General Delivery

LIBRARY SUBSCRIPTIONS — WHAT ARE THEY?

One of the subscription options for TUGboat is the "library subscription". The price is the same as for an individual membership, and a frequent question is, What is the difference?

Some organizations wish to obtain copies of TUGboat for a library, or for various reasons do not wish their "organizational" subscription to be directed to a particular individual (e.g. individuals leave, the project which required T\TeX{} information is taken over by someone else, etc.). It is to satisfy these reasons that the "library subscription" was established. Library subscribers will receive the same mailings on the same schedule as individual members. However, only members (individual members or individuals representing institutional members) may participate in TUG meetings.

**USERS' COURSE IN AM\$-T\&\TeX{}

Michael Spivak

It will be necessary for AM\$-T\&\TeX{} to be completely rewritten for \TeX{}X82. Fortunately, there are so many improvements in \TeX{}X82 that the rewrite should be easier, and the final product less kludgy, than the original. I will be spending the entire month of May at Stanford working on this, so the new AM\$-T\&\TeX{} should be much better (or perhaps much worse) than the old one. It will probably incorporate some things from Leslie Lamport's macro package La\TeX{}, though how much, or how, hasn't been decided yet.

The Joy of \TeX{} will also be completely rewritten (sometime in the distant future, on a far off galaxy), partly because of additions, differences, and a few incompatibilities with the old AM\$-T\&\TeX{}, and partly to improve the exposition. (One main change I have in mind is to eliminate most of the side trips — telling people not to read them just because they're in small type is like the judge telling the jury to ignore that last remark — and instead collect them together into a second part. So the first part will enable people to get going using AM\$-T\&\TeX{}, and the second part will involve more esoteric things.)

It is to be hoped that I will get a lot of ideas about how to do things from the AM\$-T\&\TeX{} course given in July. It should be emphasized that this course is a course only in AM\$-T\&\TeX{}! On the one hand (the low one) it is not a course in how to use a computer or a text editor; it will be assumed that everyone has their own favorite (or well-hated) text editor, or will be learning one. On the other hand (the high one) it won't be a course on \TeX{}X either; it will cover only those things that you can do with the AM\$-T\&\TeX{} macro package. Participants are encouraged to bring examples of horrendous typesetting problems; I will try to leave time at the end of the course to attack a few.

**TUG TREASURER'S REPORT

December 31, 1982

Income:

<table>
<thead>
<tr>
<th>Membership/Publications¹</th>
<th>1,300</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981 Membership</td>
<td></td>
</tr>
<tr>
<td>1981 Back volume sales</td>
<td>1,156</td>
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<td>1982 Membership</td>
<td>10,100</td>
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<td>1982 Library subscriptions</td>
<td>535</td>
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<tr>
<td>1982 Foreign postage option</td>
<td>588</td>
</tr>
<tr>
<td>Supplements²</td>
<td>376</td>
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<td>15,055</td>
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<table>
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<tr>
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<th>200</th>
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<tbody>
<tr>
<td>Educational</td>
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<tr>
<td>Non-educational</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>400</td>
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<table>
<thead>
<tr>
<th>Meetings</th>
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</thead>
<tbody>
<tr>
<td>Meeting, Cincinnati, 1/82</td>
<td>4,590</td>
</tr>
<tr>
<td>Meeting, Stanford, 7/82²</td>
<td>11,025</td>
</tr>
<tr>
<td>Course, Stanford, 7/82²</td>
<td>27,468</td>
</tr>
<tr>
<td>Waiver, Meeting/Course</td>
<td></td>
</tr>
<tr>
<td>Fees³</td>
<td>(450)</td>
</tr>
<tr>
<td>Manufacturers' Reps Fees⁴</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>42,943</td>
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</table>

<table>
<thead>
<tr>
<th>Other</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Videotape sales/rental</td>
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</tr>
<tr>
<td>Advertising and royalties</td>
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</tr>
<tr>
<td>mailing list sales</td>
<td>-0-</td>
</tr>
<tr>
<td>Royalties (\TeX{} manual)</td>
<td>-0-</td>
</tr>
<tr>
<td></td>
<td>2,200</td>
</tr>
</tbody>
</table>

| Total income              | 60,496|

Expenses:

