

3.6.3 Computers in the Astrionics Laboratory

Computers are installed in the Astrionics Laboratory to support requirements that exist in launch activity and checkout research and advanced studies in guidance and vehicle performance. The data processing is at an extremely high technical level. These requirements are met by a GE 235 and an IBM 1130.

3.6.4 Computers in the Propulsion and Vehicle Engineering Laboratory

The data processing equipment installed in the Propulsion and Vehicle Engineering Laboratory is used for calculations involving weight control and general-purpose scientific calculations.

IBM 1620.- The IBM 1620 computers are used by S-IB and S-V weight-control studies and structural analysis.

SDS 930.- The SDS 930 computers support S-I and S-V advanced vehicle programs.

3.6.5 Computers in the Quality and Reliability Assurance Laboratory

Computers are installed in the Quality and Reliability Assurance Laboratory for two functions: a study of checkout procedures for vehicles and training of personnel in checkout of computer systems. There are two computers currently being used, a GE 235 which will be expanded to a real-time system by interfacing with other computers and an RCA 110 which is being used by NASA and contractor personnel. Both computers are used in developing checkout programs needed for various components of the S-IC stage.

3.6.6 Centralized Data Processing Equipment at the Manned Spacecraft Center

The centralized data processing equipment installed at MSC is used in three areas: scientific application, TM data processing, and business application. All of the equipment is general purpose.

Scientific and engineering applications.- Scientific and engineering needs are based upon requirements to develop mathematical models, evaluate engineering designs, plan missions, and predict failure times. The computing equipment used to support these applications includes