



## STAR FIELDS

Newsletter of the Amateur Telescope Makers of Boston  
Including the Bond Astronomical Club  
Established in 1934  
In the Interest of Telescope Making & Using

Vol. 12, No. 5    May 2001

### This Month's Meeting...

Thursday, May 10th, 2001, at 8:00 PM  
Phillips Auditorium, Harvard-Smithsonian  
Center for Astrophysics

### This Month's Speaker...

ONE OF America's great astronomers, George E. Hale (1868-1938) is best remembered for the Palomar 200-inch named in his honor. Hale also built the Kenwood, Yerkes, and Mount Wilson observatories, as well as the Hale Solar Laboratory, and many other projects. Hale's special interest was the Sun. The most beautiful of his telescopes, and the most obscure, is the vertical solar refractor at the National Academy of Sciences in Washington, D.C.

This month's guest speaker will be John W. Briggs, who has visited many of Hale's telescopes, and will describe Hale's instruments, including the venerable Snow Horizontal Telescope at Mount Wilson. This telescope continues in use today for undergraduate and amateur education. The deep, subterranean spectrographs typically associated with these facilities make for fascinating exploration, and John will include these in his slides.

An amateur to the end, Hale appears to have had a close relationship with Russell W. Porter, who contributed much to the design of the 200-inch and its dome. John will outline Hale's dramatic life, including the intensity of his early output; his tragic, debilitating illness; and his final years at the private Hale Solar Laboratory in Pasadena, where Porter was a visitor. John's talk is entitled "George Ellery Hale's Magnificent Solar Telescopes".

Active at Boston ATM meetings in the early 1980s, John is presently deployed at National Solar Observatory in support of the Advanced Technology Solar Telescope Site Survey and he is president of the Antique Telescope Society. John is formerly a staff member at *Sky & Telescope* magazine and trustee of Seagrave Memorial Observatory in Rhode Island. In 1994 he wintered at Amundsen-Scott South Pole Station.

Join our most excellent speaker and us for dinner at 5:45 PM at the Changsho Restaurant located at 1712 Mass Ave. in our fair city, Cambridge.

### President's Message...

I WANT to thank all of our members who are actively involved in our club's activities. There are plenty of wonderful things happening made possible only by the donation of your time and energy. We just successfully completed participation in Astronomy Day at the Boston Museum of Science. It was a very long day, especially for those who stayed to the end with their telescopes for observing at the rooftop starparty. Several members gave lectures during the day. Others brought scopes equipped for safe solar viewing. The only person missing from our traditional event was JOHN REED due to the recent death of his mother. We offer our condolences, John. We look forward to seeing you back soon. We are proud of our members who are involved in Project Astro, inspiring children through the activities of astronomy. We also need to thank all of our volunteers who show up regularly with telescopes for the numerous starparties in the area. With the unpredictable weather of New England, scheduling and rescheduling a starparty is often a very trying activity.

Our slide off roof observatory is progressing nicely. The sidewalls on the observatory are just about completed, and with the warm weather nearly here it should be finished in short order. An upstairs room of the clubhouse has been organized to hold our loaner scopes. It's a pleasure to be able to walk into this room to get and return equipment. Our library is getting organized and other rooms are getting cleaned out. Some members are involved in updating the grinding machines. Others are giving mini classes on Saturday nights on polar alignment and techniques of eyepiece drawings. Thanks again to all those who have pitched in to make this club so exciting.

Thursday nights at the clubhouse have seen increased activity. More members are showing up with telescopes which they have either purchased or made. Some members who have built their own scopes are now becoming more involved in observing. Many clear Thursday nights have evolved into good nights for observing, setting up, and testing new equipment or just being around for the fun. If you ever need help setting up your equipment or an opinion concerning optical performance on your scope, Thursday night is the night you are guaranteed free advice (humor). Hope to see you there. **-Bob Collara, President-**

### April's Minutes...

PRESIDENT BOB COLLARA opened the 736th meeting of the Amateur Telescope Makers of Boston, including the Bond Astronomical Club. Our guest speaker was Paul Horowitz, Professor of Physics and Electronics at Harvard University. Speaking about optical SETI, he explained that with only "Earth 2000" technology we already can generate a beamed laser pulse that outshines the sun by three orders of magnitude, in white light, independent of range. These pulses could be detected with a reflecting telescope of modest aperture, followed by a beamsplitter and a pair of photodetectors of nanosecond or better speed. For more information see [www.OSETI.org](http://www.OSETI.org).

At the business meeting club officers gave their reports.

Clubhouse Director PAUL CICHETTI told how he could not see above the snow piled by the barn walkway in March. It took eight members to clean up the 3-feet of snow dropped by the blizzards of '01. The snowplow also removed half of the lawn. Members have reseeded and filled it in.

