Lawrence Berkeley National Laboratory

Recent Work

Title

OFFICER'S HANDBOOK FOR COMPUTER SYSTEM CDC 6600 AND CDC 6400

Permalink

https://escholarship.org/uc/item/4xc8w65z

Author

Quan, J.J.

Publication Date

1979-05-31

OFFICER'S HANDBOOK for COMPUTER SYSTEM CDC 6600 and CDC 6400

RECEIVED

LAWRENCE
BERKELEY LABORATORY

MAY 3 1 1979

LIBRARY AND DOCUMENTS SECTION

For Reference

Not to be taken from this room

John J. Quan

Lawrence Berkeley Laboratory
Protection Department







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.

CONTENTS

<u>'</u>	Page
INTRODUCTION	1
THE COMPUTER SYSTEM	2
THE TERMINAL KEYBOARD	4
STARTING YOUR JOB	7
PROGRAM CASES DATA BASE	13
PROGRAM <u>CARDKEY</u> MANAGEMENT SYSTEM	18
ENDING A PROGRAM	24
TROUBLE SHOOTING	25
SOME RULES TO REMEMBER	28
OTHER HELPFUL INFORMATION	
The Job Card	29
Computer Status	29
Line Printouts	30
Trouble Calls	31
APPENDICES	
A. DEFINITIONS OF COMMANDS	33
B. CASE REPORT CLASSIFICATION CODES	35
C. STANDARD ABBREVIATIONS	37

INTRODUCTION

This section is to introduce you to some of the computer systems that are used in this department. Because of our interaction type of computing we use the computer system CDC 6600 (B machine), and the CDC 6400 (C machine). The LBL computer facility is also equipped with the CDC 7600, but it is not designed for interactive use. We have two types of jobs in our department: CASES DATA BASE and CARDKEY. Each job uses a different machine. CASES DATA BASE uses the CDC 6400 C-machine and CARDKEY uses the CDC 6600 B-machine.

There are many types of computer systems when you are involved with placing information into the computer. Everything you type into your terminal is first processed by the REMOTE ENTRY CONTROL COMPUTER (RECC). The SESAME system, a sub-system of RECC, lets you enter, edit, debug, and run your program from a remote console. All the information you type into the terminals then goes into the MANAGEMENT INFORMATION SYSTEM (MIS).

You will probably ask, "Why do we need a computer system in this department?" Well, for one reason, this is one of the easier ways of recording, storing, and retrieving information that we keep on hand. You can retrieve this information instantly in the form of a printout or on the visual screen. The printout can provide us with statistics essential for departmental efficiency. This system is mostly used for budgeting and personnel management systems. The RECC is a time sharing computer and is also used by U.C. Campus, BART, and other agencies.

THE COMPUTER SYSTEM

We, in this department, use two-parts of the main BKY system that is interconnected at the Computer Center. The first part of the system is the (RECC) Remote Entry Control Computer. The RECC handles all the teletype activity. Our teletypes (terminals) are connected to the BKY system. RECC acts as an interface between teletypes and the BKY system as a whole. The RECC will respond to commands issued from any teletype connected to it. RECC will respond to your commands, such as: "Start job," "Connect to terminal," "Kill a job," etc.

The second part of the system is known as SESAME. SESAME is the main BKY interactive system. This system provides a way to execute a prearranged sequence of control cards, such as: Cases and Cardkeys. After you log them into the computer system, SESAME verifies your job card and replies. SESAME's job is to process on your command. The command procession interprets whatever you type into the system as a SESAME command.

This system, as a whole has a fail-safe feature. The B machine and C machine will automatically kill jobs which have waited 30 minutes for teletype interaction, or are otherwise delayed. Waiting for tape assignment and Program Storage System (PSS) access does not count. The system will warn you via a message that your job will be killed in 15 minutes, and will warn you again when 5 minutes remain. Any type of input will give you another 30 minutes.

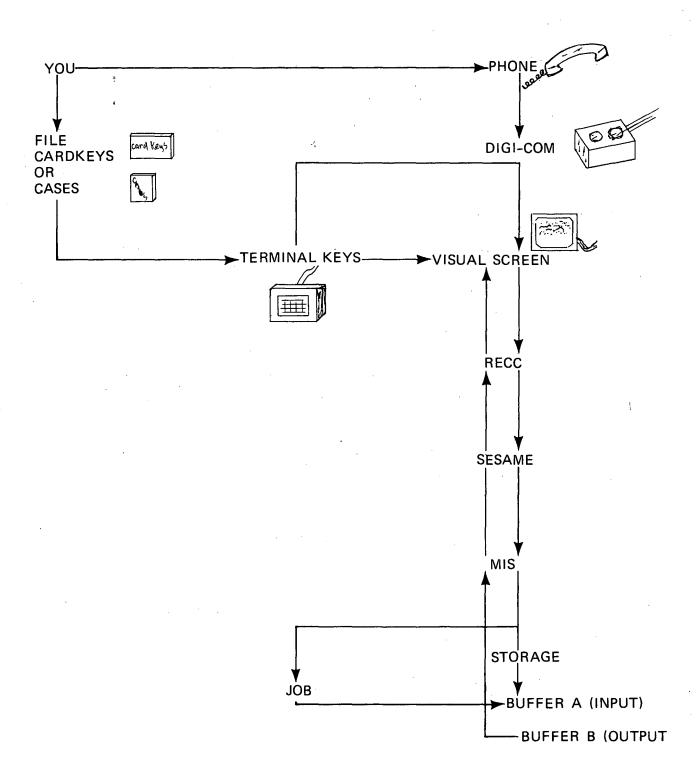


Fig. 1. Flow Diagram of the Computer System.

