



Aerospacefest 2010

President's Message

I would like to thank all NHAS members who supported the **Aerospacefest 2010** event in April. By all accounts, this was a huge event with NHAS presence and participation very strong. We had nearly thirty NHAS members participate over this three-day event showing their passion for astronomy and NHAS's mission. Feedback from both the McAuliffe-Shepard Discovery Center and the public was very positive. Well done everyone! These events only go well with excellent planning and leadership and to that point, thanks to **Ted Blank** for his outstanding efforts in being the coordinator for the event.

We recently conducted the Q2 officer meeting and discussed a variety of topics. We decided to begin restricting access to our email distribution lists to paid members only during the next renewal cycle (October). Detailed correspondence will be forthcoming. We also discussed potential use of Facebook and assigned an action item to the Web Committee to investigate. This is not a cut and dry with potential privacy and accountability issues that need to be thoroughly investigated. Finally, we discussed Astronomy League membership and plan to offer an option to the membership during the next renewal cycle as well. Again, details will be forthcoming.

I have been working on locking in more guest speakers for remainder of this year. I am happy to announce that **R. P. Hale** will be speaking at our June meeting on the

"**The 2012 Fraud**", which should be very educational and entertaining. I have also been requested to put together a briefing on my Australia trip back in March so I was thinking of July or August for that presentation. Finally, I have **John Blackwell** lined up for October with a topic still to be chosen. If anyone is working on obtaining potential speakers, please let me know.

I would like to wish everyone and their families an enjoyable Memorial Day weekend.. With this holiday marking the traditional beginning of summer, it's time to get out your favorite bug juice or mini propane bug repellent. Looks like they may be quite intense this year as we enjoy spring and summer viewing.

Clear Skies,

★ Rich DeMidio
NHAS President 2010

Highlights for This Month

We had several public sky watches scheduled this past month, many of which, alas, had to be cancelled due to overcast skies. One thing that I personally found striking, however, was the amount of public outreach we can achieve at the scheduled events even when the sky conditions don't cooperate. The public do show up for these events anyway, seeking help to sort out their own telescopes, and it can provide opportunities for us to help them use the equipment they've bought.

Many folks out there who own telescopes that they don't know how to set up or operate, and who are delighted when we can give them

advice and assistance in setup and operation of the scopes, and advice on what to look for in the sky and where to look for it.

Several times this past month I attended public observing events even though the sky was hopelessly overcast, only to find members of the public seeking advice on telescopes they owned or were planning to purchase. So sky conditions aren't the only consideration when deciding whether or not to attend one of our public outreach events.

Oh, yes—and we put on this little weekend event in celebration of International Astronomy Day, in conjunction with the McAuliffe-Shepard Discovery Center—called **Aerospacefest 2010**.

★ Paul Winalski
NHAS Secretary 2010

Aerospacefest 2010, 30 April- 2 May

Our annual club celebration of Astronomy Day was, as usual, linked to events at the McAuliffe-Shepard Discovery Center. This year the event was expanded to two days (Saturday and Sunday), preceded by a sky watch on Friday night. The expanded event was christened "Aerospacefest 2010".

The sky watch was successful, educational, and fun for all. It was very encouraging to see several of the public bring their own scopes to the event.

During the day on Saturday and Sunday, NHAS had two displays. Outdoors we set up several scopes

on the lawn to the left of the Discovery Center entrance.



Joe Derek sets up his 17½” dob (Dave Weaver photo)

We offered solar observing both in white light and H α , when the clouds permitted. There was also a demonstration of magnification. Strategically placed in the shade of the Discovery Center building we had our tent set up with numerous educational hand-outs. **Joe Derek** and **Paul Winalski** had large telescopes set up at the edge of the lawn near the Discovery Center entrance and that helped attract visitors to our outdoor area.



Solar Observing at Aerospacefest 2000 (Dave Weaver photo)



Rich Schueller demonstrates telescope magnification (Tom Cocchiaro photo)

Indoors we had a booth on the second floor with a running

astrophotography slide show and simulation of viewing Saturn (a telescope focused on an image of Saturn stuck to the wall on the opposite side of the Discovery Center).



