

JANUARY, 1988

The January meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, January 12, 1988 at 8:00 PM

Our January meeting will be a "Show and Tell" meeting. Please bring your slides and stories; remember that May's meeting will be devoted to member's observatory projects, so please save those slides for then.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory); there is free parking in a lot on the other side of Mass Ave.

COMING EVENTS

- February 9 Mike Mattei will be talk about the recent Mars Opposition at our February meeting.
- March 18,19 New England Astro-Fest #2. For details, contact Astro-Fest #2, P.O. Box 834, Simsbury, CT 06070
- May 11 Observatory showcase. ATM members will show slides and share stories about the construction of their home observatories. If you'd like to participate, please contact Gary Walker.

NEW MEMBERS

Please join us in welcoming the following new members:

Daniel Breslin	Somerville, MA
Edmond Murad	Lexington, MA

NAVAL OBSERVATORY SKY SHIRTS

From Dennis Milon comes word of special Naval Observatory glow in the dark sky shirts. Two styles, ranging in size from child's 2 to adult's extra large are available. T-shirts featuring the summer night sky sell for \$10.00; the winter sky is printed on sweat shirts that sell for \$15.00. To order, send a check to: Naval Observatory Sky Shirts, 34th & Mass Ave NW, Washington, DC 20392; include style, size and \$1.50 per shirt for postage.

REFRESHMENT HELP NEEDED

The club needs an additional volunteer to help organize refreshments every third meeting or so. Expenses are reimbursed, so please contact Gary Walker if you're interested

ATM ECLIPSE EXPEDITION

Reminder: To reserve your place on the ATM eclipse expedition (January 7 - 14, 1991) you must send a deposit of \$25.00 per adult to:

ITA Tours
Attn: ATM Eclipse Expedition
P.O. Box 45250
Somerville, MA 02145

In addition to your deposit, please send a card with your name and address and the number of people in your party, including children, to Mario. Please state whether you want a roommate. Send to:

Mario Motta
806 Lowell Street
Lynnfield, MA 01940

Some additional trip data: The trip has an estimated current cost of \$780.00 per person, to include air fare, rooms, breakfast and dinner. (This price can vary through 1990 with changes in the exchange rate and inflation.) The spaces are filling quickly, so be sure to sign up today!

CENTER FOR ASTROPHYSICS MONTHLY OBSERVATORY NIGHTS

The Harvard-Smithsonian Center for Astrophysics sponsors free programs in popular astronomy for the general public on the third Thursday of every month, at Phillips Auditorium, starting at 8:00 PM.

- | | |
|-------------|--|
| January 19 | "150 Years of Astronomy in Cambridge",
Dr Barbara Welther, Center for
Astrophysics |
| February 16 | "Red Star Aloft: Soviet Space Science
Today", Kelly Beatty, Sky and Telescope
magazine |
| March 16 | "The Ides of March: Astronomical Phenomena
as Portents of Doom", by George Mumford,
Tufts University |

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

If you would like to list anything in the ATM Bulletin, please send to: Ken Launie, 15 Salem Street, Cambridge, MA 02139, or call 617-491-6855. It's your bulletin: Contribute!

MEETING DATE

February 9
March 9
April 13
May 11

BULLETIN DEADLINE

January 25
February 22
March 29
April 26

FEBRUARY, 1988

The February meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, February 9, 1988 at 8:00 PM

Our February meeting will feature club member Mike Mattei, who will speak about "The Recent Opposition of Mars". Mike is an active planetary observer who has specialized in the study of Mars; the September opposition was the most favorable in decades, and he was able to make a number of drawings of surface features normally not visible. He will show these drawings, and discuss the special equipment and techniques he has developed.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory); there is free parking in a lot on the other side of Mass Ave.

COMING EVENTS

- March 4 MESSIER MARATHON at the clubhouse.
Rain/cloud date April 8.
- March 9 Dr William Hoffman of the CFA will talk about "Recent Advances in Ultra-Light Mirrors" at our regular March meeting.
- March 10 There will be a public star party at the Ponkapaug Golf Course. Scott Milligan will have details at the meeting, or you can call him (note his new phone #).
- March 18,19 New England Astro-Fest #2. For details, contact Astro-Fest #2, P.O. Box 834, Simsbury, CT 06070
- April 22 Spring cleanup/fixup at the clubhouse.
- May 11 Observatory showcase. ATM members will show slides and share stories about the construction of their home observatories. If you'd like to participate, please contact Gary Walker.
- August 4,5 STELLAFANE, the annual mecca of telescope nuts, will be held in Springfield, VT.

GROUP 70



Officers:

President: Landon Curt Noll
Vice President: Dan Zuras
Secretary: Danni Medlock
Treasurer: Jane Miller

Group 70 is a non-profit corporation formed to build, equip and operate the largest amateur built astronomical telescope in the history of science.

The instrument will be a general-purpose reflecting telescope of modern design with an aperture of 18 meters (70 inches). It is our intent to provide access to the telescope for all of our members. It is also our intent that the facility serve the larger amateur community as well.

Our members include astronomers, opticians, mechanical engineers, electrical engineers and computer scientists. Their combined experience and knowledge rivals that found in professional observatories and research laboratories. Many of us were involved with the construction of the 0.75 meter (30 inch) reflecting telescope now in regular operation in the observatory at Fremont Peak State Park.

We need your support. If you would like to join us and work on the project, or provide financial support, or just want more information, please contact:

Group 70
c/o Epoch Instruments
2331 American Avenue
Hayward, CA. 94545

(415) 654-6796

General memberships are twenty-five dollars per calendar year, family members with the same mailing address may share a membership at the same rate.

For those who wish to provide major financial support, founding memberships are available until March 1, 1989, for a minimum of one thousand dollars. We appreciate donations of equipment and material. Your contributions are tax-deductible.

Membership application

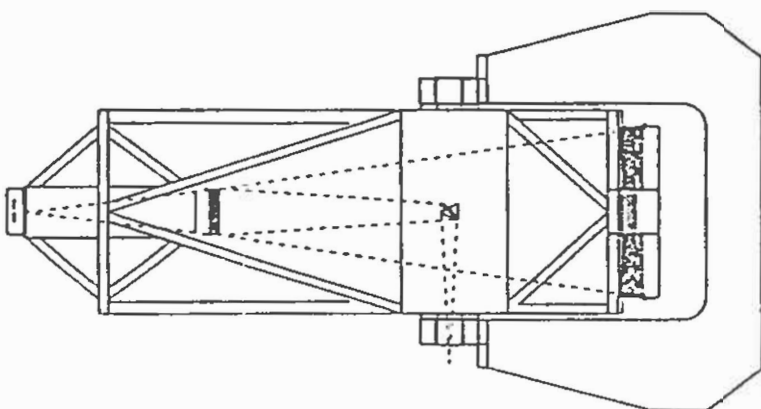
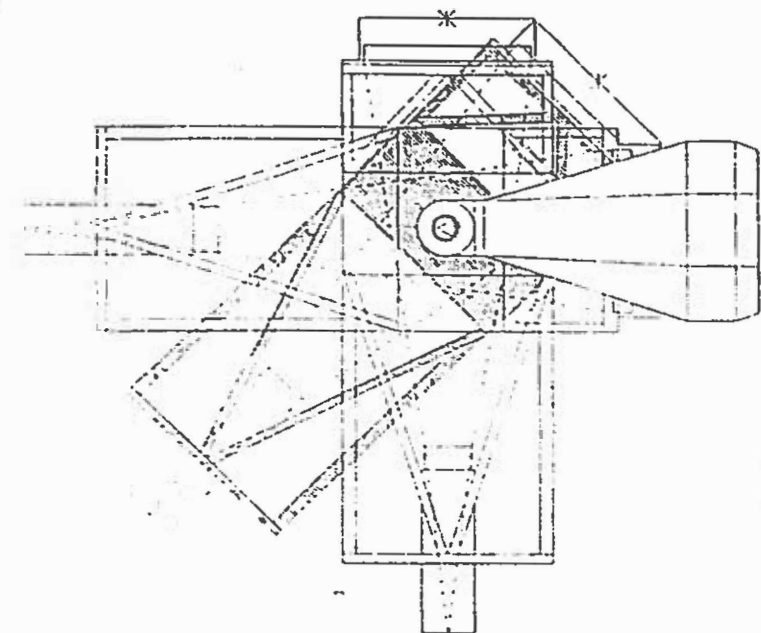
Name: _____
Address: _____
City: _____ State: _____
Zip: _____ Phone () _____
Area of interest: _____
Please make checks payable to Group 70

General \$25/yr
Family \$25/yr
Supporting \$100/yr
Patron \$500/yr
Contributing \$1000/yr
Corporate donation

Board of Directors:

John W. Briggs
Bob Fingerhut
Jay Freeman
Kevin Medlock
Danni Medlock
Randy Smith
Russ Thomas
Dick Vaubel
Jack Zelders

JOHN W. BRIGGS
100 OAK HILL WAY, 114C
LOS GATOS, CALIF. 95035
408/250 1041



(7 0)
M 8 1

NEW MEMBER

Please join us in welcoming a new member this month:
Patricia Daukantas Somerville, MA

ADDRESS CHANGES

Dave Aucoin 423 Pelham St, Apt 6
Methuen, MA 01844 508-687-2768
Scott Milligan 82 Brick Kiln Rd, Bldg 3, Apt 206
Chelmsford, MA 01824 508-970-0438

ATM ECLIPSE EXPEDITION

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ITA Tours
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In addition to your deposit, please send a card with your name and address and the number of people in your party, including children, to Mario, whose address is on the front cover. Please state whether you want a roommate. Some additional trip data: The trip has an estimated current cost of \$780.00 per person, to include air fare, rooms, breakfast and dinner. (This price can vary through 1990 with changes in the exchange rate and inflation.) The spaces are filling quickly, so be sure to sign up today!

