

TEXT LISTING

068-000324-06

PROGRAM

EXERCISER FOR COMMERCIAL
ECLIPSE: PART 4

TEXT TAPE

097-000324-06

ABSTRACT

'ECOM4' IS AN EXERCISER PROGRAM DEVELOPED FOR CHECKING OUT THE CENTRAL PROCESSOR INSTRUCTIONS OF COMMERCIAL ECLIPSE AND FOR TESTING ITS RELIABILITY. IT IS DESIGNED TO RUN IN BOTH UNMAPPED AND MAPPED MODE IF THE SYSTEM IS A MAPPED SYSTEM.

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0001 MAIN          MACRO REV 06.30      12156111 05/17/79
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: NAME: ECOM4, TX          PART NUMBER: 097-0080529
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: DESCRIPTION: EXERCISER FOR COMMERCIAL ECLIPSE: PART 4
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: REVISION HISTORY:
:
: REV.      DATE
: 00      08/08/75
: 01      02/20/76
: 02      08/06/76
: 03      12/31/76
: 04      09/09/77
: 05      09/15/78
: 06      11/17/78
:
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RECOM4 = CONTINUATION OF ECOM3
PART 4 OF EXERCISER FOR COMMERCIAL ECLIPSE

: 0.0 REVISION HISTORY
:
: REV. 05 WAS CREATED TO
: IMPLEMENT THE STANDARDS PROVIDED
: BY DL19.
: THIS HAS NOT CHANGED THE PHILOSOPHY
: OR TEST PROCEDURES IN THIS PROGRAM.
: ALL UNNECESSARY "ZORST" HAVE BEEN
: DELETED FROM THIS FILE.
:
: REV. 05 WAS CREATED TO CORRECT THE MMPUI
: WRAP AROUND SIZING PROBLEM (OTR # 2503).

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01 ADDRESS LOCATIONS 200 TO 216 IN PAGE 0 ARE FIXED
02 THE USE OF THESE LOCATIONS ARE AS FOLLOWS:
03
04 LOC 200 IS THE STARTING ADDRESS OF THIS PROGRAM.
05 LOC 201 KEEPS TRACK OF RELOCATED ADDR OF THE TEST
06 CURRENTLY RUNNING AND IS USEFUL FOR DEBUG WHEN
07 LOOPIING OCCURS IN THE PROGRAM.
08 LOC 202 CONTAINS THE STARTING ADDR OF THE PROGRAM.
09 LOC 203 SHOWS NUMBER OF PASSES RUN THROUGH THIS
10 PROGRAM.
11 LOC 204 SHOWS INTERNAL PASS COUNT WHICH IS FIXED BY
12 LOCATION 205.
13 LOC 207 IS THE CURRENT PASS COUNT FOR INDIVIDUAL
14 TEST AND SHOWS THE PASSES REMAINING THRU THIS
15 TEST AT A PARTICULAR TIME.
16 LOC 214 IS THE BASE OFFSET USED TO CALCULATE THE
17 CURRENT RELOCATION OF THE PROGRAM.
18 * LOC 215 KEEPS TRACK OF THE LISTING ADDR OF THE TEST
19 CURRENTLY RUNNING AND IS USEFUL FOR DEBUG WHEN
20 LOOPIING OCCURS IN THE PROGRAM.
21 LOC 216 KEEPS TRACK OF THE CURRENT TEST# (TALLY)
22 RUNNING AND IS USEFUL FOR DEBUG WHEN RUNNING
23 UNDER A NORMAL PROGRAM EXECUTION.
24
25 NOTE:
26 *****
27 LOCATION 216 (TST#) IS ADVANCED EACH TIME THAT THE
28 "SETUP" MACRO IS EXECUTED FOR STAND ALONE SUBTEST
29 EXECUTION, THE SIGNIFICANCE OF THIS ENTRY IS ONLY
30 THAT OF A TALLY OF SUBTESTS ENTERED.
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SWMPD 4.2

