



The Celestial Observer

*Newsletter of the North Shore
Amateur Astronomy Club*

March, 2010

From the President

Election of NSAAC Board members occurs at the March business meeting. Patrick Amoroso is the Director of the Nominating Committee. If you are interested in a position on the Board, please contact Patrick.

This year we have a full slate of nominees for all positions. All current Board members are running for office in 2010. NSAAC meets at Veasey Memorial Park and uses the parking lot for observations. We sponsor the Young Astronomers Program (YAP), youth night and a Messier club. The club also provides the public with access to astronomy by means of star parties, Merrimac College Observatory, Salem State Observatory and special events. NSAAC Board members ensure that these opportunities are provided to the membership and public. So, it is important that you attend the March business meeting and vote.

Which brings me to a previously discussed proposal: bring in outside speakers at business meetings. Of course, this takes time and effort and a “champion” to contact speakers and schedule the presentations. If you are interested in helping, please contact me. The basic idea is to have a group of NSAAC members host the speaker by meeting for dinner (China Blossom) and providing transportation needed by the speaker. About 10% of NSAAC members attend monthly meetings. In 2010, I plan to test out this program to see if NSAAC members are interested in changing how we conduct our monthly business meetings.

If you have questions or comments email me: [jefoy at comcast.net](mailto:jefoy@comcast.net).

*James Foy,
President*

Scope Clinic Attracts Two New Members

One of the services that our club provides is a telescope clinic. This is to show how to assemble and/or use their new (or old, unused) telescope. The clinic is for anyone who would like some help with his or her scope setup. The clinic has been pretty popular, and has been used by the general public and club members alike. To sign up for a clinic, just email to [scopeclinic at nsacc.org](mailto:scopeclinic@nsacc.org).

We had a scope clinic at the last meeting on February 5. Scott Sullivan and his son Ryan, from Amesbury, brought their new scope. It was a Newtonian on what looked like an equatorial mount, but not a classic equatorial mount, as it seemed to have a counter weight. It also had a nice red dot finder, and an IR controlled motorized focuser.

Unfortunately, the night sky was completely clouded out, so we couldn't set up their scope outside to show them how to use it. We told them that on the next clear (and not freezing) night we could show them how to use their scope, and find objects in the sky.

They must have been impressed, because they signed up to join the club right then and there. So, NSAAC welcomes our two new members:

Scott and Ryan Sullivan of Amesbury.

*Jim Bastable,
Membership Director*

2010 Membership Dues

Membership dues for 2010 are due by the March business meeting. Please note the following concerning dues payments:

- Membership dues for 2010 are \$20.00
- If you joined the club after October 31, 2009, your dues are not due until March of 2011. If you are unsure of when you joined and whether you owe, check with me before paying.
- **If none of your information or club options have changed, you do not need to include a renewal form with payment.** If your information has changed, please download a renewal form from our website.
- If you pay with cash at the meeting, attach a note to your cash with your name on it, or, write your name on the bill. Cash payments with no name attached will not be accepted.

- If you send your payment via US Mail, the address is NSAAC, c/o Veasey Memorial Park, 201 Washington St., Groveland, MA 01834-2007
- Members who have not paid dues may not vote in the March election.
- Please lower the workload of your club treasurer by paying your dues in a timely manner. We have a grace period for unpaid members. Members who have not paid their dues in March receive reminders until the grace period ends at which time membership privileges are lost.
- Questions about your dues can be sent to [treasurer at nsaac.org](mailto:treasurer@nsaac.org)

*Kevin Ackert,
Treasurer*

Minutes of the NSAAC Business Meeting, February 5th, 2010

President Foy called the February Business Meeting of the NSAAC to order at 8:17 PM. There were 6 members present plus 5 Board members. There was not an official quorum. This is an Information only meeting.

Secretary:
No report.

