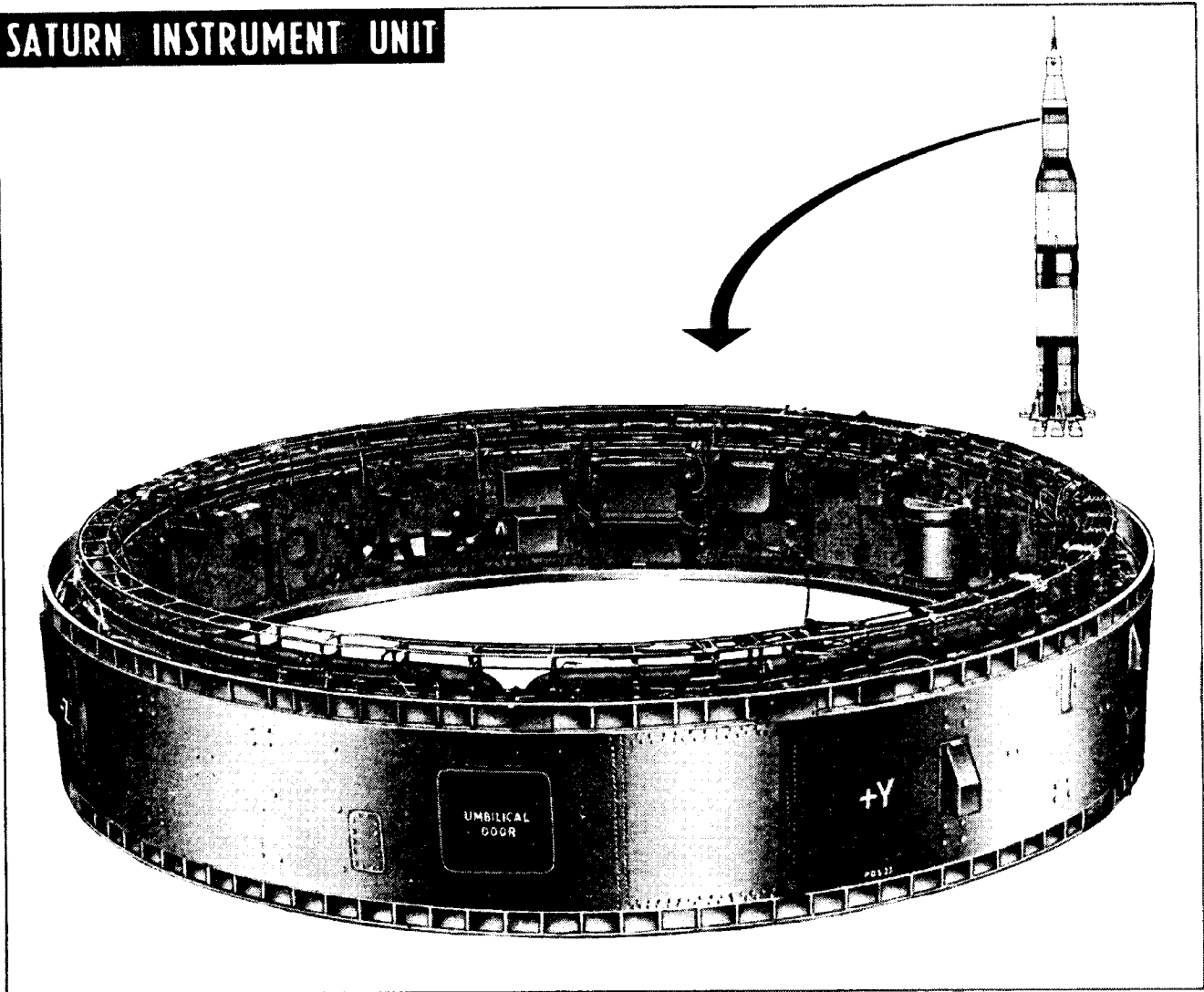


**SATURN INSTRUMENT UNIT**



### INSTRUMENT UNIT