

TUG NEWS

From the President

I carefully read the November issue of *TUGBOAT* and was shocked to see that I did not acknowledge the contributions of Pierre MacKay, Michael Spivak, and the founders of our organization. I correct this by thanking them and the AMS for creation of a good productive organization. Organizations like TUG always depend upon some good people contributing of their time. These people have really set a solid foundation for us to build upon.

Michael Spivak has resigned from the Steering Committee since he is now strictly in the \TeX community for financial gain. I am sure that he will continue to be available as a sounding board.

Nelson Beebe, John Gourlay, and Richard Palais have agreed to be the nominating committee for selecting a candidate (or slate) for vice president and for secretary at the Tufts meeting.

I have given \TeX talks to sister institutions, a seminar at the Joint Math meeting in New Orleans, a shortcourse (one day) after the meeting, and have more presentations of these types scheduled for the future.

Jim Fox at the University of Washington's Academic Computing Center has become the CDC Cyber site coordinator.

I continue to be pleased with the staff of TUG. Ray, Barbara, and Sam continue to have my complete support. We are fortunate.

Will each site coordinator please send me an indication of:
(1) The contents (and levels) of their \TeX distribution; (2) The source (or listing) of their *Local*

Guide as Leslie Lamport calls it in the \LaTeX manual.

One of my goals is to have a generic form and minimum levels for all. Happy \TeX ing.

Bart Childs
Texas A & M University

Acknowledgment of Contributions

The Officers and Steering Committee gratefully acknowledge receipt of royalties and other contributions to TUG from several sources during 1985:

Don Knuth From the sale of Don Knuth's *The \TeX book*, royalties of \$3,787.

Kellerman & Smith From David Kellerman and Barry Smith, of Kellerman & Smith, royalties of \$1,325, from fees paid to them for distribution of the VAX/VMS version of \TeX .

Arthur Samuel More than 800 copies of Arthur Samuel's *First Grade \TeX* sold by TUG in 1985 resulted in the addition of \$5,900 to TUG's treasury.

Textset Contributions of \$1,500 received from David Rodgers on behalf of Textset, Inc.

TUG sincerely appreciates these very generous contributions.

Samuel B. Whidden
Treasurer, \TeX Users Group

Donald E. Knuth Scholarship

TUG is pleased to announce the first annual "Donald E. Knuth Scholarship." The award consists of an all-expense-paid trip to TUG's 1986 Annual Meeting and the two-day course offered immediately following the meeting. Competition for the scholarship is open to all 1986 TUG members holding secretarial or clerical support staff positions.

To enter the competition, applicants should submit to the Scholarship Committee by May 15, 1986, the input file and final \TeX output of a project that displays originality, knowledge of \TeX , and good \TeX nique. Along with the \TeX files, each applicant should submit a letter stating that he/she will be able to attend the Annual Meeting and Short Course at Tufts University, Medford, Massachusetts, July 21-25, 1986. This year's course will be on \TeX Output Routines.

Selection of the scholarship recipient will be based on the \TeX sample. Judging will take place May 16-June 15, and the winner will be notified by mail after June 16.

The Scholarship Committee consists of Maria Perkins, Vanderbilt University, chairperson; Carl Smith, University of Maryland; and Linda Woessner, Computer Science Corp. Funding for the first year of this scholarship will be provided by Kellerman & Smith of Portland, Oregon.

All applications should be submitted to the Committee at the following address:

Maria Perkins
Computer Center
Vanderbilt University
Box 1577 Station B
Nashville, TN 37235

Special Credits for This Issue

This issue of *TUGBOAT* is, more than usual, an experiment. First of all, it has been guest edited, by David Kellerman and Barry Smith.

David and Barry originally volunteered for this task at the 1984 TUG meeting. Their intention was to use an issue of *TUGBOAT* to show how \TeX works in the hands of a professional graphics designer. This vision has now become real.

The layout for this issue was designed by Martha Gannett, a designer based in Portland, Oregon. You may have seen her work before — her recent projects include the 1985 Floating Point Systems annual report, and the 1984, 1985, and 1986 Mentor Graphics annual reports. Her special fondness for book design, though, has resulted in some of her most memorable projects, including *Qiniqtuagaksrat Utuqqanaat Inuuniagninisiquin*, a bilingual text of interviews with Innuipiat Indians. I am sure this project will also be among the memorable.

