**UFD UPDATE INFORMATION FILE REV. 16.4**

**THIS UFD CONTAINS ALL SOFTWARE UPDATES GENERATED AFTER THE LAST MASTER DISK RELEASE. TO UPDATE THOSE FILES REQUIRED ON YOUR MASTER DISK, FUTIL COPY THE PROGRAM REQUIRED TO THE UFD SPECIFIED IN THE TABLE UNDER THE -TO- COLUMN AND USE UPXXX AS THE PROGRAM TO COPY AND THE NAME UNDER THE NAME COLUMN AS THE NAME THE PROGRAM IS TO BE COPIED AS.**

**NOTE: ALL -TO- UFD'S MAY NOT EXIST ON YOUR DISK IF YOU HAVE A 6 OR 12 MEG.BYTE DISK.**

**EXAMPLE: UPDATE NO. NAME TO**

<table>
<thead>
<tr>
<th>UPDATE</th>
<th>NAME</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP001</td>
<td>CPUT1</td>
<td>T&amp;M</td>
</tr>
</tbody>
</table>

**FUTIL**

> FROM 'THIS UFD' NOT NEEDED IF THIS IS HOME UFD

> TO T&M

> COPY UP001 CPUT1

> GU

**NOTE: > EQUALS SUB-UFD IN -TO- COLUMN**

**NA EQUALS NOT ASSIGNED**

**USED ON (UFDNAME) DEFINITION**

<table>
<thead>
<tr>
<th>USED ON</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 00</td>
<td>P8000</td>
</tr>
<tr>
<td>80 20</td>
<td>P8020</td>
</tr>
<tr>
<td>80 60</td>
<td>P8060</td>
</tr>
<tr>
<td>81 00</td>
<td>P8100</td>
</tr>
<tr>
<td>81 20</td>
<td>P8120</td>
</tr>
<tr>
<td>81 40</td>
<td>P8140</td>
</tr>
<tr>
<td>81 50</td>
<td>P8150</td>
</tr>
<tr>
<td>81 60</td>
<td>P8160</td>
</tr>
<tr>
<td>83 00</td>
<td>P8300</td>
</tr>
<tr>
<td>84 10</td>
<td>P8410</td>
</tr>
<tr>
<td>84 20</td>
<td>P8420</td>
</tr>
<tr>
<td>84 30</td>
<td>P8430</td>
</tr>
<tr>
<td>84 40</td>
<td>P8440</td>
</tr>
<tr>
<td>84 50</td>
<td>P8450</td>
</tr>
<tr>
<td>85 20</td>
<td>P8520</td>
</tr>
</tbody>
</table>

**SET TABS 12 21 46 58 66 75**

**UPDATE NO. NAME TO. SOURCE NO. SCN NO. DATE USED ON**

* REV. 16.4 APRIL 20, 1979*
<table>
<thead>
<tr>
<th>File Name</th>
<th>Description</th>
<th>Date</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPTX-SCC</td>
<td>M164A1&gt;MFD (DIRECTORY)</td>
<td>042079</td>
<td>8410</td>
</tr>
<tr>
<td>DPTX-TSF</td>
<td>M164A1&gt;MFD (DIRECTORY)</td>
<td>042079</td>
<td>8420</td>
</tr>
<tr>
<td>DPTX-TCF</td>
<td>M164A1&gt;MFD (DIRECTORY)</td>
<td>042079</td>
<td>8430</td>
</tr>
<tr>
<td>UP005</td>
<td>SKIPPED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP006</td>
<td>SKIPPED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP007</td>
<td>API1LIB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP008</td>
<td>API2LIB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP009</td>
<td>VAPPL3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP010</td>
<td>RUNOFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP011</td>
<td>RUNOFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP012</td>
<td>SFC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP013</td>
<td>SEG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP014</td>
<td>SHARE4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP015</td>
<td>EDF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP016</td>
<td>FUL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP017</td>
<td>LOAD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP018</td>
<td>LOAD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP019</td>
<td>MPSTR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP020</td>
<td>MA3ST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP021</td>
<td>M3ASSV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP022</td>
<td>MA3TAV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP023</td>
<td>FTH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP024</td>
<td>FT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP025</td>
<td>FTCTOPT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP026</td>
<td>FITUP1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP027</td>
<td>COPOL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP028</td>
<td>C4.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP029</td>
<td>C2C14A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP030</td>
<td>C2C14D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP031</td>
<td>FTH5V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP032</td>
<td>V0SPK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP033</td>
<td>V0GPK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP034</td>
<td>IFMNL1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP035</td>
<td>OFTNL1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP036</td>
<td>NFTNL1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP037</td>
<td>FINLIB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP038</td>
<td>S4.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP039</td>
<td>S2114A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP040</td>
<td>S2C14R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP041</td>
<td>BASIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP042</td>
<td>BASIC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP043</td>
<td>DBASIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP044</td>
<td>DBASIC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP045</td>
<td>P81400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP046</td>
<td>P81RUN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP047</td>
<td>PRINET</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP048</td>
<td>X.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP049</td>
<td>FIXRAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP050</td>
<td>FIXRAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP051</td>
<td>FIXRAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP052</td>
<td>FIXRAT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP053</td>
<td>KTPAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP054</td>
<td>K11A9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
END OF UPDATE TABLE

