



Astronomy Day Preparation

President's Message

March was an exciting month for NHAS. Spring sky watches are ramping up with several events scheduled and being attended. We were also partially successful with a Messier Marathon in which good conditions prevailed till about Midnight, which has been a lot better than recent years. EOC also put together a presentation for the McAuliffe-Shepard Discovery Center on very short notice regarding Saturn. They did a tremendous job and it went over very well. EOC will deliver this at a future NHAS meeting as an evening program. My thanks go to **Ted Blank** (Architect), **Rich Schueller**, and **Chase McNiss** for leading this effort.

We have just a few more weeks before our Astronomy Day event. Preparations are in full swing and plans are coming together. I want to personally thank everyone who has signed up to contribute. There is still time to help if there are folks who wish to contribute. Please contact Chase McNiss if you would like to assist. There has also been a lot of advertising at schools and other local businesses for this event. With 2009 being the International year of Astronomy, this year's event proves to be special as we expect a very large turnout.

★ Rich DeMidio
NHAS President 2009

Highlights for this Month

The big news item this month is a report on the plans for Astronomy Day. In celebration of 2009 as the

International Year of Astronomy, **Chase McNiss** has led an effort to revamp and considerably expand NHAS's A-Day exhibits.

★ Paul Winalski
NHAS Secretary 2009

Astronomy Day May 2nd

Astronomy Day 2009 is getting closer and we are just about done with all the big details; now comes the fun of dealing with the small details.

For those who are not aware there is the regularly scheduled First Friday of the Month sky watch at McAuliffe-Shepard Discovery Center the evening before A-Day. Another day to mark on your calendar! When will this end?

A-day hours are from 10:00 am to 5:00 pm.

Setup time for the outdoor displays is 9:00 am. We have volunteers who will be bringing the NHAS canopy and others who have volunteered to be there starting at 9:00, but if you are as excited as I am, you will have trouble sleeping in, so don't be afraid to show up early, we will have plenty for you to do.

Most of the outdoor display volunteer positions are now filled but I will not be sending out the final volunteer assignments until several days before the event. Floaters are an important volunteer assignment which gives us the flexibility we need to make things run smoothly, if that's possible. If you are not sure what you want to do, volunteer as a floater and let us do the thinking for you.

For those who will be helping out at the main indoor table I am going to try to get set up the night before A-Day during the 1st Friday Skywatch. This will give us an opportunity to get the display set up and running without the confusion of the morning setup. For others there is the skywatch Friday night where we will be showing the public that, yes, you can still see astronomical objects in the warm glow of Concord's city lights.

The indoor display is being set up in the café overflow area behind the café just inside and to the left of the center's main entrance. On the main table will be a new NHAS display with several media shows running on LCD screens. Right now it looks like there will be room for the Astro-photography static displays to be inside with the main table and the photo show.

We are going to hold a raffle to help raise funds to support the educational outreach programs the NHAS is now implementing. Prizes will include a beginner telescope, astronomical binoculars, astronomical charts and books, red observing flashlights and even a meteorite.

There will be literature handouts in both the indoor and outdoor display areas. This will include current and past issues of S&T and Astronomy Magazine, literature from JPL, NASA, as well as a new NHAS brochure.

The NHAS canopy will be outside in the quad area where it has been for the past several years. This is the area where the Solar, Magnification, Venus/Moon,

Binocular, Radio (??) and Static Telescope displays will be set up. There will be other vendors there as there has in the past so we need start early to stake out our territory.

There will be electricity to the outside area but we will need to bring our own extension cords. It is not certain as yet if there will be tables provided but in years past, we have been able to use the picnic tables from the NHTI and that has worked really well. If you have a comfortable folding chair bring that along to take an occasional break and get off your feet.

It is still not known if MSDC will be providing a lunch as they have in the past. I am not expecting them to because they have many more personnel since the opening of the discovery center. With this in mind, I suggest you bring your own lunch; there will be cold bottled water for NHAS volunteers.

During setup NHAS volunteers can use the access road to the rear quad area to drop off equipment. This should be done between 9:00 and 9:30 am. After 9:30 it might be too busy for you to get safely through. This should give you incentive to get there early to set up so you don't have to carry equipment a long distance.

