



## Our December Meeting...

Thursday, December 9, 1993  
 Phillips Auditorium, Harvard-Smithsonian  
 Center for Astrophysics

THIS MONTH'S speaker is MIT Professor and AT-MoB member Gerald Sussman. He'll speak on "Repairing a 2.4m telescope" or "What I did for my summer vacation".

Last December, in an attempt to learn something about observational astronomy, I accompanied Professor Paul Schechter (MIT department of Physics) on an observing run at the MDM 2.4m Hiltner Telescope on Kitt Peak in Arizona. Unfortunately the weather was uncooperative and the telescope refused to remain collimated, so instead of doing astronomy we took apart the telescope. This was the inauspicious beginning of my participation in an adventure in real-world engineering which culminated this summer in the installation and testing of a new mirror-support control system for the 2.4m telescope. Besides relating a journal of events, I will try to contrast the feelings that arise when working on a magnificent piece of precision machinery with the frustrations that accrue from dealing with vendors of pneumatic fittings.

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.

## November Meeting Highlights...

AT LAST months meeting, Ed Dougherty gave the observing committee report and noted Jupiter's return to the morning sky. Ed said it's a good time to practice observation techniques in preparation for the July 6, 1994 Jupiter impact of Comet Levy-Shoemaker. An official watch is being organized for the event. see Ed for maps and instructions.

Bernie Volz said the club made \$119.00 from the Hansen Planetarium orders. He then read a letter from Janet Mattei of the American Association of Variable Star Observers (AAVSO), thanking the club for holding two star parties for school children in Lynnfield and Sudbury. An unexpected \$400.00 donation to the club was received from NASA for holding the events.

Mario Motta reported the Lynnfield star party was a huge success. Approximately 250 children and parents turned out for a view of the heavens. According to Mario, prior to the star party, all the students wanted to be paleontologists, afterwards, half changed their future occupations to astronomers. Special thanks to the following members at that star party. Ed Los, Tal Mentall, Mario Motta, Ken Fye, John and Monique Reed, Mike and Janet Mattei, George East and Bernie Volz.

Mario also updated the club on the November 6, 1993 charter meeting of the New England Light Pollution Advisory Group (NELPAG). Dan Green of the CFA is the region coordinator and Mario will be the Massachusetts representative. The goal of the group is to have lighting ordinances instituted throughout New England. Carl Hein suggested the club hold a meeting on the subject.

Dr. Shadia Habbai spoke on the temperature and spatial structure of the solar corona.

## President's Message...

MARIO MOTTA will be presiding over the December meeting as I'll be on a business trip to the west coast.

John Samolyk announced at the November meeting, he is not interested in continuing to serve as Membership Secretary once his current term expires in June. If anyone is interested in serving as Membership Secretary or in any position on the Executive Board, please let me know so that I can pass it on to the nominating committee in April.

## An ATM Point of View...

A RELATIVE gave me article which was published on page 17 of the June 19, 1993 Keene *Sentinel*. The article talked about Robert Morse, President of the Springfield Telescope Makers, the club that meets at Stellafane and uses the clubhouse their during the year. The article was quite lengthy, but one passage struck me as very special and I wanted to share it with all the club members. It goes like this: *Making the telescope lens takes the most care. It involves hundreds of hours of work, hollowing and then grinding a slab of glass until it's concave to the desired depth. "Some people think rubbing two blanks together and then grinding the lens for hours at a time sounds boring. I guess it does sound like that, but it's knowing that you'll have something real decent to look through once you're finished that makes it worth it. It's the pride you take in the*

## 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.

work and finishing touches you put on your telescope to make it your own, and that makes it fun."

Spoken like a true amateur. I have never met Robert Morse, but I know from his words, he's my kinda guy!

- Anna Hillier

## Keep Looking Up...

GEMINID METEOR Shower - December 13th-14th.

PERIODIC COMET Encke returns and can be located in Pegasus this month. The following positions are from the December 1993 issue of *Sky & Telescope*.

