



STAR FIELDS

Newsletter of the
Amateur Telescope Makers of Boston
Including the Bond Astronomical Club
Established in 1934
In the Interest of Telescope Making & Using

Vol. 21, No. 8 September 2009

This Month's Meeting...

Thursday, September 10th, 2009 at 8:00 PM
Phillips Auditorium

Harvard-Smithsonian Center for Astrophysics
Parking at CfA is allowed for duration of meeting

The Day We Discovered the Universe

Marica Bartusiak will be talking on the discovery of the true nature and startling size of the universe, delving back past the moment of revelation to trace the decades of work by a select group of scientists that made it possible.

On January 1, 1925, thirty-five-year-old Edwin Hubble announced findings that ultimately established that our universe was a thousand trillion times larger than previously believed, filled with myriad galaxies like our own. It was a realization that reshaped how humans understood their place in the cosmos. Six years later, continuing research by Hubble and others forced Albert Einstein to renounce his own cosmic model and finally accept the astonishing fact that the universe was not immobile but instead expanding. The story of these interwoven discoveries includes battles of will, clever insights, and wrong turns made by the early investigators in this great twentieth-century pursuit, from the luminaries (Einstein, Hubble, Harlow Shapley) to the lesser known: Henrietta Leavitt, who discovered the means to measure the vast dimensions of the cosmos...Vesto Slipher, the first and unheralded discoverer of the universe's expansion... Georges Lemaître, the Jesuit priest who correctly interpreted Einstein's theories in relation to the universe...Milton Humason, who, with only an eighth-grade education, became a world-renowned expert on galaxy motions...and others.

Combining her skills as a journalist with an advanced degree in physics, Marcia Bartusiak has been covering the fields of astronomy and physics for three decades. Currently, she is an Adjunct Professor with the Graduate Program in Science Writing at the Massachusetts Institute of Technology.

Bartusiak is the author of *Thursday's Universe*, a layman's guide to the frontiers of astrophysics and cosmology, *Through a Universe Darkly*, a history of astronomers' centuries-long quest to discover the universe's composition, and *Einstein's Unfinished Symphony*, about the on-going attempt to detect gravity waves, the last experimental test of Einstein's theory of general relativity. All three were named notable science books by The New York Times. She also co-authored *A Positron Named Priscilla*, a National Academy of Sciences book on cutting-edge science. Her latest books are *Archives of the Universe*, a history of the major discoveries in astronomy told through 100 of the original scientific publications, and *The Day We Found the Universe*.

Please join us for a pre-meeting dinner discussion at [Changsho, 1712 Mass Ave, Cambridge, MA](#) at 6:00pm before the meeting.

President's Message...

It was cloudy and rainy most of June and July until the skies finally cleared in August and summer finally arrived. The last time I had seen the Summer Triangle of Vega, Deneb and Altair was in May when it was still rising at 11:00pm. When the weather finally broke, they were high in the sky at 9:00pm. Sailors of yesterday knew these same three stars as the Navigator's Triangle. They were the first stars to be seen during dusk, when the horizon was still visible enough to "shoot" their elevation angle in order to locate the ship's position at sea.

Stellafane coincided with the arrival of the clear skies this year. Those who attended the convention were treated to the unusual event of being able to observe on both Friday and Saturday evening. I've taken advantage of the lull in the monsoons by getting several decent images of Jupiter. Humid days are a good time for planetary observing as the moisture in the air may really clobber transparency; it really helps steady the atmosphere enough for decent seeing and resultant good views of planets and the moon.

Hopefully this clear weather will follow us through September, when the nights are cool enough to drive the mosquitoes away, but warm enough to observe without having to bundle up. This is a great time of the year for all members to visit the clubhouse and take advantage of the observing fields and the club's telescopes that are available for use. The seventeen-inch Dob. always provides great views as does the twenty-inch with its recently aluminized mirror. Parts are being shipped in from Software Bisque that will allow the completion of the upgrade of the mount to the C-14 so we expect it to become operational shortly. Tom and Steve Bisque really came through for us in helping us inexpensively upgrade one of their original mounts to their latest models. Bruce Berger did a great job brokering the deal while John Blomquist added the skills needed to modify the mount to take the upgrade.