* *  reason for change

*  TA  15  20

UF001  (DPTX-DSC) This is a new product for REV. 16.4.

UF002  (DPTX-TSF) This is a new product for REV. 16.4.

UF003  (DPTX-TCF) This is a new product for REV. 16.4.

UF004  (PASICV) To fix leading spaces in "WRITE USING" format string.
WHICH WERE PREVIOUSLY IGNORED.

UP007
(APPLIB) 16.4 FIXES A MINOR BUG FOUND IN MSUBSA (MOVE SUBSTRING) WHICH CAUSED OVERLAPPING FIELDS TO BE MOVED INCORRECTLY.

UP008
(APPLIB) SEE UP007.

UP009
(VAPPLB) SEE UP007.

UP010
(RUNOFF) (1) TARS 23221 & 23222 INVOLVING PROBLEMS WITH DECIMALIZATION COMMANDS PARTICULARLY ".DL" RATHER THAN WRITING ON EXTRA PAGE.
(2) NO LONGER SAVE A PLACE FOR THE PHANTOM HYPHENS IN THE TABLE OF CONTENTS.
(3) STACK FILE NAMES FOR ERROR MESSAGES CORRECTLY.

UP011
(RUNOFF) SEE UP010.

UP012
(SEG)(1) ALLOW TREE NAME IN QUOTES AS INPUT TO CMDSEG.
(2) REINITIALIZE DEFAULT MODE IN 64V.
(3) SHARE A SPLIT MODULE LESS THAN 4000 (BASE 8) WORDS IN LENGTH AND DISPLAY STACK ADDRESS DURING THE LOAD.
(4) HANDLE AN INTEGER*4 COMMON BLOCK WITH THE DIMENSION 65536. NO TARS

UP013
(SEG) SEE UP012.

UP014
(SHARE4) SEE UP012.

UP015
(EDB)(1) FLAG SOURCE INPUT FILE AS A "BAD OBJECT FILE".
(2) GENET (OBSOLETE BUT STILL SUPPORTED) NOW WORKS.

UP016
(EDB) SEE UP015.

UP017
(LOAD)(1) TAR 25536 DEFERRED COMMOM ON A LIBRARY "COMMON" BLOCK FIXED.
(2) ALLOWS LARGER COMMON REDEFINITION WHEN DEFERRED.

UP018
(LOAD) SEE UP017.

UP019
(MAGSR)

UP020
(MAGRST)(1) HANDLES THE CONDITION THAT "A NON DATA RECORD FOLLOWS A UFD TREE NAME RECORD".
(2) PRINT ERROR MESSAGE AND PAUSE WHEN A "DISC FULL" CONDITION OCCURS. (TAR 11969)
(3) PRINT PATHNAME OF THE FILE AT THE TIME AN "UNEXPECTED EOF CONDITION OCCURS.
(4) SET READ/WRITE LOCK CORRECTLY. (TAR 10554)
(5) REMOVE ",-LONG" FROM USAGE LINE. (TAR 22800)

UP021
(MAGSAV)(1) SAVE UFD WHICH HAS "READ ONLY" PERMISSION TO NON-
UPDATE INFORMATION FILE REV. 16.4

OWNER AND FILES WITHIN THAT UFD WHICH PERMIT READ ACCESS TO NON-OWNER. PASSWORDS FOR THE SAVED UFD ARE SET TO NULL.