EQUIPMENT LOCATIONS

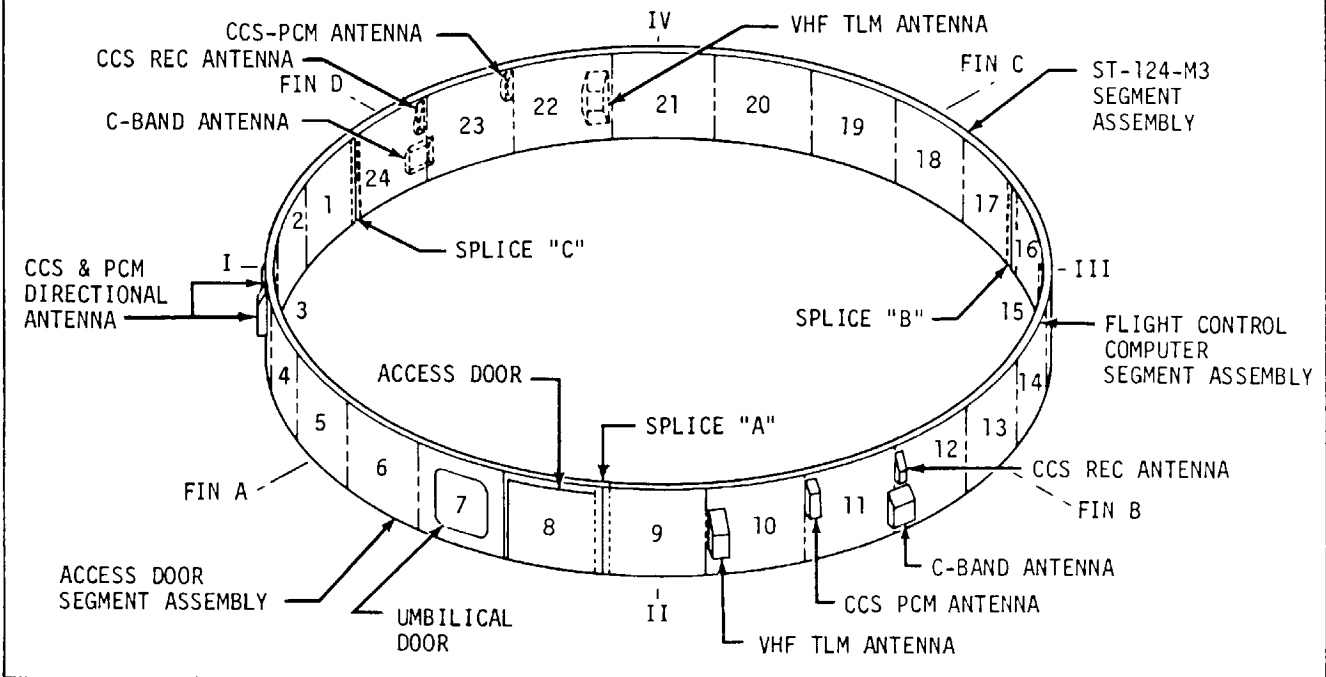


Figure 7-4 (Sheet 1 of 5)

