

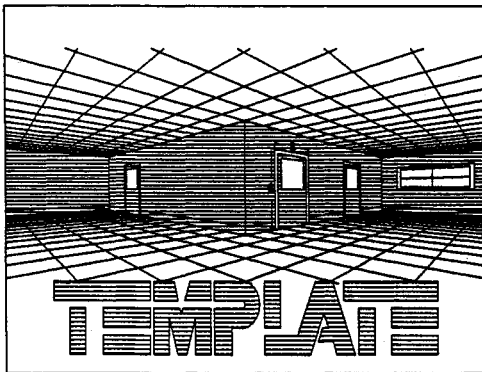
SYSTEMS INC.

# TALARIS TALKS TEX

We talk your language. Talaris Systems Inc. offers TEX users full TEX support through its line of TEX-compatible text and graphics software, its family of high quality laser printers, and its extensive library of METAFONT-generated TEX and LATEX fonts.

## TEX AND GRAPHICS

We offer QDRIVE™, a TEX-compatible text and graphics merging tool. QDRIVE processes TEX-formatted text pages and merges them with automatically scaled and positioned embedded graphics, like so:



and/or overlaid graphics (see our logo above) for letterheads, borders, forms, grids and "rubber stamp" emulation. QDRIVE is available on VAX/VMS, DEC-10 and DEC-20.

## LASER JOY

Talaris offers three fast, affordable, high quality laser printers: the Talaris 2400 (24 pages per minute), the Talaris 1200 (12 pages per minute) and the Talaris 800 (8 pages per

minute, desk-top). All are full page bit-map, 300-dots-per-inch text and graphics laser printers. Each functions as a line printer, a plotter (both vector and raster graphics), a Diablo-style printer and a typesetter.

## TEXSUPPORT

TEXsupport is our software kit for TEX82 on DEC-10, DEC-20 and VAX/VMS based Talaris laser printers, and for TEX82 on VAX/Berkeley 4.1 or 4.2 UNIX based Talaris laser printers. Each TEXsupport kit comes with QTEX, our TEX82 DVI file post-processor.

TEXsupport comes with a complete library of 185 TEX and LATEX fonts (183 downloadable, 2 in ROM), spooler or symbiont enhancements, and TEX version 1.1, LATEX and SLI<sub>TEX</sub> at no extra charge. We also offer 4 optional TEX ROM font sets. (Our TEX fonts are completely compatible with Stanford's.)

## FONT FLASH!

Now available on the VAX/VMS: The VMS Print Server, also known as the Font Daemon. The Font Daemon provides automatic down-loadable font memory management. While your document is being printed, the Print Server dynamically loads for you any font it encounters in your text. It first checks to see if the referenced font has already been loaded, and if not, automatically loads it for you. If font memory is too full, it deletes the oldest unused font before loading the new one. (Bonus: the Font Daemon works with any text file, not just TEX text files.)

# WHY QDRIVE?

**Question:** Why would a T<sub>E</sub>X user want to use QDRIVE, our text and graphics merging program? **Answer:** Because QDRIVE has far more expanded capabilities than Q<sub>T</sub>E<sub>X</sub>.

Q<sub>T</sub>E<sub>X</sub> is our regular T<sub>E</sub>X driver; however, its power is limited. QDRIVE, on the other hand, has these expanded features:

- it accepts a variety of files as input—T<sub>E</sub>X DVI, word processing and ASCII (not just T<sub>E</sub>X DVI files, as with Q<sub>T</sub>E<sub>X</sub>);
- it has powerful text and graphics merging capabilities (Q<sub>T</sub>E<sub>X</sub> has none); and
- it gives far more control over output page parameters (you can specify no less than 11 of them, compared with Q<sub>T</sub>E<sub>X</sub>'s one).

## WORDS AND PICTURES

QDRIVE simplifies two types of text and graphics merging applications:

(1) "Internal overlays." These are figures to be embedded in T<sub>E</sub>X text on the output page. All you have to do is specify, from within the T<sub>E</sub>X input file, the size available for the figure and the location of the graphics file using the Talaris "grafix" macro. QDRIVE then scales the figure and prints it in the correct position on the output page.

(2) "External overlays." These are whole page overlays that enable you to layer several different pieces of information onto the same page—much like transparent overlays used in viewgraphs. They're useful for layering logos, borders, forms, etc., onto T<sub>E</sub>X text.

QDRIVE also allows you to:

- mix vector, raster and "native" (printer-dependent) graphics on the same page;
- overlay T<sub>E</sub>X output onto T<sub>E</sub>X text; and
- mix page orientations.

## OUTPUT CONTROL

For those of us who have not yet mastered Chapter 23 of Dr. Knuth's *The T<sub>E</sub>Xbook* ("Output Routines"), QDRIVE can be an invaluable aid in controlling T<sub>E</sub>X output generation.

Using QDRIVE's output parameters menu you can do the following:

- turn off automatic centering of T<sub>E</sub>X pages;
- control the placement of the T<sub>E</sub>X output page onto the printed page (by specifying the left, top and binding margins); and
- specify page dimensions and orientation.

