



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. 13, No. 7 July 2002

This Month's Meeting...

Thursday, July 11th, 2002, at 8:00 PM

Pratt Conference Room

*Located in the Richard S. Perkin Laboratory
for Astrophysics Building*

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-*

Note Change in Location...

ON JULY 11th the Phillips Auditorium will be the venue for a re-scheduled CfA Public Sci-Fi Movie Night. Therefore our July ATMoB meeting will be held **at the CfA**, but in the **Pratt Conference Room** in the building named the **Richard S. Perkin Laboratory for Astrophysics**. The building is easily found by driving into the CfA using the entrance on Garden St. There is a traffic light at the Garden St. entrance which should make it easy to spot. The Perkin building is on the left situated opposite the tennis courts. The Pratt Conference Room is a corner room on the ground level, faces the tennis courts and has doors that open directly outside. We will have those doors open before the meeting begins so you can enter without walking through the building. The Flea Market tables will be set up in the hallway just outside of the room. If you are bringing something to the Flea Market, park close to the building. There are about 25 parking spots near the Perkin building. If those are taken, drop off your items and then park by the Phillips Auditorium or in the lots below it, and walk towards Garden St.

and the tennis courts. We will also have some signs up in case the outside door to the Pratt needs to be closed after the meeting starts. The entrance to the building itself has a white Library Return Book Box just outside the black glass doors. Walk down the stairs and follow the signs to the Pratt.

President's Message...

THANK YOU BOB COLLARA, our outgoing President, for continuing the growth of the club and inviting speakers on such a variety of topics. We always left your meetings encouraged, inspired, and well fed. We now have over 350 members, with more on the way as public interest in astronomy is at a high. Our meetings offer the opportunity to expand our knowledge of astronomy. Our clubhouse, star parties, and visits to dark sky sites give us the opportunity to get out and observe. We have social occasions to meet each other as well, including picnics, tours, carpooling to astronomy conventions, and bus trips to NYC.

We have a new executive board, full of familiar names and faces. A face usually seen in the polishing room at the clubhouse on Thursday nights, Vice-President BRUCE BERGER completed his first mirror and telescope this year. "Mosquito Magnet Bruce" also just finished running a series of solar and star parties. Secretary MIKE HILL, an ATMoB member since 1974, has a special interest in solar and variable star observing. Have you looked at prominences on the Sun with his homemade spectrohelioscope? Membership Secretary PETER PSYHOS brings his telescope to many of the club's star parties, talking to folks about Jupiter, comets, and all sorts of astronomical subjects while enjoying the excitement of their reactions as they observe what he points out. Treasurer BERNIE VOLZ has been treasurer for many years. How many? I don't really know. Member-at-Large DAN FELDKHUN has been our lead at the clubhouse on CCD training. Member-at-Large LEW GRAMER can always be found at a dark sky site whenever there is a meteor shower. He is a fine educator who sparks an interest in meteor observing wherever he goes.

What a fine group our club has to guide us through the next year. *-Eileen Myers, President-*

Membership Report...

This month we welcome new member DAVID SNAY of West Boylston. If you read the Globe article in May on chasing dark skies you may remember the picture of Dave and his daughter Danielle observing Jupiter.

I want to thank John Small for all the hard work he has done as Membership Secretary. He has been a great help getting me up to speed with membership renewal processing. I know I will be calling on him from time to time. Thanks John!

June's Minutes...

PRESIDENT BOB COLLARA opened the 749th meeting of the Amateur Telescope Makers of Boston with mixed emotions, as this was to be his last meeting as acting President. The business section of the meeting was held first, beginning with the reports being read by the club officers. **Charlie McDonald** suggested that we have more than one observing committee member, each representing a different geographical area. **Mario Motta** seconded this opinion and suggested 3 members. Mario also reiterated that we CANNOT lobby as a non-profit club for political purposes such as light pollution reduction. If you want to do that join the IDA or NELPAG. **Paul Cicchetti** informed us that the observatory roof was now movable by 2 people. He also related that his mosquito magnet seems to be working better than the one at the club and that the current location may not be optimal. The last portion of the business meeting was the annual election. The nominations for the Executive Board were listed with no nominations from the floor. The members then unanimously elected each of the new members to the executive board. Now Past President BOB COLLARA then handed the gavel over to our new leader for the next two years, EILEEN MYERS.