SWITCH SETTINGS

LOCATION "SWREG" IS USED TO SELECT THE PROGRAM OPTIONS (NOT SYSTEM CONFIGURATION). WHILE RUNNING UNDER DTOS, THIS LOCATION WILL BE LOADED BY THE MONITOR, HOWEVER UNDER STAND ALONE AND PROGRAM LOAD MODES THIS LOCATION WILL BE SET ACCORDING TO THE ANSWERS SUPPLIED BY THE OPERATOR. IN ANY CASE THE OPTIONS CAN BE CHANGED OR VERIFIED BY USING ONE OF THE COMMANDS GIVEN IN SEC. 4.2.2

4.2.1 SWITCH OPTIONS AND THEIR INTERPRETATION AT LOCATION DIFFERENT BITS IS AS FOLLOWS:

BIT	OCTAL VALUE	BINARY INERPRETATION
1	40000	LOOP ON ERROR SKIP LOOPING ON ERROR
2	20000	PRINT TO CONSOLE ABORT PRINT OUT TO CONSOLE
3	10000	DO NOT PRINT % FAILURE PRINT % FAILURE
4	04000	ALLOW END OF PASS PRINT OUT SUPPRESS END OF PASS PRINT OUT
5	02000	DO NOT PRINT ON THE LINE PRINTER PRINT ON THE LINE PRINTER
6	01000	DO NOT HALT ON ERROR HALT ON ERROR
7	0	DO NOT PRINT SUMMARY AND/OR PASSING OF EACH SUBTEST PRINT SUMMARY AND/OR PASSING OF EACH SUBTEST
8	00200	PRINT ONLY THE FIRST ERROR PRINT EVERY ERROR

4.2.2 SWITCH COMMANDS

ONCE THE PROGRAM STARTS EXECUTING THE STATE OF ANY OF THE BITS CAN BE CHANGED BY HITTING KEYS 1-9, A-F. THE PROGRAM WILL CONTINUE RUNNING AFTER UPDATING THE OPTIONS. EACH KEY WILL COMPLEMENT THE STATE OF THE BIT AFFILIATED WITH IT, THUS BIT 4 CAN BE ALTERED BY HITTING KEY 4. (DEFAULT MODE IS DEFINED AS ALL BITS OF SWREG SET TO 0) THE PROGRAM CAN BE LOCKED INTO SWITCH MODIFICATION MODE BY TYPING A 0, IN WHICH CASE MORE THAN ONE BIT CAN BE CHANGED BEFORE CONTROL IS ALLOWED TO RETURN TO THE MAIN PROGRAM.

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01 OTHER COMMANDS
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04 "CR" A "RETURN" CAN BE TYPED TO CONTINUE THE PROGRAM
05 AFTER ITS LOCKED IN A SWITCH MODIFICATION MODE
06
07 "D THIS COMMAND GIVEN AT ANY TIME WILL RESET "SWREG"
08 TO DEFAULT MODE AND RESTART THE PROGRAM.
09
10 "R THIS COMMAND GIVEN AT ANY TIME WILL RESTART THE
11 PROGRAM. SWITCHES ARE LEFT WITH THE VALUES THEY
12 HAD BEFORE THE COMMAND WAS ISSUED.
13
14 "O THIS COMMAND GIVEN AT ANY TIME WILL CAUSE THE
15 PROGRAM CONTROL TO GO TO ODT (NOTE: THIS IS AN
16 OPTIONAL COMMAND AND IS AVAILABLE ONLY IF
17 ODTPK IS PRESENT)
18
19 M THIS COMMAND GIVEN AT ANY TIME WILL PRINT THE
20 CURRENT OPERATING MODES.
21
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25 BIT OCTAL BINARY INTERPRETATION
26 VALUE VALUE
27
28 C 00010 0 DISABLE MPPU/MMPUI MAP DUMP
29 00001 1 ENABLE MPPU/MMPUI MAP DUMP
30
31 F 00001 0 DO NOT ENABLE QUICK VERIFY OPTION
32 00001 1 ENABLE QUICK VERIFY (QV) MODE
33 EXECUTION
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01 OPERATING PROCEDURE/OPERATOR INPUT
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4.3 OPERATING PROCEDURE/OPERATOR INPUT

4.3.1 LOAD THE PROGRAM VIA THE BINARY LOADER OR INSERT A
PRELOADED MEMORY MODULE.
4.3.2 SET SWITCHES TO 200.
4.3.3 PRESS START.
4.3.4 THE PROGRAM WILL RUN UNTIL MANUALLY STOPPED. IN CASE
OF MALFUNCTIONING, THE PROGRAM WILL PRINT ERROR
MESSAGE AND TAKE APPROPRIATE ACTION AS PER THE SW
SETTINGS.