# INSTRUMENT UNIT EQUIPMENT LOCATIONS

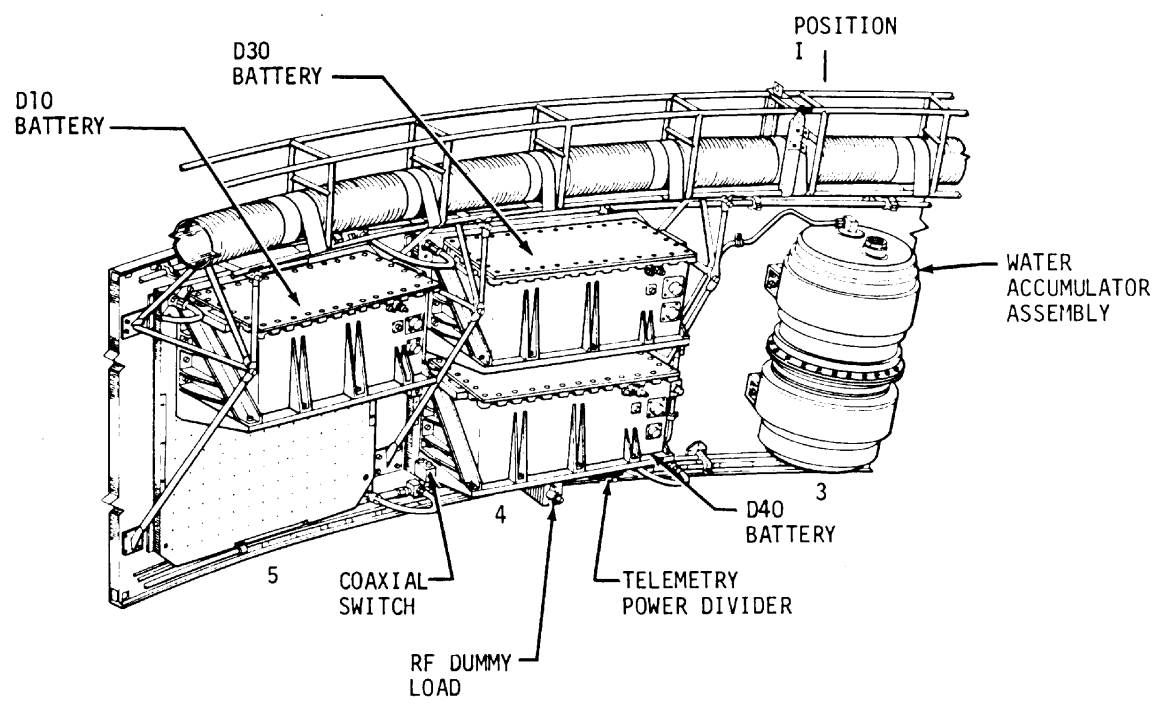
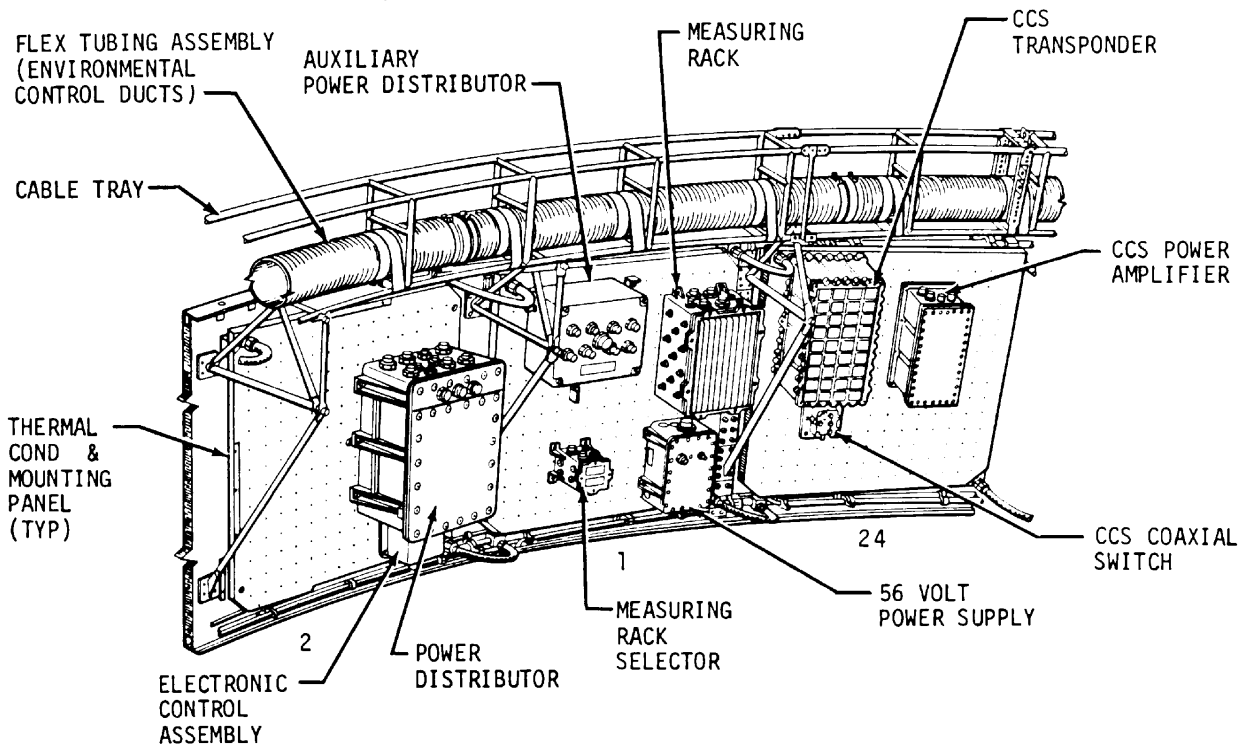


Figure 7-4 (Sheet 2 of 5)

