



# OBSERVER

Vol. 2013, No. 9

Newsletter of the New Hampshire Astronomical Society

September 2013

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## *President's Message*



It's been July since I wrote my last message, which is far too long. My life was busy as I am sure everyone else's was as well. The old expression "Life gets in the way" was certainly in my vocabulary. Between summer and life changing events, things tend to be placed on the backburner and forgotten. I know that for me personally, I have not put nearly as much time into NHAS as I have desired to. Since the dust is starting to settle, I can focus more attention to the matters at hand and contribute more to the organization.

As a club, we had a great summer with both outreach and in-reach events. I have seen new blood in club meetings and at various events, which is always a pleasure. One such forum was NEFAF, where NHAS had a huge presence. I recognized those volunteers at the last meeting and I am grateful to a job well done representing our organization.

As we move into the fall, I wanted to remind everyone of a few book-keeping tasks. First, October is membership renewal month, so please renew your membership. Our Treasurer will send out a reminder about the details. It's important to renew because only paid members will be allowed to vote in the December elections. Speaking of which, this is also the time of year where we elect new officers. Nominations start at our next meeting and will continue to the December meeting where the vote will take place. In addition, the annual email purging of the membership distribution list happens in January. Finally, I wanted to mention once again about the need for a membership chair. I really want to get someone who is willing to take on this important role. As you can see, trying to do double duty as President and Membership chair has not worked out well. Please contact me if you are interested.

Contribution and service comes in many ways. When I first joined NHAS back in 2000, I remember my very first meeting in which my feeling was one of terror. I questioned how and why I was even in the room with people who had probably forgotten more about Astronomy than I knew at the time. "Overwhelmed" was the word that came to mind. However, quite to my surprise, I found everyone very eager to share their knowledge, which provided great comfort. That mentoring and nurturing relationship continues to this day as our senior members continuously express their passion of Astronomy not only to our membership but the public. My point is that you need not be a genius to contribute. Just as that terrified overwhelmed member that joined in 2000, who felt like a mental midget, started out slowly and contributed what was possible, every one of us, no matter how small you may feel your contribution is, has something to add. Every little thing matters.

I wanted to conclude by reminding everyone that our December meeting will be our annual pot luck dinner and celebration event at MSDC. For the new members, this is our time to celebrate the year by enjoying some great food and talking about our passion. At the last meeting, I asked the membership to think about individuals who they feel have made significant contributions and who should be recognized. Please contact me privately with your recommendation and idea. Once again, thank you all for what makes NHAS a great organization, the passion of its individuals.

Clear Skies,

**Rich DeMidio**  
*NHAS President*

### *Concord High School Solar Observing, Concord NH, September 11*

Groups of about 20 students each from three Astronomy classes attended in separate sessions in the morning. After the fog burned off, the sky was clear with very steady seeing. I set up the Takahashi FSQ 106 on the GM8, and the Coronado PST on a manual alt-az tripod.

Unfortunately there was just one tiny sunspot visible in white light. But to make up for that there was a huge prominence visible. I checked later and it was the start of a coronal mass ejection event.

I also took a look at a telescope that one of the teachers had found in a back room. It was a mid-1970s vintage Meade 4" Newtonian on a manual GEM. The fine control knobs for the GEM have been lost and the RA worm is very loose and needs adjusting. The mirror didn't look to be in too bad shape. They had a single 25mm Kellner .985" eyepiece. I'm recommending that they forget about this scope and get a new Orion XT8 Classic.

- *Paul Winalski*

### *Owls Landing Campground, Holderness NH, September 14*

The event had been postponed from the initial date of September 6 due to rain. This is a site with VERY dark skies and almost zero ambient light, and we had an excellent sky watch here in 2012. The weather looked very bad at first and I came prepared to give just an extended indoor presentation if necessary.

I set up the FSQ 106 tracking the Moon, which was visible through some sucker holes in the clouds. It turned out that by the time the indoor presentation ended the sky had cleared up. There was still some back-ground haze and dew was a big problem. Also, with the first quarter Moon in Sagittarius, DSOs such as M8 and M17 were out of the question. I kept the FSQ on the Moon and set up the 14" TScope to view other objects, which included Mizar, Polaris, Albireo, Gamma Delphini, Gamma Arietis, and WZ Cassiopeiae for double stars, carbon stars T Lyrae and V Aquilae, clusters NGC 457, the Perseus double cluster, M13, and M92, and galaxies M31 and M32. About 25 people were there, four of whom stayed until 11 PM.

It was too bad we couldn't do the original date, which would have been at new Moon. The background sky was still quite dark, even with the Moon shining.

- *Paul Winalski*

### *Girl Scouts of Eastern Massachusetts Septemberfest, Camp Runels, Pelham NH, September 21*

It's not often NHAS members are treated to dinner before a skywatch. The Camp Runels staff served up burgers with all the fixings and dessert (cheesecake) to boot. Club members present were Marion Hochuli (who was DA), Joe Dechene, Joe Derek, Steve Pearsall, Rich DeMidio and Gardner Gerry.

The skies stayed mostly clear and we showed off the typical late summer objects, M13, M57, M11, NGC 457 and Alberio.

Early on Joe Dechene had moved higher up the hill and had Venus and Saturn in his 6" dobsonian scope before they sank into the trees.

