

## **DISCLAIMER**

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor the Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or the Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof or the Regents of the University of California.

For Reference

Not to be taken from this room

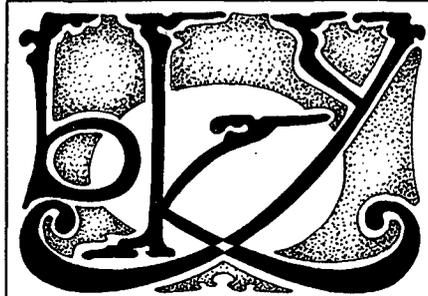
RECEIVED

APR 20 1979

Pub. File

L.B.L. LIBRARY

L.B.L. COMPUTER CENTER



# NEWSLETTER

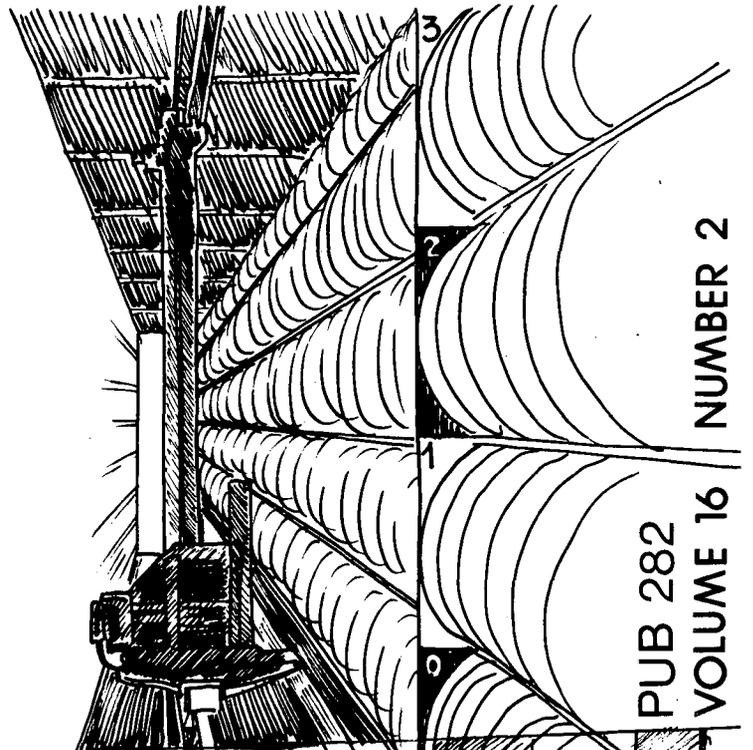
## TABLE OF CONTENTS

Names & Numbers to Know .....	2
CODE9 & ENCODE -- Final Installment .....	3
Our UNIX System .....	3
The Automated Tape Library .....	3
LCM Cutback .....	3
For the Bug Market .....	3
Results of the November Evaluation .....	4
New Mathematical Software .....	5
UNIX News .....	5
STOTAPE V3.3 Improvements .....	5
VOX POP .....	6
COPY .....	7
Computer Science Colloquium .....	7
Cross Words III .....	8
Note From the Expeditors .....	11
Internal Documentation on Fiche .....	11
Computer Center Statistics .....	11
Tape Notes .....	12

Address all communications for the Newsletter to Maggie Morley, Bldg. 50B, Rm. 1245A.

Illustrations by George Kapus & Jeremy Knight.

Closing date for the March Newsletter is Thursday, February 15, 1979. And no later ...



