



## RASC, Halifax Centre Annual General Meeting - December 8, 2017

### AGENDA

#### ***Welcome & Opening Remarks***

- 1- Approval of 2017 Agenda
- 2- Approval of Minutes of December 9, 2016 AGM
- 3- Appointment of Auditor for 2017-2018 Audit

#### ***Reports***

- 4- President / VP Report – Paul Gray
- 5- Secretary's Report– Judy Black
- 6- Auditor's Report – Gregg Dill
- 7- Treasurer's Report – Jim Millar
- 8- National Council Representative Report – Pat Kelly

#### ***Committee Reports***

- 9- Observing Chair Report– Sean Dzafovic
- 10- St. Croix Observatory (SCO) Report – Tony McGrath
- 11- Nova Notes – Tony Schellinck
- 12- Nova East Report – Melody Hamilton
- 13- Librarians' Report – Andy Hasler
- 14- Outreach – Paul Heath

#### ***Matters to Be Determined by Special Resolution***

- 15- None at this year's AGM

#### ***Call for Nominations and Election of 2018 Council***

- 16- Nominating Committee Report - Paul Gray
  - a- Nominations for positions
  - b- Elections for positions

#### ***Regular Business***

- 17- What's Up? – Sean Dzafovic
  - 18- Presentation: Dave Chapman - "The Unusual Moons of Early 2018"
  - 19- Date of next Members' Meeting – January 19, 2018 in Room AT101, 8:00 PM
- Adjournment

**Royal Astronomical Society of Canada - Halifax Centre**  
**Annual General Meeting (AGM)**  
**Friday, December 8, 2017**

President Paul Grey welcomed the 27 members in attendance and provided opening remarks.

**Welcome and Opening Remarks**

**1. Approval of 2017 Agenda**

**081217AGM-Mot01:**

It was moved by Paul Heath and seconded by Blair MacDonald to approve the 2017 AGM agenda as circulated.  
CARRIED.

**2. Approval of 2017 AGM Minutes**

The minutes of the 2016 AGM had been pre-circulated to members.

**081217AGM-Mot02:**

It was moved by Dave Lane and seconded by Patrick Kelly to approve the minutes of the 2015 AGM as circulated.  
CARRIED.

**3. Appointment of a New Auditor**

Jim Millar stated that Gregg Dill had re-offered to stand as auditor for 2017-2018.

**081217AGM-Mot03:**

It was moved by Jim Millar and seconded by Andrew Frank to appoint Gregg Dill as Auditor for 2017- 2018.  
CARRIED.

**Council Executive Reports**

(Note: All reports in their entirety will be in the Jan/Feb edition of Nova Notes)

4. **Vice-President's Report** – Paul Gray stated that a president for the past year could not be found and that he acted in that capacity in a President's absence. The Council works well together and steps up when needed. He noted that Tony Schellinck would be stepping down as Editor of Nova Notes, and a replacement was being sought. He also thanked Judy Black for keeping the Council on track, and leading the final part of the Bylaw review. Going forward, members were looking to revise the Halifax Centre Website and to making upgrades to the St. Croix Observatory (SCO).
5. **Secretary's Report** – Judy Black stated there were 8 Council meetings and 7 Members' meetings in 2016-2017, including the informal members' BBQ at SCO. Members were notified at least 3 times about each of the meetings. There were numerous motions made by Council that had budgetary implications such as funds required for the two Dark Sky Week-end at Kejimikujik, replacement books for the library, and repairs to the library cart. The nomination of Paul Heath for the Qilak Award resulted in the winning of that award. Correction amendments to Bylaw #1 (2016) were approved by special resolution in February 2017. As required in the current bylaws, she advised members of the make-up of the Halifax Centre 172-member membership, up five members from last year at this time. The position descriptions for the Board of Directors and support positions were approved by Council in November and are now posted on the Halifax Centre website. She thanked the Centre and Council members for their support in the past year.
6. **Auditor's Report** – Jim Millar read the Auditor's letter as Gregg Dill could not attend the meeting. There was one recommendation:
  - a) That the Board entertain a motion to require cheques and other documents be signed by two of at least three people registered to have signing authority.

Membership agreed the Board should investigate this and report back at a subsequent Members' Meeting.

7. **Treasurer's Report** - Jim Millar spoke to the financial report he provided and explained the changes in revenue and expenses. Revenue was \$4,094.47 with expenses at \$6136.70. This meant a deficit of \$2042.23 for the year, but the Centre continues to be successful and solvent. The deficit was planned as we were accumulating too much each year for an non-profit organization. He then explained the assets of \$35,091.06, liabilities of \$620.70, and equity of \$32,818.48. Nova East that had a net deficit of \$432.35 due to an increased prize acquisition budget and payment of the guest speaker. Jim also notified the membership he is stepping down from the treasurer's role.
8. **National Council Representative Report** – Pat Kelly noted that much of the Society's work was accomplished in its Committees. If Halifax Centre members want to know how they can become involved, go to the national website to find the committees and the types of work they do. The committees are being restructured, and the structure and purpose of the RASC General Assembly is being reviewed. He also noted that because of his role in the Blomidon Naturalists Society, he was pleased to give contributors Blair MacDonald and Dave Chapman complimentary copies of the Society's 2018 calendar.

