



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. 17, No. 6 June 2005

This Month's Meeting...

Thursday, June 9th, 2005 at 8:00 PM

Phillips Auditorium
Harvard-Smithsonian Center for Astrophysics

Parking at CFA is allowed for duration of meeting

THIS MONTH'S SPEAKER will be TODD GROSS, TV7 News Chief Meteorologist & Amateur Astronomer. The title of Todd's talk will be "The Weather, how it affects our observing and imaging."

Todd first became interested in astronomy at age 5. He had a "moonscope", planetarium, and other goodies which he forced his 4 and 5 year old friends to play with. He built his own 8" reflector as a teenager, and became an eclipse chaser, having witnessed 6 total eclipses. After becoming chief meteorologist at Channel 7 in 2002, he wound down some of his astro-mania but continues to share his enthusiasm for the skies with the public during his weather segments today. A native of New York City, he graduated from the State University of New York in Albany with a Bachelor of Science degree in atmospheric sciences. Todd has assigned us a bit of homework in order that we get the most from his talk. He invites all of us to read his article, published in Sky & Telescope in January 2000. S&T has granted us permission to post this article on our website for a limited time. This article is for ATMob members only. Please respect their generosity and do not redistribute the article.

Feel free to join together for a pre-meeting dinner at 5:45 PM (seating at 6:00 PM) at the Changsho Restaurant located at 1712 Mass Ave. in our fair city, Cambridge.

President's Message...

As most of you have heard, this will be my last President's message. Family responsibilities must take a precedent in the coming year, and yet the club must go on. We placed our utmost faith in the nominating committee and they have done a fine job. I know that you will join me in supporting their choices to lead the club this next year.

We have accomplished much these past 12 months. I'd like to recap the most significant accomplishments and to thank some of the key players.

For educational & public outreach we held about 30 star parties, served an estimated 7,000 people, distributed approximately \$31,000 of donated materials, CDs and magazines, and involved close to 80 of our members.

For our facility at Haystack, we completed the supporting roof structure and are ready for a new roof cover, erected a tool shed, cleaned and inventoried all resources in the glass room, started work on improving the library, completed the 20" compound reflector, installed a new general-purpose equatorial mount, and installed a computer network with five newer computers.

We have also improved our good relationship with our landlord, and this past year **Joseph Salah**, Director at Haystack, granted us permission to expand our mosquito abatement program, installed, at their expense, connectivity to their network for always-on high-speed internet access, and provided us with access to radio astronomy gear.

We have just received word from our Springfield Telescope Maker brethren that ATMob now has access to their site, and for those that seek training, the 13" Schuppmann.

For these accomplishments we all owe a great amount of thanks to each other. Each and every one of us is both responsible and deserves credit. There are a few individuals that have stood out though, and I'd like to take the remainder of this space to recognize **Dave Prowten, John Reed, Paul Cicchetti, Virginia Renehan, Eileen Myers, Gary Jacobson, Shilpa Lawande, Mike Hill, Paul Valleli, Gary Walker, Lew Gramer, Brewster LaMacchia, Marsha Bowman, Anna Hillier, Dave Siegrist, Ed Los, John Blomquist, Bruce Gerhard, Brian Maerz**. I'd also like to recognize **Anne Gorczica, Doug Harrison** and **Mike Poirier** from MIT/Haystack.

I'll continue to be an active member of the Executive Board, and to strive to make this club the best there is.

Thank you, and clear skies to all,

Bruce

May Meeting Minutes. . .

The May meeting of the ATM's of Boston featured Bob Naeye of Sky and Telescope. Bob's topic was the search for extra-solar planets, and the acceleration of their discoveries. Bob first described the problem of finding the extra-solar planets, given their proximity to stars, and the low intensity of light reflected off them. Astronomers therefore use a variety of means to discover them, other than visual detection. Those means include:

- astrometry - Early on most research was in this area, looking for the motion of the stars as the mass of planet rotated around it. There were many claims of discovering exoplanets, but to date, none have been confirmed based on astrometry.
- variations in pulsars – by observing very small variations in the emissions of pulsars, as exoplanets orbit them. An early discovery was made in this way, but none since.
- radial velocity (wobble) – As the planet-star system orbit about each other, the light from the star shifts slightly in frequency (Doppler effect) depending on whether it coming toward us, or moving away. This method can find massive planets, but has difficulty with smaller ones. It also can only find the minimum mass of the planet, but with no information about the inclination of the planets orbit, its actual mass is unknown. Several planets have been found in this way.
- transit method – similar to eclipsing variables, a planet transiting in front of the star will reduce the light traveling to us. This is an area where amateurs can contribute, and we have heard from our own Gary Walker as he uses this method.
- direct imaging – although difficult, effort is being made to image close brown dwarfs to discover if there are companion planets.

To date there have been over 160 exoplanets discovered.

The business meeting followed with standard reports from the club officers and committees

- Clubhouse report: much progress has been made in shoring up the roof, readying it for a new surface. New stairs were built in the basement, and the high speed internet work has mostly been completed. Many folks have contributed long hours to make the clubhouse a resource for all of us.
- June 11th is the club picnic, and we have invited the South Shore group to join us.
- Al Takeda showed pictures from Astronomy Day at Dexter. A good time was had by all.
- Mario reported on the lack of progress on the Dark Sky bill. He also updated folks on the eclipse trip to Egypt. Folks interested in joining them should contact Mario.
- Paul Varella reported on progress at Stellafane in building the pole barn. Donations would be much appreciated. Also, access to the observing field is now available to ATMoB'ers. Interested folks should contact Paul or Bruce for the details.