THE TERMINAL KEYBOARD

Typing into a program is like using a typewriter, but some keys have different shift characters than indicated on the keys. Figure 2 and the following summary explain the keyboard.

Short Summary of what each key means:

LINE FEED KEY: This key will erase the whole line if you have not hit the return key. (The RETURN KEY will be known as @). The RECC will type out 3 backslashes over the beginning line. This key is not used for our purposes. DO NOT USE IF UNFAMILIAR WITH THIS KEY.

RUB OUT KEY: Will erase the last entered character from the uncompleted line in the Buffer. RECC will counter with printing a backslash followed by the characters deleted; e.g., you enter AB, hit RUB OUT KEY, you will get back AB (backslash) B. Not used for our purposes. DO NOT USE IF UNFAMILIAR WITH THIS KEY.

SHIFT KEY: When depressed, causes key struck to have the upper function of the upper case much like the typewriter shift key; e.g., hit the No. 4 key, you will get \$.

<u>REPEAT KEY:</u> Causes the character pressed simultaneously with it to be repeated until both are let up. Not used for our purposes.

BREAK KEY: No meaning in RECC. Not used for our purposes.

<u>CONTROL KEY</u>: Causes certain keys to send control characters to RECC when they are hit with the CONTROL KEY also depressed. Use only if you are familiar with system, otherwise do not use.

ESCAPE KEY: Sends a control key to RECC. Not used for our purposes.

SHIFT LOCK KEY: Will keep shift key in place, red light will be on. To unlock, hit shift key.

<u>REMOTE KEY</u>: Depress this key, the light should be on; you are connected with the computer center. Should be on if working on a job.

LOCAL KEY: Disengage from computer complex. Red light will go on.

KEY BOARD PRINT **BREAK** LOCAL REMOTE **ENTER** 0 0 # % CNTRL LINE 0 FEED RETURN TAB 0 Ε Т U SHIFT RUB S D F G Н Κ REPEAT HOME ERASE LOCK OUT \Box 1 SHIFT Х C ٧ В SHIFT **ESCAPE** Z М

Fig. 2. Terminal keyboard. Your terminal keyboard may look like this, although there are various kinds of terminals. Keys 1-3, 5-7, and M have different shifted characters than indicated on keyboard. The actual shift character appears above the key in this figure.

Shift Not Depressed	Shift Depressed	Teletype Character/Meaning
1 2 3 4 5 6 7 8 9	∨ ≠ \$ <	Number seven/dot (not period)
0 : - ← →	*	Colon/equal sign Negative sign One step backward. Erases one space at a time One step forward. Erases one space at a time
A B C D E F G		
H I J K L M N		
O P Q R S T U		
V W X Y	•	
; , , /	+ < > ? ^	Semicolon/plus Comma/less than Period/greater than Slash/question mark One step upward One step downward

STARTING YOUR JOB

This is a step-by-step way to start the RECC system. Equipment needed to start your job:

- 1. Digi-Com
- 2. Visual screen
- 3. Telephone (ordinary LBL phone will do) use extension
- 4. Teletype terminal keyboard
- 5. File 330-3
- 6. Current month case reports
- 7. Cardkey log

STEP 1: Turn on Equipment.

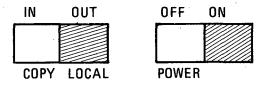


Fig. 3. Switches at rear of Digi-Com.

Make sure the switches are in the right position.

RT	l l	PER PWR	R/C RCV	!	RTS -O- (MT	CAR RCV	PER -O- PWR	R/C RCV	RTS -O- XMT	CAR -O- RCV	PER -Q- PWR	R/C RCV
		J		<u> </u>				 				

Fig. 4. Front of Digi-Com.

On position

On position/connected to phone

When you turn the power on, and switch to the out position, two red lights will appear: one on the RTS Box, and one on the PER Box. When you are connected to the Digi-Com via the telephone, a red light will also appear in the CAR Box.

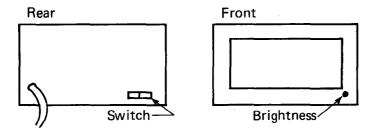


Fig. 5. Visual screen.



Fig. 6. Indicator blinking on screen.

STEP 2: Digi-Com Connection.

- a) Dial an LBL extension number. We have three numbers to call to connect with the computer center. The extensions are 6041, 5758 and 5752.
- b) When you dial the extension number the phone will ring at the other end. In answer, you will get a high pitched tone. Place mouthpiece of the phone at the back end of the Digi-Com. Make sure the mouthpiece and the earphone are securely attached to the Digi-Com.
- c) Also make sure all three red lights are on in the front side of the Digi-Com. See Fig. 7.