Parking during the event will be in the parking area near and in front of the Police Standards and Training building and not in the MSDC parking area. PLEASE DO NOT PARK IN THE MSDC PARKING LOT!

We are going to hold a skywatch after the A-Day event. The skywatch is scheduled to start at 7:30 pm; although a little early for this time of year, there will be the Moon to look at. We are looking into getting pizza delivered between the end of the daytime event and the start of the skywatch. The skywatch will be held just off the MSDC parking area near the front entrance to the center. There will be personnel from the MSDC there to turn off the lights in the parking area even though the center will be closed. Because the center will be closed, we will not have bathroom

facilities available so keep this in mind.

Even if you do not have time to volunteer for the event, if you are in the area please stop by the say Hi. Who knows, there might be a few volunteers who need a hug and words of encouragement and we would love to see some smiling faces. It will be a long day and if you plan to participate from morning through to skywatch, try to rest up the day before.

Hope for clear skies.

★ Chase McNiss

Library Telescope Project

I stopped by the Cook Memorial Library (Tamworth) to see how the telescope was doing. I managed to catch it "home". Some middle school kids were in the room and I showed them what I was up to—checking the collimation, aligning the finder scope, and checking its battery. The adjusting screws were loose, but no problem to tighten. The collimation was almost perfect. The kids looked through the scope and asked good questions.

The Staff said there was still great enthusiasm for the scope, and no problems had been reported.

Moultonborough Library is holding a sky watch April 20th and is featuring their new scope.

A new handout

The Club has a reel of slide film from a 1992 shuttle mission. Almost all are of pictures of the Earth, with a few Moon pictures (a small white dot...). The scale is not very large, and it's a struggle to identify where the subject land-mass is, though it's fun to try.

During the Market Street Day event, we cut some of the 2 inch square pictures off the roll and handed them to people coming to look through our scopes. They held on to the pictures like they were Holy Relics! The EOC has spoken about how to use the pictures, as their format does not lend itself to easy use, and various handout formats have been briefly discussed. I made 4X6 cards with a picture taped on

one edge. This allows one to flip up the picture and reflect light off the card and through the transparency. I have handed some out at a local sky watch, and the kids instantly flipped the film up to view it. They loved them!

★ Marc Stowbridge

Astro Photons

Check out the images that members are posting in the "Pictures" forum on the NHAS website.

★ Paul Winalski

Recent Public Sky Watches

North Hampton Library, 8 April

The rescheduled N. Hampton Library Star Party started on time at 6:30 and went off without a hitch. The Library did a great job of advertising it and handling the reschedule. There were about 15-20 very well prepared students (3rd-6th grade) who asked some very sophisticated questions. One even knew the catalog numbers of the latest stars to show evidence of planets being present! We covered the scale of the Universe and Solar System, types of objects we typically see in the Milky Way, and how refracting and reflecting telescopes work. I showed some of the videos from Cassini and Huygens, then after having two kids act out the roles of the Sun and Earth at various seasons of the year, everyone cut out and assembled their own planisphere from pre-printed forms that you can download from Lawrence Hall of Science in Berkeley, Ca. A quick overview of some constellations and we headed outside. **Tom Cocchiario** was there all evening and he scouted out a good location to view M42 through breaks in the clouds, so he set up a C6R and I put the 8" dob next to it. After everyone had seen M42 Tom noticed that Saturn had begun to peek through some clouds, so we finished up with everyone including parents and the Librarian, Ashley, getting a very good look at Saturn plus Titan and one other moon.

Some of the kids were extra happy to see Titan since we'd just watched the movie of Huygens descending through Titan's atmosphere—you could sense they felt the extra connection. We finished up about 9 PM. Temperature was comfortable and seeing was very good—Saturn was sharp and cloud bands were visible in the C6.

★ Ted Blank

Thornton's Ferry School, Merrimack, 13 April

The sky watch was for the 3rd graders, plus family, from both Masticola and Thornton's Ferry Elementary Schools in Merrimack, NH. **Paul Winalski** gave each group an indoor presentation on the night's sky and then they hit the observing field.



