RT-11

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THE SOFTWARE DISPATCH

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RT-11 SOFTWARE DISPATCH

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The RT-11 Software Dispatch complements the RT-11 Software Dispatch Review. New and revised Software Product Descriptions, programming notes, software problems and solutions, and documentation corrections are published here. Much of the material is developed from Software Performance Report (SPR) answers significant to the general audience and is printed here to supplement the maintenance notebook (established by the Software Dispatch Review).

PRODUCTS SUPPORTED in the RT-11 SOFTWARE DISPATCH

BASIC-11/RT-11 V2
CTS-300 V6
DECnet-RT V1.1
FMS-11/RT-11 V1.1
FORTRAN GRAPHICS PACKAGE V1.1
FORTRAN/RT-11 LAB Extensions V1
FORTRAN IV/RT-11 V2.5
GAMMA-11 F/B V3
LSP-11 V1.1
MSB11 V1
MSB/FORTRAN IV V1
MU BASIC-11/RT-11 V2
PLOT 11/RT-11 V1.1
RT-11 V4
RT-11 2780/3780 Protocol Emulator V4
SSP-11 V1.2

DISTRIBUTION

The RT-11 Software Dispatch is directed to one software contact for each software product. No mailing will be made to addresses without a software contact name. **Address change requests should be sent to the nearest DIGITAL field office. Include the new address and mailing label from the most recently received publication.**

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Eleanor F. Hunter, Editor
Ann Owens, Associate Editor

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SPR USER LETTER

Submitted by Sheila Hatchell, 8/11 Administration

The Dispatch SPR User Letter has been revised to reflect the new SPR form which is now available. These forms can be obtained from your local DIGITAL Office or SPR Center, or by requesting them from SPR Administration.

How to Make the Best Use of the SPR Form

What We Can Do for You:

1. Blank SPR forms are returned with each SPR acknowledgement and are available upon request in the desired quantities through the SPR Administration (P.O. Box F) and your local office/SPR Center.
2. Copies of the SPR acknowledgement and answer are sent to the appropriate DIGITAL Office/SPR Center for their information.
3. STATUS FOR SUBMITTED SPRs IS PROVIDED UPON REQUEST.
4. SPRs marked PROBLEM/ERROR will have a response for DIGITAL SUPPORTED products. These SPRs should refer to suspected deficiencies in the software.
5. SPRs marked SUGGESTION are forwarded to the pertinent software group for information purposes, and are responded to at their discretion.

What You Can Do for Us:

1. Fill out the form completely either by typing or printing clearly. **PLEASE INCLUDE YOUR SOFTWARE SERVICE CUSTOMER NUMBER IN THE ADDRESS BOX.**
2. Limit only one problem per SPR form. Several problems on an SPR can lengthen the turnaround time.
3. WHENEVER POSSIBLE, SUBMIT AN SPR WITH ATTACHMENTS, SUCH AS MACHINE READABLE DATA, DETAILED INSTRUCTIONS ON HOW TO REPRODUCE THE PROBLEM, PROGRAM AND/OR DATA FILES, LISTINGS, AND CONSOLE LOG.
4. It would be helpful to all concerned if problems with patches are reported as soon as possible.
5. For security SPRs, it is imperative that the DO NOT PUBLISH box be marked.
6. It would be helpful if tapes submitted with SPRs are labeled (track and density), and have a directory attached.
7. Complete the questionnaire that is supplied with each SPR answer. Your feedback is essential in monitoring the quality of our responses.
8. SPRs should not be used for problems concerning software policy, software distribution, or hardware. The local office should be contacted in these cases.

RT-11 V4.Ø
Monitor Patches
RT-11FB VØ4.ØØF
RT-11SJ (S) VØ4.ØØF
RT-11FB (S) VØ4.ØØK
RT-11XM (S) VØ4.ØØN

Seq 1.1.18 M

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Supersedes article dated September 1981

UPDATES TO MONITOR FILES (JM)

********* REPLACEMENT ARTICLE *********

The following errors are corrected in the patches below. Please note that these patches increase the size of RMON.

FB distributed monitor:

The correction made to allow the .GTLIN request to acknowledge the setting of bit 14 of the JSW (Seq 1.1.16) inhibits the monitor from converting lowercase input to uppercase input for the .CSIGEN and .CSISPC requests. After applying the following patch if bit 14 is set in the JSW lowercase input to a .GTLIN request will not be converted to uppercase but will for both .CSIGEN and .CSISPC.

System generated monitors:

In FB and XM, the correction made to allow the .GTLIN request to acknowledge the setting of bit 14 of the JSW (Seq 1.1.16) inhibits the monitor from converting lowercase input to uppercase input for the .CSIGEN and .CSISPC requests. After applying the following patch if bit 14 is set in the JSW lowercase input to a .GTLIN request will not be converted to uppercase but will for both .CSIGEN and .CSISPC.

The system hangs when booting on a system containing DIBOL Instruction Set support (subset of LSI-11 Commercial Instruction Set). When the bootstrap executes the CIS instruction to determine the existance of the Commercial Instruction Set hardware the value in the high byte of R4 is non-zero which with DIS support indicates instruction suspension. This effects all system generated monitors.

The inhibit TT wait bit (bit 6) of the terminal configuration word (T.CNFG) in the TCB of non-console terminals is not cleared when the terminals are detached, either through an explicit detach (.MTDTCH request) or when a job terminates. This effects all multi-terminal monitors.

Global symbols are added to extend support of products layered on RT-11. This effects all system generated monitors.

The FB and XM monitor does not set the handler hold flag on normal abort entry which may cause queue elements belonging to an aborted job to remain in a handler's queue after the job has been terminated.

1. The following is a required patch to the RT-11FB VØ4.ØØF (distributed) foreground background monitor. It must be installed in all copies of RT11FB.SYS (previously modified in Seq 1.1.16 M).

RT-11 V4.Ø
Monitor Patches
RT-11FB VØ4.ØØF
RT-11SJ (S) VØ4.ØØF
RT-11FB (S) VØ4.ØØK
RT-11XM (S) VØ4.ØØN

NOTE: Since patching the distribution medium is not recommended, the patch must be installed whenever you copy the monitor file from the distribution medium.

This patch is installed by using SIPP, the Save Image Patching Program. First, ensure that a copy of the monitor file to be patched is on a mounted volume. Using an editor, create the file RT11FB.ØØ7 as follows. Replace 'DK:' in the patch below with the name of the device that contains the monitor file.

```
RUN SIPP
DK:RT11FB.SYS/C
Ø
4736
47166
^Z                                  (up-arrow/Z)
476Ø
4346Ø
^Z                                  (up-arrow/Z)
^Z                                  (up-arrow/Z)
36352
3726
4767
12576
^Z                                  (up-arrow/Z)
^Z                                  (up-arrow/Z)
55Ø44
34
417
11127
Ø
21127
1
24Ø
^Z                                  (up-arrow/Z)
74
26727
177746Ø
1
1ØØ6
137ØØ
```

RT-11 V4.Ø
Monitor Patches
RT-11FB VØ4.ØØF
RT-11SJ (S) VØ4.ØØF
RT-11FB (S) VØ4.ØØK
RT-11XM (S) VØ4.ØØN

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```
44
42700
137777
50061
450
207
^Y                                  (up-arrow/Y)
47206
^C                                  (up-arrow/C)
```

2. To apply the patch to RT11FB.SYS type:

```
@RT11FB.007
```

The resulting version of the monitor will be RT-11FB V04.00G.

3. After the patch has been installed, copy the boostrap and re-boot your system as follows:

```
.COPY/BOOT RT11FB.SYS SY:
.BOOT SY:
```

4. The following is a required patch to the RT-11 source file BSTRAP.MAC. You must apply it to the updated copy previously modified in Seq 1.1.16 M.

To install the patch, first create a patch file for input to the SLP utility. Using an editor, create a file called BSTRAP.017 on your system volume. Enter the text below into the file. The hyphen must be the first character in the file. The special symbol "<tab>" indicates the TAB character. All other blank spaces in the text should be entered in the file as single SPACE characters.