- *Gardner Gerry*

I was expecting a bunch of kids and instead, we had a great turnout of scout leaders. They were very interested, asked great questions, and were really appreciative. I spoke with several leaders in multiple age-groups, ranging from young adults to retired individuals. The observing site was wonderful and I hope that we are asked to come back next year. With no light pollution from the moon, it would be a great site for deep sky objects.

I brought Obby and showed Albireo, WZ Cass, M103, Lobster Cluster (NGC 457), M57, M11, M13, M92, and Polaris since it has a small companion.

- *Rich DeMidio*

### *Nashua Public Library, Nashua NH, September 24*

We had very clear skies and a large enthusiastic crowd. This was the kick-off event for their library telescope – the first time it was available to be checked out. The librarians were delighted that one of their patrons took the scope home after the sky watch, and there are already two names on the waiting list.

After the indoor talk there was such a crowd of people in the plaza outside the library that I didn't set up a telescope – I just pointed out stars and constellations using my laser pointer. There were already several scopes set up.

Club members present were Ramaswamy (who donated the Nashua Public Library telescope), Gardner Gerry, Bob Veilleux and Ted Blank.

- ***Paul Winalski***

60 adults and kids attended Paul's presentation and asked some very good questions, during and after the session. There were more outside, kids outnumbering adults 2 to 1.

I set up my WO Z80 on the Porta II mount, but the queues were so long that I showed only one object: Mizar. Gardner similarly was stuck with M57. I think Alberio was sighted through Ted's scope, but it was about 45 minutes of bedlam and then the plaza was empty.

There were plenty of wows and some side chats about satellites sighted by patrons while waiting (I mentioned the **heavens-above.com** site for information). Everyone waited their turn patiently, and many kids had their first star sighting. I am glad it was Mizar, telescope's first double (and mine).

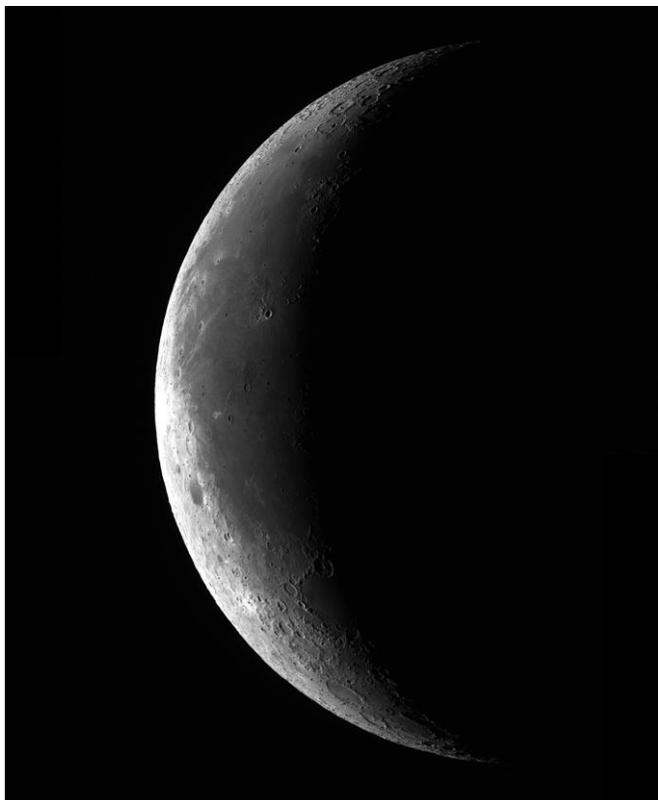
Lights in the plaza had been turned off, but cars moving in the parking lot to the East meant beams of unwelcome light, and Venus and Saturn were lost behind the treeline to the West even before we even got going. Given the size of the crowd, the next time should be an all-hands affair, but the size of the plaza may be a problem again.

- ***Ramaswamy***



*People lined up at Gardner's scope (left)  
(Photo: Ted Blank)*

## ***Moon over Deadline***



### ***Ask and Ye Shall Receive!***

I had made a big deal of having no deadlines for submissions to the Observer, and that if one were mandated, it would be the very last day of the month, every month.

Ed Ting captured our neighbor at 4:45am on the 30<sup>th</sup>, using a DMK41 camera on his Takahashi FS102 at prime focus, and dashed off this composite stitch of two individual images of the crescent Moon by 10am. Thanks, Ed!

And I cannot resist signing off...

*The other -Ed.*

The third annual New England Fall Astronomy Festival took place on the weekend of September 13-14, 2013. Rain on Friday morning gave way to partly cloudy skies, then clear skies for the evening. NHAS volunteers at the event included Patrick Amoroso, Ted Blank, Tom Cocchiaro, Rich DeMidio, Jeffrey Dionne (a new member), Gardner Gerry, Larry LaForge, Stu May, Steve Pearsall, Steve Rand, Rich Schueller, Gerry Smith, Pete Smith, April South, Mike Townsend, Bob Veilleux and probably a few more.



