



Freeze Your Buns

President's Message

At the January meeting, I was honored to complete some unfinished business from 2009 when I presented **Marc Stowbridge** and **Larry Lopez** their awards for outstanding contribution in 2009. The best part of my job is hand out awards to people recognized by the membership as contributors.

This month, you will see the deployment of the long awaited NHAS attire website. Our goal was to place control into the hands of the membership versus NHAS being a bottleneck. Members can now go to that site directly eliminating the middleman. Thanks to **Ken Charles** for organizing this capability for our members. Ken will provide a full briefing to the membership at the February business meeting.

Astronomy Day planning is now in full swing. **Ted Blank** is leading that effort and he will also provide an update at the business meeting. He and his team are coming up with specific tasks that will provide plenty of opportunity for members to contribute. Please look at or think of ways to help contribute. We had a wonderful turn out last year with folks covering both inside and outside. This is a big event for NHAS.

The annual Messier Marathon is being planned for March and will once again be hosted by **Linda** and **Larry Lopez**. Linda and Larry have made this a wonderful NHAS tradition that we all look forward to every year (it is our internal SuperBowl). The marathon will

actually occur before the March business meeting this year so we will discuss this briefly at the February business meeting with email follow-up.

Finally, I have guest speakers lined up for February, April, and May. Please remember to coordinate with me if you are researching potential speakers.

Clear Skies,

★ Rich DeMidio
NHAS President 2010

Highlights for This Month

The last two of the 2009 member awards were presented at the January business meeting.

The Library Telescope Program continues to be a big success. This month we report on recent placements in Plymouth and Ossipee.

Planning for the club's Messier Marathon and Astronomy Day events is underway. We will celebrate Astronomy Day as part of the three-day Aerospace Festival at the McAuliffe-Shepard Discovery Center.

We had successful public sky watches at the Discovery center (our monthly first Friday event) and at Alton Elementary School. The club's Freeze Your Buns coffee house night at YFOS also was very successful.

Ed Los and his work on the project to digitize the Harvard College Observatory plate collection are featured in an article in the latest *Sky & Telescope*.

★ Paul Winalski
NHAS Secretary 2010

2009 Member Awards

At the December business meeting, **Rich DeMidio** presented the 2009 member recognition awards. These were awarded by our President, based on nominations by one or more club members. Two were not presented because the recipients had not attended the meeting. These two awards were presented by Rich at the January business meeting:

Expanding the Mind Award

To **Marc Stowbridge** for his maniacal focus on assisting public educators. Marc implemented the wildly successful Library Telescope Program to place telescopes in New Hampshire public libraries that can be checked out just like a book. He also organizes relentlessly our sky watches for public and private organizations.

Rock of Gibraltar Award

To **Larry Lopez** for being the definition of the word "dependable". Larry's ability to multi-task is exceptional. He is often taken for granted because he is always there doing something to promote NHAS.

My own personal congratulations to Marc and Larry for a job well done! You set an example for all of us.

★ Paul Winalski

Astro 101/201 Workshops

There was an Astro 201 workshop on Photometry held on 15 January presented by John Blackwell at the Grainger Observatory at Phillips-Exeter Academy. Three members attended of the seven who signed

up; the others either got lost or worked late and forgot about the workshop.

The venue was excellent and the material presented was “excellent!” according to **Al Navarro**.

In the future I will include door to door instructions on the reminder emails.

I would like to get additional suggestions on workshops that the members would like to have. Some suggestions have been to have a very deep dive on a workshop (an Astro 301).

I have asked **Gardner Gerry** to develop a Astro 101 workshop that would cover Astrophotography, the topics to include: hands-on access to equipment, setup, alignment, use of equipment and processing the data. With two lab areas at YFOS (the observing field and a processing lab with image processing software). We hope to add this to the course-ware by the end of spring.

★ Bill Steele

Library Telescope Program

The Madison Library is interested in a telescope and would like us to hold a sky watch some time after Memorial Day to help with the fund raising.

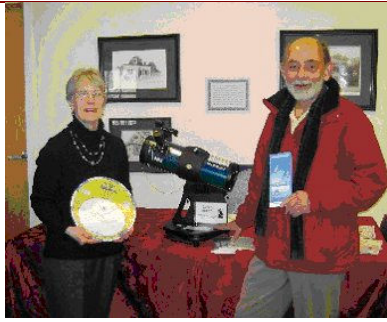
From the Pease Library in Plymouth:

“I appreciate all the work you have done to help make our telescope a reality! It is quite a time commitment—the ordering, the paperwork, the modifications—and then, you even drove up here to deliver! Many, many thanks on behalf of everyone who is going to enjoy studying the skies, thanks to you and the Society.

