the next generation.

He left behind his total dedication, knowledge, organized records and important information that he compiled for the benefit of all RASC members and to the public.

He left us his footsteps to follow, and it is not a simple task.

I give my personal thanks to everyone on the observing committee who with no hesitation, helped with the continuance of his work.

The previous year kept us busy as we processed 24 certificates and issued 18 certificates.

The updated committee is healthy and we are looking for an Observing Chair during elections.

#### **Observing Programs**

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

2024. The NextGen Committee has also set the ambitious goal of extending a call for astronomy art submissions from youth members in the society to include in the Passport to the Universe design, as well as to release a draft of the Passport to the Universe for approval by the end of 2024. With a larger committee membership base, it is expected that "Youth Game Nights", and the Discord community will be able to be sufficiently maintained by the NextGen Committee in the long run, following their release. The Discord community will create a spot for communication and collaboration to connect members and increase reach. The NextGen Committee also seeks to implement its finalized ideas for the revamped scholarship program and unveil it to the community by the end of 2024. The NextGen Committee is looking to create several new merchandise lines, suggest improvements for youth membership benefits, increase its social media presence, and engage in educational promotions of the Total Solar Eclipse occurring in April 2024. 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.

- 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. At the close of 2022, a total of 855 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

51

submissions but logging/sketching must be done from an eyepiece.

#### **Certificate Recipients**

We approved the following 16 applications in 2023.

- EU, Kim Hay, Kingston
- EU, Bob Ryder, member of the public
- EU, François Boucher, National
- EU, Emma Duke, St. John's
- EM-B, Gregory Bounds, Edmonton
- EM-T, Matteo Statti, Mississauga
- EM-T, Chris Vaughan, Toronto
- EM-T, Andrew Godefroy, Kingston
- EM-T, Bernard Venasse, National
- M, Pat Seilis, Prince George
- M, Susan Gagnon, Kingston
- M, Gord Ridout, Toronto
- DS, Richard Weatherston, Toronto
- DS, Murray Hunt, Edmonton
- DS, Mark Force, Okanagan
- IWLOP, Jill Sinkwich, Victoria

#### The Team

The Observing Committee ending the year 2023 was comprised of Emma MacPhee (New Brunswick), Dale Armstrong (London), Chris Beckett (National, Regina), Dr Randy Boddam (Belleville), Roger Hill (Hamilton, Kingston), Bruce McCurdy (Edmonton), Murray Paulson (Edmonton), Karol Socander (Kitchener-Waterloo), Jo Vandendool (Mississauga), and Bill Weir (Victoria).

#### Promotion

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



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

YouTube. See the RASCANADA YouTube channel for all their videos. The link here specifically connects to the playlist for the <u>Messier Minutes</u> delivered by Chris Vaughan and Samanatha 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.

observing@rasc.ca

#### https://rasc.ca/certificate-programs

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

#### 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 2022 with much of the activity redefining 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 and Executive Director. The RASC President (Charles Ennis / Michael Watson), RASC Executive Director (Phil Groff /Randy Attwood (interim) / Jenna Hinds) and other Board members have regularly attended meetings to provide guidance when needed and to update on Board activities for which input was requested.

# Meetings

The National Council frequency of meeting was increased from four to six times in 2023 – February 5, April 2, June 4, September 24, November 5, and December 3. Each meeting averaged 25 of the 41 members representing an average of 21 of the 30 Centres. Board members were also strongly encouraged to attend; an average of 7 of the 9 members attended each meeting. Beginning this year, National Council meetings have 40 minutes allotted for Board updates (financial, special projects, staffing, etc.).

The COVID pandemic meant Centres utilized an online platform for Member and Executive meetings. Some provided hybrid meetings while others required advice as to how to implement the hybrid option; consequently, Jim Fairles (Kitchener-Waterloo) developed a report on hybrid meetings and shared it with members.

Two NC meetings were considered special meetings at which Centre Presidents were invited as guests to

hear the RASC financial status update of the RASC Board of Directors and the plan of action, and to provide the opportunity for positive feedback to the Board regarding the plan of action presented.

- February 5 with 17 Centre Presidents and 29 of 41 NC members attending. Charles Mountain (accountant), Catherine Carr (RASC Treasurer), Charles Ennis (President) and Phil Groff (ED) provided an overview of the finances then addressed concerns raised. The Board provided recommendations regarding SkyNews, the robotic telescope and simplification of the member fee structure.
- June 4 with 11 Centre Presidents and 24 of 41 NC members attending. Charles Ennis (President), Catherine Carr (RASC Treasurer), Michael Watson (Vice-President) and Jenna Hinds (ED) provided an update on progress made since February, then addressed concerns raised.

# Officers & Centre Representatives to the National Council

As Chair, I thank my fellow officers, Jim Fairles and Eric Klaszus, for their continued support and dedication to ensure the National Council business goes forward. 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.

Chair Vice-Chair Council Recorder	Judy Black, Halifax Centre (re-elected; June 4 by acclamation) Jim Fairles, Kitchener-Waterloo Centre (re-elected; June 4 by acclamation) Eric Klaszus, Calgary Centre (re-elected; June 4 by acclamation)		
Belleville	Debi Butler	Halifax	Judy Black
	Don Town	Hamilton	Victor Abraham
Calgary	Eric Klaszus		(Abigail Hughes)
	Adriana Stone	Kingston	John Hurley
	Garnet Tozer	Kitchener-Waterloo	Ellen Papenburg
	(Steve Donaldson)		(Jim Goetz)
	(Robyn Foret)		(Jim Fairles)
Edmonton	Jon Stolte	London	Peter Jedicke
	(Sukrit Ahluwalia)		(Mark Tovey)
Fraser Valley	Greg Sebulsky		

Mississauga Randy Attwood Saskatoon Joelle Sheard-Patrick (Swapna Shrivastava) (Les Dickson) CF de Montréal Patrice Scattolin (Brent Burlingham) Montréal Frank Tomaras Sudbury Alan Ward Sunshine Coast (Morrie Portnoff) **Charles Ennis** New Brunswick François Therriault (Bill Haskett) (June MacDonald) St. John's Marcellus Redmond Thunder Bay Andreas Buccholz Niagara **Rick Stasiak** Toronto Lucy Winnicki (Pauline Horton) Ralph Chou Okanagan **Jim Failes** Ottawa Stephen Nourse Vancouver Nolan Smith Jean-Sebastian Gaudet Victoria Bill Weir Nathan Hellner-Mestleman (Mick Wilson) (Jonathan Falbo) Windsor Tom Sobocan Prince George Rob Woods Winnipeg Judy Anderson Regina Mark Meadows Bryan Stach (Peter Hagar) (Dennis Lyons) Sarnia Marty Cogswell Yukon Dyson Hale (Patrick Egan)

# **Terms of Reference**

Beginning in April, National Council and their Presidents were provided opportunities to suggest change to the *RASC Policy C11: National Council Terms of Reference*. In November, they were provided documents regarding redevelopment of the Policy: (1) suggested additions/deletions and the rationale for the changes developed by the NC Officers in August, and (2) outcome of discussion by the Quorum Task Team regarding quorum and

# National Council Welcome Package

A task team was formed to provide the list of topics to be included in the welcome package for newcomers to the National Council; it was suggested that even the longer term members could benefit from information about the NC and their role within it. Relevant documentation such as NC and Board minutes and reports and where to find them

# are part of the package. Considerable thanks to Tom

expertise and volunteer time.

Sobocan (Windsor) and newcomers Victor Abraham (Hamilton) and Ellen Papenburg (Kitchener-Waterloo) for their time developing the content list. The document will be completed with implementation to be realized in mid-2024.

membership. The draft Policy was approved at the

December 3, 2023, NC meeting and was forwarded

to the Board for their approval in early 2024. Many

the Quorum Task Team (Randy Attwood, Kim Hay,

Dennis Lyons, Don Town, Michael Watson) for their

thanks to my fellow Officers (Jim Fairles, Eric

Klaszus) and to the members who joined us on

# **Relationship with the RASC Board of Directors**

The three Pillars of Trust (collaboration, consultation, transparency) were further strengthened this year. The lines of communication and *collaboration* between the Board and the National Council continued to improve. Financial statements were shared with NC members who then shared with their Centres, ensuring there was *transparency* in financial

activity and budgeting. As promised in April, the Board *consulted* the NC regarding the RASC budget prior to final Board approval. President Michael Watson, E.D. Jenna Hinds and Board members apprised the NC of the work accomplished at each meeting.

# **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 further edits and improvements to the Centres Operations Manual (COM). The NC approved the document; however, subsequent edits have postponed the date of posting to the RASC site to early 2024. The EPO Committee also kept the National Council apprised of the NOVA (New Observers to Visual Astronomy) program development.

The Editorial Board Chair, Chris Gainor, was consulted when NC members questioned the

# Priorities for 2024

Priorities for 2024 were determined at the September 2023 meeting.

- Ongoing: Consultation with RASC Committees and with the RASC Board of Directors.
- Development of the NC Welcome Package and an onboarding process for NC members.
- Address improvement to communication mechanisms within the National Council

## Summary

Needless to say, 2023 was an interesting year, one of strengthening the three Pillars of Trust. The successes achieved were the result of preparation, hard work by all the RASC teams (Board of Directors, the NC, Committees, Centres), and learning from our history. We identified our weaknesses, determined the roads to take to change those weaknesses into strengths, and created paths to ensure we avoid repeating past errors. 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, those that were successful and, yes, even those deemed failures. The seemingly bitter trials were blessings

potential of having both the Observer's Handbook and the RASC Observer's Calendar produced in paper and digital formats. Consequent to this request, the Editorial Board is considering which RASC publications could be produced in both formats and remain viable in both.

The Eclipse Task Force through its Chair, Randy Attwood, kept the NC apprised of its activities and its relationship to other organizations also making plans for the April 8, 2024, total solar eclipse. He provided updates regarding plans for access to eclipse viewers or glasses and coordination of RASC Centre events along the lines of totality.

- Implementation of the NC welcome package and a resource/education online package for all NC members.
- Define the term "membership services" and determine the true costs of providing such services.
- Other business would be prioritized as it arises.

in disguise, providing opportunities to understand and to learn from our membership from coast to coast to coast. 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 remind all our fellow RASC members to look up. The skies, beginning at your feet, are open to explore our Universe.

Respectfully submitted, Judv Black Chair, National Council

# **Annual Reports Of Centres**

# Belleville

The Belleville Centre celebrated it's 20th year with the RASC in 2023. Although small, with only 22 members, we were able to continue our night time and solar outreach programs at Presqu'ile Provincial Park. In addition to feeding the mosquitos throughout the summer at the park, our Centre hosted the Fall-N-Stars Star Party in September. We began planning for the Total Solar Eclipse which passes through our region on April 8, 2024.

The Belleville Centre is supporting a Dark Sky Designation for the south shore of Prince Edward County as part of the **S**outh **S**hore **J**oint Initiative (see: <u>www.ssji.ca</u>). Ambient nighttime light levels are being recorded in preparation of the submission.





2023 Fall-N-Stars – Joint Belleville & Kingston Star Party – Sept. 15-17, 2023

#### **Centre Executive**

Co-Presidents	(
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Vice President	F
National Council Rep	[
Secretary	L
Treasurer	(
Media Coordinator	S
Database Manager	F

Greg Lisk Don Town Randy Boddam Debi Butler Joanne Burns Garth Penn Steven Burr Robert Mindenhall Website: Email: Addresses: rascbelleville.ca rascbelleville@gmail.com 11 Robert Dr., Trenton ON 119 Trillium Rd., Belleville ON

# Calgary

Secretary's Annual Report 2023

Centre:	Calgary Centre		
Submitted by:	Robyn Foret, President		
	Derek Euale, Secretary		
Established:	1958		
Membership:	583 as of December 14, 2023		
Assets:	Meetings held at the Calgary Central Library		
	Wilson Coulee Observatory – just north of Okotoks- Multiple Scopes on site		
	Eccles Ranch Observatory- Conservation Easement- yearly Star Party 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		
	Community Associations, Municipal Libraries, Special Interest groups		
Outreach:	10 General Meetings open to the public		
	Annual Star nights, Star-B-Q and Alberta Star Party		
	Events, i.e. Outdoor Adventure Travel show, Earth Science for Society, etc.		
	On-Line Kids Program		
	Pop-ups		
Special Projects:	RALPH KLEIN PARK OBSERVATORY budgeted to cost \$550,000.00.		
	The Centre has secured \$400,000 to date; \$125K in Casino Fundraising, \$125K from a Provincial Grant, \$125K from the Calgary Foundation, and \$25K from the Clearwater Charitable Foundation. Outstanding grant applications for \$75K and \$150K are expected to meet and/or exceed the fundraising target.		
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

#### Centre Executive- through November 16, 2023

**Centre Executive- Current (2024)** 

Name	Role(s)	Name	Role(s)
Phil Langill	Honorary President	Phil Langill	Honorary President
Simon Poole	President	Robyn Foret	President
Steve Donaldson	1st Vice Pres	Steve Donaldson	1st Vice Pres
Heather Laird	2nd Vice Pres	Heather Laird	2nd Vice Pres
Russ Dueck	Treasurer	Nisha Valckx	Treasurer
Bruce Foster	Secretary	Derek Euale	Secretary
Roland Dechesne	Past President	Simon Poole	Past President
Council		Council	
Phil Tracey	Councilor	Phil Tracey	Councilor
Andrew Bennett	Councilor	Andrew Bennett	Councilor
Larry McNish	Councilor	Adriana Stone	Councilor
Fred Ritter	Councilor	Patricia Jeffery	Councilor
Adriana Stone	Councilor	Myrna Fleury	Councilor
Patricia Jeffery	Councilor	Daniel Boychuk	Councilor
Myrna Fleury	Councilor	Russ Dueck	Councilor
Daniel Boychuk	Councilor	Shabana Ahmad	Councilor
National Reps		National Reps	
Steve Donaldson	National Council Rep	Eric Klaszu	National Council Rep - Ntl
Eric Klaszus	National Council Rep - Ntl		Secretary
	Secretary	Adriana Stone	National Councip Rep
Robyn Foret	National Council Rep	Garnet Tozer	National Council Rep

#### Centre Activity Report Nov 2022 - Nov 2023

2023 was a return to normal for the Centre as COVID took a back seat and social gatherings reconvened.

