A CONTINUOUS STENCIL DUPLICATOR¹

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The duplicator described here will print long strips of copy suitable for teaching-machine tapes. The maximum length of teaching tapes that can be produced by existing commercial methods, e.g., by a large offset or letter press, is 76 inches. Such teaching tapes are also prohibitively expensive unless thousands of copies are required. The duplicator will produce even longer strips of copy conveniently and at small cost, and would be particularly useful when 25-150 copies of a program are required, as for example in experimental programs.

The basic duplicator is a spirit-type duplicator such as the Rex-O-Graph.² A superstructure is added to support a roller, the width of the stencil, above the machine. A flat belt such as is ordinarily used on a sanding machine forms a loop around the printing drum of the duplicator and the roller on top of the superstructure. The stencil is affixed to the belt and rotates continuously as the drum is turned either by hand or by electric motor. Since the stencil has a slight tendency to gradually run off the rollers, the top roller must be realigned by the screw adjustments under it. Sixteen-pound duplicator paper is mounted in large rolls in place of the usual paper-feed mechanism, and feeds through the drum continuously.

The critical factors in the construction of the device are the perfect alignment of the top roller with the drum of the duplicator, and the exact alignment of the pressure rollers of the duplicator with the drum. Although very slight misalignments will ordinarily have no effect when single sheets of paper are fed, the cumulative error may be quite large when the paper is being fed continuously. We have been able to run as many as 250 legible, 75-inch strips from a single stencil; a more usual number of usable copies might be of the order of 125, however. The maximum length of the stencil depends upon the size of superstructure that is added to the duplicator. A 12-foot stencil is possible, although at this size the device might become somewhat unwieldy.

The stencil is a Long-Life Ditto Master and can be obtained in 100-foot rolls.³ The cost of the duplicating paper is \$1.00 for approximately 1000 feet, and the cost of the stencil material is approximately 5 cents per foot, when purchased in quantity. The total cost of running 150 copies of a 6-foot teaching tape would therefore be approximately \$1.50, including stencil material and paper, plus approximately 1.5 hours of secretarial time for typing and running the stencil.

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²The continuous stencil duplicator is being manufactured by A. H. B. Products, 6247 Park, Indianapolis, Indiana. The Rex-O-Graph spirit duplicator is manufactured by Rex-O-Graph, Inc., Division of General Binding Corp., 1101 Skokie Highway, Northbrook, Illinois.

³Hess Duplicating Co., 224 North Meridian Street, Indianapolis, Indiana.

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Figure 1. Photograph of the duplicator.