```
-/ELBSTR<tab>== 24/,.,/;017/
ELBSTR<tab>== 25
-24,24,/;017/
PATLSJ<tab>= 4
-27,27,/;017/
PATLFX<tab>= 11
-182,,/;017/
<tab>MOV<tab>R4,-(SP)
<tab>CLR<tab>R4
-183,,/;017/
<tab>MOV<tab>(SP)+,R4
-605,607,/;017/
<tab>CALL<tab>@#XMREL+<BUFFB-RELLST>
<tab>MOV<tab>MEMSIZ,-(R1)
<tab>ADD<tab>#<RMSTAK-$XMSIZ>,R1
```

RT-11 V4.Ø
Monitor Patches
RT-11FB VØ4.ØØF
RT-11SJ (S) VØ4.ØØF
RT-11FB (S) VØ4.ØØK
RT-11XM (S) VØ4.ØØN

Seq 1.1.18 M

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```
-1588,,/;Ø17/
.IF NE MMG$T
XMREL::<tab>MOV<tab>#$XMPTR,R1
<tab>ADD<tab>R4,R1
<tab>MOV<tab>R1,DECNET(R4)
<tab>RETURN
.ENDC
/
```

5. The following is a required patch to the RT-11 source file RMONFB.MAC. You must apply it to the updated copy previously modified in Seq 1.1.16 M.

   To install the patch, first create a patch file for input to the SLP utility. Using an editor, create a file called RMONFB.Ø1Ø on your system volume. Enter the text below into the file. The hyphen must be the first character in the file. The special symbol "<tab>" indicates the TAB character. All other blank spaces in the text should be entered in the file as single SPACE characters.

```
-/ELRMFB<tab>== 13/,.,/;Ø1Ø/
ELRMFB<tab>== 14
-1Ø8,1Ø8,/;Ø1Ø/
FORK::<tab>.WORD<tab>$FORK-$RMON
-699,,/;Ø1Ø/
ERRHOK::
-1334,,/;Ø1Ø/
RCTHOK::
-1539,,/;Ø1Ø/
<tab>MOV<tab>@R1,(PC)+
GTLFLG:<tab>.WORD<tab>Ø
-1587,,/;Ø1Ø/
<tab>CMP<tab>GTLFLG,#1
<tab>BNE<tab>77$
-159Ø,,/;Ø1Ø/
77$:
-1712,,/;Ø1Ø/
EXIHOK::
-3638,,/;Ø1Ø/
GTIHOK::
-3736,,/;Ø1Ø/
CMTHOK::
-3875,3875,/;Ø1Ø/
```

RT-11 V4.Ø
Monitor Patches
RT-11FB VØ4.ØØF
RT-11SJ (S) VØ4.ØØF
RT-11FB (S) VØ4.ØØK
RT-11XM (S) VØ4.ØØN

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```
 .ROM<tab>MOV<tab>#1ØØØØØ,FPPFLG,GLOBAL=YES
-3898,3898,/;Ø1Ø/
 .ROM<tab>ADD<tab>R5,PSCLOK,GLOBAL=YES
-3933,,/;Ø1Ø/
ENSHOK::
-3946,3946,/;Ø1Ø/
 .ROM<tab>MOV<tab>SP,TASKSP,GLOBAL=YES
-4Ø16,,/;Ø1Ø/
FPSHOK::
-4415,4415,/;Ø1Ø/
1ØØ$:<tab>SEC
<tab>ROR<tab>-(RØ)
-4562,,/;Ø1Ø/
CRRHOK::
/
```

6. The following is a required patch to the RT-11 source file MTTEMT.MAC. You must apply it to the uncommented source supplied with the Version 4 distribution kit.

   To install the patch, first create a patch file for input to the SLP utility. Using an editor, create a file called MTTEMT.ØØ1 on your system volume. Enter the text below into the file. The hyphen must be the first character in the file. The special symbol "<tab>" indicates the TAB character. All other blank spaces in the text should be entered in the file as single SPACE characters.

```
-/ELMTEM<tab>== Ø/,.,/;ØØ1/
ELMTEM<tab>== 1
-357,357,/;ØØ1/
<tab>BIC<tab>#TCBIT$!TTSPC$!TTLC$,@R3
-433,433,/;ØØ1/
MTTGET::
<tab>JSR<tab>PC,GETPSW
-448,,/;ØØ1/
MTTHOK::
/
```

7. The following is a required patch to the RT-11 source file MTTINT.MAC. You must apply it to the updated copy previously modified in Seq 1.1.16 M.

   To install the patch, first create a patch file for input to the SLP utility. Using an editor, create a file called MTTINT.ØØ5 on your system volume. Enter the text below into the file. The hyphen must be the first character in the file. The special symbol "<tab>" indicates the TAB character. All other blank spaces in the text should be entered in the file as single SPACE characters.

RT-11 V4.Ø
Monitor Patches
RT-11FB VØ4.ØØF
RT-11SJ (S) VØ4.ØØF
RT-11FB (S) VØ4.ØØK
RT-11XM (S) VØ4.ØØN

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```
-/ELMTIN<tab>== 1Ø/,.,/;ØØ5/
ELMTIN<tab>== 11
-162,,/;ØØ5/
DLIHOK::
-198,,/;ØØ5/
DLIHOK::
-2Ø9,,/;ØØ5/
FRQHOK::
-94Ø,,/;ØØ5/
.ENABL LSB
-969,,/;ØØ5/
DLOHOK::
-1ØØ8,,/;ØØ5/
PCHHOK::
-1Ø1Ø,,/;ØØ5/
DSBHOK::
-1Ø12,,/;ØØ5/
.DSABL LSB
/
```

8. Apply the patches to the source files as follows:

```
.R SLP
*BSTRAP=BSTRAP,BSTRAP.Ø17
*RMONFB=RMONFB,RMONFB.Ø1Ø
*MTTEMT=MTTEMT,MTTEMT.ØØ1
*MTTINT=MTTINT,MTTINT.ØØ5
*^C                                    (CTRL/C to exit)
```

9. Repeat the assembly and link of your generated monitor, using the command file MONBLD.COM that was produced during system generation. Alternately, you can manually repaet the relevant assembly and link steps. Be sure to use the correct version of SYCND.MAC and to relink with the correct OBJ files.

1Ø. The resulting version of the SJ generated monitor will be RT11SJ (S) VØ4.ØØG. The resulting version of the FB generated monitor will be RT11FB (S) VØ4.ØØL. The resulting version of the XM generated monitor will be RT11XM (S) VØ4.ØØO.

11. Preserve the patched source files. If there are any future corrections, you will be required to apply them to the patched source files.

RT-11 V4.Ø
System Utilities
PIP.SAV VØ7.ØØE

Seq 7.1.7 M

1 of 1

/POSITION:N SWITCH FOR MAGTAPE INPUT WORKS INCORRECTLY (DBF)

When copying files from magtape using the /POSITION:n switch, where n is a positive integer, PIP ignores the /POSITION switch and copies all files that match the input specifications. PIP should advance the tape to file sequence number n, and begin searching for matching input files from that point on the tape.

1. The following is a required patch to the PIP.SAV utility program. It must be installed in all copies of the utility.

   NOTE: Since patching the distribution medium is not recommended, the patch must be installed every time you copy the program from the distribution medium.

2. This patch is installed using SIPP, the Save Image Patching Program. First, ensure that a copy of the file PIP.SAV is on a mounted volume. Create the file, PIP.ØØ6 as follows. Replace 'DK:' in the patch below with the name of the device that contains the program file.

```
RUN SIPP
DK:PIP.SAV/A/C
Ø
3632
1Ø6
^Z                                  (up-arrow/Z)
1ØØ76
4Ø2
^Y                                  (up-arrow/Y)
45ØØ
^C                                  (CTRL/C to exit)
```

3. To apply the patch to PIP.SAV type:

   ```
   @PIP.ØØ6
   ```

   The resulting version of the utility will be PIP VØ7.ØØF.