(2) WHEN PROGRAM ASKS FOR A NEW TAPE, PROGRAM CHECKS TO SEE IF THE NEW TAPE IS AT LOAD POINT. IF NOT, AND THE TAPE IS THE SECOND PHYSICAL REEL OF A LOGICAL TAPE, PROGRAM WILL QUERY USER TO SEE IF HE WANTS THE TAPE TO BE REWOUND. IF HIS ANSWER IS "YES", TAPE WILL BE REWOUND. IF THE ANSWER IS "NO", PROGRAM WILL ASK FOR A NEW TAPE UNIT.

UP022 (MAGSAV) SEE UP021.

UP023 (FTN) TAR 23673 GENERALIZED SUBSCRIPTS CAN GENERATE BAD CODE WHEN A VARIABLE IS SUBTRACTED FROM A CONSTANT.
TAR 25264 "LS" AND "RS" INTRINSICS GENERATE BAD CODE FOR NEGATIVE SHIFT COUNTS.
TAR 25561 THE COMPILER HANGS WHEN IN 64V MODE A STATEMENT FUNCTION IS PASSED AS AN OCTAL ARGUMENT.
WHEN A "INSERT" FILE IS NOT FOUND, THE ERROR MESSAGE WILL NOT CONTAIN A SPOURIOUS "." THE "SHORCALL" STATEMENT WORKS WITH LIBRARY CONVERSION FUNCTIONS.
MINOR PROBLEMS IN PARSING ARRAY REFERENCES AND STATEMENT FUNCTIONS ARE FIXED. THE COMPILER USED TO GET THE EXCESS SUBSCRIPTS AND TOO FEW SUBSCRIPTS ERROR MESSAGES REVERSED.

UP024 (FTN) SEE INFO ON UP023.

UP025 (FTN) ALL THE FIXES FOR "FTN" APPLY TO "FTNOPT" AS WELL. OPTIMIZER PROBLEMS WHICH HAVE BEEN FIXED ARE:
- USE OF THE DO LOOP OPTIMIZER SOMETIMES PRODUCED LESS EFFICIENT CODE OUTSIDE LOOPS
- TEMPORARY VARIABLES INSIDE OPTIMIZED DO LOOPS WERE NOT ALWAYS FREED PROPERLY
- OPTIMIZED DO LOOPS OCCASIONALLY HAD BAD CODE FOR MIXED MODE ARITHMETIC.

UP026 (FTN) SEE INFO ON UP025.

UP027 (COBOL) TO CORRECT TAR 25666. QUALIFIED DATA NAMES NOT OPERATING CORRECTLY.

UP028 (C4000) SEE UP027.

UP029 (C2014A) SEE UP027.

UP030 (C2014B) SEE UP027.

UP031 (FLIB6V) [F$IO]-FREE FORMAT COMPLEX INPUT DID NOT WORK FOR F$IO.
**UP032** (VDSPKS) [TSRC$$] = "**A" DID NOT WORK FOR TSRC$$.

**UP033** (DOSPKS)
SMLIR P300 CODE REMOVED. (TAR 81470)
TSRC$$ "**A" DID NOT WORK.

**UP034** (IFTNLB)
-P300 CODE REMOVED (TAR 81470)
-"**A" DID NOT WORK

**UP035** (PFTNLIP) SEE UP034.

**UP036** (NPFTNLIP) SEE UP034.

**UP037** (FTNLIP) SEE UP034.

**UP038** (S4000) SEE UP034.

**UP039** (S2014A) SEE UP034.

**UP040** (S2014B) SEE UP034.

**UP041** (BASIC) TARS 12546 & 80852 "PRINT USING" JUXTAPOSED
ITEMS WHEN THE FIRST NUMERIC ITEMS OVERFLOWED.
TAR 13717 ".NL." DID NOT RESET THE COLUMN COUNT
IN ENTER STATEMENT.

TAR 24728 STATEMENT NUMBER "0" WAS NOT SENSED AS AN
ERROR.
TAR 15219 "PRINT USING" ROUNDIING IS NOT CONSISTENT.
MACHINE FLOATING ACCURACY IS THE PROBLEM HERE, BUT
NOTE THAT THE ACTUAL COMPUTATION ACCURACY IS NOT
AFFECTED BY THIS PROBLEM, WHICH IS DUE TO THE IN-
PUT CONVERSION IF ASCII DIGITS TO FLOATING NUMBERS.
A BETTER METHOD IS USED BY BASIC/VM AND FORTRAN, SO
THESE PROBLEMS WILL NOT SHOW UP.

