A Battery Simulator

A device which simulates the output of individual battery cells has been developed with the primary purpose of verifying proper operation of a battery cell voltage-monitoring device. This battery simulator could be used anywhere a simulation of variable battery-cell voltages is desirable.

Many systems include batteries as secondary power sources to be used in the event of primary power failure. Periodically the batteries must be tested to determine their capacity. The battery cell scanner used for this purpose must be calibrated properly to assure that accurate readings are obtained from the batteries. The new battery simulator was developed to aid in the calibration of the battery scanner.

As shown in the figure, the device contains, in addition to variable battery-cell voltage outputs, variable ac voltage to ascertain that the scanner will perform its function at all possible ac voltages. Convenient test points for troubleshooting with an oscilloscope are also provided. Inputs of 115 V ac and 38 V dc are required for operation.

Note:

No additional documentation is available. Specific questions, however, may be directed to:

Technology Utilization Officer
Kennedy Space Center
Kennedy Space Center, Florida 32899

Reference: B70-10340

(continued overleaf)
Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: N. Lahr and S. Ferrell, Jr. of The Boeing Company under contract to Kennedy Space Center (KSC-10172)