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Lawrence Berkeley National Laboratory

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For Reference

Not to be taken from this room

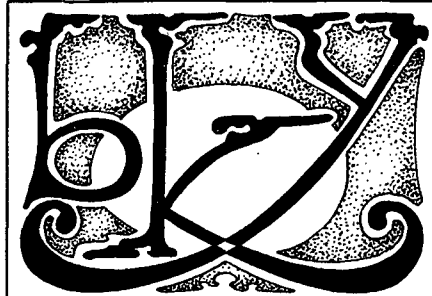
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NEWSLETTER

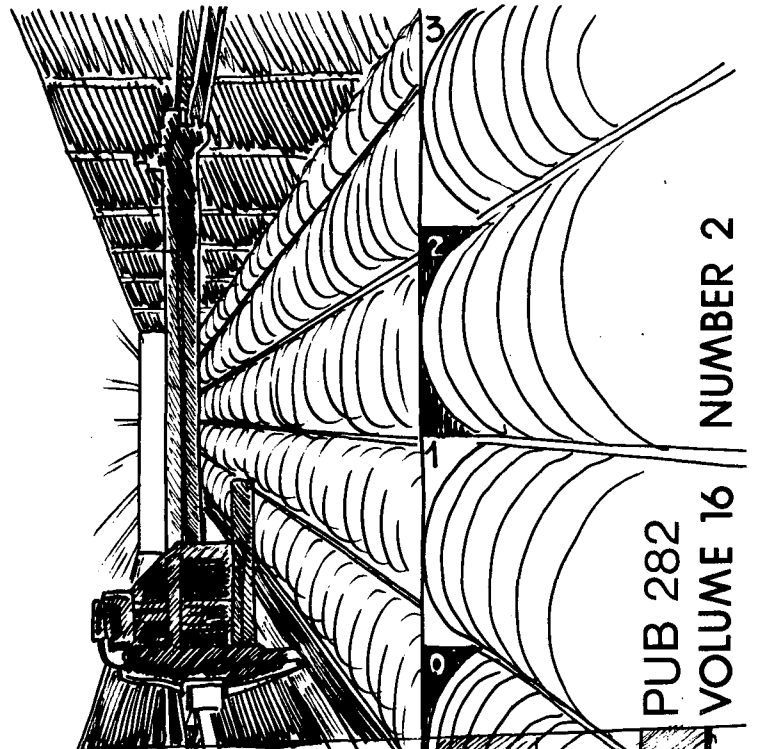
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Address all communications for the Newsletter to Maggie Morley, Bldg. 50B, Rm. 1245A.

Illustrations by George Kapus & Jeremy Knight.

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



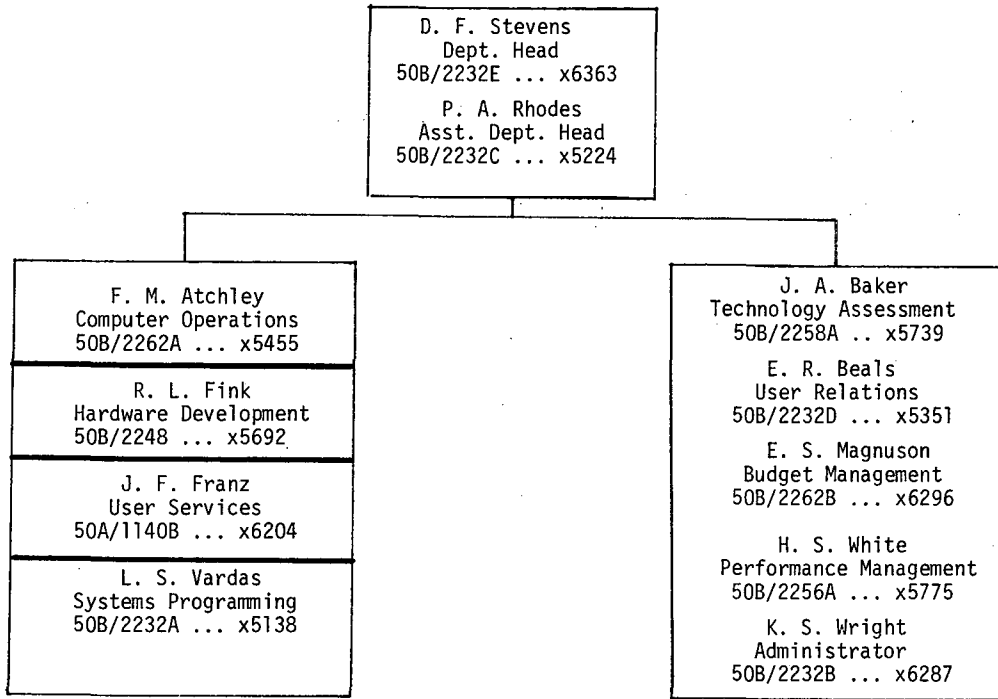
NUMBER 2

PUB 282
VOLUME 16

FEBRUARY 1979



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[®]. 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.

