

GENERAL SCIENCE

1,074 Pass Science Test

The first hurdle in the Science Talent Search has been successfully completed by 1,074 high school students, boys and girls who may be the science leaders of tomorrow.

► MORE THAN 1,000 high school seniors have passed the Science Aptitude Examination, the first hurdle in the 17th Annual Science Talent Search for Westinghouse Scholarships and Awards amounting to \$34,250.

From 4,050 entrants, the largest number ever to qualify for the Search, 1,074 have scored high enough on the examination to be named Candidates. These are the most capable of the aspiring young high school seniors who entered this year's Search.

Passing the test is only one of the hurdles that must be successfully overcome in the Search leading to the nation's top science scholarships and awards.

To discover the top 40 young research scientists in the nation and 260 honorable mentions, the judges also evaluate school records, teachers' recommendations and 1,000-word reports on scientific research projects written by the Candidates. Names of winners and honorable mentions will be announced later.

The 4,050 entries came from 47 states and the District of Columbia. Science Clubs of America received requests for 25,039 examinations from 3,298 high school educators. Girls made up 21% of the total number of contestants.

Only completed entries are judged. Each consists of the Science Aptitude Examination administered by a faculty member; school and personal record, and the 1,000-word report on a research project.

The 40 winners and 260 honorable mentions will be recommended to the leading colleges and universities of the nation. Most of these boys and girls will receive thousands of dollars in scholarship offers.

The 40 winners will be invited to attend the all-expense paid Science Talent Institute in Washington, Feb. 27 to March 3, where they will meet outstanding scientists, visit scientific laboratories, and confer with the judges.

At the conclusion of the Institute, the winners of the \$34,250 in Westinghouse Science Scholarships and Awards will be announced.

Many additional students will win recognition and awards in the State Science Talent Searches conducted by 31 states and the District of Columbia through special arrangement with SCIENCE SERVICE. Contestants' entries are released to the states by Feb. 15.

The Science Talent Search is conducted by SCIENCE SERVICE and is supported by the Westinghouse Educational Foundation. It

is one of two annual events conducted by SCIENCE SERVICE for young scientists. The other is the National Science Fair which will be held in Flint, Mich., May 7 through 10, 1958.

Among the Candidates in the Science Talent Search are 23 National Science Fair Finalists of the past two years.

Science News Letter, January 18, 1958

RADIO ASTRONOMY

Find New Kind of Noise In Sun's Radio Outbursts

► A NEW KIND of noise in the sun's broadcasts at radio wave frequencies has been detected by two American scientists.

It shows up as an inverted U-shaped figure on the television-like tubes used to record solar radio emission, they report in *Nature* (Jan. 4). At least 80% of the "U" bursts are associated with solar flares that occur near sunspots.

Drs. A. Maxwell and G. Swarup of Harvard Radio Astronomy Station, Fort Davis, Texas, U.S.A., discovered this "remarkable new type" of burst in the 100 to 580 megacycle band.

Science News Letter, January 18, 1958

OCEANOGRAPHY

Bathyscaphe Explores Ocean Bottom

► STRANGE HOLES in the ocean floor and "snow" deep in the ocean were encountered by the underwater "blimp," the bathyscaphe, during tests conducted by the Office of Naval Research, the Navy has announced.

Probing down nearly two miles below the surface of the Mediterranean, the scientists placed particular emphasis on studying underwater acoustics. A "puzzling phenomenon" was that the noise level at mid-depths, which came from a horizontal rather than a vertical direction, differed "significantly" from that at higher and lower depths.

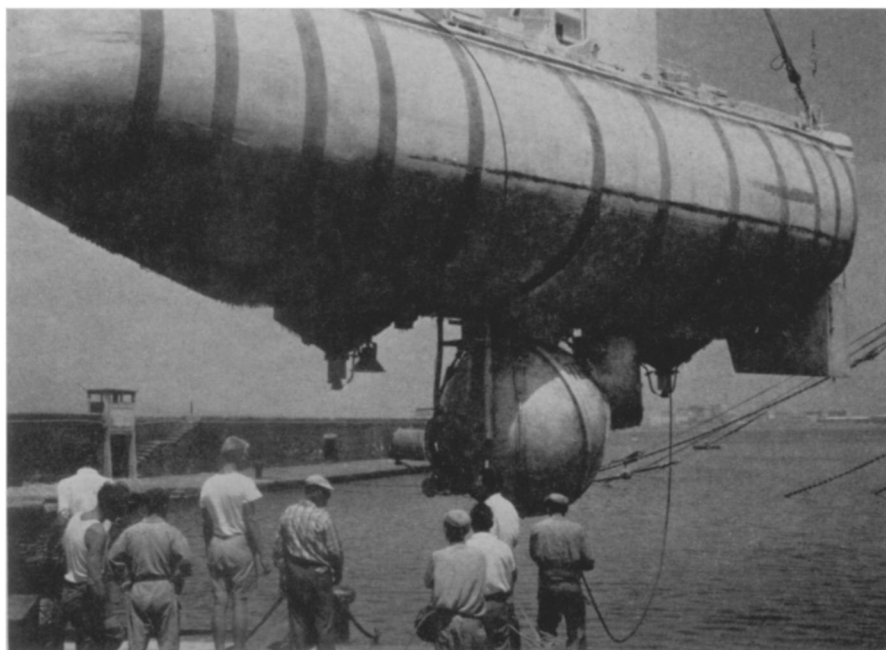
Minute suspended particles, looking like "snow," filled the sea, but there was no indication of large numbers of macroplankton. These small plants and animals have been considered responsible for the deep scattering layer.

In addition to fish, some of which seemed to have a white down covering their bodies, an abundance of sea life was observed at all depths. However, if the numerous holes in the ocean floor, most of them about one-quarter inch in diameter, were caused by burrowing animals, the animals were never seen.

A series of 26 dives was completed in the bathyscaphe, which consists of a 50-foot hull, 12 feet in diameter, filled with gasoline to make it buoyant. A sphere, six and a half feet in diameter, is suspended beneath the hull and is capable of withstanding ocean depths of more than three miles. This is about 20 times as deep as a submarine can descend.

The unique vessel is one of two designed and built under the supervision of the French scientist, Prof. Auguste Piccard, inventor of the bathyscaphe.

Science News Letter, January 18, 1958



UNDERWATER "BLIMP"—The bathyscaphe Trieste is in drydock, preparatory to scientists making a check on its scientific instruments. The cabin is in the sphere seen below the 50-foot hull and can hold two scientists with their cameras and various recording and observing instruments. The vessel is able to descend to depths great enough so that studies could be made of most of the ocean floors.