**081217AGM-Mot04:**

It was moved by Paul Heath and seconded by Blair MacDonald to accept the Council Executive Reports as presented.  
CARRIED unanimously.

**Committee Reports**

(Note: Committee reports in their entirety will be in the Jan/Feb edition of Nova Notes.)

9. **Observing Chair Report** – In the absence of Sean Dzafovic, Paul Gray provided highlights from Sean's report. Eight members received RASC certificates in the past year – Melody Hamilton, Tony Schellinck, Judy Black, Dave Chapman, Art Cole, Jeff Donaldson, Michael Gatto, and Blair MacDonald. Tony Schellinck was applauded for being the only person in Canada to receive all 3 of the Astro-Imaging certificates. Michael Boschat was also applauded for receiving a certificate from the American Association of Variable Star Observers (AAVSO).
10. **St. Croix Observatory (SCO) Report** – In the absence of Tony McGrath, Paul Gray provided highlights from his report. The annual SCO BBQ was another success this past year with new and returning members in attendance. The annual work party saw a major clean-up of the roll-off observatory, warm room, storage shed and grounds. The go-to Newtonian continues to be used on a regular basis; introductions on its use were provided throughout the year. Upgrades in the coming year will include an electrical upgrade and the installation of a steel telescope pier outside the observatory. Tony noted in his report that SCO continues to fulfill a worthwhile function for the Centre membership and thanked everyone who contributed to SCO operations.
11. **Nova Notes Report** – Paul Gray displayed the recent *Nova Notes* cover while Tony Schellinck provided an overview of *Nova Notes*, including both regular contributors and those who provided special articles, and members who provided photos for the cover and to enhance articles. He thanked all the members of his large team that produced 5 issues of *Nova Notes* per year. He noted that he was stepping down as Editor; a replacement is being sought. He requested that when the new website is being developed that the ability to track the number of times the newsletter is downloaded is part of the site's capabilities.
12. **Nova East Report** – Melody Hamilton, as one of the Co-Chairs of Nova East, reported there was a change from the regular date in August to a week-end in July due to many members attending the Solar Eclipse in the United States. It was a great opportunity for members to attend education sessions but equally as important was the opportunity for socializing and observing with Halifax Centre members. She noted there were 3 documents going forward to the 2018 Nova East Planning Committee:
  - a- Terms of Reference for the Nova East Star Party Planning Committee;
  - b- Summary of recommendations regarding recurring events, health and safety, inventory lists and an action list; and
  - c- Nova East Task Chart that includes a timeline of items to be planned, who is responsible, and the associated tasks

Members inquired as to where pictures of the 2016 Nova East could be found. Melody informed them they could be found on the web site in the Nova East Star Party.

13. **Librarian Report** – The report to be provided by Andy Hasler will be included in Nova Notes.

14. **Outreach Report** – Paul Heath provided an overview of the report that will be included in the Jan/Feb Nova Notes. He thanked everyone who helped him during his illness. He estimated about 53-5800 Galileo moments at various events such as HalCon, the eclipse, and International Observe the Moon (InOM). He thanked:
- a) Tony Schellinck for his extensive public outreach through his flat-screen presentations in Liverpool, and through SCANS;
  - b) Melody for her work in the Digby-Valley area; and
  - c) Dave Chapman for his work with Kejimikujik Dark-Sky Weekends.

Paul also noted that from January to November there were approximately 625 attending presentations at the planetarium.

**081217AGM-Mot05:**

It was moved by Tony Schellinck and seconded by Dr. Roy Bishop to accept the Committee Reports as presented.

CARRIED unanimously.

**Matters to be Determined by Special Resolution**

15. **Bylaw #1 Review Presentation** - There were no matters to be determined by Special Resolution.

**Call for Nominations and Election of 2018 Board of Directors**

16. Paul Gray explained that beginning in January 2018, the RASC Halifax Centre would now be governed by a Board of Directors instead of the current Council. According to Bylaw #1 (2016) now enacted, there could be no less than five and no more than 10 on the Board. There was a call for nominations from the floor for the 2018 Board of Directors. Judy Black nominated Paul Gray for the position of President; Jim Millar seconded the nomination. Paul Gray agreed to stand for the position.

The slate of volunteers for the 2018 Board of Directors was presented as follows and included one new member:

Executive Committee

President – Paul Gray

Vice-President – no nominees

Recording Secretary – Judy Black agreed to re-offer as Secretary

Treasurer – no nominees

National Representative – Pat Kelly agreed to re-offer as the National Representative

Directors

Melody Hamilton

Andrew Frank

John Read

Paul Heath (also re-offered to serve as Outreach Chair)

Sean Dzafovic (also re-offered to serve as Observing Chair)

Charles White

There being no further nominations, the 2017 Council positions were approved by acclamation.