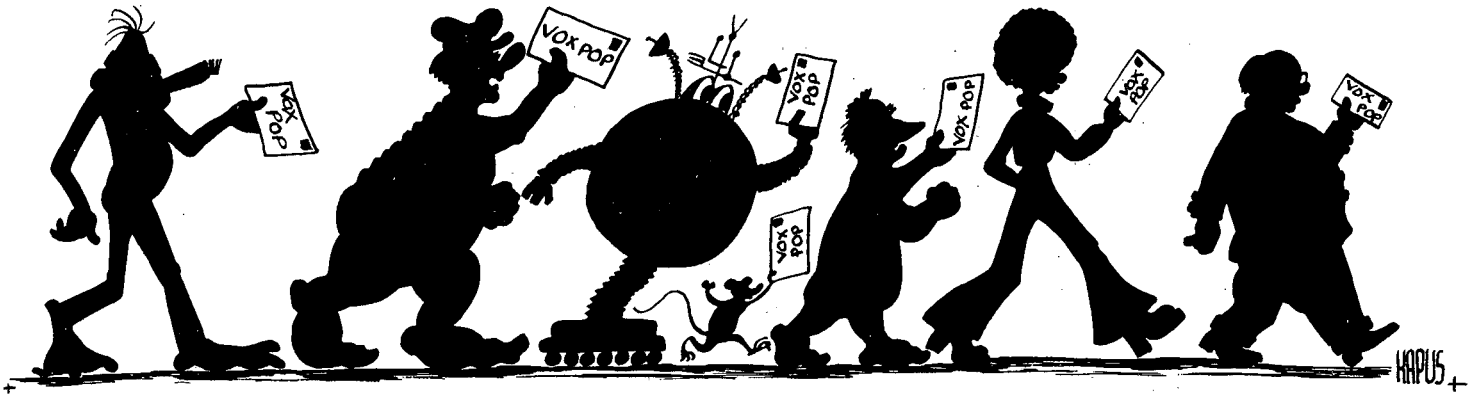
... Joan Franz, x6204

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.

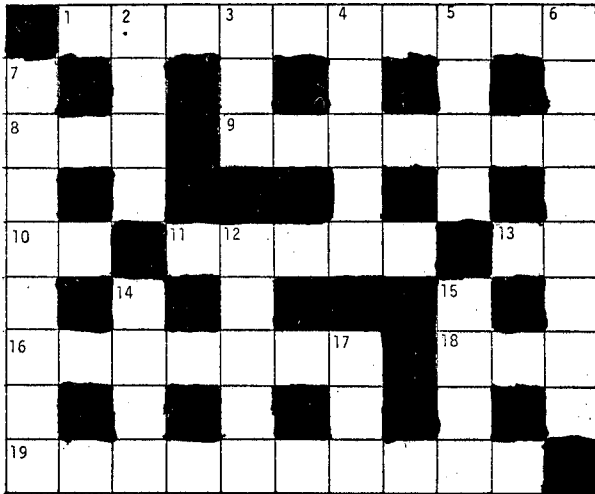
SKI SMART GUYI POL UY ELI GKE CLEGY LES OLN CLEGY LES
SKOS KI CLEGY LES OLN SKULCY KI'Y YPOMSIM SKOL OLTVENT
IRYI.

... B. SOTREM NEMYIT

CROSS WORDS III

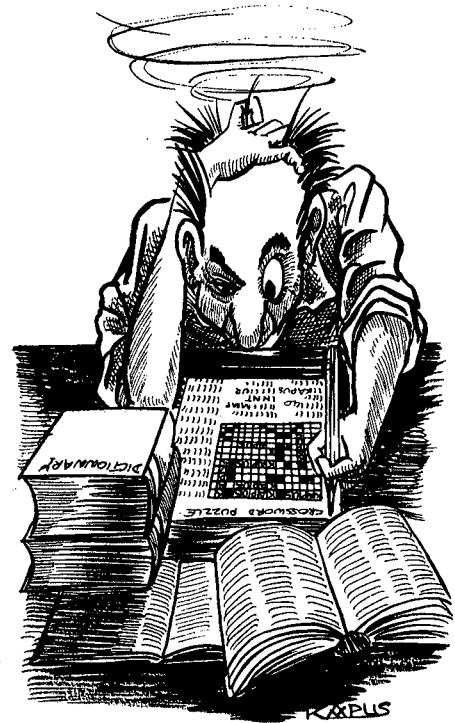
As she promised in the Oct. '76 Newsletter, little Ehrith Ehrer has produced another diversion to titillate the word fanciers in our readership.