4. Save the new version of the utility on a backup volume.

RT-11 V4.Ø
System Utilities
DUP.SAV VØ4.ØØI

Seq 7.2.11 M

1 of 1

OUTPUT ERROR DURING COPY/DEVICE TO MAGTAPE CAUSES SYSTEM ERROR (DBF)

If an output error occurs while doing a COPY/DEVICE to magtape, DUP causes a system halt or trap to 4.

1. The following is a required patch to the DUP.SAV utility program. It must be installed in all copies of the utility.

   NOTE: Since patching the distribution medium is not recommended, the patch must be installed every time you copy the program from the distribution medium.

2. This patch is installed using SIPP, the Save Image Patching Program. First, ensure that a copy of the file DUP.SAV is on a mounted volume. Create the file, DUP.Ø1Ø as follows. Replace 'DK:' in the patch below with the name of the device that contains the program file.

```
RUN SIPP
DK:DUP.SAV/A/C
Ø
3546
112
^Z                                  (up-arrow/Z)
22324
1Ø6
^Y                                  (up-arrow/Y)
14Ø1Ø6
^C                                  (CTRL/C to exit)
```

3. To apply the patch to DUP.SAV type:

   ```
   @DUP.Ø1Ø
   ```

   The resulting version of the utility will be DUP VØ4.ØØJ.

4. Save the new version of the utility on a backup volume.

PIP ERROR MESSAGES MISSING (MS)

The following PIP error messages were inadvertently omitted from the RT-11 System Message Manual:

?PIP-F-Directory full DEV:

No space exists in the output volume's directory to create the output file.	Use the SQUEEZE command to consolidate free space on the output volume, or copy the output volume to a volume with a larger number of directory segments and reenter the command.

?PIP-F-Fetch error DEV:

1. A serious PIP or system internal error occurred. The copy of PIP.SAV, the monitor file, or the specified device handler may be corrupted on disk. 2. The in-core copy of PIP or the monitor may be corrupted.	Reboot the system and retry the the operation. If the error occurs again, obtain a new copy of PIP.SAV and the specified device handler. Retry the operation. If the error still occurs, submit an SPR to DIGITAL; include with the SPR a program listing and a machine-readable source program, if possible.

?PIP-W-Output file found, no operation performed DEV:FILNAM.TYP

The monitor /NOREPLACE or PIP /N option was used in the command line, and a file already exists on the output device with the same name as the output file you are trying to create.	Use a different name for the output file, or retype the command line and do not include the /NOREPLACE or PIP /N option.

?PIP-F-Protected file DEV:FILNAM.TYP

An attempt was made to delete a protected file.	Unprotect the file using the monitor RENAME/NOPROTECT command or the PIP /Z option and retype the command.

?PIP-F-Protected file already exists DEV:FILNAM.TYP

A protected file already exists on the output device, with the same name as the file name specified in the command.	Use a different name for the output file.

These messages will be included in the next release of the RT-11 System Message Manual.

EMBEDDED BLANKS OVERRIDES THE ICNT PARAMETER IN THE ASSIGN ROUTINE (PAT 14)

PROBLEM:

The CALL ASSIGN routine will override the ICNT parameter when embedded blanks occur within the file name string.

SOLUTION:

1. Type in the following MACRO file: PAT14.MAC

PAT14.MAC:

```
        .TITLE  $ASSIGN/OPEN
        .IDENT  /007/
        .PSECT  OTS$I
S=.
.=S+60
        JMP     REMBL
.=S+76
CMPRSD:
.=S+26
        JMP     ASGND
RET:
.=S+372
RETNOP:
.=S+404
GETARG:
.=S+424
REMBL:
        TST     R1
        BEQ     EOS
EMBED:  CMPB    @RØ,#4Ø
        BNE     CON
        INC     RØ
        BR      NOBL
CON:    MOVB    (RØ)+,(R2)+
        BNE     NOBL
        TSTB    -(R2)
        BR      EOS
NOBL:   DEC     R1
        BNE     EMBED
EOS:    CLRB    @R2
```

```
        JMP     CMPRSD
ASGND:  BIS     #4Ø,34(RØ)
        DECB    R4
        BLE     RETNOP
        JMP     RET
        .END
```

2. Assemble the patch using MACRO-11

```
.R MACRO
*PAT14=PAT14
*^C
```

3. Install the patch, using PAT, to the most recently patched OTSCOM.OBJ file:

   NOTE: Make a copy of OTSCOM.OBJ before you patch it just in case something goes wrong.

```
.R PAT.SAV
*OTSCOM=OTSCOM/C:72206,PAT14/C:16531
```

4. Rebuild the OTS using the procedure described in the FORTRAN IV Installation Guide.

5. Test the patch by creating and compiling the following FORTRAN program.

```
        BYTE    NAME(1Ø)
        NAME(1)='A'
        NAME(2)='S'
        NAME(3)='G'
        NAME(4)='N'
        NAME(5)=' '
        NAME(6)=' '
        NAME(7)='.'
        NAME(8)='C'
        NAME(9)='H'
        NAME(1Ø)='K'
        CALL ASSIGN(21,NAME,1Ø,'NEW')
        WRITE(21,1Ø) NAME
1Ø      FORMAT(' NAME IS ',1ØA1)
        END
```

Which should produce the file ASGN.CHK.

FORTRAN IV/RT-11 V2.5
for RT-11 V4.Ø
OTS

Seq 45.2.12 M

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THE DEFAULT CARRIAGE CONTROL FOR THE ASSIGN ROUTINE IS INCORRECT (PAT 15)

PROBLEM:

The FORTRAN OTS does not properly set the default carriage control for sequential files assigned by the ASSIGN routine. Patch 14 (Seq 45.2.11M) must have been applied to the OTS before this correction can be applied.

SOLUTION:

1. Type in the following MACRO file: PAT15.MAC

PAT15.MAC:

```
        .TITLE  $OPEN
        .IDENT  /Ø07/
        .PSECT  OTS$O
S=.
.=S+55Ø
        BIT     #22ØØ,@RØ
.=S+556
        JMP     ASGN
RET:
.=S+11Ø4
ASGN:
        BIT     #2Ø,@RØ
        BNE     4$
        BIT     #1ØØØ,@RØ
        BEQ     3$
        BIT     #4Ø,34(RØ)
        BEQ     3$
4$:     BIS     #4Ø,@RØ
3$:     JMP     RET
        .END
```

2. Assemble the patch using MACRO-11

```
.R MACRO
*PAT15=PAT15
*^C
```

3. Install the patch, using PAT, to the most recently patched OTSCOM.OBJ file:

   NOTE: Make a copy of OTSCOM.OBJ before you patch it just in case something goes wrong.

```
.R PAT.SAV
*OTSCOM=OTSCOM/C:161143,PAT15/C:13225
```

4. Rebuild the OTS using the procedure described in the FORTRAN IV Installation Guide.

5. Test the patch by creating and compiling the following FORTRAN program.

```
        CALL ASSIGN(1,'ASSIGN.DAT',1Ø)
        WRITE(1,1)
1       FORMAT('ØWHEN ZERO APPEARS AS THE FIRST')
        WRITE(1,2)
2       FORMAT(' CHARACTER ON THE LINE ABOVE THE PATCH IS SUCCESSFUL')
        END
```

   Which should produce a file ASSIGN.DAT, which contains the following:

```
ØWHEN ZERO APPEARS AS THE FIRST
CHARACTER ON THE LINE ABOVE THE PATCH IS SUCCESSFUL
```

GAMMA-11 V3.1 Seq 49.2.2 M
FGAMMA

SYSTEM MAY HANG WHEN DISK SQUEEZED (JB)

There is an error in the foreground program which causes the system to hang when the disk is squeezed using the FGAMMA option DELETE immediately after performing a Gated acquisition in the foreground.

To correct this problem follow the procedure below using a copy of the distribution disk.

DO NOT PATCH THE DISTRIBUTION DISK.

