```
+----------------------------------------------------------------------+
|  _ _ _ _ _ _ _                                                       |
| | | | | | | | |                    Level of         Page _1__       |
| |d|i|g|i|t|a|l|                    Urgency          Of ___5__       |
| |_|_|_|_|_|_|_|            FCO      [ I ]                            |
|_____|
| FIELD CHANGE ORDER                       Number: DMZ32-I001          |
|_____|
| Applicability:Replace Revision E1 or earlier M8398 module with a revision |
| F1 or later to incorporate new UBI microcode version 16 and TIU microcode |
| version 1C when problem/symptoms are evident. Phase M8398 Revision "F1" |
| module into spares stock by 14 March 1987 as per ECO M8398-MK003. Purge |
| Stockroom 17 and all Field Service Stockrooms by 1 April 1987        |
|                                                                      |
|_____|
| Problem/Symptoms: Problem: 1. Flush bit not clearing DMA correctly.  |
| Symptom: File corruption on unibus disk controller drives and some users |
| getting other users data. System errorlogger logs "IMR" invalid map  |
| register errors. This bug requires that "DMA" mode be turned off on all |
| DMZ32 lines on the system. This is a VAX/VMS specific problem. See page 2.|
|_____|
| Quick Check: Presence of ROM 315F4 in location E135, ROM 155D2 in E145. |
| See page 4 for ROM locations.                                       |
|_____|
| Compatibility/Prerequisite FCO: N/A          | Est. Time to Install: |
|                                              |       1.0 hr.         |
|_____|_____|
| Special Tools or Test Equipment: N/A                                |
|                                                                      |
|_____|
|                      FCO Parts Information                          |
|_____|
| Order by   |                  Contents                             |
| FCO Kit #  |_____     |
|            | Quantity     Part Number      Description             |
| EQ-01457-01|    1           M8398         Module at Revision F1    |
| FA-04743-01|    1                         FCO Document             |
|            |                                                       |
|_____|_____|
| EQ Kit Variation/System-Option Applic: N/A                          |
|_____|
|                         Approvals                                   |
|_____|
| CSSE Engineer        |F.S.  Product Safety  | F.S.  Logistics       |
| Lee Sondrini         |  Jerry Gannelli      | Ed Duggan             |
|_____|_____|_____|
| Responsible CSSE Mgr.|F.S. Microfiche Libraries| Affected Population |
| Tony Payne           |                      | 10,000                |
|_____| EP-FSNVX-LB   VAX    |_____|
| MicroMedia Publishing|                      | Initial Kitting       |
| Ray LeBlanc          | VAXnotes             | 10,000                |
```

```
 _____        | STARS                        |_____ |
| Revision:              |      |                              | Hardcopy Publication   |
|        A               |      |                              | 10,000                 |
|_____|      |                              |_____|
| FCO Release Date       |      |                              | Parts Availability     |
| 18-MAY-87              |      |                              | June 1987              |
+--------------------------------------------------------------------------------------+
```

EN-01095-12-REVB(548)

```
  _ _ _ _ _ _ _                  |            FCO  DMZ32-I001
 | | | | | | | |                 |
 |d|i|g|i|t|a|l|                 |            PAGE  2  OF  5
 |_|_|_|_|_|_|_|                 |
                                 |
_____|_____
```

2. Problem: SSYNC timeout counter starts before NPG is received [NXM
            error].

   Symptom: This causes Ultrix and UNIX systems to hang and or crash based
            on operating system environment at the time of the timeout.

3. Problem: When H3014 is powered off/on, DTR is not reasserted by
            microcode.

   Symptom: Terminal lines set up as modem will not be able to connect to
            system, as well as users logged in through modem connections
            will be dropped due to no "DTR on" status. System must be re-
            booted to reenable modem lines.

4. Problem: Unsupported baud rates cause microcode to hang.

   Symptom: If un-suspecting user tries to set terminal to one of the two
            unsupported baud rates, the DMZ32 microcode will hang and the
            device will be unusable to the system. A total system reboot
            is required to clear the condition.

5. Problem: NXM error sets the wrong bit in Octet CSR.

   Symptom: No error reports from field, but if NXM were to occur, the YC-
            driver would not be notified of it's occurrence. This could have
            serious implications on 8XXX system with DWBUA [unibus adapter].

6. Problem: Self test code constants enabled at wrong time.

   Symptom: None reported from field, but was discovered during internal
            testing of DMZ32 microcode.