- The nominating committee reported on the slate of officers for the upcoming year. Bruce Berger has elected to invest more time in his job search, and will not be running for president. Those nominated include:

President	Bernie Volz
Vice Pres.	Virginia Renehan
Secretary	Mike Hill
Treasurer	Gary Jacobson
Membership	Dan Winchel
At Large	Dave Prowten, Bruce Tinkler

- Peter Bealo showed a film from the recent Titan rocket launch, and Chuck Evans showed images from his recent visit to Kitt Peak.

The meeting was adjourned to a time of fellowship among the membership. - **Dave Siegrist** -

Annual Meeting Announcement

The Annual Meeting of the Amateur Telescope Makers of Boston, Inc. will be June 9, 2005. The election of the 2005-2006 Executive Board will take place at the meeting.

Slate of Officers for 2005-2006

The Nominating Committee is offering the following slate as officers for fiscal year 2005-2006. The candidates are:

President: Bernie Volz

Vice-President: Virginia Renehan

Secretary: Mike Hill

Membership: Dan Winchell

Treasurer: Gary Jacobson

Members-At Large (2): David Prowten, Bruce Tinkler

There will also be three Past-Presidents serving on the Executive Board: Bob Collara, Eileen Myers and Bruce Berger.

Members have the right to offer additional nominations from the floor of the annual meeting, provided only that a suitable written notice, containing the name or names of the person or persons to be nominated from the floor at the annual meeting, and the signatures of at least seven members, is filed with the Secretary not less than ten (10) days prior to the date of the annual meeting.

We had great choices for all offices and we were extremely impressed to see multiple people volunteer for a number of positions. *-The Nominating Committee – Eileen Myers, Peter Bealo, and Paul Valleli -*

Club History

The Historical Committee met on Saturday, May 21st at 10:00 a.m. at the Clubhouse to discuss the editing of the club history. Anna Hillier and Eileen Myers went over the articles, discussed photos and the possibility of having the club history published as a soft cover book.

Serendipitously, at 2:00 p.m. Karen Reardon arrived at the clubhouse – her first visit – and agreed to help. Karen is a professional technical writer with extensive experience publishing this type of work. Karen is the wife of new member Yuval Gonen, who came to the clubhouse to lend a hand with the clubhouse computer network.

We are going to have a deadline of August or September 2005. We hope to add some more content and photographs, formatting the history so that it looks pleasing to the eye and also a joy to read. *-Anna Hillier and Eileen Myers-*

Clubhouse Report

Over the past five weeks seventeen members contributed 42 member days for clubhouse projects (April 23 through May 28, '05). With the end of winter, the snow fence and posts were removed and stored; mowing, trimming, and chipping commenced; propane was purchased and mosquito magnets set up, repaired, and are now running. The roof support bridge system in that attic was completed and hurricane ties installed. The old basement stairs were removed, new stairs were built and installed in one day; a new railing was installed the next day. A new attic window was installed on the west end. A second bat house was installed next to the first bat house, and both are now occupied. The attic refuse was partially removed and the far barn cleared to receive roofing supplies. Internet work continued and first light was reported. Picnic planning and the 2005/2006 budget planning proceeded. Sky and Telescope sorting continued with excess issues set aside for star parties.

Thanks to the following ATM's: Dick Koolish, Carl Goedecke, Bruce Berger, Phil Rounseville, Brian Leceau, Larry Swezey, Virginia Renehan; with special thanks to Paul Cicchetti, Bruce Gerhard, Brian Maerz, Eileen Myers, Anna Hillier, Steve Clougherty, Art Swedlow, Dave Prowten, John Blomquist, and Jonh Reed.

Clubhouse Saturday Schedule

June 4	Dave Prowten	Tome Wolf
June 11	John Panaswich	Jim Suslowicz
June 18	Paul Cicchetti	John Reed
June 25	Ed Budreau	David Richardson
July 2	Glen Meurer	Art Swedlow

**July Star Fields deadline
Saturday, July 2nd**

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

POSTMASTER NOTE: First Class Postage Mailed June 3, 2005

Amateur Telescope Makers of Boston, Inc.
c/o Shilpa Lawande, Membership Secretary
13 Royal Crest Dr., #12
Nashua, NH 03060

FIRST CLASS

EXECUTIVE BOARD 2004-2005

PRESIDENT: Bruce Berger (978) 256-9208
president@atmob.org (978) 387-4189 cell

VICE PRES: Virginia Renehan (978) 283-0862
SECRETARY: Michael Hill (508) 485-0230
MEMBERSHIP: Shilpa Lawande (603) 891-2702

TREASURER: Gary Jacobson (978) 692-4187
MEMBERS AT LARGE:
Lew Gramer (781) 396-7822
Dave Prowten (978) 369-1596

PAST PRESIDENTS:
2003-04 Eileen Myers (978) 456-3937
2001-02 Bob Collara (781) 275 9482
1998-00 Joseph Rothchild (617) 964-6626

COMMITTEES

CLUBHOUSE : Paul Cicchetti (978) 433-9215
John Reed (781) 861-8031
Steve Clougherty (781) 784-3024

HISTORIAN: Anna Hillier (781) 861-8338

OBSERVING: Virginia Renehan (978) 283-0862

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.

June 6 New Moon
June 14 First Quarter Moon
June 18 7th mag star SAO 79782 onoy 1' north of Saturn
June 21 First day of summer
June 22 Full Moon
June 25 Saturn 1.3° from Venus and 1.5° from Mercury
June 27 Venus and Mercury 3.9' apart
June 28 Last Quarter Moon