Thornton's Ferry Observing Field



Young observer at the Los scope (Chase McNiss photos)

Transparency and seeing were both good. We had twelve telescopes and needed all of them, as attendance (50 from Masticola, 100 from Thornton's Ferry) exceeded expectations.

NHAS members participating: **Herb Bubert, Ken Charles, Gardner Gerry, Peter Kelly, Larry Lopez, Ed Los, Chase McNiss, Al Navarro, John Rose, Bill Steele, Mike Townsend.**

★ Paul Winalski

New Searles Elementary School, Nashua, 14 April



Mr. T. the 14" TScope reflector



TeleVue 75mm observing (Chase McNiss photos)

Sky conditions were not as good as the previous evening, and the site has horrific light pollution due to floodlights in an adjacent public park, but about 50 students and their families were treated to the planets Saturn and Mercury (visible just above the horizon at twilight), the Pleiades, the Orion nebula, clusters M35 and M37, M3, and galaxies M81 and M82.

NHAS members participating: **John Bishop, Herb Bubert, Ken Charles, Joe Duchene, Gardner Gerry, Ed Los, Chase McNiss, Al Navarro, Rich Schueller, Bill Steele, Paul Winalski, Nils Wygant.**

★ Paul Winalski

Cocheco Arts & Technology Academy, Dover, 16 April

A very nice sky watch location with good horizon exposure, heavy light dome from Dover and Rochester, small field with trees and towers and fairly dark site after the sun set.

25 high school students, their parents, and educators attended.

NHAS members participating: **Ted Blank, Tom Cocchiaro, Marc Stowbridge, Bill Steele.**

★ Bill Steele

Messier Marathon 2009

I made the almost 5 hour drive north to New Boston to both look at the sky, but more importantly, meet up with all my old friends.



MM Observing Field (Paul Cezanne photo)

What you don't see in the photo is my setup. I decided to go simple this year. I normally use a computer controlled scope and for last year's marathon I brought out my 1962 Edmund Scientific 6" reflector. This year I was going to do it all with my Canon 15x50 Image Stabilized binoculars. Why not? Messier used a small scope. My binoculars are smaller but surely made of better glass plus the advantages of using both eyes is well known. Now he had darker skies for sure, so I figured it was a fair game. This isn't as crazy as it sounds, I have currently seen 87 of the 110 objects so I know I can get the bulk of them.

I was using the Sky and Telescope Pocket Atlas, which is a wonderful field atlas as well as Duchek's Telrad Finder Charts, a nicely laminated volume which is also just great for use in the field. But when looking for dim Messier objects, I find that both of them are lacking sometimes. You see, when using a telescope you can use the charts to "hop" from one object to another. With binoculars, sometimes the destination is dim and even just stellar at times. And when you are looking at a field of identical dim objects you need to be certain that

you have the right one. So I had my Palm PDA loaded up with Astromist, a truly wonderful planetarium program. With Astromist I can load charts that go down to mag 11, more than I'll need for sure, but I'll be able to distinguish which dim dot is my galaxy and which one isn't! Binoculars are easy for some objects but harder for others. The dim objects just aren't harder to see, they are harder to identify also. I used Larry McNish's Messier Planner to generate my list. I was, of course, using the Ed Ting sequence.

So of course the forecast was for crappy skies but it looked like we'd get a couple of hours of observing in so at 1pm I got into Jezebel the Volvo and started driving south. Yeah, from Cape Cod I have to drive south to go north! Come to think of it, I had to drive east to go west also!

I get there, get set up and greet all my old friends. Even if it clouded up I was glad I came.

At sunset there is a frenzy of activity to try and grab all the objects that are setting. I knew I wasn't even going to try for M77 and M74. I had tried for them a few weeks earlier under perfect conditions and failed to get them. And the haze was thick, these were not even close to perfect conditions! Here's the list of objects I got in the order I got them. This is different from the Ting sequence only because of the clouds!

* M41—Grabbed it early just to see if we could see anything in the haze, hard grab but the sky was still pretty blue.

* M36, M37, M38—Harder than I thought, I was all turned around in my head. I usually observe these at the start of the season, they were all upside down now!

* M42, M43 - M43 was tough but I did see bit of glow around the star above M42. In retrospect, I wonder if that was just haze!