On a completely different note, did you know seventy five years ago, Prohibition was repealed, strong winds stripped the topsoil of Midwest farms creating the "Dust Bowl", work on

the Golden Gate Bridge began and the Amateur Telescope Makers of Boston was established? We will be celebrating one of the above events at the clubhouse on September 26th vis-à-vis a picnic followed by an evening observing.

Clear Skies,
- Steve

~ *Stephen Beckwith, President* ~

July Meeting Minutes . . .

The July meeting of the Amateur Telescope Makers of Boston featured a "Members Night" and mini swap meet. The evening speakers were Bruce Berger, Peter Bealo and Ken Launie.



(L-R) Bruce Berger and the new Clubhouse Workshop

Bruce Berger gave an update on the Clubhouse workshop. He mentioned that in the last Executive Board meeting, an initial grant of \$1000 dollars was allocated for the purchase of tools to outfit the shop. Along with this money, the Workshop Committee has been soliciting donations which has resulted in the membership stepping forward to donate machinery, tools and money for this effort. Bruce thanked the members that have donated.

Bruce noted that he has been having fun shopping. He showed some images of some of the items that have been purchased or donated.

Purchased Items:

13 drawer Toolbox
Floor Standing Drill Press
Toolbox with a complete socket and wrench set (1/4, 1/2 and 3/8 inch) – standard and metric

Donated Items:

4-inch wide Belt and Disk Sander (Bruce Berger)
Digital Calipers and Measuring Devices (John Blomquist)
Rigid Wet/Dry Vacuum (John Blomquist)
9-inch Southbend Lathe and Accessories (Mike Hill)
Router and Clamps (Fred Montague)
14 inch Delta Band saw (Al Takeda)

In order to launch the shop, a few small projects are being formulated to instruct 5-6 people at a time on the use of the tools and equipment. Possible project ideas include a barn door mount, a binocular parallelogram mount or a laser pointer holder for your telescope.

However, before the shop can be used, safety equipment will have to be installed. Bruce thought that a few of the projects could be started after everyone returns from their summer break.



(L-R) Peter Bealo and a photo of the Fecker 12.5 inch with Prof. Gerencher

Peter Bealo explained that the Science Museum in London is opening a new exhibit called "Cosmos & Culture: How Astronomy has Shaped Our World" in which they are showing some historical astronomical equipment. The museum approached a few members of the Antique Telescope Society members and Peter Bealo agreed to loan them his original Porter Garden Telescope (No. 53). The scope will be on display for a year and a half. He showed some sketches that the museum sent him of the planned exhibits. Peter pronounced that he now has an annex to his "Sweet Hill Observatory" in London.

Peter commented that "when something goes out something else has to come in". While he was "cruising" around the classic telescope section of Cloudy Nights he found a posting for a 12 inch, f/15 Fecker Cassegrain. The scope was donated to Moravian College in Bethlehem, Pennsylvania in 1989. Due to its weight of over 400 pounds and the college not wanting to build an observatory, this scope was placed in storage for over 20 years. Professor Gerencher who originally accepted the donation was going to retire shortly and wanted to see the scope placed in a good home.

Peter collects Fecker telescopes and since his company's headquarters is an hour away from the college he "had to go down there". He picked up the scope and accessories and brought them back.

The original owner was Dr. James Q. Gant, noted lunar observer and member of the Association of Lunar and Planetary Observers (ALPO). Gant corresponded with and was friends with H.P. Wilkins and Patrick Moore. When Gant passed away in 1990, Moore wrote his obituary.

The telescope is now set up in Peter's Bealo's "Sweet Hill Observatory" next to his 6 inch refractor.



(L-R) Ken Launie and E.C. Pickering's desk (image by Ken Launie)

Ken Launie spoke about how E.C. Pickering, astronomer and director of Harvard Observatory received an anonymous donation of \$20,000, known as "The Gift of 1902". With this money he built part of the Center for Astrophysics building for the Plate Stacks, purchased a 60 inch telescope whose mirror was constructed by A.A. Commons, built 2 Alvin and Clark reflectors and also built a desk.

Pickering justified the expenditure of building the desk by noting that "it takes the place of 21 feet of surface area and 60 feet of shelving and it allows me to organize my work..." The desk was built between 1902 and 1906. In 1921, astronomer Harlow Shapley inherited the desk. He liked to be associated with it and most people at the time called it the "Shapley desk".

