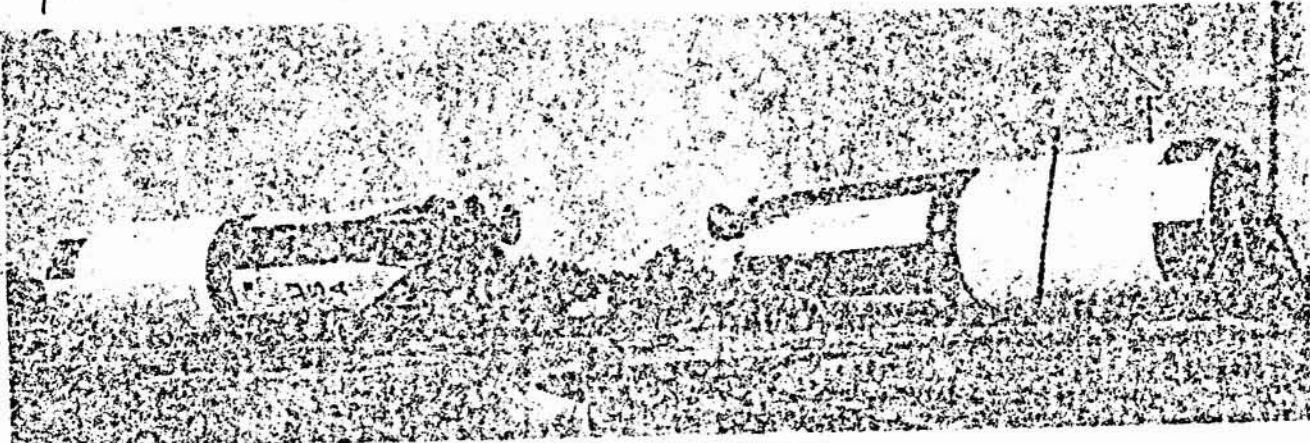


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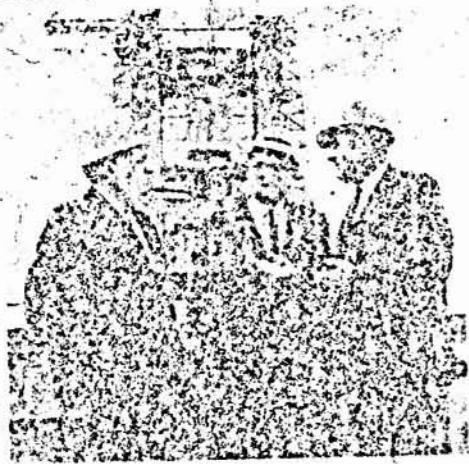
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Two S-IC boosters are moved for tests at Marshall Space Flight Center.

Standing before Saturn V flight booster in static test stand are (from left) Dan Driscoll, Karl Heimburg, John Cully.