4.4 PROGRAM OUTPUT/ERROR DESCRIPTION

4.4.1 FOR ANY ERRORS DETECTED, THE PROGRAM WILL PRINT ERROR
REPORT OR % FAILURES DEPENDING UPON THE SW SETTINGS.
4.4.2 FOR ALL ERRORS, APPROPRIATE PROGRAM INFORMATION WILL BE
PRINTED WHICH CONSISTS OF TEST#, ALL ACCUMULATORS, CARRY,
LISTING PC OF LOGICAL RELOCATED PC OF ERR, PHYSICAL
PC (OCTAL) WHERE ERROR OCCURED AND THEN THE PROGRAM
WILL GO INTO SCOPE LOOP. % FAILURE RATE MAY BE PRINTED
AT THIS TIME BY USING THE PROPER SWITCHES.
IF THE ERROR IS DETECTED IN MAPPED ENVIRONMENT, ADDITIONAL
DATA ABOUT CURRENT MAP WILL BE PRINTED SHOWING THE BEGIN
AND END OF THE 32K MODULE THAT LOGICAL 32K IS MAPPED
TO. IF THE PROGRAM IS LOADED FROM 'DTOS', IT WILL ALSO
PRINT 'DTOSIK', SHOWING THAT 'DTOSIK' IS NOT MAPPED AND
MUST BE SKIPPED OVER TO DETERMINE THE PHYSICAL BLOCK OF
FAILING ADDR IF IT HAPPENS TO BE ABOVE 'DTOSIK'.
THE CONTENTS OF THE MPPU/MMPUI MAP WILL BE DUMPED TO
THE SELECTED DISPLAY DEVICE IF SWT "C" IS = 1 AND SWT "O"
IS = 1.

4.4.3 THE PROGRAM WILL LOOP IN THE TEST THAT IS FAILING IF
SWT1 IS 0 AND SWT "15" OF SWREG = 0. SEE 4.6.1 BELOW !!
THE PRINTING OF ERROR REPORT CAN BE ABORTED BY SETTING
SWT2 TO 1 AND/OR SWT5 TO 0.

4.4.4 IF LOOPING OCCURS IN THE PROGRAM, SELECT MONITOR MODE
AND CHECK LOCATION 216 TO FIND OUT THE TEST THAT WAS
RUNNING BEFORE THE LOOPING OCCURRED.
LOCATION 215 WILL HAVE THE LISTING ADDRESS AND LOCATION
201 WILL HAVE THE RELOCATED ADDRESS OF THE FAILING TEST.

4.4.6 CAUTION

ERRORS AT "XFERR" AND "XFERRM" SIGNIFY THAT AN
ERROR WAS DETECTED IN BASIC "BAM" (XFERR)
PROGRAM RELOCATION OR "BLM" MAP MODE (XFERRM)
PROGRAM RELOCATION. IF EITHER OCCUR, IT IS
HIGHLY PROBABLE THAT THE PROGRAM SEGMENT
THAT WAS TRANSFERRED IS NOT CORRECT, AND THE
USER SHOULD RUN THE BASIC ECLIPSE DIAGNOSTICS!!!

