Picture Story No. 699

TEST OF BIGGEST U. S. ROCKET SET FOR 1961

Before the end of 1961, a rocket vehicle towering 185 feet (56 meters) above its seaside launch pad at Cape Canaveral, Florida, is expected to roar upward into space. This will be the maiden test flight of Saturn, the big eight-engine rocket designed to have more than twice the lifting power of any other United States booster. The success of this test, and others to follow it, will mark important steps in the U. S. advance in peaceful space exploration.

At Marshall Space Flight Center in Huntsville, Alabama, where it was developed, the Saturn recently completed all tests short of launching. Since the rocket is too big and heavy to be transported by air, railroad or highway, it was shipped 2,200 miles (3,540 kilometers) over water to Cape Canaveral, Florida. There, at an elaborate, specially built launching site, the rocket with two dummy stages atop it will be prepared for the flight test. When the Saturn is fueled ready for blast off, the big vehicle will weigh 1,160,000 pounds (522,000 kilograms).

There will be a long series of Saturn tests, starting with several to gauge the lifting power of the rocket's cluster of engines, designed to provide 1,500,000 pounds (675,000 kilograms) of thrust. Gradually, this lifting power will be increased through the addition of upper stages with multiple high-thrust engines. Later, improved Saturns and even more powerful rockets will be used to place heavy, manned satellites in orbit far out in space and to send multi-ton spacecraft to the moon and other planets. The U. S. National Aeronautical and Space Administration, which is carrying out the Saturn program with the assistance of private industries, expects to reach this goal within several years.

8-11 A massive launching site -- largest in the United States -- was built at Cape Canaveral especially to accommodate present and future Saturn rockets. At the center is the circular launch pad. The high structure near the pad is the movable tower for preflight preparation of rockets. The site, known as Complex 34, is planned for independent operation. Its elaborate equipment includes a heavily shielded launch control center, an automatic ground control station, fuel handling and storage areas, and an array of servicing facilities. (61-9503)

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