NASA TECH BRIEF

Shortened Procedure for Obtaining Reproducible Copies of 35 MM Color Slides

The problem:

To devise a new procedure for making reproducible copy (vellum) from a 35 mm color slide. Existing techniques require that first, an enlarged film negative be made from the slide, second, a photoprint or film positive be made of the enlarged film negative, third, the film positive be photographed onto a Xerox plate, and fourth, the image be transferred from the Xerox plate onto vellum. This procedure is time consuming and expensive.

The solution:

A new technique to reduce the steps required to obtain reproducible copies of 35 mm color slides. A 35 mm slide is projected directly onto a Xerox plate, eliminating the necessity for producing a photoprint or film positive of the slide. The new procedure reduces both processing time and expense.

How it's done:

The equipment used in the process includes a Xerox Model D Processor, Xerox E plates, and a photoenlarger capable of projecting a 35 mm slide.

With the new procedure, the selected 35 mm color slide is placed in a photographic enlarger, and the desired image is projected onto the enlarger easel. After the image size (normally 8-1/2″×11″) has been locked in and the focus set, the enlarger is turned off and a Type E Xerox plate is positioned on the enlarger easel. (The slide is projected under red safelight.)

When the slide is projected on the plate, a fairly low light level is used to avoid scattering on the Xerox plate. The exposure time of the Xerox plate will vary with the color of the subject matter on the slide. Tests to determine proper exposure time may be required until operator knowledge is developed. Exposure time is comparable to using low to medium-speed projection type photographic paper. Line or continuous tone slides may be used, but the end result will always be line toned due to the nature of the Xerox process.

After the Xerox plate is exposed, it is processed in the normal fashion and the image is transferred to a vellum sheet.

Notes:

1. This technique cannot be implemented directly on late-model Xerox copiers such as the 2400, which have light-sensitive, electrostatic drum inputs.
2. No additional documentation for the invention is available.
3. Technical questions may be directed to:
   Technology Utilization Officer
   Kennedy Space Center
   Kennedy Space Center, Florida 32899
   Reference: B68-10560

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: Frank Levine
of The Boeing Company
under contract to
Kennedy Space Center
(KSC-09957)

Category 02