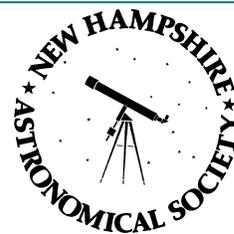


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THE NHAS OBSERVER

Newsletter of the New Hampshire Astronomical Society



Volume 2002 No. 10

"All the news that fits in print"

October 2002

A Stellafane Award Winning Telescope

President's Message



Nights are getting longer, temperatures are getting cooler, and

Halloween is right around the corner. In fact, I heard that, on **HALLOWEEN**, some astronomers set up telescopes. Often they become the most popular house on the block because they entertain the kids *and* the parents.

We have a real treat of our own this month. At our October meeting, member **Joe Dechene** is going to show us his award winning telescope, which took First Place for Mechanical Design at Stellafane this year. You can see at: http://www.stellafane.com/post_conv/2002_conv/2002_mechanical.html.

Or you can see it right here:



The truth is we have a few members who have won awards for their hard work and outstanding telescope making ability.

NHAS is comprised of many people with varied talents (for example, astrophotography, electronics, optics, mechanical design, and graphic arts). Please consider sharing your talent either through one of the committees or by teaching an NHAS course (see Bob Sletten who is putting together club courses, or send e-mail to: chairman@nhastro.com).

Later this year the officers hope to formally recognize those who have made contributions to NHAS over the years. Without their skill and time investments, NHAS wouldn't be what it is today!

Astronomy Quote: "A scientist can discover a new star, but he cannot make one. He would have to ask an engineer to do that." (Gordon L. Glegg)

Clear Skies,

★ Barbara O'Connell
NHAS President 2002

Public Observing Highlights

The Skywatch season begins with a bang in October.

Friday Oct. 4 is our monthly CMP Skywatch.

Saturday Oct. 5 we are at the NH Fish & Game conference at Geneva Point. Expected attendance is about 20-100.

Tuesday Oct. 8th we are at the Rundlett Middle School in So. Concord. Expected attendance is 125-200.

Friday Oct. 11th is our monthly dark sky Skywatch at YFOS.

Wed Oct. 23 is our annual Skywatch at Reed's Ferry School. Expected attendance is 300 or more.

Brush up on your observing skills and load up the car for this busy month.

I'll see you out there!

★ Ed Ting

Web Uploads

The web site currently offers links to photos of last month's spectacular aurora, with photos by **John Blackwell**, **Tim Printy**, and **Steve Stefanik**.

The NHAS web site is located at :

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

Update from YFOS

At the work session on Sept. 21, **Chase McNiss**, **Larry Lopez**, **Todd Miller**, and **Joel Harris** formed the work crew.

Chase, Larry, and Todd painted with Chase assuming the managerial responsibilities. This included trim on the observatory and warming room and the inside fold-away panels on the observatory.

Joel started planning a ramp for the warming room. Todd was checked out on the C14. Larry mowed a little. Todd did another coat on the observatory door and the warming room table.

We need new propane tanks, because the fittings for the old ones are obsolete.

Todd enjoyed driving Larry's F350 and JD235 tractor.

★ Larry Lopez

Feature Story

Vanishing Milky Way.....Page 2

Re: The Vanishing Milky Way

A poem by Liz Ahl, Plymouth, NH
for MT

The e-mail messages keep coming,
one stacked on the other, arguments
building ladders to nowhere in particular –

*re: lack of faculty parking spaces,
re: campus police armed,
re: college name changed to University...*

Some subjects seem to weigh more than
others --

pleas for reason, calls to arms, questions
of pedagogy in the wake of terrorism --

but still, most electronic dialogue
seems flattened by the screen
into nothing more than pixels

bent on taking up space, distraction
from the face-to-face of conversation,
drawing me into rhetorical poses,

irresistible invitations to “weigh in”
or “speak out.” Among these e-mails,
accumulating like early drifts of snow

on the screen, the occasional subject line
catches my eye --

Re: The Vanishing Milky Way

Re: Meteor Shower, Re: Aurora Borealis –
a few lines mourning the campus’
light pollution blotting out the stars,

but most importantly, these gentle
reminders to slow down, step outside,
and look up.

Welcome New Members

NHAS welcomes aboard the following
new members who joined recently. Let's
take the time to seek them out at the next
meeting and welcome them in person.

Marcie Bailey

Jon Blodgett

Jay Boynton

Arvin Congleton

Mary Rose Deak

Derek Fonda

Tom Sanfilippo

Membership Committee please take note.

ATM True Grit

Don Ware, Larry Lopez, Linda Lopez and John McLean attended the ATM meeting on Sept. 22.

Don showed the Bartle stepper software to Larry and John. John showed Don and Larry his new mount. It was really cool.

Don and Larry provided some support and suggestions to getting it wired up and some pitfalls he may get into.

★ Larry Lopez

AstroPhotons

The monthly Astrophotography meeting was held at YFOS on Saturday Sept. 14 at 7 p.m. The meeting was an open discussion platform.

The next meeting will be at YFOS on Saturday Oct. 5 at 7 p.m. Bring your photos or images to the meeting for review and discussion.

See you there.

★ Richard Fleming

Looking Back at Last Month

Opening. **Barbara O'Connell** offered a welcome to the new members present.

Book of the Month. none this month.

Scope of the Month. none this month.

Committees. Photo: **Chase McNiss** noted that the previous Saturday at YFOS was cloudy and only four members attended. They discussed photography techniques and left early due to the clouds.