1. Create the patch file FGAMMA.ØØ3 with the contents shown below.

```
RUN   SIPP
DK:FGAMMA.REL/C
6
13750
1624
4767
142
^Z                  (UP-ARROW /Z)
1772
5046
13746
54
62716
360
4736
11211
14241
207
^Y                  (UP-ARROW /Y)
65346
^C                  (UP-ARROW /C)
```

2. Replace 'DK:' in the patch file with the name of the device which contains the copy of FGAMMA.REL to be patched.

3. Apply the patch by typing:

```
@FGAMMA.ØØ3
```

4. Configure the GAMMA-11 system disk (refer to the GAMMA-11 SYSTEM REFERENCE MANUAL).

GAMMA-11 V3.1 Seq 49.5.1 M
BGAMMA
DATANL 1 of 1

ISOMETRIC DISPLAY IMAGES USE INCORRECT INTENSITY LEVELS (JB)

There is an error in the data analysis program which causes intensity levels 9-16 to be displayed as levels 1-8. To correct this problem apply the following patch to a copy of the distribution disk.

DO NOT PATCH THE DISTRIBUTION DISK

1. Create the patch file DATANL.ØØ4 with the contents shown below.

```
RUN    SIPP
DK:DATANL.SAV/C
4
55Ø12
46Ø2
177740
^Y                (UP-ARROW /Y)
15332
^C                (UP-ARROW /C)
```

2. Replace 'DK:' in the patch file with the name of the device which contains the copy of DATANL.SAV to be patched.

3. Apply the patch by typing:

```
@DATANL.ØØ4
```

CTS-3ØØ VØ6
for RT-11 V4.Ø
DBUILD VØ5-ØØ
DECFORM VØ6-ØØA
(PATCH 21)

Seq 51.2.1 M
Seq 51.4.2 M

CORRECTION FOR THREE DECFORM PROBLEMS (LG)

1) Patch 21 will allow a DECFORM program to:

   a) use the VT100 attributes if the terminal is a VT100 and it is in ANSI mode when the program is started.

   b) use a VT100 in VT52 mode if it is in VT52 mode when the program is started.

   Furthermore, when the DECFORM program is terminated, the VT100 terminal will be left in the mode in which it had been prior to starting up the DECFORM program.

2) Using the value check option, which compares the contents of a data field against a table of values, can cause a subscript error. Patch 21 corrects this so that using the value check option does not cause a subscript error.

3) Using DECFORM under Verify mode, if a line of code has an "R" for required, and a "V" for verify, a problem results if the field has a value. If the operator does not enter a value (for verifying) and presses the carriage return key, the field value changes to zero. Patch 21 corrects this so that under these conditions the field contains the proper value.

Patch 21 corrects these problems as stated above, and changes the version number of DBUILD to V06-00A and DECFORM to V06-00B.

Using the editor, create the following files. Name them as indicated in the comment line that is the first line of each file. Then, to install the patch, follow the procedure shown following the files.

Corrections are made to the source modules using the SLP (Source Language Patch) program. Please note that the last record in each .PAT file is "/". You must terminate each line in those files with a carriage return, including the last line "/".

CTS-3ØØ VØ6
   for RT-11 V4.Ø
DBUILD VØ5-ØØ
DECFORM VØ6-ØØA
(PATCH 21)

Seq 51.2.1 M
Seq 51.4.2 M


```
;P021A.PAT
-1,1
-435,435
VERSN,  EROR='DECFORM V06-00B '
-751,751
TYV,    IF (V.LT.0) GOTO OPTION
/


;P021B.PAT
-64
,A73,'  RECORD'
,A73,'TCODE,    A7'
,A73,'TANS,     D2'
,A73,'TCTR,     D2'
-68,68
,A73,'  ;XCALL FLAGS(01000000)          ;SUPPRESS STOP MESSAGE'
,A73,'  XCALL FLAGS (01010000,1)        ;SUPPRESS ECHO & STOP MESSAGE'
,A73,'  DISPLAY (1,27,''Z'')            ;WHAT ARE YOU'
,A73,'  SLEEP 1'
,A73,'LUPEO,    XCALL TTSTS (TANS)'
,A73,'  IF(TANS.EQ.0) GOTO VTCNTO'
,A73,'  INCR TCTR'
,A73,'  ACCEPT (1,TCODE(TCTR,TCTR))'
,A73,'  GOTO LUPEO'
,A73,'VTCNTO,   IF(TCODE(3,3).EQ.''?'') DISPLAY (1,27,''[?2'',108)'
,A73,'  XCALL FLAGS (00010000,0)        ;TURN ECHO ON'
-107
,A73,'  IF(TCODE(3,3).EQ.''?'') DISPLAY (1,27,''<'')'
-135,135
,A73,'EXIT,     IF(TCODE(3,3).EQ.''?'') DISPLAY (1,27,''<'')'
,A73,'  STOP'
-140,141
MAXCT,  D3,102          ; # OF LINES OF 'CANNED CODE' TO WRITE
SUM,    D3
-163,163
        RECORD
TCODE,  A7
TANS,   D2
TCTR,   D2

-167,167
        XCALL FLAGS (01010000,1)        ;SUPPRESS ECHO & STOP MESSAGE
        DISPLAY (1,27,'Z')              ;WHAT ARE YOU
        SLEEP 1
LUPEO,  XCALL TTSTS (TANS)
        IF(TANS.EQ.0) GOTO VTCNTO
        INCR TCTR
        ACCEPT (1,TCODE(TCTR,TCTR))
        GOTO LUPEO
VTCNTO, IF(TCODE(3,3).EQ.'?') DISPLAY (1,27,'[?2',108)
        XCALL FLAGS (00010000,0)        ;TURN ECHO ON
        DISPLAY (1,27,'Y',32,32,27,'J','DBUILD V06-00A',13,10,10)
-241
        IF(TCODE(3,3).EQ.'?') DISPLAY (1,27,'<')
```

```
CTS-3ØØ VØ6                                                    Seq 51.2.1 M
   for RT-11 V4.Ø                                              Seq 51.4.2 M
DBUILD VØ5-ØØ
DECFORM VØ6-ØØA                                                3 of 4
(PATCH 21)

;P021C.PAT
-57,57
\
        .ASCII  /       ;DISPLAY (1,27,'<')     ;ATTEMPT TO SET VT100 MODE/<CR><LF>
/



;P021D.MAC
        .TITLE  FOC5
        .CSECT  FOC5
P021:
        .=      .+2230
        JMP     P021A
        .PSECT  $P021
P021A:  BEQ     7$
        CMP     (R0)+,(R0)+
        JMP     P021+2222
7$:     TST     (R0)+
        JMP     P021+2234
        .END



.RENAME DECFO.DBL,DBUILD.DBL,FOC12.MAC *.OLD
 Files renamed:
DK:DECFO.DBL    to DK:DECFO.OLD
DK:DBUILD.DBL   to DK:DBUILD.OLD
DK:FOC12.MAC    to DK:FOC12.OLD

.RENAME FOC5.OBJ,FOCOMP.SAV *.OLD
 Files renamed:
DK:FOC5.OBJ     to DK:FOC5.OLD
DK:FOCOMP.SAV   to DK:FOCOMP.OLD

.R SLP
*DECFO.DBL=DECFO.OLD,P021A.PAT
*DBUILD.DBL=DBUILD.OLD,P021B.PAT
*FOC12.MAC=FOC12.OLD,P021C.PAT
*^C

.R MACRO
*FOC12=FOCO,FOC12
ERRORS DETECTED:  0
*P021D=P021D
ERRORS DETECTED:  0
*^C

.R PAT
*FOC5.OBJ=FOC5.OLD/C:047737,P021D/C:020305

.R DICOMP
*DBUILD=DBUILD/W/O

    NO  ERRORS DETECTED
*^C
```

CTS-3ØØ VØ6 Seq 51.2.1 M
for RT-11 V4.Ø Seq 51.4.2 M
DBUILD VØ5-ØØ
DECFORM VØ6-ØØA 4 of 4
(PATCH 21)

```
.R LINK
*FOCOMP=FOC1/C
*FOC2/O:1/C
*FOC3/O:1/C
*FOC4/O:2/C
*FOC5/O:2/C
*FOC6/O:2/C
*FOC7/O:3/C
*FOC8/O:3/C
*FOC9/O:3/C
*FOC10/O:3/C
*FOC11/O:3/C
*FOC12/O:3
*DBUILD=DBUILD,DIBOL
*^C
```

CTS-3ØØ VØ6
  for RT-11 V4.Ø
DICOMP VØ6-ØØ
(PATCH 22)

FOUR DICOMP ERRORS FIXED (LG)

Patch 22 corrects the following problems in DICOMP:

1) If the output file specified in a DICOMP command string exists as a protected file, the message "INPUT FILES?" is incorrectly generated. Patch 22 corrects this so that the error message "PROTECTED FILE" is generated instead.