# INSTRUMENT UNIT EQUIPMENT LOCATIONS

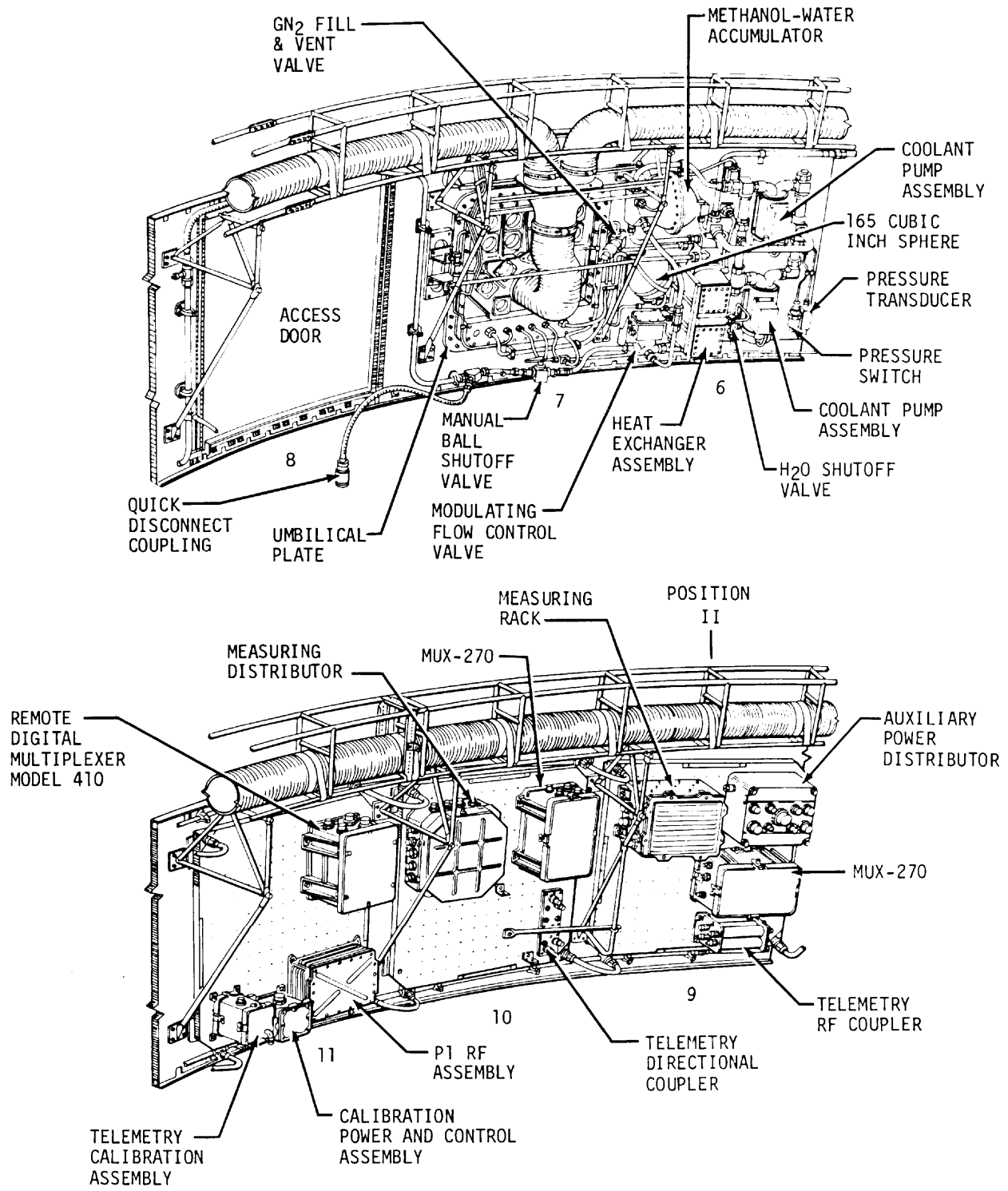


Figure 7-4 (Sheet 3 of 5)