<table>
<thead>
<tr>
<th>TUGboat (2 issues)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing</td>
<td>2,220</td>
</tr>
<tr>
<td>Postage</td>
<td>1,143</td>
</tr>
<tr>
<td>Editorial services⁵</td>
<td>3,460</td>
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<tr>
<td>Clerical services⁶</td>
<td>3,300</td>
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<tr>
<td>Computer expense</td>
<td>3,555</td>
</tr>
<tr>
<td></td>
<td>13,678</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meetings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati, 1/82</td>
<td>4,130</td>
</tr>
<tr>
<td>Stanford, 7/82</td>
<td>2,460</td>
</tr>
<tr>
<td></td>
<td>6,590</td>
</tr>
</tbody>
</table>
Other
Supplements\(^2\) $225
\TeX\ distribution support (Stanford)\(^7\) $0
ANSI meetings\(^8\) 2,503
Legal and tax consulting\(^9\) $0
Advertising TUG membership & TUGboat\(^9\) $0
General mailings 1,335
Subsidies\(^10\) $0
Printing, other 1,212
Miscellaneous\(^11\) 1,688 $6,963

Total expenses $27,231

Summary:
Balance forward 1/1/82 $(8,660)
Total income 60,498
Total expenses (27,231)
Balance 12/31/82 $24,607

Notes:
All expense figures include an AMS overhead charge of 17.13%.

1. 1981 membership was open through April 30, 1982; 130 1981 members were accepted in 1982; since then, individual 1981 issues have been available for $10 each ($30 per volume/3 issues). As of December 31, 1982, there were 731 1982 memberships/subscriptions, including libraries and complimentary: 258 foreign, including Canada and Mexico; 473 U.S.

2. 47 copies of reprints of Max Díaz’s Fácil \TeX\ were sold.

3. The issue of Institutional Membership was finally resolved at the Stanford meeting in July, but it proved to be too late to launch an effective membership drive. Only the American Mathematical Society and Calma became Institutional Members during 1982. However, as of March 31, 1983, TUG has 27 Institutional Members.

4. 136 members participated in the TUG Stanford meeting, July 25–30, 1982; 62 attended the TUG meeting; 9, the \TeX\ short course; and 65, both the meeting and short course. Representatives of Hewlett-Packard, Florida Data and Symbolica participated also.

5. The Finance Committee approved the waiver of fees for one member to participate in both the TUG and the \TeX\ short course.

6. Editorial services include programming, reviewing and editing; clerical services include maintaining the data base and mailing list, and other administrative duties.

7. $8,500 was allocated to Stanford primarily for Professor Arthur Samuel, who acted as \TeX\ coordinator, answering questions, distributing tapes, and fixing bugs in the \TeX\ source code. However, another source of support was found for this function, and the amount budgeted was not used.

8. The Steering Committee authorised attendance by Lynne Price at two meetings of ANSI X3J3.

9. Some legal/tax consulting was received for which there was no charge. Advertising TUG membership, meetings and TUGboat was accomplished at no cost to TUG through news releases distributed to various trade publications with very favorable results.

10. Money available to the Finance Committee to subsidise travel and membership fees for individuals when appropriate.

11. Postage/express charges, telephone tolls and supplies, plus programmer and clerical services not associated with production of TUGboat.

Respectfully submitted,
Samuel B. Whidden, Treasurer

* * * * * * * * * * *

TUG BUDGET — 1983

Income:
Membership/Publications
1981 Back issue sales, $300
1982 Back issue sales, 700$15
1983 Membership, 850$20\(^1\) 13,000
1983 Library subscriptions, 300$20\(^1\) 600
1983 Foreign postage option, 75$12 900
Supplements\(^2\) 500 $16,350
Institutional Membership
1983 Membership, 250$200\(^1\) 5,000 5,000
Meetings
Stanford, 7/83 8,000
Fall '83 7,000 15,000
Other
Videotape sales/rental 3,000
Advertising and mailing list sales 500
Royalties (\TeX\ manual) 500 4,000
Total income $40,350

