

Picture Story No. 703

MIGHTIEST U.S. ROCKET ENGINE TESTED

Progress toward manned flights to the moon and distant planets is seen in the successful performance of F-1, the mightiest rocket engine ever developed in the United States. In more than 25 recent test-stand firings, the new single-chamber liquid-propelled engine has met and even exceeded its designers' power goal of 1,500,000 pounds (680,000 kilograms) of thrust. After flight tests in 1963, the F-1 is expected to become the nation's basic booster engine, with the power and versatility to advance space flight during the next decade.

4-10 This is F-1, the mightiest rocket engine ever built in the United States. Although it looks tremendously complex, it actually is an incredibly simple booster engine. It has less than one-sixth as many moving parts as an airliner jet engine. An important feature of this rocket engine is its ability to operate in flight without electrical power. On the launch pad, electricity will be used to start the power plant, after which the engine will operate without the danger of electrical malfunction during flight. (51-13324)

No de audio

61-13324

Science: Astronautics (Research)

Este es el "F-1", el más potente motor cohete construido nunca en los Estados Unidos. Aunque aparece como enormemente complicado, es en realidad un motor de lanzamiento increíblemente sencillo. Tiene menos de una sexta parte de piezas movibles que un motor de avión de reacción. Un importante aspecto de este motor cohete es su facilidad de funcionamiento en vuelo sin energía eléctrica. En la plataforma de lanzamiento, la electricidad será utilizada para poner en marcha la central eléctrica, después de lo cual el motor funcionará sin el peligro que supone un mal funcionamiento eléctrico durante el vuelo.