2) In a DIBOL program, if the comment after the START statement is 50 or more characters long, the first line of code on each page of the resulting compiliation will be displaced to the right when output to the terminal. Patch 22 corrects this so that under these conditions the first code line is not displaced.

3) In another situation, the line printer is set to NOHANG and the printer is off line when DICOMP is run. If a listing file is requested, the incorrect error message "LISTING OUT OF ROOM" is generated. Patch 22 corrects this so that the error message "LISTING I/O ERROR" is generated instead.

4) If the DIBOL compiler options /G (to create a log file of errors generated during compilation) and /C (to produce a cross-reference listing) are both used, no log file is created. Patch 22 corrects this so that under these circumstances a log file is created in addition to the listing file.

The version number of DICOMP changes to V06-00A.

Using the editor, create the following source files. Name them as indicated in the comment line that begins each file. Then, to install the patch, follow the procedure shown following the source files.

CTS-3ØØ VØ6 Seq 51.6.1 M
for RT-11 V4.Ø
DICOMP VØ6-ØØ 2 of 3
(PATCH 22)

```
;P022A.MAC
        .TITLE  INIT
        .CSECT  INIT
P022:
        .=      .+262
        JMP     P022A
        .=      P022+3333
        .BYTE   'A

        .PSECT  $P022
P022A:  CMP     R1,#4
        BNE     1$
        MOV     #PRFIL,R0
        BR      2$
1$:     MOV     P022+2404(R1),R0
2$:     JMP     P022+266
PRFIL:  .ASCIZ  /PROTECTED FILE/
        .END

;P022B.MAC
        .TITLE  ROOT
        .CSECT  ROOT
        .MCALL  .WRITW
P022:
        .=      .+4004
        JMP     P022A
        .=      P022+4402
        NOP
        .=      P022+4412
        NOP
        NOP
        NOP
        .=      P022+4554
        .WRITW
        BCC     P022+4412

        .PSECT  $P022
P022A:  DEC     R2
        BGT     1$
        JMP     P022+4020
1$:     JMP     P022+3774
        .END
```

```
;P022C.MAC
        .TITLE  SYMBOL TABLE OUTPUT
        .CSECT  ENCODS
        .GLOBL  SWG
        .GLOBL  CLOSEG
        .GLOBL  OUTCRF
P022:
        .=      .+3254
        JMP     P022A

        .PSECT  $P022
P022A:  JSR     PC,OUTCRF
5$:     TSTB    SWG
        BEQ     7$
        JSR     PC,CLOSEG
7$:     JMP     P022+3260
        .END


.RENAME DICOMP.SAV,(INIT,ROOT,ENCOD).OBJ *.OLD
 Files renamed:
DK:DICOMP.SAV  to DK:DICOMP.OLD
DK:INIT.OBJ    to DK:INIT.OLD
DK:ROOT.OBJ    to DK:ROOT.OLD
DK:ENCOD.OBJ   to DK:ENCOD.OLD

.MACRO P022A,P022B,P022C
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.R PAT
*INIT.OBJ=INIT.OLD/C:005142,P022A/C:016513

.R PAT
*ROOT.OBJ=ROOT.OLD/C:133070,P022B/C:017723

.R PAT
*ENCOD.OBJ=ENCOD.OLD/C:076402,P022C/C:020543

.R LINK
*DICOMP=ROOT,FATAL/C
*INIT/O:1/C
*DATA/O:1/C
*PROC/O:1/C
*ENCOD/O:1/C
*DILINK/O:2/C
*DICERR/O:2
*^C
```

CTS-3ØØ VØ6
for RT-11 V4.Ø
DKED VØ6-ØØB
(PATCH 23)

Seq 51.7.3 M

1 of 7

DKED INCORRECTLY HANDLES CONTINUED LINES

When editing, if any function such as forward cutting is used followed by an UP or a TOP command from the keypad an MMU fault occurs. This usually happens when continuous lines are involved.

Patch 23 corrects the problems with continued lines and also changes the version number of DKED to V06-00C.

Using the editor, create the following six files exactly as shown. Name them as indicated in the comment line that is the first line of each file. Then, to install the patch, follow the procedure shown following the files.

Corrections are made to the source module using SLP (Source Language Patch) program. Please note that the last record in the file P023.PAT file is "/". You must terminate each line in that file with a carriage return, including the last line "/".

NOTE: When using the DKED editor on a VT100 terminal, the wraparound bit in the SETUP B screen of the terminal should be set to a 0. This wraparound bit is the second bit in the third word in SETUP B.

```
;P023A.MAC
        .TITLE  DISCN
        .CSECT  DISCN
        .GLOBL  TABLE$
P023A:
        .=.+320
        JMP     P023A1
        .=.+122
        JMP     P023A2

        .PSECT  $P023A

P023A1: MOVB    #12,(R1)+
        CLRB    TABLE$+52
        JMP     P023A+324
P023A2: CMPB    TABLE$+52,#2
        BEQ     P023A3
        CLRB    TABLE$+52
P023A3: JMP     P023A+452

        .END


;P023B.MAC
        .TITLE  LASTP
        .CSECT  LASTP

        TABLE = ^D46

P023B:  .=.+222
        JMP     P023B1

        .PSECT  $P023B

P023B1: CMPB    TABLE+52(R2),#1
        BEQ     P023B2
        JMP     P023B+250
P023B2: JMP     P023B+230

        .END


;P023C.MAC
        .TITLE  DOWN
        .CSECT  DOWN
        .GLOBL  TABLE$

P023C:  .=.+106
        JMP     P023C1

        .PSECT  $P023C

P023C1: CMPB    TABLE$+52,#1
        BEQ     P023C2
        JMP     P023C+216
P023C2: JMP     P023C+114

        .END
```

```
;P023D.MAC
        .TITLE  DISP
        .CSECT  DISP
        .GLOBL  TABLE$

P023D:  .=.+104
        JMP     P023D1
        .=.+310
        JMP     P023D3
        .=.+12
        JMP     P023D5

        .PSECT  $P023D

P023D1: CMPB    TABLE$+52,#1
        BEQ     P023D2
        JMP     P023D+130
P023D2: JMP     P023D+112

P023D3: CMPB    TABLE$+16,#2
        BEQ     P023D4
        JMP     P023D+426
P023D4: JMP     P023D+452

P023D5: CMPB    TABLE$+16,#2
        BEQ     P023D6
        JMP     P023D+444
P023D6: JMP     P023D+504

        .END


;P023E.MAC
        .TITLE  DSCROL
        .CSECT  DSCROL
        .GLOBL  TABLE$

P023E:  .=.+62
        JMP     P023E1

        .PSECT  $P023E

P023E1: CMPB    TABLE$+16,#1
        BEQ     P023E2
        JMP     P023E+174
P023E2: JMP     P023E+70

        .END


;P022.PAT
-1,1
-207,207
        DIS1,   A12,'DKED V06-00C'
/
```

```
.LIBRARY/EXTRACT
Library? EDLIB
File    ? DISCN
Global? DISCN
Global?  <cr>          (<cr> means RETURN key)

.LIBRARY/EXTRACT
Library? EDLIB
File    ? DISP
Global? DISP
Global?  <cr>

.LIBRARY/EXTRACT
Library? EDLIB
File    ? LASTP
Global? LASTP
Global?  <cr>

.LIBRARY/EXTRACT
Library? EDLIB
File    ? DOWN
Global? DOWN
Global?  <cr>

.LIBRARY/EXTRACT
Library? EDLIB
File    ? DSCROL
Global? DSCROL
Global?  <cr>

.RENAME (EDLIB,DISP,DISCN).OBJ *.OLD
 Files renamed:
DK:EDLIB.OBJ    to DK:EDLIB.OLD
DK:DISP.OBJ     to DK:DISP.OLD
DK:DISCN.OBJ    to DK:DISCN.OLD

.RENAME (LASTP,DOWN,DSCROL).OBJ *.OLD
 Files renamed:
DK:LASTP.OBJ    to DK:LASTP.OLD
DK:DOWN.OBJ     to DK:DOWN.OLD
DK:DSCROL.OBJ   to DK:DSCROL.OLD

.RENAME STRTO.DBL STRTO.OLD

.MACRO P023A,P023B,P023C,P023D,P023E
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
```

