



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. 14, No. 7 July 2003

This Month's Meeting...

Thursday, July 10th, 2003 at 8:00 PM

Phillips Auditorium
Harvard-Smithsonian Center for Astrophysics

IN ANTICIPATION OF Stellafane, this month's meeting will be a combination Show-and-Tell and Flea Market. If you have a project you would like to share, please email me at starleen@charter.net or phone me at home at 978-456-3937. If you have telescopes, optics, books, eyepieces, glass, DC motor/controllers, etc. that you would like to sell or get rid of, bring them to July's meeting

Join us for dinner at 5:45 PM at Changsho Restaurant located at 1712 Mass Ave. in our fair city, Cambridge. -
Eileen Myers-

Presidents Message . . .

Club elections were held in June and those officers who chose to run again were re-elected to serve for a second year. All of us need to thank our outgoing Treasurer, Bernie Volz, who has served us well in that position for eight years. Bernie skillfully steered us through all necessary government paperwork, kept track of club income and expenses, and kept us within budget. We have all appreciated his swift reimbursements when we

submitted expense reports. Bernie has already been helping Gary Jacobson get started as incoming Treasurer. Bernie, thank you for all of your hard work.

Outgoing Membership Secretary Peter Psyhos served the club for one year, and served us equally well. With a club membership of well over 350, Peter had hundreds of membership forms to process. He introduced us to new members at almost every meeting, and we are also grateful that he has already sent out the membership renewal forms for 2003-04 so that our new Membership Secretary, Shilpa Lawande, could get a head start. Thank you, Peter. Well done.

The rest of the executive board and members of the various club committees have all had an outstanding year. Thank you Mike Hill for getting out *Starfields* every month. VP Bruce Berger made major contributions to the club in the areas of telescopes, tours, T-shirts, and reducing the mosquito population. Our Clubhouse Committee Directors John Reed, Paul Cicchetti and Steve Clougherty were busy all the time with clubhouse improvements. No work party or picnic was complete without the culinary skills of John Reed. We thank Steve for helping so many of us see the wonders of the night sky through the 17" Dob, and Paul for his lunar drawing workshops. Member-At-Large Dan Feldkhun is always there to help out with refreshments and cleanup at meetings, and to maintain the club computer and electronics room. Member-At-Large Lew Gramer has us all eager to spot meteors, even sporatics. Historian Anna Hillier can always be counted on to provide the historical research needed to understand the significance of the club's assets. Star Party Coordinator Charlie McDonald weathered the past year of postponements and rescheduling of star parties with true joy when they finally took place. Our three past presidents have performed well their job as advisors. One more thank you to David Prowten for all of the skill, experience and clear thinking he brings to everything he does. And while I'm at it, take a look through the past year's *Starfields* at the lists of all of the members who have helped at work parties or at star parties. Ours is a grand club and I am proud to serve once again as President.

As you renew your membership this year, I hope that you will consider helping the club move towards the future with a donation. We have built the Ed Knight Observatory with your donations, and the 6" Shupmann telescope has been installed and is in use. We are hoping that the 20-inch will see first light this year as well. There is always work needed to maintain the clubhouse, and sometime soon a new and costly roof will be needed. Our CCD group has plans to use one of our telescopes for CCD work. Clubhouse mirror making activities are on the increase, and with the recent addition of several young people grinding and polishing mirrors on Thursday evenings all barrels are in use. Work is underway to make more efficient use of our space. And then there is still the hope of purchasing a small piece of land to offer members a truly dark sky observing site. -
Eileen Myers, President-

June Meeting Minutes. . .

Eileen Myers opened the 760th meeting of the Amateur Telescope Makers of Boston with a short history of the 30" CerVit Mirror that has been at the clubhouse since 1986. It was brought here by Frank Novotny from Owens- Illinois in Ohio. The mirror weighs 200 pounds and has an 11" central hole, with a hyperbolic surface, and a radius of approximately 92" (F1.5). Mario Motta has expressed some interest in using this for his next big project. Paul Valleli filled us in on some more details of the glass and strongly recommended that we let Mario make use of it if the dimensions suit his needs. The main speaker for the evening was Ron Dantowitz, the director the Clay Center Observatory in Brookline. He talked to us about astronomical imaging using a standard black and white video camera and impressed all of us with the exquisite pictures he had obtained using techniques that all of us have the ability to reproduce without too much difficulty. The idea is that with a video camera one obtains 30 frames/second. As we all know, no matter how good your telescope is, astronomical imaging is limited by the atmospheric turbulence that is always present. By taking 30 frames/second and sorting through these with the aid of the VCR slow motion playback feature and a computer frame grabber, one can pick out the few images that occur during moments when the turbulence is at a minimum. The resulting images that one ends up with are guaranteed to be of much better quality than random snapshots we are used to taking with a film camera or even a CCD imager. Another important technique that Ron impressed on us was the use of a RED #25 filter in order to limit the light to the longer wavelengths. This helps to improve the focus of the instrument since only one wavelength needs to be focused. Ron did warn us that equally important to obtaining good images was the performance of the telescope. The scope must be very well collimated, sources of local turbulence must be eliminated, and it must be focused perfectly to within at least ± 0.1 mm at a minimum. Before, during, and after all this information was imparted to us, Ron treated us to an array of jaw dropping pictures – Hadley Rille on the moon (as good as the image by Ranger-9 just 54 seconds before impact) – Mercury by day (with a **crater** never before seen) – Saturn including the Crepe ring and Enke division – Jupiter and its moons (details were visible on the moon!) and of course picture of manmade objects for which he is well known for, including the space shuttle, Mir, and the International Space Station. All these images were remarkable indeed. I'm sure this was one of the more inspiring talks we have had in a long time as what he has shown us is something we can actually hope to do ourselves.

