



Our June Meeting...

Thursday, June 9, 1994
Phillips Auditorium, Harvard-Smithsonian
Center for Astrophysics

THIS MONTH'S meeting is the annual meeting; next year's officers will be elected.

This month's speaker is Steve O'Meara from Sky & Telescope; he'll be speaking on "Atmospheric Phenomena". He'll take a aesthetic and scientific look at the green flash, the "Specter of the Brocken", double suns, rainbows, halos, and a host of other fantastic observations of light and color in nature.

In addition, Steve will have copies of his latest book "Volcanoes: Passion and Fury" for signing and sale. The book sells for \$16.95, but ATMob members will receive a 10% discount.

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.

May Meeting Highlights...

THE MAY meeting was highlighted by members reporting and showing slides on various astronomy related activities they are involved in. Ted Poulos led off the evening with a different and very interesting discussion on downloading satellite images via a home-built antenna to his home computer. Mario Motta showed slides of the construction of his 32-inch telescope from glass to it's final home in his New Hampshire observatory.

Ed Dougherty played a video of the annular eclipse and club members observing the event from Gary Walker's New Hampshire observing site. Peter Bealo exhibited solar and lunar eclipse photos. Bernie Volz had slides on the last total lunar eclipse, aurora from his Ashland home and the Kitt Peak Observatory. Vlad Vudler had annular eclipse slides and Joe Rothchild showed a video tape of the same.

Gary Walker had some more of his spectacular CCD images to show.

In addition, those attending the meeting heard annular eclipse reports from ATMob members who observed the event from various New England locations.

Dick Koolish reported on Astronomy Day activities at the Museum of Science. The event attracted large crowds and the sky cleared in time for the evenings star party. Dick also said he sold approximately 400 eclipse filters netting the ATMob \$300 in doing so.

Annual Meeting...

THE NOMINATING committee presented their nominations for next years slate of officers as follows:

President	Mario Motta
Vice President	Peter Bealo
Secretary	Steve Beckwith
Membership Secretary	Mark Bruckner
Treasurer	Anthony Costanzo
Members-at-Large	Dick Koolish
	Gary Walker
	Phil Rounesville

Thanks to the nominating committee - Ted Poulos, Ken Launie, and Ed Knight.

Membership Renewals...

THIS ISSUE of *Star Fields* contains the membership renewal form. Please complete and return it, with your payment, as soon as possible to Mark Bruckner (address is on the form). Do it today so you don't forget!!

Please note that you may now also purchase CCD Astronomy through the club. Existing subscriptions will simply be extended for 12 months.

If you are subscribing to one or more magazines, please note that deadline dates (on the form) to make sure your subscription will not lapse.

An Alternative CCD Camera ...

BACK IN the January issue of *Star Fields*, I described a CCD camera home-build path which offered substantial technological advantages over the more widely known Berry-Canto-Munger design (based on Texas Instrument's TC211 and TC245 detectors).

Advanced by Roy Tucker of Southwest Cryostatics, it features a 16-bit A/D converter, a four stage thermoelectric cooler (capable of -60C temperatures), very low noise correlated double sampling and most importantly, completely programmable clocking to support any CCD detector array up to and including 2K x 2K devices. This provides the option to build one camera which can be upgraded at a future date as they become available.

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.

Roy's design is now in a wire-wrapped, prototype stage and is being beta site tested by thirteen volunteers. From this first offering, two minor design bugs have been discovered and fixed.

Currently, the Tektronics TK512 (512 x 512, 27 μ m² ~ \$2000) and Kodak KAF-0400 (768 x 512, 9 μ m² ~ \$250) are under test with the design.

Detailed plans of the wire-wrap version are available for \$69.95. This is a not-for-profit endeavor. I have volunteered to crack for one of the multi-layered circuit boards: additional contributors are welcome. Roy can be reached at 1-505-266-7141 and I can be reached at 1-603-382-7121 (Evenings). I'll bring copies of his latest communiqué to the June meeting.

- Kevin McCarthy

ATMoB Activities...