Treasurer:
No Report

Membership:
No new members

Early Meeting Announcements:
Open forum on the agenda after New Business

Committee Reports:

Young Astronomers Program:
Kevin Ackert sent out the YAP mailing at the end of December. YAP awards will be April 24. 50 more schools added to the data base. The last time Kevin checked the YAP webpage there were over 50 hits showing that there is interest. Because of the YAP mailing we got a request for a star party at the A.B. Bruce elementary school in Lawrence. The four telescopes have been ordered.

Merrimack College:
No report. Ralph Pass is trying to arrange for a keypad for the Observatory so members can lock the door after a session.

Salem State:

Dennis Gudzevich opened up the observatory to a Boy Scout troop of about 20 scouts and a few parents. Fred Sammartino gave a good presentation and provided enough information for their merit badges. Opened up another day and had about 20 visitors. Observatory has not been open in January due to bad weather.

Star Party Committee:

The upcoming star parties are:

Saturday, February 20th, IRWS Topsfield

Friday, February 26th, Amesbury School

Thursday, March 11th, Science night Bowditch School, Salem, MA

Thursday, March 11th, A.B. Bruce Elementary School, Lawrence, MA

Tuesday, June 29th, Wenham Public Library, Wenham, MA, rain date Thursday, July 1st

Telescope Clinic:

There was one request for assistance prior to the business meeting. Jim Foy, Jim Bastable, and John Hobbs assisted Scott Sullivan in setting up, adjusting and using his 4 inch reflector.

News, Correspondence and Upcoming Activities:

No information

Old Business:

John Tulik has renewed the clubs permit to use the dark park for the coming year. He has not yet set up and electronic copy on the list server for member download. This will be done before the snow melts.

New Business:

President Foy indicated that he has put two young astronomers nights on the calendar due to the bad Weather so that we can have alternate dates. He will use the list server to indicate whether or not the event will take place.

Jim Foy has updated the club brochure and has posted it to the website.

Astronomy day is April 24th and it is up to the club to see if they want to do something for the event. Jim Foy will head this up and send something on the list server.

President Foy indicated that the club now has two donated 60 mm refractors. The question of what to do with these was discussed. Tony Costanzo has volunteered to take them, add an Edmunds reflector he is donating, and making them available for loan to new members of the club. Jim Foy will put something on the website about this process.

President asked for more pictures to be sent in for the newsletter and the website.

Pat Amoroso, chairman of the nominating committee, announced the slate of candidates for the offices of the club. They are:

President: Jim Foy
Vice-President: Bill Drown
Treasurer: Kevin Ackert
Secretary: John Hobbs
Membership Director: Jim Bastable
Members at Large: Ron Sampson and Dan Smoody

Entertainment for the evening was the next lecture "The Seasons" from the Learning Center Astronomy Lectures.

Board meeting will be Wednesday February 17th at 7:30 PM.

Meeting adjourned at 8:50 PM.

*Respectively submitted,
John Hobbs, Secretary NSAAC*

Young Astronomer Program

The YAP page has received about 80 hits since the mailing went out. The Telescopes are purchased. We will plan to assemble them at the March or April meeting. YAP awards day is April 24th.

Let me remind members again that the contest is open to ALL youths grades 5 through 8 and that YAP entry packages can be downloaded from our website at www.nsaac.org/yap.html.

Kevin Ackert

Star Party News

Star Party season is in full swing with schools calling to set up events. Because of poor coordination by the Star Party coordinator, we have two star parties scheduled on Thursday, March 11th. This necessitates that we have a strong turnout of scopes for both of these events. If the weather cooperates at all, please try to provide a scope at the event that is closest to you. Please email me or Jim Foy if you are sure you can participate. As the date nears we will keep an eye on the weather and try to have an accurate account of how many scopes are available.

See the minutes of the February business meeting for the list of upcoming star parties.

The Star Party Committee would like to thank all the members who have supported our star party effort and look forward to your continued participation in the coming months.