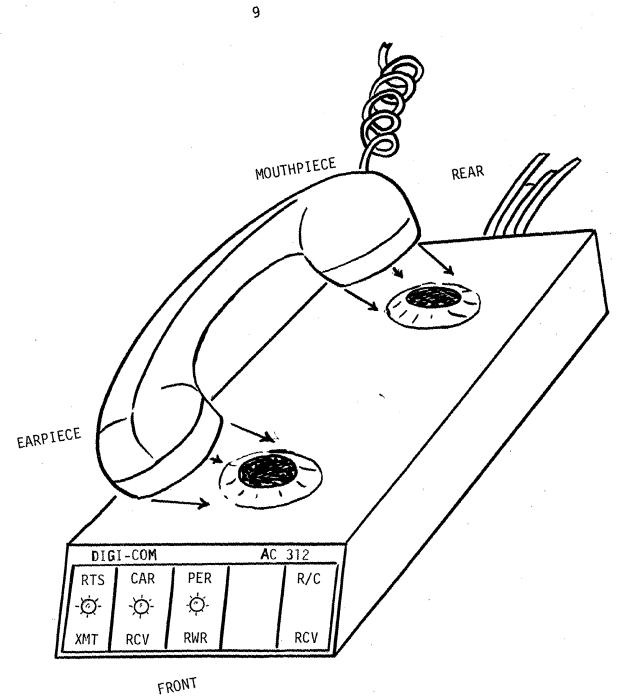
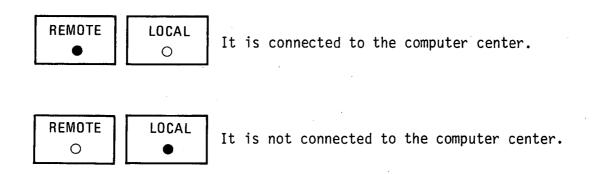


Fig. 7. Digi-Com and telephone receiver.

STEP 3: Connect with Computer Center

- a) Punch the REMOTE KEY to connect into the computer center. Make sure this key is on (by the red dot on key). This will allow you to punch in information and get a response from the computer.
- b) Punch the LOCAL KEY, you will not be connected to the computer center. You can use this local key to practice, or for testing the unit. You are on local if there is a red light on that key.



STEP 4: Starting a Job with LOG

There are a number of equivalent requests for starting a job:

- a) > LOG This step not always used.
- b) > LOG IN
- c) > LOG ON

or to check on the computer system, to see if it's working (UP), or not working (DOWN).

Type: > B to check the status of the B machine. Type: > C to check the C machine. The computer will reply with the information concerning that machine.

Now you are ready to type your job card directly on the >LOG message. Type: > LOG, JOB NAME, 5, 1000, 10000, 123456, NAME. After you have finished typing in the job card you then punch the return key to log into the computer and to get an answer. If by chance you make a mistake, and do not catch it, the computer will answer with a ? or ILLEGAL REQUEST after you punch the return key. All you have to do is re-enter the job card correctly. When you get into the system the computer will print out LOG IN, etc., and will end with OK SESAME. Now that you are in the system you should type out LIBCOPY, JOB NAME, CONTROL/XR, START, etc. The computer will type out the date of the last file. Now you are ready to start programming in cases, or cardkey information. The computer system will PROMPT you through the system, that is, it will guide you through the details, see sample below for the C-machine. There are separate files for each of four years 1975-1978. Use the desired year in the start-up procedure, e.g., use START 78 when putting in cases for 1978.

To clarify operator-computer dialogue, in this sample, the computer response is in all upper case while your typing is all lower case. In actual practice, of course, there is no lower case.

computer

response:

you type:

>log,*c, cases,5,1000,100000.302501,puccio

LOGIN CP-32 TTY-154 08.42.22.**BKY69B*C*02/07/78.

WARNING - USE UNWIPE CONTROL CARD TO GET QUEUED FILES

SEE OCT 77 NEWSLETTER

CASESO1 LOGGED IN. LOGIN 2.0

OK - SESAME

libcopy, cases, control/xr, start78

CASES FILE LAST UPDATED --ORIGINAL FILE SPECIFY CASE NUMBER (E.G. N=512) n=14325

```
NO ENTRIES FOR CASE 78-14325
ADD A NEW ENTRY? Y OR N
У
CLASS
10
DATE
11/19/78
TIME
1645
CODE SPEC
21107vc
TYPE
veh acc, non-inj
LOCATION
cyc rd, 100 ft w of e st
SERIAL NUM
     ( ← can enter a blank)
LOSS
456
DISPOSITION
cl'
  78-14325 ^ 10 ^11/19/78 ^1645
~ 21197VC ~ VEH ACC, NON-INJ
↑ CYC RD, 100 FT W OF E ST
∼ .
                     456 ~ CL
CHANGES? Y OR N
n
ANOTHER ENTRY? Y OR N
n
AT YOUR COMMAND.
replace case
AT YOUR COMMAND.
```

CASES DATA BASE

STEP 1: Entering the Cases Data Base.

