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NASA TECH BRIEF



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Polaroid Film Helps Locate Objects in Inaccessible Areas Quickly

The problem:

To locate objects in restricted or difficult areas for X-ray inspection in minimum time. In difficult areas, it is usually necessary to shoot many test shots with conventional X-ray film to isolate and align the item or object to be inspected. Conventional X-ray film takes approximately 35 minutes to develop.

The solution:

Polaroid film is used with conventional portable X-ray equipment to "rough in" shots of items or objects in difficult areas. Polaroid film development time is about 20 seconds.

How it's done:

To separate the item or object to be inspected from other similar items, place a small lead arrow or dot on the item of interest. The lead arrow or dot serves as an index mark for locating the item or for moving the X-ray equipment to obtain a desired alignment. After

location or alignment of the item, conventional X-ray photographs are taken.

Note:

This method was successfully used in the radiographic inspection of brazed joints in Command Modules. Tubing joints which were not accessible from inside the Module because of wire bundles and equipment installations were located and X-rayed from the outside.

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: H. G. Griffin and G. W. McClelland
of North American Aviation, Inc.
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Category 02