NUMBER 2

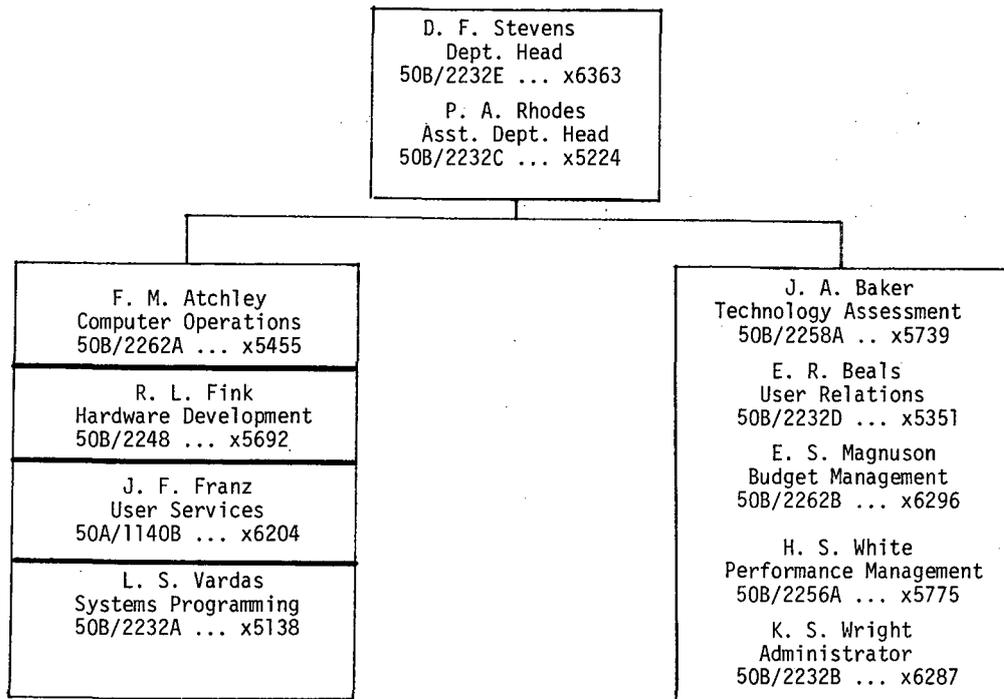
PUB 282  
VOLUME 16

FEBRUARY 1979



ATL  
IS HERE

LBL Computer Center  
 NAMES & NUMBERS TO KNOW  
 Organizational Structure



FACILITIES AND SERVICES

	BLDG.	ROOM	PHONE
CONSULTANTS .....	50B	1245	5981
ESTABLISHING AN ACCOUNT, Eric Beals .....	50B	2232D	5351
ESTABLISHING AN ACCOUNT, Gerry Moore, Martha Banks .....	930	413	5211
GUEST CARDS, LOCKER SPACE, PARKING PERMITS, Leslie Schroeder .....	50B	2232	5654
ESTABLISHING A REMOTE TERMINAL (RJE or Interactive), Sig Rogers .....	50A	6134	6713
TERMINALS/PORTS - REPAIR/TECH SUPPORT, Sandy Merola .....	50A	6102	5354
CHANGING AN ACCOUNT NUMBER, PASSWORDS Fran Permar .....	50B	2258	6310
OBTAINING DATA CELL SPACE, Bob Rendler .....	50B	2266	5629
TAPE LIBRARY, Jewel Walczak .....	50B	2249	6219
COMPUTER CENTER LIBRARY, Maggie Morley .....	50B	1245A	5529
EXPEDITER SERVICE, Irene Partyka .....	50B	2249B	6205
COPE OPERATOR .....			5311
COMPUTER OPERATIONS .....			6211
ASST. MGR., OPERATIONS, Mike Long .....	50B	2262B	5627

COMPUTER ADVISORY COMMITTEE MEMBERS

Stanley Hagstrom, (NRCC) .....	50	228	6722
Charles Horne, (Particle Data Group) .....	50	308	5885
Ron Huesman, (Biomedical) .....	1	212	5435
Christoph Leeman, (Accelerator Division) .....	64	212	5831
William A. Lester, Jr. (NRCC) (Ex Officio) .....	50	206	6722
Creve Maples, Jr., (nuclear Science) .....	88	206	5088
Dr. J. W. Morris, Jr., (UCB) .....	8	278	7-2-3815
Barrie Pardoe (Group A) .....	50B	5239A	6301
Dr. David Pellett .. Department of Physics, University of California, Davis, CA (95616) ..			18/453-1783 (FTS)
Carl Quong (CSAM) .....	50B	3238	6330
Henry Ruderman, (Energy & Environment) .....	90	3120	6292
Arlene Spurlock (Employee & Information Services) .....	930	332	5403
Chin Fu Tsang, (Earth Sciences Division) .....	90	1012H	5728
Allen Zalkin (MMRD) .....	70A	4405E	5762

OBSERVERS

Bence Gerber, 2540 Washington ST., Suite 120, San Leandro, CA 94577 .....	415-351-7807
Charles W. Stevenson, 681 University Hall, UCB (Computer Division, UCB) .....	415-642-0393 (7-2-0393)

CODE9 & ENCODE -- Final Installment

The changes to the internal tables used by CODE9 and ENCODE for converting ASCII/EBCDIC and CDC Display Code will occur on March 1st. The update OLDPL's for both programs will be upgraded on the PSS library OLDPL at that time. For a list of the table changes, see the August '78 and January '79 Newsletters.

... David Gok, x5124

Our UNIX System

We have decided to run essentially the same UNIX system on our PDP-11 as the Campus (UC Berkeley) Computer Center runs on their systems in Evans Hall. Our system will be nowhere so complete as theirs, of course; for instance, the only languages available will be C and Assembler, and we do not anticipate that many people will be using these. Our file protection mechanism will be different from theirs also. But their basic system seems to be about as rugged a one as can be found, and we want this ruggedness.

The principal text editors to be offered are the Campus twins EX and EDIT. These are outstandingly powerful and pretty well human-engineered, but their biggest advantage is that they are marvellously well-documented for the beginner. Even someone who has never done text editing on a computer before should have little trouble in learning to use EDIT.

