

The prelaunch systems engineering activities are summarized in figure 24. Figure 25 is a photograph of Launch Complex 39 at Cape Kennedy. All of the stages and Ground Support Equipment (GSE) comes together at the Cape. In the background you can see the Vehicle Assembly Building; there is assembly, checkout, and launch equipment in this building for which we provide engineering and integration at Huntsville. At Huntsville, our function is to assure that flight hardware, ground support equipment, and spares supplied by MSFC will meet the requirements of the processing that takes place at the Cape. The operations and maintenance analysis for the first flight is complete; the spares and GSE are on schedule; and our pre-launch vehicle-processing analysis is on schedule.

The third activity is concerned with the vehicle during flight (Fig. 26). In flight mission planning, we calculate the actual flight path or trajectory that the launch vehicle will take from Earth; we determine settings from the flight control system—the guidance and navigation system—which are then set into the instrumentation unit you saw in Huntsville yesterday. We predict, prior to flight, how the launch vehicle will perform and evaluate data for MSFC after the flight. The activity to support the 501, is complete—both the trajec-

S-IC PROGRAM SUMMARY

- S-IC PROGRAM IS 5 WEEKS AHEAD OF SCHEDULE
- OF THE TOTAL OF 3 GROUND TEST STAGES AND 15 FLIGHT STAGES, 9 ARE NOW STRUCTURALLY COMPLETE.
- 3 FLIGHT STAGES HAVE COMPLETED STATIC FIRING PROGRAMS.
- QUALIFICATION TEST PROGRAM IS 96% COMPLETE WITH ONLY 2 PARTS REMAINING FOR S-IC-1.
- STRUCTURAL TEST PROGRAM IS 90% COMPLETE WITH ONLY 1 TEST REMAINING FOR S-IC-1.
- RELIABILITY TEST PROGRAM IS 74% COMPLETE.
- BOEING MANAGEMENT IS CONTINUING TO PLACE CONCERTED EMPHASIS ON IDENTIFYING & RESOLVING POTENTIAL PROBLEMS AS EARLY AS POSSIBLE.
- KNOWN PROBLEMS WILL NOT IMPACT STAGE DELIVERIES NOR FLIGHT SCHEDULES.

FIGURE 17