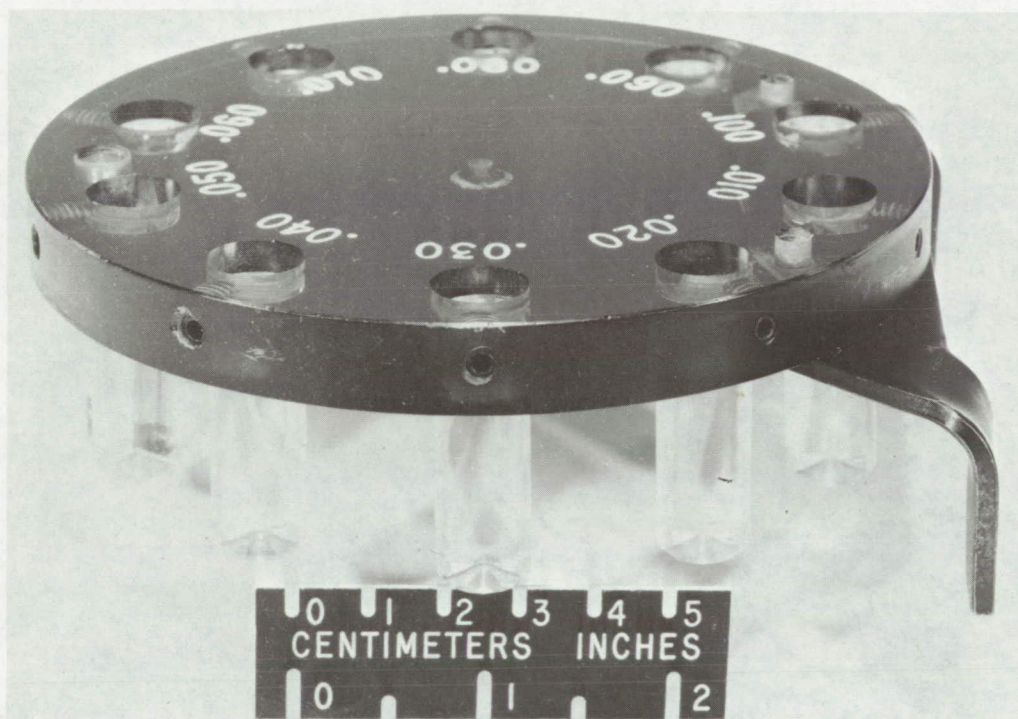


NASA TECH BRIEF



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Water Surface Depth Instrument



Tripod Base of Water Gauge

A measurement gage has been devised to provide instant visual indication of water depth based on capillary action and light diffraction in a group of solid, highly polished polymethyl methacrylate rods. The device consists of a flat polymethyl methacrylate disc mounted on a small tripod. The 1/2-inch diameter polymethyl methacrylate rods are circularly mounted in the disc, parallel to the plane of the tripod base.

The base height of each rod above the plane of the tripod feet (corresponding to the surface on which the water depth is to be measured) is numerically indicated on the disc top.

When the countersunk end of the polymethyl methacrylate rods contacts the water surface, a capillary effect is initiated. The effect is instantly visible by light refraction at the polished upper end of the rods which

(continued overleaf)

are immersed. Water depth is indicated by the highest rod immersed. Rod lengths are adjustable to measure various water depths in any desired increments.

These water depth gages will be used at air bases to correlate rainfall precipitation rate with water depth on the runway.

Note:

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

Technology Utilization Officer
Langley Research Center
Hampton, Virginia 23365
Reference: B70-10103

Patent status:

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

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