Observer Staff Editor & Publisher: Paul Winalski



Newsletter of the New Hampshire Astronomical Society



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"All the news that fits in print"

September 2011

# **LTP Modification Party**

### **President's Message**

Several years ago I bought a condo by Newfound Lake (second row but with beach rights). With the condo came a Meade 16-inch telescope. The previous owner didn't want to take it as he'd "tried it once and it hadn't worked". This fortuitous event was the start of my current involvement with astronomy.

The telescope hadn't worked because he'd installed the secondary mirror wrong: it was too close to the end of the tube and so when you looked in the focuser you didn't see the secondary, just the other side of the tube. A little adjustment and the 16-inch was a functioning telescope. But the Meade structure was a monster, about two hundred pounds of white-laminated particle board and massively thick cardboard tube. It didn't fit in my car, it was hard to move even on a dolly and had a single-mode focuser.

So I started researching telescopes and found scopereviews.com and lots of write-ups on how to tweak one of these monsters. I also bought a small telescope to learn with (my Stargazer Steve 4-inch). Even with the tweaks the Meade was inconveniently big, so I finally decided to spend some real money and get a truss tube structure to put the mirror in: I also sent the mirror to Pegasus Optics for testing and recoating. John Hall at Pegasus refigured the mirror and had it recoated and sent to Jim Nadeau of Night Sky Scopes to be fitted into a truss-tube structure. I ordered a number of upgrades from Jim, particularly Sky Commander and ServoCat.

The "new" telescope finally arrived and everything was wonderful for a while but then the ServoCat began to have glitches—it wouldn't stop when moving, it wouldn't register one of the axes, it wouldn't move at all. There were lots of failure modes but no consistent ones.

For some years, I used the 16-inch in purely manual mode. One day I was reminded of what our past President **Rich DeMidio** had said: our club members are a knowledgeable crew and a valuable resource. I asked **Larry Lopez** of the ATM Committee to check out the problems with my 16-inch.

He came over, looked at the telescope and applied a multi-meter to the batteries. "Old batteries," he said, and recommended that I get new ones. Didn't I know that leadacid batteries only last three to five years? Didn't I have to replace the batteries in my car? My telescope batteries were lead-acid and had the save lifespan: after six years it wasn't surprising that they didn't deliver a full twelve volts and it wasn't surprising that sensitive electronics didn't work well when not getting their required voltage. I followed his advice and bought new batteries. On August 30<sup>th</sup> I installed them and tested the

Everything worked! Sky Commander and ServoCat found objects and tracked them. No glitches, no problems, no confusion. It was great! It was obvious I should have asked for help earlier.

telescope.

I know I tend to forget how much knowledge and experience the club as a whole has. Access to that

On the web at http://www.nhastro.com/

knowledge and experience is one of the benefits the club provides us.

The lesson for me (and maybe for you) is that we should be less shy to ask other members for help with telescope problems.

★ John Bishop NHAS President 2011

# Astro 101: Introduction to Astrophotography, 26 August



# The Moon imaged at YFOS (Pat Bourque photo)

The NHAS Astrophotography Committee met at YFOS August 26<sup>th</sup>, 2011 for Astro 101: Introduction to Deep Sky Imaging. Members attending were shown a PowerPoint presentation about cameras, mounts, telescopes, lenses and software with examples of images by club members. Unfortunately the sky was cloudy when we were done so there no imaging done as part of the work shop as I had hoped. Those attending included Bob V., Walt J., Dan S, Stu M, Ken M, Andy J, Pat B, Herb B, Shane C, and Nathan C.

**★** Gardner Gerry

### Coffee House Night, 26 August

While the weather report was not as good as it had been earlier in the week **Mike Townsend** and I (**John Rose**) decided to go the YFOS anyway.

We arrived around 7:30 and found the place pretty well filled up. With Mike's wagon I counted 14 vehicles. Two more showed up shortly after we did. Many of these cars were there for the class given by **Gardner Gerry**.

We had been expecting the clouds to dissipate soon after sun down but they hung around for several hours. But the clouds did clear out later. I had done some sucker hole chasing in the meantime.

Transparency was decent but not the best I have seen there. Around midnight I could see the main stars of the Little Dipper. So around mag 5 for me. Some others could see the 5.7 star in the bowl flickering in and out. It was pretty damp but Mike's refractor on a G11 with the pier extension was high enough to stay reasonably dry. I think we left around 12:45 Saturday morning. I'm certainly glad we went.

**★** John Rose

### Library Telescope Modification Party, McAuliffe-Shepard Discovery Center, 17 September

The first modification party was a great success!



### Bob Veilleux unloads the OPT scopes (Ted Blank photo)

The effort was focused on readying the grant scopes from Oceanside Photo and Telescope for distribution to libraries.



# Gardner unloads Ted's garage (Ted Blank photo)

As of the Mod Party, NHAS had received twenty-four scopes from Oceanside Photo and Telescope (OPT); we were still waiting for the 25<sup>th</sup> scope and the zoom eyepieces.