Saturn moon rockers are preparing for

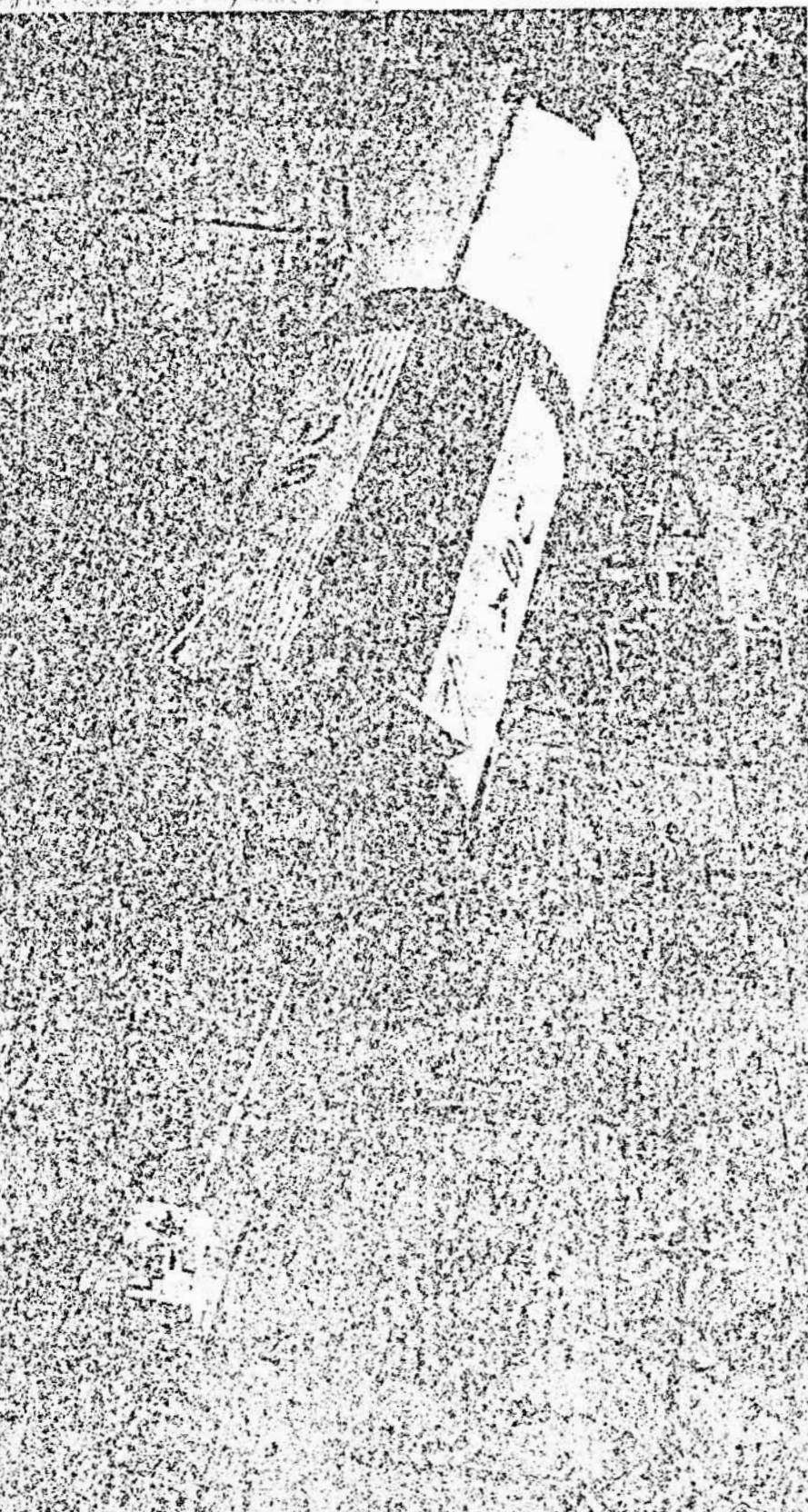
**COUNTDOWN
 TO
 LIFTOFF**

By WILLIAM B. SHEU.

ABOUT THE TIME that the S-IC 1 booster is lifting the first Apollo/Saturn V from the launch pad at Cape Kennedy on its maiden unmanned flight next week, the firing systems will have all been checked out. The S-IC 1 of Devil's Den, Alabama, is being moved to the 400-foot test stand at Marshall Space Flight Center, Mississippi, by the city of Huntsville. The booster will be fired in a static test stand at Marshall Space Flight Center, Mississippi, on March 21.

the S-IC 1 of Saturn V first stage boosters will be capable fired at MTR. At present, S-IC static firings are conducted by the Marshall Center's Test Laboratory at Huntsville, Alabama. Boeing's systems test organization assists in checking out the booster's electrical, mechanical and propulsion systems. During the tests, a vehicle of flight configuration used on the pad for earlier tests. Boeing was responsible for the first firing tests, including two full-duration tests of 15 minutes each. The first firing was from the

400-foot test stand in January and is undergoing modification and refurbishment at Huntsville for use during later phases of the program. The first flight stage—the S-IC-1—was placed in the static test stand January 21, 1966, and completed its test program February 26. It was removed from the stand March 14 and is undergoing post-firing check-out. It is due to be shipped to the Kennedy Space Center where it will be mated to the top stage of the Saturn V. The first flight stage and the Apollo spacecraft, the S-IC-1, were launched on March 21.



Ground test stage of moon rocket is 138 feet in

and is being tested during April. The S-IC-3 also will be tested at Huntsville in 1966.

The job of putting the world's largest and most powerful rocket together—it will stand 365 feet tall, weigh over six million pounds, and produce 7½ million pounds of thrust—will be accomplished in the world's largest building, the 52-story Vehicle Assembly Building.

"Right now," says John Cully, Boeing's Huntsville systems test manager, "our job is to continue to help Marshall check all S-IC systems. We are supporting Karl Heimburg (NASA MSFC Test Lab Director) and Dan Driscoll (NASA MSFC Systems Test Division Chief) in testing both the S-IC-1 and S-IC-2 flight stages through the summer. When Michoud delivers the S-IC-3 to Huntsville next fall, we will assume responsibility for the systems test program.

"Testing the 3 will enable our Boeing crews to gain first-hand experience they'll need for handling the S-IC test program at Mississippi next year. The S-IC-1 is due to be placed in the stand at MTR during the first quarter of 1967. Other vehicles will follow it to test during 1967-68 on about a one-per-quarter basis."

Marshall Test Director Heimburg regards the S-IC tests as "the most challenging and rewarding of my career. When you consider that each of the booster's five F-1 engines gulps propellant (liquid oxygen and kerosene) at the rate of three tons per second and that the stage produces 7.5 million pounds of thrust—roughly the equivalent of 160 million horsepower in flight—you begin to understand why we are enthused about the project. Add this to the fact that these tests will ultimately lead us to the moon and you soon see why we are so interested in keeping the program on schedule."

"Every phase of the S-IC static test program is running on or ahead of schedule," states Driscoll. "We plan to meet that first on-dock delivery date for the S-IC-1 of late this summer. That will be a major milestone and we're looking forward to that. The S-IC-2 and the test program are proceeding about