By layering several T<sub>E</sub>X output files onto one page, you can create page layouts which would otherwise require writing a new T<sub>E</sub>X output routine. For instance, you can mix together, on the same page, output generated with both the dual-column and the plain T<sub>E</sub>X output routines. This greatly increases your productivity when creating unique, one-time page layouts.

Why QDRIVE? Because of its powerful text and graphics merging capabilities, its versatility as a page layout tool, and its friendliness and ease of use.

For more information on our T<sub>E</sub>X-related products, call or write us today.

## WE TALK T<sub>E</sub>X!

P.O. Box 8309, La Jolla, CA 92038 (619) 454-3363

# COMBINING TEX AND GRAPHICS TAKES IMAGINATION.

**QMS**  
Quality Micro Systems

**TEX**  
Sample Page

With TEX and the Lasergrafix™ you can mix text and graphics any way you wish... either for serious material... or possibly just for fun.

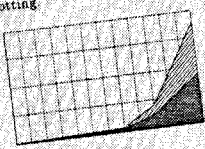
A complete TEX software package including a driver program for the Lasergrafix printer family is available through QMS and the Texas A&M TEX Users' Group. The source programs reside in the host computer and are written in WEB and Pascal. Currently the software package is available for the VAX/VMS configuration and the DG/ADS configuration. Versions for Honeywell, IBM and VAX/Unix systems should be available in September, 1984.

Document preparation is easily accomplished using TEX and its programming language. Manuscripts can be formatted to include circles, lines, boxes, forms, mathematical expressions and much more.

$$\Psi(P) = \frac{1}{4\pi} \int_0^{2\pi} \int_0^{\pi} \left( \frac{\partial \Psi}{\partial r} \frac{dr}{r} + \frac{\partial \Psi}{\partial \theta} \frac{d\theta}{r} + \frac{\partial \Psi}{\partial \phi} \frac{d\phi}{r \sin \theta} \right) n da$$

$$\Psi(P) = \frac{1}{4\pi} \int_0^{2\pi} \int_0^{\pi} \frac{e^{ikr}}{r} (a_0 + a_1 \cos \theta + a_2 \cos^2 \theta) n da$$

... as well as half-tone area fill, pie & bar charts, graphs and plotting.



In fact, whatever you can print using the Lasergrafix family of non-impact printers...

QMS, Inc. • One Magnum Pass, Mobile, Alabama 36689  
Printed on the LASERGRAFIX 800 using TEX and the QMS controller.

**QMS** Where Imagination Leads

The QMS LASERGRAFIX™ family of non-impact printers offers exciting new advances in graphics technology:

1. LASERGRAFIX 2400 - 28 pages per minute, experienced laser printer
2. LASERGRAFIX 1200 - 12 pages per minute, compact laser printer
3. LASERGRAFIX 800 - 8 pages per minute, desktop laser printer.

These systems can serve as high quality output devices for the TEX™ operating system. QMS offers the entire growing family of electronic page printers, each of which can be part of a print applications network system you can manage with just about any computer you can name. The original Lasergrafix, the most continuously print intensive machine, is combined with industrial and business graphics in a letter quality word processor, bar charts, pie charts and barcodes can be printed on this high resolution plot device. Full bit-level page memory lets you mix computerized typesetting with professional graphics and fonts of varying sizes and typefaces... all on the same page... even on the same line. The 800 is highly compatible with the use of TEX typesetting and the many fonts it offers... from finely detailed mathematical notation

$$\left( \int_{-\infty}^{\infty} e^{-x^2} dx \right)^2 = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dx dy$$

to large and small fonts for every part of the page from the headline.

## Chapter 1

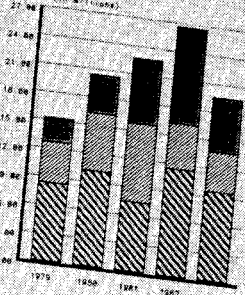
to the footnote...

\* LASERGRAFIX is a registered trademark of QMS, Inc.

Visual contrasts can be effectively used in many ways. These just typeface and size differences of print options. Variable character orientation, high resolution compressed fonts, barcodes, line and bar drawing, multiple fonts overlay, reverse image print, and

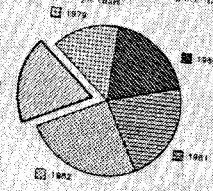
Three-dimensional graphics are done with a special format language. A combination of Lasergrafix and QMS controller can print 300 pages of 300 dpi and 300 dpi line art on every 80 page bar chart.

DOLLARS (in millions)



Legend:  
 ■ PRODUCTION  
 ■ 1979  
 ■ 1980  
 ■ 1981  
 ■ 1982  
 ■ 1983

The Lasergrafix 800 and the rest of its family can even use the QMS™ Arc and Circle Drawing Set to reproduce data in this pie chart.



Printed on the LASERGRAFIX 800 using TEX and the QMS controller.

With TEX software and a QMS Lasergrafix™ non-impact printer you can print just about anything you can imagine.

