

The Celestial Observer



January 2015

Dick Luecke, editor

When beggars die, there are no comets seen; the heavens themselves blaze forth the death of princes.

William Shakespeare, *Julius Caesar*

Welcome, Lovejoy!

What better way to begin the New Year than with a new comet! For those who haven't already seen it, C/Lovejoy Q2 is naked eye observable low in the southern sky by mid-evening. It will rise higher and (hopefully) grow brighter as it passes east of Aldeberan on 15 January, up through Aries, and, into Triangulum by the 28th. Given that trajectory, look for it very near Almach (Gamma Andromedae) on 5 February. [For an *Sky & Telescope* chart showing Lovejoy's projected track, google "Comet Lovejoy 2014" then scroll down to the second sky chart.]

Here's a photo of Lovejoy taken by Gary Meehan on 13 December through a remote scope sited at Siding Springs, Australia. Thanks, Gary!



If you'd like to learn about the remote Aussey scope used by Gary Meehan, go to <http://www.itelescope.net/telescope-t27>

Who's Lovejoy? As many readers know, comets are named after their discoverers. C/Lovejoy Q2 is named for Terry Lovejoy, an amateur astronomer residing in Brisbane, Queensland, Australia. Q2 is just the latest of the many comets and asteroids for which he is credited. Like many of us, Terry ascribes his interest in astronomy to a family member who treated him to planetary views through a telescope. He has been hooked ever since. At last report, his instrument of choice and discovery was a Celestron 8-inch Schmidt Cassegrain. For more about Terry Lovejoy, go to <http://www.realscience.us/people/terry-lovejoy/>

From the President

Happy New Year, NSAAC Members!

I hope everyone is staying warm during these long cold nights, which are growing shorter now that we have passed the winter solstice. I have always liked these long winter nights because it is dark earlier and we have more observing time, even if the extreme cold limits our ability to stay out from time to time.

Despite the cold, I've been observing Comet Lovejoy, watching it grow from night to night. It's closest approach was on January 7, so step outside one of these nights and look to the right of Orion to catch a glimpse before it is gone. I have posted a *S&T* article link on the NSAAC Facebook page that describes how to locate the comet.

New meeting format and entertainment. The January meeting was the start of our new meeting format. Although we got off to a late start, we were able to get through all of the club business in 30 minutes. Thanks to all who attended and stayed for the presentation on "Space Telescopes," coffee and snacks afterwards.

We are always looking for presenters for our meetings. If you would like to be one please contact me. No special expertise is required. You can talk about your favorite eyepiece, a book you have read, or your favorite constellation. Your talk can be as detailed or as casual as you like. If you have ideas for speakers or meeting entertainment topics please let me know. For a list of upcoming meeting entertainment and featured speakers see the following link--
<http://goo.gl/4v3MAB>

Annual election of club officers. As a requirement of our 501(c)3 status we must fill certain club office positions. Our annual election of club officers will take place at the March meeting. All candidates for office must be announced

at our February meeting. If you would like to throw your hat into the ring and be considered for one of the offices, please contact Ray Ferland rfer813397@aol.com. No special expertise is required to fill any of the offices, just a willingness to help run the club's various activities over the coming year.

January's armchair astronomy topic. NASA's New Horizons mission to Pluto has recently "awakened" from its slumber on its nine-year trek to Pluto. The spacecraft is currently 4.8 billion kilometers (3+ billion miles) from Pluto and closing fast at a speed of 14.62 km/second (9+ miles/second).

New Horizons will make its closest approach to Pluto on July 14, 2015. Watch for more news about New Horizons in the coming months.

I hope to see members old and new at upcoming meetings or observing sessions this winter.

Clear Skies! Kevin Hocker, NSAAC President

Next Business/Members Meeting

The Friday, February 6 meeting at Brooks School in North Andover will, once again, begin at our **new time**: 7:30 p.m. A scope clinic will begin at 7 p.m. *if – and only if –* one is requested in advance. See the website for scope clinic requests.

Brooks is east of Hwy 125 and south of Hwy 133. Enter the campus from Great Pond Road at point M on the Google map below and continue to the Science Center parking lot at point B. We'll meet there with our liaison and enter the Science Center. If for any reason the gate at point M is closed, enter the campus at point A on Great Pond Road, drive to the security gate (point C) and indicate that you are with "North Shore Amateur Astronomy Club." Then continue on to the Science Center parking lot (point B).

The campus and meeting location:

<https://mapsengine.google.com/map/edit?mid=z2g0nAC6lh5w.kFBPV6o9jyl0>

Product Review: Equatorial Platform

By Barrie Sawyer

Note from the editor: Those of us who use Dobsonian scopes have a lot to like: Dobs are cost-effective light catchers; they set up in flash; no electronic gremlins will burn out or break down in the field. But their

inability to track objects can be a royal pain—especially at high magnifications. If you've used your dob at star parties, you know that target objects must be recentered every 30 seconds as viewers wait in line. Also, the intense concentration required to capture details on the moon and planets is diminished as our quarry moves across the field of view. Precious seconds of stable air and perfect clarity are often missed as we recenter our targets. Fortunately, there is a solution, as club member Barrie Sawyer explains here. Thanks, Barrie!

Equatorial platforms--also called equatorial tables or Poncet tables—solve a problem for dob users: tracking targets as the earth rotates beneath them. I bought the standard wooden platform offered by Tom Osypowski's Equatorial Platform Company (equatorialplatform.com) for my 15" dob and have used it several times. It allows my dob to track for almost an hour.

