

# THE WEST BANK BUFFER

West Bank Computer Center  
University of Minnesota

## SUMMER EDITION

1973

### BLOCK TIME USERS

A new policy allows block time users to run, connected to the 6600, on Sunday nite between 4:00 p.m. and midnight. All persons interested in becoming qualified block time operators on the 3200 should contact Hugh Smith or Helen Nelson in 93c Blegen Hall. Remember, if you have taken the block time course but have not operated in the last six months, your qualification has lapsed and you must requalify.

### SUMMER HOURS

Summer hours are identical to spring hours. We will be open on Saturdays. The schedule is reprinted below.

Mon - Fri 8:00 a.m. - 12:00 midnight  
Sat 8:00 a.m. - 2:00 p.m.

The center will be closed on Wednesday, July 4 for a Civil Service holiday.

### TIME SHARING LAB

The West Bank instructional time sharing lab is available during summer sessions. Any instructor who wishes to use the MERITSS system for a class related project should contact Hugh Smith. The time sharing lab is located in 167 Social Sciences tower and its hours are as follows:

Mon - Fri 8:30 a.m. - 4:30 p.m.

Additional hours may be scheduled by providing a room monitor and

checking out a key from Hugh Smith or Helen Nelson in 93c Blegen Hall.

### FISCAL YEAR ENDS ALL ACCOUNT - NUMBERS WILL CLOSE UNLESS RENEWED

All 3200 and 6600 account numbers will become invalid on July 1. You must renew existing accounts in order to continue storing tapes at Lauderdale or to maintain disk pack space reserved under the old number.

The forms are even simpler to fill out than last year so hurry down to 93c Blegen and pick one up from Helen.

### NIFTY MOD PROVIDES Ø29 CAPABILITY

Tom Berg has implemented an Ø29 to Ø26 conversion routine as part of our IMPORT package. Thus it is now possible to read cards punched on an IBM Ø29 keypunch without converting them. From a users point of view, this modification is identical to one available at Experimental Engineering. The write-up from U.C.C. Notes and Comments is reprinted here to provide documentation.

### 029 KEYPUNCH CARD INPUT

The installation standard for the Exp Eng & West Bank remote station is the 026 keypunch card input. The user may override this standard to select 029 keypunch card input by punching consecutively the characters 2 and 9 into

029 KEYPUNCH CARD INPUT (cont'd)

columns 79 and 80 of his JOB card or any 7/8/9 end-of-record card. The newly selected keypunch mode then remains in effect until the end of the job or until it is reset by the characters 2 and 6 consecutively punched into columns 79 and 80 of a 7/8/9 end-of-record card. The user may correctly read an input file of records having consecutive or alternating keypunch modes by punching 26 or 29 on appropriate 7/8/9 cards preceding the corresponding 026 or 029 records. If columns 79 and 80 of a 7/8/9 end-of-record card is blank or does not contain the character pair 26 or 29, the previously selected keypunch mode or the 026 default mode is used.

The particular conversion of 029 card codes to CDC display code that has been implemented on our system is described in the attached table. This mapping was designed to enable FORTRAN, SNØBOL, and CØBØL users of the IBM/360 to run their card programs on the CDC 6600 without any major repunching of cards. Since many of the 029 keyboard characters are not directly available in the CDC 6600 63 character set (particularly those needed in SNØBØL) the conversion maps 029 card codes into the corresponding display code substitutes which are generally accepted by CDC 6600 compilers.

Often, minor changes must be made in an 029, IBM/360 program deck in order to be compatible with the CDC 6600 compilers. For example, in a FORTRAN program, a program card may be a necessary addition in order to declare files used in the program. This additional card must either be punched on an 029 machine or punched by an 026 machine simulating an 029 machine. In the latter case, the attached table of comparative punch codes may be quite useful. The punches made by both keypunch machines are identical for many of the most common keyboard characters including the alphabetic, the numeric, and the comma, period,

minus, asterisk, and slash.

Caution to 029 FORTRAN users: The use of the apostrophe ' to denote hollerith strings is nonstandard FORTRAN and is acceptable only to the MNF compiler.

Hollerith Card Conventions table is on page 3.

CRTFTN TWEAKED AGAIN

CRTFTN is now disguising itself as a real live compiler by sneakily calling FORTRAN on its own. This saves a little more time and provides a simple one control card call to process CRTFTN programs. The parameter list on the CRTFTN card now includes these options L,X,Ø,F which are described below:

L if present causes a CRTFTN listing to be produced.

,X = ii specifies the file to which executable binary will be written by the FTN compiler. Default is ii = 56.

,Ø = jj file ordinal of output from CRTFTN and input to FTN  
Default jj = 54

,F = i if i = 0 no FTN call made  
i = 1 generates FTN, I=jj,X=ii  
i = 2 generates FTN, I=jj,X=ii,L  
i = 3 generates FTN, I=jj,X=ii,L,M  
i = 4 generates FTN, I=jj,X=ii,  
L,M,A  
Default is i = 2

,I = kk specifies that ordinal or unit from which CRTFTN input is read.  
Defaults to input

,999999 The size of the array IDATAW. This array holds literal strings produced by define statements. Thus the array can be eliminated if no define statements are used.

West Bank Computer Center  
Hollerith Card Conventions

	Display	CDC 63-Character Set	Ø29 Keyboard	Hollerith (026)	Hollerith (029)
Identical	01 thru 11	A thru I	A thru I	12-1 thru 12-9	12-1 thru 12-9
	12 thru 22	J thru R	J thru R	11-1 thru 11-9	11-1 thru 11-9
Identical	23 thru 32	S thru Z	S thru Z	0-2 thru 0-9	0-2 thru 0-9
	33 thru 44	0 thru 9	0 thru 9	0 thru 9	0 thru 9
Identical	45 46	+ -	+ -	12 11	12-8-6 11
	47 50	* /	* /	11-8-4 0-1	11-8-4 0-1
Identical	51 52	( )	( )	0-8-4 12-8-4	12-8-5 11-8-5
	53	\$	\$	11-8-3	11-8-3
Identical	54 55	= blank	= blank	8-3 no punch or 6-8	8-6 no punch or 0-8-2
	56 57	, (comma) . (period)	, (comma) . (period)	0-8-3 12-8-3	0-8-3 12-8-3
Identical	60 61 62	≡ [ ]	! ç _ (underline)	0-8-6 8-7 0-8-2	11-8-2 or 11-0 12-8-2 or 12-0 0-8-5
	63	: (colon)	: (colon)	8-2	8-2
Identical	64 65 66	’ → v	' (apostrophe) ? 	8-4 0-8-5 11-0 or 11-8-2	8-5 0-8-7 12-8-7
	67 70 71 72	^ † ‡ <	& " (quote) @ <	0-8-7 11-8-5 11-8-6 12-0 or 12-8-2	12 8-7 8-4 12-8-4
Identical	73 74 75 76 77	> < > ⌋ ; (semicolon)	> # % ⌋ ; (semicolon)	11-8-7 8-5 12-8-5 12-8-6 12-8-7	0-8-6 8-3 0-8-4 11-8-7 11-8-6

STATISTICAL CONSULTANT

Ralph Krishnan will be our statistical consultant during the first summer session. He will help users who have problems with OMNITAB, BMD, or SPSS programs. Ralph will be available in room 167 Social Sciences Tower during the following time:

Mon, Tu, Th 12:30 p.m. - 2:30 p.m.  
Weds. even. 8:00 p.m. - 11:00 p.m.  
Fri. 12:30 p.m. - 1:30 p.m.

The night time hours are scheduled to help those extension students who have consulting problems.