groups—in the South Pacific. Among these were the Danger Islands in the Cook group.

American observing groups selected as their site Motu Koe, the southernmost of the three Danger Islands and the one closest to the center of the path of totality. Transportation and logistic support for the observers were supplied by the Department of Defense. The Navy furnished a vessel, the LSD *U.S.S. Thomaston,* both to transport scientists and equipment and to serve as a base of operations.

The Eclipse and The IGY

This unusually long eclipse was of particular importance because of its occurrence during the International Geophysical Year. The scheduling of the IGY from July 1957, to December 1958, was intended to coincide with a peak period in the cycle of sunspot activity. Solar eruptions during such periods are followed by many observable effects on the earth and its atmosphere, such as cosmic ray storms, auroral displays, disturbances in the ionosphere, magnetic fluctuations, and disrupted radio communications.

The eclipse also afforded the opportunity to coordinate observations of a variety of terrestrial conditions, by the many widely scattered IGY stations, with observations of solar features and terrestrial effects during an eclipse. For the first time, high-altitude research rockets were used to study the effects of an eclipse on the stratosphere and the ionosphere.

First Details of New Space Agency Organization

Appointments to the top management of the new National Aeronautics and Space Administration were announced 5 October by T. Keith Glennan, administrator of NASA. Initially, the organizational structure provides for three principal areas of activity—namely, space flight development, aeronautical and space research, and business administration.

Reporting to the office of the administrator are the directors of each of these areas: Abe Silverstein, John W. Crowley, Jr., and Albert F. Siepert.

Glennan described the NASA organization as follows:

"In the first category, NASA will be concerned with the entire spectrum of space flight operations including the design and procurement of vehicles and satellite payloads, the launching and monitoring of scientific satellites, the accumulation and reduction of data, and activities supporting the objective of launching man into space.

"In the second category, the long-established and highly regarded laboratories acquired from the NACA will continue their programs of basic and applied research in support of aeronautics and space science and technology. Additional effort in this area of activity will be supported in the laboratories of industry and educational and non-profit institutions.

"The third category, business administration, includes the business functions of any well-run organization, such as the development of fiscal and budgetary policies, of contracting policies and their implementation, of policies relating to personnel administration, plant operation and security, and the provision of administrative policy guidance for the decentralized operation of NASA's research centers and field stations."

Proposed Institute for Study of Man in Africa

When at the end of 1958 Raymond A. Dart retires from the chair of anatomy at the University of the Witwatersrand, which he has held since 1923, it is planned that his work be continued and extended by the establishment of an Institute for the Medical and Anthropological Study of Man in Africa.

A group of past and present students and colleagues of Dart have conceived the idea of the institute, the purpose of which would be to advance the study of the living peoples of Africa in health and disease and to serve as a museum, research, and teaching center. The objectives of the proposed institute are set forth by the organizing committee in its constitution as follows:

1) The institute shall advance the study of the peoples of Africa today in health and disease, their bodily structure, function and pathology, diet and nutrition, genetics and racial composition, disease patterns, climatic adaptations, demography, physical anthropology, psychological problems and cultures, including art, music, languages, social and tribal structure, and psycho-social attitudes.

2) In the second place, the institute shall advance the study of man's ancestors in Africa, their fossil remains, migrations, hybridizations, climatic background, associated flora and fauna, and cultures, including implements and other cultural objects, artistic creations and burial customs.

3) The institute shall foster and facilitate research in the laboratory and in the field; provide educational facilities, both intra-mural and extra-mural; set up a museum of Africana, which shall serve as a repository for collections within the University of the Witwatersrand bearing on the subject of man in Africa, past and present; build up a library and set up a centre for the collection, classification and dissemination of information on all relevant aspects of man in Africa.

Africa's need for workers in all of these fields is great, and it is expected that one great service which such an institute would fulfil, would be to draw young men and women into such work and to train competent personnel for field-work up and down the continent. Another important aim should be to provide adequate facilities for, and encouragement to, visiting scientists from overseas to spend periods working on African material.

Dart's record has included the deanship of the Medical Faculty in Johannesburg from 1925 to 1943, membership on the board of the South African Institute for Medical Research from 1934 to 1948 and on the Medical Advisory Committee of the Council for Scientific and Industrial Research from 1946 to 1948. He has served as president of the South African Association for the Advancement of Science and received the association's gold medal in 1939. Among his greatest achievements have been his contributions to all aspects of the study of man in Africa, not least of which has been his discovery and appraisal of the South African fossil ape-men, the Australopithecinae.

Seawolf

On 6 October the atomic submarine *Seawolf* surfaced off New London, Conn., after a record-breaking continuous submersion which lasted for 60 days. The previous record, set by the *Seawolf's* sister ship *Nautilus,* was 31 days and a few hours. The *Seawolf's* feat was held to have significance for a number of fields, chiefly naval warfare and space exploration. Admiral Hyman G. Rickover, commenting on the performance, said it was now possible to establish a hidden base beneath the sea. For the field of astronautics, with its problem of the extended isolation of space travelers, the experience of the crew of the *Seawolf* is expected to have considerable value.

New Atomic Reactor

A prototype of a nuclear reactor which is designed for space-vehicle propulsion will be tested soon at an Atomic Energy Commission facility near Mercury, Nevada. The basic design of the reactor calls for the injection of gases into a fission reaction, their sudden and extreme heating by it, and their expulsion through directing nozzles for propulsion.