**161209AGM-Mot08:**

It was moved by Pat Kelly to adjourn the AGM.

**Regular Members' Meeting**

17. **What's Up?** – Paul Gray and Dave Chapman informed the membership of a Wednesday/Thursday Geminids watch at SCO, weather permitting. Dave agreed to bring hot chocolate and members were encouraged to bring snack food if they wished. members will be notified on the Discussion List once weather and clear sky conditions are determined.

18. **Refreshments:** Members were invited to enjoy the Christmas treats provided while the guest speaker was set up.
19. **Presentation:** The Unusual Moons of Early 2018 – Dave Chapman, as the Guest Speaker, explained how we can have two full moons in one month. There will be two full moons in January, none in February and two in March. How can this happen? The long-term average of the synodic period of the moon is 29.53 days, and that months with 31 days are three times more likely to have two full moons than 30-day months. That meant that February would have either one or no full moons. How often does this happen? Looking at dates of its occurrence in years past - 1961, 1980, 1999, 2018 - it appears to happen every 19 years. The future occurrence is therefore in 2037. He referenced page 125 in the 2018 Observers Handbook. He also made comparisons on the apparent size if the moon was compared to pizza - small, regular and large. The small pizza was approximately 7% less than the regular and the regular was approximately 7% less than the large or "Super pizza!" The use of the word "super" should not be used in reference to these perigees, and that we should discourage its use in any outreach conducted.
20. **Date of Next Members' Meeting:** January 19, 2018: 8:00 – 9:30 PM in AT101.
21. Adjournment at 10:00 PM.

The following reports were provided in the 2018 January/February edition of Nova Notes

## 2017 Annual Report: Vice-President

Well, 2017 is almost history. Along with another successful Nova East we have had another busy year in the Halifax Centre. I am writing this as 1<sup>st</sup> VP but have spent the year acting as your President as we had a vacancy in that position. I enjoyed the extra time as in the role as President with the presiding over meetings and working with the great team on our executive. Not enough praise can be said about the great team of people we have in our Centre. Many thanks to them all!

Nova East was a huge success once again. A nod of thanks and round of applause to Judy Black and Melody Hamilton for co-chairing the great event! With over 60 people in attendance and good weather even though the skies were not perfectly clear, we had a good time with great talks, food, and time with fellow sky watchers.

Nova Notes has been a great asset to our Centre and Tony has done great work in seeing it produced. However, Tony has decided it is time to let someone else take charge of Nova Notes and so we are seeking a volunteer who might like to tackle our newsletter. Should you be interested contact one of us on the executive.

Other changes coming in the New Year also include us switching to our new bylaws and a Board of Directors. With that project behind us, thanks to the lead of Judy Black, we now need to refocus our club and direct our energies into new goals. One of these is the long overdue update of our club's website. If you have any web-based skills and would like to help out by setting up the site or simply helping add the content contact us. Another is to do an upgrade to the St Croix Observatory, mainly a power upgrade but there are other ideas too. Stay tuned to see what we plan and how you can help out.

As a whole, we had a very busy and good year with a full slate of speakers for 10 monthly meetings plus numerous outreach events. We have a very active Centre with many knowledgeable members. We are very fortunate in this way and I encourage all members to come out to events to take advantage of our great Centre.

Clear skies,  
Paul Gray, 1st Vice-President  
RASC, Halifax Centre

## 2017 Annual Report: Secretary

The principal duty of the secretary is to provide minutes, agendas, and meeting announcements to the Council and members of the Centre. An additional duty is to book meeting rooms through SMU for meetings. We were welcomed back for another year and are grateful to Saint Mary's University for their very significant support related to meetings and special speaker events held at their institution.

There were 8 Council Meetings in 2016-2017 which usually occurred during the hour before the Centre Meeting. Members are welcome to attend Council meetings if they wish. There were no Council meetings held in June, July and August.

There were 7 regular Members' Meetings along with the informal gathering at the Annual BBQ held in June 2016. All Members' Meetings had a guest speaker. Some of the highlights included the May musical presentation by RASC Historian Randall Rosenfeld, the youth presentations in April and November, the September update on members' summer activities (at the solar eclipse, Starmus, Nova East and the August Kejimikujik Dark Sky Week-end) and SMU's MacLennan Lecture that replaced the October meeting. There were minimally 3 reminders of meeting for every Council and Members' Meeting held.

