



**STAR
FIELDS**

BOSTON

NEWSLETTER OF THE AMATEUR
TELESCOPE MAKERS OF BOSTON

Vol. 5, No. 2 February 1994

Our February Meeting...

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

THIS MONTH'S topic, "The Sun and Solar Eclipses", will be presented by Dr. Jay M. Pasachoff, who is preparing for his 20th eclipse expedition. He will describe some of his past expeditions and how solar physicists use observations from the ground and from space to study the sun. Pasachoff will detail the May 10, 1994 annular eclipse that will be visible near Boston and the November 3, 1994 eclipse in South America.

Dr. Pasachoff is on sabbatical leave at the Harvard-Observatory Center for Astrophysics from Williams College. He is the author of the Peterson Field Guide to the Stars and Planets (with Donald H. Menzel listed as co-author) and of the Cambridge Guide to Eclipse Photography (with Michael Covington as co-author). Pasachoff is Chair of the Working Group of Eclipses of the International Astronomical Union. He has described two of his eclipse expeditions in National Geographic.

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

January Meeting Highlights...

DANIEL GREEN, last month's guest speaker, described his search for a fireball seen over New England skies last summer.

Bernie Volz noted that April 16th is Astronomy Day and the club will once again have an exhibit at the Boston Museum of Science. Bernie suggested the club have a new banner for the event and said there will be a need for volunteers and speakers. In addition, the museum will host an astronomy event and star party on May 20th and is requesting volunteers from the ATMoB membership.

It was announced that next month's meeting will be a Show & Tell by ATMoB members (see the announcements for details).

President's Message...

AT OUR annual meeting in June, next year's ATMoB officers will be elected. Any club member interested in any officer position is encouraged to contact me (or, you can wait to notify the nominating committee to be elected in April). Please consider being an officer - the club needs you and you can do a lot to shape the future of the club.

A show & tell meeting is scheduled for March. Anyone wishing to present something at the meeting should contact me (Bernie Volz) as soon as possible. I would like three to five presentations. -depending on length- for the meeting..

This is your opportunity to talk about your interests in amateur astronomy, any special projects you've been working on, show recent astrophotographs you've taken, or just present some information to the club membership.

As an example of a presentation, Mike Mattei and Eric Johanson will discuss the comet impact on Jupiter this July and observing projects the club might undertake.

ATMoB Product Reviews...

LUMICON 1.25" Helical Focuser. ATMoB member Bryan Stone reviewed this accessory for *Star Fields* and describes the product as a direct replacement for the lower quality focusers found on Odyssey telescopes. The focuser is designed with screw holes that align with the original focuser's mounting holes on the telescope tube. Once installed, the focuser's smooth motion comfortably handled up to the largest eyepiece (32mm Plossel). The product is listed at \$59.50 from Lmicron and is highly recommended to Odyssey owners looking to upgrade their current focuser.

- Bryan Stone

MURMURS OF Earth, the voyager interstellar record CD ROM package was reviewed by member Anna Hillier. In 1977, the Voyager spacecraft was launched on its mission to the outer gas giants and eventually, to the stars. A record inscribed with music, images and sounds went with the spacecraft. This record is now available in a two CD-ROM set.

The entire Murmurs of Earth package contains a 300-page book, an 8-page voyager gallery and the two CD-ROMS.

The CD-ROMS are not interactive and only support images and sound. One CD-ROM contains the audio portions (music and greetings) and can be played on any CD player. The book may be the best part of the package as it describes the creation of the record itself.

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.

Murmurs of Earth cost \$39.00 and can be purchased from CompUSA or Computer City.

- Anna Hillier

Star Fields is looking for member reviews of commercially available telescopes and accessories. If you have new equipment, how about letting members know how well it works by writing about it in *Star Fields*? Mail your articles or send them via modem to me.

- Steve Beckwith

Keep Looking Up...

JUPITER rises at 1:00AM 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.

NOVA CASS 1993 is fading and was at magnitude 8 at the end of January. It can be found at the following coordinates: R.A. 23^h41.8^m, DEC +57^p31^m.

FEBRUARY 21 Lunar Occultation of χ^1 and χ^2 Orion at 2:08 (UT) and 6:51 (UT) respectively.

MERCURY RETURNS to the Southwest evening sky this month.

Keeping Warm...

THIS WINTER'S frigid weather won't be ending soon and while most of you hearty New Englanders know how to dress for these temperatures, here's a few extra tips that might help keep you warmer while at the eyepiece.

Keep your head covered to keep your feet warm. Your head acts like a radiator and shunts away over fifty percent of the body's heat when left exposed to the air.

We all know about dressing in layers, but make that first layer polypropylene underwear. It's warm, lightweight and it wicks moisture away from the body.

What you put into your body is just as important as what you put on it. Eat a meal high in complex carbohydrates (pasta, rice, pizza, potatoes etc.) before observing.

