



**STAR
FIELDS**

NEWSLETTER OF THE AMATEUR
TELESCOPE MAKERS OF BOSTON

Vol. 5, No. 3 March 1994

Our March Meeting...

Thursday, March 10, 1994
Phillips Auditorium, Harvard-Smithsonian
Center for Astrophysics

SHOW & TELL is scheduled for this month's meeting.
The following presentations are scheduled:

Mike Mattei and Eric Johansson will announce the observing seminars they'll be holding at the clubhouse on the Shoemaker-Levy Comet impact on Jupiter.

Kevin McCarthy will describe desktop polishing.

Dick Koolish will present information on the May 10th Annular Eclipse. And more ...

Please join us at a pre-meeting dinner at the Changsho Restaurant, 1712 Mass. Avenue, Cambridge. Please meet at the restaurant by 6:00 pm.

February Meeting Highlights...

Ed Dougherty gave the observing committee report and said he needed one more volunteer for the committee. Ed also said an astrophotography class will be held this April or May.

Bernie Volz reported that at the last NELPAG meeting, a strategy was put in place to get the Massachusetts State Legislature to pass a dark sky bill that would require state funded projects to have reduced and more cost effective lighting. Most towns follow the State's lead in such matters and NELPAG expects them to do the same with the dark sky bill.

Mario Motta updated the membership on the mirror making projects at the Lynnfield Middle School. Sixteen students and one adult are in the rough grinding stage. Three mirrors have curves generated already. The project is part of the "Partnership in Astronomy" program.

Gary Walker invited the ATMob membership to his New Hampshire observing site to view the May 10, 1994 annular solar eclipse.

Phil Rounseville said he will hold three optic classes at the clubhouse and has asked anyone interested in attending them to contact him.

President's Message...

We are asking, as required by the ATMob Bylaws, for the membership to approve raising the membership dues to \$25. The Executive Board feels that this increase is necessary for the continued financial health of the club. Over that past few years, we have continued to increase our expenses faster than our revenues. In addition, many of the revenue generating activities that the club has done in the past no longer occur.

Last year, we had fairly good success with asking members to contribute voluntarily this resulting in a \$1000 increase in the average level of voluntarily contributions from past years. However, this is still not sufficient to offset our expenses at the present dues rate.

In the past year, we've spent approximately \$8000 while having only \$7200 in revenue. Based on our best estimates at this time, we'll have about the same level of expenses this coming year. With an estimated 275 members paying \$25 each, we'll take in about \$6875 in dues. We hope to increase our additional sources of revenue, such as contributions and mirror making supply sales, as well.

The Executive Board would also like to offer students and senior citizens the option of paying only 50% of the normal dues (\$12.50).

Executive Board Meeting...

AN EXECUTIVE Board meeting was held at Mario Motta's house on Sunday February 13th. Present were Bernie Volz, Mario Motta, Steve Beckwith, John Samolyk, Anna Hillier, Marion Hochuli, Gary Walker, and visitors Ed Dougherty and Dick Koolish. The following decisions were reached:

It was voted to have Dick Koolish fill in for the remainder of the year for past President David Aucoin. David has failed to renew his membership and therefore can not serve on the Executive Board. Should David not renew his membership by June, we will fill his past President position with a third member-at-large as called for in the Bylaws.

We are pleased to have Dick Koolish on the Executive Board once again.

It was voted to raise the membership dues to \$25.00 (student membership at \$12.50). Also, it was voted to allow senior citizen members to pay at the 50% rate (\$12.50) if they so desire.

The \$25 dues is required to continue to assure the financial health of the club. We have had increased expenses over the past several years and have had reduced auxiliary revenues. Presently, our only major source of revenue is membership dues and contributions.

Telescope Loaner Program

THE CLUB has several loaner telescopes available for members! The telescopes come with eyepieces and a hands-on instruction session, if requested. Please contact Ed Dougherty to take advantage of this great offer. A \$5 donation to the club (for upkeep of the scopes) is suggested.

Note: The membership will be asked to approve these membership dues rates at the March meeting as required by the Bylaws.

Ed Dougherty, on behalf of the Clubhouse/Observing Committee, requested and had approved expenditures as follows:

- \$150 for an air compressor for the evaporator.
- \$225 to complete the polishing room, repair the bulkhead, and purchase grass seeds.

Anna Hillier has agreed to be the Club Historian. Thanks Anna!

Anyone that has any historical information (especially photographs) on the ATMobS is kindly asked to forward a copy to Anna Hillier.

The Executive Board feels that it is important to recognize significant contributions to the club by a few of its members. It was decided that a procedure (still to be determined) will be put in place to review nominations made by the general membership. A plaque will be placed in the clubhouse and members names and their contributions will be placed on that plaque. The names of honorary members will also be added to the plaque.