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February 16	"Red Star Aloft: Soviet Space Science Today" Kelly Beatty, Sky and Telescope magazine
March 16	"The Ides of March: Astronomical Phenomena as Portents of Doom", by George Mumford, Tufts University
April 20	"The Early Solar System", by John Wood, Center for Astrophysics

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6026 or the Public Affairs Office at 495-7461.

LIGHT POLLUTION

The following letter, concerning sodium lamp conversion was sent to the DPU after discussion at the January meeting. A reply wasn't received before the bulletin deadline.

Ms Bernice McIntyre, Chairman
Massachusetts Department of
Public Utilities
100 Cambridge Street
Boston, MA 02202

18 January, 1989

Reference: Electric Rate Case
D.P.U. 88-135/88-151

Dear Ms McIntyre,

I am writing on behalf of the 150 members of the Amateur Telescope Makers of Boston to acquaint you with issues that are raised by the Street Lighting portions of this rate case, in particular the apparent unwillingness of Massachusetts Utilities to maintain older incandescent "platter" fixtures, and the resulting bias toward High Pressure Sodium lamp conversion. This case includes provisions that encourage (some might even say coerce) towns to convert to these new fixtures, using the financial incentives of lower rates until conversion, as well as a declaration that the Utility will no longer replace any incandescent fixture. The alternative rate structure, where the town owns and maintains all of its own fixtures, is likely to be unacceptable to many cities and towns that already find it difficult to cope with the demands of school maintenance, Public Works tasks, etc.

Obviously, as amateur and professional astronomers, we are alarmed about the huge increase in wasted light spilling into the sky after the typical sodium conversion, as light pollution has made viewing the heavens much more difficult. Many of our members routinely drive large distances in search of "dark" skies. (Light Pollution is the term for the wasted light that escapes upwards from poorly designed fixtures as well as reflected light from excessive illumination levels; it's why city dwellers can't see many stars, and it has been getting progressively worse.) There is a tendency to assume

that the increased illumination resulting from lamp conversion gives greater safety, and that reduced energy consumption follows as well. Both assumptions can be shown to be questionable at best. The enclosed article from Science magazine includes a discussion of studies conducted by the FBI and lighting manufacturers trying to correlate crime rate with light level; results are far from conclusive.

The increased energy efficiency of HPS lights (roughly 4000 lumens for a 62 watt input vs 1000 lumens for a 95 watt incandescent bulb) is often offset by the installation of additional fixtures. The increased light output causes greater contrast between lit and unlit areas, so dark areas now seem much darker, and people complain that they don't see as well. Infilling with more light fixtures can then result in an eightfold increase in illumination, and 25% more energy consumption. There is increased glare from the brighter bulbs (unless they are very well shielded). Night driving is actually more hazardous, as eyes that have accommodated to the greater brightness can't see much of anything in unlit areas. This is especially acute among older people, but is a problem for anyone leaving an over-lit intersection or main street and driving down a side street.

Light pollution isn't going to go away, but economic arguments shouldn't be used to justify wasteful over-illumination. Continued maintenance of older light fixtures, using long-life bulbs (12000 hour bulbs should have an average three year life), will help to preserve the rural character of an area; if a fixture must be replaced, it can be replaced with a much lower wattage low pressure sodium bulb (even more efficient than HPS) in a well shielded fixture that puts the same illumination only where it is needed. What is at stake for us and many others is the night sky itself! Will our children only be able to see stars in a Planetarium?

I will be happy to discuss this with you at any time, to send more information, or to answer any questions you might have. Please feel free to contact me.

Thank you,
Kenneth J. Launie
Secretary,
Amateur Telescope Makers of Boston

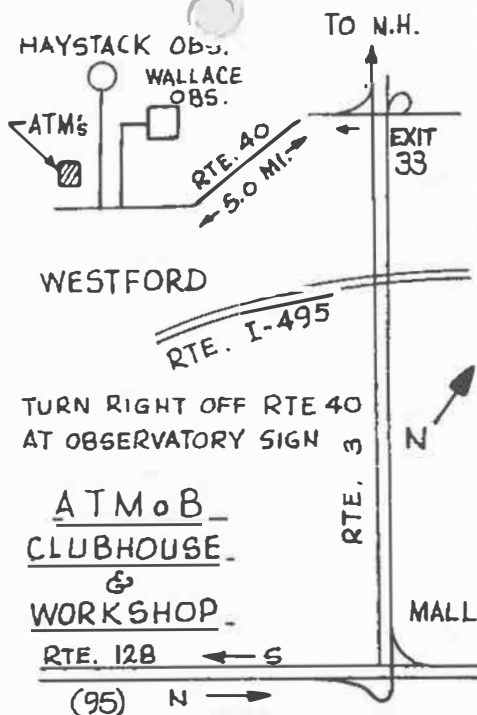
EXECUTIVE BOARD MEETING

A meeting of the executive board was held at the clubhouse in Westford on Thursday January 26. The principal topics discussed were:

- * Our tour operator's request to be allowed to use the ATM name to sell the additional rooms he's booked for the eclipse in La Pas (beyond the ones set aside for ATM members), with a portion of the proceeds going to our land fund. This has the possibility of raising as much as \$10,000. Concerns were raised about liability, and whether this would obligate club members to act as hosts, set up events, etc, and also if there would be a perception of the club benefitting at the expense of others. AAI in New Jersey has run similar trips to past eclipses; their involvement seemed to consist of making the trip arrangements (optimum sites, etc, as we're doing), and going along themselves as fellow enthusiasts. The trips were successful, and a way to meet folks from other parts of the country. It was voted that Mario Motta be authorized to negotiate with the tour operator, and report results to the board.
- * The possibility of a club trip to the 1990 Texas Star Party was discussed. If you're interested in helping to organize it, please contact Scott Milligan.
- * The club will send a deposit check to Baxter State Park to reserve the group camping area on Labor Day Weekend. If you would like to go, please send a check to Scott.
- * Scott Milligan and Phil Rounseville hope to have the club 13" Schupmann optics done by early April, and estimate needing \$1100 to \$1300 to complete the tube assembly.
- * Other coming events were discussed, and are mentioned elsewhere in the bulletin.

If you would like to list anything in the ATM Bulletin, please send to: Ken Launie, 15 Salem Street, Cambridge, MA 02119, or call 617-491-6855. Remember that it's your bulletin: Contribute!

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March 9	February 22
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May 11	April 26
June 8	May 23

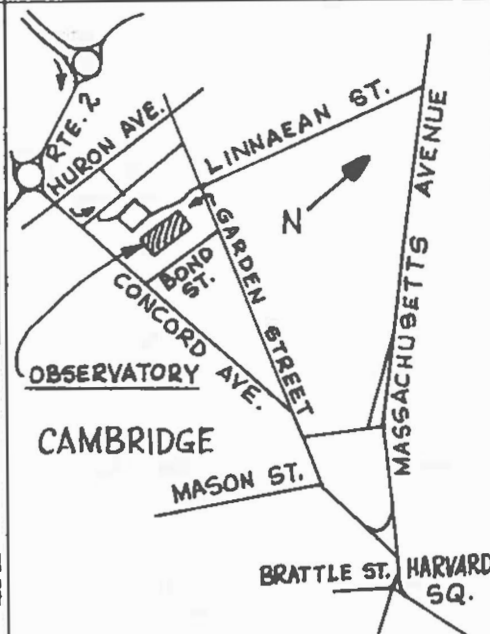


OBSERVING & TELESCOPE MAKING

The white farmhouse at
Haystack Observatory
Westford, Massachusetts

Every Saturday
starting at noon

Clubhouse telephone
508-692-8708

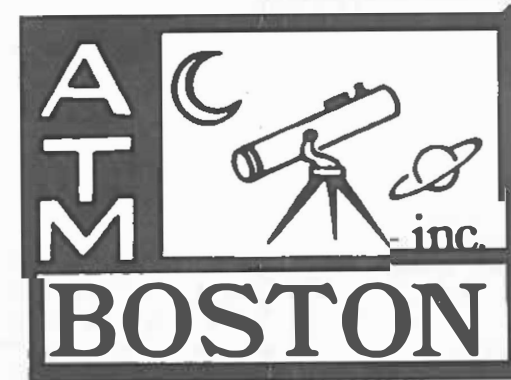


HARVARD COLLEGE OBSERVATORY
CENTER FOR ASTROPHYSICS

MEETINGS

Phillips Auditorium
Building D
Harvard College Observatory
60 Garden Street
Cambridge, Massachusetts
8 p.m.
Second Thursday each month
September to July

FMH KCH 1989 -



Amateur Telescope Makers
of Boston, Inc.

