



**STAR
FIELDS**

NEWSLETTER OF THE AMATEUR
TELESCOPE MAKERS OF BOSTON

Vol. 6, No. 2 February 1995

Our February Meeting...

Thursday, February 9, 1995
Phillips Auditorium, Harvard-Smithsonian
Center for Astrophysics

OUR FEBRUARY meeting will feature a presentation by Ursula Marvin of the Center for Astrophysics, titled "A ramble through meteoritics from 1794 to 1994". As a renowned expert in the field of meteorites this should prove to be a lively and informative evening.

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.

January Meeting Highlights...

IF YOU weren't at last month's meeting, you missed some neat stuff. Several members showed off their knowledge and skills to the delight of those who were able to attend. Kevin McCarthy gave an in-depth presentation and demonstration -complete with his set-up and video tapes- on how to figure a corrector plate for a Schmidt camera. Paul Ciccetti reprised his technique (published in *Sky & Telescope*) of drawing lunar features. Ken Launie showed slides of the Antique Telescope Society's October, 1994 meeting in the San Francisco bay area and Howard Levaux showed slides of his eclipse trip.

Membership Secretary, Mark Bruckner, reported current membership now stands at 242. John Reed gave the clubhouse report. He advised members that in the event of questionable weather, before making a Saturday trip to the clubhouse, call one of the two members on duty (listed monthly in *Star Fields*) to insure someone will be there. The polishing room is now finished. Bill McDonald has installed the first counter top in the kitchen. Steve Mock procured a new answering machine for the clubhouse and it will be updated on a regular basis. John said a two-inch rack and pinion focuser and a 17mm eyepiece are still

missing. Mario asked for their return under a no questions asked policy.

John noted that some people did not receive their copies of *Star Fields*. If you know of anyone who is not getting the newsletter, have them contact me (Steve Beckwith) so corrective actions can be taken.

Mario updated the membership on the ATMoB's legal status, the January 8th, Executive Board meeting and the February, 1998 eclipse trip. Tom Calderwood displayed his six-inch f/8 telescope that place second in optical judging at last summer's Stellafane. Tanya Vudler asked for volunteers for the February 6th and 7th star parties at Lexington's Fisher Elementary Scholls. She also said she was approached by a second school for a star party in early March.

President's Message...

I AM happy to report that I have received from Michael Connolly, the Massachusetts Secretary of State, a certificate stating that the ATM's of Boston is now in full compliance with state law and that the "...corporation is revived for all powers duties and obligations as if the corporation had not been revoked.", and are the same corporation as incorporated on June 22, 1966.

It has been a major undertaking to reinstate our incorporation and to re-certify our tax free status the last several months, yet there is no blame to assign for the above, but rather our clubs shocking lack of collective long term memory. At each election of new officers, knowledge of procedures and requirements seems to have slowly eroded, such that though our organization has a 61 year long and proud history, few in our organization recall what we have done more than a year ago. This club Alzheimer problem is the direct cause of not only letting our incorporation and tax free status be jeopardized, but has also been responsible for clubhouse disorganization and lack of knowledge of our own inventory at the clubhouse. Indeed, at times it seems we know not who we are and what we exist as a group for. This situation simply must and will change. I do not imply that in the past members did not do their job well, for we have been blessed with many fine and talented members. It is the system (or lack of it) that has led to our problems. If nothing else gets accomplished in my administration, I intend to have a system in place that will cure us of this alzheimers problem (after all, I am a physician).

If we do not know our history, we are doomed to repeat our mistakes. To this end, Anna Hillier is now the club historian, and is collating our old documents. I ask all long term members who may have knowledge of past events, photos, memorabilia, etc., if you could send or copy this information to her. I have directed all club officers to write a detailed list of official duties and responsibilities of their position, and even more, how their tasks are accomplished, so that future officers do not have to reinvent the wheel. The clubhouse is well on its way to having duties and

responsibilities, and procedures clearly defined, as well as a full inventory of club possessions and materials. We will have a yearly budget that is based on real numbers so that we can plan efficiently, and allow our organization to grow and prosper. We shall also have a yearly accounting as is specifically called for in our bylaws, yet has not been done in years. In short, we shall be run as a corporation as state law and our bylaws demand.

I would hope that after the above is fully realized, that we all have a deeper understanding of our organization and have pride in the 61 year history of both our past accomplishments and future potential. - Mario Motta

Seeing Red...

You don't have to be hopping mad to see red, you just need a telescope! Several very red objects can be observed this winter! First, Mars reaches opposition on February 12th. The "Red" planet, located among the stars of Leo, shines at -1.2 magnitude! Normally, this would be a time for celebration, considering Mars reaches opposition once every 26 months! Ah, but alas, orbital eccentricity rears its ugly head! At this opposition, Mars is about as far from the Sun as it can be and so it's as far from the Earth (at opposition) as it can be! At a distance of 63 million miles, the Red planet's disk appears only 13'.9 at best. But, don't despair... the dusky surface features are visible! So is the bright polar cap! By early evening, Mars will be well up in the east, so check it out! The December issue of *Sky & Telescope* (pg. 72) has all the details!