CTS-3ØØ VØ6
   for RT-11 V4.Ø
DKED VØ6-ØØB
(PATCH 23)


```
.R PAT
*DISCN.OBJ=DISCN.OLD/C:151761,P023A/C:024340

.R PAT
*LASTP.OBJ=LASTP.OLD/C:050530,P023B/C:014727

.R PAT
*DOWN.OBJ=DOWN.OLD/C:135474,P023C/C:015675

.R PAT
*DISP.OBJ=DISP.OLD/C:157236,P023D/C:027254

.R PAT
*DSCROL.OBJ=DSCROL.OLD/C:066613,P023E/C:020072

.R LIBR
*EDLIB.OBJ/A=EDLIB.OLD,DISCN/R,DISP/R,LASTP/R,DOWN/R,DSCROL/R
*^C

.R SLP
*STRTO.DBL=STRTO.OLD,P023.PAT
*^C

.R DICOMP
*STRTO=STRTO/O

    NO  ERRORS DETECTED
*^C
```

CTS-3ØØ VØ6 Seq 51.7.3 M
for RT-11 V4.Ø
DKED VØ6-ØØB 6 of 7
(PATCH 23)

```
.RUN LINK
*DKED=DKED,EDLIB,DIBOL/P:500.//
*COMND/O:1
*COMN2/O:1
*CUTA,CUTB/O:1
*CUTC,TOPB/O:1
*CUTD/O:1
*CUTDO,BEOL/O:1
*DELLN/O:1
*DLCH4,D2CHA/O:1
*D3CHA/O:1
*DQUIT,DSCL1/O:1
*DROFN,SWORD/O:1
*FINDS/O:1
*FIND1/O:1
*HCOMN/O:1
*HELPC/O:1
*HELPD,DEXIT/O:1
*HELPE,CUTD2/O:1
*HWILD/O:1
*PAGE2/O:1
*PASTE/O:1
*REPLC/O:1
*RETRN/O:1
*SECTN,APNDA/O:1
*STRTO/O:1
*STRT1/O:1
*STRT2/O:1
*WPAGE/O:1
*XCASE,LINSP,RESEL,UNDEL/O:1
*CUTC1,CRSTR,UDLCH/O:1
*YANK,ZTARG/O:1
*//
*^C
```

CTS-3ØØ VØ6 Seq 51.7.3 M
for RT-11 V4.Ø
DKED VØ6-ØØB 7 of 7
(PATCH 23)

```
.RUN LINK
*DKED.TSD/B:100000=DKED,EDLIB,TDIBOL/P:500.//
*COMND/O:1
*COMN2/O:1
*CUTA,CUTB/O:1
*CUTC,TOPB/O:1
*CUTD/O:1
*CUTDO,BEOL/O:1
*DELLN/O:1
*DLCH4,D2CHA/O:1
*D3CHA/O:1
*DQUIT,DSCL1/O:1
*DROPN,SWORD/O:1
*FINDS/O:1
*FIND1/O:1
*HCOMN/O:1
*HELPC/O:1
*HELPD,DEXIT/O:1
*HELPE,CUTD2/O:1
*HWILD/O:1
*PAGE2/O:1
*PASTE/O:1
*REPLC/O:1
*RETRN/O:1
*SECTN,APNDA/O:1
*STRTO/O:1
*STRT1/O:1
*STRT2/O:1
*WPAGE/O:1
*XCASE,LINSP,RESEL,UNDEL/O:1
*CUTC1,CRSTR,UDLCH/O:1
*YANK,ZTARG/O:1
*//
*^C

.RUN REDUCE
*DKED/N
*^C
```

CTS-3ØØ VØ6
  for RT-11 V4.Ø
TSD VBØ6-ØØD
XMTSD VCØ6-ØØG
(PATCH 20)

Seq 51.18.5 M
Seq 51.2Ø.8 M

CORRECTION FOR ISAM PROBLEM (LG)

If multiple users of an ISAM file have it opened in SU mode, it is possible records of data can be corrupted. This is caused by the corruption of linkage information. The problem occurs when there is a great deal of overflow usage due to the splitting of groups.

The following patch corrects the problem and changes the version number of TSD to VB06-00E and XMTSD to VC06-00H.

Using the editor, create the following source files. Name them as indicated in the comment line that begins each file. Then, to install the patch, follow the procedure shown following the source files.

CTS-3ØØ VØ6
  for RT-11 V4.Ø
TSD VBØ6-ØØD
XMTSD VCØ6-ØØG
(PATCH 20)

Seq 51.18.5 M
Seq 51.2Ø.8 M

;P020A.MAC

```
        .TITLE  $DISAM
        .PSECT  $DISAM
P020:
        .=      .+5116
        JMP     P020A
        .=      P020+5204
        MOVB    #1,12(R1)
        NOP
        NOP

        .PSECT  $P020
P020A:  MOV     4(R4),R0
        MOV     26(R0),R0
        DECB    24(R0)
        BGT     1$
        MOV     4(R4),R0
        MOVB    #-1,12(R0)
        JSR     PC,P020+4010
        JMP     P020+5132
1$:     JMP     P020+5234
        .END
```

;P020B.MAC

```
        .TITLE  $KISAM
        .PSECT  $KISAM
P020:
        .=      .+5056
        JMP     P020A
        .=      P020+5144
        MOVB    #1,12(R1)
        NOP
        NOP

        .PSECT  $P020
P020A:  MOV     4(R4),R0
        MOV     26(R0),R0
        DECB    22(R0)
        BGT     1$
        MOV     4(R4),R0
        MOVB    #-1,12(R0)
        JSR     PC,P020+3764
        JMP     P020+5072
1$:     JMP     P020+5174
        .END
```

CTS-3ØØ VØ6 Seq 51.18.5 M
for RT-11 V4.Ø Seq 51.2Ø.8 M
TSD VBØ6-ØØD
XMTSD VCØ6-ØØG 3 of 3
(PATCH 20)

```
;P020V1.MAC

        .TITLE  DTO
        .CSECT  DTO

        .=      .+4563
        .ASCII  /E/
        .END


;P020V2.MAC

        .TITLE  $KDTO
        .PSECT  DATXX

        .=      .+42
        .BYTE 'H
        .END



.RENAME (DISAM,KISAM,DTO,KDTO).OBJ *.OLD
 Files renamed:
DK:DISAM.OBJ    to DK:DISAM.OLD
DK:KISAM.OBJ    to DK:KISAM.OLD
DK:DTO.OBJ      to DK:DTO.OLD
DK:KDTO.OBJ     to DK:KDTO.OLD

.MACRO P020A,P020B,P020V1,P020V2
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.R PAT
*DISAM.OBJ=DISAM.OLD/C:113542,P020A/C:025522

.R PAT
*KISAM.OBJ=KISAM.OLD/C:141724,P020B/C:026234

.R PAT
*DTO.OBJ=DTO.OLD/C:124544,P020V1/C:003244

.R PAT
*KDTO.OBJ=KDTO.OLD/C:052562,P020V2/C:004715

.R CTSGEN         ;FOR NORMAL TSD

.R CTSGEN         ;FOR EXTENDED MEMORY TSD
```

CTS-3ØØ VØ6
for RT-11 V4.Ø
TSD VBØ6-ØØE
XMTSD VCØ6-ØØH
(PATCH 24)

Seq 51.18.6 M
Seq 51.2Ø.9 M

"SEND" STARTS MULTIPLE JOBS (LG)

The purpose of the DIBOL SEND statement is to transmit a message to another program. Under CTS-300, the optional third argument of the SEND statement indicates the terminal number to which the message will be sent, and can also be used to start a program detached if it is not already running. A single SEND statement in a program running under TSD or XMTSD may cause multiple copies of a job to be started detached.

