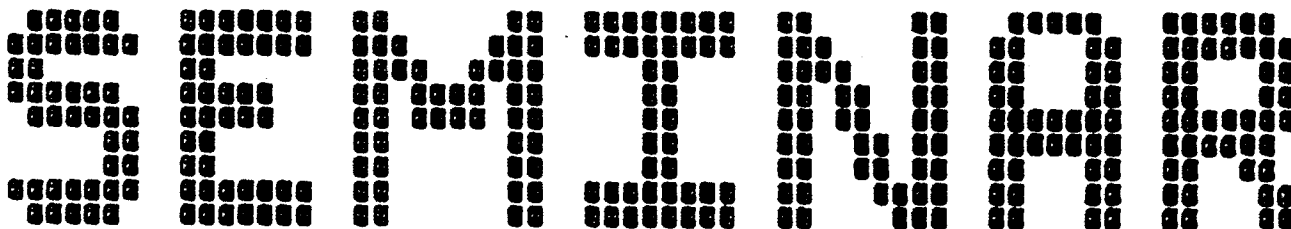
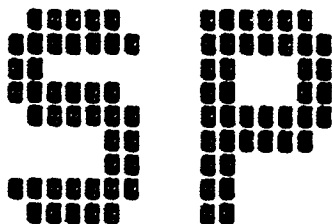


JUNE 15, 1970 NEWSLETTER VOLUME 2, NUMBER 3

ST. PAUL CAMPUS COMPUTING CENTER
26 NORTH HALL
ST. PAUL CAMPUS
373-0987 373-0990



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## JUNE BILLING

The Center will journal voucher the departments who have utilized our services in June, on Monday, June 22, 1970. In this manner, all business activities will be cleared before the fiscal year, 1969-70 comes to an end. Our year-ending cutoff will be on Friday, June 19th, at 4:30 PM --- all activity thereafter will be processed at the end of July, as fiscal year 1970-71 activity.

## ACCOUNT NUMBERS FOR THE NEW FISCAL YEAR

All of our customers who currently have one or more of our '8000' account numbers which no longer reference the proper budget number should contact our secretary, Mrs. Eva Klein and 1) request that the corresponding '8000' account number be cancelled or 2) have the necessary changes made to the corresponding '8000' account number record or 3) request a new '8000' account number.

All free-time account numbers (the '2000' series) are being cancelled June 19, 1970. We have no desire to discourage the use of our facilities, but we must be assured that the free-time account numbers are being used for the original purpose intended. Should an individual have additional work or new work for which he feels a free-time account number is justified, he may obtain free-time request forms from the Center, and make application for the same.

## FORTRAN IV PI COURSES

The Computing Center has a number of FORTRAN IV Programmed Instruction Courses available (self taught computer programming course) which may be signed out without charge for a period of two months. If you are interested in learning to program a computer, these will be of great benefit to you. To obtain manuals, please contact our secretary, Mrs. Eva Klein, 26 North Hall, 373-0987.

## ANNOUNCEMENTS

1. At the present time, we are in need of work for our computer programmers. Individuals who are in need of such a service should contact Agnes Leong or Dave Schempp.
2. Individuals wishing to use the Center's data processing equipment outside the normal working hours may do so by obtaining keys from our secretary, Eva Klein.
3. Because of infrequent usage, the Center no longer has an IBM 548 Interpreter. It has been replaced by an IBM 029 Key Punch Machine. (This particular model has the "Interpreting" feature). The 029 Key-punch-Interpreter can only interpret and print out directly over the corresponding columns. Its speed is 18 cards per minute per 80 column card; however, if less than 80 columns are to be interpreted, the use of a program card will enable the machine to skip columns not being interpreted, thereby increasing the amount of cards being processed per minute.

With the addition of the above machine, the Center now has two 029 Keypunch-Interpreters. They both are located in Room 24, North Hall and are under the control of the Operations Section. Interpreting jobs should be submitted to the operations section, giving the following information: 1) the specific columns to be interpreted and 2) the SPCCC project number.

4. We have recently added another 029 Keypunch machine in the work area in Room 14. The usage of the two keypunch machines at this location is based upon a first-come-first-served basis. The only requirements are that the user record the time started and finished on the 'Machine Record Log' sheet along with his name, project number and date.

If both machines are occupied and a person has an immediate need to keypunch, contact the Operations Supervisor for assistance. In all probability, some arrangement can be made.

## COMPUTING CENTER FACILITIES QUESTIONNAIRE

We are interested in providing the best service possible to all facility users within the limitations of the resources at our disposal. To properly evaluate the various types of services we provide, it is necessary to obtain the user's point of view. We request your cooperation in completing the following questionnaire and return it to 26 North Hall, or drop it in the SPCCC Suggestion Box. Although we may not be able to respond to all of your suggestions or be able to make immediate changes, we will be aware of the user needs and will take these into account in any future planning.

