



By-Election in May

Last summer our junior member of the Board of Directors, Gary Duranko, announced that he was moving out of the area in the fall and therefore wished to resign from the Board. Since his resignation would be effective only a couple of months from the 2018 NHAS elections, we decided not to hold a special election to replace Gary, but instead to vote on two Board members in December 2017.

Then, when December 2017 came around, your officers and directors completely forgot about the vacant Board spot—we only elected the usual one Board member to a three-year term.

The officers and directors have decided to hold a special election at May's NHAS club meeting, to elect a new second-year Director. This Director will serve until December 2019, and will chair the Board of Directors starting in January 2019.

Two candidates were nominated at the April NHAS club meeting:

Dave MacDonald Ramaswamy

Further nominations for this Director position will take place at the May 25 NHAS club meeting. The election will take place at the May meeting. If you will not be able to attend this meeting, you may email a proxy vote to the Secretary at Paul.Winalski@gmail.com.

* Paul Winalski

Vote in May on By-Laws Change

The Secretary has collected enough proxy votes to achieve a quorum

(over half the membership) on the motion to amend the NHAS by-laws concerning club dues. The vote will be taken at the NHAS monthly meeting on May 25. If you have not yet sent in a proxy vote and you will not attend the meeting in person, you can still send a proxy vote to the Secretary. Details on the motion, and how to register your proxy vote, are in the January *NHAS Observer*.

Make your voice heard on this important issue!

* Paul Winalski

NEAF 2018

The annual Northeast Astronomy Festival (NEAF) took place over the weekend of April 21-22. There was good attendance, although it wasn't particularly crowded. Saturday was favorable for solar observing, and **Marc Stowbridge** ran his Lunt H- α scope all day. Oceanside Photo and Telescope were not there.

* Larry Lopez

Hudson Memorial School Sky Watch, April 2

Steve Rand gave the indoor presentation. **Gardner Gerry**, **Dave Roy**, and **Paul Winalski** were there with scopes. Skies were a bit hazy and seeing was below average. The haze got worse after 8 PM. The good news is that the school janitors figured out how to turn off the lights on the school building, including the big nasty floodlight that has plagued us in the past.

In the 14" TScope I showed Castor, Mizar, M42, M35, the Pleiades, the Perseus double cluster, M37, and NGC 457.

* Paul Winalski

Solar Observing, Plymouth High School, April 5

The event took place as planned, under nearly ideal sky conditions. There were no sunspots, so the white light view was boring, but it gave me the opportunity to teach proper safety when doing solar observing. In H- α we saw grana, an active region, and a large prominence.

* Paul Winalski

Cancelled Sky Watch Events

Overcast skies caused the cancellation of a planned April 9 sky watch at Laconia Public Library.

* Paul Winalski

Carbon Star of the Month

X Cancri is a red giant pulsating semi-regular variable at RA $08^h55^m23^s$, DEC $17^\circ13'52''$. It is located almost exactly on the ecliptic, just west of δ Cancri in the middle of the constellation Cancer.

Spectral class is C5₄ (N3 in the old Harvard classification), and the visual magnitude varies between 5.69 and 6.94 in an approximately 180-day cycle. Currently it is magnitude 5.2 and brightening. Surface temperature is about 3317°K. The star's diameter is estimated to be 470 times that of the Sun. At a distance of about 1116 light years, it shines 4695 times brighter.

* Paul Winalski

NHAS April 2018 Business Meeting

The April business meeting was held on April 27 at the McAuliffe-Shepard Discovery Center, our President, **Marc Stowbridge**, presiding.

Notices

Barrie Sawyer plans to hold an observing session at his observatory in Groton NH over the weekend of May 11-14. Godzilla, one of four 36" Obsession telescopes made, will be there. There will be a spaghetti supper on Saturday night. NHAS members are invited.

Sarah Hoffschwelle, Director of Education for the Discovery Center, is looking for NHAS volunteers for AerospaceFest 2018, which will take place at the Discovery Center on May 5. As usual NHAS plans to conduct solar observing. Sarah asks for volunteers to help man the Center's observatory.

Nominations for Director

Two nominations were made and seconded:

Dave MacDonald Ramaswamy

Further nominations, followed by the vote, will take place at the May NHAS meeting.

By-laws Amendment

The Secretary has collected enough proxy votes to constitute a quorum. The vote on the amendment (*see* January's *Observer*) will take place at the May NHAS meeting.

Rey Center

Marc will contact **Matt Amar** concerning the NHAS volunteers lined up to conduct the monthly observing sessions at Curious George Cottage.

EOC/LTP

Pete Smith reported that two more scopes were delivered to libraries, bringing the total to 128. Pete built a scope for **Ed Ting** to take to Chile.

The Library Planisphere Program is in operation.

Membership

Larry LaForge proposed that we hold the monthly Coffee House Nights at YFOS rain or shine, and that each month there be a talk related to observing. We will implement this proposal starting with June's Coffee House Night.

YFOS

Larry Lopez reported that there is some flashing missing near the door to the observatory, and this is likely to let birds in. The big heater is working again.