# INSTRUMENT UNIT EQUIPMENT LOCATIONS

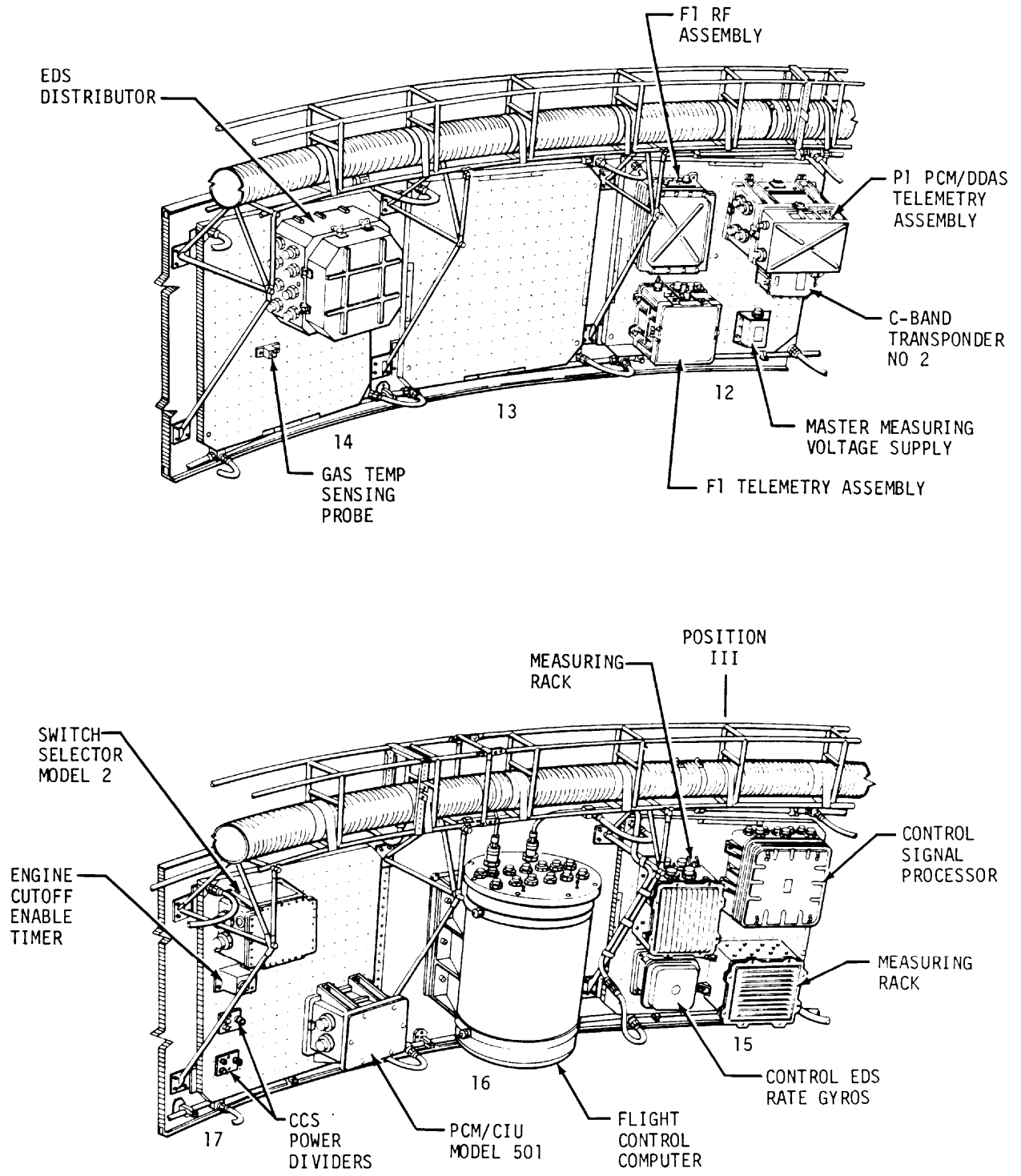


Figure 7-4 (Sheet 4 of 5)

