

## Send in Your Vote

### By-Laws Change—Get in Your Proxy Vote

The Secretary is still collecting proxy votes on the motion to amend the NHAS by-laws concerning club dues. As soon as it is clear that we have a quorum (over half the membership), a vote will be taken at the next monthly club meeting. Details on the motion, and how to register your proxy vote, are in the January *NHAS Observer*.

Make your voice heard—get in your proxy vote today!

✧ Paul Winalski

### Discovery Center Sky Watch, February 2

**Mike Townsend** and I decided to brave the cold and wind and go. We got there about 7:00. They had plowable snow. Quite a bit had drifted across the road. Skies were mostly clear with all observing in the downwind direction. We did have one visitor with an Orion XT8 Plus looking for some assistance. There were some other visitors who made some very short looks before leaving. We packed up and left by 9:30.

✧ John Rose

### Hampton Academy Sky Watch, February 5

We held the rescheduled sky watch at North Beach, under clear skies but rather poor seeing. **Herb Bubert, Gardner Gerry, Andy Jaffe,** and **Paul Winalski** were there with scopes from NHAS. About 60 students, parents, siblings, and teachers were there.

I set up the TeleVue 85mm refractor to view the Pleiades and left it there for the whole evening. With the 14" TScope I showed M42, NGC 457, M35, M37, the Christmas Tree Cluster, and R Leporis.

✧ Paul Winalski

### Chester Public Library Sky Watch, February 16

The event took place at Wason Pond as scheduled, under clear but windy skies. I was there with a telescope. NHAS member **Russ Dumont** was also there. It had rained that morning. It was too damp and windy to set up the 14" TScope, so instead I used the TeleVue 85mm refractor. We viewed the Pleiades, M42, M35, NGC 457, the Perseus Double Cluster, and M37.

✧ Paul Winalski

### KRES 24 Hours of Space Presentation, February 23

I attended Kearsarge Regional Elementary School's annual "24 Hours of Space" program. With cloudy skies and it being NHAS business night, I was there to do a half hour presentation and be on my way. As it turned out, after a nice dinner in their cafeteria and a late start, I ended up doing a 50 min. presentation for about a hundred people including some parents and staff and missing the business meeting. I ended by answering several questions and bringing out the club 8 lb meteorite. They seemed to enjoy the event and were looking forward to an overnight at

the school. I would say this is a school that really has its act together.

✧ Steve Rand

### Wolfeboro Public Library Sky Watch, February 27

**Marc Stowbridge** and I were there from NHAS. About a dozen people were there. Skies were clear, but there was an almost-full gibbous Moon. We set up in the library's parking lot, which was a problem both from floodlights that couldn't be shut off and trees blocking the horizon. Star-hopping was very difficult. I did manage to show the Moon, M45, M42, NGC 457, the Perseus Double Cluster, Mizar, and Polaris. This night was also first light for their library telescope.

We received this note from Helen Gallagher:

*"I wanted to thank you for leading the Sky Watch last night at Wolfeboro Public Library. Everyone had a wonderful, informative time. I also appreciated your flexibility as I know the conditions were not ideal! We hope to be able to do another Sky Watch at a more suitable site."*

✧ Paul Winalski

### Cancelled Sky Watch Events

Parkside Middle School (Manchester), due to overcast skies.

✧ Paul Winalski

### Carbon Star of the Month

**TU Geminorum** is a red giant pulsating semi-regular variable at RA 06<sup>h</sup>10<sup>m</sup>53<sup>s</sup>, DEC 26°00'53". It

is located about two minutes west and two-and-a-half a degrees north of star cluster M35, about half-way on a line between M35 and  $\kappa$  Aurigae.

Spectral class is C-N5, and the visual magnitude varies between 6.25 and 8.65 in an approximately 230-day cycle. It is currently at about 7.5 magnitude. Surface temperature is about 3160°K. Its angular diameter has been directly measured during lunar occultations. The star's diameter is 250 times that of the Sun. At a distance of about 1680 light years, it shines 5700 times brighter.

\* Paul Winalski

## NHAS February 2018 Business Meeting

The February business meeting was held on February 23 at the McAuliffe-Shepard Discovery Center, our President, **Marc Stowbridge**, presiding.

### EOC/LTP

**Pete Smith** reports that the LTP will be buying and building three more library telescopes. **Ed Ting** will be taking one with him when he visits Chile in June.

**Steve Rand** has placed three more Library Planispheres (Kingston, Pittsfield, and Wolfeboro).

Sarah Post of Cornerstones of Science will be conducting a workshop on LTP called "Rope-a-Scope: Hands-on Time with a Telescope" for NASA's 75 partner libraries, four state library agencies, and a few others.