(Left and Top right): Dava Sobel on Copernicus. (Bottom right): Dava with UNH students.  
(All photos: Ted Blank)

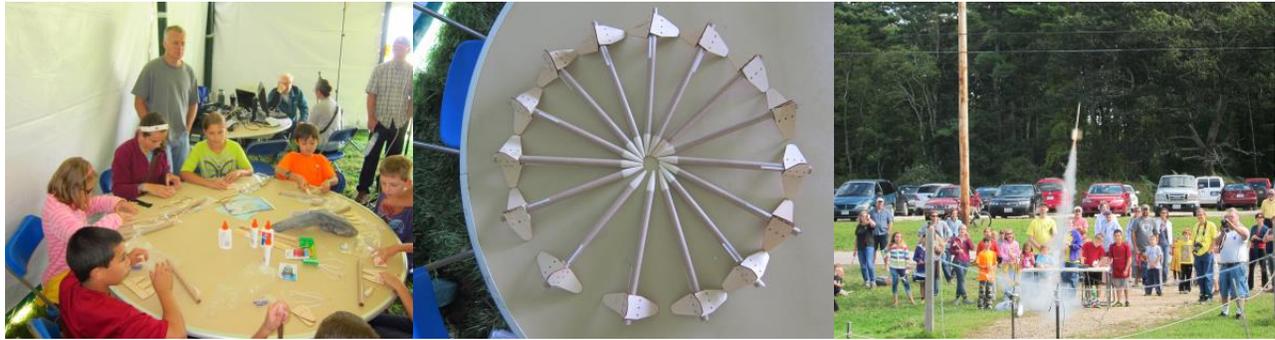
Noted author Dava Sobel kicked off the NEFAF weekend with a fascinating talk about the life and times of Copernicus, the subject of her latest book, *"A More Perfect Heaven."* There was a meet-and-greet after the talk, followed by observing outside. On Saturday morning, Dava joined club members (Gloucester, ASNNE, NSAAC and NHAS) in the speaker's tent for a private Q&A session. A highlight of the afternoon was the reading of *"And the Sun Stood Still"* – Dava's new play in the book – by students of the UNH Drama Department.

*Steve Rand adds:* Dava Sobel's research skills were evident in her presentation and in her answers to follow-up questions. I felt as though I'd just heard from a personal acquaintance of Nicolaus Copernicus.

The day on Saturday was full of activities including rocket build and launch, "Walk the Solar System," "Walk on the Sun," kids' activities, solar observing, a telescope clinic and many other events. In the evening, over 20 scopes and binoculars of various sizes were available for observing and hundreds of visitors took advantage of the opportunity to view many interesting objects in the sky.

The weekend was a great success and we hope for a bigger and better event in 2014! Many thanks to the event co-chairs John Gianforte and Ian Cohen of UNH for making it happen again.

- **Ted Blank**



*Anatomy of a successful Rocket launch: get it Ready, Set it up, Go!*

*(All photos: Ted Blank)*



*Pat Amoroso, Rich Schueller and Tom Cocchiari assisting friends with Solar viewing*



*(Clockwise from left): Inspecting Smokey Joe, discovering Binoculars and Walking the Planets.*

## Fly On, Voyager!

Confirmation of Voyager 1's location and all the related multimedia videos, maps and articles this week have brought to mind my memories of Aug 25th 1989, of being present with a bunch of my fellow Teacher in Space Candidates at NASA's JPL in Pasadena, CA. In a large conference room in their convention center, we waited to be among the first people on Earth to see Voyager 2's images of Neptune.

Fond memories of a great conference, and especially remembering an amazing all-nighter filled with anticipation, space educational discussions and many other conversations and topics, and laughter. An amazing poignant night of awe, wonder, gratitude and so many other emotions as we watched the images appear and shared that "first time ever." To have been there to see the first "Live" pictures come in from Neptune was a very special moment in my career as an astronomy educator, and I am glad to have shared the Voyager Neptune Flyby with my space buddies (TIS, NASA, NHAS, MSDC etc.).



(Photo: Bob Veilleux)

On a very personal note, my wife Nancy and youngest son Mike (now a science teacher like his dad, and who was born on Aug 18, 1977, two days before the launch of Voyager 2) were both with me in Pasadena for this historic moment, 12 years and 5 days after Voyager's launch, when it took the radio signals over four hours to reach us here on the home planet.

Now here we are, some 36 years after the Voyagers were launched, and we live in a very different world of instant communication of every event on Earth.



Let us all take a minute to remember the gold plated record carrying the Sounds of Earth record to the distant stars; Voyager 1 has passed the cusp of our solar system in search of alien civilizations that can play 8-track tapes. For a mobile music player that's 100,000 times less powerful than a crummy 8GB iPod Nano, Voyager 1 is mighty awesome.

With its 68-kilobyte computer memory and 8-track tape recorder, Voyager is bringing old-time tech to the stars. Voyager's Golden Record has a collection of images and sounds from Earth, including greetings in 54 languages.

They range from the folksy "Have you eaten yet? Come visit us if you have time" (Amoy) to the downright geeky "Greetings from a computer programmer in the little university town of Ithaca on the planet Earth" (Swedish). Assuming there are aliens out there who love old-school analog sounds, we might make some friends in a million years.

The NASA space probe was launched some three months after a new space opera called "Star Wars" hit theaters. Programmed to explore the outer planets, it has traveled farther than any other man-made object, and is leaving our solar system for interstellar space.