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?4.5 NEW MMPU/MMPUI MAP DUMP UTILITY
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?4.5.1 AUTO MAP DUMP DISPLAY
? FOLLOWING ERROR DETECTION OR TRACE REQUEST EXECUTION
? I.E. SEE 4.9 BELOW. THE CURRENT CONTENTS OF THE MMPU/
? MMPUI WILL BE DISPLAYED IF EXECUTION IS DURING THE
? MAP MODE, AND SWITCH "C" = 1.
? ADDITIONAL MAP DUMP DISPLAYS WILL OCCUR ONLY WHEN THE
? CONTENTS OF THE MMPU/MMPUI MAP HAVE BEEN MODIFIED.
?
?4.5.2 MANUAL MAP DUMP DISPLAY (USER) REQUESTED
? IF THE USER SHOULD NEED TO DISPLAY THE CONTENTS OF
? THE MMPU/MMPUI, HE MAY DO SO BY HALTING THE PROGRAM
? AND START AGAIN AT LOC. 220 (OCTAL). THE PROGRAM HALTS
? FOLLOWING THE DISPLAY AWAITING THE USER. IF THE USER
? DEPRESSES CONTINUE THE PROGRAM WILL EXECUTE THE MMPU/
? MMPUI MAP DUMP DISPLAY UTILITY AGAIN.
? NOTE:
? IT IS THE USERS RESPONSIBILITY TO RESTART THE PROG--
? RAM FOLLOWING MANUAL MODE MMPU/MMPUI MAP DUMP DISPLAY
? EXECUTION REQUESTS.
? SWITCH "C" MUST = 1, I.E. BE SET TO ENABLE MAP MMPU/MMPUI
? DUMP DISPLAY. ALSO SEE SWT"2" AND SWT"5" CONTROL ABOVE.
?
?4.6 PROGRAM DESCRIPTION/THEORY OF OPERATION
?
?4.6.1 MOST TESTS ARE MODULAR, SO THE PROGRAM CAN
? BE STARTED FROM ANY TEST WITHOUT CAUSING ANY
? INITIALIZATION ERRORS. SEE NOTE 4.0.1 ABOVE !!!
?
?4.6.2 WHEN THE PROGRAM IS STARTED FROM CONSOLE OR VIA 'DTOS',
? IT WILL SCAN THE SYSTEM AND WILL PRINT THE SIZE OF THE
? MEMORY. THE 1ST PASS WILL RUN VERY FAST AS EACH TEST
? IS RUN ONLY ONCE IN THE FIRST PASS. ALL OTHER PASSES
? WILL TAKE MORE TIME AS EACH TEST IS RUN ACCORDING TO THE
? TEST ITERATION COUNT SPECIFIED IN EACH SUBTEST.
? AFTER THE 1ST PASS, 'ECOM1' IS RELOCATED IN AVAILABLE
? LOGICAL MEMORY AND THE AREAS BELOW (CALLED 'LBU2F') AND
? ABOVE (CALLED 'HBU2F') THE RELOCATED PROGRAM ARE USED
? AS SCRATCH BUFFER AREA. 1 RELOCATED CYCLE IS RUN
? FOR EACH LOGICAL 32K MODULE.
? ON MAPPED ECLIPSE, 2 CYCLES ARE RUN UNMAPPED AS DESCRIBED
? ABOVE. THEN THE FIRST 32K ARE MAPPED TO ITSELF AND 2 MORE
? CYCLES ARE RUN OUT OF WHICH THE 1ST ONE IS NON-RELOCATED.
? THEN THE PROGRAM 1ST 16K IS MOVED TO NEXT 16K AND LOGICAL
? 32K ARE MAPPED TO 32K FROM THERE ONWARDS AND 2 CYCLES
? ARE RUN. THIS CONTINUES UNTIL THERE IS AT LEAST 32K LEFT
? ABOVE THE PROGRAM. THEN THE PROGRAM WILL PRINT 'PASS XX'.
? THE ORIGINAL COPY OF THE PROG IS ALWAYS LEFT UNTOUCHED
? IN THE 1ST 16K.
?
? WHEN THE PROGRAM IS LOADED FROM 'DTOS', 1K OCCUPIED BY
? 'DTOS' MONITOR, CAT OR KITTEN IS ALWAYS LEFT UNTOUCHED.
? THE NUMBER OF PASSES EACH TEST IS RUN IN MAPPED MODE
? IS ADJUSTED ACCORDING TO THE SIZE OF THE TOTAL MEMORY SO
? AS TO EQUALIZE THE RUN TIME FOR DIFFERENT SIZE SYSTEMS
?
? NOTE:
? DUE TO THE WAY THE PROGRAM IS RUN (AS DESCRIBED
? ABOVE) THE MAXIMUM PROGRAM SIZE ALLOWED IS 15K. THIS
? WILL LEAVE ROOM (1K) FOR THE CAT WITHIN THE FIRST
? 32K OF THE SYSTEM WHEN THE PROGRAM IS RELOCATED.