Including the Bond Astronomical Club

Established in 1934
in the interest of Telescope Making & Using

EXECUTIVE BOARD 1988-89

PRESIDENT

Gary Walker, 8 Pond St., Dover, MA 02030, 508-785-0352

VICE PRESIDENT

David Aucoin, 1260 Westford St., Apt 36C, Lowell, MA 01851, 508-441-2970

SECRETARY

Kenneth Launie, 15 Salem St., Cambridge, MA 02139, 617-491-6855

TREASURER

Anthony Costanzo, 37 Lake Shore Dr., Georgetown, MA 01883, 508-352-8393

MEMBERSHIP SECRETARY

Edward Los, 7 Cheyenne Dr., Nashua, NH 03063, 603-880-6219

MEMBERS AT LARGE

Mario Motta, 806 Lowell St., Lynnfield, MA 01940, 617-334-3648

Frank Novomy, 25 Lumb Ave., Nashua, NH 03060, 603-888-4067

PAST PRESIDENTS

1985-87: E. Talmadge Mentall, 119 Henry St., Lynn, MA 01902, 617-598-0766

1983-85: Max ben-Aaron, 61 South Rd., Bedford, MA 01730, 617-275-7257

1981-83: Kenneth Launie, 15 Salem St., Cambridge, MA 02139, 617-491-6855

COMMITTEES

OBSERVING COMMITTEE

Scott Milligan, 51 Prentiss Ln., Belmont, MA 02178, 617-484-2458

SHOP COMMITTEE

Greg Chase, 69 Lake Shore Rd., Natick, MA 01760, 508-655-3385

STELLAFANE

Dennis diCicco, 60 Victoria Rd., Sudbury, MA 01776, 508-443-8493

MARCH, 1989

The March meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, March 9, 1989 at 8:00 PM

Our March meeting will feature Dr. William Hoffman of the Center for Astrophysics, who will tell us about "Recent Advances in Ultra-Lightweight Telescope Mirrors. Dr Hoffman has been working to advance the state of the art of telescope design for a number of years. His previous projects include the Multiple Mirror Telescope in Arizona.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory); there is free parking in a lot on the other side of Mass Ave.

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- August 4,5 STELLAFANE, the annual mecca of telescope nuts, will be held in Springfield, VT.

NEW MEMBERS

Please join us in welcoming the following new members:

Peter Bruckner	Cambridge, MA
Margarita Drozdoff	Cambridge, MA
Justin Powell	West Medford, MA

ADDRESS CHANGES

Dave Aucoin	423 Pelham St, Apt 6 Methuen, MA 01844 508-687-2768
Scott Milligan	82 Brick Kiln Rd, Bldg 3, Apt 206 Chelmsford, MA 01824 508-970-0438

ATM ECLIPSE EXPEDITION

Please note that the eclipse will occur in July, not January, 1991, in spite of what must be your editor's wishful thinking. To reserve your place on the ATM eclipse expedition (July 7 - 14, 1991) you must send a deposit of \$25.00 per adult to:

ITA Tours
Attn: ATM Eclipse Expedition
P.O. Box 45250
Somerville, MA 02145

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| April 20 | "The Early Solar System", by John Wood, Center for Astrophysics |

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

MARCH-1989

DEEP SKY WANDERINGS

This month's article is for the deep sky enthusiast who yearns for some 'hard to find' objects; ones that you sometimes can't see for all the glass at the University of Arizona. I have seen most of these objects on or around full moon, except for a few which were very difficult. This is by no means for the faint of heart; all you deep sky 'CAT' users should proceed to put down this article and leave the room. Those of you still out there should read on and prepare for adventure.

Our first stop is Cassiopeia and a faint region of emission nebulosity I first observed by the light of a nearly full moon. NGC 281, which I have termed the 'Pac Man' nebula, is faint at mag 11.0. It is 3.5' x 30' in diameter. Though just visible without a filter, it is best seen with a UHC or comparable nebular filter. I saw it with a 13" telescope. Next is the famous Horsehead Nebula in Orion, designated IC434 (Index Catalog), and B33 (Barnard's Nebula). This is the most difficult nebula I have seen to date. First there is the 'wall' of light, IC434, that stretches 60' south from Zeta Orionis. This is hard to see due to the light from Zeta, so it is best to move the star just out of the field of view. Now the Horsehead is the real challenge. To me it doesn't look like a horse's head, but more like an intersecting patch of darkness dividing IC434 in half. Once you realize this, seeing the Horsehead is that much easier. I strongly recommend the H-Beta filter and a lot of aperture. I have seen it about 11 times with the 13". There are no magnitudes listed but I estimate it at about 13.

East and North of Orion in the summer is Cygnus. A nebula grouping is centered near Gamma. I was not successful trying to view it from Westford, but it was a treat from the lovely dark skies of Katahdin! Of particular interest was NGC 6888, which really stood out with dark skies, aperture, and a UHC filter. It is mag 11, and a supernova remnant much like M1. Its calculated surface brightness is only mag 14, so large optics and red transmitting filters are a must. It is 18' x 12' and is southwest of Gamma Cygnus by 1.5-2 degrees.

Finally, an object that is as difficult as the Horsehead. The Cone Nebula, associated with NGC 2264, is tricky to view since it too is a dark nebula. It is just south of Phi Monocerotis, where an irregular variable gives the surrounding nebulosity its shine; the cone cuts off the light abruptly, is 5' long by 40" to 3' wide (cone shaped), and needs a large aperture, an H-Beta filter and patience to view! Until next time,

Clear skies to all. Deep Sky Dave

CLUB HISTORY PROJECT

Ed Los has been organizing the club's archives and researching our history. As part of that effort, he is collecting early information (especially pre-1965), including bulletins, membership lists, etc. Anything of this sort that he can borrow to xerox will be appreciated.

MT KATAHDIN OBSERVING TRIP

Scott Milligan has reserved a limited number of spaces for our annual Deep Sky Week at Mt Katahdin in Maine. The trip will take place from August 26 to September 2, 1989 (leaving on the 3rd). To assure your place, it is important that you send your check for the camping fee right away to Scott Milligan (please note his new address elsewhere). The camping fee is \$2.00 per person per night; a two day side trip to the South Branch Pond Camp is anticipated, which costs \$4.00/person per night. Please indicate in writing which days you're coming for. For further info, please contact Scott at 508-970-0438.

If you would like to list anything in the ATM Bulletin, please send to: Ken Launie, 15 Salem Street, Cambridge, MA 02139, or call 617-491-6855. Remember that it's your bulletin: Contribute!

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April 13	March 29
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June 8	May 24
July 13	June 27

Dear Member Astronomical League:

The enclosed material is an attempt to encourage the U. S. Postal Service to issue a stamp in honor of the Very Large Array radio telescope. We hope that you will agree that such an astronomically orientated U. S. commemorative postage stamp is long overdue. The last such stamp was issued in 1948 to commemorate the Mt. Palomar 200 inch telescope.

An important part of our effort is to convince the Citizens Stamp Advisory Committee that a broad base of support exists for a VLJ commemorative stamp.

We would appreciate your help. If you support our efforts, please send a letter of endorsement directly to:

Citizens Stamp Advisory Committee
Stamp Information Branch
475 L'Enfant Plaza
Washington, DC 20260

Sincerely,

P. A. Vanden Bout
Director
National Radio Astronomy Observatory

APRIL, 1989

The April meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, April 13, 1989 at 8:00 PM

Our April meeting will feature Dr Gerry Sussman of MIT whose talk is titled "The Digital Orrery: The Status of the Solar System." Dr Sussman has developed a special purpose computer to do planetary orbital calculations, which can describe the positions of the planets at any time in history. He will discuss this device, and will show us his predictions of what will happen to the planets over a period of millions of years.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory); there is free parking in a lot on the other side of Mass Ave.

COMING EVENTS

- | | |
|----------------|--|
| April 20 | Harvard-Smithsonian open night. |
| April 22 | Spring cleanup/fixup at the clubhouse. |
| May 11 | Observatory showcase. ATM members will show slides and share stories about the construction of their home observatories. If you'd like to participate, please contact Gary Walker. |
| May 13 | ASTRONOMY DAY. The club will sponsor an all day exhibit at the Museum of Science, to be followed by a public star party on the roof of the parking garage. More information will follow. |
| Through June 9 | Exhibition of "The Most Reliable Time: Clockwork Technology and Astronomy in 19th Century America." This collection of historical scientific instruments commemorates the 150th anniversary of the founding of the Harvard College Observatory and the 200th birthday of its founding director, William Cranch Bond. Harvard Science Center, room B-6. |
| August 4,5 | STELLAFANE, the annual mecca of telescope nuts, will be held in Springfield, VT. |

The second meeting of the proposed Astronomical Club will be held at the Harvard College Observatory on Tuesday, April 15, 1924 at 8:00 P.M. Following a short business meeting, Mr. P. R. Allen will discuss informally, the setting-up and use of a reflecting telescope. Miss Annie J. Cannon will give a short talk on "Southern Stars".

All interested persons are invited to attend and are requested to fill out and mail the reply card at once.

The Committee on Arrangements

April 5, 1924.

Gordon W. Stoye, Chairman

The Observatory is reached by Huron Avenue cars leaving Harvard Square, Cambridge.

