

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.

7-16 An ion engine to be used in research experiments is assembled. This type of engine, which is being developed to propel spaceships on long voyages, shows great promise. It produces thrust when atoms in cesium vapor are ionized, accelerated and expelled from the rear of the engine. This is one of many scientific projects that are being carried out in the United States to harness new sources of energy for use in space. (62-2626) (See also 62-1343)

62-2626 Science: Astronautics (Research)

Aquí vemos el montaje de un motor iónico que va a ser utilizado en experimentos de investigación. Este tipo de motor creado para propulsar naves espaciales en largos viajes, se muestra muy prometedor. Se produce una fuerza de empuje cuando los átomos del vapor de cesio son ionizados, se mueven aceleradamente y salen despedido de la parte posterior del motor. Este es uno de los varios proyectos científicos que se están llevando a cabo en los Estados Unidos para poner en servicio nuevas fuentes de energía para su utilización en el espacio,

