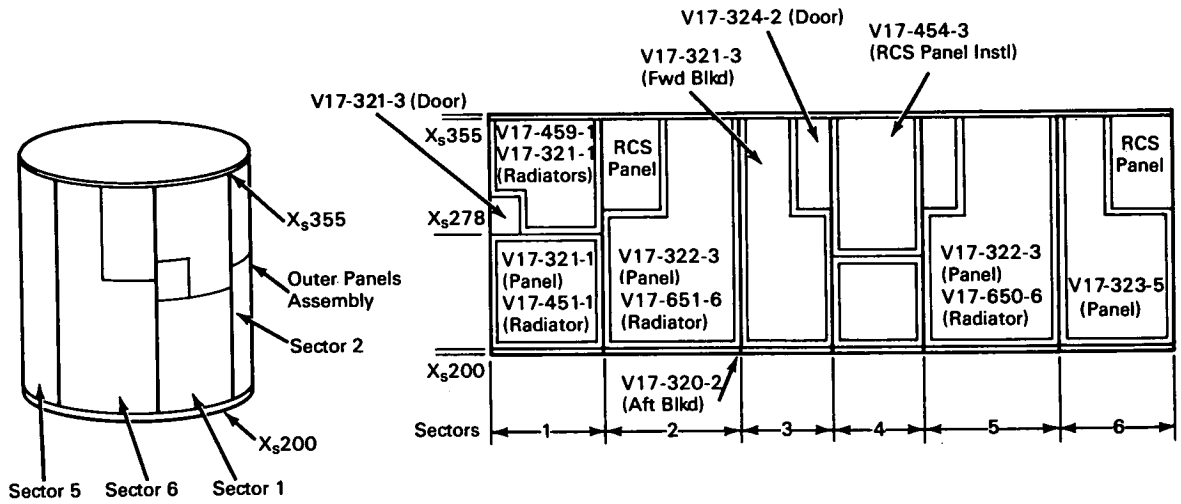
NASA TECH BRIEF

Chart System Simplifies Identification of Complex Design Assemblies



SERVICE MODULE END ITEM

OUTER PANELS ASSEMBLY

The problem:

To devise a method to identify rapidly and accurately, from numerous drawings, all the component parts of a complex design assembly. In the past, when it was necessary to identify all the component parts of a complex assembly, the work required to obtain an accurate list of the numerous components from the many drawings on which the information appeared took a great deal of time and effort and the possibility for error was very large.

The solution:

Prepare an identification breakdown chart that lists the component parts required for any specific end item. Cylindrical and complex configurations are depicted as continuous flat surfaces for ready identification. The interrelation of many components from many drawings is graphically presented for analysis or design study.

How it's done:

A standard 8½x11 vellum sheet is used for the preparation of the identification breakdown chart. The parts used on end items, and which are identified on many different drawings, are arranged systematically by sketch and drawing number. One sheet is used for each area. The figure on the left shows the identification breakdown of a service module end item. The figure on the right shows the cylindrical outer panels assembly as a continuous flat surface for clarity of visual identification. The identification breakdown chart may be used to make a comparative analysis of various end items, to ascertain which part numbers are used on any one end item, or as a visual

(continued overleaf)

guide to determine the physical location of one part in relation to another.

Note:

Inquiries concerning this innovation may be directed to:

Technology Utilization Officer
Manned Spacecraft Center
Houston, Texas 77058
Reference: B66-10460

Patent status:

No patent action is contemplated by NASA.

Source: Helen P. Morin
of North American Aviation, Inc.,
under contract to
Manned Spacecraft Center
(MSC-752)