



# perspective

Volume 3, Number 9 • September-October 1979  
Office of Academic Computing, University of California, Los Angeles

## The Full-Screen Editor under TSO

# How We Spent Our Summer at OAC

## SERVICES DIRECTORY

	Extension <sup>1</sup>	Room <sup>2</sup>
Office of the Director ( <i>William B. Kehl</i> ) . . . . .	57511	5905 MSA
<b>User Relations:</b>		
Accounts and billing inquiries —		
Complaints —		
Equipment rental for private use —		
General information —		
IDs and passwords —		
(Manager, <i>Bonnie Aten</i> ) . . . . .	57548	4302 MSA
(Assistant Manager, <i>Mark Stevenson</i> ) . . . . .	57548	4302 MSA
<b>Computer Operations:</b>		
Input Counter and		
systems status inquiries . . . . .	57554	4328 MSA
Operations Manager ( <i>Bill Tippit</i> ) . . . . .	57546	4328 MSA
Machine room (MSA) . . . . .	57554	4328 MSA
(GSM) . . . . .	54524	2035 GSM
(Boelter Hall) . . . . .	55756	2817 BH
(CHS) . . . . .	59470	A1-228 CHS
Magnetic tape (loan) . . . . .	57554	4328 MSA
Terminal problems . . . . .	51662	
Keypunching Service ( <i>Imogen Beattie</i> ) . . . . .	57541 <sup>3</sup>	3273 BH
<b>Publications:</b>		
Users Manual (purchasing information) . . . . .	52172	5628 MSA
OAC newsletters (back issues) . . . . .	55676 <sup>3</sup>	
<b>User Services:</b>		
APL Space Coordinator ( <i>Joan Slottow</i> ) . . . . .	57418 <sup>3</sup>	
Application Program		
Librarian ( <i>Mark Cirlin</i> ) . . . . .	57426 <sup>3</sup>	
Dataset Librarian ( <i>Joan Slottow</i> ) . . . . .	57418 <sup>3</sup>	
Programming Consulting (MSA) . . . . .	57452	3909 MSA
(CHS) . . . . .	57862	A1-228 CHS
QUICKRUN Procedure		
Librarian ( <i>Michael Graham</i> ) . . . . .	57438 <sup>3</sup>	
Refunds . . . . .	57452	3909 MSA
Remote User Liaison ( <i>Aeint de Boer</i> ) . . . . .	55698 <sup>3</sup>	
User Services Manager ( <i>Jim Adams</i> ) . . . . .	57529	
UCLA Computer Club . . . . .	55879	3514 BH

<sup>1</sup> Area code 213 and prefix 82 (i.e., 213-82n-nnnn) dialing from off-campus

<sup>2</sup> MSA (Math Sciences Addition), GSM (Graduate School of Management), BH (Boelter Hall), CHS (Center for the Health Sciences)

<sup>3</sup> To leave a message, call extension 53993

## OPERATING SYSTEM INFORMATION

OAC's central computer for public use is an IBM 3033 with eight megabytes of main storage. The 3033 runs IBM OS/MVT, Release 21.8 under VM, Release 6.

OAC also operates a Digital Equipment Corporation PDP-10KA Computing System with 224K words of 36-bit memory. The DECsystem-10 operates under the TOPS-10 Version 6.03 operating system.

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## OPERATING HOURS

OAC's IBM 3033 and DECsystem-10 are available 24 hours per day except during periods of preventive maintenance, systems testing, and disk space maintenance. Schedules for the various services are listed below.

All times given in the table below are in Pacific Time.

### Preventive Maintenance

IBM 3033 — Sunday, 7:00 a.m. to 12:00 noon.

DECsystem-10 — Monday, 6:00 a.m. to 10:00 a.m.

No computing services are available during preventive maintenance.

### Systems Testing

During periods of systems testing, services may be unavailable or unstable. Users are cautioned not to run large or important jobs during these periods.

\*Sunday, 12:00 noon to 4:00 p.m. and 4:00 p.m. to 12:00 midnight.

Monday, no testing.

Tuesday, 10:00 p.m. to 12:00 midnight.

Wednesday, 10:00 p.m. to 12:00 midnight.

Thursday, 10:00 p.m. to 12:00 midnight.

Friday, 10:00 p.m. to 12:00 midnight.

Saturday, no testing.

\*Advance notice will be provided by 4:30 p.m. on the preceding Thursday if systems testing will occur on Sunday evening.

### Disk Space Maintenance

IBM 3033—Alternating Sundays (biweekly), 5:00 a.m. to 7:00 a.m.