* M52

* M103—probably would have missed it if I hadn't already spent a

lot of time this summer in Cassiopeia with binoculars looking at M103 and all the nearby NGCs

* M31—Hard! The western clouds hard cleared enough but this was a tough grab. M32 and M110 were impossible for me.

* M45—naked eye of course, but then I put the Canons on them, nasty tonight.

* M34

* M47, M46—I just love looking at this pair in the binoculars. Such a contrast!

* M51—way out of sequence but I was with a friend now futzing with his new scope and he was busy adjusting something so I grabbed it since I was just standing around.

* M78

* M35—Usually I grab this with 36,37 and 38 but since I was upside down I missed it then.

* M1—I was quite surprised I got this under the conditions.

* M93

* M50—had to work the charts for this one, the area is rich in things.

* M44—The Beehive, got it both naked eye and with the binoculars.

* M48—hard work with the charts again

* M67—a brand new one for me, sweet!

During this section I also tried for M79. I tried a lot but just couldn't do it. In sequence that was right after M34.

It was now around 10pm and the haze came in strong so we all went inside to eat and talk. Lots of good food tonight!

By 11:30, only a guess, it had cleared again so we went outside to try for more. We were into Leo now.

* M65, M66—I went off sequence to get the easier ones first. These were hard, uh oh...

* M95, M96—I must have spent about half an hour on these two. The haze was deep and these were challenging. I was right on the right spot, my charts confirmed that (Pocket Atlas) but nothing was

there. Eventually, with averted vision they came out. Notice that I did not get M105, that wasn't for lack of trying!

Now the binocs had dewed up. This happens to me on the eyepiece end, not the objective. Presumably moisture from your eye gets on the glass. I put them with some reusable hand warmers in a tool chest to warm up some and pulled out the backup Canon 10x30IS binoculars. I tried for M81 and M82 but they dewed up in about 2 minutes. I took a break brought out the 15x50s again

* M81, 82—much harder than I'm used to.

And that was it! Virgo disappeared along with all its galaxies. Vega was still visible so I tried for M57 but failed. Too much haze.

We hung out a bit more then packed it in around 2AM.

Total count, 28. Not too bad for the conditions.

★ Paul Cezanne

NHAS March 2009 Business Meeting

ATM

No report.

YFOS

Our current plowing contractor has gone out of business. We are looking for a replacement. The observatory is entering mud season—be sure to keep to the left when driving in.

Membership

No report.

Astrophotography

Gardner Gerry reported that on 10 March the Astrophotography Committee held a virtual meeting on the Internet, **John Buonomo** hosted the meeting. Others participating were **Herb Bubert**, **Tom Cocchiari**, **Gardner Gerry**, **John Hill**, and **Dave Weaver**. Gardner processed a Rosette image. John demo'd the Nebulosity software. The meeting spent two hours online. Thanks to John B. for setting it up.

Radio Astronomy

No report.

Public Observing

Marc Stowbridge reports that some recent events were cancelled due to bad weather. The Nashua Library event took place. The schedule is filling up.

Educational Outreach

Rich Schueller reported that at the last EOC meeting the committee discussed and revised the A-Day brochure. **Tom Cocchiario** is reviewing quotes for the printing.

The website is being redesigned to make links for membership applications and sky watch requests easier to find. Paying dues through PayPal as an option was discussed.

We will be using the website forums rather than the calendar to store sky watch info. We need a second person (other than the public observing coordinator) set up as that forum’s moderator.

The Lunt solar scope was present at the EOC meeting!

We have submitted an additional grant application to the NH Charitable Foundation seeking additional funding for the library telescope program. Ten libraries have heard about the program and are chomping at the bit.

Webmaster

Matt Marulla has more time to spend on the NHAS website now that his intense work on SLOOH is calming down.

Board of Directors

No report.

Book of the Month

Clocks in the Sky—The Story of Pulsars by Geoff McNamara.

Scope of the Month

The club’s 60mm Lunt solar scope, which we purchased for educational outreach activities, was presented.

Highlights for the last 30 Days

- 22 NHAS members attended the McAuliffe-Shepard Discovery Center opening.
- HB 585 (NH outdoor lighting efficiency act) passed 19-0 from committee.

- We have a major influx of requests for observing events for this spring and summer.
- Astronomy Day preparation is in full swing.