The late, great astronomer Carl Sagan, who helped organize the contents of the disc, said of Voyager: "The spacecraft will be encountered and the record played only if there are advanced space-faring civilizations in interstellar space. But the launching of this bottle into the cosmic ocean says something very hopeful about life on this planet."

Fly on, Voyager! You're the stuff that dreams are made of.

- **Bob Veilleux**  
(September 14)

*[Better known now for his extensive collection of meteorites, Bob was a **Teacher In Space** candidate in the 1980s, along with Christa McAuliffe and Barbara Morgan. His original proposal, submitted to NASA as part of his **TIS** application, was to photograph aurorae from space, which had never been done before, but is done routinely now. -Ed.]*

### Farewell, Nova Delphini 2013

The first report was posted to the NHAS Chat list by John Bishop at about 11pm EDT on August 14, 2013 and it was electrifying. The news was spreading around the world in a manner not possible when Voyager had flown by Neptune. And in this case, speedy dissemination of time-critical information was essential.

Amateur astronomer Koichi Itagaki in Yamagata, Japan had discovered a nova in Delphinus that night in an image taken at 1800 UT, using a small 7-inch reflecting telescope and CCD camera. He had imaged the region the night before (down to about mag. 13), and seen nothing unusual. The bulletin from AAVSO was brief and had the coordinates of the nova: **PNV J20233073+2046041 2013 08 14.5843\* 20 23 30.73 +20 46 04.1 6.8 U**



(Image: Chris Krstanovic, August 28)

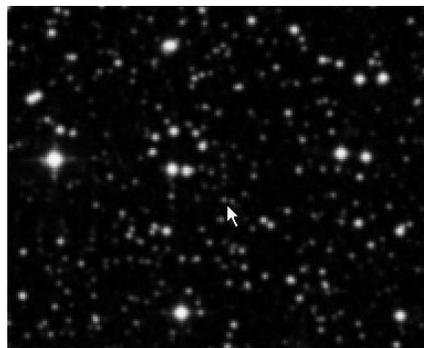
The next night, the nova was still brightening and observers in North America watched it cross the magnitude 6.0 mark and then 5.0. I had my first look at it, using a star-hop published in S&T and my 15x70 binoculars, just before midnight on August 15. It was a heady moment, my first visual sighting of a Nova.

At the Goffstown Public Library Skywatch of August 16, Ted Blank setup his Zenithstar 80 with a video camera to display the area of the nova onto a screen, side-by-side with a laptop showing Stellarium's star-chart of the same region. It was an elegantly simple demonstration of "here you see it, and here you don't" and downright impressive. Richard Feynman would have approved!

By this time, I had refined my star-hop from  $\alpha$  Delphini to the asterism about  $5^\circ$  NW that I call the Figure Skater. From there, it was easy to get to HIP 100536 (a degree away), and there was the nova, just below. It couldn't be missed. The twin stars of HIP 100754 and HIP 100719 to the NE provided another marker. But at the Goffstown Skywatch, Ed Ting suggested that it was simpler to follow the arrow of Sagitta, and in a sense it was. But I stayed with my approach from the south. Paul Winalski came up with an alternative, by following the line of stars in the Coathanger (Cr 399, aka Brocchi's Cluster), which runs parallel to the Equator and a good pointer to the nova once the finderscope cross-hair was rotated to run along it.

The nova brightened to mag. 4.5 and beyond, but I never saw it near its peak. A slender hope remained that it'd stabilize at about mag. 5.5 for a while, but after the first 2 weeks it had dimmed back to the brightness when first discovered. Since then, there has been a steady decline, dipping below magnitude 9.0 by the end of September.

Chris Krstanovic, an NHAS member from Windham, NH published an astro-image of Nova DEL 2013 in late August (above) and I was sufficiently intrigued to compare the AAVSO star-chart and his images. The tell-tale circle of magnitude 12 to 16 stars on one side and a parallelogram of mag 12-13 stars on the other side was a good signpost. The progenitor star was identified to be about or below mag. 17.



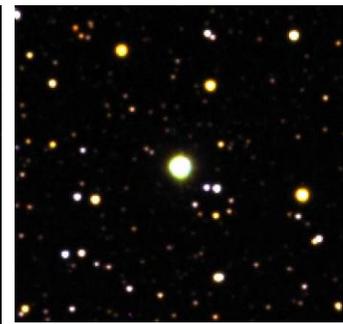
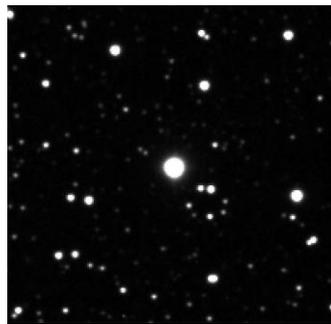
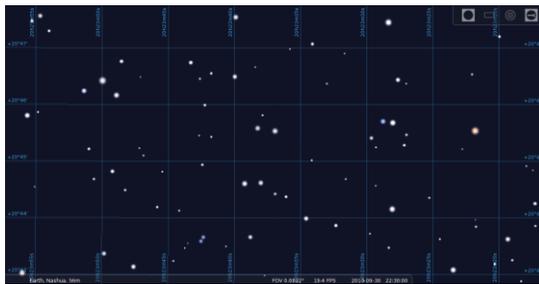
The DSS reference image, with an arrow pointing to the progenitor star. (Both images: Chris Krstanovic)



The bright Nova, outshining some nearby stars. Note the parallelogram to the right and the circle to the left in both images.

