



STAR FIELDS

NEWSLETTER OF THE AMATEUR
TELESCOPE MAKERS OF BOSTON

Vol. 6, No. 11

December 1995

Canceled because of snow This Month's Meeting...

Thursday, December 14th, 1995
Phillips Auditorium, Harvard-Smithsonian
Center for Astrophysics

THE DECEMBER meeting talk is "Venus after the Magellan Mission" by Dr. John Wood from the Center for Astrophysics.

Dr. Wood studied geology at Virginia Polytechnic Institute (Bs. 1954) and the Mass. Institute of Technology (Ph.D., 1958). While at MIT, he became interested in the geologic properties of meteorites, about which little was known at that time. Since then Dr. Wood has pursued this subject at the Smithsonian CFA, where he is a member of the research staff. He has also worked at the Enrico Fermi Institute, University of Chicago, on meteorite research. Dr. Wood participated in the analysis of lunar samples brought back by the Apollo astronauts, and served as Vice-chairman of the lunar sample analysis planning team (advisory to NASA) during the Apollo program.

He was a member of the Radar Investigation Group of the Magellan mission to Venus, and continues to study the surface mineralogy of that planet. He is the author of *Meteorites and the Origin of Planets* (McGraw-Hill), 1968 and *The Solar System* (Prentice-Hall), 1979). From 1973-1993, Dr. Wood taught solar system studies part-time in the Dept. of Earth and Planetary Sciences at Harvard University. In 1991, he was elected to the National Academy of Sciences.

Please join us for a pre-meeting dinner at Changsho's restaurant at 6:00 pm on 1712 Mass. Ave. in Cambridge.

President's Message...

*Twas the night before Christmas and all through the clubhouse not an amateur was stirring, not even John Reed
The telescopes were set in the field with great care In hopes that a star soon will be seen.*

The members were quiet, snug in their parkas while visions of nebulae danced in their heads and Reed and Cicchetti in the front meeting room had just settled down for a long winter's night

When out in the field there blazed such a light amateurs sprang from their seats to see what it was Away to the Porch, they flew like a flash they loosened their hoods and staired to the sky

The moon on the breast of the new fallen snow gave a luster of midday to objects below When, what to their wondering eyes should appear but a great comet with eight streaming tails A coma shaped nucleus, so lively and bright They knew in a moment, It was a great sight

More rapid than meteorites, the members did go Nugent stood at the doorway and called them by name Now Beckwith! Now Mock! Now Clougherty and Koolish! On Walker! On Volz, On Beals and Los. To the top of the porch, to the scopes in the field, Now dash away, dash away, dash away all!

As I drew my head and turned around, down the western sky comet did fly It was fitted with streamers from head to its tail and its tails white with reflected sunlight A coma was forming around its bright head It looked like an arrow pointing down west

The amateurs how they twinkled, the members how merry Their cheeks were all rosy, noses like cherries as the temperature dropped to twenty below The frost on their chins was as white as the snow. The telescope tubes were held tight in their hands and condensation encircled their heads like a crown Their long tubes and stubby mounts shook as they moved like bowls full of jelly

It was a broad and jolly new comet and they laughed when they saw it in spite of the cold With a wink of the eye and a twist of the head They strained at the eyepieces for a view of the head They spoke not a word, but continued to work at filling their eyes with comet photons And blocking the cold wind and steadying their scopes they observed and smiled at the great sight

*The comet slid down the sky, to the west it did go and away it descended beyond yon horizon and the amateurs felt a great peace Happy Christmas to all and to all a good night
- Mario Motta*

PS: If you would like to hear the original version by the great orator Tal Mental, come to the December meeting.

Desperately Seeking Sphere...

KEVIN MCCARTHY reports: "The 27-inch Zerodur primary for my Dall-Kirkham compound 'scope is fully polished and I'm about (gulp) to begin figuring. Foucault knife testing revealed a smooth figure, with some faint rings due to my use of a polishing machine (the big brother to the desktop polisher). I was surprised to find that the mirror emerged from polishing slightly figured - zone testing showed that about one-fifth of the desired correction.

