Launch Complex 39 for the first Saturn V launch. Since we resolved the bearing problem, the Crawler-Transporters have performed satisfactorily in several moves of the Launch Umbilical Tower, both unloaded and loaded with the 500-F vehicle. Tests also were performed by moving the Mobile Service Structure to Pad A for a compatibility check with the Launch Umbilical Tower and the 500-F vehicle (fig. 50, MC67-5429).

Launch Complex 39 will be fully operational in 1968. At that time, it will have three of its four high bay areas activated and will have two Crawler-Transporters, three Launch Umbilical Towers, one Mobile Service Structure, two

pads and three instrumented firing rooms in operation.

One Launch Umbilical Tower and one firing room have been completed to date. Modifications to the Instrument Unit, 2nd stage and 3rd stage can be performed in the low bay area of the Vehicle Assembly Building at Launch Complex 39. The entire Saturn V vehicle is erected on the Launch Umbilical Tower in the high bay area of the Vehicle Assembly Building (fig. 51, MC67-5011). Checkout is performed in this protected area prior to the move to the launch pads.

## Software

Following the delivery of operating systems and test programs for AS-201, the Marshall Space Flight Center delivered on schedule the succeeding computer programs for AS-202, AS-203 and AS-204. Each new programming package has included software for automating additional test functions.

## Launch operations

## Training of personnel

Last year I reported on an anticipated problem in the training of certain personnel required for operation of the Vehicle Assembly Building at KSC (fig. 52, MC66-10,276). Since then we have been able to provide training for all launch

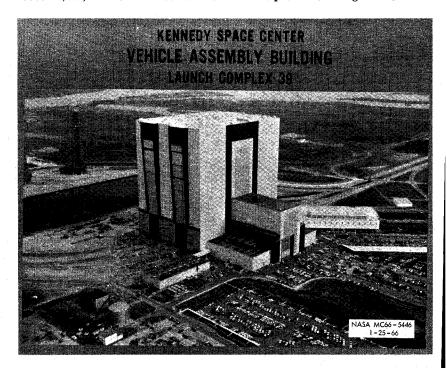


FIGURE 49