



By-Election and By-Laws Change

By-Election for Director

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 the December 2017 NHAS election 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.

Dave MacDonald and **Ramaswamy** were nominated at the April NHAS meeting. There were no further nominations at the May meeting.

The results of the by-election are Dave MacDonald 17, Ramaswamy 3. Dave is our new second-year Director and will serve on the Board until December 2019.

Congratulations, Dave!

✧ Paul Winalski

By-Laws Change Approved

Paragraph 1.A.4 of the NHAS by-laws currently reads:

The membership fee or dues shall be set by the officers and approved by the Board of Directors. The dues shall be collected and payable during the month of October. New members who join during or

after the month of July shall pay half the annual fee for the balance of the year.

Since 2010 NHAS has been charging new members who join during or after July the full annual fee, but extending the membership to October of the following year. It wasn't discovered until recently that this was in violation of our by-laws.

A motion to strike the third sentence of paragraph 1.A.4 was made and seconded at the January 2018 meeting. Amending the by-laws requires a majority vote from a quorum of half the club membership. The motion was tabled while the Secretary collected proxy votes.

The requisite quorum (88 members) was present at the May meeting either in person or by proxy, so a roll-call vote was taken. The results:

YEA: 105

NAY: 2

ABSTAIN: 5

So paragraph 1.A.4 now reads:

The membership fee or dues shall be set by the officers and approved by the Board of Directors. The dues shall be collected and payable during the month of October.

Thanks to all the members who made their voices heard on this issue.

✧ Paul Winalski

NHX Boy Scouts Jamboree, May 5

It was a perfect day for observing the sun as three members of NHAS

traveled to the New Hampshire Motor Speedway to share views of our star with Scouts from across the state enjoying a massive jamboree aimed at STEM experiences.

Supporting the event were NHAS President **Marc Stowbridge**, Vice President **Tom Cocchiario** and Secretary **Paul Winalski**.

✧ Tom Cocchiario



Marc Stowbridge conducts solar observing.



R2D2 visits the NHAS booth. (Tom Cocchiario photos)

Marc, Tom, and I were there from NHAS for the entire day. We were joined in the afternoon by **Curt**

Rude. We had a table set up showing the “Coronal Rain” SDO video from NASA, and we had both NASA posters and NHAS handouts. It was clear and sunny for most of the day, so we got in a lot of solar observing, mostly in H α since there was only one extremely tiny sunspot. I estimate that a couple of hundred people looked through the scopes.

✧ Paul Winalski

Aerospacefest 2018, May 5

The McAuliffe-Shepard Discovery Center held its annual Aerospacefest event, and as usual NHAS was there for solar observing and to help man the observatory.

✧ Paul Winalski

I thought it went well. Don't know how many people came--being off to the side where we normally are it's easy for them to come and go without being noticed. **Mike Townsend, Gardner Gerry, Scott McCartney, Liam McCartney, and David “Rags” Gilmore** are who I recall being outside. And of course **R.P. Hale** was there, but he was understandably inside most of the time as well.

Conditions were darned good. We saw three little sun spots in white light and three smallish but nicely visible prominences, and some filaments in H α . Early one Dan & Mike got Venus in one of the tracking 'scopes so we got to show everyone a planet as well the Sun. Some clouds here and there but very clear for the most part. Not hot and little breeze ... quite comfortable overall.

Outside I'd say we got 40-60 people at the scopes at a reasonably steady rate over the time we were there, reasonably steady being I don't recall ever wondering where all the people went, between groupings. We had a number of times we sat around and chatted, but none of those times seemed very long.

I also got a very nice sunburn.

✧ David “Rags” Gilmore

Scott McCartney brought his 10” SCT with a visible-light solar filter. We saw one very small sunspot at first, but two more small ones developed nearby as the day progressed. Liam McCartney manned “Smoky Joe” on the second floor near the observatory.

✧ Scott McCartney

I went to Aerospacefest with my meteorites. I was busy with many families throughout the hours from 10 to 4. I snuck outside and talked for a few minutes with Gardner Gerry and Mike Stebbins.

