NOTICE OF CHANGES TO THE OPERATING SYSTEM

Bob Zalusky installed his proposed change to the permanent file utilities
allowing the PN=0 option and a zero (0) parameter on the PACKNAM card (see
DSN 2,9 p1). Bob also installed a modification from level 12 which repairs
a small problem in RENAME.

Alan Johnston contributed the following collection of modifications.

1) TELEX ports no longer hang when a user simply dials in and then hangs
    up the phone.

2) Alan installed the new DSD FIND command. The format of the command is
    FIND,XXXXXXX., where XXXXXXX is a job/file name in either the Q-display
    or the H-display. The effect of the command is to intensify the specified
    entry if it exists and thus render the problem of finding a specific job/file
    trivial. To clear the effect of the FIND command, the operator types
    . (period) , carriage return.

3) The long standing problem with reading paper tape through TELEX with
    the X-ON feature is now fixed.

4) Users with default character set of ASCII in the VALIDUS file now actually
    are logged-in with that terminal mode.

Bill Elliott supplied a new source version of EXPLIB and added a new common
deck COMSEXF to be used by the new TAPE utility.

Bruce Johnson installed a new version of DUMPPDP. The new version suppresses
printing of duplicate lines of zero. Bruce also reorganized the format of the
DSD MSG command. This command is used to send messages to either SUPIO or EXPORT
users. The new format of the command is:

        MSG,EXPORT, XX....X.
or   MSG,SUPIO, XX...X.

where XX...X is the message. DSD will not recognize the old command format.

PROPOSED CHANGES TO THE OPERATING SYSTEM

Don Hamnes has written a lengthy proposal detailing his profuse thoughts on the
implementation of DIVERT and DISPOSE.

DIVERT AND DISPOSE - Don Hamnes

        The following is meant is describe my current thoughts on the
implementation of divert and some DISPOSE changes.

I. Divert
    a. Externally visible to user aspects of divert.
        1. Control cards, macros, pp functions.
            a. NODVRT(p1,p2,p3, . . ., pn) [Control card to be defined in
               FILES].

               Where pi designates a file type in the range [olft,ohft). The
               mnemonics defined in nmft will be used:

                        PR -- print.
                        PH -- punch.
                        XM -- XMIT.
                        BT -- batcher.
                        PL -- plot.
                        BI -- binary.

               For every output file type specified on a NODVRT card, the
               corresponding bit in SITW will be set; this will result in
               divertable files not being diverted as explained below. If no
               parameters are specified on the NODVRT card, then all output
               file type bits in SITW are set.

               Users have to be validated (by account number) to use this
               card (a bit in AACW will have to be used for this purpose).

            b. DVRT(p1,p2,p3, . . .,pn) [Control card to be defined in
               FILES].

               The pi are defined as in (a.).

               For every output file type specified on a DVRT card, the
               corresponding bit in SITW will be cleared. If no parameters
               are specified (DVRT.), then all bits will be cleared.

            c. DIVLIM(<site>,<file type>,<i>) [KCL function to be defined in
               CONTROL].

               DIVLIM will return the current sector limit for files of type
               <file type> sent to <site> (2 character site mnemonic) by
               either DISPOSE / RELEASE (<i> = D) or 1cJ (<i> = J). This in
               conjunction with the currently existing SIZE function would
               allow the user, via KCL, to take different actions on the
               basis of whether or not an output file would be diverted.

d. NODVRT QT [Macro to be defined in CPCOM].

QT may be any of the mnemonics which Pi of Part (a) may be. This macro specifies setting the bit corresponding to the file type represented by QT. If QT is omitted, then all relevant bits in SITW (byte 0) are set.

e. DVRT QT [Macro to be defined in CPCOM].

QT may take on any of the values which Pi of Part (a) may take on. This macro specifies clearing the bit corresponding to the output file type represented by QT. If QT is omitted, then all output file type bits in SITW (byte 0) are cleared.

f. DIVLIM f,s,t,i [Macro to be defined in CPCOM]

Where: f is the address of a one word Parameter.
       s is the mnemonic of a site (if null then current site is used).
       t is a two character mnemonic for an output file type as defined in Part (a).
       i is *d* or *J* depending on whether information for DISPOSE or 1cJ is desired.