In the 1954, Donald Menzel became the director of Harvard Observatory and according to sources, wanted to establish his authority by taking the desk apart and tossing it into the dumpster. James G. Baker, noted optical designer, saw this, rescued it and took it to his place in New Hampshire and then called Harlow Shapley. Shapley's son picked up the desk and took it with him to his new position at the National Bureau of Standards in Colorado.

When Shapley's son passed away, Owen Gingrich arranged to have the desk returned to Harvard where it was placed in a warehouse in East Boston that the Smithsonian Astrophysical Observatory uses.

In recent times, Harvard wanted to sell the warehouse to condo developers and many of the items, including the desk were to be discarded. The Librarian at the CfA contacted Sara Schechner, who is the curator of the Harvard Collection of Scientific Instruments, and told her that the museum should have this item. Sara agreed that it had a lot of significance but the people that ran the museum were opposed to the idea. A suggestion was made to loan it to Sara and Ken for 10 years. A loan agreement was written up and Ken brought it home.

It is a wooden desk, 8 feet in diameter with many drawers and cabinets. The desk is a giant lazy-susan that can rotate one way and the cabinets the other. Ken did not have any instructions or photos to reassemble it so he had to figure out what piece went where. Using a computer he first made a Solid Works model and then made a model of the room he was going to place it in.

He had to make an upper bearing support that goes on the ceiling and to fabricate or purchase parts that were missing. He also had to make wooden disks to spread out the load on the floor. Ken estimated that he spent 200 hours to reassemble it.

It is now fully assembled on the third floor of his Victorian house. He had a reception for the folks at Harvard that were interested in its outcome. They agreed that Ken was the right person for this.



The Secretaries report was given by Al Takeda.

The Membership Secretary's report was given by Tom McDonagh.

The Treasurer's report was given by Nanette Benoit. She mentioned that PayPal can be used for a specific item such as donations. Please place a note in the comments part. Also, if you are not receiving your magazine subscriptions, please let the Membership Secretary or the Treasurer know as soon as possible.

Steve Clougherty gave the Clubhouse report for the July work party. See this month's Clubhouse report.

The Observing Committee report was given by Steve Beckwith. He announced upcoming programs such as a Sky Lore Constellation program and a class on Dobsonian construction.

After being frustrated with the bad weather, Ross Barros-Smith requested a vote "to form a committee to articulate a non-binding resolution to condemn clouds". An amendment was also put forth to blame our Meteorologist. The non-binding resolution was passed by a unanimous vote.

Announcements:

Bernie Volz has Astronomy Deep Space Mysteries 2010 Calendars for sale.

Paul Valleli mentioned that there will be a work weekend on July 11th to prepare for Stellafane. He also reminded the group to register for the event.

Steve Beckwith reminded everyone that the next meeting is September 10th.

Clubhouse Report . . .

2009 Summer Clubhouse Report

Summer brings family commitments and outings. We really thank our many members who found time and donated their days to the work effort during the July and August Work Parties. This is how we are able to keep up with Clubhouse maintenance and support our commitment to amateur astronomy.

The July 4th Saturday work session started early (7 am) with Mike Hill cleaning the new machine shop and breaking up and removing the wood crates used to transport his donated lathe. Paul Cicchetti, Dave Prowten and John Reed continued building the new platform/deck for the home dome observatory. The cost was reduced by the use of 20-16ft long 2X8 pressure treated beams donated by member George Paquin. Thank you George from all of us.

Tom Janzen, John Maher, and Brian Maerz tackled the lawn and edge growth, with great looking results. Eileen Myers, Phil Levine, Al Takeda, Nina Craven, and Harry Drake scraped and painted white stain on the West exterior walls of the barn and house. We will now complete the West wall of the house in September. Dave Prowten worked on the workshop door closing mechanism and finished painting epoxy paint on the bulkhead replacement door panels. Eric Johansson, Art Swedlow and Sai Vallabha prepared and served a delicious lunch of burgers, dogs, baked chicken, and salad.

The "house" lit up when Ed Knight arrived for a few hours to inspect the general progress; it was also great to see teams assist each other when a tight spot was reached. Later, observing began as twilight deepened. The clubhouse closed after 1am on Sunday.