Your body will convert this type of food to energy (ergo heat) more readily than proteins (meat) or fat. In addition, cut back on coffee when observing. The high amount of caffeine in coffee shrinks capillaries, restricting blood flow to the extremities. Try hot chocolate during your observing sessions. It has less caffeine than coffee and gives a short energy (heat) boost from the sugar. When taking that hot chocolate break, keep your body fueled with a snack. You'll be surprised how much of that big dinner you had earlier was burned when you were standing at the eyepiece. And don't stand at that eyepiece for long stretches. We have a tendency to concentrate on our observing for long periods, not noticing the passage of time or the frigid surroundings. Make it a point to step into a warm house or car at regular intervals. If havens such as these are not available, jump around, exercise and crank up your body's energy output.

Here's some final thoughts: don't wait until you're cold to put on the appropriate clothes, it's easier to stay warm than it is to get warm.

- Steve Beckwith

Announcements...

BEST WISHES from the ATMoB membership to Dave Emerson convalescing at the UMASS Medical Center, 55 Lake Ave., Worcester, MA 01655.

FOR THOSE who ordered the 1994 Observer's Handbook, please pick them up at the February Meeting.

CONGRATULATIONS AND best of luck to Tal Mentall in his new job as Editorial Assistant on *Sky & Telescope's* staff.

ATMoB PROMOTION brochure. Members are reminded we publish a four-page, ATMoB promotional and astronomical resource brochure. It contains information about our club, a membership application, plus other information on institutions offering public observing and sources for astronomical books, magazines, optical supplies and telescopes. Make certain that any friend or colleague interested in astronomy gets a copy of this brochure. Call the club president or secretary and ask that a copy be sent to the individual if you cannot deliver it yourself. Brochures are available at the clubhouse and our monthly meetings.

-Ted Poulos

ASTRONOMY DAY volunteers are needed for this year's April 16th event at the Boston Museum of Science. We need speakers and members to man the club's booth during the day and to assist in the evening star party. Contact John Reed (617-861-8031), if you would like to lend a hand.

AN EXECUTIVE Board meeting will be held Sunday, February 13th at 7:30PM at Mario Motta's house in Lynnfield, MA. All Executive Board members must attend.

If any member has any issues to be discussed at the board meeting, please contact Bernie Volz.

THE ANNUAL Baxter State Park trip is being coordinated by Tony Badessa. Members interested in attending this summer's camping trip to Maine for observing and hiking should see Tony at this month's meeting to reserve your spot.

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).

SPEEDY RECOVERY to member John Reed convalescing from a broken leg suffered after slipping on ice last month. John can be reached at his Lexington, MA home.

MONTHLY BREAK dancing classes taught by John Reed are postponed until further notice.

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...

ED DOUGHERTY reports that January's inclement weather prevented much work from being accomplished at the clubhouse. However, the bell jar hoist of the evaporator

is now operational and the cabinets donated by Dennis DiCicco are being installed.

The Clubhouse/Observing Committee is working on some special programs to be offered over the next year. These include:

Astrophotography Classes. Two classes are planned Ed Dougherty will repeat his class from last year and another will focus on wide-angle and piggyback astrophotography.

CCD Cameras. This will be a workshop to build and use a CCD camera based on Richard Berry's upcoming book. For more details on the camera, see Ted Poulos's article in this issue of *Star Fields*.

Basic Optics. Phil Rounesville will discuss the basics of telescope optics.

Observing Programs. These include a Messier Marathon, Lunar and Planetary observing (especially with regard to the comet impact on Jupiter this July), monthly programs, a solar observing session, and more. Steve Mock, Mike Mattei, Paul Cichetti, Eric Johanson, and Ed Dougherty are working to provide these.

Watch future issues of *Star Fields* for more details on these various programs. If you'd like to help out or would like to offer other programs, please contact Ed Dougherty.

CLUBHOUSE SCHEDULE

February 5: Swedlow, Heller, Fill, Bruckner
February 12: Burrier, Hopkinson, Ledford, Budreau
February 19: Mock, Green, Milon, Dougherty
February 26: Reed, Cichetti, Chase, Walker
March 5: Fill, Suslowicz, Johanson, Swedlow
March 12: Burrier, Budreau, Hopkinson, Clougherty

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.

MARCH STAR FIELDS DEADLINE

February 26th, 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...

Feb. 11 VARIABLE STAR OBSERVING evening, 7:00 PM - 8:00 PM at the clubhouse.

Feb. 17 CFA MONTHLY OBSERVING NIGHTS. "Chaos in the Solar System" by Myron Lecar. CFA. 8:00PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. Call 617-495-7461 for additional information.

EXECUTIVE BOARD 1993-94

PRESIDENT: Bernard Volz 508-881-3614
VICE PRESIDENT: Mario Motta 617-334-3648
SECRETARY: Steve Beckwith 508-779-5227
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Anna Hillier 617-861-8338

PAST PRESIDENTS: 1990-92 Marion Hochuli
1989-90 David Aucoin
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