



the Spectrum

BUFFALO ASTRONOMICAL ASSOCIATION INC.
BUFFALO MUSEUM OF SCIENCE
HUMBOLDT PARKWAY
BUFFALO NEW YORK 14211

Editor: Ernst E. Both

JANUARY - FEBRUARY 1976

TO ALL OUR MEMBERS AND FRIENDS WE EXTEND THE WARMEST WISHES FOR A HAPPY NEW YEAR!!!

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JANUARY MEETING: Friday, January 9, 1976, 8:00 p.m., Club Room, Buffalo Museum of Science. For our first meeting of the new year Ernst Both, the Museum's Curator of Astronomy will present a color extravaganza "GRAND TOUR OF THE UNIVERSE." Numerous excellent color slides, some taken with the world's largest telescopes, will provide a scenic tour through our solar system, galaxy and the universe, some never before shown to any audience. Followed by the usual refreshments in the Museum's cafeteria.

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FEBRUARY MEETING: Friday, February 13, same time and place as above. Our guest speaker for the second meeting of the new year will be Dr. Antoinette Paterson, Professor of Philosophy at Buffalo State College. Dr. Paterson is the author of several books, including "The Infinite Worlds of Giordano Bruno." The title of her lecture is: "Social and Political Dimensions of Astronomical Theories." This promises to be a very interesting lecture and we are pleased to welcome DR. PATERSON! Refreshments after the lecture.

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OUR NEW OBSERVATORY AT BEAVER MEADOW, by Tom Dessert.

Shortly after David Bigelow was appointed Director of the Buffalo Audubon Society's Environmental Education Center at Beaver Meadow, Java, N.Y., Ernst Both discussed with him the possibility of transferring the BAA's Newstead Observatory to this site. Mr. Bigelow was very enthusiastic about this idea and an informal meeting was arranged between representatives of the Buffalo Audubon Society (BOS) and representatives of the BAA, including Tom Dessert and Ernst Both. In October 1973 the BAA's Board of Directors approved the planning of a new observatory for Beaver Meadow and subsequently an agreement to jointly build the observatory was reached between the BAA and the BOS which detailed that the building and site would be the property of the BOS, while our association would own and maintain the necessary instruments. The BAA also agreed to present periodic educational programs for the general public.

Fund raising for the observatory proceeded during the next two years, reaching a total of \$ 6,077.56 in the summer of 1975. Chiefly responsible for this fund raising were Mrs. Octavia Black, Mr. and Mrs. David Bigelow, Edith Geiger, the late Robert Kartyas, John Riggs, and Warren Steinberg. A number of members contributed items for raffles which also benefited the fund raising efforts, while ultimate success was assured through the very excellent co-operation of the BOS which acted as the fund collecting agency.

Original plans which called for a domed observatory building had to be abandoned because of inflation. Instead, Tom Dessert with Bill Deazley and others designed a spacious roll-off roof observatory with an adjacent "warming" room. Toward the end of 1974 Tom Dessert was charged by the Board with the construction and completion of the observatory. Contracts were awarded for site excavation, foundation work, and general building construction. Yet the project could not have been carried to a successful

completion without the hundreds of volunteer hours by the following: Ken Biggie, Bill Chambers, Bill and Elaine Deazley, Tom and Marty Dessert, Mike and Nick Dlugosz, Marybeth Gauthier, Rick Janas, Steve Jaworski, Carl Kalweit, Bob Kirchgessner, Bob Mayer, Carl and Joe Milazzo, Rowland Rupp, David Steinagle, Warren Steinberg, and Walt Whyman. To these and all the others who gave not only of their time but also of their financial support the BAA owes a lasting debt of gratitude.

Meanwhile the telescope has undergone major modifications in the shop of Bob Mayer. Tom Dessert has worked closely with Bob to provide an instrument usable in a variety of visual and photographic programs. In December 1975 the BAA Board of Directors appointed Tom Dessert Observatory Director for 1976. Tom will be responsible for establishing and conducting various astronomical programs at Beaver Meadow in co-operation with David Bigelow (the center's Director) who has overall responsibility. The first program to be offered will be a public night on Saturday, January 3, 1976 (weather permitting, 7-11 p.m.) which will be repeated every Saturday thereafter. Members and friends who are interested in attending these may want to check local weather conditions by calling Mr. Bigelow (457-3228) or Tom Dessert (652-5530).