DECsystem-10—Sundays, 8:00 a.m. to 9:00 a.m.

No computing services are available during disk space maintenance. See BULLETIN for announcements of pending maintenance activity.

### APL, TSO, WYLBUR and RJS Schedules

APL — Monday-Saturday, 8:00 a.m. to 12:00 midnight.  
 Sunday, 12 noon to 12 midnight.

TSO — Available whenever the 3033 is operating.

WYLBUR — Available whenever the 3033 is operating.

RJS — Available whenever the 3033 is operating.

### Office and Workroom Hours

#### User Relations Office:

— Monday-Friday, 8:00 a.m. to 5:00 p.m. (usually open during lunch hour). Closed on weekends and University holidays.

#### MSA (Central Facility) Job Submittal Facilities, Keypunches, and Terminals:

— Always open.

#### GSM Job Submittal Facilities, Keypunches, and Terminals:

— Monday-Friday, 8:00 a.m. to 12:00 midnight. Closed on Sunday.  
 — Saturday, 9:00 a.m. to 5:00 p.m.  
 — Academic holidays. Open according to schedule for non-holidays.  
 — University holidays. Schedule varies. See newsletter announcements for schedules for specific holidays.  
 — Delivery service, Monday-Friday 8:30 a.m. and 4:30 p.m. (Holidays excepted)

#### Boelter Hall Job Submittal Facilities, Keypunches, and Terminals:

— Monday-Friday, 8:00 a.m. to 12:00 midnight.

— Saturday-Sunday, 9:00 a.m. to 12:00 midnight.

— Holidays, same as GSM above.

#### CHS Job Submittal Facilities, Keypunches, and Terminals

— Job Submittal Room, Monday-Friday 9:00 a.m. to 9:00 p.m.  
 — Terminal Room, always open.

— Holidays, same as GSM above

## From the Editor

Welcome back to UCLA! We hope you have all had a relaxing summer and are now ready to begin another year of computing work. While you were gone, things have been "hopping" at OAC.

For one thing, we are now up and running on a brand-new IBM 3033 computer, the replacement for the ten-year-old IBM 360/91. The new machine has caused many other changes, such as new rates, a new schedule of services, new job class limits, and so on. These changes are all summarized in articles in General Notes. Their titles are self-explanatory.

For our new users, we have an introduction to OAC in General Notes and an introduction to the DECsystem-10 (Free, Open-Access Computing) in DEC-10 Notes.

TSO users will be interested in reading Software Notes this month. We now have a full-screen editor (written by Systems Programmer Michael Stein) which can be used under the TSO EDIT command. OAC consultant Tom Gordon has written an article, "The Full-Screen Editor under TSO," to document this new feature.

Finally, we thought you might like a summary of what was going on at OAC this summer. Charles Hofacker, another OAC consultant has written such an article, and we include it as this month's Special Feature. In addition to talking about what has already taken place, it gives you a peek at some events which will be happening very soon.

Kathleen Vossough  
Editor

## Table of Contents

### General Notes

The Office of Academic Computing.....	2
New Rates for Computing on the	
IBM 3033.....	5
OAC Fall Quarter Course Offerings....	9
IBM 3033--Schedule of Services.....	10
Which Queue Will Your Job Go Into?..	11
Notice to Users of 800 BPI Tapes....	12
Charging for Tape Usage on the	
IBM 3033.....	12
Charging for Disk Usage on the	
IBM 3033.....	15
More Disk Space.....	18
Larger APL Workspace.....	19
Logging On to TSO and WYLBUR from	
3278 Terminals.....	19
More Public CRT Terminals.....	20
CHS Facility Room Hours.....	20
1200 BAUD Dial-Up Lines Now Available.....	21
Even Parity for WYLBUR Dial-Up.....	21
Tape Positioning Errors.....	22

### Software Notes

The Full-Screen Editor under TSO, by Tom Gordon.....	23
---	----

### DEC-10 Notes

Free, Open-Access Computing.....	32
----------------------------------	----

### Special Features

How We Spent Our Summer at OAC, by Charles Hofacker.....	35
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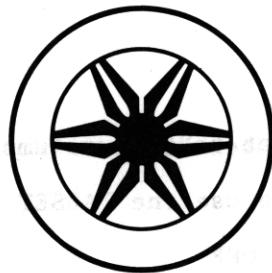
### On the Cover ...