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DIAGNOSTIC SUPPORT FEATURES
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DIAGNOSTIC SUPPORT FEATURES HAVE BEEN ADDED
TO ASSIST THE USER IN IDENTIFICATION OF THE IMPACT
OF PROGRAM RELOCATION OR THE EXECUTION IN MAP MODE.
THE USER MUST MODIFY THE ASSOCIATED CONTROL ENTRIES
TO ENABLE THEM, BE ADVISED, "THE USER MUST RESTORE
THE PROGRAM TO THE ORIGINAL STATE AND VERIFY NORMAL
EXECUTION BEFORE ASSUMING THAT THE SYSTEMS CONFIGURA-
TION IS FUNCTIONALLY CORRECT".

4.7.1 PROGRAM RELOCATION CHECKSUM
-----
PRIOR TO RELOCATION IN NONMAPPED MODE A NEW "COB" CHECK
WORD IS GENERATED, WHICH, IS VERIFIED FOLLOWING THE BAM
XFER EXECUTION. IF THE CHECK WORDS DO NOT COMPARE THE
PROGRAM HALTS. DUE TO THE NATURE OF THE PROGRAM OVERLAP-
PING ON RELOCATION AND MODIFYING THE SOURCE BUFFER FROM
WHICH IT HAS TRANSFERRED THIS TYPE OF ERROR IS UNRECOVER-
ABLE AND THE USER IS ADVISED TO RUN THE BASIC ECLIPSE
DIAGNOSTICS.

4.7.2 PROGRAM RELOCATION VERIFICATION
-----
DURING MAPPED MODE EXECUTION THE SOURCE BUFFER AREA
IS VERIFIED WORD FOR WORD (EXCEPT LOC. 0 THRU 17 OCTAL)
AND IF AN ERROR IS DETECTED THE PROGRAM HALTS. THIS
IS A FATAL CONDITION IN THAT THE PROGRAM SEGMENT THAT IS
TO BE EXECUTED NEXT MAY BE IN ERROR.
WITH SLIGHT MODIFICATION (I.E. THE ADDITION OF A HALT) AT
LOCATION "MAPHLT": THE USER MAY RESTART THE FALLING
PROGRAM FOLLOWING A "XFERR:" HALT IN BAM ABOVE AT LOC.
"RETRY". THE OMISSION OF THE HALT ENTRY WILL RESULT IN
MAP MODE EXECUTION FOLLOWING THE VERIFICATION AND COULD
MISLEAD THE USER IF FURTHER ERRORS RESULT.

NOTE:
ADDRESSES SPECIFIED ABOVE ARE IN RELOCATED MEMORY AREA
I.E. THE PROGRAM LISTING ADDRESS PLUS THE CONTENTS OF
"RELOC:" FOR "MAPHLT:" AND "RETRY:".
ALSO NOTE THAT THE ABOVE PROCEDURE WILL VERIFY THE
ABILITY OF THE BLM TO MOVE THE SOURCE CODE CURRENTLY
RESIDENT TO THE DESTINATION BUFFER SPECIFIED. IF THE
ADDRESS RANGE SPECIFIED ALLOWED THE ORIGINAL SOURCE
BUFFER TO OVERLAY THE DESTINATION BUFFER, THE PROGRAM
WILL HAVE BEEN WIPED OUT ON THE ORIGINAL TRANSFER.
CAUTION:
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ALWAYS RUN THE BASIC ECLIPSE DIAGNOSTICS FOLLOWING
PROGRAM CHECKSUM OR VERIFICATION ERRORS.
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4.7.3 INHIBIT MAP EXECUTION
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LOCATION "DMA?:" MAY BE ALTERED TO ANY NON-ZERO ENTRY
AND THIS WILL INHIBIT MAP MODE PROGRAM EXECUTION FOR
THE PURPOSE OF EVALUATING THE OPERATIONAL CAPABILITY OF
THE PROGRAM WITHOUT THE MAP (MMPU/MMPUI) ENABLED.

"DMA?P" IS LOCATION "376:" OCTAL AND MUST BE SET IN NON-
MAP MODE.

CAUTION:
-----
IT IS THE USERS RESPONSABILITY TO RESTORE THE PROGRAM
TO IT'S ORIGINAL STATE AND VERIFY THE PROPER EXECUTION .