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

Note From the Expeditors

Users who are getting itemized reports of computer charges or NAMES accounting tapes from the Expeditors should give written notification of any ACCOUNT NUMBER and/or site-code change.

... Irene Partyka, x6205
... Dortha Hines, x6205

Internal Documentation on Fiche

Sets of microfiche containing the entire Writeups and Handbook libraries, as well as the IDDS and ARPA writeups, are currently available at the Computer Center Library. They are printed in alphabetical order, according to the writeup name. Cost (\$1.00 for 48x, \$2.00 for 24x [larger print]) is charged to your Computer Center account. You may also arrange to have such sets replaced automatically every few months (i.e., when enough significant changes are generated).

... Maggie Morley, x5529

Computer Center Statistics

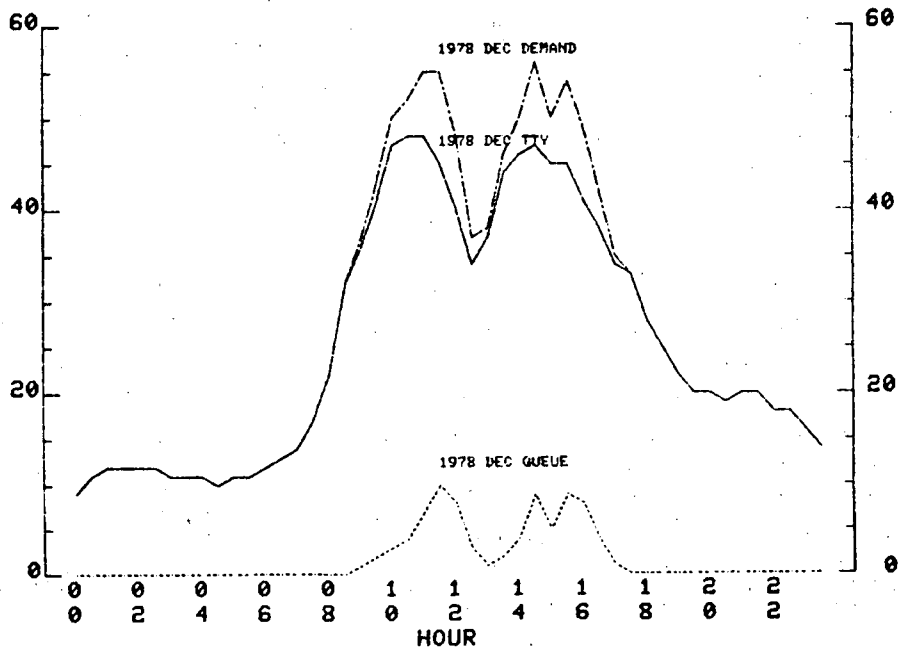
| <u>System Performance in December</u> | <u>7600</u> | <u>6600</u> | <u>6400</u> |
|---------------------------------------|---------------|--------------|--------------|
| System Availability | 84.57% | 83.72% | 85.26% |
| Median Service Interval | 7.07 hrs | 14.18 hrs | 34.05 hrs |
| Jobs Processed | 55,845 | 27,244 | (83,089) |
| | | | |
| TURNAROUND TIME | <u>20 min</u> | <u>2 hrs</u> | <u>4 hrs</u> |
| % of RUSH Jobs Returned | 84.17 | 96.95 | 99.07 |
| % of all jobs returned | 74.57 | 89.44 | 94.20 |
| % returned, CU limit = 100 | 80.30 | 96.21 | 98.11 |
| % returned, CU limit = 500 | 43.82 | 73.41 | 86.14 |
| % returned, CU limit ≥ 1000 | 16.54 | 41.89 | 56.64 |