- a) Type out your Job Card (cases)
- b) Sample sheets and job cards are in Assistant Chief Puccio's Desk top right hand corner.

These sample sheets for the Cases Data Base will give you information on what to type in, and the approximate response from the computer.

e.g., computer response: SPECIFY CASE NUMBER (e.g., N=512)

you type: N=1234

computer response: NO ENTRIES FOR CASE 79-1234

ADD A NEW ENTRY? Y OR N

you type: Y (for yes) N (for no)

It will then go down each category of the Case Data Base. The computer will prompt you through each category. There will be nine categories for each entry, they are listed in the following order:

1. CLASS: Listed on the computer room wall, tells which reports

belong in which class, e.g., Class 30 is for Unsecured

Premises.

2. DATE: Date when the case was reported. Use slashes when

typing in the dates, e.g., 7/5/79.

3. TIME: Time case was reported, e.g., 1937; don't have to print

"hours" behind 1937. Use Military time.

4. CODE SPEC: PC (Penal Code), VC (Vehicle Code), W+I (Welfare

Institutional Codes) etc., e.g., 5150 W+I

5. TYPE: 29 spaces are allotted for type of occurrence. If

an item is stolen give item, e.g., Unlocked Ext. Door (for Unsecured Premises) SONY T.V. (487 PC)

Pvt. Veh. Bk. into sign (Vehicle Accident)

- 6. LOCATION: If building type BLD; if building and a room type both, e.g., BLD 90, 0020. A comma is used in place of "room." If more than one room is involved use comma or +, e.g., BLD 90, 0020,0021, + 0013. If it is a road, e.g., Cyc Rd Nor of K St.
- 7. SERIAL NO. Use serial number of item or if not available use DOE serial number. When using DOE number you must type DOE and number, e.g., DOE 123456A
- 8. LOSS: The amount lost in cash value of items lost. Round off amount, you don't have to add cents, e.g., 600
- 9. DISPOSITION: This is the disposition of this case, abbreviation is listed with the Class testing, e.g., CONT (Case Continue) CL (Case Clear or closed) etc.

After typing in each category you must hit the RETURN KEY to go on to the next category. When all categories are completed the information will be displayed on the screen. Now if you are satisfied with this entry, you are ready to go on to the next case. When entry information is displayed the computer will ask you for Changes? Y or N.

Here are some examples of cases. All of your typing is followed by @ (the return key).

All of your typing is followed by the character @, the return key.

Class	Class	Class	Class
2	30 @	17	18
Date	Date	Date	Date
1/24/79 @	12/17/78 @	6/12/79 @	7/4/79 @
Time	Time	-Time	Time
1635 @	0132 @	1349 @	1908 @
Code Spec	Code Spec.	Code Spec	Code Spec
487 PC @	; @	21461 CVC @	; @ *
Туре	Type	Туре	Туре
TID Computer @	Unlocked Ext. Door @	Subj. Ran Stop Sign @	Pvt. Veh. Bk. into Pvt. Veh. @
Location	Location	Location	Location
Bld. 50B, 1136 @	Bld. 75, 170 @	K st. N. of Cyc. Rd. @	90 Lot @
Serial Number	Serial Number	Serial Number	Serial Number
XR 0001 @	; @	; @	; @
Loss	Loss	Loss	Loss
5000 @	; @	; @	; @
Disposition	Disposition	Disposition	Disposition
cont @	CL @	A + R @	CL @

Type REPLACE CASE to go on to the next entry case. The computer will then respond with AT YOUR COMMAND. When this is given, type N=12350 to get into the next case. You don't have to type 79, only N in place of 79. You then go through the categories of the entry and if you don't have any more changes on that case type REPLACE CASE0. When you get AT YOUR COMMAND from the computer you are ready to ask for another case.

STEP 2: Correcting Category of Entry

For correction to be made on a category of an entry, just go through the sequence of categories for that entry. At the end the computer will ask you if you would like any changes, e.g., CHANGES? Y or N. You would then type Y, this will automatically start the entry of categories again, e.g., class, date, time, and so on. You don't have to type in the information you do not want change. All you have to do is hit the semi-colon; key @ this would then leave that category alone (information intact), e.g., CLASS; @ means it will retain the information as originally typed in; NO CHANGES MADE. If you hit the space key, it will erase the information on that category, e.g., CLASS (space) @ this will erase that information for class.

Reminder: @ is the return carriage key. When you get to the category you want to change, all you have to do is type in the information and that will replace the information previously put in, e.g., CLASS: 2 will replace previous entry, like 10.

STEP 3: Ending the Program

To end the program:

you type:

REPLACE CASE @

computer response:

AT YOUR COMMAND

you type:

REPLACE FILE @

computer response:

(information when cases last updated)

you type:

PRINT @

NOTE: You do not always have to request prints.

