

THE NHAS OBSERVER

Newsletter of the New Hampshire Astronomical Society



Volume 2000 No. 12

"All the news that fits in print"

December 2000



Astronomy Social

President's Message

Officer Elections for the 2001 year will be held at this month's meeting on December 15th at CMP (the Planetarium). Please help show your support for the club by attending and voting for these positions. Afterwards, we will take a break from our usual evening programs and hold our semi-annual Astronomy Social in the Planetarium's Discovery Room. Bring a snack, meet your fellow NHASers, and get to know the new Officers.

Looking back on 2000

It's hard to believe that the year 2000 has almost passed by. It seems like yesterday when we held last year's elections under the dome at CMP and I had the honor of making a grateful acceptance speech.

Then again, it has been an eventful year. We built a beautiful observatory thanks to the enthusiastic support of many club members. We transitioned to an e-mail newsletter, and I think the *NHAS Observer* is much healthier for it. Our membership reached a record high (although I am certain that record will be demolished by mid-2001; we are growing *that fast*.)

Other changes have occurred as well. YFOS now has a Site Coordinator (**Larry Lopez**) who will oversee YFOS concerns throughout the year. The Membership Committee was disbanded, having felt that membership needs were being covered by the treasurer, web committee, and the club meetings.

Finally, I temporarily did away with the traditional guest-speaker format at the evening programs, although I am sure

they will return to enlighten us again sometime in the near future.

I wanted to publicly thank each of the other Officers and Board Members for their support during 2000. I am often amazed at the level of talent within the club; each of the Officers and Board could easily be President of any other astronomy club. NHAS is by far the best astronomy club I've ever been involved with during my 20+ years in the hobby. It is certainly the most active and organized. We schedule over 50 skywatches a year, and during that time thousands of people get their first look through a telescope. Many people joining the club are amazed that we have an observatory.

Looking back on Y2K, NHAS will probably be seen as a transition year – one in which a burgeoning, highly enthusiastic group began to move from a traditional mid-size astronomy club towards one of major regional (and perhaps national) prominence. I am proud to have played a part in its growth.

★ Ed Ting

Public Observing Highlights

A Coffee House was held on Nov 24th. About 10 NHAS members attended. This was the first truly cold session of the year – around 11 degrees F and we were not acclimated. **Dave Shelton** brought his homemade 14.5" f/6 truss Dobsonian and wowed the crowd with views of M31, M15, and M33. **Allen Chan** brought his new 12.5" Starmaster EL with amazing Carl Zambuto optics. A special "Frozen Toe" award goes out to **Herb Bubert**, who outlasted all of us that evening.

On Nov. 29, NHAS held a skywatch for Londonderry North Elementary School. About 150 people showed up. A mix-up led many to believe that the event started at 6:00 pm, rather than 7:30 pm as posted on the online calendar. Luckily, John Pappas and I happened to be there early to handle the crowd.

The CMP Skywatch on Dec. 1st was attended by 4-5 members. It was windy and mostly cloudy, but **Mike Townsend** was a real trooper, keeping his CR150 tracking on Jupiter for those brief moments when it poked out from behind the clouds.

A skywatch on Dec. 5th at Weare Middle School was cancelled.

★ Ed Ting

More Observing Highlights

Bob Sletten organized the Bow 5th Grade observing session on Dec. 6 (seventh annual event). This year it was combined with a 5th Grade Science Fair. NHAS members **Bob Bain**, **Greg Bakos**, **Eric Fiske**, and **Michael Frascinella** assisted Bob. The Moon, Venus, Jupiter, Saturn, and the Pleiades were the highlight of the evening. Fifth grade teacher **Cathy Martone** said about 150 children and parents expressed awe and delight at the chance to see the heavens up close.

There was some upper level cloudiness at times but we never lost sight of the bright objects.

★ Michael Frascinella

Feature Story

Elections for 2001.....Page 2

Elections for 2001

The slate of candidates is as follows. Butterfly ballots, easily confused voters, sleazy lawyers, chad mongers, under-voters, and anyone from Florida will be discouraged from participating [just kidding - MF].

President – **John Pappas**

Vice President – **Joel Harris**

Secretary – **Michael Frascinella**

Treasurer – **James Warend** (tentative)

Board (3 years) – **Barbara O'Connell,**
Jeff Carter

ATM True Grit

The ATM Committee has concluded work for the winter since it has become too cold in the barn. We will resume in the spring.

As a nonsequitor, I will have free keyboards and PC speakers at the next club meeting.