Marc shows how it's done (Ted Blank photo)



If they look like Santa's helpers, there's a good reason (Ted Blank photo)

NHAS attendees were Gardner Gerry, Bob Veilleux, Pat Adams, Scott McCarthy, Liam McCarthy, Marc Stowbridge, Joel Harris, Rich Schueller, David Gilmore (Rags), Ted Blank and Stijn Brand. The group mostly configured eleven scopes out of the twenty-four we received, which I why I said this was the "First Modification Party". And we'll be looking for more volunteers when we reconvene in a short while to work on the other scopes (and the 25<sup>th</sup> scope arrived: YEAH!!)



# Drill, baby, drill (Ted Blank photo)

The operation got started around 12:40 after we all got our hands greasy and stomachs filled from pizza provided by the EOC. The selection of pizzas were: Cheese, Pepperoni, Extravaganza, BBQ chicken, Meatzza, Chicken Bacon Ranch and a Deluxe without cheese. After proceeding through a good portion of the modifications, perhaps half way, Joel switched to manning the drill press and Gardner the soldering station.



Bob and Melinde working on mirror cells (Gardner Gerry photo)



**Light fuse and run (Ted Blank)**Marc kept us firmly on track with an iron fist, whipping each of us

into line as we strayed like a heard of wild cats. OK, really, Marc walked us through each step he has done with past scopes, showing us the method and intent of each mod. Some changes were made as we proceeded, to make some of the operations move a bit more quickly; like an assembly line. All of the steps for modifications can be found on the NHAS's website Library Telescope Program page if you so choose to see what it takes. (I personally learn better with hands on).



# Lots of work required in many places (Ted Blank photo)

An aside here—the best picture of the day was of Rags licking chocolate off an eyepiece holder he just used to cut one of Nori's brownies in half.



# Rags puts on some finishing touches (Ted Blank photo)

We concluded around 4:20 PM to give us time to clean up after ourselves as good guests should before vacating the premises. At the end of it all, we divided up the booty amongst several persons to "depot" the scopes around the state. (Have you EVER used the word 'amongst' before? I'm not sure I have before now.)

At this time we have four scopes committed to libraries and a few (!) requests for others to go out. Our plan is to get those four out the proverbial door as soon as we can and address scopes that have been already donated or are soon to be.



### How did I do, Dad? (Ted Blank photo)

I expect to be inundated with requests for local libraries (I've actually seen five emails this week), but we haven't decided how we are going to determine which libraries get scopes. Money is very tight these days and the offer of a free telescope is not one that even the most affluent organization would pass up. The EOC's goal with this grant is to provide the best opportunity to the greatest number of people we can. After all, that is the charter of the NHAS. OPT granted NHAS a great gift and we in the EOC want to achieve great results with it.



### The LTP Modification crew (Matt Marulla photo)

Don't be disheartened just yet. We do have twenty-five scopes and Christmas is just around the corner. Just ask Marc.

I'd like to thank **Dave McDonald** and the McAuliffe Sheppard Discovery Center for allowing us to use their facility for the modifications; and I hope we can schedule another soon. I'd also like to thank Bob Veilleux and Gardner Gerry for getting the room ready; Matt Amar for arranging the room with MSDC and **Matt Marulla** for taking the group photo. Oh and of course, a big thanks to **Rick Yeames** for taking the pizza order

and making sure we were taken care of.

So, if you all (or is that Y'all?) look at the pizza list and decide that you'd like to partake of the camaraderie, there's still a chance to help out.

**★** Rich Schueller

### Board of Directors Report

The Coulter Compact 10" Dob that was donated to the club now works reasonably well, with a finder donated by **Mike Townsend**, laminate donated by **Gardner Gerry** for the azimuth bearing, a focuser from **David "Rags" Gilmore**, and your Chairman putting this all together. It still needs an eyepiece or two and a case for them and for the Telrad. It did a decent job at the August YFOS Coffee House, but it is certainly not a high magnification scope.

**★** John Rose

### NHAS August 2011 Business Meeting

The August business meeting was held at the McAuliffe-Shepard Discovery Center on 19 August 2011, our Vice-President, **David Gilmore**, presiding.

#### **President's Report**

Stellafane has come and gone. See the full report in the August *NHAS Observer*.

Dava Sobel, author of a book on Copernicus, will be at the Capitol Center for the Arts on 6 October.

Gardner Gerry and Paul Winalski are the new co-chairs of the Public Observing Committee. Marc Stowbridge will concentrate on managing the Library Telescope Program.

The Boy Scout sky watch in Newington last Friday went very well

The Fall Messier Marathon is coming up. As usual, it will be a pot luck supper hosted by **Scott**, **Sue**, and **Ben Wicket** at their home in Lyndborough.

#### **Board of Directors**

**John Rose** reports that the surplus eyepieces from the Library Telescope Program are mostly sold; there are some 6mm eyepieces left.

**Larry** and **Linda Lopez** sold one of the club's mounts.

All but one of the Pelican/Pelicantype cases were sold at Stellafane. That one may become the CG4 case

Celestron is sending us a replacement part for the CG4 clock drive for our Lunt solar scope.

#### Membership

Bill Steele reports that the next Astro 101 course will be on Imaging on 26 August at YFOS. Several members have already registered. If you wish to attend, contact Bill.