If you want to request extra prints, like

PRINT @ three for instance, you just type:

PRINT @

PRINT @

If no prints are needed, just type STOP after

information when Cases last updated.

you type:

STOP @ to end job

computer response:

(accounting information displayed)

JOB ENDED - DISCONNECT

All necessary materials to start the Cases Data job will be on Assistant Chief Puccio's desk File 330-2 (3303), File 330-d: Current Reports RL655, Crime Reports, Accidents Reports, etc.

To check the status of the system, before you start your job: type > B @ The computer will reply with information on the status of the system, whether it is UP (working) or DOWN (not working).

When you hook onto the computer and do not enter any information, the computer will automatically disconnect in five minutes.

CARDKEY

STEP 1: Starting the Job

Pick up the CARDKEY WORK SHEET (brown binder) from the desk, next to the Interrogator 880.

STEP 2: Starting the System

Turn on the Digi-Com, and visual screen. Hook-up with telephone, and make sure the red dot is on in the remote key.

STEP 3: Start the Job by Typing Out Job Card

Type: LOG, JOB CARD @

Computer will respond with information regarding the system.

you type: >LOG, CARDKEY, 5, 1000, 10000.302501, PUCCIO! (or @)

computer response: LOGIN CP-32 TTY-053 15.03.41.**BKY65B*B*11/01/76.

CARDKOO LOGGED IN. SESAME 2.4

OK - SESAME

you type: LIBCOPY, CARDKEY, CONTROL/XR, START.!

computer response: CARD KEY FILE LAST UPDATED --

ORIGINAL FILE

SPECIFY CARD NUMBER (e.g. N=512)

OR AN ACCESS LEVEL. (e.g. L=7)

It will also type:

OK - SESAME which means you are now in the system.

Type: LIBCOPY, CARDKEY, CONTROL/XR, START. @

Type: N=123 the cardkey number.

Computer will respond with all the information regarding that cardkey including (Name, first, last, initial, Dept. etc.) and the computer will also ask you for Changes? Y or N.

If you would like a change in that cardkey hit Y0. If no change is required hit the N0.

If you type Y, the computer will respond with a sequence of category. The computer will prompt you through the entry. The system will then start prompting you for information. The following is a sequence of categories of which the computer system will ask:

LAST NAME:

The maximum number of alphabetical characters you

can type in is 12.

e.g., QUAN@

FIRST NAME:

Maximum of 10 alphabetical letters. Do not use nick-

names, AKA.

e.g., JOHN@

MIDDLE INITIAL: Maximum of 1 alphabetical letter, if no MI leave it blank.

DEPARTMENT:

Maximum of fifteen alphabetical letters or numbers.

e.g., PROTECTION@

ACCESS LEVEL:

Maximum of two numbers.

e.g., 10

TIME ZONE:

Maximum of one number.

e.g., 10

AUTHORIZED BY: Maximum of thirteen letters or numbers. e.g., ANDES@

After you have finished going through all the categories the system will display the whole card and ask if there are any CHANGES? Y or N.

If you are satisfied, you can type REPLACE CARDO. This sequence will get you to the next card.

The computer will then print out AT YOUR COMMAND. Now you are ready to request the next cardkey, e.g., N=1235.

Changing Information on Cardkey. If for some reason you would like to change the information on Cardkey 1234 after the computer displays the information and asks for CHANGES? Y or N, you would type Y@. This would then start the sequence of category. For example you would like to change the authorization from ANDES to PUCCIO; to leave the information unchanged hit the semi-colon key.

LAST NAME

;@ No Change

FIRST NAME

;@ No Change

MIDDLE INITIAL

;@ No Change

DEPARTMENT

;@ No Change

ACCESS LEVEL

;@ No Change

TIME ZONE

;@ No Change

AUTHORIZED BY

e.g., PUCCIO will erase ANDES.

For this type of change you can just type over the old information. When making an entry for a Lost Card, Terminated Employee, Damaged card etc., do the same as for adding information for the cardkey.

Request the Cardkey Number, e.g., N=1234

The computer will display the information for that Cardkey and will ask you for CHANGES? Y or N.

you type Y@

The computer will start the sequence of categories:

LAST NAME

; No Change

FIRST NAME

; No Change

MIDDLE INITIAL

; No Change

DEPARTMENT

LOST@ (for lost) TERM@ (for terminated) DAM@ (damage) STOLEN@ (theft) etc. ACCESS LEVEL

Space @ will erase original access level and leave blank space.

TIME ZONE

Space @ will erase original time zone and leave blank space. AUTHORIZED BY:

1-17-79 type the date it was programmed out of the system. You can break off in the middle of an entry

e.g.,

LAST NAME

you type

QUAN@

FIRST NAME

(you decide to break off here)

you type

DISPLAY@

All the information for that entry will be displayed and will ask you for CHANGES? Y or N.

You can then type REPLACE CARD@ and go into the next job.

When you want to delete any or all entries you must delete one at a time for that card. When typing dates for cardkey job use - e.g., 10-3-79

The computer will have now revised your information on that cardkey, it will also ask for CHANGES? Y or N.

If no changes are desired type REPLACE CARD@

The computer will respond AT YOUR COMMAND

You are now ready to request the next cardkey.