Chris also posted an animated GIF of the before- and after-images of the star (see above), which was hypnotic.

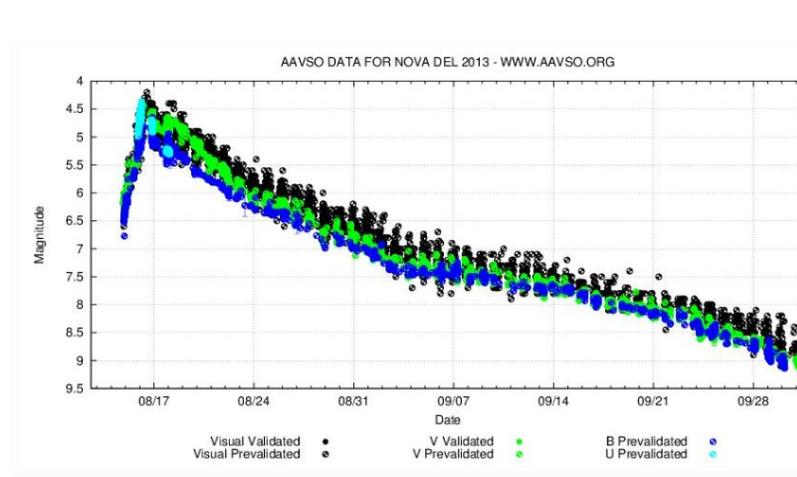
As the nova was fading, Chris went a step further on Sept. 30<sup>th</sup> and imaged the region down to mag. 19 (which is a hard task when dealing with the mag. 9 object nearby; he stacked 49 images of 10s each to get these). The images below are unflipped, to better match with the AAVSO chart shown further down, and are in B/W and Color. I have also included the Stellarium 12.2 chart of the same region at the left, in tribute to what Ted Blank was showing at the Goffstown Skywatch.



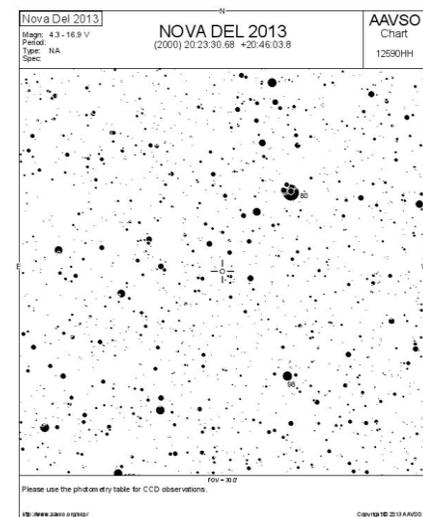
*Stellarium 12.2 chart (above), Nova in B/W and Color (right, Images: Chris Krstanovic)*

On a personal note, I left for India a week after the nova burst forth and once there, managed to find it using my Onyx 80ED refractor. It had dimmed some more but was still around magnitude 6.5, and I proudly showed it to my sister. She was most unimpressed. I suppose she was expecting to see, well, a NOVA! When I got back home a month later, the weather was uncooperative and I didn't bother. Then one night I hopped my way back to HIP 100536, and confusion. I had no clue where the nova was. A few guesses, but no certainty. I couldn't remember.

I once read somewhere that an observation is not an observation until it is written down in some detail, and maybe even sketched. I didn't do any such thing about Nova Delphini 2013 and I had no way back, even though I can see down to mag. 9 from my backyard on good nights. Lesson learned. I hope it is also a lesson remembered.



*The AAVSO Light Curve of the fading Nova DEL 2013*



*AAVSO Star Chart showing the circle & parallelogram below the star. (unflipped)*

Farewell, First Nova! Time to switch attention to SN2013dy in Lacerta. *Stay tuned...*

- **Ramaswamy**  
(September 30)

## LTP Modification Party



*From the left: Peter Wolczko, Ramaswamy, John C. Root (AAS), Pete Smith, Gerry Smith, Rich Schueller, "Rags," Scott and Liam McCartney, Michelle Thomas, Marc Stowbridge, Rob Mack and Jim Zebrowski (AAS). (Not pictured: Melinde Byrne)*

The fourth and last LTP Modification Party of the year was held at MSDC on Sunday, September 29, 2013.

A dozen scopes were converted that day, the usual 10 for NH and a pair for libraries in Mass. under the aegis of the Aldrich Astronomical Society of Paxton, Mass. John C. Root and Jim Zebrowski of the AAS were on hand to assist in the effort. Marc Stowbridge was also present and worked with them on their scopes, the first of their own Library Telescope Program in Mass.

Pete Smith kicked off the proceedings with a how-to talk, and things went smoothly the rest of the afternoon.

The surprise moment at the end of the day was when Pete pulled an LTP Mod Party sweatshirt out of the proverbial hat to present to Marc Stowbridge, the father (or is it grandfather?) of the Library Telescope Program. The expression on the latter's face was priceless, and went unrecorded. Then there was the Marc and Liam exchange about "why do kids do that?" You just had to be there! A very good time was had by all, and all the scopes found delivery agents, so Pete and Gerry didn't have to haul anything extra back home. Thanks to all that participated!