“We’ve sent the photo to the local paper, and Barrie and I have scheduled the first workshop. So it’s all starting to happen at this end. Exciting!

“Marc, thanks so much for all—and for your passion for the stars!”

Katherine Hiller, Director”



The new scope at Pease Library

Bob Gillette, who will act as the “foster parent”, wrote a press release for the Ossipee Library scope. Back in December, for a small fee parents could have their children’s photo taken with Santa (**Marc Stowbridge**, his Tamworth representative) at Ossipee Village Variety (see full report in the December 2009 Observer). The telescope is now ready for check-out. Yvonne Fisher, the Ossipee Librarian, said, “The Library is delighted to receive this wonderful gift, to be enjoyed by the whole library community. We’re so grateful to everyone who made this project possible.”



Ossipee Library scope. Left to right: Angela Carver, Bob Gillette, Yvonne Fisher.

★ Marc Stowbridge

2010 Messier Marathon

Once a year in the March/April time frame, the Sun is positioned such that it is possible from mid Northern latitudes to observe all 110 deep-sky objects in Charles Messier’s famous catalog in a single evening, literally from dusk to dawn. Attempting to do this is called “running the Messier Marathon”. Here in New Hampshire we’re a little too far north to get all 110 objects, but we can see nearly all of them (my personal best is 104).

Linda and Larry Lopez have again agreed to host the club’s annual Messier Marathon at their home in dark-skied New Boston. The event is planned for overnight starting Friday 12 March, with 13 March as a backup date.

This is one of NHAS’s major social events of the year. Come whether you plan to run the Marathon, just do some random observing of your own, or simply want to hang out and socialize. Whether or not you bring a scope, this is a great opportunity to learn the sky and to see a lot of nifty deep-sky objects. And there is always plenty of good food. Be sure to mark this on your calendar!

★ Paul Winalski

Digitizing History

The March 2010 issue of *Sky and Telescope* has an article called “Digitizing History” about the long-term project to digitize the Harvard College Observatory’s collection of over half a million sky images recorded on photographic plates since the late 1800s. NHAS and ATMOB member **Ed Los** has been heavily involved in this project; Ed wrote the custom software that controls the high-speed digitizer. You can see Ed in the background of the lead photo, and Ed’s hands in the close-up of the scanner. Be sure to check out this article. Congratulations to Ed on the recognition of his great work on this project!

★ Paul Winalski

McAuliffe-Shepard Discovery Center Sky Watch, 5 February

Despite the deteriorating weather reports, confirmed by eyeball observation, **Mike Townsend** and I headed off to the McAuliffe-Shepard Discovery Center for the monthly sky watch. After all, we have been lucky in the past and if not we would eat there at the Countdown Cafe and head home. Upon arrival the decision to bring the little scopes was vindicated as only Cappella and Mars were barely

visible through the clouds and even that didn't last long.

Shortly after we got there **Marc Stowbridge, Ted Blank, and Don McDaniels** arrived. Some people with a new scope were planning on being there looking for some help. One of the NHTI students showed up looking for the sky watch.

After standing in the cold for awhile we headed into the Discovery Center. In there was another visitor asking about the NHAS sky watch so I sent him off to see Marc. The rest of us went into the Cafe for supper. **John Bishop** arrived and then the people with the new Orion XT-8i. So they had plenty of help, at least all that could be done inside the Cafe! It turned out to be a nice time, and a lot warmer than the parking lot! I have wondered if there have been times in the past when people have shown up looking for us, but poor weather has kept the club home? Mike and I talked about how it might be a good idea to show up in marginal weather just in case.

★ John Rose

We gathered at the Discovery Center for the monthly sky watch last Friday and there was one poor star shining in the sky. Most wanted to go home but a few of us stayed and had an informal club meeting in the cafeteria. It was a good thing we stuck around because a lady showed up and asked if we were the "Astronomy people". She then brought in an 8 inch Orion reflector on a dobsonian that she needed help to set up.