The macros have been realized by David, based on the existing *TUGBOAT* macros, at least to the extent that the input files of individual articles look virtually the same as they would have, had this issue been prepared in the usual way.

Pierre MacKay worked long and hard with David to install the new Computer Modern fonts on the Alphatype CRS at the University of Washington. Considering that only the old METAFONT contains the instructions to generate Alphatype fonts, this was no mean task: It involved generation of .GF files at 5333 dots per inch with METAFONT84, translating

these images to a binary format, and recycling them through the old SAIL METAFONT. (I haven't counted the number of fonts that have been given this treatment, but I know it took at least a day's worth of computer time.)

Finally, camera copy was prepared on the Washington Alphatype and shipped to Providence for printing.

After they have had a suitable rest, I shall expect David and Barry to write up their experience, along with the new macros, for publication in a future issue. In the meantime, thanks and congratulations to all.

Barbara Beeton
American Mathematical Society

Conference: \TeX for Scientific Documentation

The \TeX for Scientific Documentation conference will take place 19–21 June 1986 at:

Centre culturel Saint-Thomas
2, rue de la Carpe-Haute
67000 Strasbourg, France

The aim of this conference is to provide a state-of-the-art survey of current work in this area, and to encourage technology transfer and information exchange on the latest applications of documentation systems based on \TeX .

These institutions are sponsors of the conference: CNRS (Centre national de la Recherche scientifique), SMF (Société mathématique de France), Université Louis-Pasteur de Strasbourg.

Applications for registration must reach the Conference Chairman before 1 April 1986.

Registration forms may be obtained from him or from the TUG office; instructions to authors will be included.

The Proceedings will be published in the Springer-Verlag Lecture Notes in Computer Science series. Contributions must be received by the Conference Chairman no later than 1 April 1986; the deadline for notification of acceptance has been postponed to 1 May 1986. Priority of publication will be given to contributions submitted by participants.

Jacques Désarménien
Conference Chairman
Laboratoire de typographie
informatique
Université Louis-Pasteur
7, rue René-Descartes
67084 Strasbourg Cedex
France

\TeX Courses

The \TeX Users Group is offering the following schedule of courses in all skill levels of \TeX programming. Contact Ray Goucher, \TeX Users Group, for registration information.

All 3-day courses start on Mondays and 2-day courses on Thursdays, except as follows: Beginning and Intermediate Courses at Stanford, Tuesday–Thursday and Friday–Saturday, respectively; Intermediate and Advanced at Tufts, Monday–Tuesday and Wednesday–Friday, respectively.

A special series of courses [150, 250, 306, 405] for technical users with programming or scientific backgrounds has been scheduled to coincide with the completion on Monday, August

11, 1986, of the International Congress of Mathematicians, Berkeley, California.

Beginning T_EX A 3-day course for non-technical users: [101] March 3–5, Vanderbilt University, Nashville, TN; [102] March 24–26, Illinois Institute of Technology, Chicago, IL; [103] March 24–26, Harvard University, Cambridge, MA; [104] June 2–4, Vanderbilt University, Nashville, TN; [105] July 28–30, Illinois Institute of Technology, Chicago, IL.

Beginning T_EX A 3-day course for technical users: [150] August 12–14, Stanford University, Stanford, CA.

Intermediate T_EX A 2-day course for non-technical users: [201] March 6–7, Vanderbilt University, Nashville, TN; [202] March 27–28, Illinois Institute of Technology, Chicago, IL; [203] March 27–28, Harvard University, Cambridge, MA; [204] June 5–6, Vanderbilt University, Nashville, TN; [205] July 14–15, Tufts University, Medford, MA; [206] July 31–August 1, Illinois Institute of Technology, Chicago, IL.

Intermediate T_EX A 3-day course for technical users: [250] August 15–16, Stanford University, Stanford, CA.

Advanced T_EX A 3-day course: [301] April 7–9, Vanderbilt University, Nashville, TN; [302] April 28–30, Illinois Institute of Technology, Chicago, IL; [303] June 2–4, Illinois Institute of Technology, Chicago, IL; [304] July 16–18, Tufts University, Medford, MA; [305] August 4–6, Vanderbilt University, Nashville, TN; [306] August 18–20, Stanford University, Stanford, CA.