Anyone with experience figuring mirror fast mirrors is invited to call me at 603-382-7121 with suggestions. The primary is $f/3.5$ but since the target figure is an ellipsoid with only 57% of the correction of a paraboloid, the difficulty is more like an $f/4.2$ paraboloid. The current plan is to use a 13' sub-diameter star shaped tool to deepen the center. While the knife-edge test useful for a quick check, the depth of the shadows and need for precise measurements have led me to the Jones single mirror null test, described in the *Sky & Telescope* July 1992 issue.

This test appears perfect, but requires a test sphere which I don't have. Anyone with a good sphere in the range of 7" to 10" $f/4$ or 12" $f/5$ or $f/6$ who would consider loaning, renting or selling is urged to contact me".

Announcements...

PLEASE REVIEW the bylaw changes proposed and published in the November issue of *Starfields*. As per our bylaws, one month later (December meeting) we will vote on these amendments.

AFTER MANY months of filing with the state, I have managed to obtain an exempt organization status for the club. This means that whenever the club purchases any materials, we can do this tax free (no sales tax). The certificate is good for 5 years until November of the year 2000.

THERE WILL be an Executive Board meeting at my home on January 7th at 6 pm (Sunday). (This will take the place of a December meeting). Any member who would like issues addressed please notify an exec board member.

A STAR party is being organized for the Killam School in Reading for the evening of January 23 (Rain date is January 25) from 6:30 until 8:30 p.m. We are expecting about 100 people so we could use about a half dozen telescopes. If you are interested in helping out please contact either Charlie MacDonald at (617) 944-6140 or myself at (508) 879-3498 or 72713.522@compuserve.com. Thanks in advance!
-Rich Nugent

THE BARROW's School Star Party held on November 15th in Reading, MA was a big success. Star party coordinator Charlie McDonald said while member Rich Nugent gave a slide show to the children and parents, the skies cleared allowing for observing with telescopes provided by Gary Walker, Dick Koolish, Mark Bruckner (and wife) and Brewster LaMaccia.

The club received a \$50.00 donation from the Barrow's School Parent Teacher Organization for the star party. This is on top of the \$35.00 they donated for last year's star party (which was canceled because of the weather).

ERNIE SCOTT and his wife Judy, have donated some of the long-time member's equipment to the club. Tal Mental was contacted by Judy last month with the offer of a heavy duty light tunnel and Foucault tester under the condition it was for club use only. The equipment -built by Ernie- is now at the clubhouse. Also given to the club were several of the Sam Brown telescope making books. Ernie is currently unable to use the equipment due to an illness.

Membership Renewals...

THIS IS the last month! If you have not renewed your club membership, please do so today. The back of the July '95 *Star Fields* has a renewal form or contact Membership Secretary, Mark Bruckner for one (his phone number is listed on the last page of *Star Fields*).

Please complete and return the form with your payment, as soon as possible to Mark.

Observing Committee...

ONE OF the big worries about setting up star parties is whether or not enough members will be present to accommodate the large crowds in attendance. It always *seems* to work out but I do remember occasions where last minute scrambles were necessary!

To help keep the anxiety down, I'd like to ask you to consider becoming an observing committee volunteer. We try to limit star parties to one per month and with a list of committee members we could insure that no one would be overburdened. Sometimes the events are held at local schools and sometimes they are at the clubhouse. We also work with the Boston Museum of Science for Astronomy Day and Space Day activities and occasionally run star parties there for special events. We run the Messier Marathon each spring and hopefully we can set up special members events at the clubhouse during warmer weather.

I know many of you already help with these events -I'd just like to put together a more formal cadre. Please call me at (508) 879-3498 if you're interested. - Rich Nugent

Treasurer's Report...

THE COLUMN at right has a brief summary of the first quarter's income and expenses. These reports will be published quarterly, in *Star Fields* one month after the close of the quarter; meaning in the November (1st quarter), February (2nd), May (3rd), and September (annual report) issues.

We are running as a cash business and therefore recognize expenses (and income) when the club actually pays (and receives) the amount. Please submit expenses (and income) promptly for accurate reporting.