Ted and Marc and two others were there beside myself and we got her scope collimated and the finder scope aligned in no time. She said she was 70 years old and had received this scope for Christmas and knew nothing about it. The others gave her a quick overview of telescopes and I shared a star chart I had with me. She was SO EXCITED at all the help and could not wait for her first clear night to go out with her new scope. Mission Accomplished!

The moral of the story is that you never know who is going to show up at a public meeting needing help. We should try to go even if the skies aren't the greatest! Thanks to everyone there!

★ Don McDaniels

Alton Elementary School Sky Watch, 12 February

Marc Stowbridge, Ted Blank, Don McDaniels, and I participated. I want to point out that Don came even though he was on crutches and in obvious pain. Talk about dedication and desire. ☺ I had Obby, Marc had his Meade Schmidt/Cass, Ted had his refractor (not sure of brand), Don had his 8 inch Orion Dob.

Ted did a wonderful presentation for a packed house of nearly ninety people (parents, students, teachers). After the session, we were all attacked by mobs of students literally running through the parking lot to the scopes. I spent most of my time on the Orion Nebula and NGC457 (E.T. Cluster). Ted and Marc showed them Mars, M31, and some other open clusters. Note: apparently, some folks did not like me calling it the lobster cluster on my Facebook. ☹ (Toss me an invite if you are on Facebook).

The skies clouded up for a bit so for about forty-five minutes we had to peek in between sucker patches.

While waiting, I personally chatted with several parents and students about various aspects of Astronomy: visual observing, light years, how telescopes work, and how stars are formed within nebulae such as M42. I found the audience to be very interested with some outright passionate about Astronomy.

Marc and Ted did a great job in organizing this event. I really enjoyed speaking with folks who are curious and appreciative of the heavens and our efforts. I highly recommend that we go back again but lets make sure we do not double book with a club event. We could have used a lot more scopes,

especially if it had been clear all the time.

★ Rich DeMidio

"Freeze Your Buns" Coffee House Night, 12 February

There was a good turnout (about a dozen that I counted) for the February "Freeze Your Buns" Coffee House Night at YFOS. For once we were able to get clear skies on a New Moon night.

Transparency was excellent. Seeing, unfortunately, was very poor. This was a night for deep-sky objects, not double stars or planets. Temperatures got down to the mid-teens—not particularly cold for Freeze Your Buns night—but there were some bone-chilling gusts of wind. The sky was mercifully dry—frost was not a problem all evening.

This was my first occasion to use my new Olympus digital voice recorder. It was much more convenient to dictate my observing notes, with my eye still at the eyepiece, rather than have to go back and forth between scope and table to write down my observations. Now I just have to make the time to transcribe what I recorded.

I of course observed several carbon stars. R Leporis is near its peak brightness—about mag 7—and thus fairly easy to find. The color is not as vividly red as it was last year, when it was near minimum (about mag 11-12), but it is still very impressive. W Orionis is about mag 8 and a deep orange-red color. S Cephei is extremely dim and must be near minimum, but as is usual with carbon stars it is at its reddest near minimum. T Lyrae was up late in the evening and was its usual intensely red self. Y Canum Venaticorum, a class R carbon star, was more of a yellow-orange shade than red. UU Aurigae, at mag 6-7 one of the brighter carbon stars, had a coppery hue. WZ Cassiopeiae (also known as OΣΣ254) is not very well placed in the sky this time of year, but it still was a delightful red-blue color contrast double.

NGC 2261 (Hubble's Variable Nebula) was an easy find, despite its being dimmer than when I last saw it several months ago. It no longer has the "Nike swoosh" shape it did last year. It is more of a wide, comet-like fan shape. The peculiar star R Monocerotis now appears to be detached from the tip of the nebulosity and is distinctly visible as a separate object.

With a O-III filter in place, I was able to trace the perimeter of the entire Rosette Nebula complex as a huge, dim, mottled ring surrounding the open cluster NGC 2244. I also used the filter to observe NGC 2438, the small planetary nebula that is a foreground object to open cluster M46 in Puppis. At about 125X it resembles a miniature of the Ring Nebula M57. I completed my O-III observing with M97 (the Owl).

On to galaxies. M51 was showing considerable spiral structure, as was M31 despite its low position in the sky. I could trace a couple of the spiral arms of M31 for most of the length of the galaxy. M81 and M82 were both very favorably positioned. Considerable structure of the exploding galactic core was evident in M82. NGC 404 was a bit hard to see because the bad seeing was smearing out the light from Mirak.

