UNIVAC 1050 SYSTEMS MAGNETIC TAPE SYSTEM

DESIGN SPECIFICATIONS

TAPE DUMP PRINT ROUTINE (TDMP)

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2.0 OPERATING INSTRUCTIONS

TDMP is a relocatable program that may be loaded from the instruction tape. It is for printing one or more memory dumps that have been written onto tape by the Executive Routine (See UP 3940.12 for OPS, or UP 3940.14 for OPR).

- a. Mount memory dump tape on logical tape unit number one.
- b. Set printer as desired.
- c. Load TDMP using normal call procedure.
- d. Stop 020001: TDMP is initialized. Press the PROGRAM START button to commence printing.
- e. Stop 020007: memory dump has been printed.
 - (1.) To print another memory dump, set the trace address switches to 01, the trace mode to PROC, and press the PROGRAM START button. The program will come to a stop with display 020001. Return to step d and reinitialize dump.
 - (2.) To release TDMP, set the trace address switches to other than 01, the trace mode to PROC, and press the PROGRAM START button. The Executive will come to a stop with the display 070001.

2.1 ERROR STOPS

Use the normal error recovery procedure for the following peripheral error stops:

01000 printer error 0140155 memory parity error 0140166 tape parity error 0140177 tape unit offline or nonready

2.2 FORMAT

The memory dump is printed in octal format.

- a. <u>Tetrad Area:</u> Each line displays the contents of eight tetrads as follows: the address of the MSC of Tn, and the contents Tn, and Tn+1; the address of the MSC of Tn+2, etc.
- b. <u>Non-Tetrad Storage</u>: Each line displays the contents of 40 character positions as follows: the address n, and the contents of n through n+04 and n+05 through n+011; the address n+012, etc.
- c. <u>Duplicate Lines</u>: If the 40 characters of a non-tetrad line are equal to the last five characters of the previous line, printing of the line is suppressed and the next 40 characters are examined. This process is continued until an inequality is detected or until the end of the dump is reached. A line of asterisks on the printout indicates that one or more lines have been suppressed.

2.3 DATA IN EXECUTIVE STORAGE AREAS

Since a memory dump is printed while the Executive Routine has program control, some information will appear in the Executive working storages, rather than the storage positions it occupies when the worker program has control. The way this information is handled varies according to whether a single program or concurrent program Executive is being used, as follows:

UP 3940.19

2.3.1 Single Program Executive

- a. Eight LSC of AR2 are destroyed
- b. The channel five interrupt entry appears in the eight LSC of AR2
- c. The four MSC of AR2 are destroyed
- d. The contents of IR1 appear in the four MSC of AR2

2.3.2 Concurrent Executive

- a. The eight LSC of AR2 are destroyed
- b. Channel five interrupt entry appears in eight LSC of AR2
- c. The three LSC of AR1 are destroyed
- d. The contents of tetrads 16, 17, 18, 8, and index registers 1 through 7, for the low order program appear in storage positions 01302 through 01355
- e. The corresponding information for the high order program appears in storage positions 01356 through 01432