The next meeting of the proposed astronomical club will be held at the Harvard College Observatory on Tuesday evening May 13, 1924, at 8:00 o'clock. It is planned to have several telescopes available on the lawn for observational purposes. The 12 and 15-inch telescopes will also be open for use. Should this night be too cloudy for observing, the meeting will be held on the next clear night during that week. In case of doubtful conditions, please telephone after 5:00 P.M. on the 13th to Univ. 0390 for confirmation of plans.

All interested persons are invited to attend and are requested to fill out and mail the reply card at once. The non-receipt of the reply card will indicate your lack of interest in the proposed club.

The Committee on Arrangements

Gordon W. Stoye, Chairman

May 5, 1924

The mid-summer meeting of the astronomical club will be held at the Harvard College Observatory on Tuesday evening July 29, 1924, at 8:00 o'clock. Professor King will give a short illustrated talk on the planets Jupiter and Saturn, followed, if sky conditions permit, by an opportunity to observe Jupiter in the large telescope.

All interested persons are invited to attend and are requested to fill out and mail the reply card at once. The non-receipt of the reply card will indicate your lack of interest in the club.

The Committee on Arrangements

Gordon W. Stoye, Chairman

July 21, 1924

MAY, 1989

The May meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, May 11, 1989 at 8:00 PM

Our May meeting will feature the legendary John Dobson, the former monk who has dedicated his life to spreading his gospel of "Astronomy for Everyone." John organized the San Francisco Sidewalk Astronomers in the 1960's, bringing telescopes to the people rather than people to the "high temples" of professional observatories. In the process he revolutionized amateur astronomy by questioning cherished telescope design and construction concepts. It was his feeling that telescopes are for looking through, and that time spent actually building a telescope, while maybe not wasted, was time away from the joys of observing. Thus, by stripping telescope making to its bare essentials (what do you really need to make a useful instrument?), he developed what is now widely known as the Dobsonian telescope design. The ability to make telescopes with simple hand tools and cast off parts has resulted in an explosion of telescope making; now people who aren't experienced telescope nuts are able to quickly and inexpensively make a 6", 8" or larger telescope that easily disassembles to fit in a car, and the telescope nuts are now routinely making immense 16", 24" and 30" scopes that may be safely transported to such places as Stellafane. It should also be noted that he has made no effort to patent or control the use of his ideas, that being contrary to his "Astronomy for Everyone" philosophy; thus his name and design concepts are being used by various commercial firms without any financial reward to him or benefit to worthwhile astronomy programs. John will also be in Boston for Astronomy Day, May 11, and will assist in our programs at the Science Museum. Your help is also needed!

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory); there is free parking in a lot on the other side of Mass Ave.

If you would like to list anything in the ATM Bulletin, please send to: Ken Launie, 15 Salem Street, Cambridge, MA 02139, or call 617-491-6855. Remember that it's your bulletin: Contribute!

MEETING DATE	BULLETIN DEADLINE
June 8	May 24
July 13	June 27

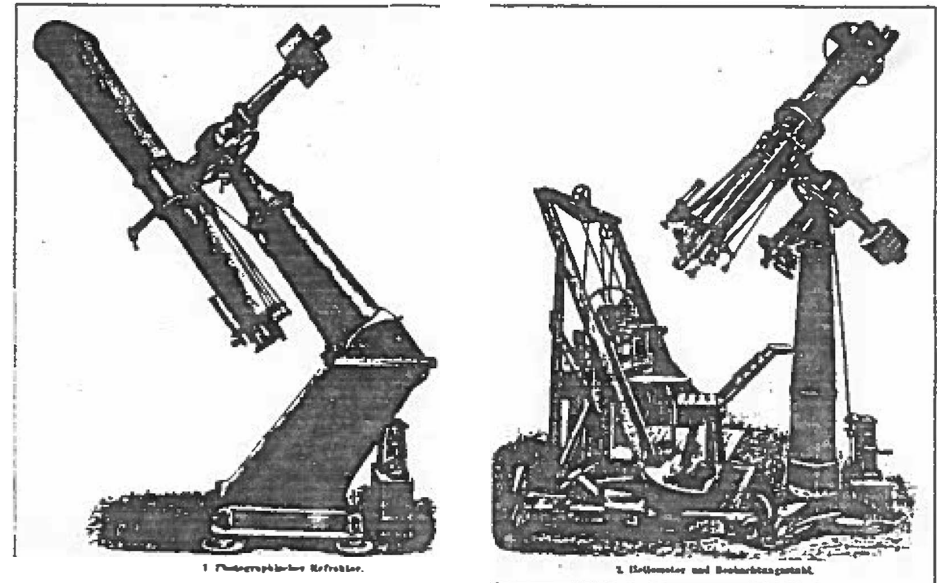
ATM ECLIPSE EXPEDITION

To reserve your place on the ATM eclipse expedition (July 7-14, 1991) please send a deposit of \$25.00 per adult to:

ITA Tours
Attn: ATM Eclipse Expedition
P.O. Box 45250
Somerville, MA 02145

In addition to your deposit, please send a card with your name and address and the number of people in your party, including children, to Mario, whose address is on the front cover. Please state whether you want a roommate. Some additional trip data: The trip has an estimated current cost of \$780.00 per person, to include air fare, rooms, breakfast and dinner. (This price can vary through 1990 with changes in the exchange rate and inflation.) The spaces are filling quickly, so be sure to sign up today!

ASTRONOMISCHE INSTRUMENTE I



Brücher/Transparenz-Lecture, 16. April

5/89

Please join us in welcoming the following new members:

Frederick Ficken	Boston, MA
Larry Klaes	Concord, MA
Marc Marin	Dracut, MA
Joseph Meier	Wellesley Hills, MA
Stephen Moshier	Cambridge, MA
Tony Rea	Framingham, MA

ELECTION of OFFICERS for 1989-1990

The process of choosing club officers for the 1989-1990 has begun. The Nominating Committee, consisting of Chairman Tal Mentall, Marion Hochuli and Dick Koolish was elected at the April meeting. They are nominating the following slate of officers:

President	David Aucoin
Vice President	Marion Hochuli
Secretary	Kenneth Launie
Anthony Costanzo	Anthony Costanzo
Membership Secretary	Edward Los
Members At Large	Scott Milligan
	Mario Motta

FOR SALE

For sale: 8" f10 B&L Schmidt-Cassegrain with Jim's Mobile Industries Dual Axis Drive, Motodec Motofocus, rich field adaptor, 26mm Plossl eyepiece and everything for astrophotography. \$1150 complete, call Barry Bilicki at 508-535-0716.

For sale: 2x Barlow, \$20; ATM piggyback mount for Questar 3.5", \$20; 52mm Orion Skyglow filter, \$55. Call Joseph Rothchild evenings at 617-964-6371.

For sale: 6" f4 Newtonian RFT with professional optics and Criterion equatorial mount with rings, \$250; 6" f8 Criterion mirror with secondary and spider, \$100; Set of cast aluminum rings, 1 1/2" ID, 1 1/8" wide, \$35/pair; 6' long x 16" ID Sonotube, FREE. Contact David Czarick in Hampton, NH at 603-926-3041

For sale: 10" f5.6 homemade Newtonian telescope with professional optics. Includes 2 eyepieces, TELRAD and 50mm finder. Equatorial pipe mount with 2" solid shafts, ball bearings, counterweights and clock drive. \$350 complete or will sell mount separately. Call Barrie Sawyer at 508-352-2561.

- May 13 **ASTRONOMY DAY.** The club will sponsor an all day exhibit at the Museum of Science, to be followed by a public star party on the roof of the parking garage. John Dobson will be a featured guest. More information will be available at the May meeting.
- May 18 Harvard-Smithsonian open night.
- June 8 Observatory showcase. ATM members will show slides and share stories about the construction of their home observatories. If you'd like to participate, please contact Gary Walker. Note that this was postponed from May.
- Through
June 9 Exhibition of "The Most Reliable Time: Clockwork Technology and Astronomy in 19th Century America." This collection of historical scientific instruments commemorates the 150th anniversary of the founding of the Harvard College Observatory and the 200th birthday of its founding director, William Cranch Bond. Harvard Science Center, room B-6.
- August 4,5 **STELLAFANE**, the annual mecca of telescope nuts, will be held in Springfield, VT.

CENTER FOR ASTROPHYSICS MONTHLY OBSERVATORY NIGHTS

The Harvard-Smithsonian Center for Astrophysics sponsors free programs in popular astronomy for the general public on the third Thursday of every month, at Phillips Auditorium, starting at 8:00 PM.

- May 18 "Dark Skies: Astronomy's Endangered Resource" by David Crawford, Kitt Peak National Observatory
- June 15 "What Are Neutron Stars?" by Roger Blandford, Caltech and the CFA
- July 20 "20 Years Since the Apollo Landing: What Have We Learned?" by Ursula Marvin, Center for Astrophysics
- August 17 "Dark Matter in the Universe" by Wallace Tucker, University of California and the Center For Astrophysics

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

JUNE, 1989

The June meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, June 8, 1989 at 8:00 PM

This month's meeting will feature ATM members who will show slides and share stories about the construction of their home observatories. These observatories range from very simple to quite elaborate structures, and the meeting promises to be very interesting. We will be hearing from Dennis DiCicco, George East and Mario Motta, and possibly one or two others. If you'd like to participate, please contact Gary Walker.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory).