We plan to keep our system approximately in synch with the Evans Hall system. There are several UNIX systems around that are oriented to computer science research, both at the Lab and on Campus, and our strategy will be to adopt snazzy new goodies from them some time after they have proved their reliability. Ours will be a workaday system of little theoretical interest but, we think, of considerable utility.

... Ed Fourt, x5293  
50A/1119

The Automated Tape Library

The impending demise of the Computer Center's largest storage device, the IBM Photodigital Chipstore, has prompted the acquisition of a California Computer Products Automated Tape Library as a temporary answer to the need for mass storage. Similar in function to a large jukebox, the ATL can automatically mount reels of magnetic tape for use by programs running in the Center's various computers.

Our ATL is a steel box some 34 feet long lined with shelves holding about 2,500 reels of high density (6250 bytes per inch) tape. A "robot," which ranges the length of the ATL on a rail, selects a requested reel and delivers it to one of the five tape drives connected to the system. A separate mechanical device at each drive mounts the reel on the hub and, since the new STC drives are self threading, the tape is made ready for use without human intervention. The entire process takes about 30 seconds.

Since the ATL can hold only a fraction of the more than 40,000 reels in the Computer Center's tape library, it will serve as a cache for the most recently-used tapes. A requested tape that is not already in the ATL will be fetched manually from the library upstairs. It will then displace that tape in the ATL which has been unused for the longest period. In this way, tapes that are frequently used will tend to remain in the ATL, and seldom-used reels will migrate back to the library.

To keep down the percentage of unused tape per reel, the ATL will be used only for tapes that are taking advantage of the GSS tape management software, which allows a user's unrelated data sets to be conveniently maintained on the same reel. Also, since the GSS programs maintain an internal label on each tape, the possibility of accidental assignment of the wrong tape is minimized.

Although over 30 ATL's are already in use at various large computer centers, virtually all are IBM installations, since that is the only kind of software supplied with the ATL. Fairly extensive work by the LBL staff with both hardware and software has been necessary to make the ATL usable with our CDC machines.

However, the effort should pay off soon. As the ATL becomes fully operational early this year, the turnaround time for many jobs will decrease substantially with the elimination of the need for manual tape mounts.

... John Dilworth, x6088

LCM Cutback

Work is beginning on the implementation of the BKY local network using NSC (Network Systems Corp.) Hyperchannel<sup>®</sup>. In order to implement the Network, buffer space must be allocated in the operating system of each of our machines. On the 7600, this will have the disconcerting effect of converting LCM currently available for users to buffers. At this time we do not know the exact amount of space required, but it will be between 40 and 100 k (octal). This means that the larger user jobs will have that much less memory available, although we do not intend to decrease the maximum user LCM available below the 1400 k (octal) that we guarantee.

This decrease will go into effect on or about February 14, 1979 and will remain in effect for at least a year. We might possibly make more user memory available after that, although we make no promises.

... Marty Itzkowitz, x5893

For the Bug Market

I am looking for a preprocessor that will read a legal MNF4 program and produce a legal FTN4 program. The constructs I would like handled, in order of their importance to me, are: (1) IF-THEN-ELSEIF-ELSE-ENDIF (2) PARAMETER (3) WHILE-ENDWHILE (4) END= . (In other words, I'm willing to convert END= to IF(EOF()) by hand, I don't (yet) use WHILE-ENDWHILE, and I will change PARAMETER if I have to, but something that can handle IF-THEN would be a blessing!

Direct replies to ...

... Steve Chessin, x6492  
70/253

Results of the November Evaluation

Here is the promised tabulation of the responses to the Computer Center Evaluation included with the November Newsletter:

- 1) Requests to copy or adapt it for local use -- 2
- 2) Responses returned -- 87
- 3) Specific attitudes about the Center (two spectra totalled more than 87 votes: Some people checked more than one slot; not knowing what else to do, we counted all checks) --

	Worst Case			Best Case			Total	
System . . . . .	3	5	11	11	13	32	12	87
Staff Attitude . . . . .	--	--	5	8	12	31	27	83
Cost . . . . .	1	5	12	23	9	20	14	84
Staff Competence . . . . .	--	--	3	14	29	31	12	89
Charge Allocation . . . . .	2	2	5	12	13	32	11	77
Batch Access . . . . .	1	7	7	9	7	17	25	73
Interactive Access . . . . .	24	21	10	4	7	3	1	70
Capabilities . . . . .	5	8	13	7	11	33	9	86
Documentation . . . . .	2	14	4	6	15	24	18	83
Unpleasant Surprises . . . . .	2	8	12	18	11	24	13	88
Overall Impression . . . . .	--	2	7	13	12	26	23	83
TOTALS . . . . .	40	72	89	125	139	273	165	903

The three negative categories totalled 22.3% of the vote, 13.8% was neutral, and 63.9% was positive. Nearly half of all votes cast (48.5%) were in the top two categories.

