Observer Staff Editor & Publisher: Paul Winalski



Newsletter of the New Hampshire Astronomical Society

Vol. 2018 No. 3

"All the news that fits in print"



# **NHAS Director By-Election**

## **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 threeyear 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.

Nominations for this Director position will take place at the April 27 and May 25 NHAS club meetings. The election will take place at the May meeting.

✤ 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

## The Astronomer is IN

Starting at March's club meeting, we will be reviving an NHAS tradition: The Astronomer is IN. When possible, an experienced NHAS member will be available before the meeting to help solve problems or answer questions that members may have. Is your goto mount giving you problems? Need help planning a star-hop? Bring your scope or problem or question to the Astronomer. We don't even charge 5 cents.

✤ Paul Winalski

## Library Planisphere Program



#### Planisphere (Steve Rand image)

The Educational Outreach Committee is placing Planispheres into NH public libraries. These On the web at http://www.nhastro.com/ flexible plastic sky charts can show a view of the sky for any night by simply dialing in the date and time. They are large, weather resistant and loaded with good astronomical information. Our goal, like our Library Telescope Program, is to get them into as many NH libraries as possible to be borrowed like a book.

Please let me know if your library doesn't have one and I will be glad to hand one off to you with a intro letter at a business meeting. So far, the following town libraries have one: Amherst, Bedford, Belmont, Brookline, Candia, Dunbarton, Epping, Francestown, Goffstown, Grantham, Greenfield, Hampton, Hollis, Hooksett, Jaffrey, Kingston, Laconia, Merrimack, Milford, MontVernon, Pittsfield, Springfield, Sunapee, Tamworth, Wolfeboro.

✤ Steve Rand

## LTP in Ohio

We received the following from Mike Feinstein, Joe DeKold, and Doug Cook of the Stillwater Stargazers of Troy, Ohio concerning their Library Telescope Program:

"We, the members (15 of us) of the Stillwater Stargazers of Troy, Ohio, have begun a Library Lending Telescope (LLT) program. In Nov. 2016 we purchased a 114 mm StarBlast and prepared it as the NHAS suggested. We offered it to the Troy-Miami County public library. They were reluctant but agreed to start a LLT program since we offered it to them free.

*"After a year with the scope, there was always a waiting list of 10 or* 

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LLT Scope and its borrower.

"We chose to use the Meade LightBridge Mini 130 mm tabletop reflector. It offers a little more aperture to boost the planetobserving experience. We have found it to be a very good scope. We are currently seeking to add two more local libraries to our program."

✤ Marc Stowbridge

## Pre-MM Session at YFOS, March 10

I arrived last night just after 6 PM to cloudy skies. I was able to park fine in the observing area. There was room for three or four cars, tops, at this time. The observing area was packed well, but it was definitely soft as you approach the warming hut.

Around 6:45 PM the skies started to clear and by 7 PM I was set up with my Starmaster 7 ready to observe. I used my 17mm Ethos so the FOV was about 1.7 degrees. The skies actually were pretty good and in the course of the next two hours, I bagged 41 out of the first 43 on the Messier List. M74 proved tough and although I believe it was in the FOV, I chose not to count for I was not certain.

A barred owl kept me company along with the stars. I did not hear any coyotes or other wildlife © I was very happy to get that many objects before having to pack it in due to clouds returning around 9:30 PM. Given the time change and feeling it was not going to get better, I declared victory and called it a night.

ℜ Rich DeMidio

#### **2018 Messier Marathon**

Each year, around the vernal equinox, it is possible from mid-Northern latitudes to observe all 110 objects in the Messier catalog in a single night. This is called the Messier Marathon. Here in New Hampshire we are a bit too far North, and about eight Messier objects are lost in the evening and morning twilight. But it is possible to get 102 of them.

For many years now **Larry** and **Linda Lopez** have hosted a Messier Marathon party and pot luck supper at their New Boston home. This year's event on March 17 doubled as a St. Patrick's Day celebration. Skies were clear, but it was very cold.

✤ Paul Winalski



Messier Marathon observing field (Joe Derek photos)

Once again, Larry and Linda hosted a wonderful event where we had the clearest skies that I can remember for a very long time. It felt more like January than March with the cold and wind, but that is why we dress in layers to stay warm—of course, going inside periodically helped ©

The food was stellar and I of course ate way too much. I need to start my training to work off the food and build more stamina.

I was able to bag 61 objects with a few of them even in the Virgo Cluster. I used my Starmaster 7" with the 17mm Ethos. I had to use the 21mm ethos for a few objects. If I can manage to get the Virgo Cluster down, then I can see it possible to actually complete an event in my lifetime (provided I improve on my stamina). I was tempted to stay, but decided best to head back especially since everyone else had left by 2:15AM.

It was great to meet several new members and as always I enjoyed the company of others.

ℜ Rich DeMidio

## Astrophotography Art in Science Exhibition, March 16 – April 21

The New Hampshire Institute of Art is putting on an exhibition of **Ed Ting's** astrophotography images at their Roger Williams Gallery, 77 Amherst Street in Manchester. The exhibit runs March 16 through April 21.

On March 23 Ed gave an artist's talk at the Gallery. **John Rose** and **Mike Townsend** were on the street corner of Victory Park showing the Moon to the public. Skies were milky and partly cloudy, but people seemed pleased.