General meetings continued in a hybrid format with attendees participating in-person at the Calgary Central Public Library (CPL) and virtual attendees participating via Webex. As always, the staff at the CPL offered just the right amount of tech support to ensure that in-person and on-line participants had a positive experience.

Public Outreach saw a great come-back 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. New for 2023 were Andrew Bennett's library programs, Eric Klaszus' POP-up astronomy and a year end capper with Roland Dechesne organizing a New Years Eve event in Diamond Valley.

Calgary Public Library programs continue with a focus on Online Astronomy for Kids, targeting 6 to 12 year olds.

In-reach continues with the David Brown's PARSEC group of citizen scientists, with Jack Milliken's Observer Group and NOVA programs, and the everpopular Telescopes for Members program run by George Grant and Daniel Boychuk where members can rent from a well-stocked pool of Centre-owned telescopes. New for 2023 is a WCO (Wilson Coulee Observatory) users group. When skies clear and enthusiasts head to the WCO, notice to this group spurs last-minute change of plans ending in an unexpected night of observing. This has expanded to encompass ad-hoc trips to popular nearby dark sky sites too.

A final aspect of in-reach relates to the Centre's Social Committee Chaired by Heather Laird. This Committee offers up opportunities for members to connect outside of the volunteer activities and formal Centre events as part of a welcoming, inclusive and diverse Centre.

#### Membership

Mid December 2023 saw the Centre membership @ 583 strong.

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

#### Parsec

Our relatively new Calgary PARSEC Group (Promoting Amateur Research and Scientific Exploration of the Cosmos ) organized by David Brown continues with high level technical online presentations. Significant occultation work has taken place too with Centre members making solid contributions to small body orbital calculations.

The Calgary Centre's Global Meteor Cameras continue to submit data to The Global Meteor Network (GMN) and to grow. In 2023 two cameras were added to the GMN both being sponsored by members of the Calgary Centre. One camera was installed near Medicine Hat and the other close to Strathmore. The addition of these cameras results in significant coverage over Southern Alberta.

The P.A.R.S.E.C. group had three talks in 2023.

 Radiation Assessment and Management for Space Tourism and Very High Altitude Aviation, by Chris Rees. January 2023

- New Research on the Age of Mars Magnetic Fields, by Eileen Hall-McKim. March 2023
- Our Holographic Universe: From Cosmic Structures to Information Theory, by Mark Schweitzer April 2023.

Individual members of P.A.R.S.E.C. have actively been gathering data in areas of asteroid occultation, variable stars, and exoplanet transits.

There was a public outreach talk at the Alberta Star Party 2023 on variable stars given by David Brown. Bill Yeung's outreach was an article on occultations that was printed in the Calgary Centre's newsletter the StarSeeker.

In November P.A.R.S.E.C. had an in-person meeting at the Wilson Coluee Observatory where current and future projects were discussed.

#### **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 are held on the third Thursday of the month in-person at the Calgary Public Library and online. 2023 featured the following speakers and topics:

General Meeting Speakers and Topic		
Date	Speaker(s)-Topic	
19-Jan-23	Kyle Brittain - Extreme Weather of Western Canada	
16-Feb-23	Chantelle Duboise CSA - Canadian Lunar Robotics	
16-Mar-23	Nicole Mortillaro - A Journey Among The Stars: Bringing Astronomy to the Public	
20-Apr-23	Members' Showcase	
18-May-23	Kimberly & Laurie Sibbald - Farming Photons: Going Dark(er) & Seeking Shelter	
15-Jun-23	Dr. Ben Tutolo - Investigating the Habitability of Ancient Mars	
15-Sep-23	Don Hladiuk & Joel Powell - Lunar Exploration - Past, Present and Future	
19-Oct-23	<b>Dr. Loic Albert</b> - How is the Webb Telescope Changing our Understanding of Exoplanets	
16-Nov-23	Annual General Meeting	
21-Dec-23	Roland Dechesne - The Astronomy & Cultural Significance of the Longest Night	

#### Marketing

The Marketing Committee, headed by Myrna Fleury has undertaken the important role of Centre branding, messaging and communications with a number of accomplishments in 2023, such as:

- Arranged for media coverage of observatory funding award from province of Alberta, placed high priority on continuing professional media relationships for RASC marketing.
- Created new display panel signage for use at large trade shows & small events at libraries, schools; special events (Teacher's Convention).
   Plan is to focus on updating material & displays in 2024 for Youth & Education.
- Hired a professional photographer to create a portfolio of photos that can be used by RASC Calgary council for signage, displays, etc. by many committees.
- Worked with membership to create a survey that can identify members wants & needs and find experienced volunteers in specific areas – website, printing, graphic design, advertising, promotion, etc.
- Displayed a marketing table with merchandise sales and/or educational material at numerous events – speaker series, Guides & Scouts, Outdoor Adventure & Travel Show, community centres, Bow Habitat Station, Telus Spark events including eclipse, other partners like U of C Rothney space nights & Ambrose University telescope & talk events.
- Created an ad hoc working group with Outreach & Education committee to advocate for inclusion and diversity in RASC Calgary, and to focus on attracting youth, families, and women to astronomy.
- Investigated fundraising grants with plans to apply in 2024 for repair and/or replacement of StarLab portable planetarium before it is beyond repair.
- Made use of available resources like social media & newsletter to communicate information to members since we have a limited budget and few volunteers.
- Continue to reach out to members who've expressed interest in volunteering to find potential committee members with experience in marketing so we can implement other plans.
- Increased awareness of council members of our goal – everyone should speak with "one voice" in all communications to be a professional wellrun organization that can attract new members (move away from spending funds on exclusive events poorly attended by membership such as WCO bbq, banquet).

Assist all members with marketing needs given enough time and with limited assistance on committee.

#### Communication

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

#### In Memoriam

#### Dr. Nicholas (Nic) David

Nic died peacefully in his home with his wife, Judy Sterner, by his side on Wednesday, January 11, 2023. Nic was a very active member and Speaker for the Calgary Centre since 2008, bringing his unique expertise (Professor Emeritus in the Dept of Anthropology and Archaeology at the University of Calgary) together with his new-found passion for astronomy in a manner both unexpected and unmatched.

#### https://mhfh.com/tribute/details/39035/Dr-Nicholas-David/obituary.html

#### **Phil Johnson**

Phil Johnson, beloved husband of Joan Johnson of Calgary, passed away by her side on September 4, 2023 at the age of 84 years. In the 20 years following his retirement, Phil Joined the Royal Astronomical Society of Canada (RASC) Calgary chapter. He attended meetings, hosted telescope making workshops at home, built camera tracking platforms to compensate for the rotation of the earth while photographing stars, and travelled to Mexico, Australia and Idaho to chase and photograph total solar eclipses. Many Calgary Centre Members have "Uncle Phil" telescopes that they built under his guidance.

#### https://calgaryherald.remembering.ca/obituary/ philip-w-johnson-1088845203/\_

#### Ken Allen

It is with profound sadness that our family announces the death of Kenneth "Ken" Allen on Friday, November 24th, 2023, at the age of 68. Ken loved the outdoors, fishing and birdwatching, however, his true passion lay in the cosmos, showcased by his long-term membership in the Royal Astronomical Society of Canada for 28 years. Ken's love for astronomy illuminated his life, leaving behind a legacy of curiosity and wonder that will forever linger in the stars.

https://www.choicememorial.com/memorials/ kenneth-allen/5331726/

## Edmonton

#### Who We Are

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

285 members (report generated as at Dec 31, 2023)

#### Assets

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

#### 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**

Subscription to a volunteer management system software (Volgistics Volunteer Logistics)

#### Highlights

- Sept. 16, 2023: Official opening of the Black Nugget Lake Observatory
- Sept. 12-17, 2023: Northern Prairie Star Party (Report available in Nov 2023 Stardust, pages 14-17)
- Monthly events: regular meetings; What's Up Over Edmonton; Observers' meetings; Astro

#### **Centre Executive**

Honorary President President Past President Vice President Treasurer General Secretary National Council Rep Public Education Director Fundraising Coordinator Councillor

Councillor

Councillor

Councillor

Councillor

Internal Communications Officer

Observing Group Director Membership Secretary

New Member Advisor

Sir Douglas Hube Jay Lavender Tom Owen Clayton Knoll Jeff Wyton Daisy Alferez Jon Stolte Geoff Robertson Luca Vanzella James McNiece Mike Szelewicki John Woolley Alister Ling Chris Meerveld Mihcael Ward Jon Stolte Sharon Morsink Murray Paulson



Café

 Ongoing work on Smokey Lake and Métis Crossing dark sky preserve designations

#### Challenges

- Communicating to membership / answering questions regarding the National RASC state of affairs
- Minor technical glitches encountered during hybrid meetings

#### Looking forward - 2024/beyond

- Offering Membership Fee Benefit Program
- Offering Astroimaging workshops
- A fully operational BNLO (for members and the public)



2023 Northern Prairie Star Party



2023 Jasper Dark Sky Festival

# 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 159 down from 171 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, a warm room, and storage room/toilet. Members can access the Thurlow achromatic doublet binoculars (named after

#### Centre Executive, 2023

President	John Nangreaves
Vice-President	Patrick Kelly
Treasurer	David Lane / Gregg Dill
Secretary	Peter Hurley
Board member	Judy Black
Board member	Matthew Dyer
Board member	David Hoskin
Board member	Tony McGrath
Board member	Kathy Walker

Dr. Bill Thurlow) and its parallelogram mount. No equipment rental.

Kejimkujik 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

Dark-Sky Weekend (DSW) held the nights of August 11-13 at Kejimkujik National Park was a highlight that had 12 volunteers from RASC Halifax Centre engage with 952 campers of all ages attending various daytime and evening events.

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

- display focusing on the gas giants and the JUICE mission to Jupiter's largest moons that engaged 50 members, and an evening sharing views of the gibbous Moon with 50 more.
- As part of Project Luna, talked about the Moon to nine 7-11-year-olds.
- display and focused on the upcoming Perseid shower, engaging 60 members of the public.
- Instruction on how to use binoculars and telescopes to 13 7-11-year-olds plus 4 staff.

Members residing in New Jersey also held two events for 62 members of the public. Thirteen additional outreach events conducted by RASC Halifax members engaged with 400 members of the public, through both in-person and on-line presentations. In some cases, electronically assisted astronomy was used to mitigate health concerns.

#### **Special Projects**

RASC Halifax Centre continues to invest in their observatory at St. Croix. This year the propane fired heater was retired and replaced by an electric baseboard convector. Electrical power was also extended to the storage building. Members participated in the general maintenance of the buildings and grounds. Further improvements to the site are expected in 2024.

#### Highlights

Our Centre annually publishes 5 editions of our newsletter, Nova Notes, thanks to Editor Lisa Ann Fanning and Copy Editor John McPhee.

Ten Board of Directors meetings and one Special Meeting by Requisition were held using Zoom. Eight Members' Meetings were held using Zoom exclusively. Volunteers Jerry Black, David Lane, Peter Hurley and Bob Russell managed the technology for 2 hybrid meetings, including our AGM held December 2.

A special BBQ was held at SCO July 4 when two of our New Jersey members visited.

#### Challenges

COVID-related restrictions continue to influence our Centre's activities. 2023 was also the summer of fires and floods. A consequence of the latter in August, damage to the penstock associated with the dam located upstream temporarily removed access to SCO until repairs were made in late fall. What would have been our 36th Nova East Star Party in August was also cancelled due to flooding washing out the MacKay Road leading to the park and its entrance. Alternate arrangements could not be made at such short notice.

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. In addition, several Board members also had to deal with challenges in their personal lives.

