

the Spectrum

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

Editor: Ernst E. Both

MAY - JUNE 1976

MAY MEETING: Our meeting on May 15, 1976 (8:00 p.m. EDT) will take place in the Fred T. Hall Building, at the Audubon Society's Beaver Meadow Environmental Education Center. This meeting will include the dedication of our new Beaver Meadow Observatory. Featured on the program will be Dr. Fred Price in a lecture entitled "The Norman Lockyer Observatory." Our Vice President, Tom Dessert, will be on hand with a slide presentation illustrating the building of the observatory and some of the objects which can be photographed with our 12 $\frac{1}{2}$ -inch reflector. This promises to be a very exciting evening and we hope to have a record turnout. 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 (LEFT) ON PERRY ROAD TO RT. NO. 77. GO SOUTH ON RT. 77 ABOUT ONE MILE AND WATCH FOR SIGN TO BEAVER MEADOW WHICH IS ON THE LEFT (EAST).

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JUNE MEETING: The last indoor meeting will take place on June 12, 1976 (8:00 p.m. EDT) in the Club Room of the Buffalo Museum of Science. It will feature the annual report of our outgoing President, Mr. Darwin Christy. Election of new officers will follow the President's report. The nominating committee is presenting the following slate of officers: President: Dr. Fred Price; Vice President: Mr. Ken Biggie; Secretary: Mr. Rowland Rupp; Treasurer: Mr. Tom Dessert. Nominations from the floor can be made at the May meeting.

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REPORT TO THE MEMBERSHIP - OBSERVATORY AT BEAVER MEADOW

The Observatory of the Beaver Meadow Environmental Education Center at Java, N.Y., has been completed since January of this year. It took nearly six months and over six thousand dollars to finish the work. It was established for the purpose of providing a facility for education and enjoyment in the various branches of astronomy. At Beaver Meadow we can appreciate a natural environment that allows us to pursue our interests in observing nature not only on the miles of trails but also in the heavens. Whether using a telescope, a pair of binoculars or just your naked eye, you will see the stars, planets and other objects under the best conditions in western New York.

The Observatory was erected through the combined efforts of the Buffalo Audubon Society and the Buffalo Astronomical Association. As provided in the agreement between these two groups, the building is owned by the Buffalo Audubon Society, while it is the responsibility of our membership to maintain the building and equipment (the latter is the property of the Buffalo Astronomical Association). We therefore ask our members to help us keep the Observatory looking its best. If you have any spare shrubs or flowers you would like to have planted around the building, please contact the Observatory Director, Thomas Dessert, at 652-5530 for information.

For our members' use we have provided a 35 mm camera body and all necessary attachments for taking pictures either with the 81-inch reflector or the 42-inch refractor mounted with it. However, to use this equipment, you must be briefed and qualified in the use of the Observatory and its instrumentation. The Observatory Director or Program Director on any clear Saturday night will be happy to check out any member on the use of the installation and present him or her with a key to the building for their own use. Program Directors are observatory-qualified members and are responsible for conducting the observing programs each public Saturday night, weather permitting. Program Directors serve for one month at a time on those Saturdays which are clear, normally about two per month. If any of our members would like to help run the Observatory by being a Program Director, they should contact Tom Dessert for details.

Under the direction of Mr. David Bigelow, Resident and Director of the Beaver Meadow Environmental Education Center, programs and lectures on astronomy have already been initiated. Mr. Carl Kalweit (BAA member) is currently conducting a ten week course, Saturday evenings from 8-10 p.m., entitled "Astronomy for the Beginner". Tom Dessert will conduct a 6-week course with lectures, demonstrations and field work entitled "Astro-Photography for the Amateur." The course is scheduled for Friday nights at 8 p.m., July 9 through August 13. To provide income for additional equipment and maintenance, all courses will entail a set fee of \$ 20.00 for non-members and \$ 15.00 for BAA-BAS members. At the completion of any astronomy course offered at the center, all participants will be qualified to use the Observatory on their own.

The operation of the Observatory is the responsibility of the Observatory Director who in turn reports to the Board of Directors of the BAA and the Resident Director of Beaver Meadow. If any member has any suggestion concerning the operation of the Observatory, please contact any of these parties. We look forward to an exciting educational future with these facilities. With the summer star parties ahead of us, many of which will be held at Beaver Meadow in conjunction with the Saturday Public Nights, most of you, we hope, will visit and use the Observatory. We are sure that you will be pleased with what you find.

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ANNOUNCING A NEW COURSE: ASTRO*PHOTOGRAPHY FOR THE AMATEUR, by Thomas L. Dessert at BEAVER MEADOW ENVIRONMENTAL EDUCATION CENTER, Welsh Rd., Java, N.Y.

Friday's, 8 p.m., July 9 through August 13, 1976

Fee: \$ 20.00 for non-members, \$ 15.00 for BAA-BAS members

Participants in this course will be Observatory qualified and have personal access to the facility.

Subjects to be covered include: Darkroom procedures; How to photograph Constellations, Milky Way, Moon, Planets, Star Clusters, Galaxies, Nebulae, even the Sun; Choice of films and printing papers; Guiding procedures, etc.

Film and processing will be supplied free during the course.

NOTE: Due to course requirements this class will be limited to the first 25 who sign up. To sign up for this course, either see Mr. or Mrs. Bigelow at the Beaver Meadow Center or call 457-3228.