For the record, we converted scopes for the following Libraries in New Hampshire with this day's effort:

Bedford Public Library, Bedford (2)  
Bethlehem Public Library, Bethlehem  
Dalton Public Library, Dalton  
Gale Library, Newton  
Hill Library, Strafford  
Josiah Carpenter Library, Pittsfield  
Kensington Public Library, Kensington  
Salisbury Free Library, Salisbury  
Webster Public Library, Webster

Scott McCartney delivered Bedford's 3<sup>rd</sup> and 4<sup>th</sup> scopes, as well as Pittsfield's. Michelle Thomas went to Kensington and Newton, Marc Stowbridge to Bethlehem, and Ramaswamy will handle deliveries to Salisbury and Strafford. Pete Smith will deliver to Dalton and Webster.

Also for the record, Rags continued his work on the LTP mod videos, while Nori showed up early with lemon and chocolate squares to die for.

We entered 2013 with 58 scopes delivered in NH, and we will end the year with 89 scopes at libraries that range from Keene to Portsmouth, and throughout New Hampshire all the way up to Colebrook. It has been a good year!

- **Pete Smith and Ramaswamy**



*Marc Stowbridge sporting a new look*

## Coffee House Night at YFOS

With a Last Quarter Moon in the offing, September 28<sup>th</sup> was Coffee House Night at YFOS this month. About 20 people showed up, some to image, some to look, and some simply to get YFOS orientation. We also had a visitor from Kennebunk, Maine – Sara Carter of the Astronomical Society of Northern New England (ASNNE) was visiting as a guest of Gardner Gerry. New members Sue McPhee and Rick Marshall got their orientation, courtesy of Gardner again, and stayed on for some skywatching. The night was clear for a change (contrary to my usual YFOS experience), the seeing was good and the mosquitos held off. The only problem turned out to be dew.

Mike Townsend brought along his latest toy, an AstroTech 10" f/4 Newtonian on an EQ mount, with a very interesting way of balancing the OTA. He and John Rose looked at some DSOs at high power. The Blue Snowball in Andromeda (NGC 7662) at 333x was one object; the Little Gem in Sagittarius (NGC 6445) was another.



*Mike Townsend caught by the flashlight.*



*Walt Jablonski caught in the dark.*

Mike reported seeing a lot of inner structure in the Blue Snowball. They also had a good look at Barnard's Galaxy (NGC 6822) in Sagittarius at the relatively low power of 55x. I didn't get to see any of those exotics, but I did manage a glimpse of the elusive Triangulum Galaxy (M33), which completed the circle of all the nearby galaxies for me. John was also showing new members many interesting objects, much as I was with my XT8, on a trial run. But by 9pm my secondary mirror had dewed up on both sides and I decided to quit. I left at about 10:30pm.

The most interesting time I spent, apart from doing a custom skywatch for the new members, was with Walt Jablonski, a member for some 5 years. He had brought along his reflector with an EQ mount and was essentially going back to basics, right down the use of a Planisphere! We chatted for quite a while, mainly about the equatorial and southern constellations. It was good to see him quietly observing, and mind you, he was using a Delos EP!

Rob Mack and his son Brian set up their 12½ inch f/6 Newtonian on a German Equatorial Mount. The Telescope World OTA, circa 1980, was complemented by a homemade finderscope. They looked at and showed a number of objects, but I only remember seeing M103 (in Cassiopeia) through that scope.

Gardner Gerry set up to image the Helix Nebula, and he was (probably) at it until the Moon emerged around 2am. Herb Bubert was imaging the Veil, whereas new member Jeffrey Dionne was engaging both his own XT8 and the club's 16" Dobson. Dan Smith also showed up with his scope, but I had a chance to talk to him only briefly in the warming hut.

- **Ramaswamy**



*Rob Mack with his scope at Stellafane  
(Photo: Rob Mack)*

### NHAS September 2013 Business Meeting

The September business meeting was held at St. Anselm College on September 20, with our President **Rich DeMidio** presiding. The Treasurer's report by "**Rags**" follows on the next page.

#### President's Report

Everyone is reminded that member-ship renewal is in October. Also, 2014 Officer nominations can be made starting in October. Speakers have been lined up for the October and November business meetings, and the December Pot-Luck Celebration moved to Dec. 20<sup>th</sup>. Please let the President know about noteworthy member contributions that should be recognized.

Joe Derek will be starting work on Sept. 30 with YFOS maintenance and Rags is looking for a "postal minion" to check for NHAS mail at the Manchester Post Office.

#### Crotched Mtn. Variance update:

NHAS has drafted a response in collaboration with some other clubs, and a Letter to the editor was sent and published by the Monadnock Ledger. Ted Blank and Scott McCartney attended the zoning board meeting, and Ted read our letter to the board. It was the largest meeting that the board could remember, with over 150 people in attendance. The Zoning Board will reconvene on Thursday September 26<sup>th</sup> at 7:30 PM in Frankestown.

#### NEFAF 2013:

We had wonderful representation from NHAS members, who were exemplary in representing NHAS to the public. The weather cooperated after a while and we were able to get both Solar and Night observing on both days. We also had a chance to interact with other New England Astronomy clubs.

