

Picture Story No. 529

SPACE RESEARCH

Rockets, satellites and missiles of many types, developed by United States scientists, will be launched during 1959 in a long-range program to put man into outer space. The vehicles scheduled for flight tests are the result of technological progress achieved through painstaking, meticulous space research by scientists in private U.S. industry and in U.S. Government. In this nationwide effort, thousands of scientists, engineers, designers and technicians are collaborating to reach two goals simultaneously -- peaceful exploration of space and military defense against possible aggression.

9-15 Before a rocket is assembled, the guidance system must be subjected to rigid tests under conditions that will be encountered in flight. Here a U.S. engineer makes final adjustments of a gyroscope that will be "tortured" on a test table. The circular test table, like the earth, makes one complete turn every 24 hours, but because the earth and the table turn in opposite directions, the test determines whether the gyro will remain fixed in inertial space. The action of the guidance system must be perfect to keep a rocket on a predetermined course. Courtesy of the Ford Instrument Company, Sperry Rand Corporation. (58-23730)

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Astronautics: Research

Antes de que un cohete sea montado, el sistema de dirección debe ser sometido a rígidas pruebas bajo condiciones que ha de encontrar durante su vuelo. Aquí vemos a un ingeniero norteamericano realizando las adaptaciones finales de un giroscopio que será "torturado" sobre una mesa de ensayos. Esta mesa circular, como la tierra, da una vuelta completa cada 24 horas, pero a causa de que la tierra y la mesa giran en direcciones opuestas, la prueba determina cómo el giroscopio permanecerá fijo en el espacio inerte. El funcionamiento del sistema de dirección debe ser perfecto para que el cohete siga el curso que se le ha determinado con anterioridad.

SCIENCE - ASTRONAUTICS (RESEARCH)