ELECTION of OFFICERS for 1989-1990

The Nominating Committee, consisting of Chairman Tal Mentall, Ed Doherty and Dick Koolish recommends the following slate of officers:

President	David Aucoin
Vice President	Marion Hochuli
Secretary	Kenneth Launie
Treasurer	Anthony Costanzo
Membership Secretary	Edward Los
Members At Large	Scott Milligan
	Mario Motta

The election will be held at the June meeting.

BULK PURCHASE OF URANOMETRIA, VOL II

People interested in purchasing either volume of this star atlas at a club discount of \$31.96 plus \$1.60 sales tax (\$33.56 total) should leave a message on Ken Launie's answering machine evenings at 617-577-3603 before Wed. June 7, and bring a check made out to "Sky Publishing" to the June meeting. The books will be brought to the meeting.

Scott Milligan would like to purchase the 17"convex Cervit secondary that was donated to the club a couple of years ago in order to make a precision optical flat; the Executive committee is looking for comments from the membership. Please contact Gary Walker.

NEW MEMBER

Please join us in welcoming Dr George Tucker of Boston.

FOR SALE

FOR SALE: For 6 years the 4x8-foot, roll-off roof "Doghouse" has been home to my C11, which has recently moved to larger quarters. The "cozy" doghouse would be perfect for a pier-mounted 8-inch SCT (welded steel pier available at extra cost). It comes completely wired with four outlet boxes, variable-brightness red and white lights, three shelves, and wall racks for books and atlases. Everything is in arm's reach while seated at the eyepiece. It can be moved on a U-Haul trailer or in a pickup truck and is ready to set on your foundation. Over \$200 worth of materials, asking price: \$100. Call Dennis DiCicco, 617-864-7360, days; 508-443-8493, early evenings.

FOR SALE: Homemade piggyback mount for Questar 3.5", \$20; 52mm Orion Skyglow filter with 55mm adaptor, \$50; 2x Barlow, \$20. Call Joseph Rothchild evenings at 617-964-6371.

COMING EVENTS

Through June 9	Exhibition of "The Most Reliable Time: Clockwork Technology and Astronomy in 19th Century America." This collection of historical scientific instruments commemorates the 150th anniversary of the founding of the Harvard College Observatory and the 200th birthday of its founding director, William Cranch Bond. Harvard Science Center, room B-6.
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June 15	"What Are Neutron Stars?" by Roger Blandford, Caltech and the CFA
July 20	"20 Years Since the Apollo Landing: What Have We Learned?" by Ursula Marvin, Center for Astrophysics

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

We are looking for comments on the format and usefulness of the bulletin; for example, would a less frequently published bulletin, supplemented by post-card meeting notices be preferable? Contact Ken Launie, 617-491-6855.

MEETING DATE	BULLETIN DEADLINE
July 13	June 27

NEW MEMBERS

Please join us in welcoming the following new members:

Frank Baron	Nashua, NH
Sheri Edgett	Tewksbury, MA
Mohamed Namali	Brookline, MA
Sai Vallabha	Salem, NH

MEMBERSHIP SECRETARY'S REPORT FOR
1988-1989

New members:	36
Lost members:	32
Membership on June 1, 1989:	305
Total bills mailed, July, 1988:	300
Total Bulletins mailed, June- May:	3797

Income from dues:	\$8954.00
Contributions:	\$45.00
Shop sales:	\$70.00
Total membership income:	\$9069.00
Bank charges:	\$6.42
15 half-year S & T subscriptions:	\$120.00
287 full-year S & T subscriptions:	\$4592.00
Refunds for overpayment:	\$58.00
Total membership expenses:	\$4776.42

Note: The above is only for the membership account and does not represent the full club financial statement.

COMING EVENTS

July 20 Harvard-Smithsonian open night.

August 4,5 STELLAFANE, the annual mecca of telescope nuts, will be held in Springfield, VT.

To reserve your place on the ATM eclipse expedition (July 7-14, 1991) please send a deposit of \$25.00 per adult to:

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Somerville, MA 02145

In addition to your deposit, please send a card with your name and address and the number of people in your party, including children, to Mario, whose address is on the front cover. Please state whether you want a roommate. Some additional trip data: The trip has an estimated current cost of \$780.00 per person, to include air fare, rooms, breakfast and dinner. (This price can vary through 1990 with changes in the exchange rate and inflation.) The spaces are filling quickly, so be sure to sign up today!

CLUB HISTORY

The Amateur Telescope Makers of Boston was founded in 1934, and during the early 1970's merged with the older Bond Astronomical Club. The meeting notices reproduced elsewhere this issue date from 1924, and appear to herald the beginnings of what became the Bond Club. Does anyone have any information that could help confirm this? They were sent to a Mr H.E. Melzar. If you do, please contact Ken Launie, who found them in an astronomical book dealer's miscellany.

Ed Los has been organizing the club's archives and researching our history. As part of that effort, he is collecting early information (especially pre-1965), like that shown, including bulletins, membership lists, etc. Anything of this sort that he can borrow to xerox will be appreciated.

February 29, 1924

A meeting will be held in Building A of the Harvard Observatory, Cambridge, on March 11 at 8 P. M. to consider the formation of an astronomical club. One of the purposes of such an organization would be to further public interest in astronomical subjects. At this first meeting new astronomical books will be on display, and various star charts will be exhibited and described.

If you are interested and find it possible to attend this meeting, please fill out and return the reply postal card.

Gordon W. Stoyke
Boston Evening Transcript
Harlow Shapley
Harvard College Observatory

The Observatory is reached by Huron Avenue cars leaving Harvard Square.

JULY, 1989

The July meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, July 13, 1989 at 8:00 PM

Summer Show & Tell Meeting

Last month several club members entertained us with stories and slides of building their home observatories. This month we are hoping to hear from people who have been working on telescope or observing projects, who have astrophotos to show, or who have anything else brief and astronomy-related to talk about. The summer meeting always has something of interest for everyone!

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory).

EXECUTIVE COMMITTEE MEETING

A meeting of the club's executive committee will be held at the home of Mario and Joyce Motta on Friday, September 22 at 8:00 PM.

Scott Milligan would like to purchase the 17"convex Cervit secondary that was donated to the club a couple of years ago in order to make a precision optical flat; the Executive committee is looking for comments from the membership. Please contact Gary Walker.

FOR SALE

FOR SALE: Homemade piggyback mount for Questar 3.5", \$20; 52mm Orion Skyglow filter with 55mm adaptor, \$50; 2x Barlow, \$20. Call Joseph Rothchild evenings at 617-964-6371.

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July 20 "20 Years Since the Apollo Landing: What Have We Learned?" by Ursula Marvin, Center for Astrophysics

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

We are still looking for comments on the format and usefulness of the bulletin; for example, would a less frequently published bulletin, supplemented by post-card meeting notices be preferable? Contact Ken Launie, 617-491-6855.

MEETING DATE	BULLETIN DEADLINE
July 13	June 27
September 14	August 23

September 10-18 The Conjunction, hosted by the Connecticut River Valley Astronomers, is held at the Northfield Mountain Recreation Center, and will feature talks, field trips and observing of Mars through Amherst College's 18" Clark refractor. Contact Jack Megas, 311 Surrey Rd, Springfield, MA 01118 or Richard Sanderson, P.O. Box 54, Monson, MA 01057.

September 30, Astro-Assembly, sponsored by Skyscrapers, Inc, of North Scituate, RI. More information is available elsewhere in this bulletin, and yes, there will be observing of Mars through their 8" Alvan Clark refractor! Contact Kathy or Steve Siok at 401-885-1608.

MEDIA STARS!

On Monday, the 8th of August (8-8-88), some members of the ATH's of Boston were in the studio audience of Channel 7's "Talk of the Town" program. One of the guests was Timothy Ferris (author of "Galaxies" and "Coming of Age in the Milky Way"), and the audience coordinator wanted some ATH's in the audience to be able to ask some intelligent questions. They contacted Steve O'Meara who steered them to Tal Mentall who enriched New England Telephone in calling members who were not too far from Boston, and who could get into beautiful downtown Boston on a Monday morn.

Robin Foster, Dave Aucoin, Stelita Cronin, Alex Rhein, Frank Tagan, Ted Kochanski, Stephen Mock, Dave Emerson and Tal were among those in attendance. They were recognized as members of the Amateur Telescope Makers of Boston, standing to applause from the audience. Video tapes of the show will undoubtedly be shown at the Clubhouse on cloudy nights.

FOR SALE, WANTED

FOR SALE: Meade Research Grade Orthoscopic 1 1/4" parfocalized oculars. Focal lengths 7mm, 10.5mm, 16.8mm, 28mm. \$40.00 each or any two for \$75.00, any three for \$105.00, all four for \$130.00. Call Bob Henderson, 227 Linwood St, Lynn, MA 01905. 617-598-3378

FOR SALE: Sky and Telescope, 1975-79, 1982: \$75.00, trade or best offer. Call Anthony at 617-268-0728

FOR SALE: Bausch & Lomb 4" catadioptric, with clock drive, 18mm and 30mm eyepieces, right angle prism, 3x finder, legs and carrying case, excellent condition, \$525.00. Cast iron equatorial clock drive mount, \$45.00. Contact Nic Easton evenings at 508-263-5325.