Dec. 11 - R.A. 22<sup>h</sup>32.4<sup>m</sup>, DEC +05<sup>d</sup>34<sup>m</sup>, Mag. 11.2

Dec. 21 - R.A. 22<sup>h</sup>29.9<sup>m</sup>, DEC +04<sup>d</sup>25<sup>m</sup>, Mag. 10.3

Dec. 31 - R.A. 22<sup>h</sup>29.5<sup>m</sup>, DEC +03<sup>d</sup>29<sup>m</sup>, Mag. 9.5

COMET MUELLER (1993a) is in Cygnus and Vulpecula this month.. The positions below are from the October 1993 issue of *Sky & Telescope*.

Dec. 10 - R.A. 20<sup>h</sup>51.9<sup>m</sup>, DEC +36<sup>d</sup>52<sup>m</sup>, Mag. 9.4

Dec. 20 - R.A. 21<sup>h</sup>07.2<sup>m</sup>, DEC +29<sup>d</sup>36<sup>m</sup>, Mag. 9.5

Dec. 30 - R.A. 21<sup>h</sup>20.8<sup>m</sup>, DEC +23<sup>d</sup>42<sup>m</sup>, Mag. 9.6

JUPITER RETURNS to the dawn sky this month.

## Star Party Volunteers Needed...

The ATMobS have been asked to hold a star party for the fifth graders at the Killam Elementary School in Reading. The star party will be on Tuesday, January 18th (cloud date of Tuesday, January 25th). The star party will run from 6:30PM until about 9:00PM. Members are asked to arrive around 6:00PM to set up. More details (including a map) will be available at the January meeting. Thanks to Charles McDonald for arranging the star party.

A star party for a Rockport elementary school is also being planned by Peter Bealo. More details to come.

Please plan to help out. We need your assistance (it would be nice to see some new faces help out at the star parties!).

- Bernie Volz

## Announcements...

THE 1994 Observer Handbooks have not arrived at the time of this printing. If they arrive before the December meeting, Mario Motta will distribute them. A few copies are still available for \$12.00 each (a \$4.00 savings over the regular price).

THE 1994 Astronomy and Space Exploration Calendars have not arrived either. If they arrive before the December meeting, Mario will distribute them also.

ANNOUNCEMENT: Would the person who borrowed Mike Mattei's monochromatic light box, please contact him.

## ATMoB Activities...

THE ATMobS hosted a Star Party for the Kennedy Middle School in Waltham on November 16th. Thanks to those ATMob members that participated. The star party was a success, we had about 200 people (kids and parents) look through the eyepiece.

Please consider helping out at future star parties - two are being planned for late January. More details in the January Star Fields.

ATMoB MEMBER Benjamin Gomes-Casseres, of Lexington, MA., had a lunar eclipse photograph published in the November 22, 1993 *Boston Globe*.

## Astro Trivia...

FORTY FIVE percent of the members consider themselves fairly experienced amateur astronomers. Twenty five percent rank themselves as experienced, twenty one percent are beginners and nine percent are very experienced. I for one, am completely lost...

### Activities Interesting ATMob Members the Most

Activity	Percent
Telescopic Observing	58
Reading About Astronomy	54
Visual Observing	33
Astrophotography	26
Introducing Others to Astronomy	26
CCD Imaging	24
Mirror and Telescope Making	23

LIGHT POLLUTION could be killing some young sea turtles. This sad bit of trivia came to me in conversation on a recent airline flight. The talk had turned to light

pollution and its effects on Gainesville, Fla.'s night skies. My fellow passenger, a biology professor at the University of Florida, said, not only have Gainesville's lights ruined their night sky, they may also be causing newly hatched sea turtles to head inland towards the city lights instead of moving to the sea.

Normally, the local sea turtles hatch at night and head eastward, guided by the approaching light of dawn, to the Atlantic Ocean. Gainesville's sky glow, west of where the turtles hatch, presents a false dawn to the hatchlings and leads them inland from the sea, and to their deaths.

- Steve Beckwith

## Clubhouse News...

ON SATURDAY, November 20th, the evaporator machine was moved into the evaporator room that John Reed, Paul Cicchetti, Bill McDonald, and others prepared. Thanks to all those that helped in the project to date. Now that the machine is in the room, work is in progress to hook it up. A dedication of the evaporator room and machine will be held sometime in the future. We can begin work on the front room/kitchen now that the machine is no longer there. In addition, one grinding machine is operational and two others are being renovated.