We experienced no unpleasant surprises in tabulating these results, although I am somewhat hard-pressed to explain the best-case vote for interactive access. (The evaluation bore an out-of-town postmark, so I doubt that it is the work of a Computer Center shill.) I am particularly pleased at the high ratings accorded to "staff attitude": We will try to maintain this posture.

I also hope that the high marks were not due to a poor selection of evaluation spectra. If you believe that the chosen spectra passed over an area in which we are significantly deficient, please let me know, and it will be considered for the next iteration (which will probably not be before November of this year).

- 4) The "three best" aspects:
  - (1) "The system", either in general or some specific element, garnered 66 votes. The most popular specific element was GSS with 13.
  - (2) The staff: 49 votes, of which 24 were general and the rest distributed among Consultants (17), I/O people (5), and Expeditors (3).
  - (3) Price/performance: 42 votes.
  - (4) Documentation (including the Newsletter): 32
  - (5) Turnaround: 18
  - (6) Accessibility: 17
  - (7) General service: 9
  - (8) User-oriented atmosphere: 6
  - (9) Versatility: 1
  - (10) Interactive service: 1 (!)
- 5) The "three worst" aspects:
  - (1) Interactive service: 67
  - (2) User interface problems: 28
 

There were eight different pieces to this problem, the most "popular" receiving only 6 votes, but the aggregate is disturbing. The specific complaints were:

    - (a) No guide to the documentation (6)
    - (b) Complicated control cards (5)
    - (c) General documentation (4)
    - (d) Internal inconsistencies (4)
    - (e) Lack of consistency with external standards (4)
    - (f) Telephone service (3)
    - (g) Poor error messages (1)
    - (h) Too much jargon (1)

Of these, only (a) is likely to see material improvement in the next year.
  - (3) Mass storage (especially PSS) size, access, reliability: 25
  - (4) Inadequate software support; 16 (of which 5 were directed towards graphics)
  - (5) Infuriating messages: 13 votes spread among six messages, almost all having to do with delays on the 6000 machines.
  - (6) Reliability of the 6000's: 10
  - (7) Poor turnaround: 10
  - (8) 9 different specific system deficiencies: 9
  - (9) Tape problems: 7
  - (10) Miscellaneous equipment reliability problems: 7
  - (11) Staff: 5
  - (12) Cost: 4

There were another 16 specific items which received no more than three votes each.

- 6) There were 73 non-frivolous "small" changes which would cause joy. 16 of these amounted to "improve the interactive service"; another 8 called for the addition of one or more machines or the replacement of the 6000's. It's clear that "small" is not a universal constant.

Nothing else was mentioned more than twice, but many of the suggestions were interesting. We will process them individually through the Vox Pop column in the Newsletter (beginning with this issue), together with those comments which are relevant.

- 7) Impressions of the questionnaire itself:

useful : 16 : 26 : 10 : 19 : 2 : 2 : 6 : waste of time

I am glad that the last 10 filled it out anyway, and I hope that you find the majority opinion justified:  
We certainly did.

... D. F. Stevens, x6363

>> LIBRARY NEWS <<

New Mathematical Software

I. BLAS Package

BLAS is a collection of low level, FORTRAN-callable subprograms that perform many of the basic operations of numerical linear algebra. The operations in the package are --

Dot products  
Elementary vector operations  
Given's transformations  
Vector copy and swap  
Vector norms, scaling and magnitude.

The coding in this package is very robust and efficient (particularly the COMPASS version) and all the subprograms have been thoroughly tested. The documentation for this package can be obtained either from Maggie Morley (x5529) or by executing these control cards --

```
< Jobcard >
LIBCOPY,BLAS77,OUTPUT,BLASDOC.
DISPOSE,OUTPUT=PR,PA=1F. ... (if printed at BKY)
< End-of-job card >
```

II. MINOS

MINOS is a package for solving large-scale non-linear programs with linear constraints. It uses a combination of efficient sparse matrix techniques as in the revised Simplex method, and stable quasi-Newton methods for banding the non-linearities. Because of the proprietary nature of this package, only the binary version is available. Interested users should contact Ru-Mei Kung (x6006) for more details.

... Ru-Mei Kung, x6006  
... Uzi Arkadir, x5194

UNIX News

Work is progressing within the Computer Center on preparing the 11/70 hardware and UNIX software for the user community. When you read this, it will be February 1 and therefore you will have realized that we did not make our original estimate of going on the air by the end of January. We have the hardware installed but there were some delays due to disk hardware problems. We are sorry for the delay; hopefully we are not too far behind schedule. We are optimistically proceeding, and at the time of this writing, working on the generation of the UNIX system on our hardware.