Motions were made with a quorum of the Council to provide direction on policy, activities, support of the observatory at St. Croix, our budget, and definition of any spending not covered in the budget. Motions made this past year included:

- Budget adjustments:
  - Up to \$1000.00 be provided for purchase of the parallelogram mount for the Thurlow binoculars at SCO;
  - Up to \$600.00 for purchase of new books for the library;
  - Up to \$1000.00 towards RASC Halifax Centre participation in two Kejimikujik Dark Sky Week-ends (August and September);
  - Up to \$425.00 be set aside for production and mailing of *Nova Notes*;
  - Up to \$250.00 for purchase of a RASC, Halifax Centre banner and base;
  - Increased budget for Nova East Prizes from \$500.00 to \$1000.00;
  - Up to \$299.00 for the purchase of a replacement laptop for the Centre;
  - \$165.00 for Halifax Centre production video; and
  - \$100.00 for annual thank you gift to Jamie Carmichael.
- Bylaw #1 (2016) amendments approved by Council prior to presentation and approval by Members
- Nomination of Paul Heath for the RASC Qilak Award (which he subsequently won)
- Treasurer to acquire a tax accountant to assist with the T2 submission to CRA.
- Halifax Centre would donate the Unihedron Sky Quality Meter of RASC Halifax Centre to Tim Doucette's Deep Sky Eye (DSE) Observatory.

RASC Halifax Centre Bylaw #1 (2016) requires that members are advised of the make-up of the membership of the Centre which as of the September 30 totaled 172 members (up from 167 last year):

- 15 Regular Family
- 127 Regular
- 5 Family Youth
- 3 Youth
- 20 Life
- 1 Regular International
- 2 Regular USA (New York, Massachusetts)

I had the continuing honour of acting as Chair of the Bylaw Review Committee that was formed in April 2016. The RASC, Halifax Centre Bylaw #1 (2016) had been approved at the 2016 AGM; however, a few required adjustments were approved by Special Resolution at the February 2017 Members' Meeting and subsequently approved by the Registry of Joint Stock Companies (RJSC).

Council position descriptions, drafted in 2016 and revised in 2017 to reflect changes made in Bylaw #1 (2016), were approved at the November 2017 Council meeting. They will be posted on the Centre's website and will be included in the RASC Halifax Centre's Council Policy & Procedure Manual. Development of this manual should be completed in 2018.

This was my second year serving as RASC Halifax Centre Secretary. I would like to thank Halifax Centre members and the Council for their invaluable support over the past year. It has been an honour working on your behalf.

Respectfully Submitted,  
Judy Black, Secretary  
RASC, Halifax Centre

## 2017 Annual Report: Auditor

December 4, 2017

To the members of the RASC Halifax Centre.

I have examined the financial records for the period October 1, 2016 to September 30, 2017. I believe that the Balance Sheet prepared by the treasurer presents an accurate account of the financial position of the Centre as of September 30, 2017.

I have also looked closely at the Income Statement, the Report of the Treasurer, and the substantiating records and receipts and have not found anything of major concern. I have not checked every transaction or receipt but most of them.

### **Recommendation:**

1. That the board entertain a motion to require cheques and other documents be signed by two of at least three people registered to have signing authority.

Respectfully submitted,  
Gregg Dill, Auditor

## 2017 Annual Report: Treasurer

### **Introduction:**

The year 2016/17 was another financial success for the Halifax Centre. We had an operational deficit of over \$1,314 before depreciation and write offs. In previous years our surplus was usually provided by the income from Nova East. This year it was decided to run Nova East at break even or a small deficit. We ran a deficit of \$432. We also continued to write off our equipment at approximately 3%. We did not upgrade the library this year and wrote down its value by about \$200. We should continue to upgrade the library in the new year.

### **Deficit of \$2042.230 for Fiscal 2016/17**

The Centre continues to be successful and solvent. The deficit was planned as we were accumulating too much each year for a non-profit organization. We are holding our own with membership and Nova East continues to be successful. We continue to follow good accounting procedures by depreciating our assets over time. We continued to invest in the St. Croix Observatory.

### **Details of the 2015 Income Statement**

#### **REVENUE:**

**Membership Fees \$2976.45:** We had a slight increase in membership fees this year. At year end we had 170 members, up from 1676 the previous year. Total income was up only slightly because we had more family memberships.

**Donations \$73.24:** We received only small donations this year.

**Educational / Outreach:** We had no revenue in this category this year as we did not hold NOVA program.

**Interest \$132.63:** Interest on our investments was up a bit. Interest rates continue to be low.

**Sales of Merchandise (Gross) \$914.68:** These were mainly RASC calendar and sales of star finders to the Friends of Keji for sale in their shop.

**Nova East (net) (432.35):** We planned for a break even for Nova East this year. We came close. We significantly increased the number and value of prizes that were given out this year. We should continue to try and break even in future years.

**Printed Nova Notes Subscriptions \$204:** This is what printed newsletters earned this year from members subscribing to hardcopy. We had fewer members (5) wanting printed copies this year.

## EXPENSES:

**Meetings \$330.65:** Pat Kelly did well to keep treat spending down again this year but he missed a meeting and his replacement bought a little more than usual. He continues to provide a nice variety of treats for our meetings.

**Newsletter \$455.45:** NN's expenses are up this year. This is caused by increased postage and printing costs. We are now subsidizing each issue by about \$6, up from \$5.