Globular clusters M3, M13, and M92 were, as always, magnificent sights. I think M92 showed the best of the three.

The fine transparency encouraged me to try my luck with the California Nebula. It did not show as well as I've seen it in the past at YFOS, but it was clearly visible, with H β narrowband filter in place, as an extremely large but extremely dim oblong patch of glow near ξ Persei.

I packed up at 2 AM, by which point the sky conditions were starting to deteriorate. It was a very fine night's observing.

★ Paul Winalski

Lots of people there. Good turnout. Larry showed up (with no telescope as usual), fired up the main heater,

and brought all the vermin out of dormancy. After shutting off the small heater and opening the door for a while, the climate became cold enough for Astronomers. It wasn't very cold, actually. Not much snow cover. Kind of a poor Freeze Your Buns, but what the heck.

It was an astonishing night in terms of transparency. I saw things easily which were not easy previously. I enjoyed myself.

The main heater is now shut off because it hasn't been leak tested. I was monitoring it with a combustible gas detector. Next year I'll do better.

★ Larry Lopez

NHAS January 2010 Business Meeting

The meeting took place on 22 January at St. Anselm College. The club Secretary was unable to attend, so minutes were taken by **Mike Townsend** and **Bill Steele**.

President **Rich DeMidio** reported on the January NHAS officer's meeting. The goals for 2010 are:

- Keep the club on course
- Improve our infrastructure; deploy new website
- Expanded our public outreach activities
- Improve communications
 - Streamline the business meetings
 - Use the forums more effectively

Rich also presented some strategic initiatives for 2010:

- Ongoing inventory of NHAS assets by Board of Directors
- Expand the Library Telescope Program
- Membership contribution: let our needs drive the contribution
- Educational materials; need more focus on novice to intermediate level

Directors' Report

John Rose presented a report on the Board's January meeting (see January's Observer for a full report). The club sorted through the tote box and discarded many obsolete or duplicate items.

Club members who have a club asset should e-mail the Chairman, **John Bishop**, to let him know about it. Club members who borrow assets should fill out the bailment form. The goal is to get club assets under control by the end of the year, and to keep it that way.

Educational Outreach

Tom Cocchiaro reported that the McAuliffe-Shepard Discovery Center's annual "Spacetacular Saturday" is being renamed "Aerospace Festival" this year and will expand to be a three-day event (30 April and 1-2 May). They are asking us to present a sky watch on Friday night and then have solar observing outdoors and an indoor presentation on Saturday and Sunday. Tom and Ted are starting to organize this work now; please contact them if you wish to participate.

Public Observing

Marc Stowbridge presented the current list of participants in the Library Telescope Program (chart attached to the meeting minutes in this Newsletter). Marc stressed the need for each telescope to have a sponsor or "foster parent" to stop by every month or so to keep the scopes in good working order.

We have some excess Orion Explorer II eyepieces that need a good home.

Miscellaneous Business

We have speakers lined up for February and May. Let Rich DeMidio know if you have ideas for other guest speakers.

Please send Rich any pictures you may have taken of Dr. Moran's talk last month. We tried to show M106 to Dr. Moran but were unsuccessful—it was badly placed in the sky. We have offered him an observing session at YFOS or another mutually convenient venue for him to view M106 with us—he has never seen it visually.

Scope of the Month

Tom Cocchiaro presented the Williams Optic 72mm FD refractor. He wanted something to piggyback on his WO TMB 110 to use as a

guide scope and for wide-field astrophotography.



William Optics 72 FD refractor.

The scope is a f/6 FD doublet, 2” back, and rotatable focusing section with dual-speed knobs.

YFOS Update

Larry Lopez reported that the catalytic heater is working. We have 1/3 tank of propane for the main heater. Its pilot is not lit.

Book of the Month

Ted Blank presented a flipbook of the Solar System, showing planetary positions, for use at public sky watches.

In The Sky

Rich DeMidio presented some of the sky events for the next month.

Library Telescope Program Status

Here is a table showing the current status of the Library Telescope Program.