As a result of executing this macro, (f) will contain the current sector limit for files of type t sent to site s by either DISPOSE (if i is *D*) or 1cJ (if i is *J*).

g. CPM function 67 will be implemented to set/clear bits in byte 0 of SITW:

call: 18/3LCPM,1/,1/1,4/,12/67b,11/0,1/ind,12/<bit string>

           <bit string> = string of ones and zeros, if bit i in the bit string is set, then bit i of byte 0 of SITW will be set (cleared) if ind is 1 (0). Only the QUFT-OLFT+1 right most bits are used.

h. UFM function 5 will be implemented to provide the DIVLIM function; it will search the VENUS file by calling OSC.

call: 18/3LUFM,1/,1/1,4/12/0,6/5,18/iParam

           (iParam) on the call must contain:

           35/0,1/i,12/<file type>,12/<site code>

           i is 1 for DISPOSE information, 0 for 1cJ information. The result is returned in iParam: 60/size.

i. Add two new Parameters to the DISPOSE control card; they will be valid after the slash (/): [Mods affect FILES.]

L -- implies issue a dayfile message stating in octal the length of the file which is being disposed. The length printed will be the same as that on which the divert decision is based.

AD - Abort DISPOSE if the file cannot be printed, punched, plotted etc. at the user specified site (S =).

The AD parameter would be useful for TELEX users -- they may not want to wait for their output if it will be diverted, or else they may wish to take other action if it would be diverted.

The L parameter would give the user some relative idea of how long he will have to wait for his output; it would also be useful in conjunction with the AD parameter (the length would be printed even if an abort occurred).

j. Add the L and AD parameters to the RELEASE macro [This modification is to CPCOM.]

k. To implement the LFM portion of (i) and (J), indicate the selection of the AD and L parameters by setting bits 21 and 22 respectively in FET+6 for LFM function 16. [This modification affects LFM.]

2. Policies
   a. Types of informative messages to be issued.

      Currently, 1cj issues the following message for all files but the primary output file which are released to the output queues:

         RELEASED TO QT   NNNNNN PRUS,XXXXXXX

      where QT is the queue type designator (PR, PH, or PL),
            NNNNNN is the file length in sectors,
            XXXXXXX is the file name.

      If file XXXXXXX has to be diverted, the following dayfile message may be issued (see part c) following the above message:

         DIVERTED TO XX, PICKUP AT YY.

      XX = mnemonic of the site to which the file has been diverted.
      YY = mnemonic of the site at which the user is supposed to pickup his output.

      If the primary print file is diverted, then the user will get a page of output stating the status of his primary print file (see below). This assumes that his job origin type is in the

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range [BLOT,DHOT).

When a file is DISPOSED / RELEASED (by LFM) and it is diverted, the second message above (DIVERTED TO . . .) may be issued (see part c) to the dayfile after the other messages produced by DISPOSE / RELEASE. Since this message is the last one issued by the LFM release function TELEX users will easily know that their file has been diverted.

When CIO functions 170, 174 or 370 result in an output queue insertion, the above RELEASED TO . . . message will be issued to the user-s dayfile. If a divert occurs then the DIVERTED TO . . . message may also be issued. These CIO functions will be made to produce no queue insertion when the job origin type is >= DHOT.

b. The file length used in determining whether or not a divert is necessary is the length of the file before any dayfile is appended plus the length of the current dayfile is also added in if:
   i. the primary output file is being processed for 1cJ; or
   ii. the file is being inserted into the print queue by a LFM release function and the user requested the dayfile.
   This implies that if a user wants to take different actions thru the use of the DIVLIM function depending on whether or not his print file will be diverted, he may have to find the size of the current dayfile as well as the size of the print file.

c. A file is considered to be divertable, ie. it could be diverted, if:
   i. The length of the file exceeds the sector limit obtained from the VENUS file via Osc.
   ii. The user intended site is down.
   iii. The equipment does not exist at the user intended site.
   iv. The equipment for the current file type is down at the user intended site.

Two questions now arise:
   A. Do we send the divertable file to an alternate site X instead of the user intended site.
   B. Do we inform the user of our actions if we send a non-primary divertable file to site x.