Although details concerning the use of the telescope by BAA members have not been finalized, those who are interested in using it should contact Tom Dessert. Needless to say, this instrument is available to all BAA members, but each user will have to be checked out at the telescope before actual use. It is hoped that many members will avail themselves of a unique opportunity to use a truly fine instrument at an excellent location.

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HOW TO GET TO BEAVER MEADOW: TAKE THRUWAY EXIT NO. 55 TO RT. NO. 400, THEN SOUTH TO RT. NO. 78 TO STRYKERSVILLE. THERE GO EAST ON PERRY ROAD TO RT. NO. 77. GO SOUTH ABOUT ONE MILE AND WATCH FOR SIGN TO BEAVER MEADOW WHICH IS ON THE LEFT (EAST).

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METEOR SHOWERS in January, by Darwin Christy

The meteor showers in January begin with the QUADRANTIDS on the third. The new moon will not interfere and this should be very spectacular for the six hours of its maximum from about 4:00 p.m. until 10:30 p.m. (if I calculated correctly). As many as 80 meteors per hour may be seen with an average magnitude of 3. On the 17th the fire ball display of the KAPPA CYGNIDS will be in order. Even though the moon will be near full phase, you should still be able to see them, and although only about 5 per hour may be expected, they are still worth the effort. On the same date the COMA BERENICIDS will occur but since they are fairly faint, they will probably not be seen.

On February 9th the AURIGIDS come into view with about 12 meteors per hour. The nearly first quarter Moon will have set so that observing should be good. Good luck!

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AUCTION IN JANUARY

Walt Whyman is bringing to our January meeting an aluminized spherical mirror 4-5/8 inch in diameter, f/12.6 (focal length 58-3/8 inch) to be auctioned to the highest bidder, with all proceeds to go to the BAA'S Observatory Fund. This mirror could be used to make a good beginner's telescope, a finder for a larger instrument

or a 'scope for lunar and planetary photography.

It is not a home-ground mirror, but was commercially made, originally as a short focus lens with a strongly convex surface and a nearly flat one, having a radius of curvature of $116\frac{3}{4}$ inches. It weighs two pounds, is $15\frac{1}{16}$ inch thick at the edges and $1\frac{3}{8}$ inch thick at the center, and without the aluminizing would be a cemented two-element achromat of about 12 to 15 inch focal length. It was given to Walt back around 1960 by Walter Semerau, who later aluminized the "flat" side to make it useable in a reflecting telescope.

To make sure this mirror doesn't go for "peanuts" and to assure a substantial benefit to the Fund, Walt himself is making a starting bid of \$ 10, which amount he will donate to the Fund if there are no other bidders. It ought to be worth between \$ 25 and \$ 30; Edmund Scientific asks \$ 27.50 (in their 1974 catalog) for a $4\frac{1}{4}$ inch spherical f/10 (current prices are probably higher). This one is a $4\frac{5}{8}$ inch, f/12.6.

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"The Largest Telescope on This Side of the Atlantic" - 1838 (conclusion) by E.E. Both

As mentioned in the Nov.-Dec. 1975 issue of the Spectrum, the 12-inch Smith-Mason reflector was dismantled in August of 1839 and taken by Smith to Ohio City, Ohio, where Smith mounted it in a better frame:

"The stand is precisely similar to the engraving, in the Philosophical Transactions, of the one erected by Ramage at the Royal Observatory, Greenwich" (this engraving is reproduced on p. 4. ed.). "It is full twenty feet high, and has a sliding gallery that will hold, with convenience, four persons. The telescope swings between two parallel beams, about six feet apart; up and down these the gallery can be raised or depressed by one person easily. The telescope is constructed to roll forward, so that the mouth may be at a convenient distance from the gallery. After observing, the tube can be let down into a tight box, and locked up; the whole is supported by four iron rollers, and can be turned by one person in any direction. The apparatus for slow motion in altitude is the same as in New Haven; I have been making some arrangements for slow motion in azimuth."

To this account (from a letter by Smith to Mason) Mason added: "From his (Smith's) zeal and activity, with so valuable an instrument, we cannot but expect the most interesting results." Apparently however, these results did not materialize and I do not know the eventual fate of the 12-inch.