Library or School	Foster Parent	Funding	Package
Tamworth Public Library	Marc	NHAS	Zoom
Moultonborough Public Library	Dan	MBL	Barlow
New Durham Public Library	Marc	NDL	Barlow
Portsmouth Middle School	Ted	PMS	Barlow
Goffstown Public Library	Bill	NHAS	Barlow
Gilford Public Library	Marc	GPL	Zoom
Ossipee Public Library	Bob	Public	Zoom
Plymouth Public Library	Barrie	PPL	On order
Mary E. Bartlett Library, Brentwood	Ted?		
Sandwich Public Library	Marc		Fund raising

★ Marc Stowbridge

Mars, in particular, is at its closest to Earth, and at its brightest, this month.

There was discussion of how to observe the February space shuttle launch.

2009 Awards Presentations

See the feature article elsewhere in this issue for the details on the awards presented at this meeting.

Evening Presentation

In lieu of a speaker, club members presented some recently acquired equipment, including:

- 22mm Nagler eyepiece (**Rich DeMidio**)
- 27mm Panoptic eyepiece (**Joel Harris**)
- Meade ETX-90 (**Ken Charles**)
- New IOptron Mini-tower Pro mount (**Steve Forbes**)
- Space shuttle take-off photographs (**Rich Schueller**)
- Planisphere (**Ted Blank**)
- SDC available on Astromart (**Larry Lopez**)

- Guide scope (**Dave Weaver**)
 - ★ Mike Townsend
 - ★ Bill Steele

The Bottom Line

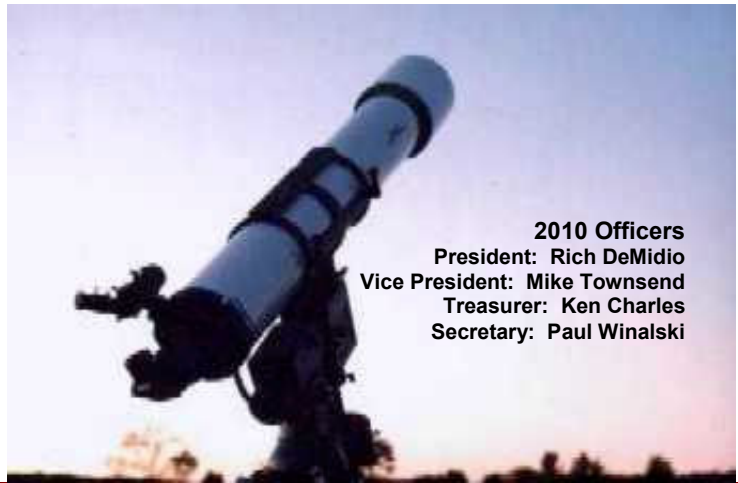
Starting Balance:	\$8087.24
Deposits/Credits:	
Membership:	330.00
Donations (EOC):	0.00
Bank interest:	2.24
Total :	332.24
Accounts/Paid:	
Cynric Company, LLC:	171.60
Academic Superstore:	234.90
Total:	406.50
Net Account Balance:	\$8012.98
Petty cash drawer:	\$100.00
Cash Balance:	\$8112.98

Membership: 108

New Members:

Al Lawler, Londonderry, NH

★ Ken Charles
NHAS Treasurer 2010



2010 Officers
 President: Rich DeMidio
 Vice President: Mike Townsend
 Treasurer: Ken Charles
 Secretary: Paul Winalski

DEADLINE March 2010 Issue: 5 PM March 13

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, Bill Steele, Marc Stowbridge, John Rose, Don McDaniels, Larry Lopez, Mike Townsend, Ken Charles

New Hampshire Astronomical Society
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Manchester, NH 03108-5823



NHAS Upcoming Events

Event	Date	Time	Location
NHAS Business Meeting	February 19	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
Educational Outreach Committee Meeting	February 26	6:30 PM	Ralph Pill Building, Concord NH
Cub Scout Pack 75 Sky Watch	March 4	7:00 PM	2010 Bow Community Building, Bow NH
Discovery Center Public Sky Watch	March 5	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Bedford High School Sky Watch	March 8	7:00 PM	Bedford NH
Coffee House Night	March 12	5:00 PM	YFOS
Messier Marathon	March 12	3:00 PM	Lopez residence, New Boston NH
North Hampton 3 rd Grade Sky Watch	March 15	7:00 PM	North Hampton NH
NHAS Business Meeting	March 19	7:30 PM	St. Anselm College, Manchester NH
Discovery Center Public Sky Watch	April 2	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Coffee House Night	April 9	5:00 PM	YFOS
NHAS Business Meeting	April 16	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH