

An equipment phaseover schedule depicts the installation and removal schedule for all general purpose computers through early FY 1970 (fig. 3-2). The installation and removal dates are based on capabilities required to support the Gemini and Apollo Spacecraft Program flight schedules as they are presently known. The phaseover schedule is subject to change, based on the extent of the required changes. Every effort is made to have the RTCC hardware directly complement the required needs, and the configuration index portion of the supporting contract is structured to motivate the contractor to eliminate hardware whenever possible if the removals do not jeopardize mission objectives.

3.2 TEST AND CHECKOUT

The role of the test and checkout computers is to insure that the integrated space vehicle and its subsystems meet the standards required for conducting a space mission. The test and checkout functions are performed at manufacturers' installations, special facilities such as MAF or MTF, and at each of the MSF Centers. The major checkout functions are outlined in the following sections. In the case of the launch vehicle, the major checkout functions are broken down by vehicle stage due to the number and types of stages. A summary of test and checkout information is shown in table 3-I.

3.2.1 Marshall Space Flight Center

The major checkout systems at MSFC are used for test and checkout of the S-IB and S-IC stages, and the Instrument Unit. MSFC also utilizes facilities at MAF, MTF, and Douglas Aircraft Company, Inc., Sacramento, California, to test the S-II and S-IVB stages.

Saturn IB stage.- An RCA 110 computer is used at the MSFC static-test stand for S-IB checkout. The equipment translates computer commands into signals that monitor and check vehicle systems during static-test firing. The computer also acquires data during the tests, processes the data, and uses it as inputs to Cathode Ray Tube (CRT) monitor displays for evaluation by test personnel.

A system performing similar functions, but utilizing a Packard-Bell (now Raytheon) PB 250 computer, is used by Chrysler at MAF to test the S-IB during fabrication. A DEE 3 (SDS 910) is used with the PB 250 computer. The DEE 3 scans the discrete event lines to detect and record any status change for later evaluation by test personnel.