The August 8th Saturday work session followed the China eclipse, was on the last day of the Astronomical League National convention in NYC, and preceded the Stellafane convention by one week. Summer is a busy time and a full work effort was possible due to our members' donated time.

Highlights were; John Blomquist power raked the thick grass clippings he had cut earlier in the week into rows. These rows were hand raked and removed using a wheelbarrow by Dick Koolish, Bill Toomey, Dave Wilbur, and Harry Drake while John Maher continued to mow the edges of the entire area not reached by the big mower. Gerry Sussman and Eric Johansson cleaned and lubricated the Schupmann mount, then reassembled the unit for testing on the new home dome platform. Assisted by John Blomquist, Paul Cicchetti, and John Reed the mount is now on the new deck pier for interim testing. Several subsequent sessions show the mount is soundly constructed, and electrical testing continues. The prepared plywood panels were installed as new bulkhead doors by Dave Prowten assisted by Paul Cicchetti and Al Takeda. This work will continue during the September work session. Paul Cicchetti lowered the basement sump pump well to keep a lower water table level in the cellar. John Reed cut edge grass until the weed whacker died (leaving half of the edging to be

cut). Lunch was prepared and served by Art Swedlow and Sai Vallabha; grilled burgers and dogs, baked chicken and salad with the trimmings were consumed by a hungry crew. We were well fed.

Late in the afternoon several members drove to Chuck Evan's home to check on his observatory raising schedule. Upon return to the clubhouse, a member's new 5" reflector was being collimated by Eric and Vlad Vudler and then star tested on the field. The view of Jupiter was excellent. Members then switched to Nina Craven's scope when she saw the beginning of a transit of Jupiter's moon Calysto and its shadow which lasted for several hours. Quite a day. All of this activity, in addition to an earlier viewing of solar prominences with Paul C's solar scope (no sunspots yet). The clubhouse closed at 4am.

The next work session will be held on Saturday, September 5th starting at 10am. We will concentrate on getting the place ship shape for the 75th anniversary picnic on Sep 26th. This may require a second mowing the week before (Sep 19th) to reduce the mosquito hiding spots. Watch for e-mail messages. Remember Thursday night mirror grinding, the Friday Astro class, and Saturday observing at your clubhouse. Clear skies to all.

~ Clubhouse Committee ~

~ John Reed, Steve Clougherty and Dave Prowten ~



(L-R)Tom Janzen and John Maher mowing the Observing Field. Image by A.T.

Clubhouse Saturday Schedule

Sept 5	B. Leacu, P. Rounseville- Work Party	
Sept 12	Steve Clougherty	Sai Vallabha
Sept 19	Chuck Evans	Tom Lumenello
Sept 26	Gary Jacobson	Dave Siegrist
Oct 3	Bruce Berger	Mike Hill
Oct 10	E. Budreau, H. Hopkinson- Work Party	
Oct 17	Rich Burrier	Eileen Myers
Oct 24	Eric Johansson	Brian Maerz
Oct 31	P.Cicchetti, J. Blomquist - Work Party	
Nov 7	Al Takeda	Bill Toomey
Nov 14	Shilpa Lawande	Nitin Sonawane

Membership Report . . .

Membership as of 8//27/2009 - 341 members.

Membership renewals are due by September 1st, 2009. Please remit you membership payment ASAP to avoid Astronomy and Sky & Telescope subscription delays. Payments can be made with PAYAL or by mailing a check through the ATMoB website renewal system. Navigate using the following link after logging in to renew your membership today!

<http://www.atmob.org/members/person.php?frid=renewals>

Then, click on the red renewal tab to renew online!

Please contact the Membership Secretary if you have any problems logging into the ATMoB website or navigating through the renewal process. Membership@ATMoB.org

New members in 2009 are not required to renew till September 2010. Members that fail to renew by December 1st will be dropped as a member. Please contact the President of the club President@ATMoB.org if you are having trouble paying the dues.

The Amateur Telescope Makers of Boston, Inc. is a 501(c)3 organization. Donations are gladly accepted and are tax deductible to the extent allowed by law. While the deadline for 2008 charitable donations has past, please consider making a tax-deductible contribution to the club when planning for 2009 and beyond.