The December '78 and January '79 Newsletters contain articles pertaining to general information about the proposed text-processing software/hardware system. Located elsewhere in this Newsletter is a form to fill out if you want to request login permission for the UNIX system. If you have questions about UNIX, please call the Consultants at x5981. A question that has been raised by a number of users is whether or not we will have a phototypesetter connected to our 11/70, and the answer is no. The reason for this is because it is not an approved activity for the Computer Center.

... Joan Franz, x6204

STOTAPE (V3.3) Improvements

The GSS program STOTAPE has been smartened up to check for a pre-existing table of contents on a tape when a T=C (GSS creation) is specified. If there is no recognizable table of contents, or if there is a recognizable table of contents and the library tape number and GSS ownername specified by the user match those found in the table, STOTAPE will allow the user to write on the tape (destroying any previous data). If there is a recognizable table of contents and either the library tape numbers or GSS ownernames do not match, STOTAPE will issue a dayfile message and not allow the tape to be written on.

With this modification, no GSS program should ever write on the wrong tape, unless it is a T=C creation run and the tape hung by the operators is not an existing GSS tape. With the emergence of the Automatic Tape Library, the number of wrong GSS tapes hung should approach zero.

... David Gok, x5124



### VOX POP

In GRUMP, the diagnostic "BLOCK DIVIDES INTO WEIRDNESS, ETC" is a phrase of which an author may be justly proud. It would have saved me twenty-four hours if it had been more precise -- for example "VALUES IN BLOCK GREATER THAN / LESS THAN -- AND MAY BE WEIRD". No more interpretation please.

Don't think we can do much about this one ... (Ed Fourt)

I have an array in a FORTRAN program containing words initialized to 2 or 3 letter strings in L format, i.e., 2LDR, 2LGR, 2LMV, etc. When GRUMP encounters this data, it interprets it as "weirdness". Can this be fixed?

Yes, and it will. (Ed Fourt)

Sorry, Maggie, but the new girl in the Cryptograms Division will have to go.

Right. You bet. Yessirree. Right now, we're looking for someone to fill her mukluks. (Maggie Morley)

I know how to maintain a source library with UPDATE. I know how to maintain an object library with GET, LIBEDIT, and LIBGEN. How do I maintain a symbol table library GRUMP?

This is now documented in the revised Handbook subset AIDS. (Ed Fourt)

Could you display somewhere, other than on a teletype that doesn't work when the computer is down, what computers are down, and when you expect them to go up? A prominent display of future scheduled down-times would also be helpful.

Scheduled down-times for preventative maintenance and systems development are posted on the board across the hall from the I/O Counter. As RECC rarely breaks, a broadcast message with computer status is normally sufficient. (Marv Atchley)

Suggestions (and their responses) from the recent Computer Center Evaluation Questionnaire are herewith, as D. F. Stevens noted, being appended to this month's VOX POP. More of same will appear in the March issue. The question was -- "What one small change would cause you the most joy?"

A status command that caused >7, >7Q, >B, >C, >CQ to respond.

You ASKED for it; you GOT it! (Or as close as we can come.) Try '>>'. (Jerry Knight/Don Zur Linden)

No smoking in all user rooms! Make them go OUTSIDE!!

Aw shucks, have a heart (or lungs). Can't they have just one room? (Marv Atchley)

Addition of DECNET-based RJE batch system & text processor front-end.

Look for this feature sometime after Sept. '79. Input from users desiring this service -- defining their needs and requirements -- can be addressed to me. (John Wood, x5972, 50A/1144)

Additional low-speed terminal ports.

I agree -- both internal and external BPS lines are heavily utilized. The CENTREX change in late December should have had some impact on distribution between internal and external access to LBL. Internal access should be better now since 13 lines attached to the x5752 rotor are accessible from LBL only. Five lines on 486-6661 are accessible from anywhere. The lines intended for use by outside users remain unchanged (15 lines are attached to the (415) 549-2824 rotor). Also in the near future, text processor lines on 845-1343 should reduce the 6000 load some. Please call me with specific problems. (Sig Rogers)

Change PM (preventative maintenance) time to only between midnight and 4 AM.

Moving the PM to early morning would increase our maintenance costs by more than 10%, and decrease coverage during the critical late afternoon period. We feel our current schedule meets over-all needs best. (Marv Atchley)

How about a better DUMP -- one that's simple & understandable.

DUMP gives machine-oriented diagnostics and printout, while GRUMP is program-oriented, printing variable values as human-readable numbers; I think you'll find GRUMP is what you're looking for. You might also try the tracing options in MNF4. (Tom Strong)

Provide better microfiche service to Bldg. 90 (>1 delivery per day).