The business meeting followed the talk. Reports were presented by the club officers. Peter Psyhos and Bernie Volz made their last presentations as outgoing members of the executive board. The membership then voted in the current slate of officers as presented by the nominating committee last month. We welcome Gary Jacobsen as our

new treasurer and Shilpa Lawande as our new Membership Secretary. Paul Cicchetti showed pictures from the last work party which consisted mainly of heavy brush clearing around the observatory. Eileen Myers asked for two volunteers to give short mirror making presentations at this year's Stellafane. Mario Motta, and Mike Hill volunteered. Eileen also informed us that new member Virginia Renahan has volunteered to work at organizing the clubhouse library. Mario presented the latest round of information on the Dark Sky bill. Lastly the membership voted to have the July meeting which will be a show and tell meeting. - *Michael Hill*-

Membership Report...

I would like to thank you all for the opportunity to serve as membership secretary. I am grateful to Peter Psyhos for his help during the transition.

Just a reminder that all renewals are due by the September meeting. If you have not received your renewal form or have misplaced it, please send email to membership@atmob.org or ask me at the next meeting.

TO AVOID DELAY IN PROCESSING, PLEASE DOUBLE CHECK THE AMOUNT YOU SEND WITH YOUR RENEWAL FORM.

- *Shilpa Lawande, Membership Secretary* -

Clubhouse Report

Work began on the near barn conversion to work shop. The old stairs to the attic. Then the new opening was cut and structure added. At the end of the work party, we had time to start adding some risers for the stairs. Also, the lawn had a much needed cutting. While this was done several of our crew worked on the library. Of course, lunch was served by Chef Jacque Reed. Thanks to BRUCE GERHARD, SAI VALLABHA, ANDREW LEVIN, JOHN REED, ART SWEDLOW, JOHN BLOMQUIST, DAVE PROWTEN, DAN FELDKHUN, VIRGINIA RENEHAN, AND EILEEN MYERS.

Clubhouse Saturday Schedule

July 5	Phil Rounsville	Joseph Rothchild
July 12	Henry Hopkinson	Art Swedlow
July 19	Bruce Gerhard	Steve Herzberg
July 26	Lew Gramer	Eileen Myers
August 2	Stellafane - Closed	
August 9	Jack Drobot	Dave Siegrist
August 16	Ed Brudreau	Dave Prowten
August 23	Rick Burrier	Steve Maerz
August 30	Rich Nugent	Peter Psyhos
September 6	Gary Jacobson	Bruce Gerhard

Treasurer's Report...

To be presented at meeting.

2004 Astronomy Calendars

I will be selling 2004 Deep Space Mysteries Calendars from Kalmbach Publishing at the July meeting (first come, first serve). They are being sold for \$8.00 (regular price is \$11.99). Please bring a check (payable to ATMoB) or \$8.00 in cash (correct change is appreciated!). Start your holiday shopping early and help the club earn a little bit as well! See

<http://lib1.store.vip.sc5.yahoo.com/lib/kalmbachcatalog/68130spread.pdf> for more details.

- Bernie Volz

For Sale

Astelle 150 Mak. Owned for one year. Limited use. Comes with mount, tripod, drive, dew shield, 25mm eyepiece and a nice finderscope. In excellent condition. Have original shipping cartons. Superb Russian optics. Asking \$1100.00. Negotiable. Contact Tim @ tim.kearns@atbi.com

Star Party Thank You...

Despite the clouds and the forecast for rain, John Blomquist, Eileen Myers, Scott Romanowski, and Art Swedlow spoke enthusiastically about sunspots and magnetic fields with many of the several hundred visitors to Space Day in Tewksbury on Saturday, June 21st. There were enough breaks in the clouds that most who came over to look through the telescopes got a chance to safely view the Sun. We also learned the hard way to always use sunblock even if the Sun is only visible through breaks in the clouds. The torrential rains held off until most of the Space Day activities were over. ATMoB member and Space Day Coordinator "Astronaut" Paul Manning's careful planning and organization made the day a huge success. *-Eileen Myers-*



Some Solar Observing at Space Day

**September *Star Fields* deadline
Sunday, August 31st**

**Email articles to Mike Hill
at noatak@aol.com**

POSTMASTER NOTE: First Class Postage Mailed July 4 , 2003

Amateur Telescope Makers of Boston, Inc.
c/o Shilpa Lawande, Membership Secretary
13 Royal Crest Dr. #12
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FIRST CLASS

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	Steve Clougherty	(781) 784-3024
HISTORIAN:	Anna Hillier	(781) 861-8338
OBSERVING:	Charlie McDonald	(781) 944-6140

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.

July 6 First quarter moon
July 8 Saturn less than 1° below Venus this morning in eastern sky
July 13 Full Moon
July 17 Moon is very close to Mars in morning sky
July 21 Last quarter moon
July 25 Mercury ½° north of Jupiter in evening sky
July 28 Delta Aquarids peaks in morning
July 29 New Moon – Stellafane Convention this weekend