*[Certificates of appreciation were also handed out to all the NHAS volunteers at NEFAF. See the list of participants at the top of Page 4. -Ed.]*

#### What's on Your Mind?

Rich Schueller introduced Paul Bencal of the UNH STEM lab. Rich, Scott McCartney and Don Byrne had met him on Sept. 12<sup>th</sup> when Paul had asked for help in setting up a K-12 Astronomy curriculum of classes of 1 to 3 week duration.

Paul Bencal then spoke to the meeting (the gist follows):

NSF wants to increase college graduates each year in STEM disciplines. Why aren't students motivated to pursue those careers? Student engagement is the key. Teachers themselves need to be educated with ideas for hands-on experiences for students. Also extracurricular activities and clubs that offer them are needed.

UNH responded with the STEM Discovery Lab to reach out to kids early on. We are developing a curriculum and are partnering with Manchester United Way to bring students to the lab. We are also asking NHAS to put together something for the various age groups which we will market.

Pete Smith announced that the next LTP mod party will be at MSDC on Sunday Sept 29<sup>th</sup>, and that it is the last one for the year. 10 scopes will be modified for NH sites, with 2 more to be converted by visiting personnel from the Worcester, Mass. area.

Ramaswamy will be taking over as Editor of the NHAS **Observer**.

#### Astronomy Shorts

*Rich DeMidio:* Found the open cluster named "Caroline's Rose" which was discovered by Caroline Herschel. It is a very large cluster in a wide FOV.

*Paul Winalski:* Used the Coat-hanger to find Nova Delphini 2013. The "line" of coat-hanger is parallel to the celestial equator.

*Steve Rand:* Was in very dark Maine skies. Hot gases from the campfire were causing Arcturus to seem to move.

*Bob Veilleux:* Showed a set of fragments of the meteor that exploded earlier this year over Chelyabinsk, Russia. Also has application for Winter Star Party 2014.

*Rags:* September S&T did an article on eyepieces. He now understands what apparent field of view means.

#### Evening Presentation

The meeting divided into 2 sections for a Scope clinic and Fall Messier Marathon advice session.

*Scope Clinic:* Rags demonstrated the club loaner Coulter 10" Dob, and talked about dealing with dew, including his way of shielding the Telrad. He and Paul Winalski also answered questions on laser collimation. Paul also explained the function of a Cheshire collimator with crosshairs.

*Fall Messier Marathon advice:* Rich DeMidio showed his sheaf of finder charts for the Messier Marathon. Ramaswamy produced his copy of Harvard Pennington's tome: "The Year-round Messier Marathon Field Guide," which was thumbed through by some.

### *NHAS Treasurer's Report* (as of September 17, 2013)

<b>Starting Checking Balance:</b>	<b>\$11,732.94</b>	<b>Membership:</b>	<b>142</b>	
<b>Deposits:</b>		Renewals:	0x30.00	0.00
Membership	90.00	New Members:	3x30.00	90.00
Donations	1,820.00	<b>Total:</b>	<b>3</b>	<b>\$90.00</b>
Calendar Sales	14.00	<b>Current Members:</b>	<b>145</b>	
Café Press (NHAS logo-wear)	53.81	<b>New Members:</b>		
Interest	0.95	Dennis Hobbs	Nashua MH	
<b>Total:</b>	<b>\$1,978.76</b>	Brandon Havey	Raymond NH	
<b>Expenses Paid:</b>		Paul Cezanne	Keene NH	
Jameco (battery holders)	15.88	<b>Donations:</b>		
Barnes & Noble (Pocket Guides)	25.78	Brandon Havey	YFOS	10.00
OPT (Zoom EPs & lens pens)	743.54	Portsmouth Sidewalk	GEN	135.00
Kalmbach Publishing (calendars)	233.10	Astronomy		
ChicagoMicro (head lamps)	118.40	North Hampton Public	GEN	50.00
GoDaddy	9.99	Library		
CornerStones of Science (LTP 'scopes)	1,320.00	Ramaswamy	LTP	650.00
Rackspace Cloud (Web site)	22.39	Joe Aldrich	LTP	650.00
<b>Total:</b>	<b>\$2,489.08</b>	Webster Public Library	LTP	325.00
<b>Current Checking Balance:</b>	<b>\$11,222.62</b>	<b>Total:</b>		<b>\$1,820.00</b>
<b>Petty Cash:</b>	<b>\$100.00</b>			
<b>Current Cash Balance:</b>	<b>\$11,322.62</b>			
<b>EOC Share:</b>				
	<b>\$5,579.63</b>			

### *Contact Information*

#### [How to join NHAS](#)

Write to us: **NHAS**  
**P. O. Box 5823**  
**Manchester, NH 03108-5823**

Send Email to: [info@nhastro.com](mailto:info@nhastro.com)

Visit our web site: <http://www.nhastro.com>

#### [How to contribute to the Observer](#)

Email articles and snapshots to the Editor:

[ramax.astro@yahoo.com](mailto:ramax.astro@yahoo.com)



*Looking ahead, because someone has to...*

This has been my first effort at the **Observer** and I am now looking for feedback.

In particular, I would like to know if feature articles, and especially technical articles, would find favor. Most members get technical information and DIY improvement tips at the Business Meeting breaks and “What’s on your mind” segment, and Social events. The **Observer** could be the place for some tips as well; after all, this newsletter is supposed to disseminate information to the wider membership.