The following table gives the answers to these two questions under a number of circumstances (+ = yes, - = no):

EQUIP EXIST ~~FREE 4DR~~	EQUIP DOWN ~~DOWN~~	NO DIVERT SPECIFIED ~~NEEDED~~	DIVERT	DIVERT MESSAGE
i	ii	iii	A	B
+	+	+	+	+
+	+	-	+	+

EQUIP EXIST	SITE DOWN	NODVRT SPECIFIED EQUIP EXIST	DIVERT	MESSAGE
+	-	+	-	-
+	-	-	+	+
-	+	+	+	-
-	+	-	+	-
-	-	+	+	-
-	-	-	+	-

Where i., ii., and iii. are the following:
  i. Does equipment for the indicated file type exist at the user intended site.
 ii. Is the equipment down at the user intended site or is the user intended site down.
iii. Has NODVRT for the indicated file type been specified.

Note that the AD parameter on a DISPOSE / RELEASE will always result in an abort of a divertable file, even if the NODVRT card has been used.

Note also that for all divertable files which are diverted, the system sector will contain similar information regardless of how question B is answered.

d. Description of the one page of output a user receives when the primary file is sent to a site other than the job origin site and the job origin type is in [blot,dhot).

The general form of the message will be:

    YOUR PRIMARY PRINT FILE HAS BEEN DIVERTED:

    FILE NAME = <file name>
    LENGTH   = NNNNNNNNB PRUS.
    DIVERTED TO <divert to site description>
    PICKUP AT   <pickup site description>

where <pickup site description> is of the form:

    BIN XXXX, site description.

Except as noted below, <pickup site description> is determined by the user intended site (it would be similar to the entries in the SITEBIN writeup).

The exception is when the pickup site is the same as the user intended site. In this case the bin number from the job bin card replaces the default XXXX. If the user didn't specify a

bin number, it will appear as blank.

e. The handling of divert related errors. In general when a system type error occurs, no divert takes place even though it should:

i. A message will be issued and no divert will take place if:
1. The VENUS file is not found or empty.
2. There is an error in the file structure of the VENUS file.
3. The user intended site from 1cj does not exist on the VENUS file (must be a system error).
ii. If the user intended site for DISPOSE / RELEASE does not exist, the job is aborted with a message stating that an illegal destination site was specified.
iii. If the FNT is full or no mass storage space is available for the one page of output produced by 1cj, then no divert of the primary file will take place and an error message will be issued.
iv. If when searching the VENUS file no alternate site exists, an error message will be issued and no divert will take place.

B. Some implementation aspects of divert invisisble to the user:

The desription of changes to QFM originally proposed in DSN 1,6 was for the purpose of consolidating the release functions into one PP program to make it easier to implement the code for divert. It has turned out that QFM was too crowded to efficiently accomplish the consolidation there. Thus, that proposal (except for the idea of making some LFM error messages more explicit) is withdrawn. Instead consider the following:

1. Create a relocatable overlay, ODV, whose function will be to compute the ultimate site, whether or not a message should be issued and to obtain certain quantities for the system sector of the file being released. It will make use of OSC.
2. Make appropriate changes to 1cj, LFM and CIO to utilize ODV and implement auto-divert.
3. Define 2 new common decks for writing dayfile messages for divert: COMPWDD and COMPWRM.
4. define a symbol in PPCOM to be the maximum length of Odv after being loaded.
5. Modify ISF to enter/return the VENUS file as a fast attach file.

I feel that a certain amount of unification of the output queue insertion code has taken place: First, COMPWSS handles the writing of the system sector with history information; together with the common decks it uses it takes up about 570b bytes. Second, ODV represents a certain amount of consolidation of code. In general

though, I think that the functions performed by 1cj and LFM are distinct enough not to combine the common sections of code.

II. DISPOSE
    A. My proposal in DSN 1,14.

    I want to revise my proposal for unequivalenced file names on the DISPOSE control card slightly to make the processing more consistent with the treatment of files at job completion (1cj):

    If a file, FI is unequivalenced (not of the form FI=QI where QI specifies what queue type the file is to be made into), a default QI is selected for it based on the file type:

        1. QI=PR is assumed if the file is a local (LOFT) or print (PRFT) file.
        2. QI=PH is assumed if the file type is punch (PHFT), the file name is neither PUNCHB nor P8 and the initial keypunch mode was selected as 026 (see p. 1-5-6 of the KRONOS Reference Manual, vol. 1).
        3. QI=PB is assumed if the file type is punch (PHFT) and the file name is PUNCHB.
        4. QI=P8 is assumed if the file type is punch (PHFT) and the file name is P8.
        5. QI=P9 is assumed if the file type is punch (PHFT), the file name is neither PUNCHB nor P8 and the initial keypunch mode was selected as 029 (see p. 1-5-6 of the KRONOS Reference Manual, vol. 1).

