

## THE ATLANTA OBSERVER'S NOTEBOOK

- prepared for the members of the Atlanta Astronomy Club -

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### CAN WE BUILD LARGER?

In recent years a number of astronomers have said that the 200-inch Hale telescope is the largest that will ever be built. This has not discouraged the proponents of still larger instruments. Indeed, the Russians are nearing completion on their 236-inch telescope. Moreover, two European astronomers have notably continued to experiment with unconventional methods of constructing very large mirrors. They propose making the large mirrors out of smaller ones united on a single fixed support of great rigidity. A multi-mirror telescope is presently being built and will include six 72-inch mirrors acting as the primary. While the light-gathering capabilities will be equal to a 176-inch mirror, their resolving power would only equal that of a single 72-inch mirror, as explained in Amateur Telescope Making, page 317.

The pessimists do not conclude that engineers could not build larger telescopes, or that, if built, these would necessarily be defective in an instrument-engineering sense. The outer limit would be set not by engineering limitations, but by irregularities in the earth's atmosphere which blur the images of stars: the larger the telescope, the greater the blurring.

It has almost been forgotten that in 1963 F. G. Pease of the Mount Wilson Observatory published a design for a proposed 300-inch telescope. His design called for a 25-foot mirror in a mounting carried on a horsehoe-bearing similar to the one that now carries the 200-inch, a feature proposed by Russell W. Porter. Pease, an astronomer, precision optician, and engineer who, with R. W. Ritchey designed the 100-inch telescope, was not frightened by magnitude; he stated that "anything up to 100-feet in aperture can be built provided one wants to pay for it". But the financing of a conventional telescope larger than the 200-inch would be a very serious problem. The 200-inch cost \$6,550,000 and might cost twice as much today, and a 300-inch would be theoretically three times as bulky and costly.

- adapted from Composit Mirrors  
by G. Boyd  
Warren Astronomical Society Paper

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### NEW ASTRONOMY CLUB IN DORAVILLE

At the request of Trina Gale, Paul B. Dill, former Planetarium Interne with the Fleishmann Planetarium Atmospherium at the University of Nevada in Reno, Nevada, was made sponsor to a new Astronomy group forming in the Doraville, Ga. area, through the Doraville Recreation Center.

This Astronomy interest group is comprised primarily of students from the

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area high schools, specifically Henderson High.

The organization is in its formative stage right now, showing interest in building telescopes, Astrophotography, Meteor observing, Astrophotography with a normal camera without the aid of a telescope, and overnight observing sessions, to name a few.

The group, in time, plans to become an affiliate of the Atlanta Astronomy Club, as a junior off-shoot, thereby enabling them to use the resources from both the Doraville Recreation Center and those of the Atlanta Astronomy Club.

Transportation for field trips has been volunteered by Mrs. Joanne Gibbs of the Doraville Recreation Center with a Van truck at the groups disposal. The group has a standing invitation for viewing in Conyers, Ga. when they are ready to observe with their own equipment.

We of the Atlanta Astronomy Club welcome the new Doraville Astronomy students to our ever-growing family and the new group is listed as follows:

Tom Bynum - 938-8290

Marc Colby - 938-8642

Andy Gibbs - 934-1691

- Beverly Dill  
Recording Secretary  
Atlanta Astronomy Club

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Observing Alert Weekend Report

Our monthly OAW was held February 27 in the public area of Panola State Park. Some 13 of us gathered on that Friday evening under clear skies. The temperature was in the 50's and the humidity low. The most unusual instrument used was Dr. Calder's "Japanese battleship binoculars". The planets and Messier objects were the most observed sights. How about bringing your portable instrument to the next OAW! It's a great activity. The next gathering will be announced during this meeting. Make a note and come.

- David Speering