

## Stellafane

### Stellafane 2017

Stellafane is an annual convention and star party hosted by the Springfield Telescope Makers at their observatory in Springfield, Vermont. The convention usually takes place in August, but due to the solar eclipse it was held July 20-23 this year.

Events include a competition for best amateur telescope (optics and mechanics categories), and solar and nighttime observing. There is a swap table for buying and selling astronomy gear. Several equipment vendors show up with their newest wares.

✧ Paul Winalski

Weather was not very cooperative this year. I did hear Thursday night was good. I was only there Saturday. Attendance was low this year. Another member mentioned it always is when the convention is in July. With the eclipse next month I suspect a number of people had to choose and put their time and money towards that. Lots of good stuff at the swap tables and I did have a few inches to spare closing the tailgate of my Trailblazer. I'd like to thank everyone who brought things for the barbecue, especially **Joel Harris** for bringing his grill and the main course of hamburgers and hot dogs and cooking it; and **Bob Veilleux, Dan Smith, Joe Dechene** and **Mike Townsend** for drinks and snacks. Thanks to **Dave Belisle** for the canopy. Also thanks to whoever brought the pop up canopy. Extra space is always nice. Sometimes the club canopy by itself gets pretty crowded! Also

**Larry Lopez** for his email reminders even if he and **Linda** were unable to go. My apologies if I missed any one. Next year's convention is the second weekend in August, the same weekend as the Perseids Meteor Shower.

✧ John Rose

### CME Impact

After a short string of spotless days, active region 2665 appeared on the Sun. AR2665 soon grew into a huge sunspot complex larger than Jupiter, with over ten umbral zones. On July 14, while facing the Earth it erupted with a M2-class solar flare and accompanying coronal mass ejection (CME). It rotated out of view on July 18, leaving us with a spotless Sun, but on July 23 it released a spectacular CME. The STEREO-A spacecraft observed a large solar flare, thought to be X-class, but this cannot be confirmed.

The CME arrived on Sunday July 16 at 6:09 UT and triggered a major magnetic storm in the Earth's atmosphere. **John Blackwell** observed it on the magnetometer at Phillips Exeter Academy.

**Robert Gillette** may have seen an associated aurora. He reports: "There was a distinct pink/red tint low in the northern sky, visible in Ossipee, just south of Tamworth, until clouds moved in at 23:45. I had a DSLR set up to take 10 sec images at ISO 2000 every 6 minutes from 23:15 on, and the glow was apparent in all of them.

"No idea if this is our normal sky glow from greater downtown Tamworth, or an actual aurora.

Will have to compare with the next clear night."

✧ Paul Winalski

### Plaistow Public Library Sky Watch, July 5

This event took place under clear skies. **Paul Winalski** gave the indoor presentation, with about twenty people attending. Afterward he, **Herb Bubert**, and **Gardner Gerry** set up scopes.



The observing field, Gardner's telescope in the foreground.



Mr. T the 14" TScope. Herb is imaging Saturn in the background. (photos by Patrick Begos, York ME)

We received this note from Scott Campbell at the Library:

*"Paul, thank you and your crew for a great night! You should know that I heard a couple people say that they were truly inspired by what they saw and learned.*

*"For my girlfriend Adriane, it was a 'bucket-list item' to see Saturn's rings.*

*"A homeschooling family came in today and the mom said they were still "buzzing" and "on a high" about it.*

*"You could say reactions like that are why librarians and astronomers do what we do. :-)*

*Needless to say, we'd be interested in doing it again."*

\* Paul Winalski

## Castle in the Clouds Solar Observing

NHAS is holding a series of solar observing sessions at Castle in the Clouds in Moultonborough on successive Mondays in July (10, 17, 24, 31) and August (7, 14). We will be providing safe views of our closest star both in white light and the H $\alpha$  (hydrogen-alpha) wavelength, which allows view of the Sun's chromosphere and solar prominences.