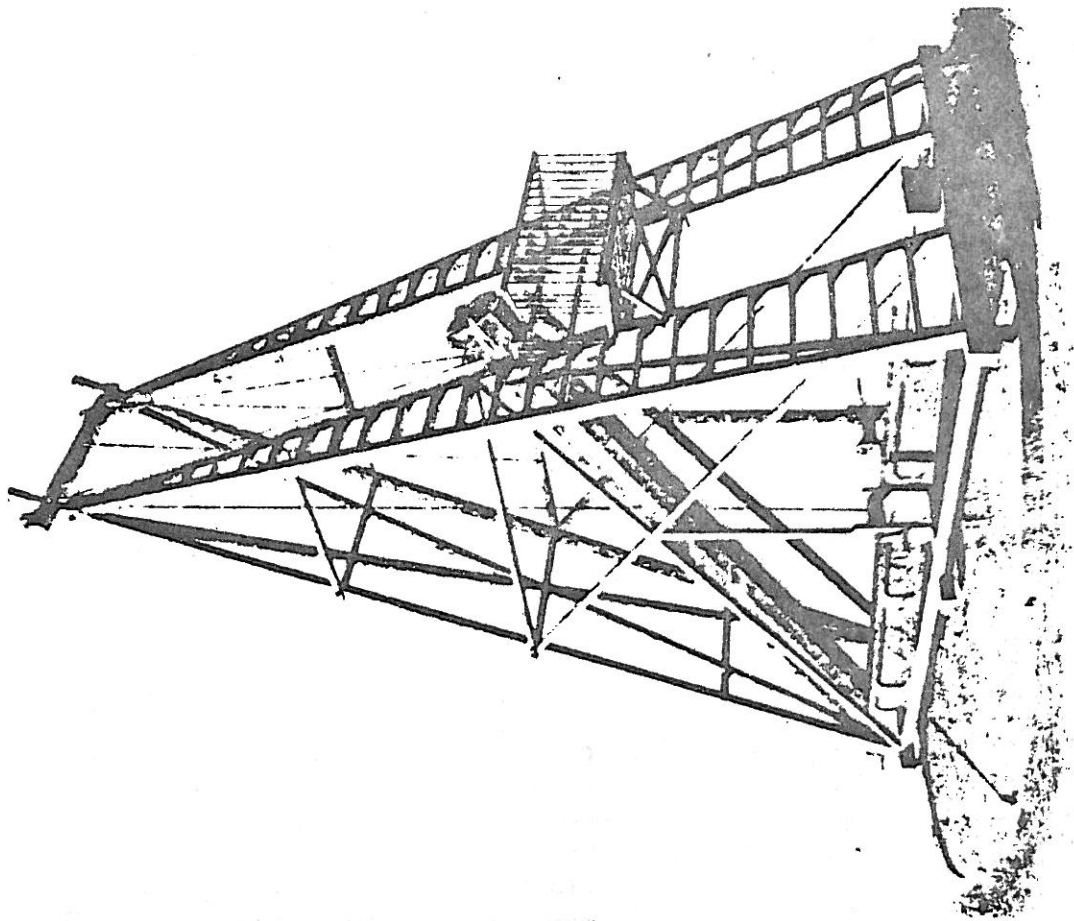
Upon his graduation from Yale College, Mason remained there as a resident graduate, working on a book, "Introduction to Practical Astronomy, designed as a Supplement to Olmsted's Astronomy." Unfortunately Mason died in his 22nd year, on December 26, 1840, one year before this book appeared in print. Earlier in 1840 Mason had published "Observations on Nebulae with a Fourteen Feet Reflector, made by H. L. Smith and E. P. Mason, during the year 1839" (in: Transactions of the American Philosophical Society, vol. 7, N.S., p. 165-213). It is evident from this paper that Mason was the primary driving force behind the building of the "largest telescope" and that he performed most of the observations. These indicate that he was a very excellent observer whose premature death probably robbed American astronomy a man of great promise. (Note: Information presented here is based on the two works by Mason mentioned above, and on Olmsted's book: "Life and Writings of Ebenezer Porter Mason," 1842.)

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WE LEARN THAT ... Rudy Buecking, a BAA member for many years, had to undergo an operation and is now in Long Island. He probably would appreciate a note from members and can be reached c/o the Buerger Family, Old Sands Point Road, Sands Point, Long Island, N.Y. 11050. Why don't you drop him a note?

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The 25-foot reflector of Greenwich Observatory by Ramage. The mounting is very similar to that used by Smith and Mason in their 12-inch reflector.



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