FOR SALE: Eyepieces: 13mm Nagler, \$160.00; 26mm Televue Plossl, \$55.00; 32mm 2" Erfle, \$60.00; 6mm Clave, \$90.00. Call Alex Rhein at 617-233-9952

FOR SALE: Meade 2080 LX3 with dec motor and hand control, asking \$1200.00. Call Eric Reines at 744-0806

FOR SALE: Celestron SP-8 with 2 eyepieces, carrying case, etc. \$750.00 Call Paul Bleicher at 617-964-4310

WANTED: Fred Miller would like to borrow Anton Kutter's "Bulletin A" concerning Schiefspiegler, which was published by Sky and Telescope in the late 1950's. Please contact him at 617-369-0528

WANTED: Peter Talmadge would like to know the whereabouts of a folded 6" refractor he made and later sold in the late 1960's to the President of an astronomy club in the Fitchburg area. If possible, he'd like to buy the scope back. Does anyone have any information about the scope, that club (apparently no longer active), or the person who bought it? He can be reached at 207-967-5945; by mail at PO Box 497A, Kennebunkport, ME 04046

CENTER FOR ASTROPHYSICS MONTHLY OBSERVATORY NIGHTS

The Harvard-Smithsonian Center for Astrophysics sponsors free programs in popular astronomy for the general public on the third Thursday of every month, at Phillips Auditorium, starting at 8:00 PM.

September 15 "Searching for X-Rays from Supernova 1987A with a Balloon Telescope" by Jonathan Grindlay, Center for Astrophysics

October 21 "Quasars" by Jonathan McDowell, Center for Astrophysics

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

If you would like to list anything in the ATH Bulletin, please send to: Ken Launie, 15 Salem Street, Cambridge, MA 02139 or call either 577-3603 or 491-6855. Please note that this includes articles, reviews, etc, in addition to items for sale!

MEETING DATE	BULLETIN DEADLINE
October 13	September 28
November 10	October 26
December 8	November 23



Amateur Telescope Makers
of Boston, Inc.

Including the Bond Astronomical Club

*Established in 1934
in the interest of Telescope Making & Using*

EXECUTIVE BOARD 1989-90

PRESIDENT

David Aucoin, 423 Pelham St, Apt 6, Methuen, MA 01844, 508-687-2768

VICE PRESIDENT

Marion Hochuli, 28 Taschereau Blvd, Nashua, NH 03062, 603-888-0141

SECRETARY

Kenneth Launie, 15 Salem St, Cambridge, MA 02139, 617-491-6855

TREASURER

Anthony Costanzo, 37 Lake Shore Dr, Georgetown, MA 01833, 508-352-8393

MEMBERSHIP SECRETARY

Edward Los, 7 Cheyenne Dr, Nashua, NH 03063, 603-880-6219

MEMBERS AT LARGE

Scott Milligan, 82 Brick Kiln Rd, #206, Chelmsford, MA, 01824 508-970-0438

Fario Motta, 806 Lowell St, Lynnfield, MA 01940, 617-334-3648

PAST PRESIDENTS

1987-89: Gary Walker, 8 Pond St, Dover, MA 02030, 508-785-0352

1985-87: E. Talmadge Mentall, 119 Henry St, Lynn, MA 01902, 617-598-0766

1983-85: Max ben-Aaron, 61 South Rd, Bedford, MA 01730, 617-275-7257

COMMITTEES

OBSERVING

Scott Milligan, 82 Brick Kiln Rd, #206, Chelmsford, MA, 01824 508-970-0438

WORKSHOP

Ireg Chase, 69 Lake Shore Rd, Natick, MA 01760, 508-655-3385

STELLAFANE

Dennis DiCicco, 60 Victoria Rd, Sudbury, MA 01776, 508-443-8493

COMING EVENTS:

September 9 STARCONN '89, sponsored by the Astronomical Society of Greater Hartford at Wesleyan University, Middletown, CT.

September 14 ATM meeting, Phillips Auditorium

September 21 Harvard-Smithsonian open night.

September 23 LEARNING ADVENTURE session at the clubhouse.

September 30 ASTRO-ASSEMBLY, sponsored by Skyscrapers, Inc. at Seagrave Memorial Observatory. Contact Kathy at Steve Siok at 401-885-1608

How to find us....

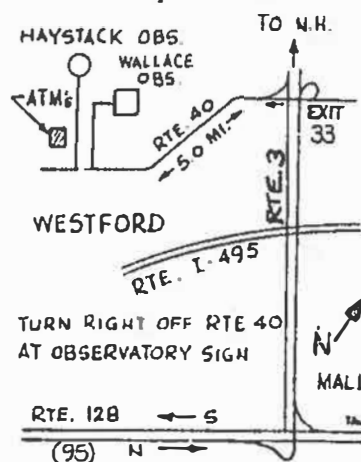
OBSERVING & TELESCOPE MAKING

The white farmhouse at Haystack Observatory

Westford, Massachusetts

Every Saturday starting at noon

Clubhouse telephone 508-692-8708



MEETINGS

Phillips Auditorium, Building I

Harvard College Observatory

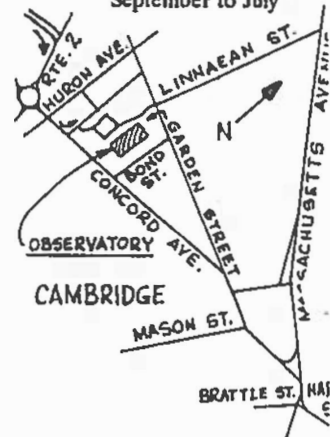
60 Garden Street

Cambridge, Massachusetts

8 p.m.

Second Thursday each month

September to July



NEW BULLETIN FORMAT

You will have noticed that we've changed the format of the bulletin. This was suggested by a number of people, and was done to improve readability, reduce cost, and simplify production. We'd like to include more news of club members and their activities; please write and tell us what you've been doing lately! Send to Ken Launie, 15 Salem St, Cambridge, MA 02139, and note the following deadlines:

MEETING DATE

October 12

November 9

December 14

DEADLINE

September 27

October 25

November 29

SEPTEMBER 1989

The September meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, September 14, 1989 at 8:00 PM

Our speaker is Dr. Ursula Marvin of the Harvard-Smithsonian whose topic will be "Lunar Rocks Still Reflecting New Light on the Moon." She is the only one in the Boston area still performing research on lunar samples.

Dr. Marvin received her BA at Tufts and her MA and PhD from Harvard. Her chosen field is geology, and she is an expert mineralogist. After spending eight years in Brazil and Africa, she taught geology at Tufts. In 1961 she joined the SAO to study meteorites, and when the Apollo samples were brought back she became a pioneer exo-geologist. Dr. Marvin currently lectures in geology and conducts a seminar at Harvard.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory).

ATM NEWS NOTES

ATM'S HOSTED A LEARNING ADVENTURE OUTING at the clubhouse on Saturday, July 29. Club members provided an instructional and observing session. Talks were given by Mike Mattei, Ted Poulos, Greg Chase, Scott Milligan and David Aucoin. The affair was videotaped by John Reed for critique purposes. Steve Mock treated our guests to spectacular views of the setting sun through a refractor fitted with a hydrogen alpha filter. Another Learning Adventure session is planned for September 23.

SEEING DARK SKIES and some wilderness camping and hiking, about 20 members headed for Maine in late August. This was the third annual week-long ATM outing at Mt. Katahdin in Maine's Baxter State Park. We will ask Scott Milligan, who has organized these events, to report soon on the observing and any special happenings.

KALMBACH GROUP SUBSCRIPTION PLAN REMINDER

The club voted at the June meeting to participate in the Kalmbach Publishing Company group subscription plan. The membership secretary will administer the plan, under which special one year subscription rates for the following magazines are available:

Astronomy	\$14.00 (12 issues)
Deep Sky	\$8.00 (4 issues)
Odyssey	\$10.00 (12 issues)
Telescope Making	\$8.00 (4 issues)

NOTE: SEPTEMBER 15 (THE DAY AFTER THE MEETING) IS THE CUTOFF DATE! Late fees will be returned! The plan and the choice of magazines is optional for ATM members. The subscriptions run from January through December 1990, or extend existing subscriptions by one year. The above fees are in addition to the club dues of \$30.00. For convenience, please use this year's billing notice to indicate your choice of magazine (if any), and add the amount of the selected subscription(s) to the club dues. All magazines will be mailed directly to the homes of club members. Only the membership secretary, however, will receive renewal notices.

NEW MEMBERS

Please join us in welcoming the following new members:

Richard & Cheryl Gottlieb	Ashland, MA
Mariane Meuse	Wakefield, MA
Charles Penney	Marblehead, MA
Michael Segool	Berlin, MA
N. P. Warner	Cambridge, MA

FOR SALE

FOR SALE: Homemade equatorial mount and pedestal made from pipe fittings. Includes setting circles but no cradle. Good for 6" - 8" Newtonian. Call Jim Kile days at 617-981-2508.

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September 21 Dr. Sallie Baliunas of the Center for Astrophysics will speak on "The Sun, Stars, and Climate, or why Louis XIV had cold feet."

October 19 "Astronomy's Final Frontier: The Sub-millimeter Window" by Dr. Colin Masson of CFA.