The NHAS indoor display (Dave Weaver photo)



Ted Blank demonstrates how a reflector telescope works (Tom Cocchiaro photo)

Also, **Matt Marulla** had his impressive astro-imaging gear set up. There was also a newtonian reflector with part of the tube cut away so that it could be used to demonstrate how a reflector telescope focuses light.



Dave “Rags” Gilmore mans the NHAS booth. (Tom Cocchiaro photo)

NHAS members also pitched in to work shifts manning the Discovery

Center’s solar observing setup in the observatory dome.

NHAS also conducted a raffle at the event. The first prize, a Sky-Watcher refractor telescope went to an ecstatic recipient.



Ted Blank presents the raffle 1st prize to its winner, as Dave Gilmore looks on (Tom Cocchiaro photo)

I personally was manning the outdoor scope displays and did a shift in the observatory dome. In my opinion, our location outdoors couldn’t have been any better. This was my seventh Astronomy Day event with NHAS, and in terms of public outreach, I think it was our most successful yet.

Ted Blank did a superb job of coordinating NHAS’s Aerospacefest activities.

We received this message of thanks from **Dave McDonald**, the Director of Education for MSDC:

“Friends,

Thanks SO MUCH to the NHAS for a great couple days!!

Thanks for the Astronomy Bowl prizes. Thanks for the great raffle prizes. The boy that won the scope at the raffle was AMAZINGLY overjoyed to have won that.

Thanks for the sky watch and observatory coverage. The list truly could go on and on.

A special thanks to President Rich and NHAS Aerospacefest coordinator Ted !!

I think I'll go home and sleep now."

★ Paul Winalski

I counted twenty-three members who were able to make part or all of their weekend about giving back to the community at this great event. And we had several first-timers. Hope you enjoyed it!

We had easily over a hundred encounters with the public, some I observed lasting thirty minutes or more (very unusual in such a setting, this speaks to your enthusiasm and "from the heart" attitudes).

Thanks to Dave McDonald for always being our biggest fan.

The first day of Aerospacefest 2010 went extremely well, thanks to all the hard-working volunteers. We had people in the observatory all day showing the sun in the 100mm Lunt (I know, tough job but somebody has to do it!), inside at the table, demonstrating scopes, handing out literature, selling raffle tickets, and of course the core of our outreach efforts—the hardworking outdoor crew. They waited out the morning clouds and got in about six hours of beautiful weather, showing the sun, Venus, and even a few stars. We were rewarded with both sunspots and prominences to show the public - thanks Sol!

★ Ted Blank

NHAS Donates Prizes for Astronomy Bowl IV

For the last several years, the McAuliffe-Shepard Discovery Center has conducted an Astronomy Bowl event. This is a statewide competition for high school students, grades 9-12. Participants must answer questions about constellations, planets, stars, and other objects projected in the Discovery Center's planetarium. The top three finishers receive scholarships: \$1000 for first place, \$500 second place, and \$250 third place.



Rich DeMidio and Ted Blank present the Orion StarBlast to Astronomy Bowl IV 1st place winner Preston Morrisette (Tom Cocchiario photo)

This year, for Astronomy Bowl IV, NHAS also awarded prizes to the Astronomy Bowl winners. First place finisher **Preston Morrisette** (Lakes Region Christian Academy, Laconia) received an Orion StarBlast telescope. **Samantha Ryan**, second place (also from Lakes Region), received Astronomy software. Third place finisher **Naji Pride** (home school student, Lisbon) got Astronomy books.

All three also were awarded one-year NHAS memberships. So congratulations and welcome aboard to our new members!

★ Paul Winalski

Langdon Library Sky Watch, Newington NH, 20 April

Several NHAS members traveled to the Langdon Library in Newington for what became a marathon sky watch. The evening started at 5 PM with an hour's worth of solar observing courtesy of **Herb Bubert** and **Tom Cocchiario**. The duo treated more than a dozen library patrons and passers-by with views of solar prominences through Lunt HS60 H α scopes. Cocchiario followed up with a short library presentation on finding your way around the sky and celestial objects, and then it was off to a nearby playground for the grand finale. A 10-inch dob, graciously provided by **Ted Blank** (who could not stay for the whole program), was manned by

Seacoast Astronomer **Tim Mauro**, **Brian Cossette**, new NHAS member, and **Jim Moe**, another Seacoast astronomy regular, also pitched in for to give more than two dozen Newington adults and children a tour of the night sky. One visitor quipped it looked like the whole town of Newington came out for the evening activities.