Interactive Statistics

**LBL COMPUTER CENTER
PERFORMANCE MEASURES**

**INTERACTIVE CONNECTIONS AND UNSATISFIED DEMAND
6600 AND 6400 COMPUTERS**

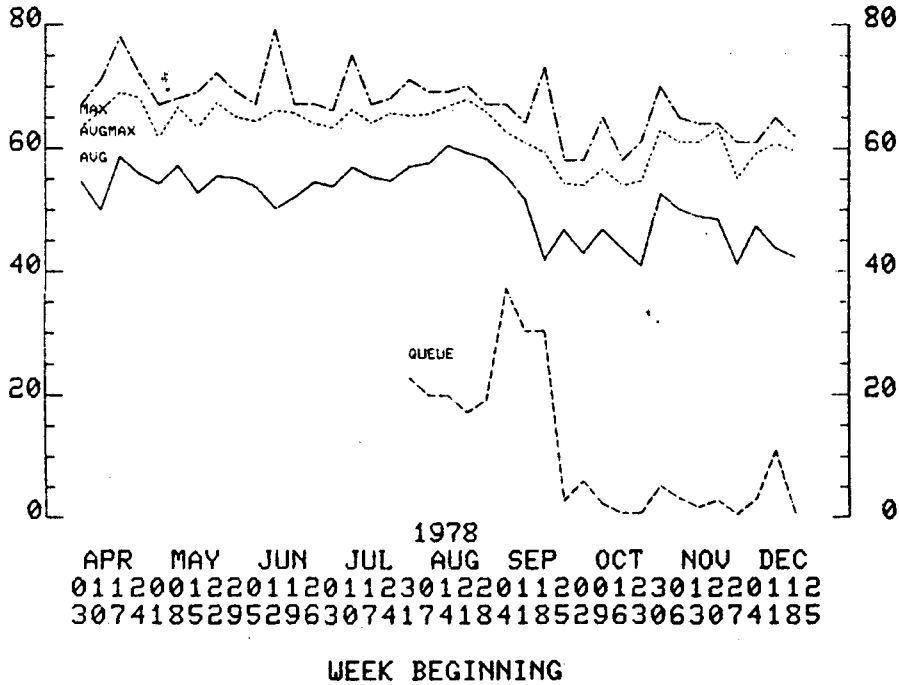
DECEMBER 1978 WORKDAYS



LBL COMPUTER CENTER
PERFORMANCE MEASURES

INTERACTIVE TERMINAL ACTIVITY

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



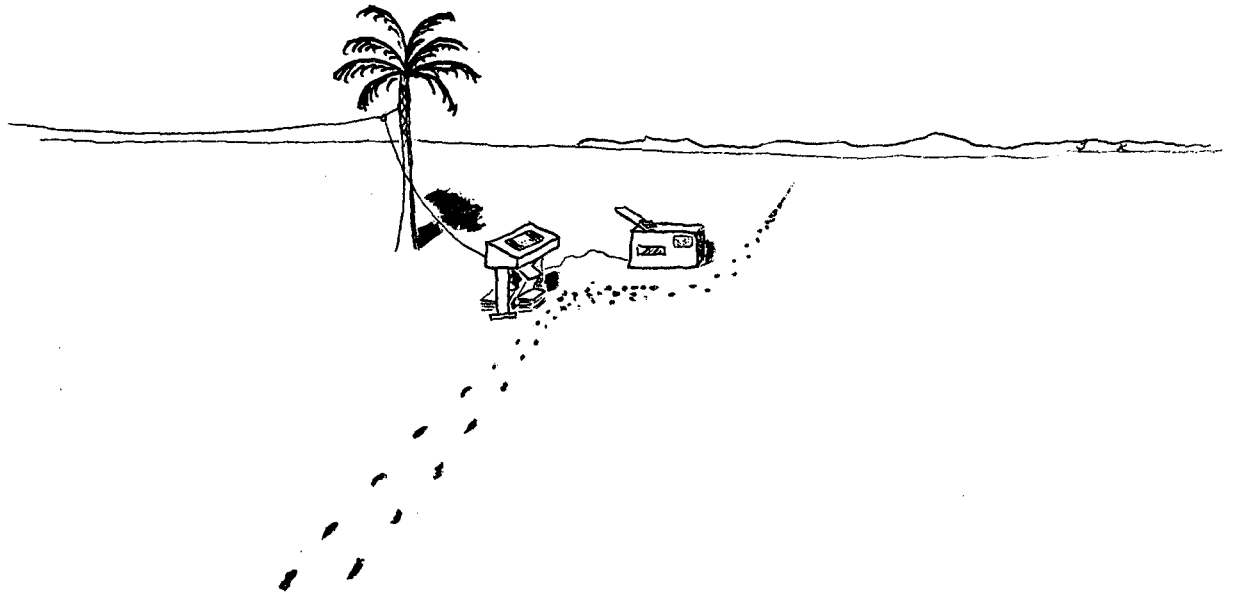
Tape Notes

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

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LB