Patch 24 corrects this so that only one copy of the job is started detached. The version number of TSD is changed to VB06-00F and XMTSD is changed to VC06-00I.

Using the editor, create the following files exactly as shown. Name them as indicated in the comment line that is the first line of each file. Then, to install the patch, follow the procedure shown following the files.

Corrections are made to the source module TSDTBL using the SLP (Source Language Patch) program. Please note that the last record in the file P024A.PAT is "/". You must terminate each line in that file with a carriage return, including the last line "/".

CTS-3ØØ VØ6
   for RT-11 V4.Ø
TSD VBØ6-ØØE
XMTSD VCØ6-ØØH
(PATCH 24)

Seq 51.18.6 M
Seq 51.2Ø.9 M

2 of 3

```
;P024A.PAT
-1,1
-371,371
        .GLOBL  MRSW
MRSW:   .ZBLKW  1

-384
1$:     TST     MRSW            ;IS A JOB BEING STARTED?
        BEQ     11$             ;NO
        JSR     PC,$SLEEP       ;WAIT FOR JOB TO START
        BR      1$              ;GO TRY AGAIN
11$:    COM     MRSW            ;SET FLAG FOR JOB BEING STARTED
-414
        CLR MRSW
/
```

```
;P024B.MAC

        .TITLE  FRUNIT
        .PSECT  $FRNIT
        .GLOBL  MRSW
P024:
        .=      .+142
        JSR     PC,P024A

        .PSECT  $P024
P024A:  CLR     P024+444
        CLR     MRSW
        RTS     PC
        .END
```

```
;P024C.MAC

        .TITLE  FRUNIT
        .PSECT  $FRNIT
        .GLOBL  MRSW
P024:
        .=      .+140
        JSR     PC,P024A

        .PSECT  $P024
P024A:  CLR     P024+436
        CLR     MRSW
        RTS     PC
        .END
```

CTS-3ØØ VØ6
   for RT-11 V4.Ø
TSD VBØ6-ØØE
XMTSD VCØ6-ØØH
(PATCH 24)

Seq 51.18.6 M
Seq 51.2Ø.9 M

3 of 3

```
;P024V1.MAC

        .TITLE  DTO
        .CSECT  DTO

        .=      .+4563
        .ASCII  /F/
        .END


;P024V2.MAC

        .TITLE  $KDTO
        .PSECT  DATXX

        .=      .+42
        .BYTE   'I
        .END




.RENAME TSDTBL.MAC,(KFRUN,FRUNIT,DTO,KDTO).OBJ *.OLD
 Files renamed:
DK:TSDTBL.MAC  to DK:TSDTBL.OLD
DK:KFRUN.OBJ   to DK:KFRUN.OLD
DK:FRUNIT.OBJ  to DK:FRUNIT.OLD
DK:DTO.OBJ     to DK:DTO.OLD
DK:KDTO.OBJ    to DK:KDTO.OLD

.R SLP
*TSDTBL.MAC=TSDTBL.OLD,P024A.PAT
*^C

.MACRO P024B,P024C,P024V1,P024V2
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0
ERRORS DETECTED:  0

.R PAT
*FRUNIT.OBJ=FRUNIT.OLD/C:102100,P024B/C:016167

.R PAT
*KFRUN.OBJ=KFRUN.OLD/C:136577,P024C/C:016145

.R PAT
*DTO.OBJ=DTO.OLD/C:125421,P024V1/C:003245

.R PAT
*KDTO.OBJ=KDTO.OLD/C:053721,P024V2/C:004716

.R CTSGEN         ;FOR NORMAL TSD

.R CTSGEN         ;FOR EXTENDED MEMORY TSD
```

GAMMA-11 V3.Ø
FGAMMA

SYSTEM MAY HANG WHEN DISK SQUEEZED (JB)

There is an error in the foreground program which causes the system to hang when the disk is squeezed using the BGAMMA option DELETE immediately after performing a Gated acquisition in the foreground.

To correct this problem apply the following patch to a copy of the distribution disk.

DO NOT PATCH THE DISTRIBUTION DISK

User input is shown in bold type.

<CR> denotes the carriage return key.

<LF> denotes the line feed key.

1. **.COPY FGAMMA.REL FGAMMA.ØØ1 <CR>**

2. **.R PATCH <CR>**

```
FILE NAME --
*FGAMMA.ØØ1/O/C<CR>
*6:15546/     11211     4767<LF>
6:15550/      14241     142<CR>
*6:15714/       Ø       5Ø46<LF>
6:15716/        Ø       13746<LF>
6:15720         Ø       54<LF>
6:15722         Ø       62716<LF>
6:15724         Ø       36Ø<LF>
6:15726         Ø       4736<LF>
6:15730         Ø       11211<LF>
6:15732         Ø       14241<LF>
6:15734         Ø       2Ø7<CR>
*E
```

Checksum? **71531<CR>**

If the error message:

?PATCH-I-Checksum error

is printed after entering the checksum then the patch has been typed incorrectly and steps 1 and 2 must be repeated.

3. **.COPY FGAMMA.ØØ1 FGAMMA.REL<CR>**

4. Configure the GAMMA-11 system disk (refer to the GAMMA-11 SYSTEM REFERENCE MANUAL).

RT-11 V4.0
CUMULATIVE INDEX
OCTOBER 1981

This is a complete listing of all articles for RT-11 V4.0 and related products. In the case of subordinate software, missing sequence numbers may pertain to problems unique to interaction with previous versions of the same product or other major operating systems.

IMPORTANT!

Unassigned articles are indicated: UNASSIGNED.

Flags are currently being installed for all articles. The flags and definitions are as follows:

M = Mandatory Patch. These patches correct errors in the software product. All users are required to apply these patches to maintain consistent "user level" unless the accompanying article specifies otherwise.

F = Optional Feature Patch. These patches extend or configure functionality into the product. These functions will be treated as a supported part of the product for the duration of the current release and will be incorporated with any future release, unless otherwise stated.

R = Restriction. These articles discuss areas that will not be patched in the current release because they require major modification or because they are not consistent with the design of the product. Restrictions, except those described as permanent, are reviewed and modified when possible as part of the normal release cycle.

N = NOTE. These articles provide explanatory information that supplements the manual set and provide more detailed information about a program or package. They also provide procedural information to make it easier to use a program or package.

+ = Articles appeared in the RT-11 Software Dispatch Review, March 1980.

*The "Autopatch Kit" column in the list which follows indicates the first RT-11 V4.0 Autopatch Kit in which the associated patch was included. Unless otherwise indicated, the patches also appear in subsequent Autopatch Kits as well. Note that Autopatch Kit "A" is the latest kit available from the SDC.