Surprisingly, many visitors to the skywatch stayed long past the scheduled 8 PM close looking at planets, nebulas, star clusters and a host of galaxies. Despite the quarter moon, the sky was dark enough for observers to tag M81 and 82, M51, the Leo Triplet, the Sombrero, the Perseus Double Cluster, the Orion Nebula, the top three open clusters in Auriga, the Beehive Cluster, and binary stars and others. Head Librarian Scott Campbell was "over the moon" with the program as were the effusively grateful town residents who thanked our group for sharing the night sky with them.

★ Tom Cocchiario

Salvation Army "Kids Klub" Moon Watch, 21 April

I spent a few very enjoyable hours with the Salvation Army "Kids Klub", a Wednesday after-school outreach program of the Salvation Army. Kids from difficult situations (shelter families, latchkey kids whose parents are working extra jobs, single parent homes) are picked up by SA volunteers for an afternoon of fun, enrichment, a new toy and a hot meal, and are home by 7 PM.

I was contacted last September by someone from SA who had visited us on the sidewalk in Portsmouth. Since we knew the kids would not be around after dark, we picked a day with first quarter Moon so we would be able to see something during the daylight hours. It worked out very well, we got lucky and only a few clouds interfered. I got there about 4:45 and talked for about thirty minutes with slides explaining the scale of the solar system, galaxy and universe, and had the kids participate in a demo

that explains why we see different constellations in summer and winter. They were very interested and curious. **Tom Cocchairo** had already dropped off my 10" dob from the Langdon Library star party the previous night, so all we had to do was carry it down the steps to the sidewalk and point it at the Moon high overhead. Each person (kids and adults) got to see the Moon first at low magnification and then at high. Even though the daylight washed out some of the details, the craters along the terminator were easily visible and elicited the same "oohs" and "aahs" we get during nighttime events. Then we all had dinner together inside.

The SA folks plan to contact Marc to schedule a nighttime sky watch in the summer or fall at a dark location where they would arrange to bring the kids to us. That should be great fun.

★ Ted Blank

McAuliffe-Shepard Discovery Center Sky Watch, Concord NH, 7 May

The Clear Sky Chart was so-so, and several NHAS members showed up for our first Friday of the month sky watch at MSDC. **Gardner Gerry, Joe Derek,** and I were there, along with several others—forgive me for forgetting names. The skies were hopelessly clouded over. Nonetheless, Joe and I spent half an hour or so talking to someone who was planning to purchase a truss tube dob in the 12" to 16" range. We gave him a bunch of advice, and I was able to demonstrate setup and collimation of a 14" dob.

This drove home to me why we should show up for the monthly MSDC sky watch even if the skies look hopeless. Folks still show up looking for advice and assistance concerning telescopes.

★ Paul Winalski

New Searles Elementary School Sky Watch, Nashua NH, 11 May

Skies were, unfortunately, hopelessly overcast. Since it's practically on my way home from work, I showed up anyway, just in case any of the public came. **Ken Charles** joined me, on his way home from work.

As it turned out, there *were* some families interested in seeing telescopes, even if they couldn't look at the sky. I set up my 14" dob for them and they got to see, in great detail, the top of a radio tower about five miles away. The kids were impressed by the big scope.

One family had also brought a 70mm refractor on a small, tabletop mount, that they had been having trouble with. I showed them how to set it up properly. The focuser wasn't working because the grease in the rack-and-pinion mount was gone and some of the teflon tape had come loose and wrapped back on itself, so it was sticky-side-out. The result was that the rack-and-pinion focuser was slipping. I removed the focuser tube, we trimmed back the tape, and I re-inserted the focuser tube, and the focuser was in business again.

After that repair, they were able to see their first image--ever--in the scope: a view of the same distant radio tower. I explained how the two eyepieces (20mm and 9mm Kellners) worked, and the function of the 2X barlow lens. The primary optics aren't at all bad, and the focuser takes 1-1/4" eyepieces, so this scope has the potential to give them some good observing. They were delighted to have it working. Their son is keen on Astronomy.