✧ Bob Veilleux

Children's Day, May 6



The NHAS booth at Children's Day.



Steve Panish talks about the Sun with young visitors. (Tom Cocchiaro photos)

Despite heavy rain and cloudy skies several NHAS members traveled to Portsmouth, NH to talk space with visiting families on Children's Day 2018. NHAS Volunteers **Steve Panish, Jason Spencer, Emily and Carter Evans, Michael Deneen** and **Tom Cocchiaro** spent the day handing out space related materials and sharing telescope views of riverside attractions with the crowds.

✧ Tom Cocchiaro

Salem High School Sky Watch, May 8

The sky watch took place on May 8 as planned. Steve Rand did the indoor presentation. Gary Duranko had bought an 18" StarMaster for Salem High School, so I didn't bother unpacking my 14" dob. **Joe Dechene** brought his reflector, which was a good thing because one of the side panels on the StarMaster's rocker box had separated enough to make movement in altitude next to impossible. I had to abandon the scope. We set up as usual in what used to be the library quad. Sky conditions were clear, but there was a tremendous amount of ambient light due to the construction going on at the school.

NHAS is working with Laura Preston to get the StarMaster repaired.

✧ Paul Winalski

Castle in the Clouds Sky Watch, May 11

We had 45 people show up for the evening. I did a Tonight's Sky presentation with a few meteorites as well. Observing was fairly poor with a lot of high thin clouds. We packed it in about 10:15

✧ Bob Veilleux

Girl Scouts of the Green and White Mountains Sky Watch, May 18

Sky conditions at Camp Farnsworth in Thetford, VT were clear but damp and a bit hazy. Seeing was not good. **Paul Winalski** gave a presentation to forty girls at dusk on telescopes--what they are, how they work, and how to use them. This was followed by observing as twilight deepened, starting with the Moon, then Venus, Mars, Aldebaran, Mizar, and M3. I also passed around the Schueller Memorial Meteorite and explained the story of Campo del Cielo.

✧ Paul Winalski

Plymouth Regional High School Sky Watch, May 21

The sky watch for Plymouth Regional High School's Astronomy Club took place as scheduled under clear skies, although a haze moved in later on. NHAS members present were **Gardner Gerry**, **Dave McKenney** (the teacher who invited us), **Wayne Mitchell**, **Marc Stowbridge**, and **Paul Winalski**. There was also a professor from Plymouth State University. Dave McKenney was operating the telescope that NHAS donated to Plymouth Regional High School.

While waiting for the twilight to end, we viewed the first quarter Moon, Venus, Jupiter, and an ISS pass. Once it got dark enough I showed Mizar, Castor, M3, and M13 in the 14" TScope. The few students who hung around until 10:30 PM got to see a second, better placed ISS pass.

✳ Paul Winalski

Cancelled Sky Watch Events

The weather gods were kind to us in May. Only the Plaistow Public Library event was cancelled due to overcast skies.

✳ Paul Winalski

Carbon Star of the Month

Y Canum Venaticorum is a red giant pulsating semi-regular variable at RA 12^h45^m07^s, DEC 45°26'25". It is located under the handle of the Big Dipper, about ¼ of the way on a line between M106 and M6. It was given the name **La Superba** by 19th century astronomer and spectroscoper Angelo Secchi, who was impressed with the beauty of its spectrum.

Sources don't seem to agree on the spectral class, given as C5₄ in some sources and C-J7 in others. The visual magnitude varies between 4.8 and 7.3 in an approximately 160-day cycle. Currently it is magnitude 5.5 and brightening. Surface temperature is about 2800°K. At a distance of about 1000 light years,

the star's diameter is 307-390 times that of the Sun and it shines 4800-5800 times brighter.

La Superba is a C-J type star with very strong bands of C₂ and CN containing the ¹³C isotope of Carbon.

✳ Paul Winalski

NHAS May 2018 Business Meeting

The May business meeting was held on May 25 at Saint Anselm College, our President, **Marc Stowbridge**, presiding.