All members are encouraged to seek out and welcome our new members:

**Vincent Cocco
Karin Ludwig
Roger Marion
JamesMcGough**

**Rukmal Fernando
Nate Roman
Pankaj Shah
Ken Cantrell**

Welcome!

membership@atmob.org

~ Tom McDonagh – Membership Secretary ~

Report of the ATMoB Solar Eclipse Trip . . .

The night before the July 23 solar eclipse, the weather reports in China were ominous; a cold front had just passed through to the north of us, and the remains of a cyclone were passing to the South. The site we had originally planned to observe from was out of the question, with rain forecast there. So our leaders, Mario Motta, Bernie Volz and Joel Harris, decided to seek an alternative site at the last minute. The site selection team surveyed new sites the afternoon and evening of July 22, and joined the pre-eclipse meeting at 9PM that evening, to announce that they had picked a public park about an hour West of Hangzhou China, where we were staying.

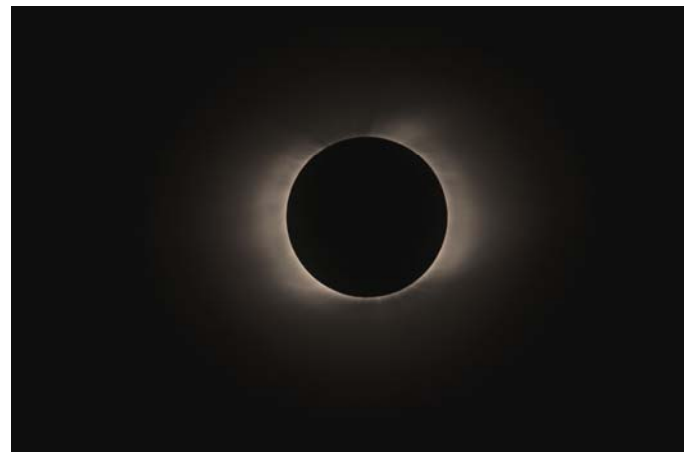
On the morning of the eclipse, we arrived at the newly selected park about 7AM under high clouds, and were not able to see the Sun's disk. However, just after 8:00, a cheer arose as the clouds thinned, and the Sun's disk was clearly visible. First contact began shortly after. Second contact took place at about 9:34 AM. Totality lasted a little longer than 5 minutes from our site, and during totality we were treated to a weak solar prominence, streamers which were only a little diminished by the high thin clouds, and a great diamond ring at the end.

During the eclipse, curious residents passed by on bicycles on their way to work, and several dozen stopped to see what was happening. Many ATMoB members shared their telescopes and binoculars with these folks, probably giving them their first real look at a solar eclipse. The language barrier was no problem, as these residents also expressed their delight at witnessing this primal spectacle.

At the post-eclipse celebration, everyone agreed that our expedition was a success. Perhaps the celebration was even sweeter because of the close call. Joel Harris, our trip organizer, called this the closest he has ever come to almost missing an eclipse in the dozens he has taken part in. But we did it!

After the eclipse, most of the original group of about 70 went on to tour other sights in China. Shanghai is the business and trade center of China, with many sky scrapers, together with an old section with its extensive imperial gardens which we saw. Hangzhou is a beautiful city, with low buildings and a large lake with surrounding parkland, which we boated on and walked around. This area is rich in agriculture, and we visited a tea plantation. Traveling then to Xian, we saw the famous Terra Cotta Warriors, and other ancient sights in this "Silk Road" city. Then finally in Beijing, we toured a section of the Great Wall, Tiananmen Square, the Imperial Palace in the Forbidden City, and the Temple of Heaven (a favorite of Henry Kissinger), and then onto the Imperial Summer Palace. Our excellent Chinese guides helped us to understand the history of these sights, and also explained ancient and contemporary Chinese culture. All in all, an excellent and successful trip!

~ Submitted by Bernie Kosicki ~



Totality – Hangzhou, China. Copyright Al Takeda

Calendars for Sale . . .

Starting with the July meeting and until they are sold out, I will once again have the Astronomy Deep Space Mysteries 2010 Calendars available for sale. They list for \$12.95 (see <http://kalmbachcatalog.stores.yahoo.net/68158.html>) but the club sells them for \$8 (this includes a small profit to the club – so you not only get a great buy, but you help support the club as well).

It is greatly appreciated if you have exact change available. Or, you can write a check (made payable to the ATMöB).

Sorry, but I will only sell them at the monthly meetings, first come, first served.