Passing The Gavel ! Or is Eileen taking it from Bob



Our speaker this evening was **Frank Sienkiewicz** who spoke about the CfA MicroObservatory project. This is a project that incorporates a number of on-line telescopes that are accessible to Middle School students on-line via a standard web browser. The telescopes are 6" F3.6 Maksutovs and are all weather telescopes, as demonstrated by the picture of one of the scopes covered with snow, but still operational. The main CCD imager is a Kodak KAF1401E with 1317x1035 pixels (FOV .926° x .733°) The finder CCD imager is a Kodak KAF040011E with 768x512 pixels (FOV 12° x 9°). There are currently four scopes. One each in Cambridge, Arizona, Hawaii, and Australia. Students may use these scopes in 3 minute time slots by first come first serve request. There are very little restrictions on the object selected and the time of day a student takes a picture, thus allowing for "mistakes" from which they learn. The goal is to eventually upgrade the system to worldwide telescope farms each consisting of 10-15 robotic

scopes. This will provide for much more versatility and accessibility for more students.

Visit the web site and check out some of the good and bad pictures taken by students at:

<http://mo-www.harvard.edu/MicroObservatory/>

Clubhouse Report...

The weather on the last work party was mostly showers so not much was done in installing drip edge and the fiberglass as was planned. So, we decided to further secure the planks on the entry ramp and pre-cut the fiberglass in order to get it ready for when we could install it. But thanks to DAVE PROWTEN, DICK KOOLISH, BRUCE GERHARD, STEVE CLOUGHERTY, JOHN and JEFF SMALL for helping out that day. With the summer here now, expect more impromptu work parties in order to get the observatory structure done before the fall.

Clubhouse Saturday Schedule

July 13	Steve Herzberg	Peter Psyhos
July 20	John Small	Jim Suslowicz
July 27		Work Party #7
July 27	Paul Cicchetti	Dave Prowten
Aug 3	Dan Feldkhun	Eileen Myers
Aug 10	Closed for	Stellafane
Aug 17	Mike Hill	Eric Johansson
Aug 24	Art Swedlow	Gary Walker
Aug 31	Jack Drobot	Henry Hopkinson
Sep 7	Lew Gramer	Jim Suslowicz

Star Party Thank You...

AFTER THREE postponements the town of Harvard Star Party was finally held on June 21. Maybe the fact that it was the solstice made the Sun finally shine and clear away the rain. Eighteen telescopes were set up, and through the course of the evening approximately 200 people wandered from scope to scope over the long soccer field, some never making it to the other end. My neighbor brought her granddaughter, who had first light with her Tasco 900. Using my eyepieces (she didn't know she needed any) she quickly found Venus, and later proudly showed her friends different features on the Moon. Her delight was infectious, and her friends asked many questions. The bright Moon encouraged us to find and split double stars. There were also two scopes with video cameras attached focused on the Moon, allowing greater detail to be discussed and studied. Thank you TOM BERGMAN, JOHN BLOMQUIST, KATHY CUNNINGHAM, JACK DROBOT, STEPHEN and VALERIE INTO, GARY JACOBSON, PETER PSYHOS, DAVE SIEGRIST, DAVE SIMONICH, DAVE SNAY, AL TAKEDA, ANDY WARNER, JOE CARUSO from the Oak Ridge Observatory in Harvard, and five astronomy enthusiasts from Harvard. **-Eileen Myers-**

Treasurer's Report...

FOR THE month of May we had \$189.10 in revenue and \$573.09 in expenses for a net loss of \$383.99 for the month. As of May 31st , 2002 our assets were:

Checking Account - Regular	\$ 12,245.02
Investments	\$ 26,001.67
Total Current Assets	\$ 38,046.69

Of the total, \$2,641.21 is in the Land Fund and \$155.00 is for clubhouse key deposits.

As you can see from the revenues and expenses for the past fiscal year, the membership dues do not cover our costs. Therefore, we are extremely dependent on membership contributions. To avoid future membership dues increases, we need to continue to ask members to donate to the club. So, when filling out your membership renewal, please consider including a bit extra!

