**Use of Color-Coded Sleeve Shutters**

**Accelerates Oscillograph Channel Selection**

The problem:
In conducting tests that require frequent or extensive oscillograph channel changes, much time is spent in manually adjusting individual galvanometer light beams onto or away from selected channels on the oscillograph paper.

The solution:
Sleeve-type shutters placed over each galvanometer. The galvanometer light beams are individually mechanically adjusted onto the oscillograph paper to insure proper channel separation and the shutters are raised or lowered to admit or block the light to the paper. In complex test setups, the sleeve-type shutters are color coded to separately identify each channel.

Notes:
1. This technique has been implemented with common drinking straws that have been color coded. It could be used on any commercially available equipment using tubular galvanometer light sources.

2. Inquiries concerning this invention may be directed to:
   Technology Utilization Officer
   Kennedy Space Center
   Kennedy Space Center, Florida 32899
   Reference: B67-10382

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: Thomas Bouchlas and Frank W. Bowden of The Boeing Company under contract to Kennedy Space Center (KSC-10092)

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