~ Submitted by Bernie Volz ~

AMA Light Pollution Resolution . . .

On June 15, 2009, The American Medical Association (AMA), which encompasses all 50 State medical societies, and over 120 specialty societies, voted unanimously to support light pollution abatement measures. As president of the Massachusetts Medical Society, and as an elected member of the AMA Council on Science and Public health, I had submitted a resolution for consideration at the Annual AMA meeting this June. The resolution was brought before a reference committee that allowed a number of speakers to present testimony, and much to my delight, all spoke in favor of the resolution.

Barrington Hills, a community from Illinois, sent 2 representatives to observe the proceedings, and were allowed to speak on the subject. (Barrington Hills has declared its town a dark sky haven).

One may ask why the AMA had decided to support LP legislation. The reason is that bad lighting, with glare, is a public health hazard, especially the older you become. Glare light scattering in the eye causes loss of contrast and leads to unsafe driving conditions, much like solar glare on a dirty windshield. Secondly, wasted light is unnecessary energy production and CO2 production, leading to more greenhouse effect. Finally, many species (including humans) need darkness to survive and thrive. These were the reasons, for human health and safety that the AMA came out so strongly in support of LP legislation.

The reference committee then deliberated and wrote the following:

“Resolution 516 asks our American Medical Association to: (1) advocate that all future outdoor lighting be of energy efficient designs to reduce waste of energy and production of greenhouse gasses that result from this wasted energy use; (2) support light pollution reduction efforts and glare reduction efforts at both the national and state levels; and (3) AMA

support efforts to ensure all future streetlights be of a fully shielded design or similar non-glare design to improve the safety of our roadways for all, but especially vision impaired and older drivers.

Your Reference Committee heard unanimous testimony in support of this resolution. Excessive light pollution comprises an inefficient use of energy and is a public health hazard for drivers, as well as an environmental disruption for several species. In addition, it was acknowledged that several states have light pollution measures currently enacted and that national legislation on this issues is pending. Your reference committee recognizes the important environmental and public health implications of this resolution.”

Based on that report, the entire House of Delegates of the AMA (540) representing physicians from the entire country, voted unanimously in favor of the resolution.

I am therefore quite happy to report that the AMA now has the following policy outlined in the final resolves below, and that all light pollution activists may quote these in the ongoing legislative battles to enact LP laws in your local.

RESOLVED That our AMA advocate that all future outdoor lighting be of energy efficient designs to reduce waste of energy and production of greenhouse gasses that result from this wasted energy use, and be it further

RESOLVED That our AMA develop and enact a policy that supports light pollution reduction efforts and glare reduction efforts at both the national and state levels; and be it further

RESOLVED That our AMA support that all future streetlights will be of a fully shielded design or similar non-glare design to improve the safety of our roadways for all, but especially vision impaired and older drivers.

~ Submitted by Mario Motta, MD ~

Thoreau on Astronomy . . .

The sky is singularly marked this evening. There are bars or rays of nebulous light springing from the western horizon where the sun has disappeared, and alternating with beautiful blue rays, more blue by far than any other portion of the sky. These continue to diverge until they have reached the middle, and then figure like the divisions of a muskmelon, not very bright, yet distinct, though growing less and less bright toward the east. It was a quite remarkable phenomenon encompassing the heavens, as if you were to behold the divisions of a muskmelon thus alternately colored from within it. A proper vision, a colored mist. The most beautiful thing in nature is the sun reflected from tearful cloud. These white and blue ribs embraced the earth. The two outer blues much the brightest and matching one another.

Journal, 7 September 1851

~ Submitted by Tom Calderwood ~

75th Anniversary Club Picnic . . .

Saturday, September 26th is the date for celebrating the 75th anniversary of ATMoB. Members and their families and friends are invited and the picnic is on rain or shine. The potluck dinner will start at 3PM at the Tom Britton Clubhouse in Westford. Please bring your favorite dish, enough to share with others. There will be activities for kids, including the annual walk up the hill to view the Haystack facility buildings. If the sky is clear observing will continue until Midnight (1st Q Moon). The observatories will be open. Don't forget your warm clothing for nighttime observing.

