

is integrated with the Manned Space Flight Network stations, using their remote site data processor programs. Then, after all of these interfaces have been checked, we mate it with the space vehicle on the launch pad, giving us our final overall verification.

In the case of the Apollo Saturn 202 flight, we were required to go through this process several times before we were able to debug the software. After we acquire more experience, we expect gradually to reduce the amount of testing required to resolve all of the interfaces. At the present time such testing is one of the major factors in our 61-day turn around time. This is the time between the completion of one mission and the launch of the next mission, if they are being conducted from the same floor of the Control Center.

MANNED SPACE FLIGHT NETWORK

Next, I wish to talk about the Manned Space Flight Network (fig. 97, MA66-8951).

Ground stations

This chart indicates the development of our Manned Space Flight ground stations, starting with the initial facilities when the equipment is delivered, as it progresses through system evaluation and testing, through network integration, and finally to operational status.

We have shown here the eleven 30-foot dish stations and the three 85-foot "deep-space" stations. At the bottom are some of the Gemini stations which will continue to be used for some time yet in the Apollo program.

As I pointed out earlier, three of the stations supported the AS-202 mission and gave us a limited test of our Unified S-Band tracking and communications capability. These were Merritt Island (MILA), Bermuda, and Carnarvon. All of the stations except Antigua and Canary will support the first manned flight. Prior to the time we get to the first Apollo Saturn V manned flight, all of them will be available to support our launches.

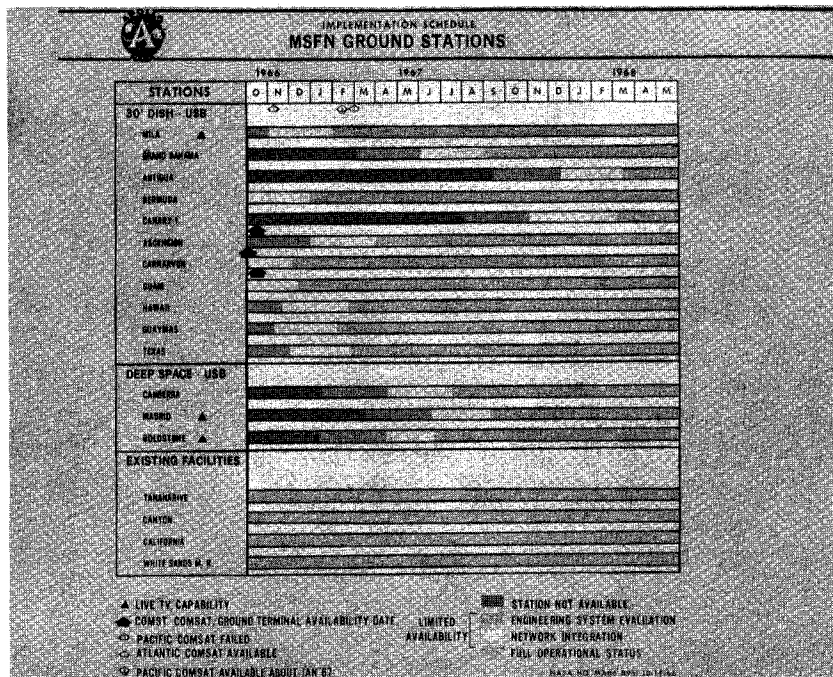


FIGURE 97