TAR'S 80236 & 80469 "HALT"'S ARE ENCOUNTERED WHEN
STRINGS ARE PASSED TO A FORTRAN PROGRAM. THE DOCU-
MENTATION IS WRONG AND INDEED STRINGS ARE NOT
ALLOWED TO BE PASSED TO A FORTRAN PROGRAM.
TAR 22723 A "FOR-NEXT" UNMATCHING ERROR WAS GENERATED
WHEN IN FACT NO MISMATCH EXISTED.

**UP042** (BASIC) SEE INFO ON UP041.

**UP043** (DBASIC) SEE INFO ON UP041.

**UP044** (DBASIC) SEE INFO ON UP041.

**UP045** (PRI400)
BUG FIXES AT REV. 16.4

COMINPUT COMMAND
THE FILE UNIT SPECIFIED WAS IGNORED IF SPECIFIED AFTER A -OPTION. E.G., IF THE COMMAND 'CO -CONTINUE 7' WAS GIVEN, FILE UNIT 6 WAS USED. (TAR 80697)

FILUNT COLD START PARAMETER

IF A FILUNT PARAMETER WAS USED IN THE COLD START FILE, SPURIOUS RESULTS WOULD OCCUR.

ASSIGNED AMLC LINES

OUTPUT CHARACTERS COULD BE LOST WHEN UNASSIGNING AMLC LINES. (TAR 73415)

WTLINS

DATE-TIME MODIFIED NOT UPDATED WHEN FILE ACCESSED WITH CALL TO WTLINS.$

SHARE

IT WAS NOT POSSIBLE TO SHARE AN ENTIRE SEGMENT. I.E., RESTORE FILE WHOSE START ADDR = 0 AND END ADDR = 177777 OCTAL. (TAR 10555)

COMOUTPUT

DID NOT GIVE ERROR MESSAGE IF FILE SPECIFIED WAS A DIRECTORY. COMMAND OF FORM "COMO TREENAME -C" WOULD NOT WORK.

-DUE TO A CONFLICT WITH PREVIOUSLY DEFINED HARDWARE DEVICE ADDRESSES, THE DEVICE ADDRESS OF THE PRIMENET NODE CONTROLLER (PNC) HAS BEEN CHANGED FROM '61 TO '07.

* UP046 (PRIRUN) SEE UP045 FILE.

* UP047 (PRINET) FAM FOR REV. 16.4, THE FOLLOWING BUGS HAVE BEEN FIXED:

-ACCESSING SEGMENT DIRECTORIES VIA PATHNAME NOW WORKS.

(I.E., SEG REMOTE_UFD>SUBUFD>PROG )

-DUPLICATE RECEIVED MESSAGE BUG IS PROBABLY FIXED.

-LONG WRITE LINES NOW WORK WITH > 255 TRAILING SPACES.

-GROSS FLAG IS NOW RESET IN FAMCYL, (COULD GET LOCKED SET IN 16.2).

-FAM NOW ACCEPTS CDS CODES TO WORK WITH PRIMENET CIRCUIT CLEARING CAUSES.

-THE INTERNAL VERSION NUMBER AND RECEIVE BLOCK SIZE PASSING HAS BEEN UPDATED TO CONFORM WITH 17.0'S EXPECTATIONS.
UP048  (X.25) NETCFG has been fixed for heterogeneous combinations of PRIMENET and X.25 software in the same network. It is no longer a requirement that if any node has the X.25 software, they all must have it. To support this feature there have been some internal changes to the format of the configuration file 'NETCON'.

UP049  (FIXRAT) UFD compression failed to work correctly.

UP050  (FIXRAT) See UP049.

UP051  (FIXRAT) See UP049.

UP052  (MIDAS)

MIDAS REV. 16.4

ABSTRACT

NEW AT REV 16.4, MIDAS utility *MPACK sorts data records by primary key and recovers space occupied by data records which have been marked for deletion.

For REV 16 MIDAS files, *MPACK sorts data records by primary key and recovers space occupied by data records which have been marked for deletion. Indexes are also restructured so that they occupy as little disk space as possible. *MPACK is useful for applications in which 1) disk space is very limited, and/or 2) records are often inserted and deleted from a MIDAS file.