\* Paul Winalski

Solar observing at CitC has been very nice! Each afternoon has brought about 50 people, I guess, perhaps more. Almost all are families and retired folk, and everyone has been very enthusiastic. The Sun has been relatively quiet, except for the humongous Sun spot of the last few weeks. With any luck, it will return for a second round, having released a CME whilst on the far side.

The Solar observing has allowed me to plug the nighttime events, the club and the LTP. It's a great venue and the staff at the Castle are very supportive. It has all the best qualities of sidewalk astronomy, just without the sidewalk.

\* Marc Stowbridge

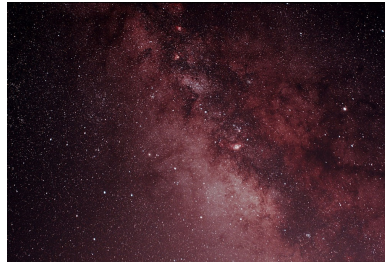
## Castle in the Clouds Sky Watch, July 25

This event took place as scheduled on July 25th. There were 165 people to hear **Dave MacDonald's** talk, and more that stayed with the scopes on the field, we estimated 180 in total at least. We did not set up on the Carriage House patio as

we have in the past, we set up in the field near the pond. Members there were myself, **Rich DeMidio**, **Ed Ting** and **Marc Stowbridge**. There were a few other folks there with scopes but I didn't get a chance to meet any of them. Dave let the crowd out around 9 PM to the scope field.



**Ed Ting ready for observing.**



## Milky Way at Castle in the Clouds. [Ed Ting photos]

The skies were as good as any I've seen in New Hampshire in a long time. Clear and transparent with a 2 day old crescent Moon in the sky, Jupiter and Saturn making their appearance at dusk. I showed Jupiter and then Saturn with my C9.25 until it got dark enough to observe deep sky objects. M13 was really spectacular owing to the great skies and it's position near the zenith. I also showed off M57 and M11. The crowds were great, lots of kids and all very appreciative of our efforts. We didn't start packing up until 11 PM and with those skies I didn't want to leave, but it's a long ride home and work in the morning. This sky watch was a big success.

\* Gardner Gerry

I handed out a bunch of NHAS info, and talked a lot (I know... shocker...) about the LTP. It was very gratifying that many people said they had used one.

A nice thing happened when a fellow met a club member there with whom he had connected on his town web group. He had a

SkyQuest 8", but didn't know how to set it up. We helped him with every thing and he was able to show the planets to another man in a wheelchair. It was brilliant!

The sky was very dark, all the Little Dipper stars were visible. I was showing Jupiter, Saturn, M31 and a lovely crescent Moon.

The crowd included very young children and senior citizens. They stayed until quite late and thanked us all profusely. Extra points go to Stephanie for being such a great hostess.

\* Marc Stowbridge

We had 185+ attendees! I was busy the whole time, with 10+ people stacked deep much of the night. I saw Gardner, Rich D, Marc S, Dave M, and a couple of other members.

I was exhausted, partially because in addition to manning my scope, I was simultaneously running \*two\* imaging rigs on the side (thumbnails of images attached.) I got home at 1:35 AM and was dragging the next day.

\* Ed Ting

There were about 175 people there for indoor presentation. It went well. Many good questions from kids, too. I will let others comment on telescopes. A great time for all indoors and out!

\* Dave MacDonald

It was a great time. I showed the crowd Jupiter, Andromeda Galaxy, M11 (Wild Duck Cluster), and the Swan Nebula using my 12.5 inch Obsession and 31mm eyepiece.

I had a full line for the duration as soon as the talk was over. Plenty of great conversations with adults and children. They were a very intellectual group.

\* Rich DeMidio

## Dunstable Concert Series Sky Watch, July 26

The town of Dunstable MA annually has a series of concerts on the town common on Wednesdays during the summer. For the past couple of years they have invited

NHAS to conduct a sky watch after the concert.