Second Shift Operator Paul Klein wanted to prepare something special for the IBM 360/91's last job. This tombstone is the output from that last job, run on Saturday, August 25th. Not shown on our cover, but present on the output is the following quotation:

It will always be remembered by its last words uttered on August 24, 1979 at 22.52.56:

"IFBF05W CPU ERROR. RELOAD OS"

# dec-10 notes



## Free, Open-Access Computing

Would you like to learn how to use a computer? Would you like to improve your programming skills? Write your term papers with the computer's help? Or use its calculating abilities to assist with your chemistry or statistics homework?

OAC has a computer that any UCLA faculty member or student can use without having to apply for any special computing funds, and without having to take a regular University class that uses the computer. This computer is a Digital Equipment Corporation DECsystem-10 computer. It was first made available to the UCLA community in December, 1977. The DEC-10 is an interactive computer, which means that you communicate with it through a computer terminal in a conversational manner.

The DEC-10 has other uses. Faculty, post-doctoral candidates, and graduate students with research projects that are not funded by the usual mechanisms can use the DEC-10 to do research calculations of moderate size. Instructors who want to teach their classes using a computer but who find the interactive services on OAC's IBM 3033 too expensive for their budgets can have their students use the DEC-10 instead, without charge.

The rest of this article provides a general description of the services provided on the DECsystem-10. It will

not detail DEC-10 policies or procedures, nor teach you how to use the computer. To learn about these things, read the material discussed below under "Printed Information."

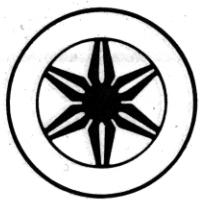
## Getting on the DEC-10

You can acquire an account simply by filling out a form at the User Relations Office (4302 Math Sciences) between 9 a.m. and 5 p.m., Monday through Friday. Students must present a valid registration card and a picture ID. There are no "request for funds" applications associated with DEC-10 accounts. The account will be ready to use within a couple of working days. Accounts do not expire unless your UCLA student or faculty status lapses.

## Hardware Description

For those of you with some knowledge of computer hardware, we include this list of DEC-10 components.

- The OAC DECsystem-10 has a model "KA" processor with sixteen 36-bit general purpose registers.
- Main storage consists of 224K 36-bit words.
- There are seven online disks, partitioned into four "logical" disk structures.



- There are seven DECtape drives.
- There are three regular magnetic tape drives: two 9-track 800 BPI drives and one 7-track drive. (Restricted use.)
- There is a single 600 lines-per-minute printer capable of printing both upper- and lowercase letters.
- There are 30 telephone dial-up ports, all operating at 300 BAUD. All access to the machine is through these dial-up ports.

You can find public terminals from which to call up the DECsystem-10 at the Graduate School of Management, Boelter Hall, and central (Math Sciences) facilities. These terminals can dial-up either the DEC-10 or the IBM 3033.

The DEC-10 is available for use 24 hours a day, seven days a week. The exception to this is a period of preventive maintenance on Monday mornings from 6 a.m. to about 10 a.m., and scheduled periods of systems testing.

## Software

The DEC-10 runs under the TOPS-10 version 6.03 operating system. The following compilers/interpreters are available:

BASIC-10  
 FORTTRAN-10 (Digital Equipment Corp.  
 ALGOL-10 program products.)  
 COBOL-10  
 LISP (from Rutgers University)  
 PPL (from Harvard University)  
 PASCAL  
 CALGOL68 (a version of the Algol68 compiler implemented on the DEC-10 by the UCLA Computer Science Dept.)

The following text editors are available:

TECO  
 LINED  
 SOS  
 RUNOFF (for producing attractive reports)

Several utility programs, applications programs, and a game library are also available. Notable among the applications programs are IDA (Interactive Data Analysis for statistics) and REDUCE (for solving symbolic mathematical expressions, including polynomials). Great fun may be had with the game library during restricted hours playing such games as STARTREK, WUMPUS, and the ever-popular ADVENTURE.

In addition, we have acquired a copy of the DECUS library. DECUS is an association of Digital Equipment Corporation product users. The DECUS library is a collection of programs written at the many DEC-10 installations to do a constellation of different things. Programs from this library are put on the machine by request. If you want to look over the DECUS library's catalog, make an appointment with consultant Mark Cirlin at (82)5-3993.

## Getting Help (Consulting)

Consulting services are provided free of charge to all DECsystem-10 users, students and faculty alike. The consulting office, 3909 MSA, is open from 10:30 a.m. to 4:30 p.m. weekdays, except from 10:30 a.m. until noon on Thursdays. Although the consultants cannot provide such extensive help as teaching programming languages or assisting with solutions to class assignments, they are always happy to help you get started using the DEC-10 and to bail you out when error messages the computer sends you defy comprehension.

Periodically, OAC and the UCLA Computer Club offer free seminars and classes on