While they are expensive (I paid over \$1,300 for mine) there are platform-building plans on the net for those who have the time, tools and skill to construct one of their own. Despite the cost, I am very happy with my Osypowski platform. The construction is first rate and the instructions that came with it were complete and easy to follow. The device has several layers of polyurethane on the plywood parts, so I do not worry about keeping it out in my observatory. Once aligned, the platform performs flawlessly.

The real advantage of an equatorial table is not having to constantly adjust the scope. I can now view objects at high power for prolonged periods without interruption. This allows me to swap eyepieces and filters, check my star chart, and align finder scopes without having to re-acquire the target, which is both aggravating and time consuming. Once the platform reaches the end of its track, it can be reset by simply pulling on a handle at the bottom. I begin by aligning the table to Polaris as best I can. Even with approximate alignment, the table will track a deep sky object at high power for several minutes with little or no image shift. A 9-volt battery powers the system for an average of 45 hours according to the maker.



Photo courtesy of Tom Osypowski

If you are considering a binoviewer, tracking is a must. I am learning to use my new Binotron-27 binoviewer. Unlike single eyepieces, binoviewers need a fair amount of tuning. They are not for wide angle, low power viewing. If you use a binoviewer in a dob you need time to carefully position a ladder or chair (if needed) so that you can look through it comfortably and without muscle strain. The head must be held very still at just the right angle and position to intercept and hold the light cones exiting the eyepieces; this is much more difficult when using two eyepieces instead of the usual one. These binoviewer chores are more easily handled when the target object stays in the field of view.

My single axis EQ platform, which tracks along right ascension only, is suitable, according to the manufacturer, for planetary and lunar photos and for short (30 seconds or less, deep sky imaging. For long exposures, you need the ability to auto-guide, and for that you must have a dual axis platform. Of course, the dual axis feature adds to the cost.

Bottom line: If you own a dob, get an equatorial platform. It will enhance your viewing experience more than any other accessory or eyepiece I can think of.

Clear skies, Barrie Sawyer

Glenn Chaple's Sky Object of the Month

Glenn has served up an interesting and easily located double star this month: **Struve 817**. Located in the same medium power eyepiece field as Orion's Betelgeuse, 817 is easily separated and its two component stars are bright enough to be seen by small apertures. John Hobbs has posted Glenn's full

article and star chart to the Club website (nsaac.org). Thanks, John.

In the neighborhood: While you're on Betelgeuse and Struve 817, slew downward at 5 o'clock to find **M78** (NGC 2068). This bright, diffused emission nebula is part of the Orion complex, the large region of star-forming gas and dust that includes nearby M42 and M43. Then go inside and thaw out.



Photo credit: NOAO/AURA/NSF

Upcoming NSAAC Activities

Star Parties Stay tuned for 2015 events being schedule by Brewster LaMacchia.

Collins Observatory Club-sponsored public viewings are held at Salem State University with Dennis Gudzevich at the controls of the 12-inch Meade. The observatory is closed on school holidays and cloudy nights, so check the website, <http://nsaac.org/about-the-club/salem-state-university-collins-observatory/>

Mendel Observatory Merrimack College's observatory is open every Wednesday from dusk until 10 p.m. when the sky is clear, with Kevin Ackert and Fred Sammartino operating the 20-inch scope. Check <http://nsaac.org/about-the-club/merrimack-college-mendel-observatory/> before driving out.

Volunteers Needed To:

- Assist Brewster LaMacchia with star parties and presentations. Contact: starparty@nsaac.org
- Help with public viewings at Merrimack College Observatory on Wednesday evenings. Contact: Kevin Ackert at treasurer@nsaac.org
- Be the **Snackmeister**, the most appreciated Club position! Take responsibility for snacks/beverages at monthly meetings. Perhaps two members could divide up the year. Contact: president@nsaac.org
- Help Ed Burke with the website. Contact: webmaster@nsaac.org

Minutes of the NSAAC Business Meeting: January 2, 2015

President Hocker called the January Business Meeting of the NSAAC to order at 7:40 PM. There were seven members present plus five Board members. There was a quorum. Meeting was official.

Secretary Minutes of the December Business meeting were approved by acclamation.

Treasurer Treasure received the club insurance bill and paid the bill.

Membership There are currently 101 members in good standing.

Early Meeting Announcements Open forum on the agenda after New Business

Committee Reports

Merrimack College: The observatory was closed due to the holiday evenings.

Salem University: Dennis Gudzevich opened the observatory on December 15 with eight guests.

News, Correspondence, and Upcoming Activities

Star Party Committee: No report

Telescope Clinic: No activity.

YAP Program: Tabled talk about how to do YAP and whether we want to

continue and how involved.

Old Business The club still would like to find other volunteers to do star party presentations. If anyone is interested please contact Brewster LaMacchia. Also, we need more volunteers for the operation of the telescope at Merrimack College. If interested contact either Kevin Ackert or Fred Sammartino.

New Business Election of officers is coming up in March. We need a chairman of the nomination committee. Ray Ferland has volunteered to be the chairman of the committee.

Astronomy Day is coming up and maybe the club could do an event at Brook's School and open it to the public. Astronomy day is Saturday April 25. Kevin Ackert suggested a scale of the solar system, a presentation in the building, solar observing, and a display of types of telescopes.

Because of the updating of memberships, sending out information to new members, and the reoccurring problem with the collection and notification of club dues has not been working very well, board member Richard Luecke, the membership director, has suggested that the club consider doing away with dues and consider membership on a voluntary donation basis. The Board will discuss this at the next board meeting and formulate ideas for discussion at the next business meeting.

The May Board meeting date will be Monday 12th at 7:30 PM at The Village Restaurant in Georgetown. Meeting adjourned 8:35 PM.

Entertainment for the evening was a presentation by Kevin Hocker on Space Telescopes.

Respectively submitted by John Hobbs, Secretary NSAAC