THE NOTICE FILE SYSTEM

by

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The Notice File contains the latest information on the status of the computer system at the University of Chicago Computation Center. The information in the Notice File supplements information available in other Center documentation, such as Memoranda and program manuals. While Memoranda and manuals are updated infrequently and with considerable expense to both the Center and the user, the Notice File is updated regularly, often daily, at minimal expense to the Center and little, if any, expense to the user who accesses it.

The most important point in our concept of the Notice File is that it contains only supplemental and transient information. Information is deleted as soon as it becomes irrelevant or untrue, or when it has been incorporated in more permanent Center documentation. In this way, the file is kept to a size which does not immediately discourage users from attempting to get information from it. Items of information are as concise as possible (hopefully without omitting important details), so that listing an entire item even on a slow terminal is not a frustrating experience.

The Notice File covers a wide range of topics. Included are such things as program bugs, new policies, documentation errors and additions, temporary hardware problems, announcements of upcoming seminars, courses, and meetings, changes in rates, and other dynamic information of interest to Computation Center users. In addition, the Notice File contains up-to-date version numbers of language processors and major applications packages.

The Notice File is considered to be a primary source of information to the user and, just as with program documentation, users are expected to check it regularly for items of concern to them. Since the Center operates on a full-cost recovery basis, it is particularly important that we provide users with complete and correct information to protect ourselves from excessive refunds on supported systems and the users from non-refundable runs which use documented, but unsupported software. Our liability for refunds on supported systems is limited if the problem, along with an appropriate bypass, is published in the Notice File.

Description of the Notice File

The Notice File is divided into a number of sections, each dealing wth a different area of user information. Each of the major programming languages has its own section--FORTRAN, PL1, ALGOL, Assembler. Among the other section names currently used are General News, VS/HASP, Hardware, MILTEN/WYLBUR, Courses & Meetings, Statistical Packages, Utilities, TSO and Linkage Editor.

Within each section are items which are relevant to that category. For example, items which detail bugs in any of the Fortran Compilers would go into the Fortran section. Occasionally an item will be relevant to more than one section; in that case, the item will be in each of the sections. As an example, an item with information on calling the SORT program from a higher-level language would be put in both the COBOL and PL1 sections. Likewise, an item of interest to all terminal system users would be listed as both a TSO and a MILTEN/WYLBUR item.

Each item contains the following:

Date of entry into the file
An item number by which it may be referenced
A title summarizing or suggesting its contents
A detailed text
A "flash" indicator

The "flash" indicator is turned on in the Notice File if an item is considered to be of particular importance to a large segment of users. We also include "flash" items in a dataset which is printed by the operating system on the first inside page of each job's output. However, limitations on the size of the output flash dataset occasionally force us to remove items from it before their importance is diminished. But these items can continue to have the flash indicator within the Notice File until the indicator is turned off or the entire item is removed.

User Access to the File

Users can obtain information from the Notice File in four ways: in the batch, under TSO, through WYLBUR, and by reading posted copies of the File. In all cases, an interface has been provided so that the user never has to know the actual format of the File.

***Batch

Batch users may execute a catalogued procedure called NOTICE which prints a formatted copy of the entire Notice File. The items are printed in order by section; within a section all "flash" items are printed first, followed by the other items in order by recency of the item. On the first page a Table of Contents is printed which lists for each section the sequential item numbers of all the items within it, followed by the titles of all "flash" items and all items which were entered within the last two weeks. In this way, a reader can tell at a glance whether new or particularly important information about his or her areas of interest is available.

Figure 1 shows a sample of Table of Contents and Figure 2, a sample page from the Notice File.

***Posted Copies

On a weekly basis, the Computation Center uses this batch NOTICE procedure to print approximately fifteen copies of the Notice File. These copies are distributed to all major sites on and off campus where computing activities take place. By making the File easily available, often hanging on bulletin boards, we hope to reach those users who would not access it themselves but might read it while standing around waiting for output.

***TSO

The TSO user can access the Notice File by executing the NOTICE command processor. Requests for particular kinds of information are made with the LIST command, which has the following syntax:

LIST <list of section names or ALL>
<,TEXT><,TITLES><,#XXXX<,#YYYY..>>
<,FLASH><,age of item in weeks>

where TEXT lists the entire text of the selected items

TITLES lists only the titles of the selected items

#xxxx,#yyyy,# . . . are item numbers to be listed

age of item in weeks selects only items which have entered in the last n weeks

FLASH lists only items considered "flash" items

If neither TEXT nor TITLES is specified, only the TITLES are printed. If any of the titles are of particular interest, the entire text can be obtained by giving the item numbers and asking for text.