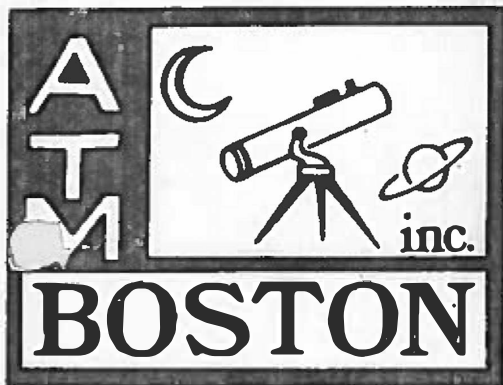
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EXECUTIVE COMMITTEE MEETING

A meeting of the club's executive committee will be held in September. The date will be announced at the meeting, but is likely to be in the week following the meeting.

FIRST CLASS MAIL

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STELLAPANE

Dennis DiCicco, 60 Victoria Rd, Sudbury, MA 01776 508-443-8493

COMING EVENTS:

~~1990~~ - 1989

October 12 ATM meeting, Phillips Auditorium

October 14 CLUB PICNIC, 2:00 PM at the clubhouse

October 19 Harvard-Smithsonian open night

October 28 LEARNING ADVENTURE session at the clubhouse

NEW BULLETIN FORMAT

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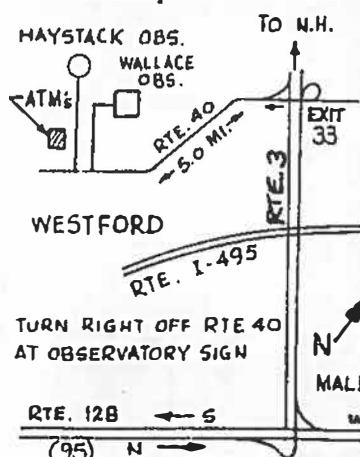
How to find us....

OBSERVING & TELESCOPE MAKING

The white farmhouse at Haystack Observatory

Westford, Massachusetts

Every Saturday starting at noon
Clubhouse telephone 508-692-8708



MEETINGS

Phillips Auditorium, Building I

Harvard College Observatory

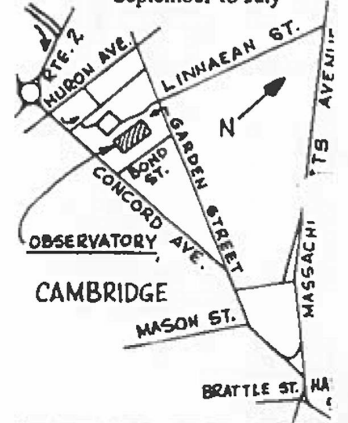
60 Garden Street

Cambridge, Massachusetts

8 p.m.

Second Thursday each month

September to July



OCTOBER 1989

The October meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, October 12, 1989 at 8:00 PM

Our speaker is Alan MacRobert, whose talk is titled "What Happened Before the Big Bang". Mr. MacRobert is an Associate Editor at Sky and Telescope magazine, and is responsible for the "Backyard Astronomy" and "Celestial Calendar" sections.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory).

WORKSHOP NEWS

The clubhouse firewood supply is low, and we're looking for donations; also, if anyone has a decent working VCR that they'd like to donate, it would be much appreciated. In addition to viewing Astronomical tapes such as the ones we purchased of last year's conventions, John Reed has been videotaping our Learning Adventure sessions for constructive feedback (and no doubt there are Dr Who and Star Trek tapes lurking about for those cloudy nights). If you have a machine to donate, please call Dave Aucoin or Greg Chase.

SEPTEMBER MEETING HIGHLIGHTS

During announcements at the September ATM meeting, Mike McCoy told us of the North Shore Astronomy club, which meets at the Ipswich River Sanctuary on Friday nights (when clear). Scott Milligan spoke of upcoming Learning Adventure sessions to be held at the clubhouse; members interested in getting involved should contact him. Dave Aucoin reported that the club raised approximately \$800.00 at the Stellafane swap table (remarkable considering the weather), and Gary Walker informed us of the upcoming donation of a large telescope. This telescope, a 12.5" Cave, is sound but in need of some restoration, so we're looking for volunteer help. Dave also announced that the annual ATM Picnic will be held at the clubhouse on Saturday, October 14 at 2:00 PM.

Our main speaker, Dr. Ursula Marvin of the SAC, whose talk was titled "Lunar Rocks Still Reflecting Light on the Moon", has been working with lunar samples for nearly 20 years. The oldest known earth rocks are 3.6 billion years old, while lunar rocks range from 3.1 to 4.6 billion years old, so very early geologic history can be traced only with these samples. In 1982, Dr. Marvin found a piece of lunar rock in Antarctica, and was recently able to determine that it was likely hurled out by the impact that formed the crater Copernicus. This rock and seven others like it are exact matches to lunar rock, and so are less expensive samples than those brought back by the Apollo astronauts (of course we needed to go there to be sure we knew what lunar rocks looked like)!

After the talk, and refreshments by Stelita Cronin, members who attended the Mt Katahdin dark sky trip showed slides.

NEW MEMBERS

Please join us in welcoming the following new members:

Charles Furgason	West Roxbury, MA
Charles Tenney	Marblehead, MA

(Our apologies to Mr Tenney for the incorrect spelling last month!)

FOR SALE

FOR SALE: Meade Declination Motor for Meade 2120 or 2080, \$30.00. Contact Tal Mentall at 617-598-0766.

FOR SALE: Homemade equatorial mount and pedestal made from pipe fittings. Includes setting circles but no cradle. Good for 6" - 8" Newtonian. Call Jim Kile days at 617-981-2508.

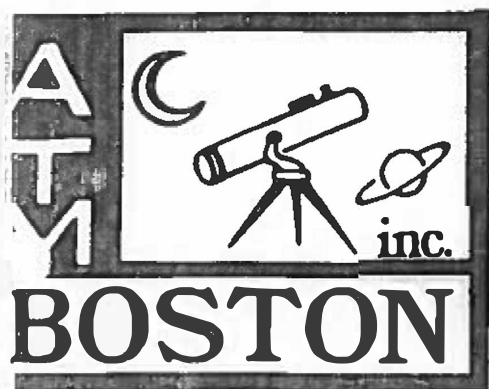
CENTER FOR ASTROPHYSICS MONTHLY OBSERVATORY NIGHTS

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October 19 "Astronomy's Final Frontier: The Sub-millimeter Window" by Dr. Colin Masson of CFA.

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.

Amateur Telescope Makers of Boston
Edward J. Los
Cheyenne Drive
Nashua, NH 03063



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of Boston, Inc.

Including the Bond Astronomical Club

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in the interest of Telescope Making & Using

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Jim Milligan, 82 Brick Kiln Rd, #206, Chelmsford, MA, 01824 508-970-0438

Mario Motta, 806 Lowell St, Lynnfield, MA 01940, 617-334-3648

PAST PRESIDENTS

Gary Walker, 8 Pond St, Dover, MA 02030, 508-785-0352

E. Talmadge Mentall, 119 Henry St, Lynn, MA 01902, 617-598-0766

13-85: Max & Aaron, 61 South Rd, Bedford, MA 01730, 617-275-7257

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WORKSHOP

Chase, 69 Lake Shore Rd, Natick, MA 01760, 508-655-3385

ELLAPANE

nois DiGeroni, 60 Victoria Rd, Sudbury, MA 01776, 508-443-8497

COMING EVENTS:

November 9 ATM meeting, Phillips Auditorium

November 11 LEARNING ADVENTURE session at the clubhouse

November 16 Harvard-Smithsonian open night

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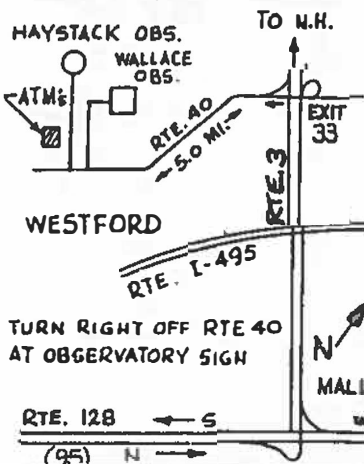
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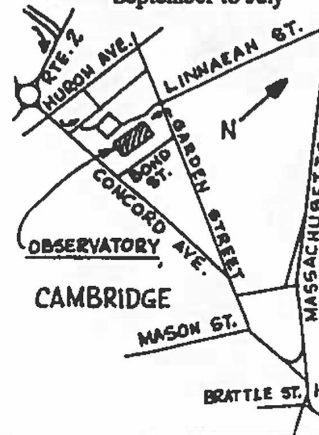
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NOVEMBER 1989

The November meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, November 9, 1989 at 8:00 PM

Our speaker will be Bill Luzader, planetarium director of ~~the~~ Taunton High School, who will tell us about "Project STAR - New Methods for Astronomy Education". Bill is a West Virginia native, who previously spent 8 years teaching and directing the Planetarium program at Brockton High School. He is also a STAR consulting teacher during the summer months, and is a member of the South Shore Astronomical Society and a frequent visitor at ~~the~~ Skyscrapers. He also ~~gives~~ ^{shows} the famous "Astro-Quiz" at ~~the~~ Astroassembly ~~comes~~ ^{from} each fall.

Please join us for dinner before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory).

