June 1970 Brief 70-10091

NASA TECH BRIEF



NASA Tech Briefs announce new technology derived from the U.S. space program. They are issued to encourage commercial application. Tech Briefs are available on a subscription basis from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151. Requests for individual copies or questions relating to the Tech Brief program may be directed to the Technology Utilization Division, NASA, Code UT, Washington, D.C. 20546.

Wiring Harnesses Documented by Punched-Card Technique

A technique has been devised for documenting wire harness details by use of punched cards in conjunction with a card sorter and a card printer. This documentation technique was devised to save the drafting time and expense customarily required to prepare pictorial drawings representing harness details (connector pins, wiring destination, wire size and function, and any pertinent twist or shield information). Any wiring changes that are made can be rapidly documented with this technique, saving the time and cost which would be required to correct and reissue drawings.

In the punched-card technique, all cards representing a connector are punched, sorted, and then used to print out wiring documentation for that connector. If wiring changes are made, all cards involved in the change are separated from the other cards, new cards are punched, and the wiring documentation is reprinted to reflect the latest configuration.

After the cards are punched and sorted according to harness, they are then sorted according to connectors or splices within each harness. Each of the connector stacks is next arranged in consecutive order according to pin. When the cards are arranged by harness and connector and are in consecutive pin order, they are run through a card printer to obtain wiring harness documentation. The printing format is

basically the same as the typical 80-column card format, except that 120 spaces are available on the printing format.

An entire harness printout consists of a printed sheet for each connector and for each splice in the harness. The card file can be used to printout wiring harness information in response to specific requests.

Note:

Details are presented in a report which may be obtained from:

Clearinghouse for Federal Scientific and Technical Information Springfield, Virginia 22151 Single copy price \$3.00 (or microfiche \$0.65)

Reference: NASA-CR-97150 (N68-36319), Documentation of Wiring Harnesses by Use of Punched-Card Techniques

Patent status:

No patent action is contemplated by NASA.

Source: W. G. Kloezeman and W. W. Hicks of
Caltech/JPL
under contract to
NASA Pasadena Office
(NPO-11249)

Category 09