opportunity to assist Arvind Borde with TEXHelp, an on-line TEX reference.

I am presently a member of the technical staff at Hewlett-Packard Laboratories in Palo Alto, California.

Personal statement:

Computing and printing environments have changed drastically since the inception of TEX. As computer speeds and screen and printer resolutions have risen, so have the expectations of users. Where once users were awed by simple ligatures and kerns, now users expect four-color separations with fountains, chokes, and spreads. With TEX essentially frozen, any new features must derive from preprocessors, postprocessors, and drivers. The establishment and adoption of implementable, extensible, powerful standards for these new features is essential to maintaining the portability of TEX. As a board member of TUG, I intend to use my experience with the technical aspects of TEX to help encourage the design, development, and adoption of standards for specials, graphics, color, media, pagination, font encoding, and other important extensions.

Production Notes

Barbara Beeton

Input and input processing

Electronic input for articles in this issue was received by e-mail and on diskette.

In addition to text and various coded files processable directly by TEX, the input to this issue includes several encapsulated PostScript files. More than 60 files were required to generate the final copy; over 60 more contain earlier versions of articles, auxiliary information, and records of correspondence with authors and referees. These numbers represent input files only; .dvi files, device-specific translations, and fonts (.tfm files and rasters) are excluded from the total.

Most articles as received were fully tagged for *TUGboat*, using either the plain-based or LATEX conventions described in the Authors' Guide (see *TUGboat* 10, no. 3, pages 378–385). The macros are available from CTAN (the Comprehensive TEX Archive Network); see *TUGboat* 14, no. 2, p. 100. The TUG office will provide copies of the macros on diskette to authors who have no electronic access.

By number, 85% of the articles in this issue are in LATEX, but only about 57% of the pages. The three articles by David Salomon were all tagged for the plain-based tugboat.sty; one of them redefined the entire verbatim system, requiring that it be processed separately from the others (which also incorporated verbatim segments, but without affecting the *TUGboat* macros).

Test runs of articles were made separately and in groups to determine the arrangement and page numbers (to satisfy any possible cross references). A file containing all starting page numbers, needed in any case for the table of contents, was compiled before the final run. Final processing was done in 2 runs of TEX and 2 of LATEX, using the page number file for reference.

In addition to the three articles by Salomon, The following material was prepared using the plain-based tugboat.sty:

– the TUG calendar, page 66.
– these Production notes.
– "Coming next issue".

Output

The bulk of this issue was prepared at the American Mathematical Society from files installed on a VAX 6320 (VMS) and TEX'ed on a server running under Unix on a Solbourne workstation. Output was typeset on the Math Society's Compugraphic 9600 Imagesetter, a PostScript-based machine, using the Blue Sky/Y&Y PostScript implementation of the CM fonts, with additional fonts downloaded for special purposes.

Photographs illustrating the article by Claudio Beccari (p. 9) were converted to halftones by traditional means. Two diagrams for the Salomon/Hendryx article on "Slanted lines" (p. 59) were provided as camera-ready copy and pasted in.

Coming Next Issue

Tools for interaction

Michael Downes describes two documentstyle options, `dialog.sty` and `menus.sty`, which provide functions for printing menus on a screen and reading users' responses. These have been written so that they are also usable with non-LaTeX macro packages that include `plain.tex` in their base, such as $\mathcal{A}\mathcal{M}\mathcal{S}$-TeX or `eplain`.

More new books

Reviews of the following are expected:
- Norman Walsh, *Making TeX Work*
- Christian Rolland, *LaTeX guide pratique*
- Stanley Sawyer and Steven Krantz, *A TeX Primer for Scientists*
- and possibly others ...

New techniques in METAFONT

Certain geometrical problems that arise very often in glyph design are not directly solvable by METAFONT's plain macros. Yannis Haralambous presents two such problems and solutions for them, along with a discussion of an approach that, although geometrically correct, does *not* work in real-world METAFONT practice and should be avoided. [Delayed by technical difficulties]

ASCII.sty

Because they needed a font to prepare a table of ASCII control codes and their associated IBM graphics characters for a book on interfacing medical equipment to an IBM PC, R. Ramasubramanian, R.W.D. Nickalls and M.A. Reed developed a new style option and encoded font containing these characters for use with TeX and LaTeX. The new font is based on the public domain IBM Courier font.

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