Expenses:
TUGboat (2 issues)\(^4\)
Printing $2,200
Postage 800
Editorial services 4,300
Clerical services 4,000
Computer expense 3,200 $14,500
Meetings
Stanford, 7/83 4,960
Fall '83 4,960 9,920
Other
Supplements\(^2\) 350
ANSI meetings\(^5\) 1,180
Legal and tax consulting 500
Advertising TUG membership & TUGboat\(^9\) 1,500
General mailings 1,100
Printing, other 2,180
Subsidies  
Miscellaneous  
Total expenses  

Budget summary: (revised 4/83)  
Balance forward 1/1/83  
Total income  
Total expenses  
Estimated balance 12/31/83  

Total expenses  

Notes:  
These figures, with the exception of the budget summary, are identical to those published in TUGboat Vol. 3, No. 2. The rescheduling of the Stanford meeting from March to July has been noted.  
All expense figures include an AMS overhead charge of 18%.  
1. Numbers of members and subscriptions are based on 1983 figures for individual memberships and library subscriptions. The estimate for institutional memberships is now obsolete; 27 institutional members have joined as of March 31.  
2. Lengthy descriptions of macro packages will be available for purchase separately.  
3. Although no formal plans have been made for a second general meeting in 1983, one is assumed for the Fall.  
4. Editorial services include programming, reviewing and editing; clerical services include maintaining the data base and mailing list, and other administrative duties.  
5. Support is budgeted for attendance at one meeting of ANSI X3J6.  
6. Costs for advertising TUG membership in trade publications.  
7. Money available to Finance Committee to subsidize travel and membership fees for individuals when appropriate.  
8. Postage/express charges, telephone tolls and supplies, plus programmer and clerical services not associated with production of TUGboat.  

Respectfully submitted,  
Samuel B. Whidden, Treasurer  

Software  

TExHax SUMMARY  
David Fuchs  

Here's a distillation of the information that has gone through the TeXHax mailing list over the last few months. Most of it consists of details of installing and maintaining the WEB and TExX systems, and it is not very well organized.  

One change to both systems is that all of our WEB programs now discard trailing blanks on all input lines. This aids in portability, since there are a surprising number of systems in which the number of trailing spaces a program gets to see on each line is some random function of the phase of the moon. It also improves the TExX language, since it is harder to have invisible differences between two files lead to differing results. Implementers should check their change files, since we had to alter a system-dependent module in many of the programs to make this change (look for input.in).  

Another reason you might get the “Change file entry did not match” error is that most of the discretionary hyphens (\-) that were included in the WEB source code have been removed, since they are no longer necessary with TExX2’s hyphenation algorithm. Similarly, a number of comments in the WEB programs that looked like \$\# now look like |x|, since this is the correct way to use WEB. Finally, the ANSI Pascal document specifically rules out the statement WRITE(1:0), so we have changed all our WEB programs to say WRITE(1:1) to mean “write out I with no leading or trailing blanks”.  

For TExX, there are a few other changes to watch for: The module (Globals in the outer block) has been renamed (Global variables), so if any of your change file entries say “(Globals ...)” you'll have to change them. The q1 and qo macros have been joined by hi and ho, which you should add to your change file if this is a module you changed. Finally, the macros float and unfloat have been added to aid TExX installers on systems on which it is impossible to use native floating point numbers for glue ratios.  

There are a few new features in WEB. First, the new control sequence \^o is similar to \$, except that it indicates that a hexadecimal constant follows. Note that TANGLE.WEB actually uses \^o in one place, so if you are trying to bootstrap a new Tangle from an old one, you'll have to temporarily change \^o80000000 to \^o 10000000000 in the new TANGLE.WEB when you process it with the old Tangle (otherwise, the old Tangle will ignore the \^o and interpret 80000000 as a decimal number, and you'll end up with a TANGLE.PAS that won't run on itself). This adulterated Tangle should be able to run through a clean copy of the new Tangle and produce the same correct Pascal program. Once you reach this state, you can toss out the altered Tangle, and forget that we ever suggested changing a WEB file directly.  

Two other new primitives: ^/ forces a line-break in the Pascal output of Tangle, and ^-=...^o means to put the included text into the Pascal output “verbatim”. Also, WEAVE now keeps track of which modules are changed, and prints all references to these module numbers with an asterisk.