NEW ELECTRICAL wiring has been installed by Ed Knight and John Reed. Several additional outlets and lights have been added.

THANKS TO Ken Launie for the improved mirror mounting jig for the test tunnel; Adam Green. for donating an air conditioner a few months ago; and Eric Johansson for donating a burglar alarm (exactly how we'll use it still needs to be determined).

AN IMPORTANT Observing Committee meeting will be held 7:00 PM Saturday, December 11 at the clubhouse. Committee members unable to attend, contact Ed Dougherty prior to the meeting.

### CLUBHOUSE SCHEDULE

December 4: Budreau, Walker  
December 11: Fill. Cicchetti, Reed  
December 18: Mock, Johansson, Green  
December 25: Christmas: Closed  
January 1: New Year's Day: Closed

## A Visit With the IUAA...

While honeymooning in England last August, my bride, Jan, and I had the opportunity to drop in on the eighth General Assembly of the International Union of Amateur Astronomers (IUAA). I noted no more than thirty attendees at the Wolverhampton University venue. I had

expected more participants, but travel to such assemblies is an expensive and difficult venture for individual members.

Previous commitments only allotted us three hours at the assembly but it was enough time to meet with several IUAA officers to discuss the organization's charter and goals.

The IUAA's main mission is to promote world wide amateur astronomy and provide an information conduit for the amateur community. This is accomplished by reporting via news letters and assemblies, descriptions and results of research projects being carried on by its membership.

U.S. participation in the IUAA is low compared to the rest of the world, partially due to U.S. astronomy magazines previously providing research news and details to the U.S. amateur community. These magazines are not readily available world wide so members in the international community rely on the IUAA as a science source.

Membership in the IUAA is \$10.00 a year. Anyone interested in joining, should contact me for an application and the IUAA mailing address.

- Steve Beckwith

## Equipment Reviews Needed...

EVER BUY a piece of equipment and the first time you used it, wondered why you didn't buy it sooner? Maybe that expensive telescope took forever to be delivered and wasn't all the manufacturer claimed it to be.

*Star Fields* is looking for member reviews of commercially available telescopes and accessories. The astronomy magazines are doing their reviews and while adequate, they are not always blind reviews. Some have been little more than free advertising for the manufacturer. Here's your chance to review a product as a *customer*. 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

## Market Place...

FOR SALE: Celestron 8" Schimdt-Cassegrain. Excellent optical quality, hard coated optics, four eyepieces, wedge, steel tripod. AC/DC drive corrector, camera adapter, projection eyepiece tube, star atlas, case. \$950.00.

Paul Valleli 617-272-8946

FOR SALE: German equatorial mounted 17.5", F4.5 Newtonian reflector. Coulter primary, Novak nine point mirror cell, Telescopic 3.1" diagonal, four vane research quality spider and low profile helical focuser.

The mount is a rugged assembly of 2 7/16" shafts mounted in ball bearing pillow boxes all fixed to stainless steel structural boxes. Many extras...

Mike O'Connell (W) 603-881-1627 (H) 603-429-0550

## Coming Events...

**Dec. 11** OBSERVING COMMITTEE MEETING  
7:00PM at the clubhouse.

**Dec. 17** VARIABLE STAR OBSERVING evening,  
7:00 PM - 8:00 PM at the clubhouse.

**Dec. 16** CFA MONTHLY OBSERVING NIGHTS. "Crystal Starlight: A Journey Through the Winter Skies" by Stephen James O'Meara, *Sky & Telescope* magazine. 8:00 PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. For additional information, call 617-495-7461.

**On Going** COLLISION COURSE EARTH, the story of Earth crossing asteroids, is the current program at Hayden Planetarium. For times, call 617-723-2500.

### 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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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

## JANUARY STAR FIELDS DEADLINE

**December 30th**, is the deadline for items to be included in the January 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 Observing 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**  
c/o John Samolyk