    The other implied QI-s are based directly on the file type (PLFT files go to the plot queue etc.).

    Bit 23 in FET+6 for LFM function 16 will be used to indicate an unequivalenced DISPOSE / RELEASE of a file.

    Also, change the RELEASE macro such that if the second parameter, which corresponds to the dispostion code QI on the DISPOSE card is not specified then LFM function 16 will be selected with bit 23 set. Note: prior to level 10 CDC used this form of the RELEASE macro to indicate the same function as if COMMON were specified.

    B. Mike Frisch-s proposal in DSN 1,14 for the D parameter.

    If the D parameter doesn-t appear in one of the following forms its use will be considered a fatal error:
        D, D=NO, D=YES.
    Bits 18 and 19 of FET+6 for LFM function 16 will be used to encode what D parameter value was selected. Interpreting the D-parameter field as an octal number:

```
            value              action

              0            default
              1            toggle default (D)
              2            D=YES
              3            D=NO
```

The ability to specify YES and NO instead of just D as a parameter
in the RELEASE macro will be added.

Summary description of FET+6 for LFM function 16:

12/0,24/BIN NUMBER,1/U,1/L,1/AD,1/0,2/D,6/OT,6/FT,6/PF

where: U = 1 if file is unequivalenced.
        L = 1 if file length is desired.
        AD = 1 if abort on divertable file has been selected.

D has been described above, and the other parameters are as usual (no
change).

B-Display Messages and Job Security - B. Johnson

The message area MS1W (or MS2W if active) in CPA is displayed on the Cyber
console B-display. SUPIO and TELEX (DSD) also display this area for each CP.
Presently, 1AJ writes the control statement it is translating to MS1W
immediately after reading it thus allowing SUPIO and TELEX to read and display
potentially priviledged information.

I suggest that 1AJ write the message according to the same rules as when 1AJ
issues a dayfile message with control statement information, i.e., if the
called program has a SDM=entry point present, then no message is written.

A New Subsystem - B. Wells

Due to the increasing usage of inter-terminal communications and game
programs on the Meritss system, it is therefore proposed that a new
subsystem be established, especially for handling these programs. This
subsystem would reside at control point 2 and handle data communications
between TELEX and itself via the "SIC" function. The basic subsystem task
is to gather all input and disperse all output for the appropriate terminals
and the desired games. In general then, the subsystem would be a glorified
data handler.

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Inter-terminal programs generally operate as follows: After each line of input, an attempt is made to attach a direct access file in modify mode or read modify. The programs are generally desired to loop and/or rollout (event) until the file becomes available. Once available the file is read, rewritten and returned. For one or two players, this is not a bad scheme, however with 15+ people accessing the file, many attempts are necessary causing many conflicts with control points and PP's. This subsystem would handle scheduling and the like within itself and the need for a D.A. file would be altogether removed as the user program would have access to all input and output within its memory. The advantage then lies not in less CP time but in less system housekeeping and in fewer RA+1 requests made—yielding less congestion (and thus faster turn around) for the serious user. The various jobs and parts of the subsystem could be "rolled out" of memory thus the subsystem would not sacrifice the extra memory.

SYSTEM MAINTENANCE: People and Procedures

System Programming Project List - T. W. Lanzatella

The following is a relatively firm list of system programming projects. All projects are slated for completion by the beginning of fall quarter.

