

to go ashore on the island. The boat carrying the scientific party with instruments and supplies was capsized during the landing, but the instruments were for the most part recovered and there were no casualties.

Observations were to have been made on Necker Island, but rough weather made landing there impracticable. The ship therefore proceeded to French Frigates Shoal, where on East Island the same observations were made as on Nihoa. Triangulation was also started, and more complete magnetic observations were made at this place.

The ship returned to Honolulu for supplies and fuel, and has started on a second trip to these islands. Another attempt will be made to occupy Necker to make there the same observations that have been completed at Nihoa and French Frigates Shoal, and to continue the triangulation work at the latter place.

The program contemplates continuing these observations on through the islands to the northwest as far as Ocean Island, if conditions permit, perhaps representing several seasons' work. For the longitude and gravity observations radio time signals are received direct from the Arlington station near Washington, D. C. Lieutenants Brown, Bainbridge and Simmons, who did geodetic work on the Island of Hawaii about a year and a half ago, are the observers in this present work.

SCIENTIFIC AND TECHNICAL COURSES OF THE BUREAU OF STANDARDS

SCIENTIFIC and technical courses will be given at the Bureau of Standards beginning on October 1. The courses are open to all properly qualified students as well as to members of the staff. The subjects covered this year are: Advanced optics, Fourier series and spherical harmonics, Newtonian potential function, Einstein's relativity and theory, analytical mechanics, chemical thermodynamics, advanced inorganic chemistry, ceramic petrography, Heaviside's electrical circuit theory and elementary ceramics.

Each course will be given by an expert in that particular field, the instructors being Dr. T. L. de Bruin, of the University of Amsterdam, and research fellow of the International Education Board; Dr. Tobias Danzig, of the University of Maryland; Dr. L. H. Adams, of the Geophysical Laboratory; Dr. Louis Cohen, of the Signal Corps Research Laboratory; and Dr. Paul R. Heyl, Dr. Raleigh Gilchrist, Dr. Herbert Insley and R. V. Stull, of the Bureau of Standards.

These educational courses of the bureau were started twenty years ago, and each year an opportunity has been given to the younger men and women on the bureau's staff and outside to perfect themselves in

physics, chemistry, mathematics and allied subjects. Authority for the work is contained in a joint resolution of the congress in 1892, opening the government's bureaus for research and educational purposes.

The fees charged place the work on a self-supporting basis, nearly every year showing a small increase in the reserve fund which is added to the sum available to pay the expenses of instructors, prepare the necessary copies of lectures and carry the work through occasional "lean years."

The enrolment has increased slowly but steadily. At the present time about 90 students have enrolled for the coming season. The number will probably be about 120 by October 1.

The work is under the supervision of an educational committee, consisting of four members appointed by the director of the bureau and two elected by the students. The chairman for the past eight years has been Dr. L. B. Tuckerman, of the engineering mechanics section and an internationally known expert on the theory of structures.

Complete information on the courses for the coming year may be obtained by addressing the Educational Committee, Bureau of Standards.

THE SMITHSONIAN INSTITUTION AND MR. ORVILLE WRIGHT

IN an attempt to clarify the Smithsonian Institution's position on the Langley-Wright controversy, to correct errors, where errors have been made, and to do justice alike to three great pioneers of human flight—Wilbur and Orville Wright and Samuel Pierpont Langley—as well as to the Smithsonian, Secretary Charles G. Abbot has made public a comprehensive statement (Smithsonian Publication No. 2977). In this he takes up individually what he understands to be Mr. Orville Wright's grievances against the institution.

Pointing out that since his election as secretary in January, 1928, he had sought to end the controversy, Dr. Abbot reviews the history of the institution's relations with the Wright brothers. He lists seven points to illustrate the recognition by the Smithsonian of the Wrights' achievement in being the first to make sustained human flights in a power-propelled, heavier-than-air machine. This recognition includes the publication of articles by the Wright brothers in the Smithsonian Annual Reports for 1902 and 1914, and of other articles descriptive of their achievements; the award to the Wright brothers of the first Langley Gold Medal for Aeronautics; the request made in 1910 for Wright planes, including the Kitty Hawk plane, to be exhibited in the National Museum, and the public exhibition in the museum of the Wright plane of 1908 (deposited by the War Department)