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PAST EVENTS: 42 members went to the Rochester Strasenburgh Planetarium for our April meeting and thoroughly enjoyed the show. *** Reports of the April 2 Pops concert indicate that 59 tickets were sold. From the proceeds of these (\$ 295.00)

a total of \$ 221.25 went to the Buffalo Philharmonic Orchestra, while the BAA received \$ 73.75; in addition \$ 32.50 were contributed by the following members: Mr. and Mrs. Wm. Chambers, Bruce and Mrs. Cook, Michael Dlugosz, Richard Janas, Robert Mayer, and Margaret Rabe. Our sincere thanks to these members and to all who purchased tickets. The total from this event amounted to \$ 106.25, which will be added to our Observatory Fund. We are especially grateful to Mrs. Edith Geiger through whose untiring efforts this sum was raised.

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COMING METEOR SHOWERS, by Darwin Christy

Perhaps Meteor showers are not the most spectacular astronomical phenomena to observe in this area, but - - - did you ever lie back in a lounge chair or on a hammock and just ramble through the star fields, maybe re-studying the constellations? Well, it is a good way to accidentally see or observe a meteor from a particular shower or just a sporadic obs. Starting in May, there are about twenty showers which will occur through September. The expected showers are:

Zeta Herculids	May 4	Alpha-Beta Perseids ...	July 27
Arietids	June 8	Delta Aquarids	* July 29
Zeta Perseids	June 9	Pisces Australids	July 30
Alpha Scorpids	June 9	Alpha Capricornids	August 1
Ophiuchids	June 20	Perseids	* August 11
Draconids	* June 28	Kappa Cygnids	August 20
Beta Taurids	June 30	Omicron Draconids	August 22
Sagittariids	July 6	Zeta Draconids	August 26
Alpha Cygnids	July 14	Epsilon Perseids	September 11
Capricornids	July 23	Alpha Aurigids	* September 22

Those with an asterisk are major, well-known showers. The other showers are mainly known to those who belong to the American Meteor Society and work is still being done on these to obtain more information. Although meteor showers are not usually observed through a telescope, the dark night skies at our new facility at Beaver Meadow should be excellent for naked eye observations.

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FIRST U.S. MANNED SPACE FLIGHT LAUNCHED 15 YEARS AGO (from NASA Release 76-72/73)

Fifteen years ago on May 5, America sent its first man into space, Astronaut Alan B. Shepard, Jr., in his Mercury spacecraft, Freedom 7. At 9:34 a.m., EST, on May 5, 1961, a 78,000-pound thrust Redstone lifted off from Pad 5 at Cape Canaveral, Fla., carrying the Mercury spacecraft aloft. The 2,700-pound capsule landed downrange in the Atlantic Ocean 15 minutes and 22 seconds later, after reaching a peak altitude of 116.5 miles and a top velocity of 5,180 miles per hour.

Astronaut Shepard experienced a peak stress of 6 g during booster acceleration and less than 12 g on reentry. During the flight, Shepard underwent five minutes and four seconds of weightlessness. Within two minutes after his capsule splashed down in the Atlantic, northeast of Grand Bahama Island, Shepard was hauled into a Marine Corps helicopter and was on board the aircraft carrier USS Lake Champlain after another six minutes. Six destroyers lay along the path of this first American manned flight and 10 search-and-chase aircraft were in the air. In addition to laying the groundwork for future manned flights, it was the first maiden flight of a

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revolutionary manned vehicle was open to worldwide public view. Some 45 million Americans watched the event on television and the flight was also viewed throughout the world.

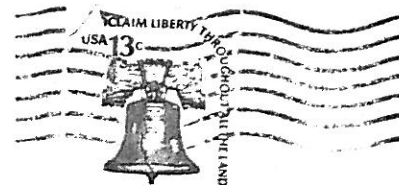
Although the flight was unsophisticated when compared to the 30 manned missions which were to follow, it was a key mission for the National Aeronautics and Space Administration. It was an important first step in a program which over the years has provided jobs for hundreds of thousands of American and foreign workers; has brought sights and sounds from around the world via communications satellites; has expanded our knowledge of the universe through space science and lunar and planetary satellites; and altered the way we live through Earth observation satellites.

The success of the Freedom 7 flight also intensified public interest in the space program. Less than three weeks later, on May 25, 1961, President John F. Kennedy in a special message to Congress on "urgent national needs" set as a national goal "landing a man on the Moon and returning him safely to Earth." The goal was met and thousands of technical innovations are the payoff from our years in space. The direct benefits to us on Earth include a broad spectrum ranging from prospecting for oil with land-resource satellites to medical diagnoses by computer, based on technology gained in the space program.

The distance the space program has traveled was cited by NASA Administrator Dr. James C. Fletcher, who said: "Less than two decades ago, we were proudly pointing to a grapefruit-sized satellite in orbit. Today we are sending robot spacecraft to explore the surface of other worlds ... We must keep the dreams of space alive, for in the long run they will prove of far more importance than the attainment of immediate material benefits."

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Buffalo Astronomical Association, Inc.
c/o Buffalo Museum of Science
Humboldt Park
Buffalo, N.Y. 14211



FIRST CLASS
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Mr. & Mrs. R. Rupp
132 Burroughs Dr.
Snyder, NY 14226