Picture Story No. 716

PEACEFUL SPACE EXPLORATION -- U.S. PROGRESS AND PLANS

Part III - "Research and Development"

During its short lifetime, the United States space program has accelerated rapidly to keep pace with man's desire to investigate and travel far beyond his planet. Since the National Aeronautics and Space Administration was established in 1958, the nation's resources in science and technology have been marshalled for the tremendous task of research and development that has led to progress in exploration. Today, the program -- diversified, complex and costly -- is nationwide in scope. Men and women in every-known field of science and the work force in thousands of factories are participating in a vast effort to acquire knowledge of space and to use space for beneficial purposes. A few of the scientific and technological details of this effort are shown in this group of photographs.

5-16 Kiwi B-1A, photographed from a distance during a test late in 1961, is one in a series of experimental reactors in a program aimed at development of a nuclear-propelled rocket. This successful Kiwi test represents a major step toward flight tests of NERVA, a nuclear engine planned to power a vehicle called RIFT, which will be an upper stage of an advanced Saturn rocket. The Kiwi reactors, developed jointly by NASA and AEC, are important steps in Project Rover, which seeks to take advantage of nuclear power for long space flights. (62-2625) (See also 62-1343, 62-2626 and 62-3152)

62-2625 Science: Astronautics (Research)

El Kiwi-B1A, fotografiado desde cierta distancia durante una prueba llevada a cabo a finales de 1961, es uno de una serie de reactores experimentales dentro del programa que tiene por objeto el desarrollo de un proyectil propulsado por energía nuclear. Esta prueba satisfactoria del Kiwi representa un gran avance hacia las pruebas de vuelo del NERVA, motor nuclear proyectado para propulsar un vehículo llamado RIFT, que será la fase superior de un avanzado proyectil cohético Saturno. Los reactores Kiwi, creados conjuntamente por la A.N.A.E. y la Comisión de Energía Atómica, representan importantes avances en el Proyecto Rover, encaminado a aprovechar la energía nuclear para largos vuelos espaciales.