Bill Elliott

Express Library Manager (EXPLIB)	(90%)
User Interface Routine for EXPLIB	(40%)
Level 12 Conversion	(0%)
RESEX Revision for EXPLIB	(Summer)
EXAMINE (9-Track Version)	(Summer)
TAPEUSE Update	(Summer)

Kevin Fjelsted

APLUM

Barry Fox

Convert Master Accounting Data to 52000	(50%)
Install PROFILE	(Summer)

Rich Franta

Get Systems Group to Shape Up	(99%)

Don Hamnes

AUTO - DIVERT	(90%)

Bruce Johnson

SUPIO Message Processor	(50%)
MINI Computer Protocol	(70%)

Alan Johnston

ECS Display	(95%)
DSD Find Command	(95%)
Document DSD/USERS	(80%)
QDUMP, QLOAD, QFSP for NLR	(0%)
TELEX Timed Input Mode	(Summer)
PORT File Manager	(Summer)
After 5 Rotary Check	(Summer)
ECS ROLLIN/ROLLOUT	(Summer)
Move Advance Time for DSD to MONITOR	(Summer)
Allow 4095 Character Input for TELEX Binary Input	(Summer)

Howard Kurs

Fix Bugs in RANCONV	(99%)
Install Utilities TRIAL and FORM	(50%)
UCC Record Manager Guide	(Summer)
Install Level 12/13 Products	(Summer)
Install and Test COBOL 5	(Summer)
Short Course for 8-Bit Subroutines and FORM	(Summer)

Tom Lanzatella

DSN/NEW Deadstart Tapes	
LEVEL 12	(5%)
Merge 6400/CYBER 74 OS	(.1%)
KRONOS Consortium Correspondence	(20%)
CDC PL/1 Installation, Post Level 10	(85%)
CIMS PL/1 New Version	(Summer)
Operator Guide for TELEX	(Summer)
LEVEL 13	(Summer)

Kevin Matthews

System Statistics/Study	(70%)
Study Moving TRT's Out of CM	(Summer)
Merge 6400/CYBER 74 OS	(Summer)
Password Hashing (Finally)	(Summer)
Update PF GUIDE	(Summer)

Rick Matthews

Cyber Loader Statistics	(95%)
Dayfile Equipment Protection	(50%)
Cyber Loader Mods	(25-75%)
Documenting and Orienting Others on My Projects	(0%)

Andy Mickel

PASCAL Documentation	(10%)
Technical Report	(50%)
User's Manual (Basic Part)	(50%)
LISP Documentation	(10%)
PASCAL Compiler with J. Strait	(Summer)
More User's Manual Stuff	(Summer)
More PASCAL and LISP Documentation	(Summer)
PASCAL Users Group	(Summer)

Jim Mundstock

New ANSI Fortran Compiler	(15%)
ECS Rollin/Rollout	(50%)
Help Move TRT's Out of CM	(Summer)
SUPIO	

Marisa Riviere

Level 12 Products	(10%)
Rewriting CALLPRG Procedures Document	(25%)
Level 13 Products	(Summer)
Rewrite MF501	(Summer)

N. L. Reddy

EXPORT	
Remote TTY for Operations I/O (BATCHIO Job Monitor) decwriter	(0%)

Bill Sackett

AUTO-DIVERT	(90%)
1CJ Call PFM for Submit Output Dayfiles	(90%)
CPUMTR - CIO TTY Read Processing	(90%)
6400 Bugs and Maintenance	
PFM Mode Change Overlay	(90%)
STIMULATOR Scripts and Enhancements	(20%)
Merge 6400/CYBER 74 OS	(Summer)
Disk Hole Filler	(Summer)
DDF at Deadstart Time	(Summer)
Clean Up CDC BASIC	(Summer)
ECS ROLLOUT	(Summer)
Check Possibility of CMAP Implementation	(Summer)

Tim Salo

Disk Hole Filler/Catalog Track Packer	(10%)
PASCAL Run Time System Rewrite	(20%)

Betty Stahl

PTR's new ANSI Fortran

John Strait

Convert PASCAL Mods for PASCAL Release 2	(80%)
ARCHIVE PF Dump/Load Utility	(95%)
SPRUCE - PASCAL Pretty Print Program	(10%)
PASCAL Compiler Improvements	(Summer)
PASCAL Users Group Duties	(Summer)

Bill Wells

XEDIT Rewrite	(25%)
NOTICE/NOTIFY	(Summer)
New TELEX Subsystem	(Summer)

Bob Williams

Merging 6400/CYBER 74 OS	(.1%)
MERITSS Operations	
CPUMTR Roll-Out to ECS	(Summer)
STIMULATOR ENHANCEMENTS	(Summer)

Bob Zalusky

Install PFM PN=0 Option	(80%)
Merging 6400/CYBER 74 OS	(Summer)
Learn PASCAL	(Summer)

The following projects were recommended as important projects for the Systems Group. Initials of the individual recommending the project appear to the right of each item.