### Membership

**Larry LaForge** has collected a list of volunteer members for the club mentorship program and has posted the information on the NHAS website.

### Other Business

Ed Ting has been appointed a NASA JPL Solar System Ambassador volunteer educator.

Our Secretary continues to collect proxy votes concerning the proposed by-laws amendment. We have not yet achieved the required

quorum to take the vote. Please send in your proxy if you haven't already.

AerospaceFest 2018 will take place at the Discovery Center on Saturday May 5. NHAS is already committed to another daytime event (NHX Boy Scout Jamboree) that day. The Discovery Center would like some NHAS members to conduct solar observing outside, and maybe to man their observatory for an hour-long shift or so.

We still need a new chairperson for the Speaker Committee.

### Scope of the Month

Meade 80mm spotting scope.

### Book of the Month

A 1970s vintage Sky & Telescope collection of all 110 Messier objects.

### Evening Presentation

**Gardner Gerry** gave a presentation on basic astrophotography.

## The Bottom Line

Income and expense report for January through December 2017:

### Income:

Membership:	3420.00
General Fund Donations:	508.75
LTP Donations:	1300.00
Calendar Sales:	63.79
NHAS Logo Wear Sales:	53.39
Bank interest:	3.71
<b>Total Income:</b>	<b>5349.64</b>

### Expenses:

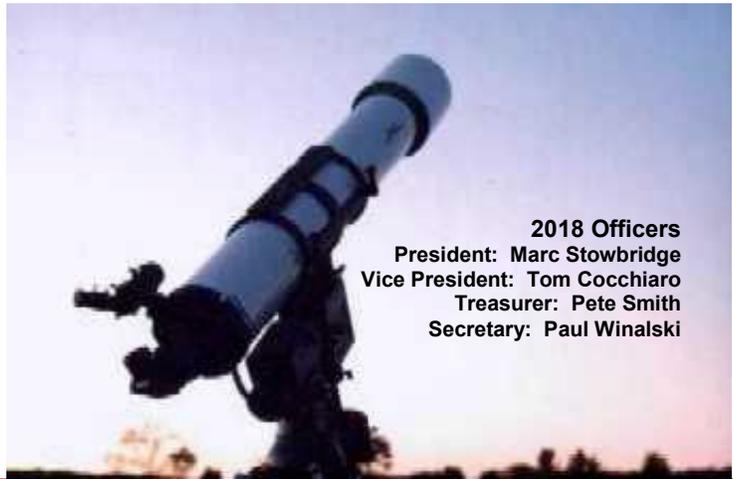
Astronomy League Dues:	257.50
Equipment Purchases:	357.91
Insurance:	1795.00
LTP Purchases:	2424.69
Office Expenses:	125.36
PayPal Fees:	136.04
Postage and P.O. Box:	200.00
Public Outreach:	529.94
Website:	740.57
YFOS Plowing:	1367.08
YFOS PortaJohn:	73.39
YFOS Propane:	124.53
<b>Total Expenses:</b>	<b>8150.01</b>

**Net Income:** 2800.37

**Cash Balance:** \$16230.70

\* Pete Smith

NHAS Treasurer 2018



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

**DEADLINE March 2018 Issue: 5 April 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](mailto:info@nhastro.com)

**Use our web site:**

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

**This month's contributors:**

Steve Rand, John Rose, Paul Winalski

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**NHAS Upcoming Events**

<b>Event</b>	<b>Date</b>	<b>Time</b>	<b>Location</b>
Discovery Center Sky Watch	March 2	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
NHAS Monthly Meeting	March 9	7:30 PM	St. Anselm College, Goffstown NH
Franklin High School Sky Watch	March 15	7:00 PM	Franklin High School, Franklin NH
Spring Messier Marathon	March 16	4:00 PM	Lopez residence
Rey Center Sky Watch	March 16	8:30 PM	Curious George Cottage, Waterville Valley NH
Ed Ting Astrophotography Sky Watch	March 23	7:00 PM	77 Amherst Street, Manchester NH
Sidewalk Astronomy	March 24	6:00 PM	Market Square, Portsmouth NH
Hudson Memorial School Sky Watch	April 2	6:45 PM	Hudson Memorial School, Hudson NH
Discovery Center Sky Watch	April 6	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Laconia Public Library Sky Watch	April 9	7:30 PM	Laconia Public Library, Laconia NH
Coffee House Night	April 14	5:00 PM	YFOS
Rey Center Sky Watch	April 14	9:00 PM	Curious George Cottage, Waterville Valley NH
Sidewalk Astronomy	April 21	6:00 PM	Market Square, Portsmouth NH