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RELEASE DATE

On Receipt

DOORWAY TO THE MOON:

THE LUNAR LAUNCH COMPLEX

Spread across more than three miles of Merritt Island, Fla., Launch Complex 39 will one day be this nation's doorway to the moon.

Through this doorway, being built by the Canaveral District of the Army Corps of Engineers for the National Aeronautics and Space Administration, will pass America's astronauts and the rockets and spacecraft they will use for the first-- and subsequent--trips to the moon.

The lunar launch complex extends from the launch pads, a quarter-mile from the edge of the Atlantic Ocean north of Cape Kennedy, to the huge Vehicle Assembly Building 3 1/2 miles inland.

Compared to the more conventional launch facilities at Cape Kennedy, where pre-launch assembly and checkout of multi-stage space vehicles is accomplished at the launch pad, Complex 39 will offer a striking contrast.

At Complex 39, the Saturn V moon rocket and its three-man Apollo spacecraft will be assembled and checked out in the controlled environment of the Vehicle Assembly Building, then will be transported in a vertical, or firing, position over a super-strong Crawlerway to the launch pad.

Heart of Complex 39 is the 52-story tall Vehicle Assembly Building, which with more than 129 million cubic feet of space will be the world's largest building from a volume standpoint.

The VAB will contain four High Bay areas in which it will be possible to assemble vertically as many as four of the lunar rockets and their spacecraft at one time.

Each Saturn V will be assembled on a Mobile Launcher within the VAB. The mobile launcher, which stands 446 feet high and weighs nearly 10.6 million pounds, will also accompany the assembled space vehicle to the launch pad.

The VAB's High Bay section will have doors 456 feet high so that an Apollo-Saturn V and a Mobile Launcher can be moved out to the launch pad.

Adjacent to the VAB and connected with it by an enclosed bridge will be the Launch Control Center. From this building, more than three miles from the launch area, NASA teams will control the countdown and launch.

Four firing rooms will occupy the third floor of the building and launch crews will be able to view all pads visually and by television.

The three main rocket stages of the Saturn V will be brought to Merritt Island by barge. To provide direct access to Launch Complex 39 and the VAB, a barge canal was dug from the Banana River to the VAB area and a turning basin and dock space was constructed under direction of the Corps of Engineers.

Joining the VAB and the launch pads are more than five miles of Crawlerway, on which a 5 1/2-million-pound tractor-like vehicle called a Crawler-Transporter will haul the launch platform, the assembled rocket and spacecraft to the launch pad at a speed of one mile per hour.

Since the Crawler-Transporter itself weighs 5 1/2 million pounds and the platform and its cargo weigh 12 million pounds, the Crawlerway had to be built to withstand a total weight of 17 1/2 million pounds.

The Crawlerway is 6 1/2 feet thick, consisting of three feet of crushed rock atop a 30-inch compacted shell-sand subbase and a compacted 12-inch thick sand subbase.

The two lanes of the Crawlerway are spaced on 90-foot centers to match the tractor units of the Crawler-Transporter. Each lane is 40 feet wide.

To service the Apollo-Saturn V at the launch pad, a 40-story-high Mobile Service Structure is being built.

This structure, standing 402 feet high and weighing nine million pounds will have five vertically adjustable platforms with cantilevered closure sections for providing access to the Apollo-Saturn V.

When not in use, the Mobile Service Structure will be parked in an area alongside the Crawlerway. After an Apollo-Saturn V and its Mobile Launcher have been placed on the launch pad, the Crawler-Transporter will return, pick up the Mobile Service Structure and take it to the pad, positioning it on the opposite side of the rocket from the mobile launcher. Prior to launching of the rocket, the Mobile Service Structure will be returned to its park position along the Crawlerway.

Pad A, the first launch area built for Complex 39, covers almost a quarter-square mile and at its top is 48 feet above sea level. A cellular-type structure, the pad contains 120,000 cubic yards of concrete.

Built in the launch pad area are a two-story concrete building, housing environmental control systems and pad terminal equipment, and a single story high pressure gas storage building.

Several tunnels connect underground terminals with the pad surface. A 24-foot wide perimeter road encircles the area.

Pad B, the second lunar launch pad, is being built a mile and a half north of Pad A.

Directly in charge of building the launch complex for the Canaveral District of the Corps of Engineers is Lt. Col. Joseph A. Bacci, Resident Engineer, who serves under Col. W. L. Starnes, Canaveral District Engineer, and Col. J. N. Cox, Deputy District Engineer for NASA construction projects in the Merritt Island-Cape Kennedy area.

Construction of the launch complex is expected to be completed in 1966 and before the end of the decade NASA plans to use the facilities for the takeoff of America's first lunar astronauts.