

*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. 10 November 2002

This Month's Meeting...

Thursday, November 14th, 2002 at 8:00 PM

**Phillips Auditorium
Harvard-Smithsonian Center for Astrophysics**

This Month's Meeting...

THIS MONTH'S SPEAKER will be club Member-At-Large LEW GRAMER. Growing up in rural Florida, Lew as an adolescent became an active amateur astronomer in 1976, developing a special interest in meteor astronomy in 1978. He found encouragement through the Southern Cross Astronomical Society in Miami (this was long before the Winter Star Parties were started) and had the opportunity to learn meteor observing skills from meteor observing expert Norman W. McLeod III.

Lew moved to Boston in 1983 to attend MIT, and finally returned to amateur astronomy in 1995, joining the North Shore Amateur Astronomy Club in 1996 and the ATMs of Boston and the New Hampshire Astronomical Society in 1997. Lew also reestablished his contacts in the meteor-observing community, joining the North American Meteor Network in early 1996. He soon created that organization's mailing list, which today is known as MeteorObs - an Internet forum for meteor observers of all levels (www.meteorobs.org). Lew is an active member of the International Meteor Organization. He has traveled all over the globe pursuing his science, sometimes even to the clubhouse observing field in Westford.

Lew's talk will be entitled "The Lion's Last Roar: Observing the last Leonid Storm from New England".

Please join our most excellent speaker for dinner at 5:45 PM at the Changsho Restaurant, located at 1712 Mass Ave. in our fair city, Cambridge.

-Eileen Myers-

President's Message...

JUST LIKE your local newspaper, the ATMoB "society page" is starting to list upcoming Fall events and everyone is invited: our well-attended star parties. Personally, I am looking forward to dusting off my 4" Unitron refractor and inviting lines of students to "take a walk on the Moon" or split a double star. Our members guide others through their first glimpses of the night sky through a telescope. Choose two or three favorite night sky objects to show that evening and you're ready to go. I hope you will join us. You will feel great pleasure in the reactions of the participants. If you have always wanted to run a star party for your school or town and want to learn how, we will show you what to do to plan and run it.

Another social event, which I am happy to have organized, was our third annual visit to the Rose Center for Earth and Space and the Hayden Planetarium Space Theatre in NYC. A small band of thirty ATMoB members, family and friends enjoyed an all-too-short visit. During the show the Zeiss projections were so accurate and exquisite that one member of the group who has been an active observer for years commented that he saw stars he had never seen before and would search for them the following evening from his NH observatory. The stellar nursery simulation in the "Are We Alone" Space Show was awe-inspiring. We were delighted that both John Pazmino from the Amateur Astronomers Association and our tour guide Kathy from Pennsylvania could join us again. These two talented guides made the trip even more memorable.

At least seventeen of our members volunteered at the International Dark Sky (IDA) meeting. The local organizer was Mario Motta. We heard from and spoke with lighting designers and engineers, an electric company representative, doctors and luminaire vendors, and learned a great deal about controlling light pollution and the effects of light pollution on humans, wildlife, and vegetation.

Ours is a very active club. I wish to thank everyone who organizes our activities and I urge everyone to join in on the good times. *-Eileen Myers-*



October's Minutes...

Eileen Myers opened the 752nd meeting of the Amateur Telescope Makers of Boston with a short excerpt from the club history archives. She touched on a bit of the history of the 20" telescope that will soon be housed in our new observatory. This was followed by a very interesting talk by Leonard Amburgey who talked about the observation of Near Earth Objects that include three classes of asteroids as well as comets. Of the three classes, one of special significance to Mr. Amburgey are the Apollo class of asteroids which cross the earth's orbit twice as they circle the sun. The special significance is that he discovered one of these himself on June 31st, 2000 which was numbered Asteroid 2000NM. He recounted the story of its discovery and the series of "errors" that led to the fortuitous find. It began with a mistaken selection of targets for the nights observing session that turned out to be below the horizon once it was dark. Upon realizing this, a new set of targets, two instead of the usual five, were selected. Since inclement weather was forecast for the next night, a change in observing plans with a local high school further altered the normal observing regimen that Mr. Amburgey followed. These two factors altered the usual timing of his observing run. When entering the coordinates of one of his targets a slight error in declination caused a misalignment of two CCD images that were to be "blinked" to confirm the location of the target he was trying to acquire. The second of these images had a short streak on it however. A third image, to replace the second one, which he took right away revealed the same streak, in a different location however. What would have been discounted as a cosmic ray strike had the second image been in the correct location now proved to be an unexpected object. He had just discovered an asteroid. Due to its brightness at magnitude 13, he didn't expect it to be a new object but indeed it was and he was the only one to report it – quite a find.