OCTOBER MEETING HIGHLIGHTS

During announcements at the October ATM meeting, Scott Milligan said that the Learning Adventure session was to be rescheduled to November 18, that there would be a star party with the AMC on October 20, and that he was looking at Nantucket as a possible dark-sky trip site. There was a brief discussion of observing conditions there. Ted Kochanski said that an upcoming NOVA program on radar was partially filmed at Haystack. Dr. Owen Gingerich of Harvard spoke briefly of the possible restoration of the Great Refractor and its building and exhibit space. They are in receipt of a \$78,000 matching grant from the Perkin Fund as well as an \$11,000 planning grant for exhibits from the Smithsonian; he will be in touch with the club if our help is needed. Dave Aucoin showed a completed model of the Voyager spacecraft and hopes to make a group purchase of card-stock models of Voyager and Galileo (more information elsewhere). He told us that the 12.5" Cave telescope donated to the club recently needs lots of work, and then he read a letter from a disgruntled visitor who didn't feel he was very welcome at the clubhouse on several visits (unfortunately one of the visits was during a Learning Adventure session). He will try to contact the person directly. He also will be unable to run club meetings for the foreseeable future due to work conflicts, so Marian Hochuli will fill in for him.

Our main speaker, Alan MacRobert of Sky and Telescope spoke of "What Might Have Happened Before the Big Bang"; how various pre-Big Bang inflationary universe theories were giving rise to rather fantastic mathematical scenarios of such things as alternate universes, as well as incredibly large distances and unimaginably small times. This is indeed a controversial topic which generated a lively discussion!

NEW MEMBERS

Please join us in welcoming the following new members:

Michael Brown	Townsend, MA
Mark Bruckner	Brighton, MA
Joseph & Janice MacMunn	Maynard, MA
Michael Mroz	Nashua, NH
Ruthie Ristich	Somerville, MA

WORKSHOP NEWS

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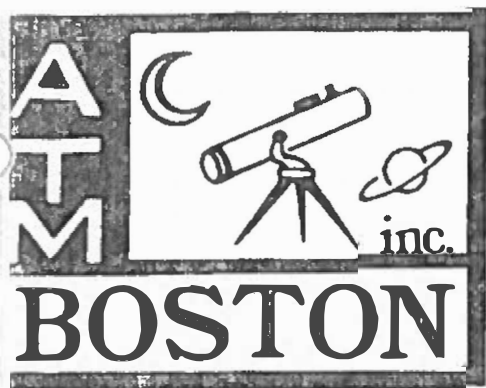
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November 16 "Neptune Revealed: Voyager's Last Picture Show", by Samuel Palmer of CFA

Remember that help is needed with the observing held after the talks; for more information, call Dick Koolish at 646-6086 or the Public Affairs Office at 495-7461.



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1987-89: Gary Walker, 8 Pond St, Dover, MA 02030, 508-785-0152

1985-87: E. Talmadge Mentall, 119 Henry St, Lynn, MA 01902, 617-598-0766

1983-85: Max Ben-Aaron, 61 South Rd, Bedford, MA 01730, 617-275-7257

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TELEPHONE

Keneth DiCicco, 60 Victoria Rd, Sudbury, MA 01776, 508-443-8493

COMING EVENTS:

December 14 ATM meeting, Phillips Auditorium

December 18 Grazing Occultation, Northern Mass

December 21 Harvard-Smithsonian open night

January 11 "Show & Tell" meeting

February 14 Monthly meeting at Hayden Planetarium
Note this is a **Wednesday!**

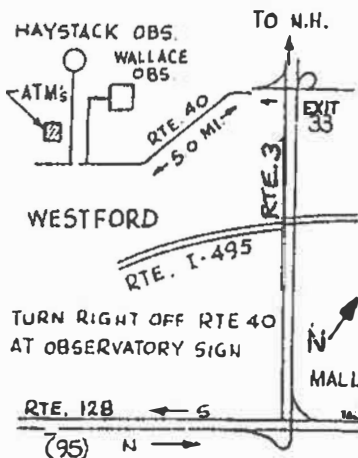
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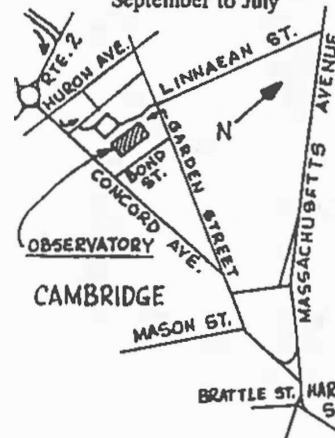
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DECEMBER 1989

The December meeting of the Amateur Telescope Makers of Boston, Inc. will be held in Phillips Auditorium at Harvard College Observatory on

Thursday, December 14, 1989 at 8:00 PM

Our speaker will be J. Kelley Beatty, Senior Editor of Sky and Telescope magazine, whose topic will be "The Voyager Neptune Encounter". He will give us the latest results as well as an overview and eyewitness account of what it was like to be there as the news was breaking. Kelley joined Sky Publishing in 1974 and covers space exploration and the solar system. He recently has spent much time in the Soviet Union reporting on their space activities, and he also does freelance writing for other magazines and newspapers, including the Boston Globe.

Please join us for dinner with our speaker before the meeting at the Changsho Restaurant at 6 PM. The restaurant is located at 1712 Mass Ave in Cambridge, near Linnean Street (which leads directly to the Observatory).

MEETING AT THE PLANETARIUM

We will be having a special program for our February meeting, at the Hayden Planetarium of the Boston Museum of Science, on **Wednesday, February 14 at 8 PM**, (rescheduled from January). There will be a \$3.00 admission charge (except for Science Museum members).

STAR PARTY

On February 1st, the Central Middle School in Waltham is planning an "Evening with the Stars" program and would like to have a number of telescopes and several amateurs and teaching astronomers present.

NOVEMBER MEETING HIGHLIGHTS

At the November ATM meeting, Marion Hochuli filled in for President Dave Aucoin. After the usual reports she read excerpts from Digital's "Astronomy Net", an electronic bulletin board, where people described how they enjoyed the Digital astronomy group's visit to the Clubhouse, and she asked for interested people to sign up for a group purchase of the RASC handbook for 1990. Dave Aucoin had a signup sheet for a group purchase of Voyager models (please send him your check right away if you're interested- we're still a couple of people short of the minimum needed for the discount). Scott Milligan wishes to purchase a convex 17" Cervit blank previously donated to the club; the Executive Board agreed that it is unlikely that it would be used by the club given our other undertakings, and that funds received from such a purchase could help advance our other telescope projects. In order to properly value the disc, we obtained fair market valuations from some optical firms. These ranged from \$700 to \$1000. In other announcements, we learned of a grazing occultation occurring on December 18 in northern Massachusetts. Ed Wallner brought an Aurora Alert Network signup sheet; he's hoping to get the network working well by the time of solar maximum. Scott Milligan announced that the "Learning Adventure" sessions at the clubhouse would likely be held every three months or so (following the November 18 session), and that a preliminary system test of the 13" Schupmann optical system showed only minor corrections were needed. He also described a visit to Nantucket to check out observing conditions for a possible Dark Sky trip; it might be possible to have a joint educational venture with the Boy Scouts there, enabling us to use the only camping facility on the island. Off-season rates for other accommodations on the island look like high-season rates elsewhere! Gary Walker told us of a friend who owns a small island in Nova Scotia which might be available for a trip as well. He also has a few copies of the John Dobson books. Vladimir Vudler showed us a catalog of very warm (and expensive) outdoor clothing, as well as a video of the items after the meeting. We also heard that the MDC is planning to end all educational programs, including our public star parties at Ponkapoag Golf Course, due to a funding cut-back. Scott Milligan urged members to write to: M. Ilyas Bhatti, MDC Commissioner, 20 Somerset St, Boston, MA 02108, as well as to their local State Representative.

Bill Luzader, Taunton High School's planetarium director, spoke on the current state of astronomy education. He showed a video done by Project STAR, taken at the latest Harvard commencement, where graduates were asked some fundamental astronomy questions, followed by an exploration of where their misconceptions came from. This research showed that people have "naive" theories to explain such things as the seasons, and that they will try and fit what they hear in a classroom to these theories. Unless they are challenged, and asked to do activities that require them to learn, and then describe what they've learned, they are likely to only remember a few unconnected facts that they fit into the framework of their original theory. In other words, they don't gain any actual understanding. One of the Project STAR approaches is to work with scale models that the student builds; this gives them a feel for the scale of things, and lets them try to explain concepts to themselves in a way that textbook diagrams can't.

NEW MEMBERS

Please join us in welcoming our new member:

Shirley Elizabeth

Boston, MA

FOR SALE

FOR SALE: Amateur Telescope Making 1,2,3, \$10.00; RNGC, \$10.00; Becvar Atlas Catalog w Field Atlas, \$5.00. Call Tom Calderwood, 617-894-1353

FOR SALE: Meade Declination Motor for Meade 2120 or 2080, \$30.00. Contact Tal Mentall at 617-598-0766.

FOR SALE: Greenerd No. 3 Arbor Press, \$50.00. Ken Launie, 617-577-3603

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December 21 **"Backyard Astronomy Through the Ages"** by Mitch Friedman, Amateur Astronomer

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