MUSEUM OF Science Star Party, Friday May 20th. Thanks to all the ATMoB members that helped out; Tom Calderwood, Ed Dougherty, Mario Motta, Ted Poulos, Phil Rounseville, John Reed, Bob Collara, Bernie Volz, Dick Koolish, Ken Launie, Charlie MacDonald, Art Swedlow, Frances Antonelli, Rich Nugent, Tal Mentall, and anyone I may have forgotten. The evening was a great success and the 300+ visitors from Egleston Square had a super evening.

- Bernie Volz

CATASTROPHE TURNED into triumph. Late in the evening on Thursday May 12th, I was informed by the person responsible for organizing star parties, etc. that he would be out of town this weekend and that no arrangements had been made for a star party that was scheduled for 7:30 PM, Saturday May 14th at the club observing site!

Being that the event would be at the club facilities meant that on Saturday the 4 members of the Observatory Committee on duty that evening could expect to be overwhelmed by at least 70 additional guest over and above the normal traffic if something were not done.

Dozens of phone calls had to be made, people had to be scheduled to handle the crowd, a program had to be developed, volunteers with and without telescopes were needed. The facilities and grounds were not yet prepared from winter weather and needed extensive organization, preparation and cleaning, and many other miscellaneous matters that

required attention had all had to be attended to in 1-1/2 days.

This was an impossible task on such short notice, but somehow with the assistance of members of the observatory committee and their friends and relatives, we were able to pull it off.

The event finally took place on time with mirror grinding and coating, CCD astronomy and machine shop demonstrations, short talks on observing, telescopes, the Moon and Jupiter and tours of the facility. We had over 30 telescopes from 2 inches diameter to 20 inches diameter in operation and we viewed the usual deep sky objects, plus Venus, Mercury, Jupiter, the Sun and a 5 day old Moon.

The final count was about 25 school children, 50 adult guest and about 40 club members and friends and relatives participating. The evening was just great with a perfect sky. And thanks to the magnificent efforts of many people this was probably the biggest and best star party our club has ever had in spite of the short notice.

I want to thank Eric Johansson, Bob Collera, Fritz Ledford, Paul Cicchetti, Steve Clougherty, Mike Mattei and Cynthia Dougherty who first responded to the emergency and made the facilities acceptable in record time. I also want to thank all the members who brought their telescopes knowledge and enthusiasm Saturday evening. If not for their concern for the club image, love of astronomy and quick response, we would have had a disaster on our hands. THANK YOU ALL!

In particular I want to thank my wife Cynthia for her efforts sweeping, vacuuming, and scrubbing all the way through the facility. Cynthia also jointly organized the evenings refreshments along with Eric Johansson, and then she and Fritz Ledford manned the refreshment table all evening.

Finally I can not express my gratitude enough to Eric Johansson for working with me to organize the operation and then taking over when I became ill, and supervising the latter half of the star party on his own. Thanks Eric!

- Ed Dougherty

Announcements...

ATMOB APPAREL - Caps, T-shirts, and sweatshirts imprinted with our logo, are available for purchase at meetings and by mail (postage extra). All proceeds go to the ATMoB. We offer yellow T-shirts with a blue logo for \$10, gray sweatshirts/blue logo for \$18 and blue and white caps with a blue logo for \$6. - Ted Poulos

JOHN DOBSON is speaking June 11th at 2:00PM at the Chatham High School. The event is a fund raiser for the Cape Cod Astronomical Society observatory. A limited number of camp sites have been reserved at Nickerson State Park in Brewster for Friday and Saturday nights. Dobson will also be teaching a mirror making class from May 31st to June 24th. The class will meet eight to ten times. There

are five spaces left in the class. Phone Jim Carlson at 508-432-4316 to reserve a spot for the class or campsites.

CONGRATULATIONS TO Timothy M. Solinsky on his graduation from Birch Run Michigan High School. Tim, a former ATMob member, will be attending College in the Fall.

DURING the Star Party for the Acton School System on May 14, 1994, Ed Dougherty, Chairperson for the Observatory Committee collapsed and was taken to Lowell General Hospital where he was treated for exhaustion. According to Cynthia Dougherty, Ed is doing well but must limit his future activities.

