

TO: All Department Chairmen and Administrative Personnel.

RE: Multilith Machine, Operation and Utilization.

General

A new multilith duplicating machine has been purchased by Texas Christian University, and is available for utilization by all departments and divisions.

The multilith, in brief, is an off-set printing process, which, in the fields for which it is intended, has advantages over any other form of duplication. Roughly speaking, it is a compromise, in both cost and performance, between mimeographing on one hand and commercial printing on the other.

Please read the following instructions carefully before you plan or request any multilith work.

Operation

The TCU Press, under the direction of Mr. Noel Keith, will operate the multilith machine. Any University department or official may utilize its services, but the TCU Press reserves the right to reject any jobs which could more satisfactorily or more economically be done by other methods of reproduction.

Procedure will be similar to that used in mimeographing---multilith masters will be prepared by the departments requesting work, and the TCU Press will be responsible only for running off the copies.

Prepared masters should be left in the cabinet in the student personnel office, together with a completed "Job Order" (Sample attached).

Budget charges against departments ordering multilith work will be computed on the basis of (1) supplies used; and (2) operator-time required. For example, on a job in two colors, the paper must be run through the machine once for each color, and the machine must be thoroughly cleaned between each two colors; operator-time is thus at least doubled or tripled, depending upon the length of the run.

Utilization

The multilith machine, if it is properly utilized, can make possible---at very low cost---many jobs which can not be done by mimeographing and which in the past have been prohibited by the cost of commercial printing.

It should be clearly recognized that the multilith is not intended to replace the mimeograph. The latter will continue to be used for all work which it can satisfactorily handle.

Utilization (Continued)

In general, the multilith should be used for the following types of work:

1. Extremely long runs. Efficiency of the multilith process varies in direct proportion to the number of copies produced. It requires the operator approximately 30 minutes to ink the machine before a job and to clean it after a run, regardless of the number of copies; once set up, however, the machine will turn out 100 copies per minute.
2. All work requiring fine detail reproduction. Forms, drawings, charts, cartoons and similar copy requiring detail too fine for the limitations of a mimeograph stencil can be handled by multilithing, and the quality of the finished product depends almost solely upon skillful preparation of the master.
3. Any job in which neatness is of paramount importance. On any type of copy, the multilith gives a cleaner, clearer, sharper impression than the mimeograph. In the interest of the University's public relations, the multilith should be used for any form letter or manuscript which is to be distributed publicly.
4. Anything requiring the setting of type or the reproduction of photographs. (Note: For fuller explanation, see Paragraph 2 below under "Preparation of Masters.")

Preparation of Masters

Multilith masters are of two principal types---"Duplimats," made of paper and costing approximately the same as mimeograph stencils; and photoengraved metal plates, made to order by the Addressograph-Multigraph Company and costing about \$3 each for the photoengraving process (Cost of typesetting, artwork and any other work involved in preparation of the copy to be photographed is, of course, additional.

The metal photoengraved plates should be used:

1. For runs of 10,000 or more copies. The best grade of Duplimats are guaranteed for a maximum of 10,000 copies, and any longer run would justify the cost of a photoengraved plate.
2. For jobs requiring special treatment---the setting of type, the enlargement or reduction of prepared copy, or the reproduction of pictures, illustrations or art work which can not be drawn manually. As an example, the purple nameplate on the attached sample page was run from a photoengraved metal plate, while all other material on the page was run from a Duplimat. The same is true of the first page of this memorandum.
3. For reproducing any forms or copy already in print (As qualified, obviously, by copyrights). For example, the regular TCU letterhead or a newspaper clipping could be reproduced with exact detail by simply photographing the copy and making an engraved plate.

Preparation of Masters (Continued)

The paper duplimats are made in three grades: Short run (100 copies or less); medium run (1000 copies or less); and long run (10,000 copies or less). In the interest of economy, the proper duplimat should be selected according to the number of copies desired. All three grades will produce work of equal quality.

The paper Duplimats may be prepared in any of the following ways:

1. Typewriter. Any typewriter with a carbon ribbon may be used; and special fabric ribbons for multilith work may be ordered for any standard typewriter.
2. Multilith drawing ink, pencils and crayons. These supplies can be used for almost any type of drawings, sketches, forms, signatures, inscriptions, etc. A few simple specimens are shown on the sample sheet attached.

Basic Limitations

The multilith machine will take paper of any weight from 13-lb. substance to 3-ply bristol; and of any size from a minimum of 3" X 5" to a maximum of 9.75" X 14"; printing area must not exceed 9.5" X 13". Paper of any soft, fibrous variety should be avoided, as it leaves lint on the rollers.

Duplicating inks are made in---and work can be run in---virtually any color desired. The ink is supplied in 14 standard colors, and special color-blends can be purchased on special order.

In view of the fact that the bulk of the University's multilith work will be in black and the fact that the machine must be thoroughly cleaned before changing to ink of another color, the TCU Press suggests that for any job requiring color, the masters be completed and the job ordered at least a week in advance of the desired completion date; otherwise, no promises as to delivery can be made.

