

stages are planned, and the 9th and 10th will be through fabrication and assembly in preparation for acceptance firing at Sacramento by the end of the year. The remaining five flight stages will be in various phases of manufacture and assembly.

Instrument Unit: Our fiscal year 1968 funding requirements for the Saturn V instrument unit total \$75.1 million. These funds will maintain the necessary delivery rate of flight units during fiscal year 1968. The fourth, fifth and sixth Saturn V instrument units will be checked out and delivered to Kennedy, and assembly, inspection, and checkout of the seventh unit will be completed. Work on the remaining instrument units will also be underway at IBM, Huntsville, during the fiscal year.

Ground support equipment: We are requesting \$35.8 million for the Saturn V ground support equipment in fiscal year 1968.

Fiscal year 1968 funds support preparation and verification of computer tapes for Saturn V missions. In addition, these funds cover completion of Saturn V-related ground support equipment for the third Launch Umbilical Tower, high-bay, and firing room at Launch Complex 39.

F-1 and J-2 engines: The fiscal year 1968 Saturn V engine requirement are \$105.3 million for the F-1 and \$78.5 million for the J-2.

The last full year of funding the contractor development effort under the engine development project line item was fiscal year 1966. After completion of qualification in October 1966 for the F-1 and January 1967 for the J-2, the contractor effort for field and engineering support was transferred to this account.

Fiscal year 1968 funds provide for continued delivery of F-1 and J-2 flight engines required for the Saturn V stages. A total of 34 F-1 engines and 36 J-2 engines are scheduled for delivery during this period. The fiscal year 1968 funds also support flight evaluation, maintaining test engines in a configuration for quick analysis and solution of problems, component and engine system testing, and periodic verification of flight worthiness.

Vehicle Support: As I indicated earlier, the vehicle support line item covers studies, services, and equipment that are common to more than one stage of the vehicle. In the case of the Saturn V, the fiscal year 1968 funding requirements, amounting to \$242.0 million, provide for an intensive support effort at the test and launch sites. These funds cover a wide range of activities that support test, checkout, transportation, launch readiness, and postflight analysis. Included are systems integration engineering services, quality control and inspection services, reliability assessments, and contract administration. Major emphasis will be placed on support of static testing at our Mississippi Test Facility, where we will be heavily involved in acceptance testing of Saturn V first and second stages. In addition, the workload at the Kennedy Space Center will increase in support of the Saturn V launches.

Engine Development and Mission Support: My last chart on Apollo funding includes engine development and mission support (fig. 38, MP67-5439). We are requesting \$24.5 million in fiscal year 1968 for engine development, a significant drop from fiscal year 1966 and 1967 requirements, since all three of our major vehicle engines are now