Clubhouse News...

THE FINE Dall-Kirkham telescope donated by Ron Tanguay saw first light on Saturday, May 21, at the weekly observing session. Fritz Ledford, Mike Mattei and Ed Dougherty have been working on the instrument weeks and have rebuilt the old Cave Astrola 12" mounting. About 25 people viewed the moon and Jupiter and all agreed the performance was nothing short of fantastic.

THE REST of the fixturing for the evaporator has been completed by Ed Dougherty and a clean sink for the coating room is in process. If all goes well, we should be coating mirrors on a regular schedule in about a month.

WELCOME BACK to the Observatory Committee member Bill MacDonald, who has been absent for about 6 months and good wishes to Bob Collera who will be gone for about 3 months.

AN EXCELLENT 8" dobsonian and a 4" equatorial reflector was donated by Dave Young of Nashua, NH. The telescopes were put into service at the May 14th, Acton Star party at the clubhouse. Both worked very well. Thank you for your donations and they will be put to good use.

TED POULIS has donated a badly needed, 22" electric lawnmower to replace the 25 plus year old one we have been using. Thanks Ted!

AN AUDIT of the books of the mirror grinding shop has been completed and the results forwarded to the Executive Board. Everything is in good and proper order. From this point forward, record of all inventory, moneys spent and collected will be maintained by Cynthia Choate in the Thorr Enterprise's business computer under "Quicken3" software. Any and all transactions must take place only through the established members of the optics shop and be recorded according to the established rules of the optics shop section of the "Observatory Committee".

CLUBHOUSE SCHEDULE

June 4: Clougherty, Rounsville, Volz, Heller
June 11: Milon, Mock, Bruckner, Ledford
June 18: Suslowicz, Cichetti, Reed, Budreau
June 25: Hopkinson, Heller, Burrier, Swedlow
July 2: Brucker, Milon, Mock, Volz

Spring and Summer Events...

STELLAFANE! August 5th-7th on Breezy Hill in Springfield, Vermont.

Thinking Aloud...

DOES GARY Walker or Mario Motta ever sleep?

THE DECISION makers at New England Schools not allowing their students to observe the May 10th annular eclipse have been in the sun too long.

THERE'S NO doubt in my mind, the ATMob is a not-for-profit organization...

I HOPE the mass media doesn't hype the public into expecting too much of the Shoemaker-Levy/Jupiter impact.

A CONVERSATION with John Reed is a conversation with a good friend.

NASA SHOULD establish a manned station on the moon before tackling a manned mission to Mars.

IF *BOSTON Magazine* considers Tal Mentall one of Boston's most eligible bachelor's, how come I never saw him on "*The Love Connection*" or "*Studs*"...

I'VE GOTTA get more material for this newsletter...

Star Fields Needs You...

HAVE YOU been working on a special project, attended and interesting lectures or just plain have a point of view? Then how about writing about it and submitting it to Star Fields?

I can except hand or type written material via the mail or you can E-mail me via COMPU-SERVE. Deadlines for articles are listed on the back page of all *Star Fields*. Unless otherwise requested, material submitted will be subject to editing for grammar, brevity and clarity. If you've any questions, my evening phone number and address is listed on the back page of *Star Fields*.

Coming Events...

June 16 CFA MONTHLY OBSERVING NIGHTS. "Submillimeter Astronomy: New Vista on the Cosmos" by Paul Ho, CFA. 8:00PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. Call 617-495-7461 for additional information.

July 1 VARIABLE STAR OBSERVING evening 10:00 PM - 11:00 PM at the clubhouse.

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
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HISTORIAN: Anna Hillier 617-861-8338

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

COMMITTEES

OBSERVING: Edward Dougherty 508-458-8857

JULY STAR FIELDS DEADLINE

June 18th is the deadline for items to be included in the June issue of *Star Fields*. Mail or phone your contributions to: Steve Beckwith, 195 Wilder Road, Bolton MA. 01740 508-779-5227

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

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