Convene a DAYFILE analysis committee to help streamline dayfile analysis.   (BJF)

PP routine to monitor P register   (EJM)

Write ECS transfer mechanism, formalize use of ECS   (AFJ)

Improve PF dumping/loading   (KCM)

Write some good user documentation in the form of bulletins.   (KCM)

Develop a multi-faceted test plan for use on both the 6400 and CYBER 74.   (RAM)

Avoid going to NOS.   (Everyone)

Improve system stability.   (Everyone)

Short version of CRM   (EJM)

Cyber 74/6400 MERGE - T. W. Lanzatella

On 18 May 1976, staff members from all sections of UCC met to discuss the
merits and difficulties associated with merging the two versions of KRONOS
run on the CYBER 74 and the 6400. After considering several approaches to
the conversion and after considering the mandatory deadline of August 15,
we decided that the most straight-forward and direct method would be to use
level 12 KRONOS installed on the CYBER 74 (presently level 11 KRONOS) as
the base operating system. The level 12 version of KRONOS was chosen based
on favorable reports from CDC regarding the stability of TELEX. Those features
on the MERITSS system which can coexist with MIRJE features will then be
extracted and reinstalled on MIRJE. Those features on MERITSS which cannot
coexist with MIRJE features will in general be discarded.

Having reached the decision to combine the two systems, our first order of
business is to identify those areas of UCC system maintenance procedures
which require some intense effort between now and August 15. The following list
identifies these areas and suggests individuals who may be working in these
areas.

1) Level 12 installation - Lanzatella/Williams

2) MERITSS feature reinstallation - Lanzatella/Williams

3) Accounting - Fox

4) CALLPRG - Riviere

5) Library Tape/Compilers - Riviere/Frisch/Mickel

6) Machine Retrievable documentation programs

7) Conversion documentation

8) Operations - Dykstra/Sell

9) Permanent Files - Matthews/Salo

10) User number LIBRARY

Regarding item number 2 above, the MERITSS features which are to be brought
over to MIRJE; it is imperative that they be considered by the systems group as
soon as possible since, by our own design, it takes about a month for a system
change to move from proposal to reality.

The following is a broad list of MERITSS features which are not presently
available on MIRJE.

- 1) Ultra-Private files. install until automated

2) XMIT was until Attorts

- 3) SUN control card - set user number.

4) Deadstart dump – program DDT _ DISCARD

5) Accounting

    a) time option on AFD, ELD, DFD, DAYFILE. *install*

    b) AFD issues idle and system time *issues installed*

    c) PF storage warning message. *reported on evening*

    d) USE command. *accept*

6) ECS

    a) ECS use for short rollout files *workable*

    b) ECS track size *workable*

7) BARROW terminal type – for CAI *install as standardly as possible.*

8) The ROL command in DIS. *install*

9) TELEX rotary check *check with ...*

10) 1TD idle loop address to TELEX low core to spot hung ports. *install*

11) Subsystem (SS) parameter on PF commands. *install*

12) Alphabetize CATLIST - *install*

13) CATLIST S options (short list) *reinstall or BR*

14) PRINT control card. *install*

15) Do control card. *discard* _____ 15a) X. *use CAILPAG*

16) Fast attach file SIMTALK for game TALK. *(continued install)*

17) ISF NP parameter – no parameter. *investigate* *(P = PROGRAMME or P-o)*

18) MODIFY allows 0 as abbreviation for OPLFILE. - *install*

19) PURGALL legal for SYOT only. *not implemented*

20) TDUMP output formatted for TTY. *not can issue*

21) GAME command. *install*

22) INFORM command. *discard*

23) Master User numbers. *install* *(LOGOFF)*

24) LRUN command

25) NOTICE/NOTIFY — *~~~~All*

26) CPUMTR speed-up features *~*

27) CIO speed-up features *~ install after study.*

28) Assorted system hooks meant to trap bad PP requests, etc.

CALLPRG NEWS - M. Riviere

Two changes and two additions will be implemented on the CALLPRG index for
next Saturday (May 29). J. Mundstock and Y. Hwang will change the version
of MNF, Type FETCH. This is the MNF compiler compatible with the CDC 4.0
products and the new version has many modifications that bring the compiler
up to date. Yoonja has a list (a very long list) of the modifications, for
anyone that wants to see it.