**Cost of Goods Sold \$225.82:** This is down this year as we paid for our calendars in the previous fiscal year.

**Equipment and Supplies \$79.22:** The cost was not significant enough to add to our capital equipment.

**Office Administration \$336.80:** Costs were a little lower this year. The secretary did less photocopying.

**Educational Activities (Outreach) \$1455.10:** This is like previous years. The Keji Dark Sky Weekend continues to be a large portion of these expenses but we had two this year and our overall spending for the year was not higher than last year.

**Insurance \$1,251.00:** Insurance for SCO was up a further \$20 in 2016.

**Awards and Donations \$128.83:** We continue to donate to the Clear Sky Clock website and the International Dark Sky Association.

**Observatory - Operating \$507.10:** This includes the usual gift to Mr Carmichael. A BBQ, some propane, and the odd item. It also includes taxes to Hants County.

**Asset Depreciation \$727.99:** We continue to depreciate equipment at 3% per year and library books at 10% per year.

**Miscellaneous Expenses \$12.50:** This was for minor purchases.

## Details of the 2015 Balance Sheet

### ASSETS:

**Cash \$3,018.58:** This is the balance in our chequing account less uncashed cheques. We also had \$272.50 in accounts receivable for September membership fees owing from National Office.

**Merchandise Inventory \$161:** There is only a small change in inventory this year. We sold all our calendars and some more Mylar filter material.

**Investments \$16,062.98:** This is now the value of the principle in our investments. We now have four GICs that come due throughout the year and interest is only counted at maturity.

**Estimated Library \$1,778.19:** We did not spend anything on new books this year. We should continue to upgrade the library in future years.

**Observatory Equipment \$11,825.88:** After depreciation of observatory equipment of \$319.06, the sale of the 17.5-inch telescope and the purchase of the parallelogram and mount for the Thurlow binoculars.

#### LIABILITIES:

**Accounts Payable \$620.70:** This is for bills for Nova Notes received and bills received after year end.

#### EQUITY:

**Nova East Reserve Equity \$5,000.00:** This reserve is capped at \$5,000.00.

**Common Equity \$27,818.48:** Common equity fell by \$2,04223 from 2015/16. This is explained by the operating loss for the year.

#### Summary and Recommendations:

I was pleased to serve as Treasurer again this year. Unfortunately, demands on my personal life mean that I will not be returning next year. I will be available to help the new Treasurer transition into the job.

**Royal Astronomical Society of Canada, Halifax Centre**  
**Comparative Income Statement**  
**Years Ending September 30, 2016 and September 30, 2017**

	Years Ended September 30		Amount of Increase or (Decrease) during 2017
	2017	2016	
<b>Revenue</b>	<b>-\$2,042.23</b>	<b>Deficit</b>	
Membership Fees	\$2,976.45	\$2,901.05	\$75.40
Donations	73.24	1,000.00	(926.76)
Educational Activities	-	-	0.00
Interest	132.63	80.24	52.39
Sales of Merchandise	1,140.50	1,275.00	(134.50)
Nova East (Net)	(432.35)	1,815.32	(2,247.67)
Nova Notes Print Subscriptions	204.00	289.29	(85.29)
<b>Total Revenue</b>	<b>\$4,094.47</b>	<b>\$7,360.90</b>	<b>(\$3,266.43)</b>

## Expenses

Meetings Treats	\$330.65	\$244.57	86.08
Guest Speaker	\$454.48	\$-	454.48
Newsletter	455.45	309.13	146.32
Depreciation and write offs	727.99	587.03	140.96
GA 2017	116.68	179.62	(62.94)
Equipment and Supplies	79.22	442.35	(363.13)
Cost of Goods Sold	225.82	1,175.87	(950.05)
Office Administration	336.80	484.26	(147.46)
Educational Activities	1,455.10	1,416.45	38.66
Insurance	1,251.00	1,231.00	20.00
Awards and Donations	128.83	203.73	(74.90)
National Office Processing	55.08	54.24	
Operating Expenses Observatory	507.10	636.00	(128.90)
Miscellaneous	12.50	75.00	(62.50)
<b>Total Expenses</b>	<b>\$6,136.70</b>	<b>\$7,039.25</b>	<b>(\$902.54)</b>
<b>Operational Surplus (Deficit)</b>	<b>(\$2,042.23)</b>	<b>321.66</b>	<b>\$(2,363.89)</b>

Respectfully submitted,  
Jim Millar, Treasurer  
RASC, Halifax Centre

## 2017 Annual Report: National Council Representative

Most of the National Council's work is done through its committees. Committee chairs and membership are normally re-struck at the General Assembly at the meeting following the Annual General Meeting. This did not happen this year as the board wanted to review the committee structure and decide where the society's priorities lay and to see if the present committee structure best met those aims. The national council has not met since then, but there is a meeting set for December 10, 2017 which will not occur until after the deadline for the submission of this report. Some items on the agenda include: membership fees, Centre involvement in the Centre's Manual (a guide for running Centres), the previously mentioned items (Committee objectives, Committee activity and succession planning), and the future of General Assemblies.