You are asked to submit the name(s) of those members you feel have made significant contributions to the club over the past several years, with a brief description of the contributions, to Anna Hillier as soon as possible.

Eclipse Trip...

We are considering a club sponsored trip for the February 26, 1998 eclipse. We'd most likely view the eclipse from the island of Aruba (totality lasts 2:50 at Oranjestad, Aruba), with an extension to Bonaire. Since the eclipse happens in February, this is an excellent opportunity to view the eclipse and get away from the cold New England weather. The trip would be run to generate a profit for the club.

To avoid many of the complaints and hassles that occurred with the July '91 eclipse trip:

- A \$300 deposit will be required. This deposit is refundable only up to a certain date, subject to a \$50 nonrefundable administrative fee. Therefore, think carefully before submitting a deposit.

- The books on the trip will be open. In other words, you'll see exactly why a cost increase is happening when it

happens. With the long lead time and the expected price gouging, we can not guarantee any prices. Expect price increases from any prices we'll be giving in the future.

- The trip will be open to anyone, although preference is given to ATMobS members initially. ATMobS members will NOT receive a discounted price (since this again caused lots of problems with the July '91 eclipse trip).

It is still too early for us to accept deposits, however we would like feedback from the membership as to whether:

- The ATMobS should sponsor the trip and
- The level of membership interest in the trip.

We will have some additional details at the March meeting.

ATMoB Activities...

VOLUNTEERS ARE needed for a Monday, April 4th star party at the Lynnfield Middle School. A sign up sheet will be at this month's meeting or contact Mario Motta (617-334-3648) if you'd like to lend a hand. A cloud/rain date is set for Thursday, April 7th.

ASTRONOMY DAY, Saturday, April 16th. Please plan to help out during this year's Astronomy Day activities at the Boston Museum of Science. We need speakers, members to man the club's booth during the day, and to help out with star party in the evening. Contact John Reed for more details (617-861-8031).

THE ROCKPORT Elementary School second graders were treated to a slide show by Peter Bealo, Tai Mentall and Bob Collara after their February 14th star party was clouded out. Two hundred students and parents were treated to astronomical talks and views of both lunar and solar eclipses and in what was considered by all, a successful evening in spite of the cloudy night. Special thanks to event coordinator, Pete and volunteers Tai and Bob.

Keep Looking Up...

CHANGES IN Jupiter's South Equatorial Belt (SEB) are taking place. Turbulence in the SEB is spilling into and narrowing the South Tropical Zone (STZ). In addition, the Great Red Spot has moved in longitude. Jupiter rises around midnight this month and is well placed in the Southeast a few hours before dawn. Now is a good time to break out the filters, cameras, etc. and practice your observing techniques in preparation for July's comet Shoemaker-Levy/Jupiter collision.

Announcements...

HAVE YOU viewed all the Messier objects? Oh, well have you viewed them all in one evening? You haven't?

Well then, dump the kids on the spouse, pack up your gear, and head to the clubhouse Friday, March 11th (March 12th cloud date) for a dusk till dawn, "Messier Marathon".

March is the time of year when all 110 Messier objects are positioned for viewing in one evening session (See March, '94 *Astronomy* magazine for details). Plan to arrive early and stay late. If you've any questions, contact marathon race director Steve Mock (617-625-5870).

RADIO CONTACT was made last month by ATMob members and HAM radio operators, Pete Bealo and Tony Costanza with the Discovery space shuttle (Pete) and the Mir space station (Tony).

WANTED, APPROXIMATELY ten people to participate in the building, owning and sharing of a CCD camera. The release of the Willmann-Bell book and the University Optics kit has made this project possible. Cost (thirty to forty dollars per person) and labor in building the CCD will be shared among the participants. The cost of one person purchasing a kit would be between four hundred and six hundred dollars on top of labor, computer and other miscellaneous parts.

Our plan is to purchase on the parts we would have difficulty fabricating from University Optics and effect a considerable cost savings and improved functionality by doing all the machine work and designing and building many parts of the kit we feel are of marginal or poor design. Our finished product will be similar to the best SBIG ST-6 or Lynx design.

Those interested in a group build of the camera should contact Henry Hopkinson, 31 English Road Derry, NH 03038 (603-432-2490), or add your name to a sign up list posted in the clubhouse.

A kickoff meeting is scheduled for March 12, 7:00PM at the clubhouse. This is a continuation of the original club project to build a CCD camera that was initiated and put on hold over a year ago. It is separate from a parallel plan announced by Bernie Volz at last month's meeting.

- Ed Dougherty

THE ASTRONOMICAL Society of Greater Hartford is looking for slides and films of Walter Scott Houston to use in a tribute to him at this year's STARCONN '94. Anyone with these items are requested to contact Suzanne Marinan (203-871-1277).