Total membership is now 151. New members include **Robert Zelonis** of Nottingham NH and **Eugene Solod** of Wolfeboro NH.

#### Webmaster

No report.

#### **Astrophotography**

Gardner Gerry reports that there are some new images on the website, including a first light lunar photo by Pat. The Astro 101 course on Astrophotography is scheduled for next Friday, to be followed by practice, if sky conditions permit.

#### **Educational Outreach**

Matt Amar and Rich Schueller report that we have received Oceanside Photo and Telescope's \$8000 donation to the Library Telescope Program in the form of twenty-five library scopes. These will be fitted with a special plaque acknowledging OPT's role. A scope modification party for the new LTP scopes is tentatively scheduled for Saturday 17 September at noon. Pizza will be provided for the participants.

EOC is looking at a three-option protocol for deploying library telescopes:

 The library purchases the scope, either outright or by private donation.

- OPT scopes will be pay-as-goforward. The library gets the scope now, and as gifts come in to the library, they will be donated to NHAS.
- NHAS will donate one or two scopes a year to a library that can't raise the money.

Marc Stowbridge has started talks with the Keene club to be foster parents for the Keene LTP scope. There are several library scopes in Maine, and some south Florida clubs doing this as well. There are about twenty telescopes across the country outside of NH. The Royal Astronomical Society of Canada is citing our program.

The New England Fall Astronomy Festival (NEFAF) will be 14-16 October. The University of New Hampshire is taking the lead on hosting and organizing the event. We are looking for volunteers for our indoor booth and outdoor observing activities, and also for speakers and presenters.

Nashua High School South has contacted us again concerning NHAS volunteers helping with presentations at their planetarium.

The next EOC meeting will be 8 September at Manchester City Library.

#### **Pubic Observing**

Marc Stowbridge reports that next Wednesday the New Hampshire Chronicle will be at Family Camp.

#### Miscellaneous Business

We are all set for guest speakers for the remainder of this year. We still need to schedule speakers for 2012.

#### **Mystery Optic of the Month**

Larry Lopez presented an optical device that was given to an optician who doesn't know what it's for. Neither does Larry.

#### **Evening Presentation**

Dr. Norbert Schulz gave a talk on "Recent Advances in the Formation and Early Evolution of Stars and Planets".

#### The Bottom Line

Starting Balance: \$6793.33 Deposits/Credits:

Membership: 90.00

Donations:	2137.50
Bank interest:	2.73
Case sales (EOC):	580.00
Total:	2810.23
Accounts/Paid	

44 73

#### Accounts/Paid: Rackspace Cloud (2 mo.)

rackspace cloud (2 ino.)	11.75
Ted Blank	33.27
Ken Charles (filing cart)	29.67
Total:	107.67
<b>Net Account Balance:</b>	\$9495.89
Petty cash drawer:	\$100.00
Cash Balance:	\$9586.89
<b>EOC Share:</b>	\$4409.43

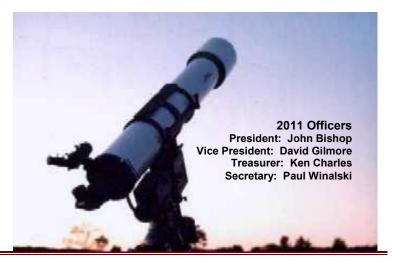
Membership: 151

#### **Donations:**

Pat Adams 325.00 LTP Cyndey Sherman (Merrimack Library) 325.00 LTP Stephenson Library 162.50 LTP OPT 1325.00 LTP

#### New Members: Robert Zelons, Nottingham NH Eugene Solod, Wolfeboro NH Lyn Beattie, Rye NH

★ Ken Charles NHAS Treasurer 2011



**DEADLINE October 2011 Issue: 5 PM October 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:

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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:

John Bishop, Richard Byrd, John Rose, Rich Schueller, Larry Lopez, Andrew Jaffe, Ted Blank, Marc Stowbridge, Gardner Gerry, Bill Steele, Rich DeMidio, Ken Charles

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### **NHAS Upcoming Events**

Event	Date	Time	Location
Runels Camp Sky Watch	September 16	7:30 PM	Camp Runels, Pelham NH
Library Telescope Modification Party	September 17	12:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Coffee House Night	September 23	5:00 PM	YFOS
Rey Center Sky Watch	September 24	8:00 PM	Curious George Cottage, Waterville Valley NH
Astro 101: Deep Sky Objects	September 30	7:30 PM	YFOS
Amherst Library Sky Watch	October 6	7:30 PM	Amherst Public Library, Amherst NH
Bedford High School Sky Watch	October 6	8:00 PM	Benedictine Park, Wallace Road, Bedford NH
Discovery Center Sky Watch	October 7	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
International Observe the Moon Night	October 8	6:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Sidewalk Astronomy	October 8	7:00 PM	Market Square, Portsmouth NH
Nashua High School North Star Party	October 12	5:30 PM	Nashua High School North, Nashua NH
Educational Outreach Committee Meeting	October 13	6:30 PM	Manchester City Library, Manchester NH