STEP 4: Request Printout and End Job

At this point you can request a printout and end your job.

computer response:

AT YOUR COMMAND

you type:

REPLACE FILE@

Now you will get information when cardkeys were last updated, etc. (At this point you can request prints. For cardkeys there are two types of printouts:

- 1) Distribution List
- 2) Master List

PRINT DSTR@ for Distribution List

or

PRINT MSTR@ for Master List

If you need two (2) copies of Master List just type twice, e.g., PRINT MSTR@

PRINT MSTR@

Obtaining a printout is not always necessary. A print is usually requested by the Supervisor. Now to end your job after requesting printouts:

you type:

PRINT MSTR@

computer response:

PRINTOUT CAN BE PICKED UP AT 7600 BLDG. 90

3RD FLOOR (or something similar to this since we now pick up our printouts at

the Computer Complex.)

you type:

STOP@

computer response:

(accounting information displayed)

JOB ENDED - DISCONNECT

If you are ending a program without requesting a printout:

computer response:

AT YOUR COMMAND

you type:

REPLACE FILE@

computer response:

(information last updated)

you type:

STOP@

computer response:

(accounting information displayed)

JOB ENDED - DISCONNECT

ENDING A PROGRAM

When ending a job always REPLACE FILE. Both the Cases Data Base and the Cardkey programs are very similar in ending.

To end a job for the Case Data Base:

you type:

REPLACE CASE@

computer response:

AT YOUR COMMAND

you type:

REPLACE FILE@

computer response:

(information when cases were last up-dated)

you type:

STOP@

computer response:

(accounting information)

JOB ENDED - DISCONNECT

To end job for the Cardkey Management System:

you type:

REPLACE CARD@

computer response:

AT YOUR COMMAND

you type:

REPLACE FILE@

computer response

(information last updated for cardkeys)

you type:

STOP@

computer response:

(accounting information)

JOB ENDED - DISCONNECT

At this stage of the computer system, each step can and most likely will take a while to complete. It all depends on how many people are using the B machine, also how the computer is reacting.

TROUBLE SHOOTING

No Reaction from Computer

- 1. Check lights on Digi-Com (Phone may be disconnected)
- 2. Check the Remote Key, make sure the red light is on and the Remote Key is on.
- 3. The red light for Local Key may be on, just punch the Remote Key to switch back over. You may have to re-type your job card again. At times, this red light may switch from the Remote Key to the Local Key. This condition would mean that the unit could be malfunctioning.
- 4. If you mistype a sentence and haven't hit the return key, you can use the
 key to go back and erase the sentence word by word. If you did hit the Return Key you can type Y when the computer asks you for CHANGES? Y or N.
- 5. The computer will disconnect in 5 minutes if you are not logged into the system.
- 6. If while you are logged in and have to go away from your terminal, the computer will warn you at 15 minutes that your terminal will close down.

Lost Phone Connection

If you have lost your connection via the phone, reconnect by typing >> CASE 01 (job number assigned to you by the computer when you are first connected) to check on your job status.

For example: CASE 14. Your current job number will be in sequence, of when you were first connected into the system.

Type: CASE 140. The computer will tell you the status of your job by responding:

WAIT MEMORY CASE 14-66 (your job is waiting memory and is still alive)

or

CASE 14 JOB STATE UNKNOWN (your job was lost or killed). This means that you will have to start over from the beginning.

If your job is still alive, then you may reconnect by typing out:

> CT, CASE 14, \$ Account Number
An important note about this formula: the 14, after CASE, is your sequence number, it can be a different number depending on when you connect into the system. When you type in your account number, the account number will not appear on the screen. This is protection against someone else obtaining your account number and using it later.

Beeping Computer

- 1. If you are typing in your data and you get a beep from the computer everytime you hit the key, the BUFFER IS FULL or FILLED. To clear the buffer you press the CONTROL KEY and the X Key at the same time and punch the return key. This clears the buffer and you can retype your commands.
- Your transmission can get stuck if you try to enter too many messages and the RECC has no place to store them, this condition will send back a beep to your terminal.

System Shutdown Warning

At times you may get a warning from the computer stating that the computer system will go down in 15 minutes or so. This warning will give you time to REPLACE FILE and STOP job.

<u>Disconnected Terminal</u>

1. At times disconnecting a terminal from a port is done by somehow lousing up the phone connection, e.g., cutting

the wire, losing the carrier signal, unplugging the teletype, turning it off, hanging the phone up, or a telephone operator cutting in for an emergency call.

When you are disconnectd from your terminal, the system will automatically disconnect from your job. You can reconnect to your job by retyping your job card etc. There will be NO guarantee that your previous entry will be saved.

Delayed Response

At times it may take a few minutes or what seems like eternity to respond to your commands. No need to be that concerned. The computer may be a little sick (that is malfunctioning), just be patient. If after about 30 minutes or more you get no answer, try calling the Computer Center X6211 and check on the status of RECC and the B or C machine.

? Response

If you get a ? (question mark) try typing the message again, there may be some junk in the machine. Or you may not be connected to your job. Check remote key if you still get a ?, it may mean you have machine trouble.