I spoke to the organizer, and she said that she'd be in touch with Marc to reschedule for June.

This shows, yet again, that it can be worthwhile to show up for sky watches even if the sky itself is hopeless.

★ Paul Winalski

Random Acts of Observing: Nashua NH, 16 May

Sunday's sky was clear and the Clear Sky Chart said the transparency and seeing would be good, so that afternoon I contacted my neighbor who has a "neighborhood" email list and told him to tell people that I would be showing Saturn at 9:00 PM.

I set up my 16-inch in a little park and people began to show up at 8:30 PM while I was setting up. Over the next two hours I showed Saturn, Mars, the Moon, M3, and M51 to about twenty-five people. The big hit was Saturn, so 80% of the time that's what I showed!

Two moons were visible on the preceding side (Rhea and Dione) and two on the trailing side (Titan and Tethys). CalSky says that Enceladus and Mimas were on the trailing side but I did not see them. The shadow of the rings was visible on the body of the planet. The rings were almost exactly edge-on. I could see some faint banding.

As usual, the kids loved it (one asked her father to get "a telescope like this"!).

★ John Bishop

Little Angels Day Care Sky Watch, Hooksett NH, 17 May

I did a short presentation indoors while waiting for it to get dark. The kids were remarkably quiet and attentive for being so young (some were as young as four years old.) I was the only one who showed up. Luckily, I brought two scopes and we looked at the moon for a while through misty clouds. I held out hope that Saturn would peek through, but it never did. Everyone seemed to have a good time, so I'd still call it a success.

★ Ed Ting

The original sky watch for this group had been scheduled for Friday, 14 May. **Herb Bubert, Gardner Gerry, Ed Ting,** and I all showed up, but, alas, skies were overcast. We were able to

demonstrate the mechanics of telescopes and to provide close-up views of a cell phone tower some two miles away.

These folks seem really interested in Astronomy. I noticed that there was a model of the solar system drawn in chalk in the pavement where we set up. The site has a panoramic horizon view to the West and seems relatively free of artificial lighting. Good potential for the future.

★ Ed Ting

NHAS April 2010 Business Meeting

The meeting took place on 16 April at the McAuliffe-Shepard Discovery Center. The club Secretary was unable to attend due to illness; thanks to president **Rich DeMidio** for taking the minutes.

President's Message

Our president, Rich DeMidio, returned from Australia, but it was a hard decision. He will give us a full report at the July business meeting.

We have had a lot of scheduled sky watches, many, alas, cancelled due to bad weather. Please prioritize our public sky watches over NHAS conflicting events.

The Q2 officers meeting is scheduled for 8 May. Send Rich any agenda items that you wish the officers to address.

The Three Rivers Foundation (the folks who sponsor the Deepest South Texas Star Safari) are interested in what we have done for the library telescope program. Rich needs to hook up with **Marc Stowbridge** with the contacts.

Public Observing

Marc Stowbridge reports that he is rescheduling several cancelled events.

There are twelve library telescopes up and running. He has one donated scope and one pending that will be given to a library. Marc is optimizing the library scope configuration to be more portable. He would like to retrofit the new design for the already deployed scopes.

We could schedule three sky watches a week but do not want to overload members. The consensus after discussion was to schedule them anyway since we get so many cancellations due to inclement weather.

Marc will provide an estimate to the officers of the cost of library scope retrofit, or will approach EOC to take the funds out of their allowance.

Dave Weaver suggested a page on the website for teachers/librarians to help with implementation of the library telescope program. Details need to be supplied to the EOC.

Marc is talking with the CEO of Orion Telescopes regarding the scope program and even more support.

Aerospacefest 2010 and MSDC

Dave McDonald thanked NHAS for the Astronomy Bowl contribution. It was a great event. The final preparations for Astrofest 2010 (our contribution to Aerospacefest 2010) are underway. We need to discuss some details with Dave regarding the deployment of NHAS resources.

Miscellaneous

Rich is still looking for a volunteer to take over the "In the Sky" part of the meeting.