This year the weather didn't cooperate very well—skies were hazy and over 50% overcast. I was the only one from NHAS present. I set up the TeleVue 85mm refractor on the Moon, which was a very fine thin crescent (but also in a cloudy area). Mr. T. the 14" TScope was focused on Jupiter when it appeared, and later Saturn. About 60 people got to see the Moon, the two planets, the Galilean moons, and Titan.

While we were waiting for it to get dark enough for Jupiter and Saturn, I passed around the Schueller Memorial Meteorite. As always it was a big hit.

As often happens at summer sky watches, by the time it was getting decently dark most folks had gone home. Those who stayed got to see a bunch of other objects: Mizar, Albireo, Polaris, 61 Cygni, V Aquilae, WZ Cassiopeiae, M57, M27, M11, M13, and M3.

✳ Paul Winalski

### Dunbarton Public Library Presentation, July 27

The planned sky watch got clouded out on both its primary and backup date, but **Steve Rand** gave an indoor presentation. We received this note from Mary Girard at the Library:

*"On behalf of the Dunbarton Public Library, a huge THANK YOU to the NH Astronomical Society for hosting our Community Sky Watch presentation the other night.*

*"We enjoyed Steve's presentation very much, and are much appreciative of his time and energy bringing it up to Dunbarton. We had a very nice time despite those darn skies.*

*Thanks again... we really appreciate the fantastic program."*

✳ Paul Winalski

### NHAS in the News

The July 10 issue of *The Laker* had an article about our solar observing events at Castle in the Clouds.

Read it here:

[https://issuu.com/thelaker/docs/laker\\_7\\_101](https://issuu.com/thelaker/docs/laker_7_101).

✳ Paul Winalski

### Carbon Star of the Month

**V Aquilae** is a semi-regular pulsating red giant ranging between 6.6 – 8.4 magnitude. At RA 19<sup>h</sup>04<sup>m</sup>24<sup>s</sup>, DEC -05°41'05", it lies a bit to the left of midway between the two stars that represent the head of Aquila the Eagle:  $\lambda$  Aquilae and 12 Aquilae (3.4 and 4.0 mag, respectively), making it one of the easiest carbon stars to find by star-hopping. Its distinctive red/orange color shows up even in binoculars and spotting scopes.

The spectral class is C5<sub>2</sub>, or Np in the older classification. It has a surface temperature of about 2600°K and is about 1200 light years from the solar system.

✳ Paul Winalski

### NHAS July 2017 Business Meeting

The July business meeting was held at the McAuliffe-Shepard Discovery Center, our President, **Marc Stowbridge**, presiding.

In a departure from the usual order, we started with our guest speaker, **Kelly Beatty**, the senior editor of *Sky & Telescope*. His topic was "America's Coast-to-Coast Solar Eclipse". He gave a captivating talk that covered the astronomy of solar eclipses, the history of solar eclipses in North America, and how and where to observe the August 21 total solar eclipse.

### Public Observing

**Paul Winalski** reported that June was a rather quiet month for sky watches. We had a very successful sidewalk Astronomy event at North Beach in Hampton for the Lane Memorial Library.

In July and August, we will be holding a series of solar observing events at Castle in the Clouds on Mondays. Our annual sky watch for Goffstown Public Library is also coming up this month.

### Camera of the Month

**Joel Harris** presented the Cannon *f*/2.8 lens.

### Stellafane

Joel Harris reported that we need someone to bring the club canopy to Stellafane this year.

### Library Planisphere Program

**Steve Rand** has ten planispheres deployed so far, and more in the pipeline.

### Library Telescope Program

We now have 130 telescopes placed in New Hampshire libraries.