We are still seeking photos of club members involved in any club activities during the past 75 years. Photos will be shown the day of the picnic in a "slide show" format. Please include the name of the people in the photo, the event, the date, and any short description or comments you think would be interesting or fun to include. You can submit JPEG images on CD-Rs, USB flash sticks, DVD-Rs, Compact Flash and SD Cards and 3.5 inch floppy disks. Please bring them to the September meeting at the CfA, drop them off at the clubhouse or mail them to Myers, 73 Westcott Rd., Harvard, MA 01451. If you have just a few pictures you can email them to Eileen at starleen@charter.net.

Directions to the Clubhouse can be found at www.atmob.org. At the very bottom of the Home Page look for ATMoB Club House, then follow that link. Directions can also be found on the last page of Star Fields.

Questions - Email Eileen Myers starleen@charter.net H 978-456-3937 W 978-461-1454

~ Submitted by Eileen Myers ~

For Sale . . .

I have a Meade LX200 10" classic for sale. Comes with field tripod and scope saver mount. Mint condition... \$1595 or BO.

Call Mike for details 781-643-4513 or mikebova@verizon.net or bova_mike@emc.com

Thanks. Mike

~ Submitted by Mike Bova ~

Stellafane Images . . .



(L-R) Phil Rounseville and Alan Bean at the CAB dinner. Image: Paul Valleli



Bill Toomey in the Porter Turret Telescope. Image by Peter Bealo.



(L-R) Book signing by Captain Alan Bean for Nina Craven. Image by Al T.



(L-R) Mike Hill's telescope entry. Dave Siegrist, Gary Walker and John Reed at the Saturday evening program. Images by Al Takeda.

**October Star Fields DEADLINE
Wednesday, September 30th**

**Email articles to Al Takeda at
secretary@atmob.org**

POSTMASTER NOTE: First Class Postage Mailed Sept 2nd, 2009

Amateur Telescope Makers of Boston, Inc.
c/o Tom McDonagh, Membership Secretary
48 Mohawk Drive
Acton, MA 01720
FIRST CLASS

EXECUTIVE BOARD 2009-2010

PRESIDENT: Stephen Beckwith (978) 779-5227
president@atmob.org

VICE PRES: Bernie Kosicki (978) 263-2812
SECRETARY: Al Takeda (508) 494-7877
MEMBERSHIP: Tom McDonagh (617) 966-5221

TREASURER: Nanette Benoit (978) 290-2802
MEMBERS AT LARGE: Chuck Evans (978) 649-7157
Bruce Tinkler (781) 862-8040

PAST PRESIDENTS:
2006-08 Virginia Renehan (978) 283-0862
2005-06 Bernie Volz (603) 968-3062
2002-04 Eileen Myers (978) 456-3937

COMMITTEES

CLUBHOUSE : John Reed (781) 861-8031
Steve Clougherty (781) 784-3024
David Prowten (978) 369-1596

OBSERVING: Stephen Beckwith (978) 779-5227
John Maher (978) 568-1253

OBSERVING AND PUBLIC OUTREACH

STAR PARTY COORDINATOR:
Virginia Renehan starparty@atmob.org

How to Find Us... Web Page www.atmob.org

MEETINGS: Held the second Thursday of each month (September to July) at 8:00PM in the Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge MA. For INCLEMENT WEATHER CANCELLATION listen to WBZ (1030 AM)

CLUBHOUSE: Latitude 42° 36.5' N Longitude 71° 29.8' W

The Tom Britton Clubhouse is open every Saturday from 7 p.m. to late evening. It is the white farmhouse on the grounds of MIT's Haystack Observatory in Westford, MA. Take Rt. 3 North from Rt. 128 or Rt. 495 to Exit 33 and proceed West on Rt. 40 for five miles. Turn right at the MIT Lincoln Lab, Haystack Observatory at the Groton town line. Proceed to the farmhouse on left side of the road. Clubhouse attendance varies with the weather. It is wise to call in advance: (978) 692-8708.

Heads Up For The Month . . .

To calculate Eastern Daylight Time (EDT) from Universal Time (UT) subtract 4 from UT.

Sept 3 Double Shadow Transit on Jupiter 6:43 UT (2:43 EDT)
Sept 4 Full Moon
Sept 12 Last Quarter Moon
Sept 18 New Moon
Sept 22 Autumnal Equinox
Sept 26 First Quarter Moon
Oct 4 Full Moon