

Lunar Module Test Articles are used in the development program to verify subsystem and vehicle operational and performance requirements. Major tests include structural, dynamic, propulsion, thermal-vacuum, and integrated systems, and each of these vehicles removes specific ground test constraints on initial flight missions. Two of these ground test articles have been refurbished for flight tests on the first two Saturn V flights.

During 1966, fabrication and assembly effort increased on a number of flight and test vehicles. The structural test article, LTA-3, successfully completed its tests at MSC. The electrical integration test article, LTA-1, has completed tests at the Grumman plant in Long Island, New York. The thermal vacuum test vehicle, LTA-8, is undergoing final tests at the contractor's facility before being sent to the thermal vacuum chamber at MSC.

The first flight test vehicle, LTA-10R, a refurbished test article, has been delivered to KSC. The refurbished vehicle is ballasted for overall weight and approximate center of gravity and moment of inertia of the Lunar Module. It is instrumented and will be flown on the first Saturn V booster (AS-501) to determine compatibility, structural integrity, and response of the simulated Lunar Module to the boost environment. The first flight Lunar Module, LM-1, is nearing completion at the contractor's plant, and will be flown unmanned on the AS-206 mission to verify subsystem operation in the space environment. The module will be programmed for a complete series of propulsion tests.

In addition to the first and second Lunar Modules now in the checkout phase at Grumman, five other vehicles are in various stages of fabrication, assembly, and installation. Long lead procurement has been initiated on all of the remaining Lunar Modules. Four of these vehicles will be delivered in 1967 (fig. 42, MA66-9695-A).

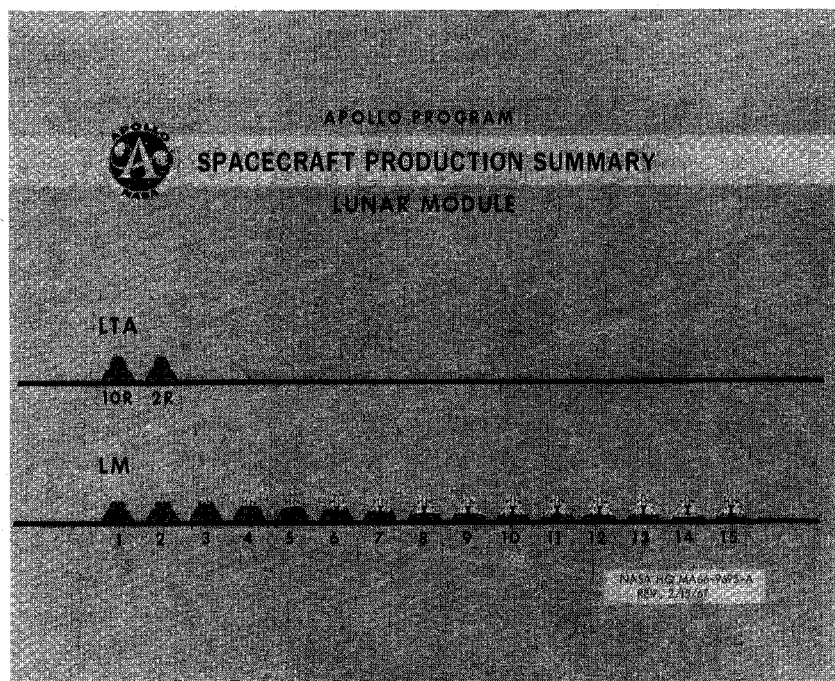


FIGURE 42