While you're out, check out another very red object towards the south. Just below Orion, the Hunter, lies the faint constellation of Lepus, the Hare. In that constellation lies one of the reddest stars I've ever observed! Discovered by J.R. Hind in 1845, R Leporis is a pulsating variable star whose magnitude ranges from 6.9 to 11. Its period is 432 days. Currently, R Lep is near minimum brightness and appears extremely red!! I recently observed it and found it to be an *intensely* red star; so red that I never saw it in the field of view until I brought a finder chart to the telescope! The chart I used was from *Burnham's Celestial Handbook*, vol. 2. This excellent reference describes the star (Also known as Hind's "Crimson Star".) as a "Carbon Star" having a surface temperature of no more than 2600 Kelvin and a spectral classification of N6e. Its distance is estimated to be 1500 light years. For additional information, check out an excellent account of the star in March '94 issue of *Sky & Telescope* (page 72)!

Want more? The March '95 issue of *Astronomy* (pg. 63) describes the Carbon Star U Camelopardalis as the "reddest star in the sky", varying between magnitude 7.7 and 9.5 over a 412 day cycle. Its distance is about 1650 light years and is classified as a spectral type N5 star. Camelopardalis represents the Giraffe. It's a *very* obscure constellation nestled between Auriga and Polaris! Use the finder chart they give but note that the star they point to is

not U Cam! The correct star is the one just to the right and slightly above the star they've indicated! I observed it recently and it appeared a deep orange color. (I still think R Lep is redder!) It's cold, so dress warmly and have fun... seeing red!
- Rich Nugent

Executive Board Meeting...

THE EXECUTIVE Board met at Mario Motta's home on January 8th. The following is a summary of that meeting.

The club has reserved a block of suites for the 1998 Aruba eclipse trip. The board voted to require a non-refundable \$50.00 (individual) \$100.00 (family) deposit for the trip.

John Reed and Paul Ciccetti gave an update of work in progress at the clubhouse. The porch is in desperate need of repair and will require about \$1500 of material to do so in the next few years. A start date on the project has not been set, however before any work begins, MIT will be notified of the activity.

A release form program will be re-instituted at the clubhouse. Prior to using any machinery, members must be checked out on the equipment by a qualified clubhouse committee member and will then be required to sign a release form.

The club has been offered a large collection of professional optical fabrication equipment which will require transportation to the clubhouse. The board voted to release funds to pay for a rental truck to collect the equipment. John Reed is to survey the equipment for what is appropriate for our activities (and allowable space).

The current club budget was reviewed and the board members were directed by Mario to present their expense requirements by the next (April '95) Executive Board meeting.

Procedures for the outstanding member award was discussed. To allow past members' activities to be eligible along with current and future achievements, the award will be "grandfathered". In that vein, research into past club member activities is on going by Historian, Anna Hillier. However, the board could really member inputs. Please contact an Executive Board member with any nominations you may have.

Dick Koolish and Bernie Volz reviewed the club's bylaws and updated the board on their findings and recommendations for changes. The board voted on which recommended changes to bring to the membership for approval. All by-law changes must be approved by the membership. It was noted, any member can propose a change by putting it to a membership vote at a monthly meeting.

Mario briefed the board on his paper chase to get the club's tax free status reinstated by the Commonwealth of Massachusetts. write a description of their job and responsibilities as guidelines for future club officers.

Announcements...

ASTRONOMY DAY '95 will be celebrated at the Museum of Science in Boston on Saturday, May 6th. We've been asked by the Museum to participate so I'd like to ask for any and all volunteers to help out! Last year we set up a large table and displayed telescopes, posters, passed out information and just talked about astronomy, telescope making at the ATMoB. In the past we've even let the public try their hand at mirror grinding! We've also been asked to present a series of short, informal talks on Astronomy. These should be fairly general in nature and last 15-20 minutes. Anyone eager to show off slides of an eclipse? How about some backyard astrophotography? Interested in discussing "What to know *before* Purchasing a telescope", or "Binoculars vs. Telescopes"? The suggestions are endless! We also need volunteers to participate in the evening star party at the museum. The crowds are usually quite large so we'll need a number of 'scopes. You can even participate by just pointing out the planets, stars and constellations!

This event is a way of introducing *thousands* of people to Astronomy! If you'd like to help out, please call me at (508) 879-3498. -Rich Nugent

THE CLUB'S tax free number is 046360709. If you plan to deduct a contribution to the club, this number can help you avoid a lengthy prison sentence...