As a monthly newsletter, the **Observer** will report on a calendar month’s events and activities, and will be published in the 1<sup>st</sup> week of the next month. I intend to cover as many NHAS activities as possible each month, but that can happen *only if* members contribute with snapshots, articles, anecdotes and just plain snippets of information. Please email them to me throughout the month, and please do respond when I solicit during the last week! For large data transfers, we can make other arrangements. Thank you!

*The address for NHAS Observer feedback and contributions is: [ramax.astro@yahoo.com](mailto:ramax.astro@yahoo.com)*

I will sign off with the list of Upcoming events overleaf, and a view below of the Milky Way submitted by our intrepid webmaster, Matt Marulla. He spent a weekend (ostensibly liaising) with the ASNNE folks in Maine, at the Acadia Night Party. In this unprocessed shot of the southern sky at dusk, taken from the picnic area, The Teapot can be made out near the bottom right, and yes, you are also seeing a contrail!

- *Ramaswamy*



*(Photo: Matt Marulla)*

Event	Date	Time	Location
Winnacunnet High School Skywatch	Tuesday, October 1	6:30pm	Winnacunnet High School, Hampton NH
Goffstown High School Skywatch	Wednesday, October 2	7:30pm	Goffstown High School, Goffstown NH
Winnacunnet High School Skywatch (backup date)	Thursday, October 3	6:30pm	Winnacunnet High School, Hampton NH
Fall Messier Marathon	Friday, October 4	5:00pm	Fall Messier Marathon, Lyndeborough NH
First Friday Skywatch for MSDC	Friday, October 4	7:00pm	MSDC, Concord NH
Fall Messier Marathon (backup date)	Saturday, October 5	5:00am	Fall Messier Marathon, Lyndeborough NH
Rey Center Skywatch	Saturday, October 5	7:00pm	Rey Center, Waterville Valley, NH
Lincoln Public Library Skywatch	Monday, October 7	7:00pm	Lincoln Public Library, Lincoln NH
Concord High School Skywatch	Tuesday, October 8	7:00pm	Concord High School, Concord NH
Rundlett Middle School Skywatch	Thursday, October 10	6:30pm	Rundlett Middle School, Concord NH
Concord High School Skywatch (backup date)	Thursday, October 10	7:00pm	Concord High School, Concord NH
NHAS Business Meeting	Friday, October 11	7:30pm	MSDC, Concord, NH
Sidewalk Astronomy Skywatch	Saturday, October 12	6:00pm	Sidewalk Astronomy, Portsmouth NH
Reeds Ferry School Skywatch	Monday, October 14	6:45pm	Reeds Ferry School, Merrimack NH
Reeds Ferry School Skywatch (backup date)	Tuesday, October 15	6:45pm	Reeds Ferry School, Merrimack NH
Educational Outreach Committee	Thursday, October 17	6:30pm	Manchester City Library, Manchester NH
Epping Middle School Skywatch	Thursday, October 17	7:00pm	Epping Middle School, Epping NH
Lincoln Public Library Skywatch (backup date)	Monday, October 21	7:00pm	Lincoln Public Library, Lincoln NH
Salem High School Skywatch	Wednesday, October 23	7:00pm	Salem High School, Salem NH
Epping Middle School Skywatch (backup date)	Thursday, October 24	7:00pm	Epping Middle School, Epping NH
Coffee House Night at YFOS	Saturday, October 26	5:00pm	YFOS
Daniel Webster College Skywatch	Tuesday, October 29	7:00pm	Daniel Webster College, Nashua NH
Salem High School skywatch (backup date)	Wednesday, October 30	7:00pm	Salem High School, Salem NH
Daniel Webster College Skywatch (backup date)	Thursday, October 31	7:00pm	Daniel Webster College, Nashua NH
First Friday Skywatch for MSDC	Friday, November 1	7:00pm	MSDC, Concord NH
Coffee House Night at YFOS	Saturday, November 2	5:00pm	YFOS
Rey Center Skywatch	Saturday, November 2	6:30pm	Rey Center, Waterville Valley, NH
Hooksett Public Library Skywatch	Tuesday, November 5	6:30pm	Hooksett Public Library, Hooksett NH
Hooksett Public Library Skywatch (backup date)	Wednesday, November 6	6:30pm	Hooksett Public Library, Hooksett NH
Auburn Public School Skywatch	Thursday, November 7	7:00pm	Auburn Public School, Auburn NH
Sidewalk Astronomy Skywatch	Saturday, November 9	6:00pm	Sidewalk Astronomy, Portsmouth NH
Educational Outreach Committee	Thursday, November 14	6:30pm	Manchester City Library, Manchester NH
North Hampton PL Skywatch	Thursday, November 14	7:00pm	North Hampton Public Library

**Note:** Please check the [Calendar] at [www.nhastro.com](http://www.nhastro.com) for up-to-date information on upcoming events.

## Credits

Contributors to this month's Observer:

Ted Blank, Rich DeMidio, Gardner Gerry, "Rags" Gilmore, Chris Krstanovic, Rob Mack, Matt Marulla, Steve Rand, Rich Schueller, Pete Smith, Ed Ting, Mike Townsend, Bob Veilleux and Paul Winalski.