The talk was followed by a short presentation by Mario Motta recounting his latest find. He managed to acquire an optical image of a recent GRB source at magnitude 20.5. This object was determined to be greater than 10 billion light years away. I'd say Mario now has the distinction of having seen the oldest light out of all of us.

The business meeting followed. It was kept pretty short. Standard officers reports were read. John Reed summarized this summer's work session efforts in terms of time. There were a total of 15 work sessions with 70 member days put into working on the clubhouse. A lot of good effort here on the part of those who attended. In addition he noted that there were a total of 360 observer nights spent at the clubhouse this past year. Bob Collara gave a short summary of the mirror making activities at the clubhouse. Currently there are four mirrors being ground and three in the polishing stage. Charlie McDonald expressed continued need for star party coordinators although he already has six lined up. Bruce Berger presented a new T-Shirt logo for inspection and brought up the possibility for a planned trip to Bolivia to the "Southern Star Party" in the summer of 2004. Gary Jacobsen put in a request for \$120 to send members of the Westford Planning Committee to the

October IDA meeting in Cambridge as they are expressing interest in forming a lighting ordinance. This was approved by the members. The meeting concluded with a set of very nice pictures of observatories in Ireland taken by Ken Launie and Dick Koolish.-*Michael Hill*

Membership Report

This month we welcome new members FRANK YULLING of Cambridge, MA, JUDITH A. TAVANO of Chelmsford, MA, MIHAI ALBU of Westford, MA, NICHOLAS GOULAS of Lowell, MA, and WILLIAM R. (Rob) JOHNSON of Ashland, MA.

Clubhouse Report...

Because of the NY trip to the Rose Center, not many people showed for the last work party. Some work was done on restoration of the Schuman mount as was some brush cutting to the west of the clubhouse. Also, a "temporary" Plexiglas window was installed to replace the broken second floor hall window that has rotted away.

Clubhouse Saturday Schedule

November 16	Dan Feldkhun	John Small
November 23	Eric Johansson	Eileen Myers
November 30	Rick Burrier	Henry Hopkinson
December 7	Jack Drobot	Lew Gramer

Treasurer's Report...

For the month of August, we had \$2,090.72 in revenue and \$793.19 in expenses for a net income of \$1,297.53 for the month.

As of September 30th, 2002 our assets were:

Checking Account - Regular	\$ 17,693.22
Investments	\$ 26,704.36
Total Current Assets	\$ 44,397.58

Of this \$43,078.90, \$2,804.31 is in the Land Fund and \$155.00 is for clubhouse key deposits.

-*Bernie Volz, Treasure*

Mirror Making At the Clubhouse

(Many thanks to Bruce Berger for the pictures)

Thursday Night mirror making sessions are certainly getting popular these days. The parking area is always full, the clubhouse is hopping and the mirror kits are just flying off the shelves. Bob can't keep up! This is great. We are, after all, the Amateur Telescope MAKERS of Boston. It's good to see that making telescopes and especially the optics is generating such interest among newcomers. We have a new batch of mirror makers just starting out on the wonderful journey of crafting a slab of roughed out glass into a finely figured paraboloid. A journey they will not soon forget. The first to get his mirror going was JOHN DUNLEAVY. John's mirror is an 8" F/7.



KEN KENYON is also working on an 8" F/7 mirror. Ken started his mirror then stopped for a while but we didn't lose him. He is now back into the grind and happily so.



GARY WESTON is making a 6" F5.5 Mirror. He is a new member from Gardner MA and works closer to the clubhouse than he lives so he comes up to work on his mirror directly from work. Work being computer related, the mirror making makes for good therapy after one of those frustrating days where computers will be computers.



What does it take to make a mirror ??

- A glass blank - 6", 8" 10" or up ...
- A glass tool to grind on
- Grits:
 - #80, #120, #220, #320
 - #400, #600, #800
- Polishing pitch
- Polishing compound
- A place to work (the clubhouse)
- Time (take as much or as little as you like)
- A little help from Bob and Ed

SERGIO SIMUNOVIC is making an 8" F/6 mirror. He is currently in the early stages that have him grinding the "back" of the mirror. This is a task that is very important but sometimes a drag to get through since one wants to start with the real work of making the curved optical surface. It really is an important step and one that is much appreciated later on when fine grinding and polishing begins.