BILL TOOMEY held a starparty in Lowell despite the rain. There were color slides, students made planispheres, and telescopes were set up inside. Bill thanked JOE HENRY, ED LOS, CHARLIE MCDONALD, PETER PSYHOS, and JOHN REED. BRUCE BERGER and CHARLIE MCDONALD each thanked the members who helped at the star parties they held. A Nominating Committee consisting of GARY WALKER (Chair), BRUCE BERGER, and CHARLIE MCDONALD was elected by the membership present. The committee will select a slate of officers for next year. Future star parties were announced.

The new director of the CfA Public Affairs Office informed us that free programs for the general public on the third Thursday of every month are resuming. "Observatory Nights" feature a non-technical lecture and telescopic observing from the observatory roof if weather permits. Lectures are intended for high school age and older audiences but children are also welcome. Seating is limited and available on a first-come, first-served basis. Doors open at 7:30 p.m. Programs begin at 8:00 p.m. We were told that a new projector in the Phillips Auditorium will provide sharper images and be easier to focus. MARIO MOTTA reported that Texas now has a light pollution bill. Mario suggested that members from a district of a Ways and Means Committee member write to them describing the problems caused by light pollution. The International Dark-Sky Association (IDA) website now has names of manufacturers of full cut-off fixtures at <http://www.darksky.org/ida/links/mfrlinks.html>. BILL TOOMEY spoke about the merits of being a Project Astro volunteer. GARY WALKER showed the ring light he assembled for making flat-fields for his CCD camera. MATT BENDANIEL announced that some of his photos were published in two astronomy magazines, and in Terence Dickinson's new book *Backyard Astronomers Guide*. Matt showed us several of his beautiful images.

*-Eileen Myers, Secretary-*

## Treasurer's Report...

FOR THE month of March we had \$257.89 in revenue and \$274.62 in expenses for a net loss of \$16.73 for the month.

As of March 31st, 2001 our assets were:

Checking Account	\$ 19,680.04
CD Investment	\$ 19,006.66
Total Assets	\$ 37,507.10

Of the total, \$2,311.51 is in the Land Fund and \$160.00 is for clubhouse key deposits.

*-Bernie Volz, Treasurer-*

## Membership Report...

WE WARMLY welcome the following new members: JONATHAN GREENBERG from Eastham, MARILYN MCCORMICK from Natick, WILLIAM MESSENGER from Belmont, and ANDREW WARNER from Harvard.

We wish to express our deepest condolences to JOHN and MONIQUE REED on the loss of John's mother.

*-John Small, Membership Secretary-*

## Clubhouse Report...

### SATURDAY OPEN CLUBHOUSE SCHEDULE

May 5	Steve Clougherty	Bruce Gerhard
May 12	Richard Burrier	John Panaswich
May 19	Steve Mock	Eileen Myers
May 26	Bruce Berger	Paul Cicchetti
June 2	Eric Johansson	Al Mazurka
<b>June 9</b>	Open	<b>Work Party #5</b>
June 9	Jack Drobot	Phil Rounseville
June 16	Henry Hopkinson	Peter Psyhos
June 23	Lew Gramer	John Reed
June 30	Dan Feldkhun	Steve Herzberg

### NOTE: Astronomy Conventions in May

Sat - Sun, May 5-6 - NE Astronomy Forum, Suffern, NY

Sat, May 12 - StarConn at Wesleyan University, Middletown, CT

AT THE April 7th work party construction on the observatory resumed. DAVID PROWTEN completed the framing of three of the four walls (4' high). There was a review of the outrigger design. Painting of the woodwork in the meeting room began. On April 14th texture panels were nailed onto the meeting room walls. Prep work began for the new furnace. Several workers tackled the drain around the 17" observing pad. This should allow for less standing water on the pad after snowmelt or heavy rain. The weather is getting increasingly warmer and the driveway around the clubhouse drier. It is now safe to use the driveway behind the barn, but be cautious during times of heavy rainfall. Thanks to STEVE CLOUGHERTY, BRUCE GERHARD, DICK KOOLISH, ED KNIGHT, DAVE PROWTEN, PETER PSYHOS, JOHN REED, DAVE SIEGRIST, SAI VALLABHA, and GARY WALKER.

The next work party is not until June 9th, but please mark your calendars. We will need the help. The work on the new observatory will continue, plus we would like to continue the re-roofing of the North side of the barn.

*-Paul Cicchetti, Clubhouse Director-*

## Astronomy Day Thank You...

THE WEATHER was cool but clear for this year's Astronomy Day celebration held at the Boston Museum of Science on Saturday, April 28th. As always, we had a strong showing of members from the club participating in the display area, giving lectures, conducting daytime observing, and setting up for the evening star party. I want to take a moment to thank everyone. If I've missed you, please let me know so I can correct the omission!

