

## ASTRONOMY

# Establish Observatory

The United States' first national astronomical observatory, to be managed by an association of seven universities, will be built in Arizona at one of three possible mountain sites.

► THIS NATION'S first National Astronomical Observatory, open to all qualified astronomers, will be built in Arizona with a grant from the National Science Foundation.

It will be managed by a group of seven universities, organized as the Association of Universities for Research in Astronomy, Inc., or AURA, Inc.

A contract for the construction, operation and maintenance of the National Astronomical Observatory has been signed by Dr. Alan T. Waterman, director, on behalf of the National Science Foundation, and by Dr. Robert R. McMath, president, on behalf of AURA, Inc.

California, Chicago, Harvard, Indiana, Michigan, Ohio State and Wisconsin are the seven universities now forming AURA, Inc. These particular universities joined together as a management group for the new observatory because they have had experience in operating large observatories and because they have strong programs of research and graduate instruction in astronomy.

As the project develops, other universities

and individuals are expected to join AURA, Inc., an Arizona corporation with headquarters in Phoenix.

The National Astronomical Observatory will include a 36-inch telescope and an 80-inch telescope, when completed. Its support by the National Science Foundation resulted from a five-year study by American astronomers on needs in their field.

The Foundation's appropriation for fiscal year 1958, which started July 1, includes \$3,100,000 for construction of the optical observatory on a site to be selected after extensive tests. Approximately \$800,000 has been awarded to the University of Michigan for site studies.

Three Arizona locations are now being tested for seeing conditions: Kitt Peak (6,875 feet), the Hualapai Mountains (7,350 feet), and Mormon Mountain (8,440 feet). Two other Arizona sites and one in California were found unsuitable for major astronomical installations.

Science News Letter, December 21, 1957



**BULLET-SHAPED "MOON"** — A bullet-shaped satellite, weighing 29.7 pounds and measuring 80 inches long together with its final stage rocket, has been designed by the U. S. Army. Technicians at the Army Ballistic Missile Agency at Huntsville, Ala., are shown assembling the satellite and final stage rocket, expected to be put into orbit as a single unit early in 1958.

## AGRICULTURE

# Foresee Drought-Free '58

► PROSPECTS are promising that the Dust Bowl states in 1958 will have the first full year of relief from drought conditions in more than a decade.

Reports received by the Soil Conservation Service of the U.S. Department of Agriculture from state conservationists show that present conditions indicating this are very good.

The reservoirs in the Dust Bowl area are full of water for the first time in many a soil conservationist's memory. Moisture in the ground where farmers and ranchers have been practicing conservation methods is reported enough to last the winter.

All states in the 10-year water-starved areas have reported that for the first time in years they are in good position for going into their growing seasons with adequate water supplies.

The optimistic outlook for the plagued areas is the result of the rainfall that broke the back of the 10-year drought this year. In some cases, particularly in Texas and Oklahoma, the rains were so heavy that they caused the most damaging floods in the history of those areas.

The picture can change by next spring and summer, soil conservationists warn, especially if there is a renewal of the drought accompanied by high winds.

At this time of year, however, farmers and ranchers in the Dust Bowl are looking forward to a promising 1958. Here are

some of the reports received from the hardest-hit states:

Colorado—For the first time in five years water is adequate for all irrigated areas and prospects for 1958 are the best since 1949.

Nebraska—October was the wettest month this year, if not an all-time high. Soil moisture is better this year than for many years.

New Mexico—October was the wettest month in several years and range areas are in better condition this year than in a number of years.

Kansas—Moisture is above normal and there are the best conditions since 1952 for ground cover crops as protection against wind erosion.

Oklahoma—Reservoirs are full and the state harvested its best native grass seed crop, more than 1,000,000 pounds.

South Dakota—The state is going into the winter in the best condition in years with reserve moisture in the ground, less overgrazed pastures, maximum cover against wind erosion and a reserve feed supply. It is one of the best years in at least a decade.

Texas—Reservoirs are full and the moisture conditions in October even delayed the harvesting of some crops.

Missouri—The stock water supply is in better shape now than in the last four years.

Science News Letter, December 21, 1957

## MANPOWER

## Scientists Forced To Retire Too Early

► THOUSANDS of experienced scientists and engineers are being forced to retire too early when they could perform vital national services, G. Warfield Hobbs, chairman of The National Committee on the Aging, said at its meeting in New York.

"A scientist in the hand is worth two in the cradle," he said, and urged that companies raise their compulsory retirement age from 65 to 70 for scientific and engineering personnel.

"While we are training young people to become the scientists of tomorrow, many mature and experienced scientists of today are being wasted," Mr. Hobbs reported.

He estimated there are now at least 20,000 retired engineers and natural and physical scientists, most of whom are able and anxious to contribute to the nation's defense effort.

Although they may not be fully trained in the latest developments, all have a basic training in the sciences which would enable them to take over many scientific duties.

If only 1,000 scientists and engineers resumed only part time work, it would mean 2,000,000 highly skilled annual man-hours could be added to the national defense effort, Mr. Hobbs concluded.

Science News Letter, December 21, 1957