James is also replacing the future verison of MNF with a new one where a
serious error in double precision exponentiation is corrected. This future
version of MNF is scheduled to replace the current MNF by June 12. Jim is
also changing batch MNF from control card callable to fetch type.

M. Frisch and Bartley Johnson are introducing two new packages, VIEW and
SKIPPL. VIEW is a program that displays CALLOMP STATOS 31 plots on
TEKTRONIX CRT terminals and SKIPPL is a program to produce forward and
backward skip operations along CALCOM STATOS 31 plot files. The documentation
of these two programs is in the process of being printed but a rough copy
is available from Michael by now. VIEW and SKIPPL are going to be control
card callable.

I am changing the current version of FUTURE, SYSLIB with a new one which
includes the relocatable versions of three new common decks (COMCTID,
COMCZFN and COMCCND). These decks were added on WPL since I created the
last version of FUTURE, SYSLIB. Additionally, I added a comment to each
record of the library to describe their functions. These comments are
listed when SYSLIB is cataloged. This version of SYSLIB will replace
the current one on June 12.

CALLPRG - Library Tape packages and the CYBER 74/6400 Merge - M. Riviere

A decision about which of our CALLPRG and Library Tape programs will be common
on the CYBER 74/6400 system will soon have to be reached. The decision as to
which products become common is not strictly up to me, however, I will be
coordinating the merging procedure. I am requesting that each individual who
maintains packages on either the CALLPRG index or on the Library tape to send
me a note with a short description of the package, a pointer to its documentation,
the field length required to run the programs and any other information which
could be considered important for the merging process. I would like this
information prior to June 4. Once the information is compiled, I will call
a meeting to discuss the set-up and handling procedures for the common
products. The meeting is planned for the second week of June. I hope that
everyone understands that the amount of available time is rather short--August 15
is the final deadline.

CALLPRG Proposals - A. Mickel

Now that we have a new CALLPRG policy for certain "staff-only" programs, I would like to have the following programs placed under FETCH:

PSCCODE   -   a PASCAL "decompiler" which prints the equivalent Compass and machine code for relocatable binary produced by the PASCAL compiler. The control card call is PSCCODE (binary file, listing file). Formerly called "DECODE" to those who know it.

SPRUCE -   a preliminary version of a PASCAL "tidy" or "prettyprint" program. SPRUCE reformats PASCAL source programs into nicely indented form. A call to SPRUCE takes the form: SPRUCE (sourcefile, sprucedfile, directivefile) SPRUCE should eventually be made available to users. It has been suggested that the names of programs like SPRUCE (TIDY, STRATEN, PRETTYPRINT, etc.) are bad. Any ideas?

COPYM -   a program to do a fast (a la MOMS CBF, etc.) multiple file copy program. A call to COPYM takes the form:

COPYM (infile, outfile, number of copies, R)

The 4th parameter, R, if present selects auto rewinding before and after of infile and outfile. Infile is always rewound.

New Programs:

Future Lisp to Current:

We have a new LISP interpreter which has undergone testing for 1 quarter under FUTURE. It is now ready to replace the current version. The new LISP offers enhanced capabilities for the interactive user: hooks for a BBN-style editor and suppression of extraneous output. Additionally the ability to run with smaller field length because of a "virtual function" capability is a very important feature. Documentation is on WRITEUP, LISP. A large University of Texas document will be (like EISINFO) on tape under FETCH,LISPDOC.

PASCAL Stuff:

We will be developing a new FUTURE version of PASCAL having received the new PL from Zurich. PASCAL versions should toggle in mid summer.

PLAP - a document maintenance and production program

I would like to install PLAP, a text formatter from the University of Colorado which unlike TYPESET and TXTEDT, is well documented, and is fairly standard among many installations. PLAP is written in bare bones ANSI FORTRAN and is thus portable which has helped it to spread to places such as University of Arizona, University of Texas, and University of Washington. PLAP is accompanied by a machine retrievable document which should go up on WRITEUP,PLAP. We now have several documents (such as the 238 page UTUSP manual) which are in PLAP format.

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PLAP is still being maintained at the University of Colorado by Prof. William Waite whose primary interest is portable software. It is the only text formatter running on several kinds of machines that has been advertised in SICDOC (Special Interest Committee on DOCumentation) Newsletter.