Supplies

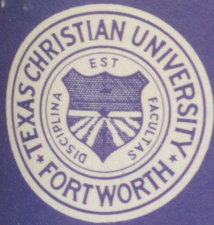
Standard paper stock---20-lb. white sulphite (the paper on which this memorandum is multilithed), in 8.5" X 12" and 8.5" X 14" sizes---will be stocked by the TCU Press and charged to the individual departments as it is used.

For any jobs in which any other type or size of paper is desired, the office or department requesting the work will furnish its own paper stock.

With the qualifications indicated in the above two paragraphs, the TCU Press will stock, in general, only such supplies as are needed in running off copies.

Following the same procedure as is used in ordering other office supplies, standard supplies needed for preparing the paper Duplimats may be ordered from the business office. These will include the Duplimats themselves, pencils, crayons, and drawing ink; fabric multilith ribbons for standard typewriters; non-reproducing pencils, for marking margins, etc.; and erasers.

Photoengraved metal masters should be planned with professional help and advice from personnel of Addressograph-Multigraph, 2908 West Lancaster.



T.C.U. NEWSLETTER



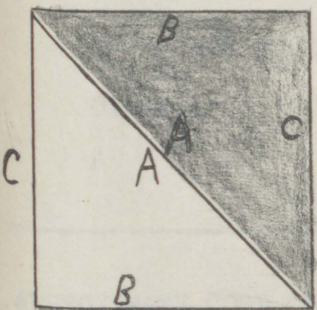
Published by the TCU News Service, Texas Christian University, Fort Worth 9, Texas

The purple nameplate above was multilithed from a photoengraved metal master. All other material on this page was run from a paper Duplimat. This paragraph was written with a typewriter with a carbon ribbon.

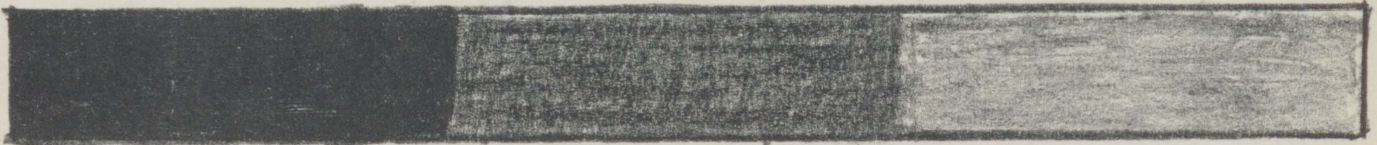
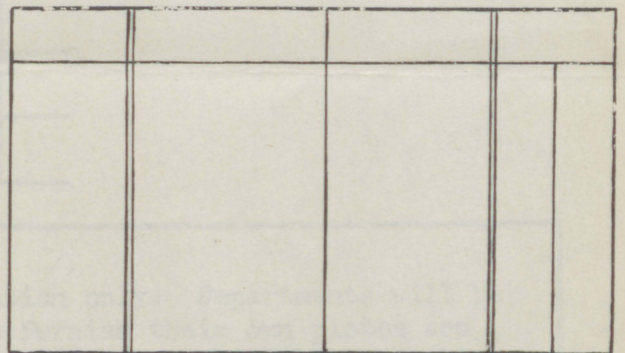
This paragraph was written with a standard typewriter with a special multi-lith fabric ribbon.

This paragraph was written with a multilith drawing pencil, and the geometrical figure and equation at the lower left was drawn with the same pencil.

This paragraph was written with an ordinary pen-point, using multilith drawing ink. The "business form" at lower right was drawn with the same pen and ink.



$$A^2 = B^2 + C^2$$



Duplimat Crayon

T.C.U. PRESS JOB SHEET

JOB NUMBER _____

Date Received _____ 195__ Time Wanted _____ 195__
 Hour Date

To be charged to _____

No. Plates or Duplimats _____ No. copies each _____ Total Impressions Required _____

INK: Black _____ Purple _____ Green _____ Blue _____ Red _____ Yellow _____ Other _____

PAPER: Regular 8½ x 11 20# Sulphite _____ Envelope Short _____

Regular 11½ x 14 20# Sulphite _____ Long _____

Furnished by TCU Press: Yes ___ No ___ Special _____

Postcard _____

Special Weight and Size (Please specify paper) _____

SPECIAL NOTATION: _____

Save stencil, master or plate? Yes... No ___

Name of Person _____

JOB COST:

*Cost of Plate or Master.....	\$ _____
Put plate on press.....	_____
Paper and envelopes.....	_____
Ink and chemicals.....	_____
Labor and overhead.....	_____
Other.....	_____
TOTAL.....	_____

APPROXIMATE COST CHART

*Halftone plate.....	\$3.25
*Line plates.....	2.50
*Masters.....	.10
Ink, per M.....	.15
Chemicals, per M....	.25
Labor, per hour.....	.60
Overhead, per hour..	.30
Putting plate on press.....	.50

*For information only: Departments will be expected to furnish their own plates and masters already prepared for lithographing.