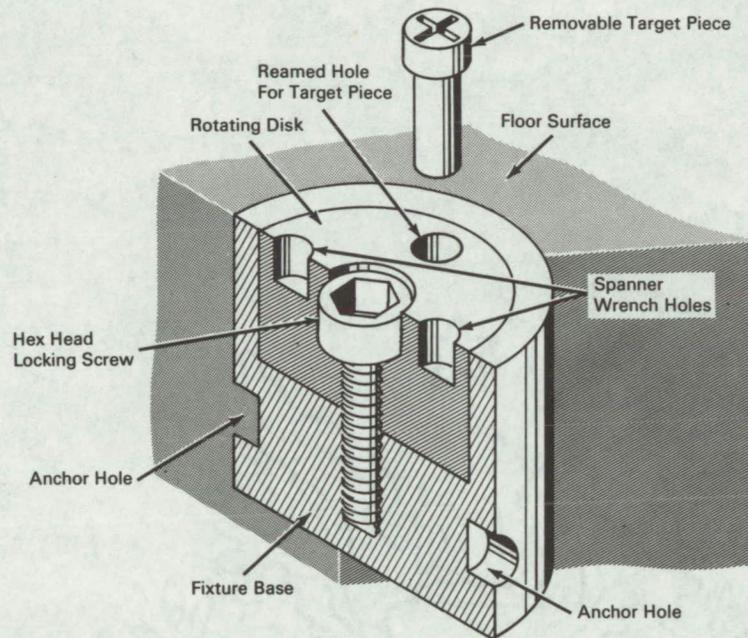


NASA TECH BRIEF



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Simplified Fixture Permits Precision Alignment of an Optical Target



The problem:

To provide an optical target holder that is permanently placed for instrument sighting, yet is adjustable and easily aligned. Standard alignment procedures require expert skill in the sighting and scribing of metal plates secured to stationary mountings. Because of the difficulty to align accurately, repeated attempts may be required. Floor settling or action of vibrating sources also cause misalignment over a period of time. Periodic realignment of fixed optical targets is costly and time consuming.

The solution:

A simple, permanently placed fixture for an optical target that is adjustable and easily calibrated.

How it's done:

The figure shows a commercially available target piece peg-mounted in a rotating disk of the fixture. The fixture is permanently mounted with the top slightly recessed and coarsely aligned to the point required by the sighting instruments. The disk is rotated by a spanner wrench positioning the target piece to the station defined by the optical instruments. The setting is locked by tightening the center screw and the target piece is then used for equipment alignment and removed when not in use. The fixture retains the same setting until the time of the next verification check when it may be easily recalibrated in the same manner.

(continued overleaf)

Note:

Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B66-10556

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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