✤ Paul Winalski✤ Ed Ting

## Solar Observing, Franklin High School, March 19

I showed the solar chromosphere to two Astronomy classes at Franklin High School, using my Coronado PST 40mm narrowband H-α scope.

#### March 2018

Skies were very clear but also very turbulent, and that seemed to wash out a lot of the detail. No prominences were visible, but solar grana were. I didn't bother with white-light viewing because there are currently no sunspots.

After everyone had a view through the scope we went back to the classroom, where I conducted a Q&A session. We also accessed the NASA Solar Dynamics Observatory website, and I explained the features of the various hard-ultraviolet narrowband views. I also played the spectacular "Coronal Rain" move of the aftermath of a M-class solar flare.

✤ Paul Winalski

#### Cancelled Sky Watch Events

Overcast skies were a big problem this month. Franklin High School was cancelled, and Hudson Memorial School was postponed to April 2.

ℜ Paul Winalski

#### **Carbon Star of the Month**

UU Aurigae is a red giant pulsating semi-regular variable at RA 06<sup>h</sup>36<sup>m</sup>32<sup>s</sup>, DEC 38°26'43". It is located about half-way on a line between Castor n Gemini and Capella in Auriga.

Spectral class is C-N5 and the visual magnitude varies between 4.9 and 7 in an approximately 441-day cycle. Currently it is magnitude 5.2 and brightening. Surface temperature is about 2760°K Its angular diameter has been measured by very-long baseline interferometry. The star's diameter is 370 times that of the Sun. At a distance of about 1110 light years, it shines 16,433 times brighter.

The star is surrounded by a silicon carbide dust shell at three stellar radii, and a second dust shell of amorphous carbon at nine stellar radii. There is also a carbon-rich shell at 300 stellar radii, and an oxygen-rich shell even further out.

✤ Paul Winalski

## The NHAS Observer

## NHAS March 2018 Business Meeting

The March business meeting was held on March 9 at St. Anselm College, our President, **Marc Stowbridge**, presiding.

#### YFOS

**Paul Winalski** conducted an orientation session for 11 members.

There are several deep ruts in the field near the warming hut on the North side, where the plow truck got stuck. We need to fill these in and perhaps re-seed the area.

There is a hole in the roof flashing just to the left of the observatory door. This is going to let the birds in.

We do not have a carbon monoxide detector in the warming hut.

The small heater is working, but Paul was unable to get the large heater to work. Fortunately member **Donnie Brasco** was able to service the heater and get it working.

#### EOC/LTP

Marc Stowbridge reported on the Library Lending Telescope program in Troy, Ohio. See the article elsewhere in this *Observer*.

#### Membership

**Larry LaForge** reports that the mentorship program has begun, with some good initial results.

#### **Other Business**

Paul Winalski ran "The Astronomer is IN" before the meeting—our first such session in several years.

Astronomers Without Borders has declared April to be Global Astronomy Month. They are inviting local clubs to hold stargazing parties for the public. Paul Winalski will be registering our April 6 sky watch at the McAuliffe-Shepard Discovery center as NHAS's GAM2018 event.

Marc Stowbridge reported on three telescopes and mounts recently donated to NHAS:



**Orion Apex 127mm Maksutov** 



**Orion Skyview Pro** 



**Celestron Firstscope 114mm** All of these scopes are available for members to take home and use.

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. Pleas send in your proxy if you haven't already.

There will be a by-election in May for a Director to replace Gary

Duranko (see article elsewhere in this *Observer*).

Scope of the Month

Orion Apex 127mm Maksutov.

**Book of the Month** Sky & Telescope star atlas.

Evening Presentation



**Roger Fu,** Assistant Professor of Earth and Planetary Sciences at Harvard, gave a talk on his recent research work: "The water-rich interior of dwarf planet Ceres: Results from the NASA Dawn Mission"

## **The Bottom Line**

Income and expense report for the month of February 2018:

#### Income:

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Membership:	480.00
General Fund Donations:	43.19
EOC Donations:	20.00
Calendar Sales:	98.00
NHAS Logo Wear Sales:	63.59
Bank interest:	0.37
Total Income:	705.15
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Expenses:	

Expenses.		
PayPal Fees:	15.58	
Postage and P.O. Box:	200.00	
Liability Insurance:	1761.00	
Website:	60.20	
YFOS Plowing:	174.49	
Total Expenses:	2211.27	
Net Income:	1506.12	
Cash Balance:	\$16719.83	
ł	✤ Pete Smith	
NHAS Treasurer 2018		



#### **DEADLINE April 2018 Issue: 5 May 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:

Rich DeMidio, Joe Derek, Steve Rand, Pete Smith, Marc Stowbridge, Ed Ting, Paul Winalski

New Hampshire Astronomical Society P.O. Box 5823 Manchester, NH 03108-5823

# **NHAS Upcoming Events**

Event	Date	Time	Location
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, Watterville Valley NH
Sidewalk Astronomy	April 21	6:00 PM	Market Square, Portsmouth NH
Plaistow Public Library Sky Watch	April 25	7:30 PM	Plaistow Public Library, Plaistow NH
NHAS Monthly Meeting	April 27	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
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