B or C Disconnected from RECC

If you get a B or C DISCONNECTED FROM RECC, try your job later, the B machine (CDC 6600) or C machine (CDC 6400) is hung up and cannot communicate with RECC.

Stray Characters

If every so often a stray character appears on the screen for no apparent reason, this is a sign of a poor telephone connection. Try hanging up and dial again. If this situation happens frequently have your port (Digi-Com) checked. Call Sig Rogers LBL X5354.

6000 Trouble

If you get a 6000 TROUBLE it means that the RECC has not received any type of response from the B machine for over 2 minutes. The machine is malfunctioning.

SOME RULES TO REMEMBER

- Wait until the computer is finished with its reply before you start your next command.
- 2. Make sure the Digi-Com terminal etc. are connected and on.
- 3. Check periodically to see if you are still connected by phone, that is make sure all three red lights on the Digi-Com are on.
- 4. Check periodically to make sure you are connected to the Computer Center, by making sure that the red light is on in the REMOTE KEY and <u>not</u> the LOCAL KEY.
- 5. There are three (3) extensions you can call. Ext. 6041, 5758, and 5752.
- 6. Remember to place mouth piece of the phone at the back end of the Digi-Com.
- 7. Make sure you hear a high pitched tone when connecting the phone to the Digi-Com.
- 8. File 330-3 is in Assistant Chief Puccio's office.
- 9. Don't forget to put the files back where you pick them up from.
- 10. Current Reports will be in Drawer #3 (for present month).
- 11. The computer will shut off (by itself) in 5 minutes if you don't log in.
- 12. If you have the computer without making any entries the computer will shut off by itself within 10-15 minutes.

OTHER INFORMATION

The Job Card

There are 6 categories in the job card. They are separated, and in order, so that the computer can understand and process them.

<u>Field</u>	Examples	Examples
Job Name	Cases	Cardkey
Priority	.5	5
Computing Time	1000	1000
Field Length	10000	10000
Account Number	302501	302501
Name	Puccio	Puccio

Your account number will also be important in reconnecting your job.

The job name is primarily of interest for inquiring about or reconnecting to your job.

Computer Status

At times you may wish to check the systems' status before starting your job, or when your job is stalled. Since we use the B or C machines you can type:

$$> B0$$
 or $> C0$

The computer will respond, e.g.,

XEQ-10, PSS-UP, MSS-DN, MEM-2 TTY-5, QS PR-160 IN35.

This will give you an overview of what's going on in the system at that moment. Just what does all this mumble-jumble mean? Here is how to read the computer's response after you type B0, to check the status of the B machine. The computer will respond with the following: INPUT Q-15, XEQ 53 D.C.DNT2 MEM-10 TTY 30 PSSRD-UP PSS WT.UP/MSS-UP. All the numbers are decimal. In the above example 15 jobs are in the 6000B Input Queue, while 53 jobs are in some state of execution.

Data Cell number 2 is down. 10 jobs are rolled out and waiting for memory. 30 users messages are ahead of yours. PSS reader is up (with no jobs waiting for it), the PSS writer is up with 3 jobs waiting for it), and MSS is up with no jobs waiting for it.

The important parts are:

MNEMONIC	Counts jobs which are:
XEQ	in memory, executing in turns
MEM	Rolled out, waiting for memory
TTY	Rolled out, waiting for user's message from terminal
CF	Rolled out, waiting for a common file
IN	Waiting to get into the machine
PSS	Program Storage System. Permanent file system used
	to store moderate sized files which are changed or
	used relatively often; data cells (storage). No need
	for concern if PSS is down, it has a back-up procedure.
Numbers	Jobs waiting
UP	System working
DN	System not working
MSS	Permanent and semi-permanent Data Storage Mass Storage System
IN	Jobs
Q	Input Queue

Line Printouts

Alphanumeric output from the computer system is normally produced on a line printer. This is the standard printout we get when we request prints.

To pick up your printouts, go to the I/O desk in Bldg. 50B, 1st Floor. The printout will be in a box under our account number; or if there is a large number of printouts you may have to hunt for them under different boxes. If all else fails, ask whomever is at the I/O desk for help.

Trouble Calls

If you have any type of computer trouble, call any of the following people:

Dan Kane, LBL Ext. 5487

Jos Polman, LBL Ext. 5181

Stan Combs, LBL Ext. 5362

Jon Powell, LBL Ext. 6211

John J. Quan, LBL Ext. 5472

APPENDIX A

DEFINITIONS OF COMMANDS (listed alphabetically)

AT YOUR COMMAND Ready for your command. At this point you can type

in your commands.

DISPLAY This command lets you see the card you have retrieved

so you can make further changes in it. Use to break

off in middle of data element.

END This command is used to terminate your job. Not used

for our purposes.

KILL This command will terminate your job permanently and

will not save your changes. Not used for our purposes.

L= This command lists the locations for one or several

access levels. Do not use if unfamiliar with system.

LOCAL Your terminal is not connected to the computer center

and you will not get a response from the system.

N Means NO when system asked for changes? Y or N.

