
Send all comments, criticisms and contributions to the editor
T. W. Lanzatella

REPORT ON LEVEL 8

Implementation of PSR 393/393 went according to schedule and almost smoothly. We are still running old versions of LTD and SFM. The program BATCHER stopped working (now fixed) because field length and time limit fields in the SSJ block were changed and TELEX seems to gobble up more central memory than before. Otherwise, all is well.

NOTICE OF CHANGES TO THE OPERATING SYSTEM

Two additional modifications were added to the last deadstart tape but after DSN Vol. 1, No. 8 was published. The first, a modification due to N. L. Reddy, concerns LCD. Several months ago, LCD was fixed so that literal input could never extend PAST a EOI (6-7-8-9) card. This was accomplished by always checking column 1 for a EOI code. As a result of this modification, column 2 was also occasionally checked for a EOI code with unfortunate consequences to a binary deck user. The second modification is due to K. C. Matthews and repairs a catastrophic bug which was in the system since the beginning of KRONOS on the CYBER 74. The bug was most elusive since it never caused a system crash and only caused damage when the disks became full. Damage, in this situation, meant gaps in files - gaps in OUTPUT files and gaps in permanent files. The problem lay in the CPUMTR function Drop Track Chain, which was clearing a PP output register with a X register which was not necessarily zero.

The following modifications pertain to the next deadstart tape to be implemented on 11 September.

John Strait contributed the necessary modifications to install a PASCAL subsystem in TELEX. The new command "PASCAL,nnnnn." sets the PASCAL subsystem in TELEX. The control card generated by the RUN command is:

```
PASCAL(sfn,,/L-,G+)
```

where sfn is the source file name. "L-" designates no list (except compile errors) and "G+" specifies that LGO is to be loaded after compilation. The command RUN, B=bfm generates:

```
PASCAL(sfn,,bfm/L-)
```

so that the binary is put on bfm and not automatically loaded (similar to the MNF subsystem). The modification requires that the FUTURE version of PASCAL be moved to current so that the control card option L- and G+ are recognized.

Tim Salo added a modification to DOCUMENT which causes it to work again. Tim mistakenly set the RFL= entry so small that DOCUMENT had no space for I/O buffers.

E. J. Mundstock added the following modifications to CALLPRG:

1. The CALLPRG user number and password are now removed from the source of CALLPRG, CALLPRG now uses the SUI macro.

2. The RFL= entry was changed to a MFL= entry.
3. CALLPRG now reduces its field length before beginning long copy operations.
4. CALLPRG arguments were changed to conform to SCOPE 3.4 conventions.

Bill Elliott contributed the following assortment of modifications:

1. Internal documentation of EXPRESS now reveals the true structure of the EXPRESS data file.
2. The EXPRESS data file is now replaced with a new version rather than being purged and recreated as a fast attach file. Now, fast attach status is never lost, thus allowing updates during production time.
3. A modification to BLANK which restores the OWNER keyword. The parameter was previously not functional due to local modifications. This will allow operators to blank label user tapes without knowing their passwords.
4. A modification which enables a user to specify a FI parameter when blanking a tape. This modification also clears up documentation extensively.
5. A modification to MAGNET which prevents premature VSN assignment by the operator. This modification eliminates false "TAPE IS KRONOS LABELED" messages.
6. A modification to EXAMINE which adds the RS parameter. This parameter enables record skips before printing begins.
7. Several new operator purge messages were added to IDU.

PROPOSED CHANGES TO THE OPERATING SYSTEM

Don Hammes submitted the following response to the criticisms of the proposed QFM changes appearing in DSN Vol. 1, No. 6.

Upon discussing with Reddy the objections by Alan Johnston and Dennis Lienke (DSN, Vol. 1, No. 7) to our proposal (DSN, Vol. 1, No. 6), it was decided that item number 9 of the proposal (the requirement of a 1000B word CM buffer) will be temporarily withdrawn until the following information is obtained:

1. The distribution of the lengths of dayfiles actually processed by 1CJ (dayfile length statistics will be gathered).
2. The amount of additional code which will have to be added to QFM because of divert.

Thus, for the present time the new QFM (prior to level 10) will make use of the largest buffer it can within its own memory (when divert code is added it might mean that this buffer size will be decreased).

If on the basis of the dayfile length statistics it is decided that a buffer of a few sectors (1 - 3) is sufficient, then level 10 QFM may not need a CM buffer of a 1000B CM words (1CJ currently has a 5000B byte buffer).

In response to the objections which do not deal with the 1000B word CM buffer by Alan Johnston, we feel that:

1. We will keep level 10 in mind.

4. It is not inefficient because the macros will call QFM directly.
5. Assuming that the mods go into a PP program, the objection is not clear; there doesn't appear to be anything inconsistent with the call of QFM. It is in the same category as calling 2TJ.
6. The bit to be defined in the installation area of the control point area is to be a flag indicating that end-of-job processing is taking place. This flag could be used by other PP routines to detect end-of-job processing.

The unnumbered objection: QFM will be loaded into the same PP; thus, it acts like an overlay.