*MPACK is built by command file C_MPACK in UFD MIDAS>SOURCE. Note that *MPACK is built in UFD MIDAS>SOURCE, not CMDNO, and executes in R-MODE only. *MPACK has basically two options. A MIDAS file may simply be restructured. In this case the existing file is overwritten with the restructured data. The second option causes the restructured data to be written to a second file, thus preserving the original file. Figure 1 illustrates how to use *MPACK. Comments are enclosed in parentheses and user input is underlined.

OK, R *MPACK
GO
*MPACK REV 16.43

ENTER MIDAS FILE NAME: ACCT>MASIER (PATH NAME OF FILE TO BE) (RESTRUCTURED.)

OK TO OVERWRITE THE FILE? NO (SEE NOTE 1.)

ENTER NEW MIDAS FILE NAME: --FILE1 (PATH NAME OF FILE TO CONTAIN THE) --FILE1 (RESTRUCTURED INFORMATION.)

FILE ALREADY EXISTS. OK TO OVERWRITE? NO (SEE NOTE 2.)

ENTER NEW MIDAS FILE NAME: FILE2 -- (SEE NOTE 3.)

BEGIN PROCESSING INDEX 0 AT 11:22:00

ENTRIES INDEXED: 250
BEGIN PROCESSING INDEX 1 AT 11:26:27
ENTRIES INDEXED: 92
RESTRUCTURE COMPLETED AT 11:28:26

FIGURE 1

NOTES

1. THE NO RESPONSE INDICATES THAT THE RESTRUCTURED DATA SHOULD BE WRITTEN TO ANOTHER FILE. THE FILE, MASTER, WAS NOT MODIFIED.

2. THE NO RESPONSE INDICATES THAT THE MIDAS FILE, FILE1, SHOULD NOT BE USED. *MPACK ALSO VERIFIES THAT THE FILE IS A VALID MIDAS FILE. IF NOT VALID, *MPACK NOTIFIES THE USER AND REQUESTS A NEW PATH NAME.

3. SINCE FILE2 DID NOT EXIST, *MPACK CREATED IT.

* UP053 (KIDALB) SEE UP052.
* UP054 (KIDAFM) SEE UP052.
* UP055 (VKDALB) SEE UP052.
* UP056 (NVKDALB) SEE UP052.
* UP057 (K4000) SEE UP052.
* UP058 (K2014A) SEE UP052.
* UP059 (K2014B) SEE UP052.
* UP060 (CREATK) SEE UP052.
* UP061 (KBUILD) SEE UP052.
* UP062 (KIDDEL) SEE UP052.
* UP063 (REMAKE) SEE UP052.
* UP064 (ERRD.F) ERROR CODE FOR DPTX.
* UP065 (ERRD.P) SEE INFO ON UP064.
* UP066 (SEISIZ) SETSIZ SOMETIMES WENT INTO AN INFINITE LOOP UNDER PRIMOS 2
* UP067 (DBPS) THE FOLLOWING IS A LIST OF BUGS FIXED IN REV. 16.3.
   EXCEPT WHERE NOTED, THE BUGS WERE FIXED BASED ON INTERNAL
ERRORS OR ERRORS THAT WERE REPORTED BY CMSI OVER THE PHONE AND THERE ARE NO TAR NUMBERS.

1) THE FOLLOWING PATCHES HAVE BEEN MADE TO DMLCP.
   A. THE SIZE OF THE INTERNAL RECORD AREA HAS BEEN EXPANDED FROM BKB TO 32 KB TAR 24722.
   B. THE OPEN COMMAND WILL NOW ONLY OPEN AREAS SPECIFIED ON THE OPEN COMMAND RATHER THAN ALL AREAS.
   C. THE CLEAR ERROR COMMAND HAS BEEN FIXED SO THE SYSTEM WILL NOT HANG.
   D. THE 710F ERROR IN THE ROUTINE SETLST HAS BEEN FIXED.
   E. THE ROUTINE PUTLST HAS BEEN PATCHED SO THAT DUPLICATES WILL BE INSERTED IN THE PROPER ORDER.
   F. AFTER IMAGE LOGGING HAS BEEN PATCHED TO ACCOMIDATE BUCKETS LARGER THAN ONE (1) PAGE.
   G. R4VAL HAS BEEN PATCHED TO ACCOMIDATE LONG RETRIEVAL TRANSACTIONS.