Membership: **Bob Sletten** has developed five topics for the proposed Astronomy 101 course and is asking for feedback and of course some volunteer instructors.

ATMs: **Larry Lopez** said they will discuss stepper motors at the next meeting on Sunday Sept. 22.

YFOS. **Larry Lopez** reminded us of the work session the next day on Sept. 21. Painting and other maintenance were to be done.

Public Observing. **Ed Ting** announced that things were going to

get active with two skywatches at the end of Sept. and three new ones on October 5, 8, and 23.

Treasury. **Jim Warend** reported 159 members and \$9,050 in the bank. He reminded members that they must renew by the end of Sept. for 2003. Astronomy magazine was offering a two-year subscription for \$55.00.

Memberships expired on Sept. 30! Renew your membership now!

Truss Mount Project. **Barbara O'Connell** noted the extensive discussion via e-mail about this project to convert the club 16-inch Dob scope to a truss mount. **Chase McNiss** reviewed the several advantages of the proposed truss mount. A lot of discussion followed, including comments about talking the project to death. Barbara summed it up by stating that the officers and board generally favored the project as did a large majority of members.

Evening Program. Guest speaker **Steve McDonald** presented "Silicon Spaceships."



His talk centered on web applications he developed to tour the universe. They are available from:

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

He prefaced his presentation by stating that the image data used by his program was not part of the program.

(Cont'd. on p. 3)

The image data can be obtained from the National Space Science Data Center, NASA Goddard Space Flight Center, Greenbelt, MD for about \$10.00 per CD. Some data are also available for downloading via the web at <http://nssdc.gsfc.nasa.gov/>

He first demonstrated GeoVirgil, the planetary program, starting with images of Venus then switching to Mars. The program allows you to scroll the image and zoom in and out.

The program essentially manipulates data stored in NASA's data format. It can also output images as jpeg files.

Steve next used AstroVirgil to display x-ray images from the Chandra X-Ray Observatory, using Cassiopeia A as an example. The program had numerous ways to display the images.

His driving ambition was to explore space (with a tongue-in-cheek reference to Star Trek). With no hope of warp drive engines any time soon, he developed Silicon Spaceships to use existing NASA data to explore the universe.

★ Michael Frascinella

The Bottom Line

We end the year with the following numbers for bank balance and membership:

Bank balance: \$9,300
 2002 members: 162
 2003 members: 32

★ Jim Warend

My Travels Through 30 Years of the Space Program

By Diane K. Fisher

In the early 70s, as a minor character in the Apollo Program, I worked in the Vehicle Assembly Building at KSC (aka Cape Canaveral). Stepping into the VAB, I felt like the incredible shrinking woman. The space inside accommodated six 45-story office towers with vast open spaces to spare. In the vertical spaces between the office towers, the 363-foot high Saturn V rockets were assembled.

From my third floor office in one tower, I often delivered documents to higher floors in other towers. Between riding the stomach-dropping glass elevators and dashing across to other



towers on narrow, open catwalks at the 28th or 44th floor levels, I soon overcame my fear of heights.

On these excursions, I would see the Saturn Vs come together in the 500-foot high bays. After hundreds of engineers and technicians had toiled around the clock for months, the morning of high-bay rollout would arrive. Slowly, the Crawler Transporter would bear forth the Mobile Launch Platform and the majestic Saturn V rocket. The morning sun reflecting off its gleaming white form would take my breath away.

The last Apollo mission was 30 years ago. As the Apollo program ended, some thought human missions to the Moon, Mars, and beyond would continue apace. Although they didn't continue, the Apollo program remains a single, large step in our technological evolution as a species. It is a great tribute to the intelligence, ingenuity, and dedication of the people responsible for the Apollo missions that they were so successful and the disasters so few. NASA's program today continues to build on the technological and managerial legacy bequeathed us by Apollo.

And just where are we now? Among its other tasks, the International Space

Station is teaching people to live in space for long periods. Robotic space missions are studying issues like land use and global warming and discovering the wonders of the universe, its history, and our

place in it. With humanity's many other pressing needs, such quests must be done efficiently.

NASA missions such as Deep Space 1 and Earth Observing 1 carry and test multiple new technologies (such as ion propulsion and advanced imaging instruments) previously untried in space. And, unlike the Saturn V, the ultimate gas-guzzling muscle car of the 70s, the new technologies must be the "zero emission" vehicles of the 21st century – small, efficient, and capable beyond anything done before.

Many of the New Millennium technologies are described for adults at <http://nmp.nasa.gov> and for children at The Space Place, <http://spaceplace.nasa.gov>.

Diane K. Fisher is the developer and writer for The Space Place web site.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with NASA.



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NHAS Upcoming Events

An Award Winning Telescope, CMP

Event	Date	Time	Location
Photography Comm.	Oct. 5	7:00 p.m.	YFOS
Rundlett School Skywatch	Oct. 8	7:30 p.m.	Rundlett Middle School, Concord, NH
Coffee House	Oct. 11	7:00 p.m.	YFOS
October meeting	Oct. 18	7:30 p.m.	Planetarium, Concord, NH
Reed's Ferry Skywatch	Oct. 23	7:00 p.m.	Reeds Ferry Elementary, Merrimack, NH
CMP Skywatch	Nov. 1	7:30 p.m.	Planetarium, Concord, NH
Coffee House	Nov. 8	7:00 p.m.	YFOS
November meeting	Nov. 15	7:30 p.m.	St. Anselm's College, Goffstown, NH