RESERVATIONS FOR the annual Baxter State Park camping trip are now being accepted by coordinator, Steve Mock. The trip is scheduled from August 19th to the 26th and members can stay longer (on their own) if they desire. If you plan on going, bring a check (the daily camping fees will be announced at the meeting) to this month's meeting or contact Steve (617-625-5870) before February 15, 1995.

THE SPRINGFIELD Telescope Makers have asked for help for this year's Stellafane. They would like members of the ATMs of Boston to deliver several short (10-15 minutes) talks on specific areas of telescope making. The talk should be simple and aimed at the beginning telescope maker. It would be best if the talk had a simple demonstration on how something is made, tested, or assembled. Stellafane will pay for any materials needed within reason. The demonstration would be self sufficient for the future, that is, Stellafane would like to keep the materials for future demonstrations. Stellafane will also help with any audio-visuals needed such as transparencies.

Some suggestions: Reflectors vs refractors, overview of mounts. Make a mirror cell, spider, focusing tube. Collimating optics, tube darkening. Mount design, construction, improvements. Drives. Mirror grinding, polishing, testing, star testing, etc. Any ideas that are geared to the beginning telescope maker will be welcome. Though members may contact Tom Spiro (STM Secretary) directly, I would prefer

that members who wish to do a talk notify me first so that we may coordinate better and not have duplicate proposals. Please notify me soon, as Stellafane would like to set their schedule. Our club has many talented members who could easily do this, let me (Mario Motta) hear from you.

THE KILLIM School Star Party has been rescheduled for March 28 in North Reading, Rain date March 30.

I AM pleased to report that Bernie Volz and my (Mario) photo of the solar eclipse from Bolivia is now on the COVER of the March issue of Sky and Telescope. It was a one second exposure on Kodachrome 64 taken with my Meade 2045. Fame is fleeting but exciting.

I HAVE not seen many astrophotos of late. I encourage members to bring great photos to meetings and I will be happy to show them off. (please, only a few at a time).

Clubhouse News...

THE CLUBHOUSE committee roster and 1995 Saturday duty schedule has been mailed to 32 committee members. If you did not receive your copy, please call Paul Ciccetti. The next committee meeting will be held March 11, 1995 at 6:00PM. The agenda includes next year (1996) projects and proposed 1995-1996 budget. Please mark your calendars.

SPECIAL THANKS to; Fred Taylor of Lexington for his donation of a sofa and chair for the clubhouse library, Steve Mock for working on the answering machine upgrade, Bill Goldthwait for installing the new clubhouse locks (keys are being distributed to clubhouse committee members by John Reed). Richard Burrier, and Feldkuhn, Paul Ciccetti and John Reed for concrete poured and brush cutting during mild weather.

VOLUNTEERS ARE needed in February to help with the kitchen upgrade, (contact Paul Ciccetti) and John Reed needs help in March to complete the aluminizing room.

THE BOSTON Junior Chamber of Commerce star party is scheduled for February 4 with a March 4 back-up date. The party begins at 4:00PM.

CLUBHOUSE DUTY ROSTER

Feb. 4:	Art Swedlow	508-486-4734
	Fritz Ledford	508-386-7028
Feb. 11:	Richard Burrier	508-448-5059
	Eric Johannson	508-667-0137
Feb. 18:	Gary Walker	508-785-0352
	Henry Hopkinson	617-432-2490
Feb. 25:	Al Mazurka	508-649-3695
	Jim Suslowicz	508-454-9239

March 4: Dave Aucoin 617-891-9650
Steve Mock 617-625-5870

Coming Events...

Feb. 16 CFA MONTHLY OBSERVING NIGHTS.
"Magellan's Views of Venus: Piercing the Cloudy Veil" by John Wood, of the CFA. 8:00PM, Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics. Call 617-495-7461 for additional information.

Feb. 24 MONTHLY FRIDAY OBSERVING at the clubhouse, 7:00PM-8:00PM. Contact Ed Los at home 603-884-1586 (home) or 603-884-1586 (work).

EXECUTIVE BOARD 1994-95

PRESIDENT: Mario Motta 617-334-3648
VICE PRESIDENT: Peter Bealo 603-382-7039
SECRETARY: Steve Beckwith 508-779-5227
MEMBERSHIP: Mark Bruckner 617-648-4426
TREASURER: Anthony Costanzo 508-521-5382

MEMBERS AT LARGE: Gary Walker 508-785-0352
Dick Koolish 617-646-6086
Phil Rounseville 617-527-1080

PAST PRESIDENTS: 1993-94 Bernard Volz
1990-92 Marion Hochuli

COMMITTEES

CLUBHOUSE DIR.: John Reed 617-861-8031
Paul Cicchetti 508-433-9215
OBSERVING: Richard Nugent 508-879-3498
HISTORIAN: Anna Hillier 617-861-8338

Amateur Telescope Makers of Boston

MARCH STAR FIELDS DEADLINE

February 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
e-mail: Compuserver@71762,2513

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.

FIRST CLASS