7. Problem: Foreign terminals sending abutted characters lose trailing bits.

Symptom: Files get invalid escape sequence data while editing using the
         "arrow" cursor positioning keys.

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 _ _ _ _ _ _ _               |            FCO   DMZ32-I001
| | | | | | | | |            |
|d|i|g|i|t|a|l|              |            PAGE 3  OF  5
|_|_|_|_|_|_|_|              |
                             |
_____|_____
```

                    REWORK/REPLACEMENT PROCEDURE
                              FOR
                       FCO DMZ32-I001

        ****
        *   NOTE   *
        *   *
        *   READ THROUGH THE REWORK/REPLACEMENT   *
        *   PROCEDURES COMPLETELY BEFORE   *
        *   BEGINNING ACTUAL REWORK   *
        *   *
        ****

1.   Obtain the Customer's permission and power down the System to be worked
     on via the console switch. Locate the Main Breaker (CB1) on the Cabinet
     Power Controller and set it to the "0" (OFF) position.

     ****
     *   !! CAUTION !!   *
     *   *
     *   DO NOT SLIDE ANY BA11 BOX OUT OF ITS CABINET UNLESS THE CABINET *
     *   IS BOLTED TO AN ADJACENT CABINET OR THE STABILIZER LEGS ARE   *
     *   EXTENDED. ONLY ONE CABINET IS ALLOWED TO HAVE AN OPTION OR BOX *
     *   PULLED OUT AT ANY ONE TIME.   *
     *   *
     ****

2.   Gain access to the appropriate M8398 module to be replaced.

3.   Disconnect the BC22N-10 cable from J1 of the M8398 module.

4.   Remove the M8398 from the SPC slot.

     ****
     *   !! CAUTION !!   *

```
*                                                                              *
*    REMOVE THE MODULE SLOWLY AND CAREFULLY TO AVOID CATCHING                   *
*    COMPONENTS ON THE CARD GUIDES OR CHANGING THE SWITCH SETTINGS.             *
*                                                                              *
******************************************************************************
```

5.   Install into the same slot the new M8398 module at revision F1 or greater.


```
******************************************************************************
*                            !!  CAUTION  !!                                   *
*                                                                              *
*    INSERT THE MODULE SLOWLY AND CAREFULLY TO AVOID CATCHING                   *
*    COMPONENTS ON THE CARD GUIDES OR CHANGING THE SWITCH SETTINGS.             *
*                                                                              *
******************************************************************************
```

6.   Ensure "F1" Brady Marker is installed on M8398 module. The marker will be
      used to indicate that this FCO has been incorporated without having to
      remove the module from the SPC slot.

7.   Reconnect the BC22N-10 cable to J1 of the M8398 module.

8.   Reset CB1 on the Cabinet Power Controller and power up the system using
      the console switch.

9.   Run the DMZ32 current revision diagnostics to verify proper microcode
      revision [UBI version 16/ TIU version 1C] and module operation.

10.   Update Site Management Guide to reflect this FCO.

11.   Report LARS data as per example on page 5.

      M8398 Rev. F1 ROM Locations:

```
 _____
|       ---------                                                          |
|E145|  155D2  |                                                           |
|       ---------                                                          |
```

```
 |                                                                          |
 |                                                                          |
 |                                                                          |
 |                                                                          |
 |                                                                          |
 |   ----------   ---------                                                 |
 |E137| 317F4  | E122| 319F4 |                                             |
 |    ----------   ---------                                                |
 |   ----------   ---------                                                 |
 |E136| 316F4  | E121| 318F4 |                                             |
 |    ----------   ---------                                                |
 |   ----------           __                                                |
 |E135| 315F4  |        ____||_                                            |
 |    ----------        |    |                                             |
 |_____|   |_____|
```

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 _ _ _ _ _ _ _                 |          FCO  DMZ32-I001
| | | | | | | |                |
|d|i|g|i|t|a|l|                |          PAGE 5  OF 5
|_|_|_|_|_|_|_|                |
                              |
_____|_____
```

LARS

	USA & GIA	EUROPE
Activity		
Contract and warranty	W	Y
Non Contract/Non Warranty	F	F
DEC Option	DMZ32	DMZ32
Type of Call	M	M
Action Taken	D	I
Fail Area-Module-FCO-Comments	DMZ32-I001	DMZ32-I001
Material Used	EQ-01457-01	EQ-01457-01

```
\^ DMZ32
\\DMZ32
\\SONDRINI
\\1987
\\MAY
\\FCO_DOCS
```