### SPCCC QUESTIONNAIRE II

6-12-70

1. Are you currently using our Computing Center facilities?    yes     no
2. Do you anticipate using our Computing Center facilities within the next year?    yes     no
3. Do you use other computing facilities off this campus?    yes     no
4. Should there be more Computer Science courses offered for credit on the St. Paul Campus?    yes     no   
    What type \_\_\_\_\_  
    \_\_\_\_\_
5. Should the Center offer more orientation sessions or short courses?    yes     no   
    What type \_\_\_\_\_  
    \_\_\_\_\_  
    Would you attend:    yes     no   
    When should these be scheduled to meet your needs?  
    \_\_\_\_\_
6. Do you have any suggestions for the improvement of the following services/products:  
    Keypunching \_\_\_\_\_  
    \_\_\_\_\_
- Programming \_\_\_\_\_  
    \_\_\_\_\_
- Computer Operation \_\_\_\_\_  
    \_\_\_\_\_
- Data Processing materials \_\_\_\_\_  
    \_\_\_\_\_
- Other \_\_\_\_\_  
    \_\_\_\_\_
7. Please provide any additional information that you feel is important to the overall needs of the user of the St. Paul Campus Computing facilities on the back of this questionnaire.

ADVENTURES\_IN\_FORTRAN\_  
Currently at Level F/DOS

CURRENT PROBLEM:

Program:

```
DIMENSION IARRAY(100)          SUBROUTINE SPCCC (IX, N)
DO 10 I=1, 100                 DIMENSION IX(N)
10 IARRAY(I)=I                 PRINT 1, IX
CALL SPCCC (IARRAY(50), 5)     1 FORMAT (1X, 40I3)
CALL EXIT                      RETURN
END                             END
```

Question: What values are printed?

-----  
ANSWER TO PREVIOUS PROBLEM:

Program:

```
DIMENSION IVAL(11)
DO 5 I=1, 11
5 IVAL (I)=11-I
PRINT 1, IVAL
1 FORMAT (11I2)
CALL EXIT
END
```

Does the program print the requested values as stated in the problem?  
No.

The following values are printed at the top of a new page.

0 9 8 7 6 5 4 3 2 1 0

What happens ?

The tens position of the first printed value (10) corresponds to the first printed position. The FIRST print POSITION is ALWAYS a PRINTER CONTROL character and IS NEVER PRINTED. Therefore the digit 1 was lost and the printer advanced to the top of a new page. This problem shows how significant digits can be lost if no allowance has been made for the control character.

A new printer control character (9) is now available in F-level Fortran. See page 5 for a description of the available printer control characters.

## PRINTER CONTROL CHARACTERS IN FORTRAN

When formatted records are prepared for printing, the first character of the record is not printed. It is treated as a control character. It can be specified in a FORMAT statement with either of two forms of literal data: either 'x' or 1Hx, where x is one of the following:

Character x	Available Under		Function
	FORTRAN	FFORTRAN	
blank	yes	yes	Advance 1 line before printing
0	yes	yes	Advance 2 lines before printing
1	yes	yes	Advance to 1st print line of next page
+	yes	yes	Do not advance before printing
* 9	no	yes	Advance to the 49th print line of the page

For output on the other units (tape, punch, disk, etc.), the 1st character of the record is treated as data.

For functions, other than those described above, SPCCC has a library subroutine called CHANEL. A writeup may be obtained from the secretary. Changes to the CHANEL routine writeup are on page 6 of this newsletter.

\* Note: This control character is not described in the IBM FORTRAN manuals. The 49th print line is approximately 2 1/2 inches from the bottom of the printer page.

## SP SEMINAR

On Thursday, June 18th, we are offering a computer program orientation session on the SP (statistical programs) that are available on our system.

PLACE: Room 6A North Hall (lounge area)

TIME: 2:30 to 4:30 PM

This time will be spent primarily in demonstrating the use of the existing routines and programs that are available on our 360 System. The subject matter will be presented at an introductory level and geared to individuals having limited knowledge of data processing or of the facilities available on our 360 System.

### C H A N E L C H A N G E S

CHANEL is a SPCCC library routine callable from FORTRAN.

This routine controls the advancement of print forms in conjunction with the printer carriage tape. This routine was written because present FORTRAN compilers are unable to execute any forms control other than top-of-page, double spacing suppress line advancement.

Make the following changes to the writeup.

1. From the Description Introduction, delete '(excluding 9)'.
2. From Part A, delete 'but not 9'.
3. Delete all of Part C. (Restrictions).

### C H O V E R C H A N G E S

CHOVER is a SPCCC library routine callable from FORTRAN.

This routine has the facility of replacing the asterisk(s) in a field overflow condition with any other desired character including a blank. As most users know, the object code generated from the FORTRAN compilers produces a string of asterisks when the field definition as described by a format statement is inadequate to handle the magnitude of the number being outputted. The use of this function gives a user the facility of purposely causing a field overflow to produce a field of any desired character string including a blank.

A writeup of this routine may be obtained from the secretary. In order to make this routine compatible between the E and F level compiler, the core size has been increased from 43 to 136 bytes.

### M A I L I N G L I S T C H A N G E S

If you wish to be included in our newsletter mailing list or wish to remove your name from the list, please fill out the following form and return to Mrs. Eva Klein, 26 North Hall. If you have any colleagues to whom the newsletter might be of interest, please show them this issue. -----

Remove my name from mailing list

Add my name to mailing list

Change my address

Name \_\_\_\_\_

Dept. \_\_\_\_\_

Campus Address \_\_\_\_\_