

Management Information System

At left, Kennedy Space Center engineers are preparing displays of Space Shuttle launch information for presentation at the group meeting shown at lower left. They are using a new Automated Management Information Center (AMIC) that employs innovative microcomputer techniques to create color charts, viewgraphs or other data displays in a fraction of the time formerly required. Developed under KSC contract by Boeing Services International Inc., Seattle, Washington, AMIC can produce an entirely new informational chart in 30 minutes or an updated chart in only five minutes, dramatic improvements in what have been labor-intensive and time-consuming tasks. The data displays can be used for live teleconferencing with officials at other sites involved in space operations.



AMIC stemmed from a NASA need to reduce the time necessary to generate information for decision making at top management levels. At NASA centers, hundreds of people are involved in producing and controlling the thousands of documents essential to space operations management. Many of these documents are still produced manually where AMIC is not available. Manual preparation of such documents, plus delivery time to get them to users at other centers, can take as long as two weeks. The old system worked well, if slowly, in the pre-Shuttle era, but it is not fast enough for the advanced space operations contemplated, with Shuttle flights eventually reaching a twice-monthly rate.

Thus, KSC initiated the AMIC program to provide decision-makers a management tool based on the latest computer technology. KSC and Boeing Services International assembled data from a number of sources to form a single non-duplicated data base, then devised means to compress information from the data base and display it in almost any format preferred by the user. The system is not only faster and more reliable, it also offers substantial savings compared with manual methods of document preparation.

The success of the KSC prototype led to the system's adoption by other NASA and military space centers. In 1982, AMIC sites were installed in the Space Shuttle program offices at KSC, at Johnson Space Center and at Marshall Space Flight Center; a common communications network linked the three centers. Last year, the AMIC network was expanded to include NASA Headquarters, the Air Force Space Division at Los Angeles, California, and the USAF's Shuttle facility at Vandenberg Air Force Base, California. Additional government installations are likely, and AMIC also has considerable potential as a management system for business firms; some large retail corporations have learned of AMIC and expressed strong interest.