**INSTRUMENT UNIT EQUIPMENT LOCATIONS**

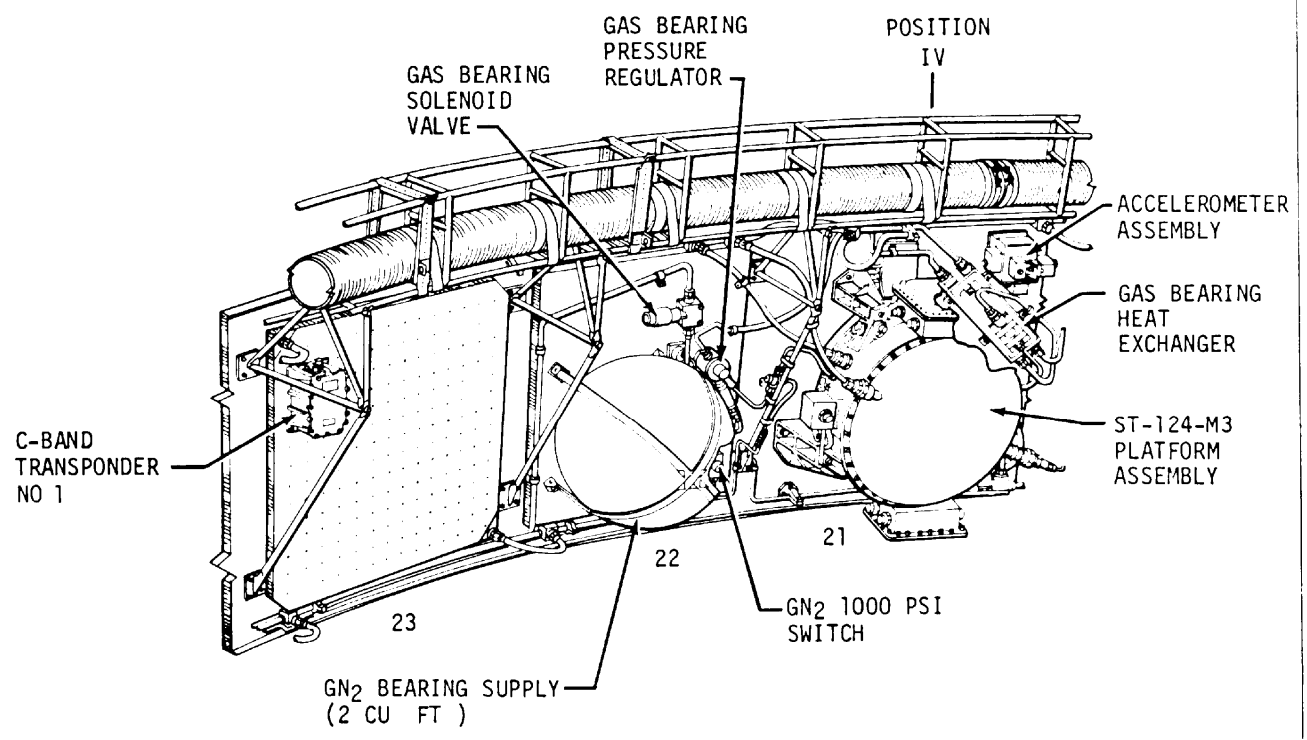