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

#### Looking forward - 2024/beyond

Updates to our Centre and Nova East Star Party websites are in progress. Further changes at our observatory will be planned as the year progresses. Hopefully our annual barbecue won't again be dampened by the weather. We hope the COVID resurgence will no longer deter members from attending meetings nor the public from participating in outreach events. Most importantly, may there be many more cloudless and smokeless skies in 2024 than in 2023!



Flood damage near SCO

## Hamilton

#### About

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

157 (as of Dec 2023)

#### Assets

The club maintains and operates an observatory in Flamborough, Ontario which was established in 1974. It has a number 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 the Waterdown Legion 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.

The center also received two large telescope donations this year. One being a Celestron NexStar Evolution 6" SCT, and the other a custom made 36" Dobsonian telescope.

#### 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, and the club has been running a GoFundMe campaign to raise funds to rebuild the observatory. Repairs will begin in April 2024.

#### **Centre Executive**

President	Andy Blanchard
Vice President / Outreach Director	Victor Abraham
Treasurer / Librarian	Jane Tumbin
Membership	Jeff Parsons
Secretary	Erin Vassair
Maintenance Director	Bruce Cornelius
Social Media Co-ordinator	Debbie Wang
Webmaster	John Devonshire
Council member	Dan Copeland



#### Highlights

Providing multiple outreach sessions to the public.

#### Challenges

The vandalism of the observatory halted our Friday Night Sight's viewing sessions temporarily, however we managed to continue them, even without the use of our facilities and telescopes. Many members brought their own telescopes for public viewing usage.

#### Looking forward - 2024/beyond

We are looking forward to a fully operational observatory, and running our Friday Night Sight's observing sessions, beginning again in May. We also have a large event planned at CF Lime Ridge Mall in Hamilton, for the upcoming Total Solar Eclipse on April 8, 2024, and are expecting 1000 attendees.



#### **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

The Kingston Centre was established in 1961 and we are in our 62nd year. Our membership stands at 72 and we are in good financial health. We held 9 Regular hybrid meetings at Ellis Hall Room 226, Queen's University, on Zoom and livestreamed on YouTube for members and guests. On non-meeting weeks, we held Zoom socials, well attended by our members. On July 22nd, John and Peggy Hurley hosted a get-together and pot-luck BBQ for our members at their home. In August, one of these socials was held outdoors at Lake Ontario Park. In the Fall, we again met for dinner at local restaurants before our monthly meetings. Our member's chat list and Centre Library keep us connected and informed.

We held four Executive Meetings to discuss budgets, National Council concerns, programming, outreach, and our Centre equipment holdings.

#### **Outreach and Events**

We hosted a table at Science Rendezvous, May 13th, a family-friendly event with 1,500+ people attending and hosted by Queen's University. Our volunteers, Kim Hay, Kevin Kell, Rick Wagner, Susan Gagnon, Bruce Elliott, Laurie Graham, Devin Graham-Ancsin, and Elena Zanetti gave out solar viewers, age-appropriate astronomy games and information, and had fun interacting with the public. "A Night Under the Stars" at Elbow Lake on August 10th was well attended with over 30 people joining Rose-Marie Burke and Rick Wagner for a talk and telescope tour of the night sky. Rick Wagner and Mark Deslauriers joined Gary Boyle at an Ottawa Centre event at Newboro Locks on August 19th for a Parks Canada Learn to Camp weekend, offering a talk and telescope viewing for families attending. Fall'N'Stars, held jointly with the Belleville Centre at Johnson's RV Park in Prince Edward County, was well attended Sept. 23-25. When available, our volunteers assist Queen's University Observatory with their monthly meetings and observing sessions. This includes monthly Saturday night sessions as well as their daytime October 14th Partial Solar

Eclipse event. Cloud cover with breaks did not deter 100+ people from enjoying views of the event. Thank you to Susan Gagnon, Laurie Graham, John and Devin Graham-Ancsin, Kim Hay, and Kevin Kell for bringing their personal equipment and sharing their knowledge with the public.

#### Awards

In June, Susan Gagnon had her name added to the Messier Certificate plaque and Andrew Godefroy received his Explore the Moon certificate. Later in the summer, our President, Kim Hay, received her Explore the Universe Certificate and pin. Our Centre's Leo Enright Award in Astronomy was awarded March 31st to a student at Leahurst College Middle School at the Frontenac Lennox & Addington Science Fair. Bruce Elliott led the judging assisted by Graeme Hay and Andrew Godefroy.

The Sky This Month by Rick Wagner, David Levy Reads Poetry, National Council updates by John Hurley and our Member's Observing Reports are regular features of our monthly Regular Meetings. Guest speakers included:

January 11 – Scott Young, RASC Winnipeg Centre, Manitoba Museum. "DOME@HOME: Astronomy Talk Shows for Virtual Astronomy".

February 8 – Tim Trentadue and Joe Gilker, Dark Arts and Astrophotography, Lennox & Addington Dark Sky Viewing Area, "DSVA & Astrophotography".

March 8 – Dr. Laura Fissel, Asisstant Professor, Astronomy and Astrophysics, Queen's University. "Scope on a Rope: Stratospheric Balloon Astronomy".

April 12 – Dr. Kristine Larsen, Professor – Geological Sciences, Central Connecticut State University. "Women in Astronomy: Past, Present, and Future".

May 10 – Member's Night: Rick Wagner, "Clusters and HR Diagrams". Kevin Kell, "Virtual Tour of the

Lennox & Addington Dark Sky Viewing Area".

June 14 – We were fortunate to have Blake Nancarrow, RASC Toronto Centre, RASC National Observing Committee Chair, as a guest speaker, "Get Certified". He passed away in September and he will be missed.

September 13 – Member's Night. "What I Did This Past Summer." Roger Hill, "A New Pier for Seaway Observatory". Bruce Elliott, "What's Up in the Sky at Snug Harbour and Beyond!". Rick Wagner, "Python and the Jupyter Notebook". Malcolm Park with a Starfest presentation.

October 11 – Member's Night. "Passions and Projects." Stefan Jackson, "Jackson Observatory

## **Kitchener-Waterloo**

#### About

Year established: 1952

Membership: ~160 members

Assets: Small telescope library and some small investments

#### Partnerships:

- Tilker's Dark Sky Site, for club members in partnership with a local farmer
- Telescope Time with Kitchener and Waterloo
   Public Libraries
- Star Parties at Conestogo Lake Conservation Area

Outreach: over 55 events in 2023, with over 1500 participants

Special Projects: Lisa Lynn Bissett Memorial Observatory – remote observatory for members

#### Highlights

Kitchener-Waterloo Centre had a very good year in 2023. We moved to a hybrid meeting format for our monthly meetings, allowing people to participate in person or online over Zoom. We had some bumps in the road with technology issues and with initially offering unfiltered access to the public, but we seem to have found our stride. In-person attendance has improved with each passing month and we are getting close to the point where we may have to think about asking Wilfrid Laurier University to book us a larger space for our meetings.

The annual Astrophotography and Sketching Contest had an increased number of participants over last year. Our club continues to impress with the large amount of talent at astroimaging. This year, more people participated in the sketching section than in past years and we are encouraging more members to sketch their observations and join in this year. Build". Andrew Godefroy, "Isabel Williamson Lunar Observing Program".

November 8 – Annual General Meeting followed by our Regular meeting. Shelley Jackson on her Astrophotography journey, other member presentations.

December 13 – Social dinner planned with no meeting this month.

Looking forward to 2024 and clear skies.

Elena Zanetti Secretary

#### **Centre Executive**

President	Michael Wright
Vice Presidents	Stephen Holmes
	Jim Goetz
Treasurer	Jim Fairles
Secretary	Roseanna Rigo
National Council Rep	Ellen Papenburg
Webmaster	Karol Socander



Our Centre usually holds two annual star parties for members at a dark sky site in Camp Huron near Bayfield, Ontario. The star parties were held in early June and late September, although a young moon interfered a little with our September event. Both were well attended and very fun. We had mixed weather both weekends, but spirits were high even on nights we couldn't observe with lots of great discussion about equipment, observing experiences and other topics.

Outreach is an area of strength for the Kitchener-Waterloo Centre. We have been ramping up our outreach offerings now that the pandemic

66



abated, and our volunteers were able to host 54 separate free public events this year with over 1500 participants of all ages. We hosted several events in partnership with local organizations: four events in association with local public library branches, one event at a children's camp in Wellington county, two public star parties in association with the Conestogo Lake Conservation Area, and a Perseid Meteor Shower observing event in association with the University of Waterloo. Many of our events were star parties at local city parks and a few at a site out in the country to show participants what it is like to observe outside of city light pollution. We also hosted two public workshops this year, one introducing participants to observing comets and another introducing participants to some free astronomy software options to help them learn the night sky and plan observing sessions.

Finally, asteroid 20029 Dorner was named for our late member Rudolph Dorner. He was a valued member of the KW Centre, providing active, generous assistance to observers and as an instrument maker. His telescope collection has provided the core for RASC's Rudolph Dorner Telescope Museum.

#### Challenges

Kitchener-Waterloo Centre has a number of challenges we are working to overcome. Firstly, the centre is slowly getting our Lisa Lynn Bissett Memorial Observatory project off the ground. It has been slow going, but we are hoping participants will begin using the service in 2024 and interest will increase.

Secondly, we recognize that our membership catchment area is large - we have members from Kitchener-Waterloo, Cambridge, Guelph, and further away in Perth, Wellington, Bruce, Huron and Grey counties. Keeping members who are out of Waterloo Region and Guelph connected in with club activities and receiving benefits to membership beyond the online portion of our meetings is something we want to look further into to see if there are things we can do to add value for these members. Lastly, our membership is aging. We hope that with our increased outreach efforts, we can start to see an increase in younger members - both adults and families. There may be some things we can do with our programming that will increase the participation of our younger members.

#### Looking forward – 2024 and beyond

We are hoping to run another large program of outreach events, but perhaps temper things a little bit compared to last year as volunteers were exhausted by fall. We are investing considerable effort into outreach and event planning for the 2024 April 8 total eclipse, including planning an event in association with the Dunville Airforce Museum. Further, we are looking into having more exclusive club member observing events outside of our outreach events, particularly to encourage more use of our dark sky site on Tilker's Farm and also to hold at least one club social event outside of our regular meetings.





## London

#### Introduction

The year 2023 was one of transition for much of the world, and the RASC London Centre was no different. As COVID-19 restrictions began to lift, London Centre was able to return to in-person meetings from what had previously been onlineonly since the spring of 2020. To complement this a renewed format was implemented, a hybrid form that allowed for those who were not comfortable or able to join members in person. The speakers that joined us live/online to share their passions continued to be knowledgeable and exciting, which made the hybrid model key to maximising member engagement.

Outreach and group observing activities continued to take place, and expanded as the restrictions shrank.

The London Centre lost some long-time and vital members, including Tom Glinos, Blake Nancarrow, and Harold Tutt. In addition, Terry Dickinson's passing was felt deeply by the London Centre, as his enthusiasm and wide-ranging influence on amateur astronomy was so significant to the members.

#### **Regular Meetings**

London Centre's goal is to provide members and guests with motivation to learn about and to participate in astronomy at every level of involvement and expertise, both in depth and breadth. Twelve meetings were held in 2023, convened upon the third Friday evening of every month. These in-person meetings were conducted at our pre-pandemic location, the Hume Cronyn Memorial Observatory, located on the campus of Western University.

We aim to present a variety of topics that include theory, observation, equipment, travel and history. The Centre president chaired these meetings whenever possible (Bill Gardner/Mark Tovey), introducing and yielding to the guest speaker. Reports from the Observer's Chair (Dale Armstrong), and Higher Education Liaison/Librarian (Robert Duff) were also presented regularly. Many times, Dr. David H. Levy gave a brief poetry reading. After a featured lecture, members continued to chat informally. In 2023 the presentations were as follows.

#### **General Meeting Speakers and Topic**

#### Date Speaker(s)-Topic 20 Jan 2023 Alan Dyer, "Chasing the Aurora." The presentation was pre-recorded, with Alan present for questions, and the meeting was held online. 17 Feb 2023 Bryce Bolin, "The Discovery of Comet C/2022E3," and Eric Briggs, "The History of Planetariums in Canada." The meeting was held online. 17 Mar 2023 Kate Alexander (University of Arizona), "The Messy Eating Habits of Snacking Black Holes." The meeting was held online and consisted of a video lecture from Steward Observatory. 21 Apr 2023 Colin Haig (Past President of the Royal Astronomical Society of Canada), "My lifelong experience in astronomy and my astronomical observatory." 19 May 2023 Blake Nancarrow (London Centre), "Using the BGO remote observatory." The meeting was held online. 16 Jun 2023 Dr. Kristine Spekkens, "Observing Dark Matter in Galaxies with Radio Telescopes." The meeting was held online. Members' Night. The meeting was held at our dark sky/observatory site (Fingal 11 Aug 2023 Wildlife Management Area) and consisted of a potluck-style BBQ gathering. 15 Sep 2023 "Buddy" Martin (University of Arizona mirror lab), "The Fascinating Work at the Mirror Lab." The meeting was held in-person at the Hume Cronyn Memorial Observatory. 20 Oct 2023 Dr. David H. Levy presented a talk on his life story. The meeting was held in-person at Cronyn Observatory. 17 Nov 2023 Kirsten Vanstone, "The Space Place Canada Project." Annual meeting and election. The meeting was held in-person at Cronyn Observatory. 8 Dec 2023 Annual Banquet. Steve Gauthier, "The Aphelion of Comet 1P/Halley Tonight." The meeting was held at Angel's Diner, London.