Some sample LIST statements follow:

LIST FORTRAN 2	lists titles of all Fortran items entered within the last two weeks
LIST ALL FLASH	lists the titles of all flash items
LIST TEXT #130 #175	lists the text of two specific items
LIST STAT MATH TEXT	lists all math and statistical package items

For new users, the HELP command gives a complete description of the TSO access, the HELP SYNTAX command describes the LIST command, and the HELP SECTIONS command lists the section names. The user may also choose to be prompted for the

necessary information, such as the section names and item numbers.

Figure 3 demonstrates a sample users TSO session.

***WYLBUR

WYLBUR users can get information from the File through a WYLBUR EXEC file which is functionally quite similar to the TSO command. It does not, however, have the same degree of flexibility because of limitations of the WYLBUR preprocessor.

Updating the File

The Notice File is updated using the TSO command processor NOTICE, the same processor executed by users who LIST the file. The UPDATE command provides many of the features of a text editor, including the ability to add new items, to delete old items, and to edit the content of an item. Within the edit function, one can list the entire item, insert a line into the text, delete a line, replace a line, renumber the text lines, and change such information as the "flash" indicator, an item's date or its title. For new items that are to be added to the File, NOTICE will prompt for all the needed information, including section name, date, title, text, and item number. For items to be deleted, NOTICE requires only an item number. The UPDATE command is a privileged command whose use is limited to a single account number.

Figure 4 demonstrates a TSO session in which the UPDATE command is used.

Some Technical Details about the File

The Notice File text is kept in a VSAM keyed direct access file. The key is the item number. Most of the activity centers around a second VSAM file which contains a record of descriptive information for each item. It is this file which can be quickly passed over for the selection of groups of items that fit specified criteria. When an item is selected and item text was requested, the item number is picked up from this file and used as a key into the larger text file so that the text may be printed.

The Notice system, which runs under TSO and consists of the user LIST and the privileged UPDATE commands, is written primarily in PL1. When an update session is complete, the last thing the program does is to create a second version of the Notice File. This new file is in a format which can be accessed by WYLBUR, since WYLBUR cannot use VSAM files. The space required to store this additional Notice File is insignificant compared with the benefit that it can bring to our large WYLBUR community.

How to Keep a Notice File Current

The most difficult part of establishing a Notice File is assigning the responsibility for its regular maintenance and obtaining the necessary input from managers and other staff members who are unaccustomed to regularly thinking in terms of user communication. Without the cooperation of certain key staff members, it would be impossible to offer this facility. For about a year after the establishment of the Notice File in early 1974, it was poorly maintained and of little benefit to anyone. Since then, we have established regular procedures for promptly obtaining information from the systems, operations, and business office staffs on problems and changes that might affect the user community.

First of all, we have provided a "Notice File Input Form" which is used for the submission of items. A copy of the input form is included here as Figure 5. These forms are available in several locations at the Center. After a form is completed, it is directed to the technical writers who have major responsibility to the File. To remain flexible and ensure that no items are lost due to an aversion to filling out forms, the file editors also take items over the telephone. The same input forms are completed in these cases. By filing the input forms in a notebook, and noting on them the dates for insertion and deletion of the items, we have a ready-made historical record of all problems, announcements, and other things relevant to the Center. This record has been useful several times in situations where we have had to reconstruct past events.

Secondly, we have established weekly meetings between one of the file editors and the systems programmer who has major responsibility for systems maintenance activities. During these meetings, they review what test systems are going to be made available or are to move into production status; what new problems in the compilers, the operating system, or other processors were reported or diagnosed during the week; the status of problems that previously had been reported in the File; and any other news about the system. Items are then added, deleted, or modified as appropriate.

We have had good success with this approach. Since the file editor who is involved in these meetings is also an advisor, a great deal of this information is passed on to the other advisors in informal conversations and in advisor meetings. The user thus benefits not only from having systems information available in the Notice File, but also from better and more informed advice.