ATMoB CCD Workshop...

WE ARE forming a workshop for members interested in building one of the two CCD cameras to be described in Richard Berry's forthcoming book. By working together, we can get the camera parts more efficiently, maybe save a little money, and certainly guarantee success. I have built from scratch, a 192x165 pixel unit described by Kanto (one of Berry's co-authors) in *Telescope Making* #48 and it

works fine. Kanto supplied me with the necessary software which I then modified to make it more user friendly.

Both Ed Dougherty and I (and maybe others) have the electronic experience and necessary test equipment that can be used to troubleshoot problems if they arise. Depending on which unit they want to build (192x165 or 378x242 pixels), workshop members should be willing to spend an estimated \$200 to \$350. They must also have a computer and be willing to spend several hours in group assembly of the cameras. Assembly will take place at the clubhouse or one of our homes.

If you are interested in joining this workshop, sign up (a few members already have) at the next meeting or call me at 617-566-5127.

- Ted Poulos

Clubhouse News...

A FEW dozen empty and clean baby food jars are needed for holding grit in the mirror kits we are selling. Three or four dozen empty thread spools are also needed for use as pull handles on cabinet drawers at the clubhouse. Please contact John Reed (617-861-8031) if you'd like to donate these items to the club.

CLUBHOUSE SCHEDULE

- March 5: Fill, Suslowicz, Johansson, Swedlow
- March 12: Burrier, Budreau, Hopkinson, Clougherty
- March 19: Milon, Walker Volz, Rounseville
- March 25: Suslowicz, Ledford, Chase, Heller
- April 2: Green, Cichetti, Reed, Johansson
- April 9: Fill, Clougherty, Beckley, Bruckner

Spring and Summer Events...

ASTRONOMY DAY. Saturday, April 16, Boston Museum of Science.

NORTHEAST ASTRONOMY Forum. Saturday, April 16, Holiday Inn (Exit 14B, NY Thruway), Suffern, NY. This third annual event is hosted by The Rockland Astronomy Club and will feature: speakers, door prizes, exhibits and a star party at Lake Sebago, Harriman State Park. For information contact Don Urban (201-768-6575).

STARCONN '94. Saturday, April 23, Wesleyan University, Middletown CT. This one-day event begins at 9:00AM and is hosted by The Astronomical Society of Greater Hartford and will feature amateur astronomy evangelist, John Dobson, as this year's key note speaker. Other events include: exhibitors, vendors, swap tables and a star party. For more information, write: STARCONN '94, P.O. Box 2271, Hartford CT. 06145.

BERMUDA '94 Astronomy Cruise. August 28 - September 4. A seven-night cruise featuring three days in

Bermuda and hosted by the Rockland Astronomy Club. Fares are as low as \$895. Interested parties should contact Bob Slone (212-741-3300, days) for more information.

APRIL STAR FIELDS DEADLINE

March 25th, is the deadline for items to be included in the March issue of *Star Fields*. Mail or phone your contributions to: Steve Beckwith, 195 Wilder Road, Bolton MA. 01740 508-779-5227

Coming Events...

Mar. 11 VARIABLE STAR OBSERVING evening, 7:30 PM - 8:30 PM at the clubhouse.

Mar. 11 MESSIER MARATHON dusk till dawn at the clubhouse (March 12 cloud date).

Mar. 17 CFA MONTHLY OBSERVING NIGHTS. "Microlenses to MACHOs: "Weighing the Universe" by Rudolph Schild, CFA 8:00PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. Call 617-495-7461 for additional information..

April 4 STAR PARTY at the Lynnfield Middle School. Mario Motta 617-334-3648.

EXECUTIVE BOARD 1993-94

PRESIDENT:	Bernard Volz	508-881-3614
VICE PRESIDENT:	Mario Motta	617-334-3648
SECRETARY:	Steve Beckwith	508-779-5227
MEMBERSHIP:	John Samolyk	617-391-9290
TREASURER:	Anthony Costanza	508-521-5382
MEMBERS AT LARGE:	Peter Bealo	603-382-7039
	Anna Hillier	617-861-8338
	Dick Koolish	617-646-6086

PAST PRESIDENTS: 1990-92 Marion Hochuli 617-334-3648
1987-89 Gary Walker

COMMITTEES

OBSERVING: Edward Dougherty 508-458-8857

How to Find Us...

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

CLUBHOUSE: The Tom Britton Clubhouse is open every Saturday from mid-afternoon 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 Observing at the Groton town line. Proceed to the farm house on the left side of the road. Since clubhouse attendance varies with the weather, it is wise to call in advance: 508-692-8708.

Amateur Telescope Makers of Boston

FIRST CLASS