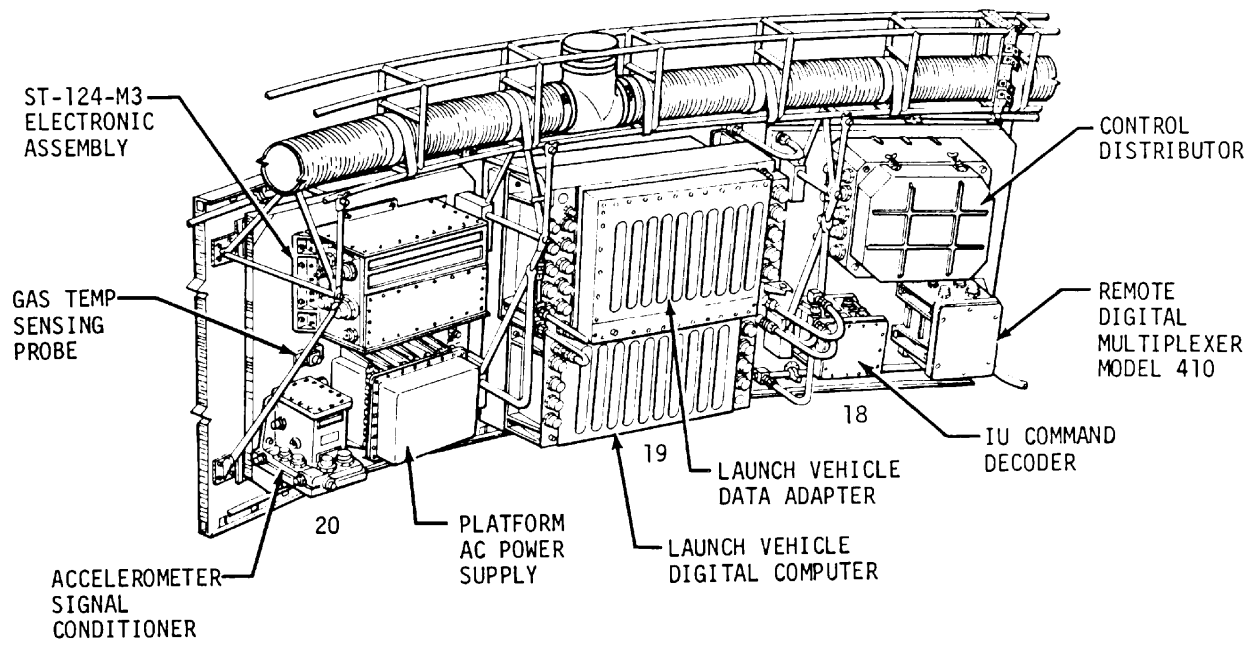
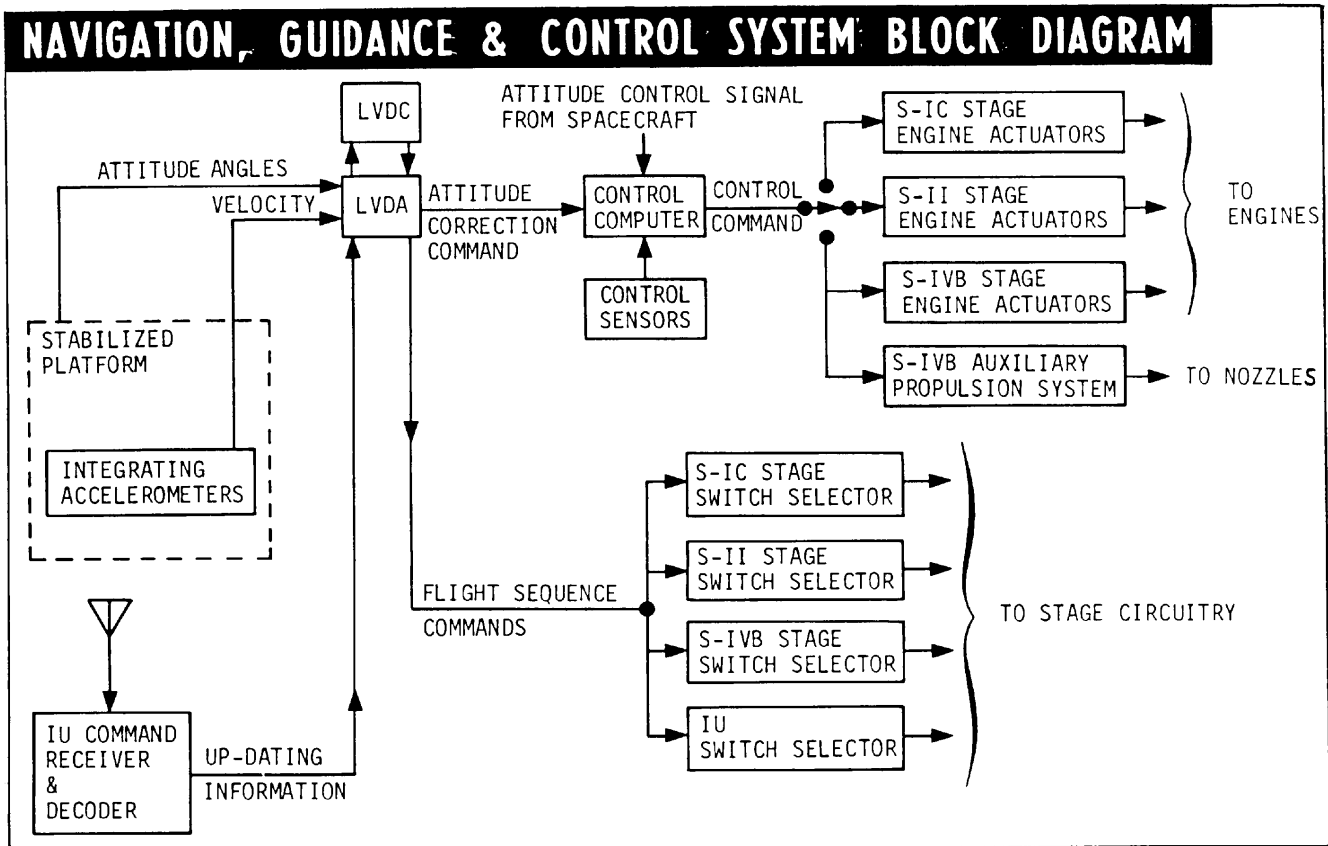