I would encourage everyone to log in to the members' section of the Society web site and look at the reports of the various committees. If you would like to contribute, contact the chair of the committee with an offer to volunteer!

Respectfully Submitted,  
Patrick Kelly, National Council Co-Chair  
RASC, Halifax Centre

## 2017 Annual Report: Observing Chair

Congratulations to the Halifax Centre members who completed RASC Observing Certificates this year:

- Melody Hamilton – Deep Sky Gems
- Tony Schellinck – Explore the Universe

- Judy Black – Explore the Moon (Binocular)

Halifax Centre members also successfully completed Astro-Imaging Certificates this year:

- Tony Schellinck – Wide Field
- Tony Schellinck – Solar System
- Tony Schellinck – Deep Sky
- Dave Chapman – Wide Field
- Art Cole – Solar System
- Jeff Donaldson – Deep Sky
- Michael Gatto – Wide Field
- Blair MacDonald – Deep Sky

Halifax Centre members are also active participants in observing programs for other organizations. Mike Boschat received a certificate from the American Association of Variable Star Observers (AAVSO) for his 3000<sup>th</sup> sunspot observation since 1999.

Clear skies,  
Sean Dzafovic, Observing Chair  
RASC, Halifax Centre

## 2017 Annual Report: St. Croix Observatory

SCO continued as a centerpiece of observing activity for the Centre. A number of targeted events were held:

- **BBQ** – A BBQ social was held at SCO in June to encourage use of the facility and give new members and guests an opportunity to meet and talk and learn more about the facility, its resources and how to access it. The event was well attended.
- **Annual Maintenance Work Party** – The annual work party saw a major clean-up of the roll-off observatory, warm room, storage shed and grounds.
- **406mm Go-To Newtonian** – The telescope continues to be a popular and useful addition to SCO. Quite a number of observers have been introduced and a number of sessions were held throughout the year.

### Current Initiatives

1. Any inventory of equipment held at SCO as well as Centre-owned equipment in general, was started this year. The inventory is effectively complete, however the format and place in which to hold the information is not settled. The plan is to assign an inventory card to each piece of equipment so that a catalog can be built and used. This will be completed in an electronic format and kept by the SCO manager. The opportunity to put this on the Centre web site exists, however no plans have been made on how to implement this.
2. Discussion continues to occur around upgrades at SCO. Two concepts are being considered:
  - a. **Electrical Upgrade**
    - i. Current situation (no pun intended) – a review of the facility has pointed out the need to upgrade the electrical. Primary considerations are:
      1. Voltage Drops – Voltages at the outlets in the roll off experience large voltage drops when in use. While it is acceptable for powering lighting and electric dew removal equipment, the existing distribution is useless for powering telescope electronics. The voltage drops arise due to a combination of small wire sizes which are installed, as well as the long runs from the fuse blocks in the warm room to the outlets in the roll off.
      2. No 120 Vac Power in the Observatory – Currently there is no 120 V power in the roll off.
    - ii. Recommendation – proceed with detailed design and budget preparation for new installation.

- b. **Steel Telescope Pier** – Installation of a steel telescope pier outside the observatory adjacent to the existing telescope pads. The intent is to provide a pier which will accept a number of common telescope mounts such that it could be used with the Thurlow binoculars as well as owner supplied mounts.

### Equipment Disposal

Several items of equipment which were determined to be surplus were removed from SCO. In particular:

- Sky-Watcher 114mm Newtonian and EQ-3 Mount – this telescope was retired and sold.

### Equipment Additions

The following items were added to the Centre inventory

- **Telrad Unit Power Finder** – The Telrad was determined to be the most appropriate finder for use on the Thurlow binoculars and one was acquired and installed for use.
- **Binocular Parallelogram Mount** – The mounting and tripod for the Thurlow binoculars received a major upgrade with the acquisition of a substantial parallelogram mount. The new mounting and tripod are a major improvement and make the use of the binoculars in a group setting a much more efficient process.

### Equipment Repairs

- **Eye Pieces for Thurlow Binoculars** – The binoculars have eyepieces which are a “press fit”. At times the installation and removal of these eyepieces present some challenges. During the course of the year, one of the eyepieces was damaged when the rubber eyecups was separated from the eyepiece. Repairs were made and the unit returned to service. It is easy to see how this could occur, and will likely occur again, efforts are being made to solve the root cause.

### Energy Systems

There are two sources of energy at SCO, a Photo Voltaic system for electricity and propane for heating.

- Electrical – no major problems were reported for the system. It is worth noting that the system is somewhat limited in capacity and is primarily used for site lighting and convenience power.
- Propane – two 11.3 kg cylinders of propane were consumed.

SCO continues to fulfill a very worthwhile function for the Centre membership. It remains this way because of the efforts of a number of dedicated people who graciously volunteer their time and talent. On behalf of the Centre, I would like to extend a heartfelt thank you to those who contributed to SCO operations and activities throughout the year, and look forward to their continued support in maintaining this most valuable asset.