DAVE SIEGRIST, having had such a good time making his 8" mirror has now embarked on a hefty 12" mirror. I'm not sure of the F/ ratio but I know he has spent a lot of time in rough grinding. Dave is becoming a specialist in using ceramic tools. He'll be making this one for a while but he has a lot of patience and is constantly moving forward.

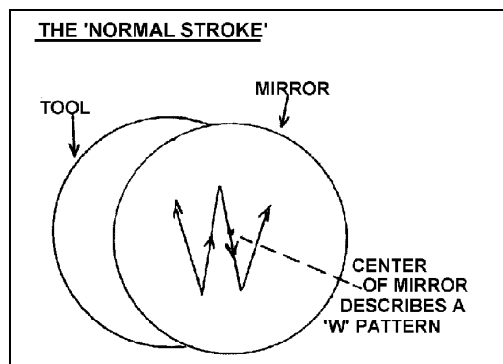


Of course we still have a few "old timers" in the polishing room trying to finish up the final task of polishing and figuring. EILEEN MYERS is working on her 8" mirror and is getting very close. MIKE SCHEXNAYDRE is also finishing up his 8" mirror but has gotten sidetracked a bit with a new project building a small 3" telescope. We don't want to have too few projects going at once you know. PAUL SOUNTSOV is also finishing up his 8" mirror. He has been working very diligently and should be getting close now.

Good luck to all of you and those that follow. Once we get some parabolas under our belts how about some different types of optics. BRUCE BERGER is thinking of making a Dall Kirkham. That would be great. I myself would like to build one of these too. I just don't have the time. Hey, I still haven't made a scope for the 10" F/5 mirror I finished last year. -Michael Hill-



Head down, Feet apart, hands on top of the tool - and back and forth and back and forth . . .



The T-Shirts Are In !

After years of delay caused by the Y2K dilemma, changes in administration, the September 11th terror attack, building a telescope and a honey-do list a mile long, the first order of the 2003 ATMob tee-shirts are expected in and will be for sale at the November meeting. The shirts are yellow, with an updated ATMob logo blazoned in blue across the front.



The \$8.00 shirts are 1st quality Hanes Beefy T, and are available sized in Medium, Large Extra Large and 2X. They are available at cost plus \$1.00, and all profits go to the club.

Plans are to make additional items like embroidered hats, golf shirts and sweatshirts available, if the demand is there.

Bruce Berger

STAR PARTIES

Marlborough Middle School

November 13 @ 6:00pm - No rain date

This has always had a good turnout with 200+ children. If you live in the area, we could use your help. For more information contact Steve Sargent at sargecs222@aol.com or call (508) 485-0741

STAR PARTY Thanks

Charlie McDonald would like to thank BOB COHEN and ED LOS for helping out at the star party in Peabody at the West Peabody Branch Library. There were about 50 people in attendance. Unfortunately the skies did not cooperate as it was from 90 – 95% cloudy that night. This was no problem though as the attendees were treated to telescope demos inside and some basic observational demos outside. Through collaboration with Astronomy Magazine Charlie managed to have a free subscription donated to the library.

Astronomy Events Calendar 2002...

Nov 12	Authors Night "The Northern Lights" Lucy Jago	Harvard Smithsonian CFA, Cambridge 7:30pm
Nov 15	"Space Based Research for Exoplanets" – Marc J. Kuchner	Museum of Science 6:00pm
Nov 21	CFa Monthly Lecture Charelle Lada "Baby Suns"	Harvard Smithsonian CFA, Cambridge 7:30pm
Nov 22	"Search for Life on Mars" Andrew Knoll	Museum of Science 6:00 pm
Nov 29	"Extrasolar Planets" Rafael Millan-Gabet	Museum of Science 6:00pm

Wanted: Regional Star Party Coordinators

CHARLIE MCDONALD is looking for volunteers to act as **Regional Star Party Coordinators**. There is a minimal amount of effort required to do this so don't be scared away by the fancy title. We have had some interest already but need a few more persons interested in fostering our primary public outreach activity.

Contact Charlie for details at: (781) 944-6140.

December *Star Fields* deadline is SATURDAY, November 30th

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

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

POSTMASTER NOTE: First Class Postage Mailed November 8th, 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	(781) 396-7822
	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:	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 Standard Time (EST) from Universal Time (UT) subtract 5 from UT.

Nov 12	Northern Taurid Meteor shower
Nov 18-19	Leonid Meteor Shower Peaks at 0400ut and 1040ut (19 th)
Nov 19	Full moon – Penumbral Lunar Eclipse
Dec 4	New moon (its dark again!)
Dec 6	Venus & Mars 1.6° apart
Dec 7	Earliest sunset for 40° Latitude (Pearl Harbor Day)