Macro Writing A 2-day course: [401] April 10–11, Vanderbilt University, Nashville, TN; [402] May 1–2, Illinois Institute of Technology, Chicago, IL; [403] June 5–6, Illinois Institute of Technology, Chicago, IL; [404] August 7–8, Vanderbilt University, Nashville, TN; [405] August 21–22, Stanford University, Stanford, CA.

Output Routines A 2-day course: [425] July 24–25, Tufts University, Medford, MA.

Notes There are many T_EX users who are not TUG members, but have expressed an interest in these courses. Please help them get the word by posting this notice.

TUG members and individuals on TUG's mailing list will be sent registration information and additional course/meeting information routinely. Anyone else wishing to receive future mailings should contact the TUG office.

Organizations desiring in-house courses, tailored to their specific needs, or interested in hosting Regional Courses should contact the TUG office.

Ray Goucher
T_EX Users Group

Software Column: Call for Papers

This time we have four papers on T_EX and WEB related software problems!

W. Appelt and K. Horn show how to KNIT and TWIST your program rather than TANGLE and WEAVE it. Their PATCHWORK system — as they call it — allows one to have more than one change file for a program; and this is

really quite useful when a program has to be adapted to several environments at the same time. I know of and have been using another similar system (called TIE) which I got from Darmstadt University a few months ago. I wonder whether further systems addressing the same problem exist. A comparison and evaluation of the solution strategies might be interesting.

The problem of error diagnostics of TANGLE is studied in R. M. Damerell's paper. He proposes and has implemented a slight change to TANGLE which improves TANGLE's error detection capability. This is quite an important point; I'd appreciate receiving information about other related work for publication in TUGBOAT.

The third paper — by A. Trevorrow — describes a very powerful preview system for T_EX. It supports quite a variety of visual displays. The benchmarks are really impressive.

Finally, M. Senn gives a survey of some preview packages. In addition to this paper I've received a few letters informing me about the existence of several other preview packages. We will prepare an update about such systems for publication in the next issue. If you have a T_EX previewer, please send me information about it.

During this academic year I had a blind student in my classes. As he had a Braille terminal much of our written communication was by computer mail. In particular, I would send him the T_EX input files of assignments, and he would get them printed in Braille (the input files!). This was fine with plain text and simple formulae. But just imagine reading a complex `\halign` in Braille! I am considering to have him work on a

DVI-to-Braille driver as a project. I wonder, however, whether such a driver already exists somewhere. (A letter asking a related question was read at the TUG '84 meeting, and published in *TUGBOAT* 5, no. 2: 146.) I'd appreciate getting comments and hints concerning this problem.

I close with my usual appeal: If you have software problems, ideas, suggestions, implementations, or papers related to typesetting, \TeX , and \WEB for *TUGBOAT*, please do send them to me.

Helmut Jürgensen
University of Western Ontario

Addenda: The BCS Word Processor Review

The Boston Computer Society's IBM PC & Compatibles Technical Word Processor Report reviewed in *TUGBOAT* 6, no. 3: 146-149, has now been published, in the January 1986 issue of the *Notices of the American Mathematical Society*, pages 8-37. The camera copy was prepared using \TeX and the Society's Alphatype CRS typesetter, except for one illustration of Troff input and output.

Copies of the complete report may be obtained by sending a check for \$8 (Massachusetts residents should add 5% sales tax) to:

Carl A. Hein
Dunster House, Apartment 7
Swanson Road
Boxborough, MA 01719

The two individuals cited as authors of the report, Avram Tetewsky and Jack Pearson,

wish it known that credit is also due to the other members of the review committee who tested the software and wrote the individual reviews. Herewith are the names of all the authors: Damon Bostick, MIT; A. G. W. Cameron, Harvard University; Jim Cronin, Yankee Atomic; Mike Fellows, MIT; Peter Ford, MIT; Richard Goldstein, Qualitas; William Gilbert, MIT; Chase Green, Raytheon; Robert Indik, Brandeis University; Jim Loomis, Yankee Atomic; Pete Matthews, Jr., C. S. Draper Laboratory; Jack Pearson, Avco Systems; Avram Tetewsky, C. S. Draper Laboratory.

The benchmark examples published in both *TUGBOAT* and the AMS *Notices* were not labeled on each page as originating in the BCS review. It is requested, if these pages are reproduced for any reason, that each copy be clearly marked to credit the PC Technical Group of the IBM PC Users Group of the Boston Computer Society.

Barbara Beeton
American Mathematical Society