### Other Business

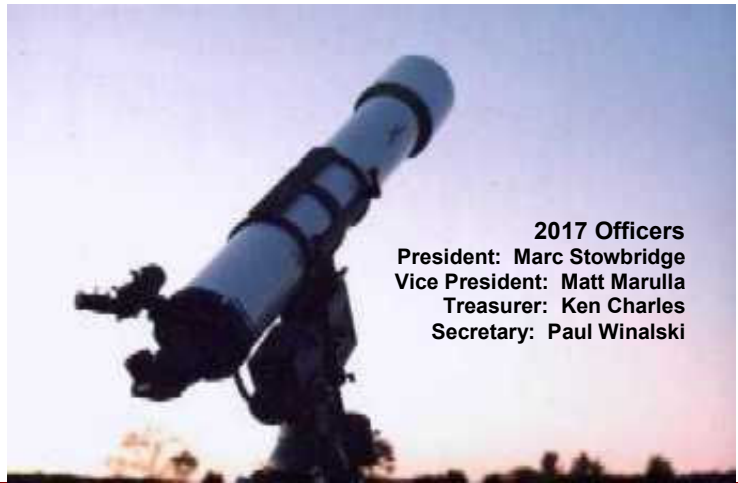
**Larry LaForge** recommended that we not renew our Meetup page, as there hasn't been much response to it.

### Astro Shorts

Marc Stowbridge was at Cadillac Mountain doing solar observing last week.

### The Bottom Line

There was no Treasurer's report this month.



**2017 Officers**  
**President: Marc Stowbridge**  
**Vice President: Matt Marulla**  
**Treasurer: Ken Charles**  
**Secretary: Paul Winalski**

**DEADLINE August 2017 Issue: 5 September 2017**

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](mailto:info@nhastro.com)

**Use our web site:**

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

**This month's contributors:**

Patrick Begos, John Blackwell, Gardner Gerry, Robert Gillette, Dave MacDonald, John Rose, Marc Stowbridge, Ed Ting, Paul Winalski

**New Hampshire Astronomical Society**  
**P.O. Box 5823**  
**Manchester, NH 03108-5823**



**NHAS Upcoming Events**

<b>Event</b>	<b>Date</b>	<b>Time</b>	<b>Location</b>
Gafney Public Library Sky Watch	August 1	8:30 PM	Turntable Park, Sanbornville NH
Birch Heights Sky Watch	August 3	7:00 PM	7 Kendall Pond Road, Derry NH
Discovery Center Sky Watch	August 4	7:00 PM	McAuliffe-Shepard Discovery Center, Concord NH
Newmarket Public Library Presentation	August 5	12:00 PM	1 Elm Street, Newmarket NH
Castle in the Clouds Solar Observing	August 7	1:00 PM	Castle in the Clouds, Moultonborough NH
Madison Old Home Week Sky Watch	August 8	8:00 PM	Burke Field, Madison NH
Merrimack Public Library Presentation	August 8	6:30 PM	Town Hall, Merrimack NH
Merrimack Public Library Solar Observing	August 10	12:30 PM	Watson Park, Merrimack NH
NHAS Monthly Meeting	August 11	7:30 PM	McAuliffe-Shepard Discovery Center, Concord NH
Castle in the Clouds Solar Observing	August 14	1:00 PM	Castle in the Clouds, Moultonborough NH
Castle in the Clouds Sky Watch	August 15	8:00 PM	Castle in the Clouds, Moultonborough NH
Goffstown Public Library Sky Watch	August 16	8:00 PM	Water Works Property, rte 114, Goffstown NH.
Lane Memorial Library Sky Watch	August 18	8:30 PM	North Beach, Hampton NH

Coffee House Night	August 19	5:00 PM	YFOS
Sidewalk Astronomy	August 26	6:00 PM	Market Square, Portsmouth NH
Owls Landing Campground Sky Watch	August 26	7:30 PM	245 US Route 3, Holderness NH
Rey Center Sky Watch	August 26	9:00 PM	Curious George Cottage, Waterville Valley NH
Chester Public Library Sky Watch	August 28	7:30 PM	Wason Pond, Chester NH
Laconia Public Library Sky Watch	August 29	7:30 PM	Opechee Park , 915 N Main St. Laconia NH