Respectfully submitted  
Tony McGrath, SCO Manager  
RASC, Halifax Centre

## 2017 Annual Report: Nova Notes

Five issues of Nova Notes will be published this year, with a range of 12 to 24 pages per issue, 76 pages in total. There were seven regular contributors to Nova Notes this year: Dave Chapman, Art Cole, Paul Heath, Jim Millar, Matt Payne, Chris Young and myself. I would like to thank them all for their timely submission of interesting and well written articles. They made my job as editor much easier.

Nova Notes also benefitted from the submission of special articles written by: Pat Kelly, Judy Black, Melody Hamilton, Blair MacDonald, Roy Bishop, Paul Heath, Wayne Mansfield, Tony Schellinck, John Read, Gillian Webster, Michael Boschat, Dave Chapman, and David Lane (first four issues).

Several other RASC Members agreed to have their photographs printed on the front page of the issues: Art Cole, Karl Hudson, Blair MacDonald and David Chapman. There were 82 photos and illustrations inside Nova Notes over the first

four issues. I believe photos and illustrations liven up each issue so I would like members to continue to submit photos with their articles or take photos at events and meetings to share with all.

Each issue was thoroughly edited before release by Pat Kelly, Michele Arenburg and Heather Schellinck. Pat Kelly posted the issues promptly on the Halifax RASC site when submitted to him and he has maintained the Nova Notes archives on the site. Judy Black put out the notification to all Halifax RASC members that the issue was ready. Paul Gray displayed the latest issue of Nova Notes at the next available RASC meeting to in order to promote readership. As you can see I am just one member of a very large team dedicated to producing a quality issue five times a year.

I mailed out about 15 copies per issue.

Finally, I would ask that when the Centre updates its web page I would like it to add the functionality of being able to track NN downloads or reading of the NN on the website.

Respectfully Submitted,  
Tony Schellinck, Nova Notes Editor  
RASC, Halifax Centre

## 2017 Annual Report: Nova East Star Party

This year the 31<sup>st</sup> Nova East was held on the weekend of July 28<sup>th</sup> to 30<sup>th</sup> at Smileys Provincial Park. Many thanks to those who participated and helped organize this event. There were 35 camp sites reserved and 49 registrants.

Judy and I would like to offer special thanks to the presenters: Pat Kelly, Kathy Walker, Dave Chapman, Andrea Misner, Matt Paine, Tony Schellinck, and John Read. Field presenters were Paul Heath and Tony Schellinck. We would also like to mention and thank the organizing committee: Roy Bishop (consultant), Chris Young, Paul Gray, Jim Millar, Dave Chapman, John Read and Irene Moore.

The weather was mildly co-operative with showers on Friday evening, but by the time Pat completed his tour of Jupiter's satellites, the skies cleared and we had a couple hours of observing. Paul took us on a sky tour with his green laser and then Tony pointed out specific objects to view with binoculars.

Saturday was sunny and warm, a perfect temperature for the talks and events throughout the day. Saturday evening clouded over but did not adversely affect the comradery of our enthusiastic group of Nova East attendees. Thanks to Chris Young, Paul Gray, and Bruce Hamilton for preparing the astronomer's breakfast of pancakes and sausages. The BBQ was also a great and delicious success! Thanks to Paul Gray for organizing the potluck and barbecuing the beef roast and Italian sausage, and to everyone who brought their own contributions to the potluck.

We would like to thank the participants of the Nova East Astro-photo contest (7 submissions this year!) and to thank Allen Sutherland of Atlantic Photo Supply (standing in for Brian Giffin) for donating the prize of a framed photo of the winning entry. Congratulations to Jerry Black for his winning submission of the Turret Arch in Arches National Park, Utah. Thank you to our esteemed adjudicators: Mary Lou Whitehorne, Blair MacDonald, and Allen Sutherland.

There were numerous door prizes this year acquired by Chris Young and John Read. The main prize was a 130 mm Newtonian Telescope, donated by Atlantic Photo Supply, and was won by David Hoskin. As Saturday evening progressed, the clouds moved in and closed off our viewing opportunities. New this year to pass on to the Organizing Committee for Nova East 2018:

- 1) A "Terms of Reference" for the committee including accountability, authority, chair appointment and responsibilities, committee membership, meetings, quorum, and term limits.
- 2) A summary of recommendations regarding recurring events, some general recommendations, health and safety, an inventory of utensils, a food inventory list and an action list.
- 3) A Nova East task chart that has a timeline of items to be planned, who is responsible, and the associated tasks required for the planning of a Nova East Star Party.

Nova East 2017 was a fun weekend and Judy and I hope that many of you will be able to attend the 32<sup>nd</sup> Nova East that will be held next year on the weekend of August 10<sup>th</sup> to 12<sup>th</sup>, 2018.