YFOS

Larry Lopez reports that the doors on the observatory and warming room need painting. Both buildings need to be cleared up. He is looking for volunteers for a work party.

EOC/LTP/LPP

We have received several telescope donations. **Marc Stowbridge** has been placing them in various schools.

Pete Smith reports that Sugar Hill Library will get a NHAS donation if they can't raise the money to purchase a library telescope.

Steve Rand has placed nine more planispheres.

Treasurer's Report

Pete Smith obtained NHAS T-shirts and other apparel from **Ken Charles**. He will be raffling one off at each club meeting, and offer the remainders to members for purchase.

Book of the Month

Mike Townsend presented the fourth volume of the Night Sky Guide. It is titled The Next Step: Finding and Viewing Messier Objects.

Voting

We held the by-election for the vacant Director's seat and a vote on the by-laws amendment. See the articles elsewhere in this issue of the *Observer*.

Evening Presentation

Marc Stowbridge gave a talk on Easy Eyepiece Math.

Paul Winalski gave a presentation on the OzSky 2018 star party in Australia.

The Bottom Line

Income and expense report for the month of April 2018:

Income:

Membership:	30.00
NHAS Logo Wear Sales:	65.53
Bank interest:	0.39
Total Income:	95.92

Expenses:

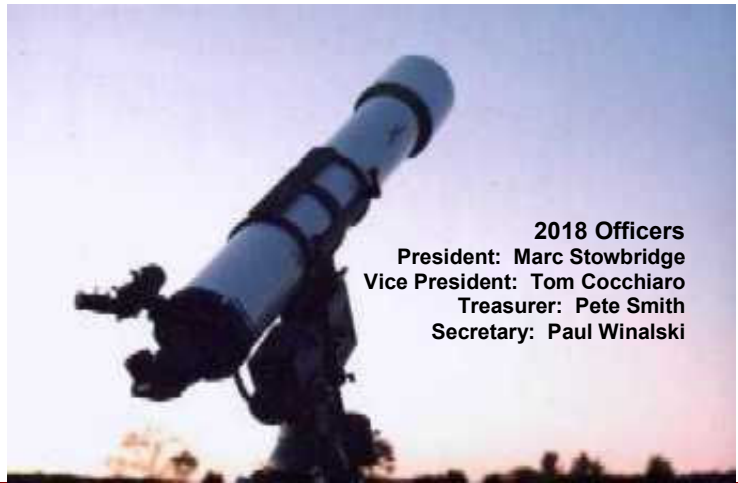
LTP spare scope:	135.00
PayPal Fees:	1.17
Website:	60.50
YFOS Plowing:	351.54
Total Expenses:	548.21

Net Income: 452.29

Cash Balance: \$15065.80

✳ Pete Smith

NHAS Treasurer 2018



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

DEADLINE June 2018 Issue: 5 July 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:

Tom Cocchiaro, David Gilmore, Scott McCartney, Bob Veilleux Paul Winalski

New Hampshire Astronomical Society
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NHAS Upcoming Events

Event	Date	Time	Location
Discovery Center Sky Watch	June 1	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Market Square Day	June 9	9:00 AM	Market Square, Portsmouth NH
Meadowbrook Dads Campout Sky Watch	June 9	8:30 PM	Osceola Vista Campground, Waterville Valley NH
Coffee House Night	June 9	5:00 PM	YFOS
Maple Ridge Estates Sky Watch	June 12	8 :00 PM	45 Technology Drive, Bedford NH
Hollis Brookline Middle School Sky Watch	June 13	8:00 PM	Hollis Brookline Middle School, Hollis NH
Rey Center Sky Watch	June 16	10:00 PM	Curious George Cottage, Waterville Valley NH
NHAS Monthly Meeting	June 22	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
Sidewalk Astronomy	June 23	6:00 PM	Market Square, Portsmouth NH
Solar Observing	July 2	1:00 PM	Castle in the Clouds, Moultonborough NH
Discovery Center Sky Watch	July 6	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Girl Scouts Sky Watch	July 7	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Solar Observing	July 9	1:00 PM	Castle in the Clouds, Moultonborough NH