

# NASA TECH BRIEF

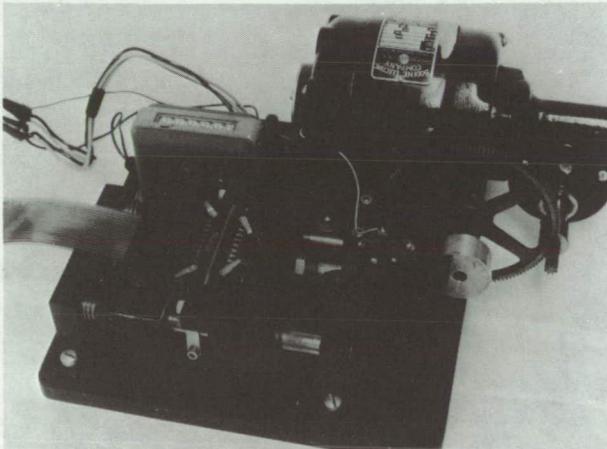
## *Marshall Space Flight Center*



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### Durability Tester for FCC Connectors

The equipment shown in the figure tests the durability of the plugs and receptacles used with flat conductor cables. The tester includes a springloaded stationary fixture that holds the plug, and a moving fixture which is driven by a small electric motor and



is geared to mate and unmate the connector approximately 10 times per minute. A cycle counter indicates the number of times the connector has been mated, and a continuity section stops the test when an electrical discontinuity occurs.

During testing, the plug and receptacle are mounted in the fixtures and slowly mated to ensure that the plug and receptacle are properly aligned. Continuity and resistance of each circuit is then checked and the data are carefully recorded. After this check, the tester is run as many cycles as desired and the resistance of each circuit is rechecked. If desired, the continuity and resistance monitoring units can be switched out of the circuit during any period of the test.

#### Note:

Requests for further information may be directed to:

Technology Utilization Officer  
Code A&TS-TU  
Marshall Space Flight Center  
Huntsville, Alabama 35812  
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#### Patent status:

No patent action is contemplated by NASA.

Source: H.G. Martineck and C.M. Chambers  
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