2) ClUP HAS BEEN PATCHED SO THAT CERTAIN ERRORS WILL BE DISPLAYED ON THEIR TERMINAL WHEN THEY OCCUR.

3) DBACP HAS BEEN FIXED SO THAT IT MAY INITIALIZE A FILE LARGER THAN 32,000 BLOCK PROPERLY.

UP066 (CPUT4) TO REDUCE THE NUMBER OF TEST PROGRAMS. P400T2 & P500T1 ARE COMBINED IN AND ARE REPLACED BY THIS NEW TEST.

UP069 (CPUT4) SEE UP066

UP070 (CPUT4) SEE UP068.

UP071 (RTCT2) TO ENABLR THE TEST TO RUN ON A VCP AS WELL AS A SOC.

UP072 (RTCT2) SEE UP071.

UP073 (PRMNT1) ADDED TESTS IN ORDER TO TEST PARTS OF THE HARDWARE THAT WEREN'T PREVIOUSLY TESTED. TO HAVE COMPATIBILITY BETWEEN THE WIRE WRAP AND ETCH VERSIONS SO THAT THEY CAN RUN ON THE SAME PROGRAM.

DEVICE ADDRESS OF PRIMENET NODE CONTROLLER IS BEING CHANGED FROM '61 OT '07.

A BUG WAS FOUND WHEN TRYING TO LOAD THE A REGISTER WITH THE DEVICE ADDRESS PRIOR TO RUNNING THE PROGRAM.

UP074 (PRMNT1) SEE UP073.

UP075 (VTYT1) THIS DIAGNOSTIC CHECKS OUT THE SERIAL INTERFACE CAPABILITIES OF THE VCP V.I.A. PFO. THIS TEST OPERATED SIMILARLY TO TTYT2.

UP076 (VTYT1) SEE UP075.

UP077 (URCT1) SUPPORT OF VRC / DECISION DATA CARD PROCESSOR.
<table>
<thead>
<tr>
<th>UP078</th>
<th>(URCT1) SEE UP077.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP079</td>
<td>(P4WCST) TEST FAILED IF THERE WERE LESS THAN 64K OF MEMORY.</td>
</tr>
<tr>
<td>UP080</td>
<td>(P4WCST) SEE UP079.</td>
</tr>
<tr>
<td>UP081</td>
<td>(STLBT2) TO ACCOMMODATE THE P750.</td>
</tr>
<tr>
<td>UP082</td>
<td>(STLBT2) SEE UP081.</td>
</tr>
<tr>
<td>UP083</td>
<td>(PXT1) TO FIX STRING PROBLEM.</td>
</tr>
<tr>
<td>UP084</td>
<td>(PXT1) SEE UP083.</td>
</tr>
<tr>
<td>UP085</td>
<td>(CRTT1) (1) TO ADD A ROUTINE TO CHECK THE ABILITY FOR THE DEVICE TO TRANSMIT ON REQUEST OF THE HOST CPU AND CHECK THE INTEGRITY OF THE TERMINALS OWN MEMORY. (2) TO CONDENSE THE WHOLE TEST INTO A SMALLER PACKAGE WHILE IMPROVING THE EFFECTIVENESS TO THE WHOLE TEST. (3) TO REMOVE POSSIBLE BUG WHERE AMLC IS SHUTDOWN BEFORE IT HAS TIME TO CLEAR DEDICATED PELL.</td>
</tr>
<tr>
<td>UP086</td>
<td>(CRTT1) SEE UP085.</td>
</tr>
<tr>
<td>UP087</td>
<td>(AMLC15) TO INCORPORATE TIMING CHANGES CAUSED BY THE VCP.</td>
</tr>
<tr>
<td>UP088</td>
<td>(AMLC15) SEE UP087.</td>
</tr>
<tr>
<td>UP089</td>
<td>(DISCT1) TO INCORPORATE TIMING CHANGES CAUSED BY THE VCP.</td>
</tr>
<tr>
<td>UP090-UP096</td>
<td>(SPool) BETTER &quot;QUEUE FULL&quot; ERROR MESSAGE. (TAR-22414) (2) HASP CONTROL ON SERIAL PRINTER. (TAR 23467)</td>
</tr>
</tbody>
</table>