These figures disagree with those published earlier in *Star Fields*. Those earlier figures did not include expenses previous Treasurer. Tony Costanzo, paid (mostly for last year's expenses) after the close of the last fiscal year. This emphasizes the point of promptly submitting expenses, especially at fiscal year's end.

Please note that our \$5,800 certificate of deposit and land fund (somewhere around \$150) are not reflected below.

If anyone should have questions regarding this report or suggestions for what you'd like to see reported, please contact me (508-881-3614).
- Bernie Volz

Clubhouse News...

THE CLUBHOUSE committee meeting was held on the 25th of November. All clubhouse committee members can expect a report in the mail in January.

THE CLUBHOUSE will be on nine Saturdays in 1996. This is to allow our committee members to celebrate holidays with their families and attend other astronomical functions. All current committee members are donating five nights a year to keep the clubhouse open Saturday nights. Additional Saturday night observing could be possible with additional volunteers for the clubhouse committee.

THE CONCRETE walk has been poured in the barn. When it cures we will be able to use the rear door.

THE MESSIER Marathon will be held the week of February 17th and March 16th. This should allow members to observe all 110 Messier objects. Let's give it a try!

PUBLIC NIGHTS. One night a month is set aside for members to invite groups to the clubhouse for observing and instruction. This is an attempt to reduce the impact of the multitude of star parties that have been occurring in the past at the drop of a hat. If you get an urgent request for a star party, utilize the next public night at the clubhouse. Please coordinate the star parties with Observing Chairman, Rich Nugent. Contact John Reed for public night dates. The next public night is January 27th.

ATMoB Expenses

Date	Description	Income	Expense	Balance
07/01	Starting Balance			5,929.64
	Clubhouse		309.02	
	Glass Supplies		273.80	
	Star Fields		526.85	
	Misc.	75.55	44.84	
07/31	Ending Bal.	75.55	1,154.51	4,850.68
08/01	Starting Balance			4,850.68
	Clubhouse		935.78	
	Glass Supplies	81.00		
	Miscellaneous	2.66	12.00	
08/31	Ending Bal.	83.66	947.78	3,986.56
09/01	Starting Balance			3,986.56
	Clubhouse		10.50	
	Misc.	<u>2.42</u>	<u>210.30</u>	
09/30	Ending Bal.	2.42	220.80	3,768.18
Total Q1 ('95-'96)		161.63	2,323.09	
10/01	Starting Balance			3,768.18
	Member Dues & contributions	3,600.00		
	Clubhouse		5.25	
	Star Fields		345.30	
	Misc.	191.49	92.09	
10/31	Ending Bal.	<u>3,791.49</u>	<u>442.64</u>	<u>7,117.03</u>
Totals for Fiscal Year:		3,953.12	2,765.73	

CLUBHOUSE DUTY ROSTER

Dec. 2:	Art Swedlow	508-486-4734
	Bob Heller	508-433-6536
Dec. 9:	Phil Rounsville	617-527-1080
	Gary Walker	508-785-0352
Dec. 16:	Al Mazurka	508-649-3695
	John Reed	617-861-8031
Dec. 23:	Christmas	Closed
Dec. 30:	New Year's	Closed
Jan. 6:	Richard Burrier	508-448-5059
	Bob Heller	508-433-6536

For Sale...

ALMOST 100 Precision single element lenses up to 4" in diameter. Too many to list. Your pick, \$5.00 each.

- Rick Burwen (508-670-2913)

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 617-942-9426
TREASURER: Bernie Volz 508-881-3614
MEMBERS AT LARGE: Gary Walker 508-785-0352
Dick Koolish 617-646-6086
Phil Rounseville 617-527-1080
Anthony Costanzo 508-521-5382

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

DECEMBER STAR FIELDS DEADLINE

December 26th is the deadline for items to be included in the January issue of *Star Fields*. Mail or phone your contributions to: Steve Beckwith, 195 Wilder Road, Bolton MA. 01740 508-779-5227 e-mail: Compuserve@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.

Amateur Telescope Makers of Boston

FIRST CLASS