

A giant 260-inch (6.6-meter) rocket motor, described as the world's largest, is prepared for a nighttime test firing near Miami, Florida. The solid-fuel motor generates 3.6 million pounds (1.6 million kilograms) of thrust and is being developed for U.S. space missions of the 1970's and 1980's, such as the 10-man space stations. To ignite the huge motor, a rocket developing 250,000 pounds (112,500 kilograms) of thrust is used. The test firing last 130 seconds, the full duration the rocket would burn in space. Fuel is consumed at a rate of six tons per second. Total weight of the rocket motor is about 930 tons. The Aerojet General corporation of Florida is conducting this final demonstration firing for the National Aeronautics and Space Administration. The test is scheduled for February 23 and the rocket flame is expected to be visible within a 100-mile (160-kilometer) radius. These photos show the fueling sequence:

UPPER LEFT -- The 60-ton motor casing is lowered into the 160-foot-deep (48 meters) firing pit. The motor is 80 feet (23 meters) long and is mounted with the exhaust nozzle up.

UPPER RIGHT -- A technician inside the casing makes a final inspection of insulation.

LOWER LEFT -- A mandrel to form a hollow inner core firing surface for the fuel is lowered into the casing.

LOWER RIGHT -- Close-up of the mandrel being removed after fueling is completed. 12

(66-0897)

