

## Remote-Control Undersea Vehicle Demonstrated

A remote-control undersea vehicle for conducting scientific studies of the ocean bottom for prolonged periods at great depths has been developed for the Office of Naval Research. The new vehicle, called RUM for Remote Underwater Manipulator, was demonstrated off the shore of La Jolla, Calif., on 16 May. RUM is essentially a tank equipped with a long, jointed manipulator arm and hand, together with specially devised underwater television cameras which serve as the eyes of the vehicle's operator on shore.

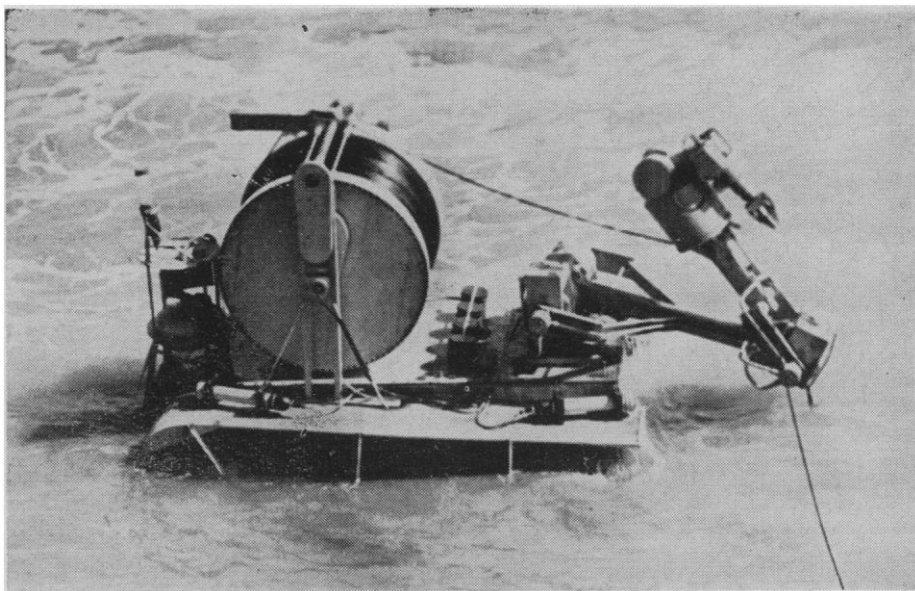
The development of the vehicle was directed by Victor Anderson of the University of California's Scripps Institution of Oceanography, La Jolla, for use in cooperation with the Hudson Laboratories of Columbia University. The goal of the RUM program is to develop an efficient oceanographic vehicle for use in observing the sea floor, collecting samples and specimens, and assembling and installing deep, bottom-mounted instrumentation.

The experimental vehicle that was demonstrated at La Jolla can operate at depths down to 20,000 feet, maintaining a speed of 3 miles per hour where the ocean floor is level. It can maneuver and operate on a 60-percent incline and is capable of climbing a vertical obstacle 12 inches in height.

RUM is linked to a mobile van by a coaxial cable long enough to permit operations out to 5 miles from shore. The cable carries the television signal, relays power for the operation of the vehicle and its cameras and mercury-vapor lights, and provides several remote-control telemetering channels.

## International Space Academy Established by Guggenheim Grant

Formation of an International Academy of Astronautics to provide world technical leadership for the peaceful conquest of space and to serve as a clearing house for astronautic information has been announced by the International Astronautical Federation and the Daniel and Florence Guggenheim Foundation, New York. The academy, which will be financed for the first 3 years with \$75,000 from the Guggenheim Foundation, will be composed of leading scientists in the



New remote-control underwater vehicle (RUM) developed for the Navy by the Scripps Institution of Oceanography.

basic sciences, engineering, the life sciences, and other major fields involved in the development of astronautics. It will be a part of the federation, whose president is Leonid I. Sedov of the U.S.S.R. Academy of Sciences.

Theodore von Karman of the United States, chairman of the founding committee that was authorized to establish the academy at last year's London meeting of the federation, has commented that the new association will provide "what may be the only common intellectual meeting ground" for the scientists and engineers of all nations, including those of both East and West. Consequently, he said, the academy can "bring about the peaceful exploration of space in the shortest possible time, and for the greatest benefit for all."

Sedov said in Moscow that the foundation's grant would be reported at the forthcoming Astronautics Congress in Stockholm and would be "highly appreciated and used for furthering international cooperation and successes in astronautics."

The International Astronautical Federation has been functioning since 1950 and consists of representatives and delegates of the rocket and astronautical societies of some 30 countries. The United States member, the American Rocket Society, has more than 15,000 members. Apart from the federation, there are only two major international groups in the field. These

are the United Nations Committee on Peaceful Uses of Outer Space and the Committee on Space Research of the International Council of Scientific Unions.

### The Academy's Functions

The principal powers and functions of the academy will be to:

Provide advice to the president of the International Astronautical Federation when requested.

Hold scientific meetings and make scientific studies and reports.

Publish *Acta Astronautica*, an international technical publication devoted to astronautics.

Award medals and prizes intended to further progress in the field of astronautics, and carry out such other tasks as may be considered desirable for promoting the advancement of astronautics.

Present plans call for the establishment of the academy as a going concern at the Stockholm meeting in August. It is expected that a permanent headquarters will be established in Paris, where the French Government has promised rent-free quarters.

## Federal Regulation of Animal Studies Proposed by 11 Senators

A bill to regulate the use of experimental animals by institutions receiving federal grants or working on federal contracts was introduced on 18 May