Public Observing

Paul Winalski reported that we have a busy first weekend in May coming up, with the monthly Discovery Center sky watch on Friday, two events on Saturday, and one event Sunday. The NHX Boy Scout Jamboree and AerospaceFest 2018 both take place on Saturday. Paul needs two other NHAS members to help out at the Jamboree. Other NHAS members should help out with the solar observing at AerospaceFest. Sunday is Children's Day in Portsmouth. Contact **Tom Cocchiaro** if you are interested in helping out.

Other Business

For the past several years we have held the NHAS business meetings on the Friday closest to full Moon. We have thought that this is the Friday when NHAS members are least likely to be out observing and thus most likely to attend a meeting. **Ramaswamy** has proposed that instead we choose a fixed date each month, as we do with the Discovery Center sky watch, to make it easier for members to remember when the meeting date is, and to plan accordingly. The club voted to change the meeting date to the second Friday of each month. The officers will work with the Discovery Center and with St. Anselm College to see if the remaining meeting dates for 2018 can be changed to fit this new schedule.

Marc Stowbridge has some scopes and mounts that were donated to NHAS:

Celestron C102 HD f/10
Orion Skyview Pro
Celestron Firstscope 114 short
Meade DS-114 AT
This equipment is available to NHAS members to take home and use.

Scope of the Month

Universal Astronomics tripod and pantograph for Celestron 100 binoculars. It has vibration problems with 10-pound bins, due to the counterweight rod being too narrow. The problem seems at least partly fixable.

Evening Presentation



Catherine Zucker, doctoral student at the Harvard-Smithsonian Center for Astrophysics, gave a talk on her research work on using dense, highly elongated, gaseous interstellar filaments to map the structure of the Milky Way.

The Bottom Line

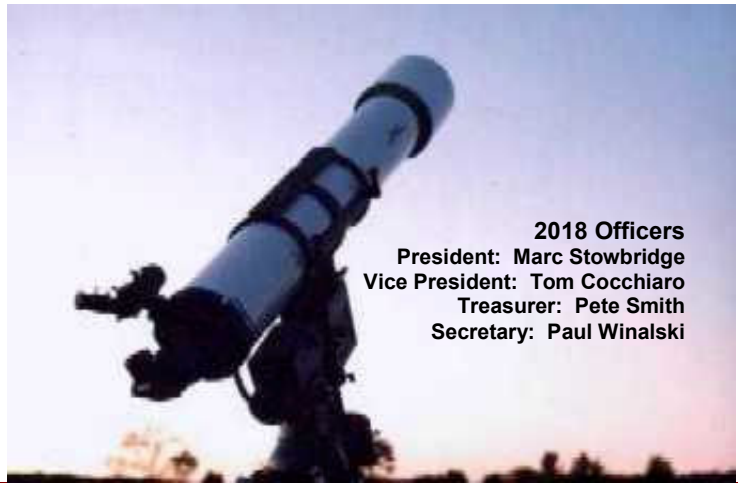
Income and expense report for the month of March 2018:

Income:	
Membership:	120.00
EOC Donations:	20.00
Calendar Sales:	7.00
NHAS Logo Wear Sales:	63.59
Bank interest:	0.39
Total Income:	147.39
Expenses:	
LTP Purchases	1053.92
PayPal Fees:	1.17
Planispheres:	239.40
Website:	54.64
Total Expenses:	1349.13

Net Income: 1201.74

Cash Balance: \$15518.09

* Pete Smith
NHAS Treasurer 2018



2018 Officers
President: Marc Stowbridge
Vice President: Tom Cocchiaro
Treasurer: Pete Smith
Secretary: Paul Winalski

DEADLINE May 2018 Issue: 5 June 2018

E-mail articles to the Editor.

CHANGE OF ADDRESS – Notify the Treasurer of changes to postal or e-mail address.

How to Join N.H.A.S.

Write to us:

NHAS
 P.O. Box 5823
 Manchester, NH 03108-5823
 Attn: Treasurer

Send E-mail to:

info@nhastro.com

Use our web site:

<http://www.nhastro.com/>

This month's contributors:

Larry Lopez, Pete Smith, Paul Winalski

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NHAS Upcoming Events

Event	Date	Time	Location
Salem High School Sky Watch	May 3	7:30 PM	Salem High School, Salem NH
Discovery Center Sky Watch	May 4	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
NHX Boy Scout Jamboree	May 5	9:00 AM	New Hampshire Motor Speedway, Loudon NH
AeroSpaceFest 2018	May 5	10:30 AM	McAuliffe-Shepard Discovery Center, Concord NH
Portsmouth Children's Day	May 6	12:00 PM	315 Market Square, Portsmouth NH
Castle in the Clouds Sky Watch	May 11	8:00 PM	Castle in the Clouds, Moultonborough NH
Coffee House Night	May 12	5:00 PM	YFOS
Rey Center Sky Watch	May 12	9:30 PM	Curious George Cottage, Waterville Valley NH
Girl Scouts Sky Watch	May 18	8:00 PM	Camp Farnsworth, Thetford VT
Sidewalk Astronomy	May 19	6:00 PM	Market Square, Portsmouth NH
Plymouth High School Sky Watch	May 21	7:30 PM	Plymouth Regional High School, Plymouth NH
Plaistow Public Library Sky Watch	May 23	8:00 PM	Plaistow Public Library, Plaistow NH
NHAS Business Meeting	May 25	7:30 PM	Saint Anselm College, Goffstown NH