MARSHA BOWMAN did a great job of coordinating some of the logistical chores throughout the day! She made sure our parking tickets were validated, recorded members present and made sure we were all set for dinner reservations. Marsha also donated a large number of passes and tickets to the planetarium shows and to the Omni Theater for the club members to enjoy.

DAVE SIEGRIST spent the day demonstrating mirror-grinding techniques to the visitors and, much to the astonishment of the entire custodial staff, another crop circle-like ring was observed in the museum's marble floor! Many people got a chance to experience the feel of mirror grinding because of Dave's tireless efforts! MIKE and FRAN CARNES spent a great deal of time in the display area as did MATT BENDANIEL, DENNIS KELLY, ED

LOS, CHARLIE MCDONALD, and myself. I had my 20-inch scope set up inside near our display area while DAVE KELLY had a scope set up closer to the Omni Theater.

Outside, ROGER GREENWOOD, EILEEN MYERS, and PHIL ROUNSEVILLE took advantage of the clear skies and set up their scopes to observe some beautiful sunspots as well as the waxing crescent of Venus.

In the Wright Theater, members gave short lectures on a variety of astronomical topics. ART SWEDLOW's talk was "Understanding Gravity", LEW GRAMER spoke on "Observing Shooting Stars", R.P. HALE gave a lecture on the "Mayan and Aztec Calendars", BILL TOOMEY's hands-on demonstration was titled "From the Earth to the Moon", and I gave a lecture entitled "Aurora: Fire in the Sky".

Other members helping throughout the day were BRUCE BERGER, ART CAMERON, PAUL CICCETTI, BOB COHEN BOB COLLARA, STEVE and DAN HERZBERG ARJAN KLOET, DICK KOOLISH, GENE MC AULIFFE, MARILYN MC CORMICK, and JOSEPH ROTHCHILD.

After dinner at Papa Razzi's many of us returned to the roof of the parking garage for the evening star party. I was joined by and DAVE and MARYLOU AUCOIN, MARSHA BOWMAN, PAUL CICCETTI, BOB COHEN, BOB COLLARA, ROGER GREENWOOD, STEVE and DAN HERZBERG, DAVE and DENNIS KELLY, ED LOS, EILEEN MYERS, and PHIL ROUNSEVILLE. There were observations of Saturn, Jupiter with three of its Galilean satellites bunched up in an interesting array, the Moon, and several bright double stars and deep sky objects.

Astronomy Day 2001 was a great success and I think everyone at the museum had a FANTASTIC TIME! We always have so much fun on Astronomy Day! The day goes by all too quickly and I always leave wanting it to continue just a little longer. I know that by sharing our enthusiasm and love of astronomy we are inspiring others to learn and explore and, hopefully, to become amateur astronomers themselves. Once again, thanks to everyone who helped out! By giving your time and energy, you help to make our club's contribution to the event very special!

*-Rich Nugent, Observing Committee-*

## Star Party Thank You Note...

WHAT STARTED out as a beautiful first day of Spring ended on a spectacular note at the **McCarthy Middle School Star Party in Chelmsford** on March 20<sup>th</sup>. Although afternoon clouds made some a bit nervous, the western sky cleared up in time to show some of the splendors of the night sky to about fifty 6<sup>th</sup> graders and their parents.

The students arrived in two groups for an introduction to the planets by amateur astronomer and Project Astro volunteer WILLIAM TOOMEY. Bill's slide show and talk stimulated the young crowd into asking many questions and left them eager to join the astronomers and their instruments on the viewing field to see these wonders with their own eyes.

Awaiting the crowd as it surged outdoors were amateur astronomers and ATMob members MIKE CARNES, DAVE GOLDHIRSCH, JOE HENRY, MIKE HILL, EILEEN MYERS, PETER PSYHOS, MIKE SCHEXNAYDRE, MIKE SIEDZIK, and KEVIN SNELL. Members guided the first time stargazers towards Jupiter, Saturn, Betelgeuse, Sirius, Polaris, the Pleiades and the Orion

Nebula. Many thanks to all of you for your dedication to the club's outreach program.

Mr. Bob Noonan, the in-school Star Party coordinator and my daughter's homeroom teacher, had spent all day at the Massachusetts State House with a group of 6th grade students speaking up for a bill that would ban non-biodegradable Styrofoam from school cafeterias throughout the state. The bill was drafted by the students, and sponsored by Rep. Carol Clevin. A great big thank you goes to Bob for his help and willingness to stage this event for his students, and for staying throughout the evening event to provide support for our group after such a long day. Maybe we can get these "activists" working on the Dark Sky Bill next!