4.7.4 LOCK ON FIXED RELOCATION BASE ADDRESS
-----
LOCATION "RLW?:" MAY BE ALTERED TO ANY VALUE IN THE
RANGE OF GREATER THAN 16K (I.E. 40000 OCTAL) AND 16K LESS
THAN THE CONTENTS OF "MAXLOC:". THIS WILL FIX THE LOGICAL
ADDRESS OFFSET USED DURING RELOCATION AND EXECUTION OF
THE PROGRAM, FOR THE PURPOSE OF EVALUATING THE OPERATION
CAPABILITY OF THE PROGRAM WITHOUT RANDOM RELOCATION. NOTE
HOWEVER THAT DURING MAP MODE EXECUTION THAT THE PHYSICAL
ADDRESSES WILL THEN VARY ACCORDING TO AVAILABLE PHYSICAL
STORAGE.
CAUTION:
-----
DO NOT SELECT A VALUE THAT WILL OVERLAY THE "CAT"
"KITTEN" OTOS 1K.

"RLW?:" IS LOCATION "377:" OCTAL AND MUST BE SET IN NON
-MAP MODE.

4.7.5 FIXED RELOCATION ADDRESS = 0
-----
LOCATION "RLW?:" MAY BE SET EQUAL TO "100000" OCTAL,
I.E. BIT <0> = 1. THIS ENABLES RELOCATION XFER EXECUT-
ION TO TAKE PLACE AS ALWAYS BUT THE PROGRAM IS ALWAYS
TRANSFERRED TO LOGICAL LOCATION "0". THIS IS ESPECIALLY
USEFUL IN SYSTEMS WHERE IN MAPPED MODE THE PROGRAM
FAILS IN RELOCATION AND A SPECIFIC AREA OF PHYSICAL
MEMORY IS SUSPECT OF BEING INSTRUCTION EXECUTION OR
DATA XFER SENSITIVE. IN MAPPED MODE THE BASIC 16K PRO-
GRAM IS REPOSITIONED UP 16K (PHYSICALLY) AFTER EVERY
THIRD EXECUTION CYCLE AND EVENTUALLY RESIDES IN THE
SUSPECTED PHYSICAL AREA WHILE THE PROGRAM CODE BASIC-
ALLY REFLECTS THE PROGRAM LISTING.

CAUTION
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IT IS THE USERS RESPONSABILITY TO RESTORE THE PROGRAM
TO ITS ORIGINAL STATE AND VERIFY PROPER EXECUTION.
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;4.7.6 INHIBIT ITERATION(S) CONTROL
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; WHEN PROGRAM EXECUTION IS STARTED AT LOC. 176 OCTAL THE
; ITERATION CONTROL FLAG IS COMPLETED. I.E. NORMALLY THE
; PROGRAM WILL EXECUTE WITH ITERATIONS FOLLOWING FIRST PASS
; EXECUTION (WITHOUT ERRORS). WHEN STARTED AT LOC. 176
; THE CONTROL ENTRY IS COMPLETED AND THE FIRST TIME THAT
; THE PROGRAM IS STARTED AT THAT LOCATION ITERATIONS WILL BE
; SUPPRESSED IN ANY SUCCESSIVE PASSES AS WELL. NOTE THAT IF
; THE USER WISHES TO RETURN TO THE NORMAL MODE OF OPERATION HE
; JUST STARTS AT LOC. 176 OCTAL AGAIN.
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;4.7.7 RESTRICTION
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; THE PASS COUNT ENTRY IS NOT ADVANCED IF EITHER ITERATIONS,
; MAPPED EXECUTION OR RELOCATION CONTROL ARE INVOKED.
; I.E. END OF PASS WILL BE SIGNIFIED BY THE FOLLOWING OUTPUT:
; PASS = 0
; PASS = 0
; PASS = 0
; ETC.
; THIS IS TO ASSURE THAT THE USER WILL KNOW THAT NORMAL
; PROGRAM EXECUTION HAS BEEN SUSPENDED.
;
;4.8 NEW FEATURES
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;4.8.1 QUICK VERIFY EXECUTION
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;
; FOR LARGE S/230 OR C/330 (256-K MEMORY) SYSTEMS A
; METHOD FOR QUICK VERIFICATION OF SYSTEMS INTEGRITY
; HAS BEEN ADDED. IT'S PRIMARY INTENDED USE IS FOR THE
; REDUCTION OF EXECUTION TIME FOLLOWING CORRECTIVE MAIN-
; TENANCE. IT MAY ALSO BE USED AS A QUICK METHOD OF USER
; VERIFICATION OF SYSTEMS CAPABILITY PRIOR TO LONG TERM
; RELIABILITY TESTING. (I.E. OVER NIGHT RUNALL OR CRUNALL
; EXECUTION UNDER DTOS).
;
; CAUTION!
;
; BE SURE TO RETURN THE SWREG SETTING TO NON=
; QUICK VERIFY MODE USING THE DTOS "SWREG" COMMAND.
;
; RESTRICTION
*****
;
; THIS METHOD OF OPERATION IS "NOT RECOMMENDED"
; FOR FINAL SYSTEMS ACCEPTANCE, OR IN CASES WHERE FAILURES
; OCCUR EITHER RANDOMLY OR INFREQUENTLY.
*EJEC

