



**STAR
FIELDS**

NEWSLETTER OF THE AMATEUR
TELESCOPE MAKERS OF BOSTON

Vol. 4, No. 9 October 1993

Our October Meeting...

Thursday, October 14, 1993
Phillips Auditorium, Harvard-Smithsonian
Center for Astrophysics

THE MYSTERIES of Stellar Genesis is the topic of this month's speaker, Dr. Charles Lada.

Understanding the formation of stars is one of the greatest challenges of modern astrophysics. Only in the last 20 years have astronomers acquired the observational capabilities to begin to attack this problem. Dr. Lada will review the progress made in the study of stellar and planetary formation. He is a senior astrophysicist at the Harvard-Smithsonian Center for Astrophysics, specializing in star-formation research.

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

September Meeting Highlights...

APPROXIMATELY THIRTY-FIVE members turned out for last month's meeting. Ed Dougherty gave the membership, treasure and observing committee reports. One hundred fifty-four members have renewed their memberships as of the September meeting. Contributions during the renewal period have totaled \$1100. Ed said the summer skies at the club house have been spectacular and the astrophotography class was a huge success.

Eric Johansson brought to the club's attention a new source of light pollution from a proposed WalMart store on Rt. 110 in Westford. Eric volunteered to approach the Westford zoning board to educate them on the benefits of shielded lighting. (Editor's note: Shortly after the September meeting, WalMart Corp. decided against building a store in Westford).

Gary Walker reported on the Perseid meteor activity seen from his New Hampshire observing sight and editorialized on Mario "I almost hit a Moose" Motta's decision to leave that area in a vain search for clearer skies...

Mario showed the members a one hundred pound fork arm from the mount for his thirty-two inch telescope.

Dr. Owen Gingerich, the evening's guest speaker, gave an interesting talk on his experiences tracing the ownership history of first and second edition copies of Nicholas Copernicus' book, "De Revolutionibus".

Thanks to Mario and Joyce Motta for providing the September refreshments.

Telescope Making Report...

I'VE COMPLETED the grinding for my twenty-seven inch, Zerodur, Dall-Kirkham compound telescope.

The machine, of a modified Strasbaugh design, also doubles as a tilting test-stand and the future telescope's principal structural element and declination bearings.

The $f/3.5$ curve of the full thickness primary has been diamond generated and the rear blank has been fine ground and polished. Given the twenty-five year lapse since my last mirror and the rather hard nature of Zerodur, working the rear has been valuable practice. Besides, the stuff just looks to good to be unpolished!

The next step is to flip the two hundred pound blank over and start work with three hundred twenty grit on the future ellipsoid.

Anyone interested in checking out the operation can give me a holler at 603-382-7121.

-- Kevin McCarthy

Executive Board Meeting Minutes...

AN EXECUTIVE Board meeting was held on Tuesday, September 14th. Present at the meeting were: Bernie Volz, Mario Motta, Tony Costanzo, Peter Bealo, Anna Hillier, Marion Hochuli, and Gary Walker. Ed Dougherty also attended the meeting. The following is a meeting summary.

The Executive Board members will again handle refreshments at this year's meetings.

The club will send a letter to WalMart and the Town of Westford regarding light pollution. We'll also suggest Westford consider a lighting ordinance.

The following budget items submitted by Ed Dougherty for the clubhouse/observatory were approved: \$1270 for the clubhouse (includes heating oil, supplies, telephone, and some capital improvements) and \$200 for the 16" telescope and structure.

The club will continue our membership in the Astronomical League and renew the liability insurance offered through the league.

The financial state of the club was discussed; our expenses continue to exceed our income. Incoming generating ideas are welcome!

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 on the scopes) is suggested.

Astro Bargains

THE 1994 OBSERVER'S Handbook from the Royal Astronomical Society of Canada is available through the club!

This valuable resource cost \$12.00 per copy (that's a \$4.00 savings over the retail price). The book should be available by the December meeting. To reserve your copy, please send a \$12.00 check, made out to the ATMob, to Bernie Volz,

73 Sudbury Rd, Ashland, MA 01721, or pay Bernie at the October meeting.

THE CLUB will be placing an order with Hansen Publications for calendars, posters, slides, and more. Because of the large number of items available, you'll need to be at the October meeting to place your order (please pay by check, made out to the ATMob). Order blanks and a flyer on the available items will be available at the October meeting. This is a great opportunity to start your Christmas shopping!

Because the club can order at wholesale, we will make the items available at a discount to members. Most items will cost you 75% of the retail price - so, you'll save 25% while raising some much needed income for the club.

Membership Renewals...

IF YOU haven't renewed your membership, please do so NOW. See the June issue of Star Fields for the membership renewal form, or, contact membership secretary, John Samolyk at 617-881-3614.

ATMoB Activities...

DONATIONS RECEIVED: Bernie Volz donated a gas grill and John Reed a shop vacuum cleaner. We now have two vacuum cleaners, to keep the clubhouse clean! Please clean up after yourself.

ATMoB PICNIC Report - Saturday, September 18th. A small crowd of about 35 people attended the ATMob picnic. Everyone enjoyed themselves and the food. It would have been nice to have seen more of you!

