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General Delivery

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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 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.

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USERS' COURSE IN $\mathcal{A}\mathcal{M}\mathcal{S}$-TEX

Michael Spivak

It will be necessary for $\mathcal{A}\mathcal{M}\mathcal{S}$-TEX to be completely re-written for TEX82. Fortunately, there are so many improvements in TEX82 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 $\mathcal{A}\mathcal{M}\mathcal{S}$-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 LaTEX, 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 $\mathcal{A}\mathcal{M}\mathcal{S}$-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 $\mathcal{A}\mathcal{M}\mathcal{S}$-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 $\mathcal{A}\mathcal{M}\mathcal{S}$-TEX course

given in July. It should be emphasized that this course is a course *only* in $\mathcal{A}\mathcal{M}\mathcal{S}$-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 either; it will cover only those things that you can do with the $\mathcal{A}\mathcal{M}\mathcal{S}$-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.

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TUG TREASURER'S REPORT

December 31, 1982

Income:

Membership/Publications[1]			
1981 Membership		$ 1,300	
1981 Back volume sales		2,156	
1982 Membership		10,100	
1982 Library subscriptions		535	
1982 Foreign postage option		588	
Supplements[2]		376	$ 15,055
Institutional Membership[3]			
Educational		$ 200	
Non-educational		200	400
Meetings			
Meeting, Cincinnati, 1/82		$ 4,500	
Meeting, Stanford, 7/82[4]		11,025	
Course, Stanford, 7/82[4]		27,468	
Waiver, Meeting/Course Fees[5]		(450)	
Manufacturers' Reps Fees[4]		300	42,843
Other			
Videotape sales/rental		$ 2,200	
Advertising and mailing list sales		-0-	
Royalties (TEX manual)		-0-	2,200
Total income			$ 60,498

Expenses:

TUGboat (2 issues)			
Printing		$ 2,220	
Postage		1,143	
Editorial services[6]		3,460	
Clerical services[6]		3,300	
Computer expense		3,555	$ 13,678
Meetings			
Cincinnati, 1/82		$ 4,130	
Stanford, 7/82		2,460	6,590

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 TEX82 short course; and 65, both the meeting and short course. Representatives of Hewlett-Packard, Florida Data and Symbolics participated also.

5. The Finance Committee approved the waiver of fees for one member to participate in both the TUG meeting and the TEX82 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 authorized attendance by Lynne Price at two meetings of ANSI X3J6.

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 subsidize 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

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TUG BUDGET — 1983

Income:

Membership/Publications

1981 Back issue sales, 30@$10	$	300	
1982 Back issue sales, 70@$15		1,050	
1983 Membership, 650@$20[1]		13,000	
1983 Library subscriptions, 30@$20[1]		600	
1983 Foreign postage option, 75@$12		900	
Supplements[2]		500	$ 16,350

Institutional Membership

1983 Membership, 25@$200[1]	$	5,000	5,000

Meetings

Stanford, 7/83	$	8,000	
Fall '83[3]		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[3]		4,960	9,920

Other

Supplements[2]	$	350
ANSI meetings[5]		1,180
Legal and tax consulting		500
Advertising TUG membership & TUGboat[6]		1,500
General mailings		1,100
Printing, other		2,180

Subsidies[7]	1,180	
Miscellaneous[8]	2,300	10,290
Total expenses		$ 34,710

Budget summary: (revised 4/83)

Balance forward 1/1/83	$ 24,607
Total income	40,350
Total expenses	(34,710)
Estimated balance 12/31/83	$ 30,247

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 1982 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

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Software

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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 TEX 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 TEX 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_ln*).

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 TEX82's hyphenation algorithm. Similarly, a number of comments in the WEB programs that looked like x now look like |x|, since this is the correct way to use WEB. Finally, the ANSI Pascal document specifically rules out the statement WRITE(I:0), so we have changed all our WEB programs to say WRITE(I:1) to mean "write out I with no leading or trailing blanks".

For TEX, 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 *qi* 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 TEX 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 @" is similar to @´, except that it indicates that a hexadecimal constant follows. Note that TANGLE.WEB actually uses @" in one place, so if you are trying to bootstrap a new Tangle from an old one, you'll have to temporarily change @"8000000 to @´1000000000 in the new TANGLE.WEB when you process it with the old Tangle (otherwise, the old Tangle will ignore the @" and interpret 8000000 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 @=...@> 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. WEBHDR al-