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0016 .MAIN
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*EJEC

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;4.8.2 SELECTION OF QV
*****
;
; QUICK VERIFICATION MODE OF OPERATION MAY BE SELECTED
; AT ANY TIME SIMPLY BY HITTING KEY "F" ON THE
; TTI DURING PROGRAM EXECUTION.
; IT MAY ALSO BE SELECTED BEFORE LOADING THE PROGRAM WHEN
; RUNNING UNDER DTOS BY FIRST UTILIZING THE SWREG COMMAND
; AND INSERTING "I(CR)". WHEN SELECTED IN THIS MANNER,
; THE QV OPTION IS ENABLED FOR ANY FUTURE DTOS PROGRAMS.
; THEREFORE, IF IT IS NOT DESIRED ON OTHER PROGRAMS,
; THE SWREG MUST BE CLEARED BY USING THE SWREG COMMAND
; AND RESPONDING WITH "0(CR)".
;
;4.8.3 ERROR CODE ID
*****
;
; A METHOD OF RELATING TO PROBABLE CAUSE OF FAILURES HAS
; BEEN ADDED TO THE ECLIPSE EXERCISER PROGRAMS THAT USE
; THE "EPACK" BASIC ECLIPSE EXERCISER UTILITY PACKAGE.
; TWO VALUES OF ERROR CODE CAN BE GENERATED FOR EACH HAND
; FAILURE, ONCE THEY HAVE BEEN RECORDED THE HISTORY OF ALL
; PAST FAILURES CAN BE REFERENCED TO AFFECT REPAIR.
;
; PROBABLE FAULT ID SELECTION
*****
;
; WHEN QUICK VERIFY MODE IS EXECUTED ABOVE PROBABLE FAULT
; (ERROR CODE ID) SELECTION IS ENABLED AND A COURSE ID
; VALUE IS GENERATED WHEN AN ERROR IS ENCOUNTERED. IT CAN
; BE IN THE RANGE OF 000 THRU 100 OCTAL.
;
; WHEN DTOS "LOAD" MODE PROGRAM EXECUTION IS EXECUTED AND
; SW "1" IS SELECTED FOR SWITCH REGISTER SELECTION A SECOND OR
; FINE ID VALUE IS GENERATED WHEN ERRORS ARE ENCOUNTERED. IT
; CAN BE IN THE RANGE OF 000000 THRU 177776 OCTAL.
;
; DURING MONITOR MODE EXECUTION UNDER DTOS ANOTHER UNIQUE
; PROBABLE FAULT (ERROR CODE ID) IS GENERATED AND IT'S
; VALUE IS 177777 OCTAL. THIS ENTRY SIGNIFIES THAT A FATAL
; ERROR HAS BEEN ENCOUNTERED DURING PROGRAM EXECUTION.
;
; THE PROBABLE FAULT (ERROR CODE ID) IS APPENDED TO ANY OF
; THE ADDITIONAL ERROR INFORMATION AT COMPLETION OF THE FIRST
; PASS OF PROGRAM EXECUTION, UNDER CONTROL OF THE SWITCH
; REGISTER SELECTION.
*EJEC

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0019 .MAIN

ENVNT 000000U 9/33
ETPKD 001044 MC 4/22
STMPD 005717 MC 6/01