-Bernie Volz, Treasurer-

Club Picnic

The June 15 clubhouse picnic was a great success despite the awful rain that day. Around 50 members, family, and friends attended, ate, and had a tour of the Haystack Observatory. Our guide was PHIL SHUTE. He told us that the radio telescope was used to select the site for some of the lunar landings. The concave parabolic shaped antenna and the convex secondary reflects radio signals into the amplifier in a cassegrain configuration. The engineers had attempted to reshape the reflecting surface of the telescope to enable reception at 3mm wavelength but the system suffered from too much loss. The antenna moved extremely quickly and smoothly, in fact one young boy present was allowed to move it! - *Eileen Myers* -

Unaudited summary of expenses and revenues for the 2001-2002 fiscal year.

Revenues

Membership Dues	7,725.00
Checking Interest	60.48
Savings Interest	1,995.01
Sales – Glass	418.00
Sales - Fund Raising	360.00
Sales – Other	450.00
Contributions – Unrestricted	2341.10
Miscellaneous Income	214.00
Club House Donations	348.50
Contributions – Restricted	118.50
Mosquito Magnet	1,079.00
Total Revenues	\$15,109.59

Expenses

Star Fields Newsletter	1514.48
Speakers Dinners, Fees	171.00
Meeting Refreshments	790.06
Misc. Supplies	48.00
Membership Dues	100.00
Clubhouse Telephone	292.69
Clubhouse Oil	295.36
Clubhouse Misc Supplies	313.62
Clubhouse Projects	4,555.29
Observatory	2,525.92
Management & General	63.00
Fund Raising	672.09
State Filing Fees	50.00
Other Expenses	1,188.75
Treasurer's Misc. Expenses	11.11
Secretary's Misc. Expenses	14.25
Membership Sec. Misc. Expenses	24.46
Total Expenses	\$12,630.08
Net Income	\$2,479.51



Paul Cicchetti Cooking up some Sausage and Dogs.



Relaxing before the big crowds showed up

Other pictures of the club picnic and the June 13th Annual Election Meeting can be seen on next page →

Annual Election Meeting



Ex President Bob Collara and Ex Membership Secretary John Small

Do these guys look happy or what ??



New President Eileen Myers and New Club Secretary Michael Hill

Just Elected and Already hard at work

Club Picnic – Heading up to Haystack



New NYC Hayden Space Show...

THE NEXT ATMob bus trip to NYC is being planned for Saturday, October 19. The new Space Show *The Search for Life* premiered in March 2002 and uses scientific data to create dazzling visualizations and animation, many developed for the show, allowing travel through space and time and the witnessing of phenomena as never before. The show features the depths of Earth's oceans, the 3-D experience of walking on the planet Mars using actual imaging data from NASA's Pathfinder mission, Europa encased in an icy crust, stellar nurseries in groundbreaking scientific simulations developed by an astrophysicist, and exoplanets, planets outside our solar system. JACK DROBOT has heard wonderful reviews of the Mars segment of the show.

Although the NYC Urban Park Rangers have scheduled October 19 for their *StarFest* in Sheep's Meadow of Central Park, the Amateur Astronomer's Association of NY has not yet indicated whether they are supporting the event.

This will be our club's third bus trip to NYC. Please contact MARSHA BOWMAN at rmbc2114@email.msn.com or me at starleen@charter.net or 978-456-3937 ASAP if you wish to go this year. We need a minimum of 30 people to keep the bus expense bus down. The cost for the entire trip, including bus, tickets to the museum and show, and dinner historically have been around \$100, and will be due in advance. -Eileen Myers-

Other News . . .

DAVE PROWTEN needs some garage door rails and other assorted garage door hardware to use in the installation of a garage door assembly on the observatory. If you have any garage door rails or other garage door hardware (wheels, springs, clamps, etc) please contact Dave at dprowten@theworld.com or call him at 978-369-1596

EXECUTIVE BOARD Meeting to be held on July 15th at 7:00 pm at the clubhouse. Topics to be discussed:

- This years budget
- A second mosquito magnet
- Re-Joining the Astronomical League
- Observatory operating procedures

ARUNAH HILL Days is set to be held on July 12-14 in Cummington, MA. Although camping is a bit rustic the skies are very dark out in this part of Massachusetts and they have a great site for observing. Go to their web site www.arunah.org and check out the flyer for this years meeting. if you would like to go.

CHANDRA Talks

The MIT Center For Space Research is sponsoring a series of lectures on the result from the Chandra X-Ray Telescope. These will be held at the McNari Building at 70 Vassar St in Cambridge, MA at 7:30 pm on the following dates.