A BIT more work was done on the clubhouse. Thanks to Eric Johansson and Al (unknown) for working on the glass room, Jim Suslowicz for starting to organize the library, and Paul Cicchetti and John Reed for their continued work on the evaporator room.

CLUBHOUSE WORKDAY - Saturday, September 25th. Thanks to Paul Cicchetti, Ed Dougherty, Anna Hillier, Bernie Volz, Steve Claurity, Fritz Ledford, and Gary Walker for helping out at the clubhouse. We painted the porch, above the porch, and the barn doors. A few other odds and ends were done.

PLEASE NOTE that the Pepsi and other drinks in the clubhouse refrigerator are not FREE! In order to continue to make these available to the membership, we need your cooperation in paying for these items. The prices are posted on the refrigerator. Please place your deposit in the "refreshments donation" coffee can.

STARCONN 93 at Wesleyan University on September 11, featured great, well delivered talks and vendor tables through which to browse during breaks. The meeting was attended by ATM'ers Gary Walker, John Stansfield, Paul Cicchetti, Ken Fye, Ted Poulos and John Reed. Amateur planetary astrophotographer, Don Parker gave a fascinating and humorous keynote address describing his experiences with CCD imaging. Gary won a raffle gift certificate. Although the ATM'ers didn't attend the evening observing, the skies for the first time in years for this convention were crystal clear. **STARCONN 94** will be held in April.

-- Ted Poulos

ARUNAH HILL DAYS were held, September 17-19, at Cummington, MA. (Berkshires area). ATMoB members Phil Rounsville and George Tucker attended. Meeting highlights included the dedication of a six inch, f/16, Gertner refractor (donated by Smith Collage) and observing under a dark sky Saturday night (M33 was visible to the naked eye).

Membership in Arunah Hill is open to all amateur astronomers. Regular observing nights and work days are scheduled throughout the year. Increased participation in Arunah Hill will accelerate plans to develop this unique dark sky and beautiful nature site for amateur astronomy use. Annual membership cost fifteen dollars and includes a newsletter/calender. To join, send a check to Aru-

nah Hill Natural Science Center, P.O. Box 16, Cummington, MA.

For information and directions, call 413-665-7402 (days) or 413-772-6715 (evenings).
-- George Tucker

ASTRO-ASSEMBLY 1993 was hosted October 1 & 2 by Skyscrapers, Inc. at the Seagrave Memorial Observatory in North Scituate, RI.

Several ATMoB members attended including Gary Walker, Ed Dougherty and Tony Costanza. Gary gave an afternoon talk on the capabilities of CCD cameras and put an exclamation point on his talk with an image of the ring nebula taken the previous evening in a near full moon sky. Tony gave a mirror silvering demonstration and Ed won first prize in the telescope competition for a six inch, f/15 refractor he built in the 1950's.

Author, Richard Berry was the evening's key note speaker. His talk, "Seeing with CCD's", focused on image processing and was an enlightening follow-up to Gary Walker's afternoon talk. Several of Gary's and ATMoB member, Dennis DiCicco's, images were used in the presentation.

October Lecture Series...

THE WRIGHT Lecture Series on Cosmic Evolution will be held every Wednesday night during October in the Cahners Auditorium at the Museum of Science. Doors open at 6:00 p.m. Admission is free.

Oct. 6 "The Early Universe and Origin of Galaxies" - Alan Guth, MIT; Edmund Bertschinger, MIT.

Oct. 13 "The Evolution of Galaxies and Stars" - Debra Elmegreen, Vassar; Bruce Elmegreen, IBM.

Oct. 20 "The Development of Life on Earth" - Lynn Margulis, UMASS; David Hubel, Harvard.

Oct. 27 "The Onset of Culture and Prospects for Alien Life" - Irven DeVore, Harvard; Paul Horowitz, Harvard.

Market Place...

FOR SALE, small German equatorial mount built in the 1950's or 60's by Bill Spacek. It was marketed as a camera platform. 115V, (AC) polar axis drive with hand-held switch box for guiding in R.A.. Manual DEC. axis guiding by small worm wheel. Hollow polar axis with optics for polar alignment. \$100, call Frederick Miller, 508-369-0528.

Coming Events...

Oct. 15 VARIABLE STAR EVENING,
8:00 p.m. - 9:00 p.m. at the clubhouse.

Oct. 21 CFA MONTHLY OBSERVATORY NIGHTS. "Globular Clusters: The Heart of Harlow Shapley's Universe" by Barbera Welther, CFA, Cambridge, MA. For additional information, call 617-495-7461.

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, 617-861-8388

NOVEMBER STAR FIELDS DEADLINE

November 1st is the deadline for items to be included in the November issue of Star Fields. Mail or phone your contributions to: Steve Beckwith, 195 Wilder Road, Bolton MA. 01740

How to Find Us...

MEETINGS: Held the second Thursday of each month (September to July) at 8:00 p.m. 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 Observatory 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.

FRST CLASS

Anna Hillier



AMATEUR TELESCOPE MAKERS OF BOSTON