★ Larry Lopez

Photography in Focus

The NHAS Photography Committee did not meet for the month of November and there will not be a meeting for the month of December.

The next meeting will take place on January 19, 2001 at the Whipple Free Library in New Boston, NH. The meeting is scheduled to start at 7:30PM and all NHAS members are welcome to attend.

Joe Malinowski will be taking over as committee chair for the photo group. Joe has been active in the group for the last couple of years. He brings a wide range of skill and enthusiasm to the group, so join me in thanking Joe for his continued commitment to NHAS.

Happy Holidays,

★ Chase McNiss

Reminder: E-Mail Observer

As of the first of the year, the new policy enacted by the officers is that members must accept the monthly newsletter in PDF format via e-mail unless they notify the Secretary that they cannot receive such a mailing. Then the member will receive the old-fashioned paper version.

We again thank you for your support during this conversion process. If there is any problem with timely receipt of your newsletter (always sent a few days before the monthly meetings, please contact me.

★ Michael Frascinella

YFOS Observatory

Bob Sletten reported that he has installed and tested the gas heater for the Warming Room and also has written up instructions on how to properly use it.

At this time, work on the YFOS Observatory has halted for the winter.

★ Larry Lopez

Donations

NHAS offers its thanks to the following members and friends for their donations. Your generosity is greatly appreciated.

Bjorn Lange	\$25
William Burleigh	\$15
David Davinport	\$20
Michael D'Angelo	\$15
Chris Hofmeister	\$20
Joe LeBrun	\$10
NW Elementary School	\$100

Thoughts on Leaving Office

I joined NHAS in 1995 – it must be about then since I have 5 different Astronomy Day tee shirts. We had about 40 members then. The club was small, very informal, somewhat disorganized, but functioned well enough to do regular Skywatches and have regular meetings. It did most of the same things we do today, just not as big. It seems that we spent a lot of time discussing Stellafane lunch at meetings back then. Things were different.

I ran for and became a short-term board member (3 months) my first year, then moved to Vice President, then to President for 2 years, and have been Treasurer for the last 2 years.

Being in the administration of a nonprofit group has taught me much, like how to work with people, how to teach, how to file for 501c3 status, how to do books, how to schedule events, how to find guest speakers, how to make building foundations, frame, insulate,

wire, and how to abate taxes. It was an interesting and fun thing, and has helped in many odd ways in my full-time job.

I have also seen all of the planets, all of the Messier objects, two major comets (three, if you include the one that hit Jupiter), meteor showers, many NGC deep space objects including a quasar at mag. 16.7.

I have ground and polished on three different mirrors. John Dobson slept in my basement for two nights. My truck was greatly aged by its service for the club.

What other hobby gives you a good reason for staying out all night when the temperature is -10, no wind, crystal clear skies, and call it a good night?

Once a person learns a bit, they decide if the hobby is for them, and if not they move on. Others move forward and gain a general background, see the Messier objects, learn to star hop, and experience the night. Some continue further and teach, do public events, or give other service to the club. Some specialize in photography, CCD, or scope building. All of this is normal, but where do you go after all that? This is the question I have asked myself.

NHAS has grown to 175 members, it now has an impressive observatory and warming room. What more could one ask for in an Astronomy club? For me at this point, it is some time off. I have given to the club my service in fair exchange for the education it has given me, and now it is time to move on and let others have a chance to take leadership roles.

I would recommend to anyone who has the time or desire, to take on an administrative position. Prior experience is not required, just the desire to help out and in some ways make this corner of the world a little better.

I have greatly enjoyed my 5+ years in NHAS, both the ups and (some of) the downs. Though I will take a nonactive role in the club, I am glad to see that the club is in such good shape and in the hands of people that care.

★ Mike Stebbins

The Bottom Line

Thanks to Carlene Stebbins, CPA, and Quickbooks, the financial statement has been compiled.

Items to note are that we had \$1360 in cash donations. This has to be a new high. We have spent \$4400 so far on the observatory this year. Our net loss year-to-date is \$926, not bad considering the observatory costs. Keep in mind that 'now' is just after annual dues were collected, so the Treasury will tend to decrease until next October.

The year-end financial statement is provided as an insert to this newsletter.

★ Mike Stebbins

Looking Back at Last Month

Opening Remarks. Just before the break, **Ed Ting** welcomed new member **Alan Shirey** who said he wanted to become more active in astronomy.

Book of the Month. **Larry Lopez** brought *The Story of Astronomy* by Patrick Moore.

