PROGRAMMING STAFF NOTE 62

TO: All CTSS Maintenance Personnel

FROM: D.R. Widrig

SUBJ: Contents of SAVED Files

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Recently, some questions have arisen regarding the exact contents
of SAVED files. Inasmuch as reference to CTSS supervisor listings
will give exact interpretations, the intent of this paper is to
point out potential trouble-spots.

1. Various switches representing the state of the AC Overflow
    trigger, MQ Overflow, etc., are set via STL or STZ instruc-
    tions. As a result, changes to CTSS which move the loca-
    tion of the STL instructions will affect the exact number
    placed in the appropriate cell in the SAVED file. Thus,
    a LOAD and SAVE at one time may produce a file which is
    slightly different than the same LOAD and SAVE done at
    a later date. Note, however, that the _effect_ is still
    the same.

2. In addition to the above effect, the initial state of the
    high-speed drums can affect the machine conditions. This
    is due to the drum being defined as the receptacle for
    the user's machine conditions. For instance, if a certain
    word on the drum was in some state due to the CE repairs
    or checking, it might be that the I/O check light (to
    use a bizarre case) would appear to be ON for some user.
    Thus, any SAVE executed while in this state will forever
    record the fact that the I/O check should be ON.

3. Since the command buffers are not cleansed as a normal
    housekeeping procedure, the contents of the SAVED command
    buffers is fairly uncertain. This assumes that the user
    himself has not set up the buffers.

In light of the above remarks, it follows that one should be extremely
cautious when doing word for word comparisons of different SAVED files.
In the case of differences, one must make certain that the problem is
not merely a "red herring".