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

Date	Attendance Host(s)		Total	
2023-01-20	23	2	25	
2023-02-17	17	1	18	
2023-03-17	18	1	19	
2023-04-21	27	2	29	
2023-05-19	17	1	18	
2023-06-16	15	1	16	
2023-07-21	16	1	17	
2023-08-18	5	1	6	
2023-09-15	10	1	11	
2023-10-20	14	2	16	
2023-11-17	6	1	7	
2023-12-08	22	0	22	
			204	

#### Assets

The London Centre assets primarily consist of the two observatory buildings, and the associated observing telescopes and support equipment at our Fingal dark-sky site. As the London Centre does not offer scopes for loan or rent to members, the Fingal Observatory fixed assets are our fixed assets and were valued as of Sept. 30, 2023 (our fiscal year end) on the books at \$23,585.73. The bank balance was \$10,881.76. As the organization has no debt, our net equity position is \$34,467.49.

#### **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—including elementary schools.

#### Cronyn Observatory, Western University, Public Nights and Special Events, January 28— November 25, 2023—Summary

There were 32 Public Nights and Special Events hosted by Western University's Hume Cronyn Observatory, January 28—November 25, 2023. There were in total 6,834 Members of the Public (Visitors), including 4,821 Adults and 2,013 Youth, at these Cronyn Observatory Public Nights and Special Events. There were 5 Winter Semester events from, January 28—April 22, 2023. There were 21 Cronyn Observatory Summer Public Nights and Special Events every Saturday from May 6— September 2, 2023. This included Science Rendezvous, with Solar Observing in Alumni Stadium and a Cronyn Observatory Public Night, Saturday, May 13, 2023. Some highlights of the 32 events at the Cronyn Observatory include the following:

- Girls and Women in Astronomy Night at Cronyn Observatory, February 11, 2023 (IAU Outreach Global Project)
- Science Rendezvous, Saturday, May 13, 2023 (2:00-9:00 p.m.) Solar Observing: 2:00-7:30 p.m. Science Rendezvous Cronyn Observatory Public Night (8:30-11:00 p.m.)
- Asteroid Day, July 1, 2023
- Doors Open London at Cronyn Observatory, September 16, 2023
- Astronomy Night with Cronyn Observatory at Fanshawe Pioneer Village, September 22, 2023
- "Copernicus' 550th Birthday" Cronyn Observatory Public Night, September 30, 2023
- Partial Solar Eclipse at Cronyn Observatory, October 14, 2023
- International Observe the Moon Night at Cronyn Observatory, October 21, 2023
- Cronyn Observatory "Book Launch" Public Night, November 25, 2023
   RASC London Member and Observatory Curator, Dr. Mark Tovey presented the lost manuscript of Beatrice W. Welling: "A Cosmic Treasury" Seeing the skies through poets' eyes—weekly poems and art for the year," Beatrice Welling & Mark Tovey, Editors.

#### RASC London Star Night & Public Outreach Events, June 3–December 6, 2023–Summary

A total of 4 astronomy outreach events took place, June 3—December 6, 2023. An estimated 492 Members of the Public (300 Adults & 192 Youth) participated in these events. These included the Join the Club Event at the London Public Library (Central Library), June 3; the Slide Presentation and Star Night at **Lambeth Public School, September 21**; the Star Party at Sir Isaac Brock Public, **September 25**; and Astronomy on Tap at the Forked River Brewing Company, December 6, 2023.

- "Join the Club" Event at London Public Library (Central Library), Saturday, June 3, 2023
- Lambeth Public School Star Party, Thursday, September 21, 2023
- Sir Isaac Brock Public School Star Party, Monday, September 25, 2023
- Astronomy on Tap at Forked River Brewing Company, Wednesday, December 6, 2023

# This table lists a Summary of Public Outreach Events hosted or supported by the London Centre.

Event type	Event Description	No. of events	RASC Volunteers	Person Hours	Attendees		
					Adults	Youth	Total
In- person	Science Rendezvous, Saturday May 13 2023 Western Alumni Stadium - Solar Observing	1	4	14	1,040	816	1,856
In- person	Science Rendezvous Cronyn Observatory Public Night, May 13 2023	1	4	11	85	66	151
In- person	Other 30 Cronyn Observatory Public Nights and Special Events	30	135	387	3,696	1,131	4,827
In- person	"Join the Club" Event at London Public Library, Saturday June 3 2023	1	3	7	53	7	60
In- person	Lambeth Public School Star Party, Thursday September 21 2023	1	3	5.25	80	60	140
	Sir Isaac Brock Public School Star Party, Monday September 25 2023	1	6	15	125	125	250
	Astronomy on Tap at Forked River Brewing Company, Wednesday December 6 2023	1	10	20	42	0	42
	GRAND TOTALS	36	165	459.25	5,121	2,205	7,326

#### 2023 Executive Team

London Centre executive met ten times during 2023. The Executive team consisted of the following:

President	Bill Gardner		
Vice President	Mark Tovey		
Treasurer	David McCarter		
Secretary	Norman McCall		
Council Members:			
National Council Rep	Mark Tovey		
Observer's Chair	Dale Armstrong		
Honorary President	Peter Jedicke		
Higher Education Liaison and Librarian	Robert (Bob) Duff		
Youth Programs / Women's Programs	Heather MacIsaac		
IT System Administrator	Tyrone Klassen		
Councillor at Large	Katelyn Beecroft		
Councillor at Large	Priyank Panchal		

#### **Member Observing**

Over the course of 2023 there were 18 observing sessions held at our dark sky site at Fingal, Ontario. All told, these sessions involved seven different club members (and family too). On August 11 the club held a BBQ and Perseid observing session. Though we were clouded/rained out, 19 people attended the BBQ, which took the form of a potluck. Members and friends from as far away as Ann Arbor, Lake Huron, and Guelph attended.

As is usual, a sizeable contingent of London Centre members attended Starfest at the River Place campground, situated along the banks of the River Beatty-Saugeen. The imagers in the club were out in full force, winning a variety of awards: Frank Sowa (Most Improved Imager), Ryan Fraser (2nd Place, Deep Sky Objects), and Katelyn Beecroft (4th Place, Deep Sky Objects).

Currently, new members are being recruited for the position of Councillor at Large.
#### **Member Images**

An abundance of remarkable photos were taken by the Centre's members in 2023 and we are pleased to present a small sampling of some of them here.

Dale Armstrong's use of our dark sky site has continued to expand his imaging interests, providing impressive foreground aspects, including this shot showing our observatories at Fingal Wildlife Management Area.





Quite notably, Katelyn Beecroft had her photo of LBN 437 (The Gecko Nebula) published as a photo of the Day on Astronomy.com, as well as published in the February 2024 edition of the magazine itself. <u>https://www.astronomy.com/pictureof-the-day/photo/crawling-in-the-dark/</u>

Ryan Fraser captured the cometary passerby C/2022 E3 (ZTF) early on in the year.



71



The Rosette Nebula was a target for multiple members this year and was beautifully imaged by Bill Gardner in November.



Ewa Pasiak shared a view of the "Heart of the Heart Nebula" from a Woodstock backyard.

In addition to the objects out in space, there were a number of opportunities to photograph space phenomena at Earth. With thanks to the very active sun, there was an abundance of aurorae captured by members in 2023.



Ryan Fraser, February 26, North of London



Mohammed Mubeen took a moment to show us what could be done with an everyday smartphone, with impressive results.



Frank Sowa continued to produce excellent astrophotos, capturing IC1396 SHO in spring.



Blake Nancarrow, March 23, St. Thomas



Rick Saunders, April 23, Regina



Mohammed Mubeen, September 18. North of London.



Bill Gardner, May 21, Killarney Provincial Park



Ewa Pasiak, September 2, Iroquois falls. Video frame capture.



Members night BBQ potlock, August 11.

Back row: Brian Parsons, Heather MacIsaac, Steve Imrie, Eric Clinton, Frank Sowa, Priyank Panchal, Dale Armstrong, Dave Clark and Bonnie Wilson-Ross, Jack Brisbin, Peter and Dianne Jedicke, Steve Gauthier and Asha Sadanand. Front row: Dina Farrow Peters and Andrew Peters, Alex and Chris Boltë. Not shown, Leanne Sowa.

# Mississauga

#### Year established: 2006

#### Membership: 240 members

#### Assets & Partnerships:

The Mississauga Centre partners with University of Toronto Mississauga (UTM) for in-person meetings and the Riverwood Conservancy for public outreach and member observing events.

The Centre lends 7 telescopes to members, including the LUNT 80 mm solar telescope. In addition to the Unistellar, two new scopes were purchased: an 8" FirstLight Dobsonian telescope and an Explore Scientific FirstLight MAK127 mm for the busy telescope loan program run by Allan Connery and Rob Neill.

#### **Outreach and Observing:**

Astronomical Observing is a very important activity of the Centre. The Centre partners with the Riverwood Conservancy for public outreach and member observing events. The Riverwood events were very well attended by the public (full capacity) and by many volunteers:

- April 28 first use of Unistellar telescope purchased with the help of Steve Mallia specifically for use at Riverwood; able capture images of galaxies, from Mississauga.
- May 30 clear, 163 visitors
- · June 28 cancelled due to smoke
- July 25 attended by over 200 people; visibility limited by haze and humidity
- Aug 22 and September 26 poor weather with about 150 attendees
- October 24 clear and successful with over 200 people

In addition, 5 member observing events were scheduled at the private residents of Kirby Alguire's sister in Vineland; of these events, 3 were successful and two others cancelled due to inclement weather.

- April 21/22 and October 13/14: cancelled due to bad weather and wet ground
- June 17 Members Observing Evening: happened but sky a little smoky
- July 22 observing
- September 16 very good sky, great hospitality from host

Other observing and outreach events were as follows:

- At the annual Starfest event, Aug 17 20, the Mississauga Centre again had a good presence.
- Four members attended the Peel Board of Education Tipis and Telescopes event at the

#### **Centre Executive**

President	Randy Attwood
Vice President	Allan Connery
Treasurer	Anil Mathur
Secretary	Swapna Shrivastava
Council Members:	
Past President	Steve Mallia
Honorary President	Dr. Ullrich Krull
Councillor	Betty Robinson
Councillor	Keith Jarvie
Councillor	Val Connery
Councillor	Chris Malicki
Councillor	Rob Neill
Councillor	Kirby Alguire

Silver Creek Outdoor Education Centre on September 15, helping with 4 telescopes. The event featured various astronomical activities centering on indigenous culture. Despite dew and light pollution, Saturn and the ISS were seen.

- Centre members volunteered with telescopes at the UTM star party on November 1 for students; while an enjoyable event, it was unfortunately cloudy.
- Shakeel Anwar organized an astronomy night for ISNA (an Islamic community organization) on Sept. 30 for something over 200 participants. In total there were three RASC members assisting.

#### **Programming Highlights**

With pandemic restrictions lifted, The Mississauga Centre had a busy year. Friday Meetings largely returned to in-person with some Zoom meetings and some hybrid Zoom-in-person. Thanks to the efforts of President Randy Attwood and UTM, the Centre was able use a new room with the first meeting in February.

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 subjects.

In 2023, there were nine Speaker Nights as follows:

- January 27 Max King: Mission to Pluto: From Napkins to New Horizons
- February 24 Betty Robinson and Randy Attwood: Antarctica Adventures

- March 24 Dr. Jessie Muir: Mapping the Dark Side of the Universe
- April 28 Three students from UTM's astronomy program presented their research results.
- May 26 Dr. Ryan Cloutier: The Long Path Toward Finding Habitable Exoworlds
- June 23 Dr. Ryan Mckinven: The Mystery of Fast Radio Bursts
- September 22 Alfred Ng, Canadian Space Agency: Understanding Lunar Gateway Orbit
- October 27 Luna Zagorac, Perimeter Institute: What We Can't See in the Universe
- November 24 Dr. Matthew J.O. Svensson, The Artemis Program and the 2023 Expedition to Kamestastin Lake, Labrador

There were 11 Potpourri meetings. Of particular note were the following: Matteo Statti did a presentation about his antique March telescope. He was invited to speak about this telescope in October in Italy at the Antique Telescope Society Convention. Robin Metcalfe participated in York University's Astronomer in Residence program at Killarney Provincial Park, and she spoke of her experiences. A number of members travelled to the USA and described the annular eclipse of the Sun on October 14. At other meetings, members spoke about observing, book reviews, the NEAF events, astronomical touring and other topics.

On December 4, there was a New Members Welcome Meeting on Zoom.

#### Awards

The Centre held its very successful annual Picnic and Awards Presentations at Meadowvale Conservation Area, on June 10. Special thanks go to Val and Allan Connery for organizing the food and the ice-cream truck, and to Swapna Shrivastava for arranging a new event, the AstroExchange.