Our normal COM delivery service to Bldg. 90 is twice daily. (Marv Atchley)

*Install a Berkeley Campus extension for 1200 BAUD interactive use and another one to allow UC users to access LBL operators and personnel.*

The first part of your suggestion has been accomplished. It is 642-5801 (Bell 212A). It is also heavily-used and a second line is on order. For VADIC 3400 modems, there is 642-9899. As for the second part of your I would suggest that that is a personal matter between you and your campus telephone coordinator. (Sig Rogers)

*Change RECC to provide RS 232-C handshake signals required to support block mode transfers from a terminal.*

Sorry, but both the hardware and software design preclude this feature. We are thinking about how to provide this service via another path. Only time and a change in priorities will permit it. If I could be more specific I would be. (John Wood)

*I'd like more reliable RJE equipment in Bldg. 90.*

The reliability of the Harris equipment has been disappointing, but we've received assurance from their management that the problems will be solved. Indeed, since this questionnaire came out in November, the maintenance has been good and the system hasn't failed in three weeks. (Marv Atchley)

*I'd like a plot subroutine added (somewhat like LGLINE) that will generate a normal or log-normal probability plot.*

The Graphics Package IDDS can produce both log-linear (semi-log) or log-log plots. If you have further questions, please contact me. (Nancy Johnston)

*Provide better dumbwaiter service.*

If our overall service was that bad, we'd have to close up. We'll remind our I/O folks of the importance of timely accurate dumbwaiter service. If you experience additional problems of this nature, please call me. (Marv Atchley)

*Support an ASCII test formatter (like BARB12).*

Check out NROFF on UNIX. (Ed Fourt)

*Treat outside users equitably.*

Can you be more specific? We try to provide good service to everyone. For example, last July 31 we held a Remote Users' Meeting in Pasadena to provide an opportunity for LBL staff and remote users to exchange information. After the meeting we attempted to solve the problems that the remote users were complaining about. A summary of problems and responses was printed in the November '78 Newsletter. If there is some specific problem that you feel has not be recognized, please contact me. (Joan Franz, x6204)

*Put NOS 1.2 on the 6600 and 6400; they will still function as 7600 station handlers.*

NOS would probably perform adequately on our 6000's, and also provide more graceful interactive support. Unfortunately, it will not work with wny of our antique disks or one-of-a-kind inventions (RJE system, RECC, COM, etc.). Rather than spend a couple of years putting a new system on obsolete hardware, we are working toward phasing the rascals out entirely. (Jerry Knight)

The Computer Center staff, in a never-ending quest for better communications with the general user community, encourages users to forward all readable (and printable) questions and comments to --

The Suggestion Box  
c/o Computer Center Library  
Bldg. 50B, Rm. 1245A  
Lawrence Berkeley Laboratory  
One Cyclotron Road  
Berkeley, CA 94720

Responses will be prompt and, it is hoped, helpful.

... Maggie Morley, x5529

COPY

The new version of COPY will go up on the system on or about February 6, 1979. See the current BKY NEWS writeup for more details.

... Lorraine Osterer, x5118

Computer Science Colloquium

The Colloquium will be held at 10:30 AM Wednesday, February 7 in the Bldg. 50 Auditorium. Speaker is Elliot Soloway of the University of Massachusetts. His topic: LEARNING = INTERPRETATION + GENERALIZATION: SOME OBSERVATIONS ON MACHINE AND HUMAN LEARNING.

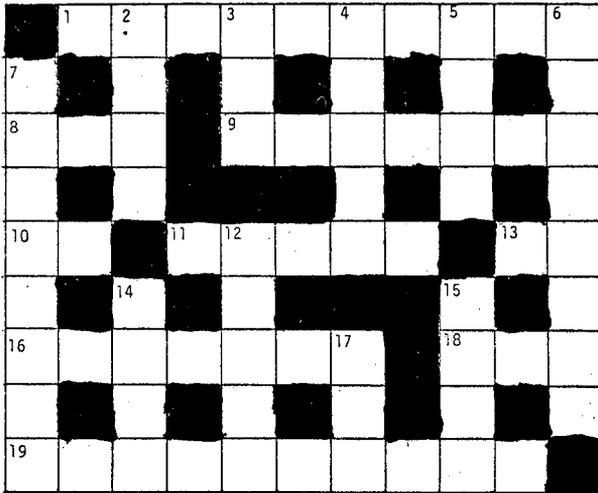
SKI SMART GUYI POL UY ELI GKE CLEGY LES OLN CLEGY LES  
SKOS KI CLEGY LES OLN SKULCY KI'Y YPOMSIM SKOL OLTVENT  
IRYI.

... B. SOTREM NEMYIT

## CROSS WORDS III

As she promised in the Oct. '76 Newsletter, little Ehrith Ehrer has produced another diversion to titillate the word fanciers in our readership.

Most of the solutions are terms associated with computing (although they are frequently to be arrived at through other associations.) For those not acquainted with the English style of crossword, it should be noted that the clues require creative interpretation.