The night also marked the first public star party where the Celestron C8 donated by DOUG BROWN of Naples, Florida was used. Doug has been a member of ATMob for about 60 years, and recently donated the scope for just this purpose. Thank you, Doug. The kids loved it! I can't wait for the next party - it was a blast!

*-Bruce Berger-*

## Star Party at Fruitlands Museum...

FRIDAY, MAY 11<sup>TH</sup> at Fruitlands Museum in the town of Harvard, MA. The museum will be celebrating its opening this year with the program "Under Starry Skies". It will begin at 6:30 p.m. Astronomers are invited to enjoy the refreshments and activities before it gets dark. They expect about 100 people. Contact Eileen Myers at [starleen@ultranet.com](mailto:starleen@ultranet.com) or 978-456-3937

## Other News...

A LUNAR drawing class with 10 students was held on Saturday, April 21<sup>ST</sup> at the clubhouse. Instructor PAUL CICCETTI demonstrated techniques for drawing lunar craters. Paul explained outlining, shadows, and the use of a gray scale. There will be a follow up field class for drawing while looking through the eyepiece.

IT IS time to do the final editing on the Club History. Please send in your changes now to club secretary Eileen Myers at [starleen@ma.ultranet.com](mailto:starleen@ma.ultranet.com) or mail them to Eileen Myers, 73 Westcott Rd., Harvard MA 01451.

THE DATE for the next ATMob bus trip to the Hayden Planetarium in New York City will be Saturday, October 20<sup>th</sup>. Email Eileen at [starleen@ma.ultranet.com](mailto:starleen@ma.ultranet.com) or call 978-456-3937.

**June Star Fields deadline is SUNDAY, June 3rd**  
**Email articles to Star Fields Editor / ATMob Secretary**  
**Eileen Myers at [starleen@ma.ultranet.com](mailto:starleen@ma.ultranet.com)**  
**Articles from members are always welcome.**

**POSTMASTER NOTE: First Class Postage Mailed May 4, 2001**

Amateur Telescope Makers of Boston, Inc.  
c/o John Small, Membership Secretary  
9 Bear Hill Terrace  
Westford MA 01886-4225

**FIRST CLASS**

**EXECUTIVE BOARD 2000-2001**

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**COMMITTEES**

CLUBHOUSE DIRS:	Paul Cicchetti	(978) 433-9215
	John Reed	(781) 861-8031
	Steven Clougherty	(781) 784-3024
HISTORIAN:	Anna Hillier	(781) 861-8338
OBSERVING:	Richard Nugent	(508) 879-3498

**How to Find Us...Web Page [www.atmob.org](http://www.atmob.org)**

**MEETINGS:** Held the second Thursday of each month (September to July) at 8:00PM in the Phillips Auditorium, Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge MA. For INCLEMENT WEATHER CANCELLATION listen to WBZ (1030 AM)

**CLUBHOUSE: Latitude 42° 36.5' N Longitude 71° 29.8' W**

The Tom Britton Clubhouse is open every Saturday from 7 p.m. to late evening. It is the white farmhouse on the grounds of MIT's Haystack Observatory in Westford, MA. Take Rt. 3 North from Rt. 128 or Rt. 495 to Exit 33 and proceed West on Rt. 40 for five miles. Turn right at the MIT Lincoln Lab, Haystack Observatory at the Groton town line. Proceed to the farmhouse on left side of the road. Clubhouse attendance varies with the weather. It is wise to call in advance: (978) 692-8708.

**Heads Up For May...**

**Eastern Daylight (Savings) Time - Subtract 4 from UT to get EDT**  
Fri May 4 – Venus at greatest brilliancy (mag -4.5), low just N of E rising less than 2h before the Sun at month's end. Venus can be followed through sunrise, when it is 37° to 46° to Sun's upper right.

Mercury appears in the WNW in evening twilight during the first half of the month.

Wed. May 16 – Mercury is in conjunction with Jupiter, appearing about 2.8° to its north.

Tue May 22 – Mercury greatest elongation – best apparition of the year.

Mars (mag -1.1 May 1) in Sagittarius is stationary on the 11<sup>th</sup> and begins retrograde (westward) motion. Mars is brighter than Jupiter by month's end (mag-2.0). Mars rises in the SE in late evening and transits near the beginning of morning twilight. Syrtis Major is in favorable view when Mars is due S on morning of May 5. On successive days as Mars passes south, the globe presents its face rotated 10° from the day before, so Syrtis Major will return to most favorable view five weeks later. Look for south polar cap. Jupiter, in Taurus, is low in the WNW after sunset early in the month. By month's end it is lost in the glare of the Sun. Saturn very low in the W after sunset the first few days of the month only.

Fri May 4 η-Aquarid meteors peak 7pm EDT.