- July 10 "Of the Glamorous Lives of Cool Stars"
- July 31 "The color of X-Rays"
- August 7 "Of Dead Stars and Cosmic Lighthouses"
- August 21 "The Mystery at the Center of Our Galaxy"
- September 4 "Recent Results of the Chandra

Observatory"

ASTONOMY CALENDER 2003

Starting at the July meeting, I have available the 2003 Astronomy Calendar for sale - first-come, first-served. The price will be \$8.00 (regular price is \$12.95). This is a great opportunity to start your Christmas shopping, save some money, and earn some money for the club.

-Bernie Volz -

September Star Fields deadline is SATURDAY, August 31st

Please !! This is a deadline. Earlier entries are greatly appreciated.

**Email articles to
Star Fields Editor / ATMob Secretary
Mike Hill at noatak@aol.com**

I would really like to get some articles from you, the members, to publish in STAR FIELDS. These should be articles about a mirror making technique you've hit upon, a telescope making project you have just completed or a recollection of a memorable observing trip or observing project that you would like to share with the rest of us. Let us know what you have been up to and share with us your talents and ideas.

(Not too long please. Keep it less than 350 words.)

Astronomy Events Calendar 2002...

July 3 - 14	Maine Camping	Baxter State Park
July 12-14	Arunah Hill Days	Cummington MA
August 9-10	Stellafane	Springfield VT
September 6-8	Conn Star Party	Colebrook CT
September 6-8	Conjunction	Northfield MA
September 14	Club Picnic	Clubhouse
October 5	Astro Assembly	North Scituate RI
October 25-26	AAVSO / IDA	Boston MoS

Member survey-What do you like to do ??



Rank your interest in the following topics. Let us know what you like to do or want to do in the areas of Telescope Making and Observing.

Please return to Mike Hill or Bruce Berger in person, via mail, or via email.

	Lowest Highest				
	1	2	3	4	5
Mirror making					
Lens making - Refractors, Correctors					
Telescope building					
Telescope modifications , improvements					
Fabricating telescope accessories					
Naked eye observing					
Constellations					
Meteors					
Satellites					
Binocular observing					
Comet Hunting					
Planetary observing					
Lunar observing					
Solar observing					
Double stars					
Spectroscopy					
Galaxies					
Planetary Nebulae					
Star Clusters					
Variable Stars					
Asteroids					
Photography					
Film					
CCD					
Radio Astronomy					
Armchair Astronomy					
Theoretical Astronomy					
Star Parties					
Public outreach programs					
Archeoastronomy					
Field trips					

Members: Feel Free to fill in the blanks with any other interests.

POSTMASTER NOTE: First Class Postage Mailed July 5, 2002

Amateur Telescope Makers of Boston, Inc.
c/o Peter Psyhos, Membership Secretary
85 Swanton st
Winchester, MA 01890-2039

FIRST CLASS

EXECUTIVE BOARD 2002-2003

PRESIDENT:	Eileen Myers	(978) 456-3937
VICE PRES:	Bruce Berger	(978) 256-9208
SECRETARY:	Michael Hill	(508) 485-0230
MEMBERSHIP:	Peter Psyhos	(781) 721-9609
TREASURER:	Bernie Volz	(508) 881-3614
MEMBERS AT LARGE:	Lew Gramer	
	Dan Feldkhun	(617) 721-4992
PAST PRESIDENTS:		
2001-02	Bob Collara	(781) 275 9482
1998-00	Joseph Rothchild	(617) 964-6626
1996-98	Peter Bealo	(603) 382-7039

COMMITTEES

CLUBHOUSE DIRS:	Paul Cicchetti	(978) 433-9215
	John Reed	(781) 861-8031
	Steven Clougherty	(781) 784-3024
HISTORIAN:	Anna Hillier	(781) 861-8338
OBSERVING:	Steven Clougherty	(781) 784-3024
STAR PARTIES:	We are looking for volunteers to act as a star party coordinator.	

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 July, August...

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

July 8 Moon 1° above Saturn in the dawn sky

July 10 New Moon

July 19 Pluto passes very close to an 11.7 mag star. We will not be able to see the occultation but this is important event to planetary scientists.

Aug 5 Mercury 1° north of Regulus

Aug 13 Persied Meteor shower

Aug 21 Venus at greatest elongation 46° east of the sun

Aug 31 Mercury at greatest elongation 27° east of the sun