### DOWN

2. Source of standard definition is found in II Corinthians, iii, 7-10. (4)
3. So soft and deadly. (3)
4. Human frailty gets nothing, right? Wrong! (5)
5. Wind dance? (4)
7. The last word in aluminum. (8)
12. 11 is tortured; analyse it. (5)
14. Sign of rising submariner. (4)
15. No garment up shows lack of structure. (4)
17. X follows Mary in the band in Mexico. (3)



### ACROSS

1. A broken ice rampart can be fixed in each case. (10)
8. In short, this oriental civil service has produced a large store. (3)
9. Disturbed? Repeat hundred times out of a hundred. (3,4)
10. The noteworthy half of a silent show, I sound like the other half. (2)
11. Extra last words are backward? Yes and no. (5)
13. Party tonic? (2)
16. Digital mice run awkwardly. (7)
18. Singular person caught between vessel and shed turns to deceit. (3)
19. Kind toiler, confused, prepared for loading. (4,6)

LBL Computer Center

UNIX 11/70

DATE \_\_\_\_\_

USER NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE NO. \_\_\_\_\_ FTS NO. \_\_\_\_\_

FIRM or LAB \_\_\_\_\_

CURRENT LAB ACCTNO. \_\_\_\_\_ CURRENT PSS or TAPE GROUP NO. \_\_\_\_\_

\*LOGIN NAME \_\_\_\_\_

\*\*EST. FILE SPACE REQUIRED \_\_\_\_\_

INTENDED WORK ON UNIX (by percentage):

JOB PREPARATION \_\_\_\_\_ DOCUMENT PREPARATION \_\_\_\_\_

LEVEL OF KNOWLEDGE OF UNIX:

NOVICE \_\_\_\_\_ INTERMEDIATE \_\_\_\_\_ EXPERT \_\_\_\_\_

DO YOU INTEND TO --

DIAL UP THE UNIX SYSTEM? \_\_\_\_\_

or REQUEST A DEDICATED

TERMINAL SWITCH CAPABILITY? \_\_\_\_\_

\* LOGIN name to be entered into the UNIX system must be no more than 8 characters; characters must be lower-case alphabetic or numeric. (NOTE: ALL passwords have the initial default name 'password'. You must set the password yourself when you first log in to UNIX. Passwords must be no less than 5 and no more than 8 characters.)

\*\* Remember to specify units.

WHAT RESOURCES DO YOU INTEND TO UTILIZE ON THIS SYSTEM?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

---

Fran Permar  
UNIX LOGIN  
Bldg. 50B, Rm. 2258  
Lawrence Berkeley Laboratory  
One Cyclotron Road  
Berkeley, CA 94720

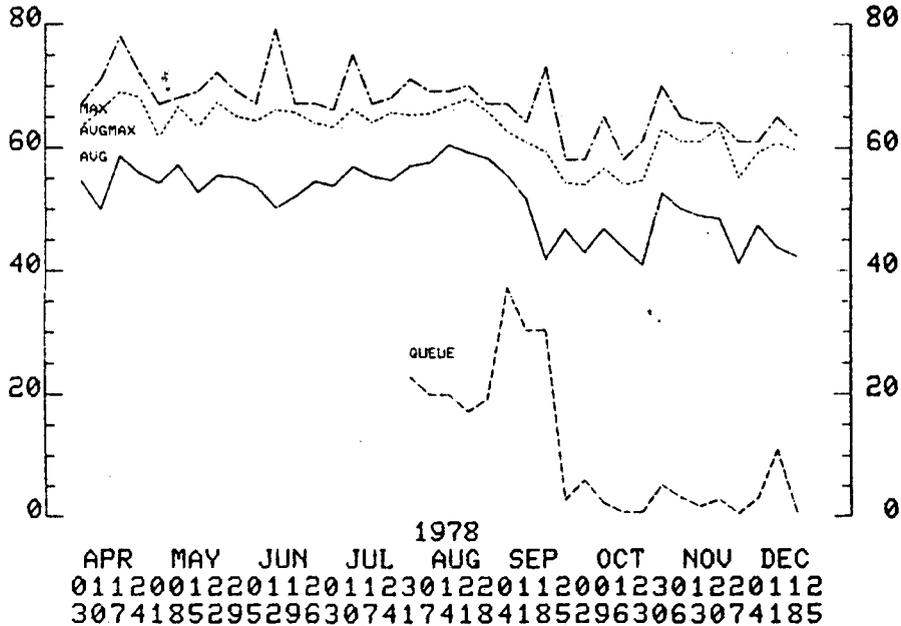
---



LBL COMPUTER CENTER  
PERFORMANCE MEASURES

INTERACTIVE TERMINAL ACTIVITY

NUMBER OF TERMINALS CONNECTED AND QUEUED  
SAMPLED AT HOURLY INTERVALS, PRIME  
USE PERIODS, WORKDAYS



1978  
APR MAY JUN JUL AUG SEP OCT NOV DEC  
011200122011201123012201120012301220112  
307418529529630741741841852963063074185