The Membership Committee is looking at communication ideas including Facebook. This will be discussed at the Officers Meeting.

We need more guest speakers starting in June. To avoid double booking, contact Rich DeMidio if anyone is working on possibilities,

Rich still has a 2XL and 1XL jacket left from the initial apparel order. Contact him if you are interested in purchasing one.

One member had a bad experience (\$48 for one T-shirt) with the NHAS attire website. Something doesn't seem right here. We need to investigate. **Ken Charles** reminded folks that we could pool orders to save on cost and shipping. Rich D. commented that he wanted to look into purchasing bulk

amounts and then selling them back to the club. This will be discussed at the officer's meeting.

Evening Presentation

Dr. Warren Brown from the SAO Cambridge, MA on Hyper Velocity Stars. Dr. Warren discovered the first one of these. His presentation was about what they are and how they are decided. He graciously volunteered to send the slide deck to us for publication. Rich D. will provide it in PDF to the members.

★ Rich DeMidio

The Bottom Line

Starting Balance:	\$6957.12
Deposits/Credits:	
Membership:	90.00
Donations:	475.00
Bank interest:	1.84
Total :	566.84
Accounts/Paid:	
Tom Cocchiaro:	219.90
(prize for Astro Bowl)	
Cynric Co.:	174.00
Sir Speedy (posters):	111.25
Total:	505.15
Net Account Balance:	\$7018.81
Petty cash drawer:	\$100.00
Cash Balance:	\$7118.81

Membership: 128

Donations:

Pease Public Library (\$350.00)

Tom Cocchiaro (\$50.00)

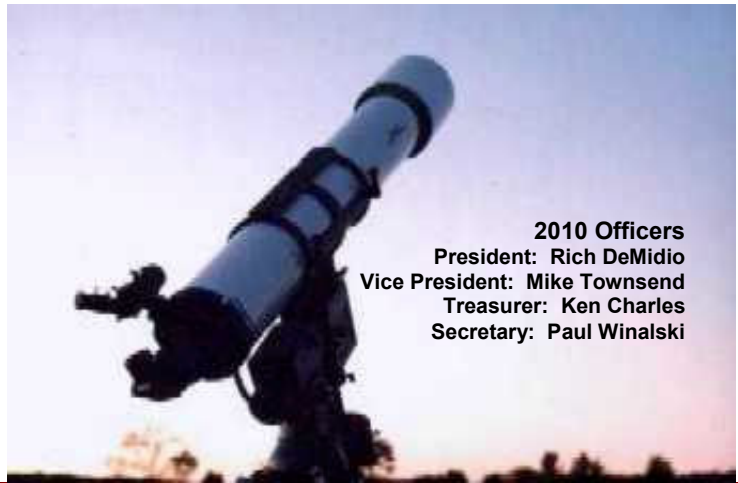
Rich Schueller (\$75.00)

New Members:

Henry Gessau, Auburn NH

Dennis Cooper, New Durhan NH

★ Ken Charles
NHAS Treasurer 2010



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

DEADLINE June 2010 Issue: 5 PM June 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, Dave Weaver, Tom Cocchiaro, Ted Blank, John Bishop, Ed Ting, Ken Charles

New Hampshire Astronomical Society
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NHAS Upcoming Events

Event	Date	Time	Location
Discovery Center Sky Watch	June 4	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Madison Library Sky Watch	June 10	7:00 PM	Madison Library, Madison NH
NHAS Coffee House Night	June 11	5:00 PM	YFOS
Market Square Day	June 12	9:00 AM	Downtown Portsmouth NH
NHAS Business Meeting	June 18	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
Goffstown Library Sky Watch	June 30	7:00 PM	Goffstown, NH
Discovery Center Sky Watch	July 2	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
NHAS Coffee House Night	July 9	5:00 PM	YFOS
Educational Outreach Committee Meeting	July 15	6:30 PM	22 Bridge Street, Concord NH
NHAS Business Meeting	July 23	7:30 PM	St. Anselm College, Manchester NH
Discovery Center Sky Watch	August 6	7:00 PM	McAuliffe-Shepard Discovery Center
NHAS Coffee House Night	August 13	5:00 PM	YFOS