Miscellaneous Business

Paul Winalski reported that our “twin club”, HantsAstro in Hampshire, England, wants to publish an article on NHAS in their eZine “Look Up”.

Astronomy Day planning: **Chase McNiss** requested volunteers for the main table. There will be a raffle of scopes, charts, books, etc. We need someone to haul the canopy back and forth. We will have a static scope display, static astrophoto display, daytime Venus observing, solar viewing (white light and H-alpha), and a magnification display. We need floating members to give breaks to other members as needed, and setup and breakdown crews. We will be advertising this year on newspaper and radio.

Members are encouraged to use the website forums rather than the email list for lengthy discussions.

Evening Program

There was no formal presentation. Instead there was an open forum and question & answer session on the Messier Marathon.

★ Paul Winalski

The Bottom Line

Starting Balance:	\$5707.33
Deposits/Credits:	
Membership:	105.00
Donations:	469.50
Bank interest:	1.41
Mugs:	10.00
Total :	585.91
Accounts/Paid:	
Plowing:	55.00
Insurance:	98.67
Office supplies:	141.84
Total:	406.76
Net Account Balance:	\$5886.48
Petty cash drawer:	\$100.00
Cash Balance:	\$5986.48

Donations:

North Hampton Public Library: \$50.00

Mike O’Shaughnessy: \$419.50

Membership: 116

New members:

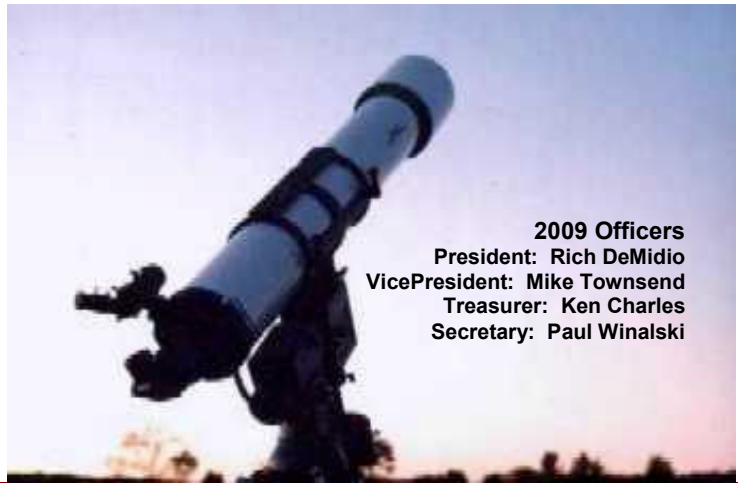
Christine Windler, Manchester NH

Donald McDaniels, Hampton NH

G. Ryan Siggins, Kittery, ME

Thomas Morin, Gilmanton Iron Works, NH

★ Ken Charles



2009 Officers
 President: Rich DeMidio
 VicePresident: Mike Townsend
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 Secretary: Paul Winalski

DEADLINE May 2009 Issue: 5 PM May 10

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:

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Send E-mail to:

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Use our web site:

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

This month's contributors:

Rich DeMidio, Chase McNiss, Marc Stowbridge, Ted Blank, Bill Steele, Paul Cezanne, Ken Charles

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NHAS Upcoming Events

Event	Date	Time	Location
NHAS Business Meeting	April 17	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
NorthEast Astronomy Forum (NEAF)	April 18-19	all day	Rockland Community College, Suffern, NY
Moultonborough Library Sky Watch	April 20	7:00 PM	Moultonborough Public Library, Moultonborough NH
Coffee House Night	April 24	5:00 PM	YFOS
Discovery Center Public Sky Watch	May 1	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Astronomy Day	May 2	10:00 AM	McAuliffe-Shepard Discovery Center, Concord NH
Astronomy Day Public Sky Watch	May2	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
NHAS Business Meeting	May 15	7:30 PM	St. Anselm College, Manchester NH
Coffee House Night	May 22	5:00 PM	YFOS
Sky Watch	May 26	7:00 PM	Portsmouth Middle School, Portsmouth NH
Discovery Center Public Sky Watch	June 5	7:00 PM	McAuliffe-Shepard Discovery Center