Winners of the astrophotography contest were announced as:

- Master Class Category: Solar System, winner: Gary Crawford
- Master Class Category: Deep Sky, winner: Adriano Almeida
- Master Class Category: Astroscape, winner: Shakeel Anwar
- · General Category: Deep Sky, winner: Aedas Lai
- General Category: Astroscape, winner: Robin Metcalfe
- Youth Division, winner: Omar Alnaji

Two Mississauga Centre awards were also announced at the picnic and the citations read out,

and published in the Centre Newsletter Messenger:

- Centre Award, Dr. Ulrich Krull
- Special Projects Award, Rob Neill

On April 28, President Randy Attwood announced that Membership Secretary John Marchese was awarded the prestigious Service Award of the RASC. The citation is in Messenger.

Messenger Newsletter Editor and Councillor Betty Robinson was honoured by the RASC by having an asteroid named for her. Asteroid (20026) Bettyrobinson was discovered in Chile in 1992. Betty has been editor for several years, and she is stepping down from this role at the end of the year.

The Mississauga Centre established a new award, the President's Award. It is to be presented at the discretion of the Centre President as a special honour for a member who has distinguished him/ herself.

#### In memoriam

The Centre was sad to hear of the passing of three members (one current and two former) of the Mississauga Centre in 2023, Andrew Motyliwski, Terry Hardman and Roy Swanson.

#### Challenges

- finding dark sky observing sites
- · holding on to members especially youth
- getting people to volunteer

#### Looking forward – 2024/beyond

- Total solar eclipse of April 8
- The Centre continues to financially support the Clear Sky Clock for Mississauga.
- The Mississauga Centre picnic, June 8

#### Submitted by

Chris Malicki, Secretary, Mississauga Centre



The Mississauga Centre picnic, June 10, 2023 photo by Swapna Shrivastava

# Montreal

2023 saw the resurgence of the Montreal Centre's Public Events, Centre Outreach to the community, Member Events and Member participation both online and in person.

The increasing and enthusiastic participation in Centre events by interested high school, college and university students bodes well for the future of our Centre.

#### **Members Observing**

Between smoke from record forest fires and those members who recklessly purchased new equipment, clear skies were relatively few in Montreal.

Despite the challenges, regular weekly observing and clubhouse activities were held at our Bellevue Observatory located at the Morgan Arboretum in Ste-Anne-de-Bellevue. The observatory benefits from the darkest skies on the island of Montreal and houses a 14" Meade LX200.



Summer maintenance by the Dome Crew, lead by Observatory Director Alex Stefanescu, included a revamp of the dome shutter mechanism.

Dark-sky observing sessions were hosted at the Centre's Wooly Woods Observatory - our Dark-Sky Preserve located about an hour South of Montreal and home to BumbleBee, our 16" Explore Scientific Dobsonian.

This year BumbleBee was upgraded with AstroDevices' NEXUS wifi-connected Digital Setting Circle.

#### **Public Events**

Public events and outreach are the lifeblood of our Centre and essential to its future.

2023 saw over a dozen Public Events ranging from smaller in-house events to massive turnouts of over 500 people. Many were shared with remote viewers.

We were fortunate to host David H. Levy as he returned to Montreal with a deep, reflective look at his Astronomical journey and the influence his late wife Wendee had on his experience.

The first annual Papacosmas Perseid Meteor Shower public event had over 500 attendees. Two presentations were given in the conservation centre and hundreds were ushered 3 at a time into the dome to see Saturn through the 14-inch. Some even saw a few meteors.

An amazing 2023 Townsend Event was held, as we happily returned to an in-person Keynote after 3 years of online Townsend lectures. Our Keynote



Members dark-sky observing at Wooly Woods with BumbleBee

Townsend Lecture "How will we reach the Stars?" was given by Dr. Andrew Higgins. In addition to an informative overview of the challenges of interstellar travel, Dr. Higgins engaged in a thorough and enjoyable Q&A session for almost 45 minutes!

#### **Public Outreach**

We continued to partner with both local and national organizations such as the Canadian Space Conference, Astrofest at the Rio Tinto Alcan Planetarium and SHAD McGill, delivering riveting content to hundreds of high school, college and university students both in person and virtually.

Topics ranged through an introductory astrophotography workshop with over 150 attendees, the first image of a Black Hole, four youth outreach workshops with moon observing with Batshaw Youth and Family Centre, an introduction to radio astronomy, and an outdoor Stargazing event for the second annual Baie D'Urfé Junior Council Star Gazing Night led by Nicole Laporte.

Russell Fralich stumped SHAD McGill students with a memorable challenge on how to measure the speed of light with a microwave oven, a chocolate bar, a ruler and a calculator.



Montreal Centre - 2023 Outreach and Events

# Niagara

The Niagara Centre had a good year in 2023. Our membership dipped slightly, from the 90s to the 80s. For the first half of the year, our monthly meetings were held at Heartland Forest in Niagara Falls. The venue was somewhat expensive and for the fall we held our meetings at the Niagara Military Museum in Niagara Falls. However, this older location was not handicap-accessible, so we decided to return to Heartland in 2024.

Some of our guest speakers were on Zoom, some were in person.

All of Niagara is in the path of totality for the 2024 eclipse. We are doing our best to help local organizations and businesses prepare for the big event.

We installed a shipping container at our observatory for storage of club equipment. It has made organizing our equipment and gear much easier.

We had many public events at parks throughout Niagara.

**Guest Speakers** 

- February Jeanette Bax The James Webb Space Telescope
- March Philip Downey Astronomy Quiz 2023
- April Star Party Preparation Michael Panucci, Philip Downey, Astrophotography - Glen Pidsadnick

# 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 available for public outreach and member use. The club has a number of scopes for rent.

#### Outreach

Lead by Outreach Program Director, Colleen O'Hare, the Kelowna group handled 45 outreach events in 2023 with 1987 guests being exposed to astronomy education and observing of the night sky wonders. This year it included the usual array of school events, presentations at libraries, a few community events, and public nights at the Okanagan Observatory. Due to weather, this past year we were only able to twice offer the "Mobility Bus" service that allows wheelchair bound individuals and those that have difficulty driving at night to visit the Observatory. That, in conjunction with our articulating eyepiece,

#### **Centre Executive**

President	Stan Sammy
Vice President	Jeanette Bax
Treasurer	Bob Lewis
Secretary	Philip Downey
Council Members:	

Mike DeRosa Brian Vaughan Gerry Wissiak Rob Lenz

- May Barak Shoshany, Brock University Faster Than Light Travel
- September Stefanie Milam, NASA. "Studying exoplanets with the James Webb Space Telescope"
- October Els Peeters, University of Western Ontario. "Studying organic molecules in space with the James Webb Space Telescope"
- November Michael Mazur, University of Western Ontario. "Streaks Across the Sky: Tracking meteors and satellites on a budget"
- December Philip Downey "South Polar Cruise"

#### **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

allows some people that would never be able to look through a telescope an opportunity for direct visual observing.

Volunteers 18, Volunteer Hours 607, Events 45, Guests 1987, Okanagan Observatory Events 7, Observatory Guests 273, Mobility Bus Guests 2.

No Go's 36, 16 of these were for the Observatory which reflects the poor weather and smoke conditions we had throughout the year.

#### Highlights

Our Astro Picture of the Month Program continues to produce a wonderful collection of submissions for our POM committee to review. "A heartfelt thank you goes out to all the members who have submitted work in the past. And into the future!" The full range of astro imaging by our members can be found in our Zenfolio gallery at https://rascoc.zenfolio.com/ We took our first steps toward hosting a Star Party



'Hugh's First Light' and is of the Chimette Radio Array and was taken by Darrel Lewis

at the Okanagan Observatory after running a small event in September under mostly friendly skies.

The following awards were presented for the year 2022:

Members of the Year: Guy Mackie and Sean Perdue.

Lifetime Achievement: Dennis Krause.

#### Challenges

Our membership numbers are dipping with our volunteer energies as well. 2024 can be a year of new direction and member passion.

#### 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. The Okanagan Observatory projects also looks to grow its volunteer base and host another star party in the month of September.



'Sky Theatre', taken at the Okanagan Observatory by Hugh Pett.

# Ottawa

#### President's Report

It has been my pleasure to serve you as President during 2023.

It was a challenging year, on a number of fronts, but we are coming out of 2023 in great shape with much enthusiasm going into 2024.

One of our priorities during this last year was to get our in-person meetings restarted after COVID shut us down. We finally had our first in-person, blended, meeting on November 3rd. There were some very intense negotiations between RASC Ottawa Centre and The Canadian Aviation and Space Museum for us to return to their space. Thank you to Stephen Nourse and Chris Teron for their assistance with this. Things have changed significantly with CASM (and all other museums under the Ingenium umbrella) in terms of their mandate, usage, and staffing. We were one of the first organizations to be welcomed back to use their space. It was important that we did this in partnership with them as the cost to simply rent their space as an outside group would have been unsustainable (around \$19,000/ year)!

It is our intention to have our meetings in blended format (in-person and Zoom) moving forward.

We did look at our venues while we were negotiating with CASM but the cost, internet access and availability was a challenge.

Thanks to the efforts of Katie Francis, we were able to have two successful Star Parties at the Diefenbuker in Carp. We had many more scheduled, but they were wiped out by cloudy skies. Let's hope for better weather in 2024!

The Fred Lossing Observatory continues to be enhanced making it a really valuable asset for our community. Thank you to Rick Scholes and myriad



79

of volunteers for their continued support in keeping this facility running smoothly.

We continued our outreach efforts to Scouts, Guides, Libraries and the general public. There are already five events (not counting star parties) scheduled for 2024. Thank you to Asser ElGindy for his support as our Outreach Coordinator.

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. I met this person early on when I joined the RASC Ottawa Centre and he has been supportive in so many ways in sharing his knowledge and his technical expertise. When he takes on a task he doesn't quit until it is done properly. I experienced this last year when he, with some others, was working on a particularly challenging issue with one the telescopes at FLO. He willingly shares his expertise in astrophotography and regularly shares his images with the rest of us.

# **Prince George**

#### About

- Year established: 1979
- · Membership: 45
- · Assets: Observatory, classroom, club scopes, digital cameras, library
- Partnerships: UNBC
- Outreach: Weekly open houses
- Special Projects: Continue to convert the 0.6m telescope for remote operation

#### Highlights

1418 visitors to the observatory in 2023, 1289 volunteer hours accumulated. Introduction to Astronomy course for Parent and Child, Introduction to Astronomy course for Adults.

#### Challenges

Developing a group of volunteers willing to present various astronomy topics during public open houses.

#### Looking Forward

Establish an urban dark sky site by collaborating with the University of Northern BC, College of New Caledonia, local high schools, Indigenous community, Exploration Place and local government. Awaiting the release of the RASC National NOVA course.

I am pleased to announce that Paul Klauninger will be receiving the RASC Ottawa Centre's President's Award.

2024 will be a busy year with the highlight being the Total Solar Eclipse (within easy driving distance) on April 8th. Most of us will be heading to Kingston and the Seaway to experience this in person. We will also be working with CASM on a number of joint events throughout the year as part of our ongoing partnership with them. There will be a partial lunar eclipse (just a little nibble out of the moon) on September 17th.

As I conclude this report, I would like to recognize RASC Ottawa Centre members who have passed away in 2023. We remember Geoffrey Cockhill, Gerald Gruber, Lathif Masood and Allan Reddoch. We also lost a key leader in Canadian astronomy, Terence Dickinson, this past year.

Clear Skies!

Dave Chisholm, President **RASC Ottawa Centre** 

**Centre Executive** 

President	Malhar Kendurkar
Vice President	Gil Self
Treasurer	Glen Harris
Secretary	Glen Harris
Council Members:	

lf larris larris Robyn Kendurkar

Rebecca Althammer Rob Woods Ian Baird



# Regina

The RASC- Regina Centre was founded on October 11, 1910 becoming the first Centre outside of Ontario to join the RASC. Halley's comet was a big news item at that time and one of the reasons why our society was formed.

We currently have about 85 members spread out across southern Saskatchewan. We operate two facilities: the Kalium Observatory on the roof of the Saskatchewan Science Centre and a dark observing site 30 minutes southeast of Regina. We do have a few telescopes that members can borrow for free.

2023 was a great year in our Centre for public outreach events. Our numbers returned to pre-COVID levels and even more. Our members participated in 63 public outreach events with 4,269 people visiting us (2,033 youth and 2,234 adults). Our biggest event of the year, weather permitting, is setting up solar telescopes for Canada Day and this year, skies were perfectly clear all day long. A huge thank you to all our volunteers that helped make that happen as well as the rest of the public events achieved in 2023! Of special note is that one of our members. Pierre Schierle, receive the RASC Service Award for all his hard work and dedication to our Centre and the national society. A very welldeserved award! Congratulations, Pierre!

The Saskatchewan Summer Star Party was held in Cypress Hills from August 16th to 20th. The weather gradually worsened towards the weekend but did provide a couple great nights of observing from very dark skies. It's always a wonderful time to meet old friends and make new ones under the stars.

#### **Centre Executive**

President	Vance Petriew
Vice President	Rick Saunders
Treasurer	Ken Luciak
Secretary	Denis Pilon
National Council Rep	Mark Meadows
Past President	Pierre Schierle
Council Members:	

Fred Cawsey **Kevin Fenwick** Jackie Waldenberger

Looking forward into 2024, we already have a few public outreach events completed so we're off to a great start. We're looking into upgrading out public outreach displays among other activities planned for our members.

I also want to thank all our council members for volunteering their time and talents to the society and to thank all our members who will be volunteering in the upcoming year. I'm looking forward to working and observing with all of you this year. Keep looking up!

Clear Skies. Vance Petriew President



Getting set up for International Astronomy Day 2023 at the Southland Mall.

## Saskatoon

Submitted by Rick Huziak, Secretary Year established: 1968 Membership: 85 members

#### Assets

Sleaford Observatory & dark-sky site, 16" Meade club scope, 8" Dob. telescopes for rent.

## St. John's

#### About

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) used to share observations, alerts, and advice.

*Partnerships*: Memorial University Physics (meeting space), Johnson Geocentre, Terra Nova National Park, Butterpot Provincial Park.

Outreach: Public Observing Events in 2023 at Johnson Geocentre at Memorial University's Signal Hill Campus (International Astronomy Day in May and Fall International Astronomy Day in September), Butterpot Provincial Park (August Star Party), Terra Nova National Park (August Night Sky Celebration). Typically 5-10 volunteers and visitors ranging from tens to hundreds. About 15 presentations to youth groups (Scouts, Guides, 4H, etc.), school



Terra Nova Night Sky Celebration Credit: Cynthia Patterson

classes (Grades 6 and 9), and community groups (Newfoundland Public Libraries, Memorial University Pensioners), presentations to youth groups (Scouts, Guides, etc., typically 12-25 attendees), plus at least 10 planetarium presentations to youth groups/ classes. The Centre uses RASC Star-Finders at some youth-oriented events. Local media organizations interviewed centre members on topics included the naming of an asteroid after St. John's Centre past-president Garry Dymond, issues with light trespass, the Perseid meteor shower, and media interest in a "supermoon".

#### Highlights

All 2023 outreach events were in person. For International Astronomy Day (May 6, 2023, Johnson Geocentre), we had an information exhibit and

#### **Partnerships**

University of Saskatchewan, Grasslands National Park DSP, Old Man on His Back Nocturnal Preserve, Cypress Hill Provincial Park DSP, Meewasin Valley Authority.

#### **Centre Executive**

President
Vice President
Treasurer
Secretary
Council Members:

Michael Morrow Robert Babb Jim Johnston Randy Dodge

Garry Dymond Doug Grouchy Craig Peterman Marcellus Redmond Chris Stevenson

telescope workshop (over 300 visitors). Weather precluded evening observing. In May, three members traveled to Terra Nova National Park to renew a Partnership Agreement with Parks Canada regarding events supporting Terra Nova's Dark Sky Preserve status. Our Butterpot Star Party (July 21-22, 2023) had public observing in the evenings (20-30 visitors each night) and solar viewing on Saturday afternoon. With a renewed Partnership Agreement in place, five members participated in the Terra Nova Night Sky Celebration (August 25-26, 2023). With support from Park staff, we provided public observing at the Park Activity Centre on Friday evening (about 150



International Astronomy Day. Credit: Randy Dodge

visitors), solar viewing at the Park Visitor Centre on Saturday (about 50 visitors), and public observing at the Sandy Pond dark sky site on Saturday evening (over 80 visitors). We celebrated Fall International Astronomy Day at the Johnson Geocentre on September 22, 2023 (8 members with telescopes, a few hundred visitors). We also held our first centre Astrolmaging Contest. The Contest was announced in June 2023 and submissions closed in early December. Voting will be completed in January 2024 with winners to be announced in three categories: Wide Field; Solar System; and Deep Sky.

The Centre held 10 hybrid meetings over the year. Meeting presentations included five talks by members and three talks by outside experts (Prof. Terrence Tricco (Memorial University) on "The Modern Era of Computational Astrophysics", Anna O'Grady (University of Toronto and St. John's Centre) on "Twists and Turns While Searching for Strange Stars", Prof. Ivan Booth (Memorial University) on "Observations in an Expanding Universe", the late Blake Nancarrow (RASC) on "RASC Observing Certificates", and Tashveena Rani Surdha (Memorial University) on "Cepheid Stars and the Origin of NGC 1851". At two meetings, several members gave short talks about interests and activities. Garry Dymond also hosted two members-only planetarium shows in 2023. Members receiving special recognition were Garry Dymond (honoured by the naming of asteroid 10271 Dymond), Jeff Hiscock (RASC Explore the Moon (With Telescope) certificate), and Emma Duke (RASC Explore the Universe Certificate). In July



Fall International Astronomy Day. Credit: Randy Dodge

# **Sunshine Coast**

#### About

Year Formed: 2004 Membership: 40

#### Assets

The club maintains and operates an observatory at Sechelt Airport and has a number 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 the Sechelt library with both an



International Astronomy Day. Credit: Craig Peterman

2023, Anna O'Grady successfully defended her PhD thesis in Astrophysics.

#### Challenges

Membership gains and losses were largely balanced. Some new members are quite active in observing and interested in contributing to public observing but it remains difficult to find new members willing to take on leadership roles. Our valued partnership with the Johnson Geocenter at Memorial University's Signal Hill Campus provides us with excellent opportunities for public observing and outreach. At the same time, we continue to explore the possibility of other public observing sites, in the vicinity, with dark skies and suitable facilities.

#### Looking Forward - 2024/Beyond

One focus for 2024 will be the solar eclipse in April. St. John's is just outside of the band of totality and many members will travel to central Newfoundland to experience totality. Colleagues at Memorial University are planning an eclipse event in Gander and the St. John's Centre expects to contribute to its planning and execution. The pandemic interrupted outreach activities with many community partners. We have established new partnerships (i.e. the A. C. Hunter Public Library) and renewed some previous partnerships. We still hope to re-establish links with previous partners such as Admiralty House in Mount Pearl and Salmonier Nature Park.

#### **Centre Executive**

President	Bruce Fryer
Vice President	Michael Bradley
Treasurer	Bill Haskett
Secretary	<b>Richard Mitchell</b>
Council Members:	

Charles Ennis Mervin Hunter Richard Corbett 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 opened the observatory at weekends when weather permitted. We held a travelling stargazing session at a location in Sechelt, which was well attended and plan to hold more such events throughout the town in the coming months. We also hold a monthly Astrocafé, where members can socialize, which is followed by an informal observing session on the seafront, weather permitting. See attached spreadsheet for attendance. We are also planning to hold a four-day star party for over several days next summer at the observatory.

#### **Special Projects**

Installation of pads and pathways to make the observatory facilities friendly for the mobility challenged – New Horizon's project. See photo.

#### Highlights

We maintained a booth at the Canada Day events in Sechelt, and at additional outdoor events over the summer.



Dr. Shandin Pete giving a presentation on Reconstructing Salish Skies at one of our monthly meetings. We were happy to welcome Lenora Joe, Chief of Shishalh First Nations and several other members of her nation.

#### Challenges

The continuing challenge is to maintain and grow our membership. We now have a dedicated speaker coordinator/fundraiser who has been successful in raising substantial funds from the local community to support the speaker program and the observatory maintenance. We have substantially increased the attendance at our events and, in particular, at the observatory, and we are expecting this interest to translate into increased membership.

#### Looking forward - 2024/beyond

We are looking forward post-pandemic to having more sessions at the observatory and making full use of the enhanced facilities.



Observatory with improved access for mobility challenged and new pads

# Toronto

#### RASC Toronto Centre Membership History - as of September 30, 2023

Member type	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Life	76	76	76	75	74	69	67	66	64	64
Regular	549	592	587	537	538	540	488	526	470	445
Youth	23	28	33	30	38	30	21	27	35	34
Subtotal	648	696	696	642	650	639	576	619	569	543
Family	192	237	213	196	194	196	150	134	113	118
Total	840	933	909	838	844	835	726	753	682	661

#### Membership

Membership retention continues to be the greatest challenge we have with respect to growing membership at the Toronto Centre and in particular, youth membership has been stagnant for over 10 years at around 60 – 70, (including youth family members) and



attracting & retaining female members. Membership gender is split 75% male, 25% female. There is also competition from university astronomy related clubs and initiatives.

In the late spring of 2023, a Membership Value Enhancement Committee was formed to explore and improve approaches to Centre engagement and connection. Outcomes to date include the appointment of our new Member Advisor (who is frequently contacted) and an additional City Star Party site pilot project. Conversations regarding many other ideas are in progress.

#### Partnerships

The David A. Dunlap Department of Astronomy and Astrophysics of the University of Toronto has erected their own observatory on the RASCTC's Carr Astronomical Observatory grounds that will be used to train undergraduate and graduate students in astronomy on how to operate a small telescope and design and carry out a research project with it. The UofT telescope will be operated for both on-site and remote observations. As a result of this project, Toronto Centre members will have access to the telescope when it is not being used by UofT and members will also benefit from an upgraded internet and telephone connection at the CAO as well as better winter access.

#### **Education and Public Outreach**

RASCTC has now transitioned primarily to in person events, while providing hybrid regular monthly meetings. In addition, online only Speakers' Nights have been maintained, which substantially expands the diversity of presenters available from near and far away locations.

#### Centre Executive 2023-2024

Honorary President	Dr. Roberto Abraham
President	Tom Luton
1st Vice-President	Scott Masterton
2nd Vice-Pesident	Dr. Elaina Hyde
Treasurer	Denis Grey
Secretary	Lucy Winnicki
Recorder	Andy Beaton
Council Members:	
Honorary	Dietmar Kupke
Retiring 2024	Reza Mohamed
	Kirsten Vanstone
	Ed Treijs
Retiring 2025	Charles Darrow
	Diana Salerno
	Charles Yung
Retiring 2026	Doug Carman
	Tanya Oleksuik
	Frank Dempsey
1st Past President	Dr. B. Ralph Chou
2nd Past President	M. Tony Horvatin

The 2022-2023 fiscal year was a very successful rebound year for outreach with:

- 42 Astronomy Talks (online/in person)
- 46 Public Observing (day/night)
- 12 Special Events
- 53 Private Events
- Total 153

Standardized volunteer tracking has been identified as an area in need of improvement. Development of a "Volunteer Tracker" online App has been initiated.

RASCTC expects the 2023-2024 fiscal year to be busier as more EPO events have been scheduled and unanticipated events arise.

#### Education & Public Outreach October 1, 2022 - September 30, 2023

A	В	С	D	E
Pickering, ON	Millennium Square(4 events between May & September 2023)	4	3250	16
carborough, ON Rouge Valley Conservation Centre - Meteor Shower/Stargazing		1	300	3
	Total	8	4214	
David Dunlap Observatory(DDO) - Ric	hmond Hill			
DDO	Astronomy Speakers' Night (On line/In person)	10	1023	
DDO	Public Observing Event (On line/in person)	28	1061	
Various	Special Event	5	1134	
DDO	March Break Event	3	59	
DDO	Private Events	53	450	
	Total	99	3727	46
Carr Astronomical Observatory (C	AO) - Town of the Blue Mountains, ON			
CAO	Evening Presentation & Sky Tour	5	159	13
CAO	Scouts Weekend Hosting	3	136	4
CAO	Thornbury Library	1	Not Tracked	7
	Total	9	159	
RASC Toronto Centre				
Toronto - Ontario Science Centre	RASCTC Recreational Astronomy Night	12		6
On Line Only	RASCTC Speakers' Night (On Line Only)	8		3
Toronto	St. Clair - O'Connor Community Centre (On line only)	6	68	5
Toronto - Ontario Science Centre	Solar Observing Satuaday	4	725	11
Bayview Village Park	City Stargazing (member)	3	Not Tracked	2
Long Branch Park	City Stargazing (member)	2	Not Tracked	3
	Total	37		
	Total - All Events	153	8236	

#### **RASCTC Online Presentation Streaming/YouTube Channel Summary**

The Audio/Visual team produced 23 streaming events to our YouTube channel – RASC Toronto:

3 Recreational Astronomy Night Meetings (RAN) online only

9 Hybrid (In person/online RAN meetings streamed from the Science Centre

8 RASC Toronto Centre Speaker Nights online only

3 David Dunlap Observatory (DDO) Speaker Presentations online only

From the 12 RAN meetings and 2 of the 3 DDO Events, 33 individual edited clips were uploaded to generate more views. Including the Speaker Night events:

#### YouTube Outreach Engagement

Geographic distribution of views was:

- United States 31.7%,
- Canada 11.6%,
- United Kingdom 7.3%; and views from many other countries globally.

#### Total views all categories

RASCTC Speaker Nights (online only)	1454
RAN (online/in person)	3671
RAN Single Subject Clip Views	4260
The Sky This Month - Single Clip Views	1294
DDO Online	765
Total Views	11444

lotal views | 11444

Viewers By Gender:

- Female 2.9%
- Male 97.6%

The dominance of male to female and older age groups viewership is concerning.

Viewers By Age Group: Highest percentage in the 55 years +

Age Group	13-17	18-24	25-34	35-44	45-54	55-64	65+
Viewer %	0.6	1.5	2.9	16.6	21	38.9	18.9

**Annual Reports Of Centres** 86

#### Social Media Engagement

#### Meta

The RASC-Toronto Centre Facebook page had:

- 1,973 followers, mostly located in Toronto and the GTA
- 1,934 page visits representing an increase of 83.1% compared to 2022.
- a drop of 46.4% in 'clicks' on content links compared to 2022
- but a decline in new likes of 30.2% compared to 2022

Unlike YouTube reach:

- followers are mostly located in Toronto and the GTA.
- the largest viewer representation was in the 35 to 44 years of age.
- representation split approximately evenly between men and women

*Instagram:* As of November 12, 2023, the RASCTC Instagram account has 1,114 followers with 531 posts

*X:* The RASC-Toronto Centre account of X has 2,000+ followers.

Detailed analysis of the RASCTC Instagram and X accounts not available at this time.

# Vancouver

#### About

Established: 1931 Membership: 240

Assets: Vancouver RASC Observatory (VRO), Radio Telescope, Telescope for lending program, Club scopes

Partnerships: UBC – VRO location in Malcom Knapp Research Forest, SFU – Meeting Space, Weekly Friday night star party and Trottier observatory use. Outreach (may include # of volunteers, # of events, size of audience, in-person and on-line) Special Projects

#### Highlights

Complete major renovations to VRO building, telescope, observing pad and grounds.

43 Public Events

- 11 Monthly Meetings with a guest speaker (300 attendees at the largest)
- 20 Starry Nights 4,200 guests

#### Information Technology

During 2023, the committee undertook to upgrade our website for the first time in seven years. This process involved updating our platform as well as getting a new mobile responsive theme applied. The site is now operational and working well although there is still (always) work to be done.

#### Telescope Loan Program (TLP)

Telescope loans resumed this year and were frequently in use. The TLP committee reports that although the designated equipment was suitable for some of the borrowers, the telescopes are generally too cumbersome or complex for the majority of the borrowers. Or in need of replacement or accessory replacement.

The TLP committee recommends that the TC should have an inventory of small telescopes suitable for first-time telescope users and for people not prepared to handle a large and heavy telescope. TLP should have an inventory of very portable, easy to handle during day or night, that don't pose a risk for strain or other injury, or require accessories not provided that would increase utility and enjoyment.

The TLP would like to remind members to consider donations of unused telescopes in the small size range that may be sitting unused because the owners may think them too small to donate to the TLP.

- 5 Stellarium Lessons
- 7 Public events, Astronomy Day, Perseids, Canada Day, Earth Day (LPA), Girl Guides, UBC at VRO
- 35 Member Events
- 16 Imaging Group meetings capturing data for astrographs.
- 6 Astronomy imaging events VRO
- 12 Council meetings
- AGM

#### Challenges

Lost 40 members this past year. We have received specific feedback from some former members that this is due to higher costs.

Growing construction and light pollution at SFU are making observing there more difficult.

#### Looking forward - 2024/beyond

Increased use and events at VRO.



VRO



First test image from VRO. Spindle Galaxy

#### Centre Executive Elected at end of 2023

President Vice President Treasurer Secretary **Council Members:** National Council Rep Membership **Evens Coordinator** Assistant Events Coordinator **NOVA Editor** Speakers and Public Relations Observing Librarian Telescopes Vancouver RASC Observatory (VRO) Webmaster At large At large At Large At Large

Robert Conrad Nolan Smith Phil Lobo Kyle Dally

Nolan Smith Marla Daskis Suzanna Nagy Kai Hu Gordon Farrell Andrew Ferreira Robert Conrad William Fearon Rick Schneider Alan Jones

Martin Curic Shay Pomeroy Michael Levy Gorgon Baush Karl Miller

# Victoria

#### About

Year established: 1914, Membership: 246

#### Assets

Victoria Centre Observatory on the grounds of the Dominion Astrophysical Observatory

OGS 12.5" RC telescope - optical tube

Takahashi TOA 130S apo-chromatic telescope

Paramount ME equatorial mount

Obsession 20" telescope + Argo Navis Setting Circles

many lending telescopes and books

#### **Partnerships**

Friends of the Dominion Astrophysical Observatory (Centre of the Universe)

University of Victoria Astronomy Department

Cowichan Valley Star Finders – Vancouver Island Star Party

#### **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 Laa

David Lee Myles Morrison Jeff Pivnick Lauri Roche Alex Schmid Fairfield Community Centre – host for the weekly hybrid Astrocafe

#### Outreach

~40 volunteers, 139 Events Total, 11500 Galileo Moments

International Astronomy Day at the University of Victoria

Vancouver Island Star Party, Saanich Fair, Beaveree

FDAO Star Parties at the Centre of the Universe. 23 events, including Annular Solar Eclipse Breakfast, Oct. 14, 2023

Monday evening Astrocafé. 28 Hybrid meetings at the Fairfield Community Centre

Three monthly on-line Special Interest Groups: Getting Started in Astronomy, Astrophotography, Makers/Citizen Science

Observation nights at the NRC 1.8m Plaskett Telescope. 4 scheduled / 2 with clear nights.

Monthly Seminar Series at the University of Victoria restarted after 4-year hiatus. 3 speakers in 2023.

#### 75 School Visits

RASC-Victoria Centre Facebook Page, RASCVictoria YouTube channel, rascvic Zenfolio photo site, and several email lists



Vancouver Island Star Party in Duncan, BC

Star Party with the Friends of the Dominion Astrophysical Observatory at the Centre of the Universe

Judging at the Vancouver Island Regional Science Fair

#### Highlight

Two asteroids named after RASC-VC members:

Asteroid (20035) Lauriroche = 1992 SA4

Asteroid (20041) Gainor = 1992 YH

#### Challenges

Increasing diversity - women, youth, and ethnicity

#### Looking forward - 2024/beyond

More in-person events! Build up the Vancouver Island Star Party



The weekly hybrid Astrocafé at the Fairfield Community Centre

# Windsor

#### About

Year established 1945 Membership 89

The Windsor Centre was quite active during 2023. General membership meetings were held every month, with the exception of July and August, at the Ojibway Nature Centre. A wide variety of topics were covered by our main speakers at meetings during the year. These included, astrophotography techniques and processing, building a home observatory, a primer on asteroids, diverging possibilities for life on evolving terrestrial planets, a researcher's journey through studies of supernovae, exotic matter and the 'fifth force', small telescope construction, urban astronomy, solar eclipses, and an introduction to astrophotography AI through the Seestar s50 telescope. In December, the group hosted a well-attended pot-luck Christmas Social Dinner in lieu of a regular meeting.

During 2023, the Windsor Centre hosted approximately 18 official stargazing events at our Hallam observatory. Group sizes ranged from 6 to 30 guests and included visits from both public and private schools, scout packs and smaller family and private groups. Group members also attended a number of weekend camps for children's groups to provide astronomy-related presentations and observing sessions.

The Centre also became active in hosting 4 sidewalk astronomy events for the municipality of Essex, Ontario. These events were held both along the shore of Lake Erie, in Colchester Harbour, and in the town of Essex proper. There were good turnouts at all of the events, with people expressing how much they appreciated the opportunity to view objects through a larger-aperture telescopes.

A number of outreach events were also held in the city of Windsor during the year. Several stargazing nights were held at the Fogolar Furlan Club (an Italian Cultural Club in Windsor). These events included public lectures, laser-guided tours of the night sky, and stargazing through Windsor Centre members' telescopes. In June we also hosted an observing night at St. Thomas of Villanova Secondary School with members sharing views of the night sky with eight telescopes out on the school's back campus. Some guests even brought out their own telescopes to share in the fun!

The Centre also hosted a large display and activity area at the University of Windsor's annual Science Rendezvous Day on May 13th. Beyond the information tables and displays presenting information about astrophotography, light pollution and various concepts on telescope optics and the solar system, a handful of members of the club were on hand to talk to visitors, carry on activities with the children and share views of the Sun through white light and H-alpha telescopes.

Our group continued its close association with students and faculty at the University of Windsor in 2023. In 2022, some of the members of our Centre teamed up with a small group of students at the University of Windsor to put forward a bid to name an exoplanet in an international contest held by the IAU's Office of Astronomy Outreach. The team's naming proposal, which included a fantastic video that they produced, went on to the reach the finals of the international selection process in 2023. As part of that bidding process the team hosted a stargazing night on the University campus where more than 180 visitors joined the team and other Windsor Centre members for views of the Moon, planets and brighter deep-sky objects. The team was very pleased with the national recognition of their strong proposal.

Because of the solar eclipses occurring in our area in the fall of 2023 and spring of 2024, the Windsor Centre also organised an eclipse committee to coordinate our efforts in publicizing, educating, and helping to organise eclipse-related events at various sites around the city of Windsor and the county that surrounds it. Activities of the organising committee involved building an eclipse information website, working with local news media on stories, consulting

#### **Centre Executive**

President	Mahayarrahh-Starr Livingstone
Vice President	Steve Pellarin
Treasurer	Laura Burgess
Secretary	Kelsey Romaniuk
National Council Rep	Tom Sobocan
Council members:	
	Sandy van Gaalen

Sandy van Gaalen Mike Mastronardi Brian Simpson Joady Ulrich Michel Collins

with municipalities, the local conservation authority and administration at Point Pelee National Park, providing free talks at local libraries and selling solar eclipse glasses. This worked continued into the new year.

Although the partial solar eclipse on October 14th turned out to be rainy, our Centre hosted events at Colchester Harbour Park and the Point Pelee National Park Visitor Centre all the same. While live observations were not possible, we were able to provide visitors with a streamed view of the eclipse.

The Windsor Centre's strong association with Point Pelee National Park and its Dark Sky Preserve was maintained in 2023 through our consistent cohosting of Dark Sky Nights at the Park each month. Club members were present on every occasion, setting up telescopes for public viewing and providing a number of free public talks in the Park's Visitor Centre. The Park's Perseid Meteor Shower Watch Party in August was a highlight of the year. The overnight event was very well-attended, with hundreds of visitors there with their blankets and chairs, counting the shooting stars as they came and went.

Our group was also active again in the annual Windsor 'City Streets' festival. Some of our members set up a booth along the pedestrian route of one of the city's major streets, talked astronomy with families and visitors, handed out astronomy collector cards to kids, provided views of the Sun through solar telescopes and built and demonstrated how to use planetarium wheels with anyone who wanted one. This interaction led to several new members joining our club.

While the club's activities kept many of us busy, our Centre experienced both happy and sorrowful events during the year as well. The group was saddened by the passing of two of our long-time active members, Dave Panton: a retired aeronautical engineer, outreach volunteer and past observatory director; and Ted Gervais: a veteran observer/ astrophotographer and outreach volunteer. Both spent many years contributing to the club in many ways. Their presence will be greatly missed, and contributions will not be forgotten. In contrast, our group was elated by the news that one of our late founding members, Daniel Bawtenheimer (a past secretary, vice-president and important early outreach astronomer and mentor), was given the honour of having an asteroid designated by the IAU minor planets division with his name (20030) Bawtenheimer = 1992 EN30.

The members of our Centre continue to be active and engage in outreach events and look forward to many new opportunities to share our interest in exploring the night sky.

# Winnipeg

#### About

Membership 232

#### Assets

Glenlea observatory, Spruce Woods Provincial Park dark-sky Preserve, Loaner scope program

#### Partnerships

University of Manitoba, Spruce Woods Provincial Park, Nature Conservancy of Canada, Oak Hammock Marsh Interpretive Centre, Manitoba Museum

#### Outreach

Monthly meetings average 30 to 40 in person and online. Posted on Youtube as well. Astronomy Day, several small outreach events by members.

#### **Special Projects**

Telescopes for Kids, Dark Sky Preserve, Incorporation of the Centre

#### Highlights

End of Covid restrictions allowing in person events again

#### Challenges

Glenlea Observatory flood mitigation efforts.

#### President's Report to the RASC Winnipeg Centre

#### AGM 8 March 2024

I just want to begin by thanking the outgoing Council for all their work they have done this past year: Judy Anderson, Ed Wright, Mike Karakas, Michelle Boyce, Marc Sarrasin, Mark Irvine, Scott Young, Kamala Kodi, Wing Kwong, Daemon Nightshade, Stan Runge and Bryan Stach. I would next like to thank all our volunteers who stepped up to took on roles in our monthly meeting presentations. Next in line to thank are the centre volunteers who took on roles to provide outreach or astronomy events to the Centre and public. With you our hobby of the science of astronomy is shared with the wider community.

This past year the Council has been busy supporting outreach and working to achieve the goals in

#### **Centre Executive**

President
Vice President
Treasurer
Secretary
Council members:

Abdul Al Manni Ed Wright Scott Young

Dennis Lyons

Judy Anderson

Mike Karakas Marc Sarrasin Mark Irvine Michelle Boyce Russell Brown

the strategic plan and the Bylaw. There are three committees that are active now. Finance, Fundraising and Observatory. The Finance Committee meets from time to time to ensure our compliance with the financial policies and procedures and make recommendations to the Council on behalf of the members. Mark Irvine is the Chair of this committee. The Fundraising Committee will work to help fund any projects or programs that fall outside of the normal budget. For instance they worked to help fund Telescopes for Kids. Wing Kwong is the Chair of this committee. The Observatory committee works on keeping Glenlea operational but has also been tasked with reviewing Glenlea and what it could develop into, identifying possible public outreach sites and identifying possible observing sites north of the city. Council is working on developing additional policies and procedures for the committees.

The Provincial Disaster Assistance Claim for the flooding of Glenlea is slowly progressing and we are hopeful to recover some of the clean up costs. Several upgrades were completed at Glenlea this past year improving the member experience. Council implemented a member's night regardless of the sky conditions. The thought is that members could still come out, socialize, learn about the observatory or get some help with their equipment.

The year saw consistent membership numbers around the 240 marks. This is normal and a sign of a healthy membership. Council began the Strategic Plan review as we are halfway through the 5-year plan. The Strategic Plan is located on the members section on the website. Overall, Council has met many of the goals of plan.

It has been a good year with lots of members volunteering to run/participate in the many public outreach that the RASC Winnipeg Centre Inc.

# Yukon

#### About

Year established: 2015 Membership: 22

#### Assets

Our observatory facility consists of an astronomical observatory containing a telescope, a warm-up building which does double duty as a lounge and as a classroom space, an outdoor concrete pad, a small gravel parking area, some lawn area, and an outhouse. It is located just north of Whitehorse. This year the main telescope at the observatory was named the Gucciardo Telescope in recognition of our founding president, Anthony Gucciardo.

#### Outreach

We have two regular programs:

- Monthly Members 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.

Both of these programs are open to the general public.

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.

Our members visited several classrooms, student groups, and camps for youth.

#### Highlights

We believe we have succeeded at our goal of making our programming more regular and predictable. To make our programs more generally provide. Finances are stable and the budget is balanced. New initiatives are being investigated and the future looks positive.

Well, that wraps up my annual report for the year of 2023. Thank you all for the privilege of being your President.

Clear Skies Dennis Lyons

#### **Centre Executive**

President	Christa Van Laerhoven
Vice President	Vikki Zsohar
Treasurer	Forest Pearson
Secretary	Patrick Egan
National Council Rep	Dyson Hale
Directors at Large:	

David Millar Dyson Hale

applicable (as opposed to exclusively geared towards beginners) we renamed and slightly reworked our two regular programs.

#### Challenges

Our main challenge is the same as last year, bringing in enough money to keep paying the electricity bills at our observatory, plus directors insurance and insurance for the observatory. We have managed thus far using



The newly named Gucciardo Telescope

donations from attendees of our events and by offering private night sky tours to tourists.

#### Looking Ahead

The land our observatory sits on is leased. In 2023, ownership of that parcel of land changed hands. We are in the process of building relationships with the new owners, with any impacts of this change of ownership yet to be seen.

#### In Remembrance

Our founding president, Anthony Gucciardo, passed away this year.

# Centre Treasurer Reports

Centre	BEL	EDM	HFX	ΚŴ	LON	SIM	NB	NIA	ОТТ	PG	SAS	STJ	SUD
Membership Revenue													
Membership Fees- Centre fee	743	6,080	3,365	3,354	3,273	4,099	1,592	1,490	7,677	1,128	2,355	1,688	787
Membership Fee - Affiliate													
Membership Fees - Other													
Centre Newsletter													
Donations / Fundraising													
Donations	149	12,489	350			1,100	383	726	1,578	3,019	500	50	1,215
Fundraising						202		168	1,933	10,000			
Sales Revenue													
Sales of Observer's Handbooks													
Sales of Observer's Calendars	137	455	340	510	400	710	930	60	1,205	1,125	640	1,093	
Other Publication Sales													
RASC Promo items													
Other Sales	1,652	406		197			120			206			
Subscription Revenue													
Astronomy / Sky & Telescope													
Other													
Events Revenue													
Star Parties	146	6,571	1,190	2,140							22,107		
Annual Dinner													
Astronomy Day													
Other Events													
Miscellaneous Revenue													
Interest and Dividends	-	65	63	227				308	750		8		
Advertising													
Observatory site revenue - members								30	505		160		
Equipment rentals/loans											40	15	
Public services, events, outreach						3,142				1,539	330		
Miscellaneous		411		151		2,775	25	1,857		458	8,094		
TOTAL REVENUE	2,828	26,477	5,308	6,579	3,673	12,028	3,049	4,639	13,648	17,475	34,234	2,846	2,002

# 2023 Centre Treasurer Reports

Revenue

# 6 Centre Treasurer Reports

Centre	BEL	EDM	НFХ	КW	LON	MIS	NB	NIA	отт	PG	SAS	STJ	sud
Sales Expenses													
RASC publications	159	1,160	491	439	338	679		163	1,143	1,143			
Other Publications				396									
Newsletter			80								177		
RASC Promo items					194			958			51		
Other				1,488				732				38	
Event Expenses													
Star Parties		9,027	1,190	3,200					1,404	1,404	23,666	51	
Annual Dinner	220								103	103			
Astronomy Day													
BIYA Event													
Meetings		187	230	358		666		1,045					
Other Events		10,185	36	385				34				75	
Travel Expenses													
GA and Council Meetings		1											
Administrative Expenses													
Office Administration	24	349	I	407		603		10	1,371	1,371	186	456	96
Equipment and Supplies		787			27				1,312	1,312	58	98	
Insurance		4,098	1,837	432		432			2,279	2,279	3,377	483	1,257
General Expenses and Audit		325				1,949		44				51	
Awards						332			473	473			
Donations		600	120										
Advertising								45					
Miscellaneous Administrative		9,041			606						21		
Miscellaneous Expenses	112	13,547	1,873	448	573	6,465		5,755	10,763	10,763	10,866	106	
TOTAL EXPENSES	515	49,306	5,857	7,553	1,738	11,459	I	8,786	18,848	18,848	38,402	1,358	1,353
SURPLUS, (DEFICIT) ON OPERATIONS	2,313	(22,829)	(549)	(974)	1,935	569	3,049	(4,147)	(5,200)	(5,200)	(4,168)	1,488	649

# Expenses

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Centre	BEL	EDM	HFX	κw	LON	MIS	NB	NIA	ОП	PG	SAS	STJ	ans
ASSETS													
Current assets	10,243	133,943	18,458	20,097	10,961	30,136	5,127	6,971	72,427	439	32,387	35,764	10,192
Long-term assets	150	300,000	10,362		23,507			16,814	20,237	126,125	142,067		
Total Assets	10,393	433,943	28,820	20,097	34,467	30,136	5,127	23,785	92,664	126,564	174,454	35,764	10,192
LIABILITIES													
Current liabilities			2,111	150					36	1,253			
Long-term Liabilities													
ΕQUITY													
Net Equity	10,393	433,943	26,709	19,947	34,467	30,136	5,127	23,785	92,628	125,311	174,454	35,764	10,192
TOTAL LIABILITIES AND EQUITY	10,393	433,943	28,820	20,097	34,467	30,136	5,127	23,785	92,664	126,564	174,454	35,764	10,192

# Balance sheet summary

# 2024 Award Winners

Simon Newcomb	Dr. Chris Gainor (Victoria)	Fellowship Award	Robyn Foret (Calgary)
Service Award	James MacWilliam (Sunshine	Chant Medal	Warren Finlay (Edmonton)
	Coast) June MacDonald (New Brunswick)	President's Award	J. Randy Attwood (Mississauga)
	Heather Laird (Calgary) Charles Ennis (Sunshine Coast)	Qilak Award	Tony Schellinck (Halifax)

# **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. <u>www.rasc.ca/sites/default/files/LookingUp-300-text.pdf</u> For names after 2000, go to the RASC website <u>www.rasc.ca/rasc-awards</u>

# **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

# **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.

#### 2014

- Randy Attwood (Mississauga)
- · Dr. Roy Bishop (Halifax)
- Peter Broughton (Toronto)
- Dr. James Hesser (Victoria)
  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)

# **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 Chevrefils (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.

- 2006 Dr. Lauren A. MacArthur (British Columbia)
- 2007 Dr. Frédéric Grandmont (Université Laval)
- 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)

**Past Award Winners** 

# **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.

2010 Sid Sidhu (Victoria)

- 2011 Mayer Tchelebon (Toronto)
- 2012 Randall Rosenfeld (National Member)
- 2013 Dave Lane (Halifax)
- 2014 Robert Dick (Ottawa)
- 2015 Walter MacDonald (Kingston)
- 2016 Terence Dickenson (Toronto)

2017 Dave Garner (Kitchener-Waterloo)

- 2018 Rick Huziak (Saskatoon)
- 2019 Michael S.F. Watson (National Member)
- 2020 Barry Shanko (Vancouver) (posthumously)
- 2021 Renata Koziol (Society Office)
- 2022 Emily Lafleche (Montreal)
- 2023 Judy Black (Halifax)

# 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)2013 Robert Duff (London)
- 2014 Dr. Howard Trottier (Vancouver)
- 2015 Toronto Centre DDO Volunteers (Toronto)
- 2016 Doug Cunningham (Toronto)
- 2017 Paul Heath (Halifax)
- 2018 Dr. Rob Thacker (Halifax) RASC

Mike Moghadam (Ottawa)

Daniel Brousseau (Sherbrooke)  (New Brunswick)
 CASCA—Dr. Jan Cami (Western University)
 FAAQ—Hugues Lacombe (Club d'astronomie de Charlevoix)
 2020 Not awarded
 2021 Not awarded
 2022 Jenna Hinds (National)
 2023 Wilfred Buck

2019 RASC—Chris Curwin

# **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.

#### 2016

- Andy Blanchard (Hamilton)
- Gary Bennett (Hamilton)
- Paul Gray (Halifax)
- Hugh Pett (Okanagan)
- Chris Teron (Ottawa)

#### 2017

- 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

- Colleen O'Hare (Okanagan)
- Grant Rice (Okanagan)
- Brian Lucas (Sunshine Coast)
- Neil Sandy (Sunshine Coast)

#### 2019

- 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)

# 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)

# 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) Dr. David L. Crawford (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

Past Appointed and Elected Officers of the RASC

# **Donations 2023**

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

Adrian Aberdeen Albert Perkins Andrew Lesser Brian M. Carroll Carl Brown Catherine Carr Claude Lapointe **Demetrios George Hamelin** Donald N. Funston Elena Zanetti Eric Rubinstein Estate of Beryl Arnold Gerry Iannuccilli Jr. Gordon Falconer Guy Ridgway Guy Thibault Jacek W Malinowski Jason C. Sokolosky Jeff Bodenham John Johnston John L Stewart Joyce Feinberg June MacDonald Kenneth C. Boshcoff Kevin McNamara M. Hugues Lacombe Margaret Scorthorne-Brons **Mike Stephens** Monica Elaine Schartner-Hansen Mr. Albano Eugenio Mr. Brad E Ward Mr. Bryon M Elliott Mr. Calvin Lambie Mr. Dale Nejmeldeen Mr. Dirk Auger Mr. Donald D Scarlett

Mr. Eugene Frank Milone Mr. James Hesser Mr. James Hughes Mr. James Sofia Mr. Jeff Vincent Mr. Jeffrey D. Walker Mr. Jeffrey Jay Marynowski Mr. John W. Johansen Mr. Kenneth Imeson Mr. Marcel Mueller-Goldkuhle Mr. Mark Pickering Mr. Marshall R Zhao Mr. Michael Andrew Russell Wright Mr. Mike Gore Mr. Paul Anthony Tilson Mr. Paul Kelly Mr. R Garth Hutchinson Mr. Rockney Jacobsen Mr. Wayne Herd Mr. William P. Bradley Mrs. Judy Black Ms. Nancy E. Church Ms. Tanya Oleksuik Olaf Lutz Pallavi Gotla Patrick Rebstein Perry R Cash Peter Cresswell Peter Milligan Raymond Keith Krag **Richard Corbet** Robert B. Bates Robert G. Anderson Robert W King Ron Fisher Scott Young

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Donations 2023

Jay Anderson Jim Edgar Leona Harari Michael Frederick Kemp Mr. Brian Banks Mr. Ken Young Mr. Randy Drumm Mr. Ryan Hildebrandt Mr. Terry Curtis Ms. Yolanda Kippers Nada Tijanic Neil Sandy Paul Sadler Peter R. Schreibmaier **Richard Bramm** Roland G. Dechesne Thomas J. Bonner T Stephen Dodson \$250 - \$499 **Beverley Burns** David Illig Dr. Alan McKeown Glen Harris Heather Mcgillivray Mr. Alan Burnell Mr. Charles Marien Mr. David A. Rodger

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