Figure 7-4 (Sheet 5 of 5)



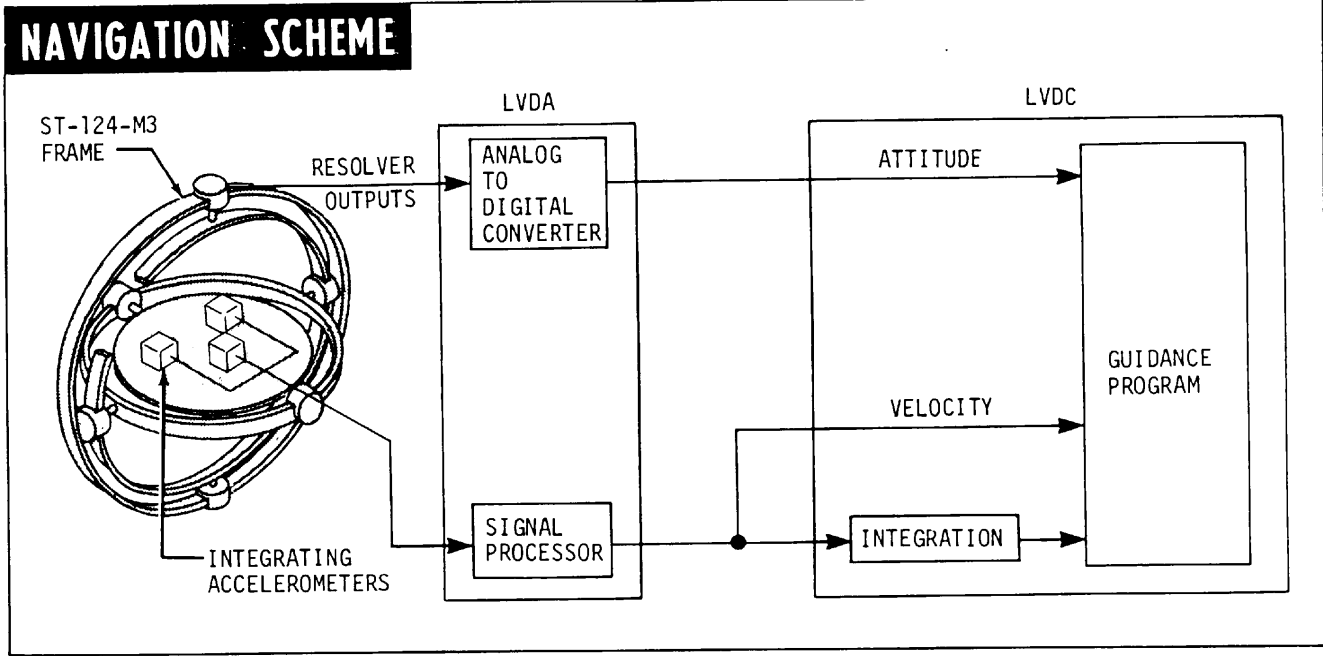
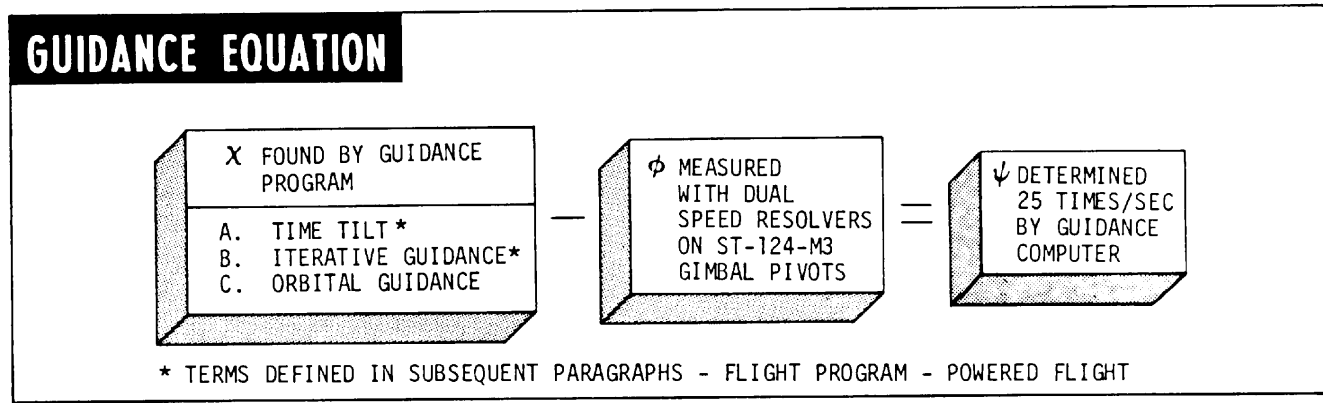


Figure 7-12





## NASA Apollo Saturn V Rocket Summary Information

| LAUNCH VEHICLE DIGITAL COMPUTER CHARACTERISTICS |  |
|---|--|
| ITEM  | DESCRIPTION  |
| Type  | General Purpose, Digital, Stored Program   |
| Memory  | Random Access, Ferrite (Torodial) Core, with a Capacity of 32,768 words of 28 Bits each          |
| Speed   | Serial Processing at 512,000 Bits Per Second   |
| Word Make-Up                                    | Memory = 28 Bits<br>Data = 26 Bits Plus 2 Parity Bits<br>Instruction = 13 Bits Plus 1 Parity Bit |
| Programming                                     | 18 Instruction Codes<br>10 Arithmetic<br>6 Program Control<br>1 Input/Output<br>1 Store          |
| Timing  | Computer Cycle = 82.03 $\mu$ sec.<br>Bit Time = 1.95 $\mu$ sec.<br>Clock Time = 0.49 $\mu$ sec.  |
| Input/Output                                    | External, Program Controlled   |

| LAUNCH VEHICLE DATA ADAPTER CHARACTERISTICS |   |
|---|---|
| ITEM  | DESCRIPTION   |
| Input/Output Rate                           | Serial Processing at 512,000 Bits Per Second  |
| Switch Selector                             | 8 Bit Input<br>15 Bit Output  |
| Telemetry Command Receiver                  | 14 Bits for Input Data  |
| Data Transmitter                            | 38 Data and Identification Bits Plus Validity Bit and Parity Bit                                      |
| Computer Interface Unit                     | 15 Bits Address Plus 1 Data Request Bit<br>10 Bits for Input Data Plus 1 Bit for Data Ready Interrupt |
| Delay Lines                                 | 3 Four-Channel Delay Lines for Normal Operation<br>1 Four-Channel Delay Line for Telemetry Operations |
| Output to Launch Computer                   | 41 Data and Identification Bits Plus Discrete Outputs   |
| Input From RCA-110 GCC                      | 14 Bits for Data Plus Interrupt   |

# LAUNCH COMPLEX 39

