December 1971

Brief 71-10496

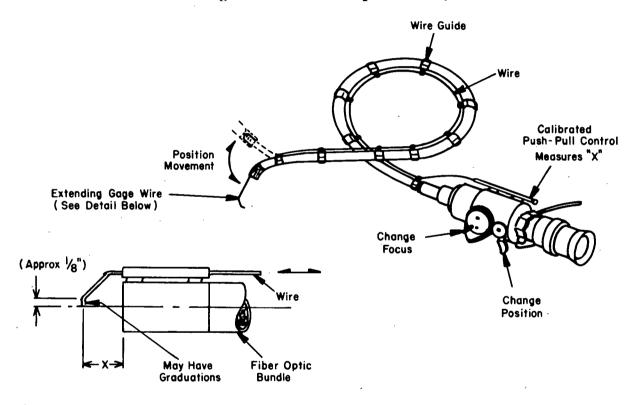
NASA TECH BRIEF

Manned Spacecraft Center



NASA Tech Briefs announce new technology derived from the U.S. space program. They are issued to encourage commercial application. Tech Briefs are available on a subscription basis from the National Technical Information Service, Springfield, Virginia 22151. Requests for individual copies or questions relating to the Tech Brief program may be directed to the Technology Utilization Office, NASA, Code KT, Washington, D.C. 20546.

Scale Factor Gage for Fiber Optics Inspection Device



A scale factor gage has been developed for attachment to a remotely positioned fiber optics visual inspection device. An extensible flexible wire device, fastened along the outside of the fiber bundle from the viewing portion to the tip, positions a calibrated, adjustable gage in the field of view.

Previously, movable fiber optic remote viewing devices for a permanently installed visual inspection system have not been capable of scaling the size from the re-

mote viewer. The extensible scale factor gage provides this capability.

The observer adjusts a calibrated push-pull control to position the gage near the detail under observation and thereby obtains a measurement of the lens-to-object distance (dimension "X" shown in figure). The scale factor can be easily determined from known magnification characteristics of the fiber optics system, or from the graduations on the gage tip (for close viewing).

(continued overleaf)

Increasing use has been made of fiber optics, both for industrial and medical applications. The improved operational capability offered by this device may render it of interest to organizations employing fiber optics devices.

Note:

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

Technology Utilization Officer
Manned Spacecraft Center, Code JM7
Houston, Texas 77058
Reference: B71-10496

Patent status:

No patent action is contemplated by NASA.

Source: William McMahon and Frank E. Sugg
North American Rockwell Corp.
under contract to
Manned Spacecraft Center
(MSC-17361)