Finally, the administration has set down certain rules and procedures to follow in making systems, operation, PR policy changes, and a key element in these procedures is proper notification to users in the Notice File. Reference to the Notice File is made throughout several policy documents, such as "Refund Policies and Procedures" and "Program Support". We make clear in these documents that we are committed to providing proper information through this medium and that the user is responsible for being aware of the File's content.

FIGURE 1

NOTICE FILE TABLE OF CONTENTS

```
 CCC    OO    M     M  PPPP          CCC   EEEE   N    N  TTTTT   EEEE   RRRR
C      O  O   MM   MM  P   P        C      E      NN   N    T     E      R   R
C      O  O   M MM M  PPPP         C      EEE    N N  N    T     EEE    RRRR
C      O  O   M    M  P            C      E      N   NN    T     E      R R
 CCC    OO    M    M  P             CCC   EEEE   N    N    T     EEEE   R  R

       N   N  OO    TTTTT  I   CCC   EEEE         FFFF   I  L      EEEE
       NN  N O  O     T    I  C      E            F      I  L      E
       N N N O  O     T    I  C      EEE          FFF    I  L      EEE
       N  NN O  O     T    I  C      E            F      I  L      E
       N   N  OO      T    I   CCC   EEEE         F      I  LLLL   EEEE
```

TABLE OF CONTENTS — ENTRIES

FIGURE 2
SAMPLE PAGE OF NOTICE FILE

```
----------------------
VS/HASP.............
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                                                          ENTRY 16
    *** 09/21/76 #0449 SYSTEM PROBLEM CAUSING 0CX ABENDS

    SINCE SUNDAY MORNING, SEPT. 19, THERE HAS BEEN A PROBLEM
    WITH THE UCINFO MACRO WHICH IS BUILT INTO SEVERAL
    UTILITIES AND IS CAUSING THEM TO ABEND WITH 0C4'S, 0C1'S,
    ETC.  THIS INCLUDES PROGRAMS LIKE MOVESTOR, USERVTOC,
    & TSO LISTOFF.  WE HOPE TO HAVE A FIX WITHIN A DAY OR TWO.

                                                          ENTRY 17
        09/07/76 #0443 TAPE MESSAGES NO LONGER FLOOD CONSOLE

    USERS WHO ACCESS MANY TAPE FILES IN A SHORT AMOUNT OF TIME
    HAVE OCCASIONALLY HAD THEIR JOBS CANCELLED DUE TO A LARGE
    NUMBER OF TAPE STATUS MESSAGES FLOODING THE OPERATOR CON-
    SOLE, ESPECIALLY IN DUMPLABL AND TAPECOPY JOBS.  THIS WILL
    NO LONGER OCCUR.  ON SUNDAY, SEPT 7, THE SYSTEM WAS CHANGED
    SO THESE MESSAGES ARE NO LONGER DIRECTED TO THE CONSOLE.

                                                          ENTRY 18
        08/31/76 #0430 NOTE ON USING DSN ON SETUP CARD

    WHEN THE DSNAME PARAMETER IS SPECIFIED ON A SETUP CARD, THE
    CATALOG IS IMMEDIATELY CHECKED FOR THE UNIT AND VOLUME OF
    THAT DATASET WHEN THE JOB IS READ IN.  THEREFORE, IF THE
    STATUS OF THE CATALOG IN REGARD TO THAT DATASET CHANGED
    BETWEEN THE TIME THE JOB IS READ IN AND THE JOB ACTUALLY
    EXECUTES, AND IF THE CORRESPONDING DDCARD SPECIFIES USE OF
    THE CATALOG, THEN A CONFLICT WILL EXIST AND THE JOB WILL BE
    CANCELLED.

----------------------
FORTRAN.............
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                                                          ENTRY 19
        09/10/76 #0407 FORTRAN DIRECT I/O AND BAD TRACKS

    IF A BAD TRACK IF FOUND IN A FORTRAN DIRECT ACCESS FILE,
    REASSIGN THE BAD TRAK USING 'GETACT' IN IEHDASDR OR
    IEHATLAS AND MAKE SURE THE ALTERNATE TRACK IS INITIALIZED
    THE SAME AS THE ORIGINAL BAD TRACK.

                                                          ENTRY 20
        00/00/00 #1002 CURRENT VERSIONS OF FORTRAN

    THERE ARE CURRENTLY FOUR VERSIONS OF FORTRAN: WATFIV
    (UNIV. OF WATERLOO), FORTRAN G1 VERSION 2.0, FORTRAN H
    EXTENDED VERSION 2.1, AND OS VERSION 21.7 FORTRAN H.
    THERE IS ALSO A LIBRARY USED BY BOTH FORTRAN G1 AND H
    EXTENDED, THE MOD II LIBRARY VERSION 2.0.
```