Documents with arcs, circles, lines, boxes, forms, mathematical expressions. Manuscripts with multiple fonts, halftones, pie charts, bar charts, graphs and vector plotting.

The reason?

All QMS Lasergrafix printers including the 800, 1200 and 2400 are equipped with the firmware necessary to merge high-resolution graphics and letter-quality text on the same page. In any configuration. At a remarkable 90,000 dots per square inch.

All it takes is imagination to combine TEX and graphics. As long as you have a printer with intelligence.

Ask for a demonstration of a QMS Lasergrafix printer today and we'll show you what we mean.

**QMS**  
QUALITY MICRO SYSTEMS  
WHERE IMAGINATION LEADS™

— Please contact me to arrange a demonstration.  
 — Please send me more information on the QMS Lasergrafix™ Family of Non-Impact Printers today. Be sure to include samples of graphics applications.

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Zip \_\_\_\_\_ Phone ( ) \_\_\_\_\_

Type of system you are now using \_\_\_\_\_

Number of print workstations you are considering \_\_\_\_\_

Print application for printer \_\_\_\_\_

P.O. Box 81250, Mobile, Alabama 36689  
 Telephone (205) 633-4300 • Telex RCA 26 60 13

**TEXTSET, Inc. P.O. Box 7993, Ann Arbor, Michigan 48107**  
**direct-typesetting services and software**

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**TEXTSET offers a full range of services and products to T<sub>E</sub>X users.**

### **DIRECT-TYPESETTING**

Direct-typesetting from T<sub>E</sub>X DVI files, T<sub>E</sub>X source, and other formatting systems on an Autologic APS-5. Macro consultation and design. Wide range of fonts available including Computer Modern.

### **T<sub>E</sub>X SYSTEM CONSULTING**

Expert consulting and programming services for in-house T<sub>E</sub>X users. Design and implementation of complete working T<sub>E</sub>X systems.

- preprocessors
- T<sub>E</sub>X installation
- macro package design
- device drivers
- font assistance
- system integration
- special applications support
- programmer level instruction

### **T<sub>E</sub>X SOFTWARE**

T<sub>E</sub>X Package software for Sun Workstations.

T<sub>E</sub>X Screen Preview for Sun Workstations.

DVIAPS, T<sub>E</sub>X DVI-to-printer driver for Autologic APS-5 series phototypesetters.

DVIXER for Xerox 8700 and 9700.

Device drivers for other selected printers.

Multiple copy discounts, site licenses, and maintenance agreements available.

For more information call Bruce Baker at (313) 996-3566.

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## *More than just a pretty face.*

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The Metafoundry is dedicated to the creation of beautiful digital typefaces with METAFONT. But, Metafoundry fonts are much more than beautiful. Each has a T<sub>E</sub>X Font Metric (tfm) file, containing all the kerning, ligature and character size information needed to get the most accurate typesetting. Not only are Metafoundry fonts fully T<sub>E</sub>X-compatible, they can also be adapted to other systems.

Using METAFONT helps us keep down the cost of changing resolutions and we pass the savings on to you. When you license our fonts, you are entitled to a substantial discount on those fonts in different resolutions.

**ROMAN**  
**Chel Sans Serif**  
*Copperplate*  
**Schoolbook**

The above are the major families in our catalogue. Also available are:

- Roman and sans serif monospace groups,
- Mathematical and scientific symbols, including extensions,
- Foreign language alphabets (Greek, Cyrillic, Azeri and Slavic) including diacritics,
- The International Phonetic Alphabet.

The Metafoundry's fonts are available in point sizes ranging from 4 to 96 points, at resolutions of 100, 200, 240, 300, 400 and 480 dpi (custom resolutions negotiable). Most fonts are available in text and italic, and in four weights (regular, medium, bold and extra bold). And The Metafoundry's designers are willing to undertake custom and logo design work.

## The Metafoundry™

6565 Frantz Rd. • Dublin, OH 43017 • (614) 764-6087

The original of this ad was printed with Metafoundry fonts at only 300 dpi.

### **T<sub>E</sub>X CONSULTANT**

Michael Spivak

*Author of the  
AMS-T<sub>E</sub>X macro package*

Write: % Publish or Perish, Inc.  
 1001 Jefferson Plaza, Suite 112  
 Wilmington, DE 19801  
 Phone: (713) 523-5700

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### **INSTRUCTORS WANTED – PART TIME**

The T<sub>E</sub>X Users Group is accepting applications from qualified individuals to teach T<sub>E</sub>X-related two-, three- and five-day seminars at various locations in the U.S. and possibly abroad. Subjects include, but are not limited to, T<sub>E</sub>X for beginners, T<sub>E</sub>X for intermediate users, AMS-T<sub>E</sub>X, font design, output devices, document design, output routines, macro writing, T<sub>E</sub>X macro packages, integration of text and graphics, and tutorials for T<sub>E</sub>X users.

Fee, plus expenses. Send resumé, with description of qualifications, to Ray Goucher, T<sub>E</sub>X Users Group, P. O. Box 9506, Providence, RI 02940-9506, U.S.A.

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