*John Hobbs,
Star Party Coordinator*

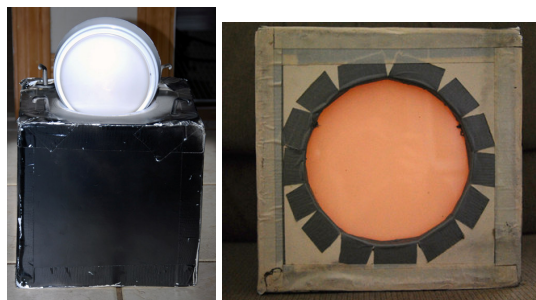
Astrotalk

by Jim Foy

Correcting Raw CCD Images – Flat Frames

In addition to correcting a raw CCD (or DSLR) image for dark noise, flat frames are needed that correct for the shape of the light cone generated by the optics, distortions due to the optics and dust and dirt on the optics. This correction is done by taking flat frames and then subtracting these from the raw image.

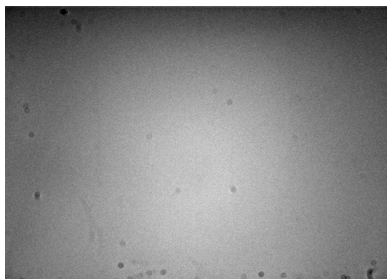
Creating a flat frame is more difficult than creating dark frames, because a "uniform" white light source is needed. My solution, which seems to work the best so far, was to build a cheap and simple light box. The box was made from 3/16" foam board, two translucent sheets of acrylic plastic, one battery powered light, duct tape and glue. The images below show the box and the light it produces.



Of course the light is not a uniform brightness perfect white light. It is brighter in the center and not color balanced because a tungsten bulb produces the light. For correcting black and white raw CCD images it works well.

A flat frame is taken by placing the light box on the telescope (DSLR camera) and taking 20 to 25 exposures that are sufficient to produce an image that is about 33% to 50% of the brightness allowed for each CCD chip and combining these into a master frame. You have to know the characteristics of your CCD and then experiment to find the correct exposure. Keep the optics exactly the same as for the light frame. Temperature is not important. Below is a flat frame for my Takahashi FSQ106N plus SBIG

ST2000XCM camera. Dust motes (dark spots) and the light cone (brighter in center) are clearly visible.



The *Celestial Observer* is edited by Leor Zolman. Feedback and member contributions are welcome. Contact: [newsletter at nsaac.org](mailto:newsletter@nsaac.org).

Suggestions regarding the content of the NSAAC web site are always welcome; Please email [webmaster at nsaac.org](mailto:webmaster@nsaac.org) with your ideas.

Getting to Veasey Memorial Park

From Interstate 95 north, take the Route 133 west (54B) exit, and follow it into Georgetown Center. Go straight through the light, now on Route 97N. Go about 1.5 miles and take a left onto Salem Street (Tea Garden Restaurant at this intersection). Stay on Salem Street and turn left onto Washington Street. VMP is down a bit on the right.

Directions to all of the NSAAC observing sites are available on our web site's "About" page at:

<http://www.nsaac.org/about.htm>

E-Mail Listserve

If you have email access and are an NSAAC member in good standing, you may want to subscribe to the email notification system that Lew Gramer established for the Club in 1996. This is a "members only" system that places you in contact with other members for late breaking news concerning spontaneous observing activities, outings, tech talk, etc. You can subscribe by emailing your request to the address below. Your message should look like this:

To: majordomo at nsaac.org
Subject: Email list (you can put anything here)
Body: subscribe NSAAC *Full-Name* <*email-address*>

To remove yourself from the email list, or to temporarily suspend delivery from the list or access your other options, please use our "Subscriber Settings" Web page:

<http://lists.nsaac.org/mailman/listinfo/nsaac#subscribers>

Contact Information

For more information about the club and its activities, contact James Bastable, Membership Director, email: [membership at nsaac.org](mailto:membership@nsaac.org) or Jim Foy, President, e-mail [president at nsaac.org](mailto:president@nsaac.org).

Our club web site is: <http://www.nsaac.org>.