FIGURE 3

```
READY
notice
DO YOU NEED HELP?
?no
?list cobol

*** 12/09/75 #0315 RESTRICTIONS ON VS COBOL
    11/24/75 #0310 VS COBOL NOW AVAILABLE AS A TEST SYSTEM
    12/05/74 #0116 CALLING SORT & USING COBOL DISPLAYS
    02/21/74 #0026 VARIABLE RECORDS IN COBOL
    00/00/00 #0001 CURRENT VERSIONS OF COBOL

?list #310 text

    11/24/75 #0310 VS COBOL NOW AVAILABLE AS A TEST SYSTEM

IBM'S VERSION OF COBOL THAT SUPPORTS VSAM (VIRTUAL STORAGE
ACCESS METHOD) IS NOW AVAILABLE AS A TEST SYSTEM.
PROCEDURES TO USE THIS NEW VERSION HAVE THE PREFIX
   COBV
OTHERWISE THEY ARE AS DOCUMENTED IN THE OS/VS COBOL COMPILER
PROGRAMMERS GUIDE SC28-6483-0.

IF YOU HAVE A LOAD MODULE WHICH WAS CREATED UNDER !

?end
READY
```

FIGURE 4

```
READY
notice
DO YOU NEED HELP?
?no
?update
ENTER 'COLLECT','EDIT','DELETE', OR 'END'
?collect
ENTER ITEM NUMBER
?400
ENTER SECTION NAME
?general
ENTER DATE OF ITEM IN THE FORM MM/DD/YY
?06/01/76
IS THIS A FLASH ITEM?
?yes
ENTER TITLE OF ITEM
?new rates as of july 1
ENTER TEXT OF ITEM
TO END TEXT ENTER '$$$' AT START OF LINE
0030the following rate increases will go into effect july 1:
0040    keypunching    $9.75/hour
0050    data processing assistance     $16.90/hour
0060$$$
ENTER 'SAVE' OR 'END'
?save
ITEM NUMBER 400 SAVED IN MASTER FILE
ENTER 'COLLECT','EDIT','DELETE', OR 'END'
?edit
ENTER ITEM NUMBER
?400
?help edit
THE ALLOWED EDITING COMMANDS ARE: 'LIST','RENUMBER','SAVE'.
'END','REPLACE XXXX','DELETE XXXX','INSERT XXXX', WHERE XXXX
IS A LINE NUMBER.  TO MODIFY TITLE LINE USE LINE #0010.
YOU WILL BE PROMPTED FOR CHANGES IN DATE, FLASH, & TITLE.
?list
0010*** 06/01/76 NEW RATES AS OF JULY 1
0020
0030THE FOLLOWING RATE INCREASES WILL GO INTO EFFECT JULY 1:
0040    KEYPUNCHING     $9.75/HOUR
0050    DATA PROCESSING ASSISTANCE     $16.90/HOUR
?insert 60
ENTER TEXT OF LINE TO BE INSERTED
?    clerical assistance     $7.50/hour
?end
YOU DID NOT SAVE THE ITEM. ENTER 'SAVE' OR 'END'
?save
EDITED ITEM NOW IN MASTER FILE
?end
END OF EDIT
ENTER 'COLLECT','EDIT','DELETE', OR 'END'
?end
UPDATE COMPLETED
?
```

FIGURE 5

NO._____

DATE

ENTERED_____

NOTICE FILE INPUT FORM

NAME:_____

DATE___/___/___ OUTPUT FLASH?__YES __NO POST?___YES ___NO

SUBJECT:__ GENERAL NEWS

__ HARDWARE

__ SEMINARS AND COURSES

__ SPECIAL INTEREST GROUPS

__ MISCELLANEOUS MEMORANDUM UPDATES

__ OS/HASP

__ PROGRAM OR SYSTEM (SPECIFY)_____

TITLE:_____

DATE FOR DELETION (if possible) _____

TEXT:

DATE DELETED_____

REASON:_____