WEEK BEGINNING

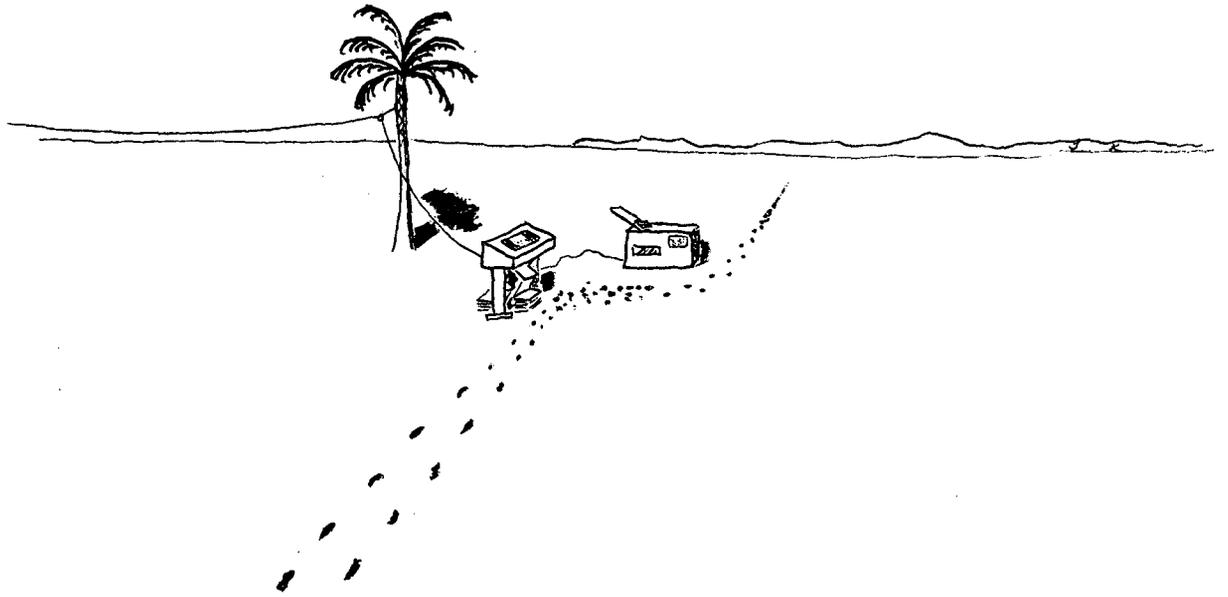
Tape Notes

In the December 1978 issue of the Newsletter, we printed some statistics on tape reliability over the previous three months and recommended to the users that they switch over to 9-track tapes (6250 BPI or 1600 BPI). We are now encouraging users more strongly to switch to 9-track drives. Besides reliability, there is another impetus for switching over to 9-track tapes, and that is because we are reducing the number of 7-track tape drives that we have connected to our system. In a month, there will be five less 7-track tape drives than there were at the beginning of January 1979. This will certainly produce some impact on 7-track tape users. On or around March 1, 1979 our tape configuration will be --

TYPE	NO. OF DRIVES	DESCRIPTION
IT	8	STC 3670 -- 9-track, Densities 6250 (D6), 1600 (D9). Default = D6
QT	4	STC 3470 -- 9-track, Densities 1600 (D9) 800 (D8). Default = D9.
NT	2	CDC 659 (Slow Drives) -- 9-track, Densities 1600 (D9), 800 (D8). Default = D9.
MT	4	CDC 607 -- 7-track, Densities 800 (D8), 556 (D5), 200 (D2). Default = D8.

Please note that in the above there are no ST-type drives; they are among the 5 7-track drives that are going away. Along with these changes, to encourage users to reconsider their usage of tape densities and devices we are going to change the default on tape type references from 7-track (MT) to no default type. We hope this will not prove too burdensome, but rather will result in a careful consideration of the tape type appropriate for the reliability necessary to maintain data integrity. The changeover to no default for tape type will occur on April 3, 1979. This changeover will not affect GSS, which always requests 6250 BPI tapes. It will affect the tape utilities and requests which now have a default type of MT. This includes, but is not limited to, REQUEST, STAGE, and LIBTAPE. There will be more information printed in BKYNEWS. If you have any questions, call the Consultants at x5981 or ...

... Joan Franz, x6204



REMOTE JOB ENTRY STATION

Computer Center Library  
Bldg. 50B, Rm. 1245A  
Lawrence Berkeley Laboratory  
One Cyclotron Road  
Berkeley, CA 94720

---

The logo consists of a large, bold, black letter 'L' on the left and a large, bold, black letter 'B' on the right. The 'L' and 'B' are connected at their top and bottom edges. Below the 'B' is a thick horizontal black bar that extends to the right edge of the page.