Scope of the Month. **John Pappas** displayed an Orion Sky Quest 6-in. Dobsonian f/8 reflector. The base required some assembly but the instructions were good. It was difficult to collimate since it had only two adjusting screws on the mirror cell. It also took a while to cool because the mirror was not ventilated. At about \$400, John recommended it as a beginner scope. **Ed Ting** followed with a display of his homemade 6-in. Dob, whose mirror was made as an ATM committee project. He used an 8-in. tube to allow for ventilation and rigged some Velcro (the fuzzy wooly part, not the loopy hook part) on the declination disks to dampen motion. His cost about as much in parts as the Orion scope.

Mike Pelletier had the club scope.

Committees. **ATMs:** **Larry** mentioned three items that made the process easier: the Foucault tester, an oven for preparing pitch lap, and a projection microscope. The ATMs were to meet on Nov. 26 to start polishing mirrors.

Photo Comm: **Chase McNiss** said the last meeting of the year was on Oct. 20 and they actually took astrophotos.

Observatory. **Larry** said that work has officially stopped for the winter,

members having become worn out from a spate of recent work sessions.

Public Observing. **Ed Ting** thanked all members who supported the skywatches at Reed's Ferry, NW Elementary School, and others. He went on to review upcoming skywatches.

Jim McCarthy held one at Belmont High School just before Halloween. **Bob Sletten** said he was hosting one in Bow in early December.

Treasury. **Mike Stebbins** reported 97 members and a balance of \$7500. The YFOS porta-potty was finally cleaned. He promised an annual statement by the December meeting.

Nominations. The following people were nominated for 2001:

President – **John Pappas** – accepted
Vice President – **Mike Townsend** – declined; **Joel Harris** – accepted
Secretary – **Michael Frascinella** – OK you win

Treasurer – **Joe Malinowski** – later declined

Board (3 years) – **Ed Ting** – declined; **Barbara O'Connell** – accepted; **Mike Stebbins** – declined; **Jeff Carter** – accepted

Final nominations and the election would take place at the December meeting.

Evening Program. **Ed Ting** and *All about Eyepieces*

Ed reviewed the development of eyepieces starting with the Huygenian in 1703 and the Ramsden in 1780. The acromat, a two-element lens, improved on simple lenses by reducing color distortion. The Kellner in 1849 was a three-element design.

Lens coatings were introduced to reduce light loss through glass. Orthoscopic lenses in the 1880s were four-element lenses, multicoated, very sharp, with very low distortion. Then followed the Plossl in 1860, the Erfle in 1917 (increasing the field of view to 60-70 degrees).

The Barlow lens increased magnification without losing eye relief.



Guest Speaker Ed Ting

The Nagler lenses in the 1980s revolutionized eyepiece design by providing the widest possible field but keeping the image very sharp with little aberration. Ed said they gave a "Holy Toledo" visual effect. Nagler later introduced Panoptic eyepieces that were good for sharp, low-power viewing, and Radians in the 3-18 mm range, a series of eyepieces that all looked the same.

Other current types included Meade SWA, Meade UWA, Pentax XL, Vixen Lanthanum, Takahashi LE, and Pentax SMC XL Orthos. He concluded the talk with a Nagler Type 5 eyepiece worth \$600 and weighing over two pounds!

★ Michael Frascinella

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for all of your astronomical product needs

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>>DEADLINE FOR JANUARY 2001 ISSUE: 4 PM Jan. 5<<

E-mail articles to Editor. Call to schedule late submissions.

**Merry Christmas to all
And to all a Good Night!**

From the people in your
town who bottle this
newsletter



How to Join N.H.A.S.

Write to us:
NHAS
PO Box 1001
Manchester, NH 03105-1001
Attn: Treasurer

Send Email to:
Treasurer@nhastro.com

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

2000 Officers (one last time)

President:: Ed Ting President@nhastro.com

Vice Pres.: Barbara O'Connell VP@nhastro.com

Treasurer: Michael Stebbins Treasurer@nhastro.com

Secretary: Michael Frascinella Secretary@nhastro.com

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NHAS Upcoming Events

Astro. Social, Dec. 15, Planetarium

Event	Date	Time	Location
Dec. Club Meeting	Dec. 15	7:30 pm	Planetarium, Concord, NH
Coffee House	Dec. 22	7:30 pm	YFOS, Hillsborough, NH
CMP Skywatch	Jan. 5, 2001	7:30 pm	Planetarium, Concord, NH
Jan. Club Meeting	Jan. 12	7:30 pm	St. Anselm's College, Goffstown, NH
Freeze Your Buns Off	Jan. 26	7:30 pm	YFOS, Hillsborough, NH