N= This command fetches a card or case you want to look at

or change, e.g., N=512.

PRINT

Requesting a computer printout from the computer.

- a) MSTR (for cardkey prints only). Includes the master list and alphabetical listing.
- b) DSTR (for cardkey prints only). Includes list broken down by department and list broken down by access level.

REMOTE

Terminal is connected to the computer center. You will get a response from the system.

REPLACE CARD

This command saves a changed card and replaces it back into the file (which must be saved by a REPLACE FILE command).

REPLACE CASE

This command saves a changed case and replaces it back into the file (which must be saved by a REPLACE FILE command).

REPLACE FILE

This command makes the system save the data in the data cell for later retrieval. If you don't use this command before disconnecting, you will lose all your changes.

RETURN

To get a response from the computer for your command.

SEMICOLON:

Leave information unchanged.

SPACE BAR

Use to erase that particular information on that data element.

STOP

This command terminates your job. You should have already replaced the file if you have made changes.

Υ

Means YES when system asked for changes? Y or N.

•

Query or request.

APPENDIX B

CASE REPORT CLASSIFICATION CODES

	Class	<u>Type</u>
Felony Offenses:	1	Grand Theft
	2	Grand Theft (Gov't/LBL Prop.)
•	3	
	4	
	5	All other Felonies
	6	Outside Felony Warrants
Misdemeanor Offenses:	7	Petty Theft (Exclude Gov't/LBL Prop.)
	8	Petty Theft (Gov't/LBL Prop.)
	9	Trespass
	10	Malicious Mischief
	11	
	12	
	13	All other Misdemeanors (Except Traffic)
	14	Outside Misdemeanor Warrants
Traffic:	15	Traffic Collision (Except Gov't Veh/Prop.)
	16	Traffic Collision (Gov't Veh/Prop.)
	17	Traffic Offenses (Reports only)
	18	
	19	

Miscellaneous Repo	rts: 20	Suspicious Circumstances
	21	Casualty Response (Injury)
	22	Casualty Response (Illness)
	23	Fire Alarm Response (other than Arson or
•		Criminal)
	24	Other Emergency Response (not included above)
	25	Security Alarm Response (Except Cardkey)
	26	Security Alarm Response (Cardkey)
	27	Civil Advice
·	28	5150 W & I
	29	Outside Assist
	30	Unsecured Premises

Note: Not all case reports can be classified with above codes.

DISPOSITION ABBREVIATIONS

CONT - Continuing

CL - Closed/Cleared

UNF - Unfounded

REG - Recovered

A&R - Advice and Release

CIT - Citation

ARR - Arrest

UCPD - Univ. of Cal. P.D.

BPD - Berkeley P.D.

SFPD - San Francisco P.D.

OPD - Oakland P.D.

DPD - Dixon P.D.

APPENDIX C

STANDARD ABBREVIATIONS

ACCEL DIV

ADMIN SER

AFFIRM ACTION

BIO-MED

C & M DEPT.

CHEM BIO-DYN

COMP OPS

COMP SCI & MATH

CTR

DAM

DIR OFFICE DONNER LAB

DPS

EARTH SCI.

ELECTRONICS

ENG-ENV

ENGR

FIRE DEPT

HEALTH PHYS

INV MANAGEMENT

LOST

MECH DEPT

Accelerator Division

Administrative Services

Affirmative Action Department

Biology and Medicine

Construction and Maintenance Dept.

Chemical Bio-Dynamics

Computer Operations

Computer Science & Mathematics Div.

Controlled Thermonuclear Research

Entered with date reported for Cardkeys

reported damaged or defective.

Director's Office
Donner Laboratory

Data Processing System

Earth Sciences

Electronic Engineering & Installation

Energy and Environment

Engineering

Fire Department

Health Physics

Inventory Management

Entered with date reported for Card Keys

reported lost or misplaced.

Mechanical Department

MED SERV

Medical Services

MMRD

Materials and Molecular Research Division

MOTOR POOL

Motor Pool

NBSTF

Neutral Beam System Test Facility

NUCL SCI

Nuclear Science

PERS SERV

Personnel Dept., Public Info Affirmative Action

PHYSICS DIV

Physics Division

PROTECTION

Protection Department

RTS GRP

Real Time Systems Group

SAFETY SER

Safety Services

STLN

Entered with date reported for Cardkey reported

stolen.

SUPPLY ADMIN

Supply Department

TECH INFO

Technical Information Department and Graphic Arts

TERM

Terminated

VISIT ARRANGE

Visitor Arrangements Department

<u>NOTE</u>: Entries for Department or Group must be entered exactly as abbreviated above.

This report was done with support from the Department of Energy. Any conclusions or opinions expressed in this report represent solely those of the author(s) and not necessarily those of The Regents of the University of California, the Lawrence Berkeley Laboratory or the Department of Energy.

Reference to a company or product name does not imply approval or recommendation of the product by the University of California or the U.S. Department of Energy to the exclusion of others that may be suitable.

TECHNICAL INFORMATION DEPARTMENT LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA BERKELEY, CALIFORNIA 94720