### Income Statement Nova East for Period Covering 01/10/2016 to 30/09/2017

#### Revenues

Nova East Income	C\$0.00	
BBQ	C\$25.00	
Camping	C\$630.00	
Miscellaneous	C\$0.00	
Registration	C\$1,350.00	
T Shirts	C\$650.00	
Total Revenue		C\$2,655.00

#### Expenses

Nova East	C\$0.00	
BBQ	-C\$233.77	
Camping	-C\$227.95	
Miscellaneous	-C\$1,156.68	
Nova East Prizes	-C\$994.97	
T Shirts	-C\$473.98	
Total Expenses		C\$3,087.35
Net loss for period		C\$432.35

Clear Skies,

Melody Hamilton / Judy Black  
Co-Chairs, Nova East Planning Committee 2017  
RASC, Halifax Centre

## 2017 Annual Report: Outreach

Once again, we have had a busy year at outreach events. First, I would like to thank everyone who stepped up to cover events while I was in Hospital and recovering. Especially Wayne Harasimovitch for covering HalCon and leading the Inside event at Discovery Centre for the Eclipse.

The Eclipse was of course our biggest event. In Halifax at the Discovery Centre, we had 970 inside, and just over 500 outside for the partial eclipse. Also had 7 media interviews as well as others around the province holding viewing sessions. Blair, Art, and Mary Lou's daughters held observing at their workplaces. Wayne and Carsan at the Liverpool waterfront saw over 100 attending. Roy at Avonport and Bruce and Melody at Annapolis Royal also held viewing sessions. There were those who chose to 'stand under the shadow' and went to Nebraska, Kentucky and Wyoming. Paul Gray joined us by phone at the Discovery Centre from his viewing site in Nebraska.

A number of our volunteers have stepped up their game and ventured into new outreach events connected to the communities they are in. Chris Turner and Jeff Donaldson led community observing sessions. Melody and Bruce Hamilton led an event for Glooscap First Nations, Acadia Night of Light, Spring Solstice at Fort Anne and the eclipse at Annapolis Royal. Tony Schellinck's continued his DSO with binos, the indoor theatre program he has been doing at the Astor theatre in Liverpool along with his bino table at major outreach events. Tony also teaches an intro astronomy class for SCANS, helped with Privateers Days in Liverpool, HalCon, library talks, Keji Dark Sky, Keji Seaside, White Point Lodge, a Boxing Rock event Nova East and the Halifax Planetarium. Another busy year for Tony. Wayne Mansfield also helped with events at the Liverpool waterfront and Keji dark sky.

It is very rewarding to see outreach continue to spread throughout Nova Scotia.

Our members helped with Planetarium shows. Quinn Smith, Chris Young, Pat Kelly and Tony Schellinck presented 27 shows to almost 650 people. Thanks to Stephen Payne of the Dalhousie Department of Physics and Atmospheric Science for supplying these numbers

Many of our events this year were repeats of past events, our success stories. Dave Chapman again organized the Keji Dark Sky weekend as well as a September Fall For the Stars event at Keji. Dave led the development of a 'How to video' for our Star Finders with the help of Andrea Misner and Halley Davies. A great project.

Saltscapes and the APS sidewalk events were also very successful again this year. Chris Young helped YNC with their astronomy talk and observing session and Rob Thacker held a talk for the Shubenacadie Wildlife park.

Despite being in hospital and extended recovery time, I have been again very busy with outreach this year. I am again the RASC board member for YNC and organized a talk and observing session for them. Thanks again to Chris Young for filling in for me. While recovering, I led a 6-week astronomy course for THRIVE Education. Saltscapes was again a busy and successful event. I also did three talks for the Gr. 2 and both Gr. 6 classes at Grosvenor Wentworth Elementary, and helped with Nova East, Keji Dark Sky weekend, the MacLennan lecture, and had a great InOMN at Bishops Landing. I helped organize the eclipse event at Discovery Centre and did 7 Media interviews for the event.

The GA in Ottawa was my most memorable event as I received the Qilak Award for outreach and education. Also, as the Halifax Centre Representative, I got to see the inside workings of RASC at the National Level.

The Halifax Centre can be proud of its outreach again this year. We participated in the following: Library talks, school presentations, park presentations, Youth group talks, outreach events (InOMN, Privateers Days on Liverpool waterfront, 2 Keji Dark Sky events, Nova East, Saltscapes, APS sidewalk), Introductory Astronomy classes both classical (SCANS) and student (THRIVE), and supported local astronomy venues with BGO and Planetarium talks. Members also did astronomy presentations in support of other groups events.

Overall, between October 2016 and September 2017 the Halifax Centre created over 5,200 Galileo moments. A tremendous effort from all the Outreach Volunteers! My sincerest thanks go out to all the Halifax Centre members that helped with these outreach events. This of course does not include all the times we set up our telescopes to show neighbors, friends and family the night sky, because that too is Outreach.

Again, many thanks to all who helped support our outreach events over the past year. Let us continue to show the night sky to any and all who 'look up and wonder'.

Respectfully Submitted,

Paul Heath  
Outreach Chair