Component	Autopatch Kit	Sequence	Mon/Yr
RT-11 V4.0			
MONITOR PATCHES			
ISSUING .SETTOP #-2 AND .EXIT UNDER XM MONITOR MAY CORRUPT SYSTEM DISK	A	1.1.1 M	Jul 80
IMPLEMENTING INTERNAL HANDLER QUEUEING IN FB AND XM MONITORS	A	1.1.2 M	Jul 80
ADDING HIGH SPEED RING BUFFER SUPPORT	A	1.1.3 M	Jul 80
CORRUPTION OF CSI TEXT UNDER XM MONITOR	A	1.1.4 M	Jul 80
MISSING COLON IN BOOT XX CAUSES SYSTEM HALT	A	1.1.5 M	Jul 80
TYPING ^U WHILE IN A ^X SEQUENCE UNDER A SYSTEM JOB	A	1.1.6 M	Sep 80
ABNORMAL TERMINATION OF FG JOB WHICH IS USING CSI	A	1.1.7 M	Nov 80
MISCELLANEOUS MRRT-11 BUGS	A	1.1.8 M	Nov 80
MRRT-11 MINIMAL FILE SUPPORT PROBLEM	A	1.1.9 M	Nov 80
INCORRECT LIMIT CHECKS ON PRIVILEGED BACKGROUND JOBS USING VIRTUAL OVERLAYS	A	1.1.10 M	Nov 80
MULTI-TERMINAL MONITORS DON'T ALWAYS PROCESS CTRL/F PROPERLY	A	1.1.11 M	Nov 80
MONITOR CHANGES AND CORRECTIONS	A	1.1.12 M	Dec 80
MONITOR CORRECTIONS	B	1.1.13 M	Jan 81
MONITOR UPDATES	B	1.1.14 M	Feb 81
ABORT I/O IN PROGRESS HANDLER BIT	B	1.1.15 M	Apr 81
CORRECTIONS FOR DISTRIBUTED AND SYSTEM GENERATED MONITORS		1.1.16 M	Jun 81
PRINT COMMAND RESTRICTION		1.1.17 R	Jul 81
UPDATES TO MONITOR FILES		1.1.18 M	Oct 81
DEVICE HANDLER SOURCES			
DEVICE HANDLER NOTES			
RL02s AT REV. LEVEL "F" FAIL DURING RT-11 SYSGEN		6.1.1 N	Oct 80

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
DD.MAC			
DD PRIMARY BOOTSTRAP PROBLEM	A	6.4.1 M	Jul 80
DL.MAC			
PATCH XM VERSION OF DL HANDLER .SPFUN GET SIZE ROUTINE	A	6.5.1 M	Dec 80
ERRORS ON RL01 DISK DRIVES AFTER DISK PACKS ARE CHANGED	B	6.5.2 M	Jan 81
DM.MAC			
ERRORS IN DM OFFSET POSITIONING AND ERROR LOGGING	A	6.6.1 M	Jul 80
DY.MAC			
DELETED DATA MARK MAY BE LOST IF BUFFER STARTS ON PAR BOUNDARY		6.11.1 M	Aug 81
LP.MAC			
LP SET NOHANG MAY CRASH SYSTEM	A	6.12.1 M	Sep 80
LS.MAC			
LS SET NOHANG MAY CRASH SYSTEM	A	6.13.1 M	Sep 80
PROBLEMS WITH LS HANDLER	B	6.13.2 M	Jan 81
USING AN LA120 TERMINAL AS A LINE PRINTER WITH THE LS HANDLER		6.13.3 N	Jul 81
SET LS NOHANG IS CURRENTLY INOPERATIVE		6.13.4 M	Jul 81
RACE CONDITION IN LS HANDLER		6.13.5 M	Aug 81
PD.MAC			
CORRECTION TO PDT ERROR LOGGING SUPPORT	B	6.16.1 M	Apr 81
MAG TAPE HANDLERS			
BUFFER CLEARING ON SHORT READ IN XM MONITOR	A	6.20.1 M	Jul 80
LINKING AN XM, NON-FILESTRUCTURED TS HANDLER GENERATES AN UNDEFINED GLOBAL	A	6.20.2 M	Aug 80
INCORRECT READ ERROR RECOVERY IN MT HANDLER	A	6.20.3 M	Sep 80
TS-11 DOES NOT RECOVER FROM SOFT ERROR ON WRITE EOF		6.20.4 M	Jul 81
SYSTEM UTILITIES			
PIP.SAV			
ERRORS IN PIP	A	7.1.1 M	Sep 80
COPY/PREDELETE COMMAND		7.1.2 N	Sep 80
MATCHING FILE SPEECIFICATIONS ERRORS	B	7.1.3 M	Feb 81
COPY/BINARY/WAIT AND LOG HEADER PROBLEMS	B	7.1.4 M	Apr 81
COPY/PREDELETE AND COPY/NOREPLACE WORK INCORRECTLY WITH /WAIT		7.1.5 M	Jun 81
ERROR WITH RENAME/NOREPLACE		7.1.6 M	Jul 81
/POSITION:N SWITCH FOR MAGTAPE INPUT WORKS INCORRECTLY		7.1.7 M	Oct 81
DUP.SAV			
MISSING COLON IN BOOT XX CAUSES SYSTEM HALT	A	7.2.1 M	Jul 80
SQUEEZE CREATES <UNUSED> ENTRIES OF LENGTH ZERO BEFORE .BAD FILES	A	7.2.2 M	Aug 80
PROBLEMS WITH COPY/DEVICE AND INITIALIZE	A	7.2.3 M	Dec 80
BOOTSTRAPPING AN UNPATCHED MONITOR FROM A PATCHED SYSTEM	B	7.2.4 N	Jan 81
.SPFUN RETURN BUFFER PROCESSED INCORRECTLY FOR RK06/7	B	7.2.5 M	Jan 81
USE OF INITIALIZE/RESTORE ON MEDIA SUPPORTING BAD BLOCK REPLACEMENT		7.2.6 N	May 81
PROBLEMS WITH INIT/BAD AND COPY/DEVICE		7.2.7 M	May 81
PROBLEMS WITH INITIALIZE COMMAND		7.2.8 M	Jun 81
ATTEMPT TO RESTORE UNCLOSED TENTATIVE FILES FAILS		7.2.9 M	Jul 81
/V WITH NO DEVICE SPECIFICATION GIVES WRONG ERROR MESSAGE		7.2.10 M	Sep 81
OUTPUT ERROR DURING COPY/DEVICE TO MAGTAPE CAUSES SYSTEM ERROR		7.2.11 M	Oct 81
DIR.SAV			
DIR/OUT COMMAND PRODUCES DEVICE NOT ACTIVE MESSAGE	A	7.3.1 M	Jul 80
DIR/VOL GIVES ?MON-F-TRAP TO 4	A	7.3.2 M	Dec 80
LOSS OF LAST PRINT CHARACTER IN DIRECTORY LISTING		7.3.3 M	Sep 81
RESORC.SAV			
RESORC MAY REPORT INCORRECT JOB NAMES ON A SHOW JOBS COMMAND	A	7.5.1 M	Aug 80
ADD CIS DETECTION CAPABILITY TO RESORC	B	7.5.2 M	May 81
PROBLEM WITH IDENTIFYING 11/23 PROCESSOR		7.5.3 M	Sep 81

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
LINK.SAV			
LINK BYTE RELOCATION AND DIRECTORY SIZE	A	7.9.1 M	Jul 80
LINK MAP PROCESSING ERROR	A	7.9.2 M	Aug 80
LINK MAP ERROR AND MULTIPLE DEFINITION LIBRARIES	A	7.9.3 M	Oct 80
RT-11 V4 LINKER RESTRICTION	B	7.9.4 R	Jan 81
LINK TRANSFER ADDRESS CALCULATION BUGS	B	7.9.5 M	Mar 81
LINK ADDITIONS AND CORRECTIONS		7.9.6 M	Aug 81
LIBR.SAV			
A LIBR COMMAND WITH NO FILE-SPEC CAN CAUSE A SYSTEM CRASH	A	7.10.1 M	Jul 80
LIBR ERRORS		7.10.2 M	Jul 81
LIBR CORRUPTS FORM LIBRARY DIRECTORY		7.10.3 M	Jun 81
FILEX.SAV			
FILEX WILDCARD TRANSFERS CAUSE MONITOR TRAP	A	7.11.1 M	Aug 80
FILEX CREATES ZERO FILLED INTERCHANGE RECORDS	A	7.11.2 M	Sep 80
SIZE CALCULATION PROBLEM IN FILEX		7.11.3 M	Aug 81
RECORDS DROPPED BY FILEX		7.11.4 M	Sep 81
SRCCOM.SAV			
COMPARING TWO FILES MAY CAUSE TRAP TO 4	A	7.12.1 M	Aug 80
BLANK LINE COMPARISON FOR SLIDING MATCH	A	7.12.2 M	Dec 80
BINCOM.SAV			
BINCOM GENERATES ERRONEOUS ERROR MESSAGE	B	7.13.1 M	Apr 81
ERRONEOUS DOUBLE PRECISION CALCULATION IN BINCOM		7.13.2 M	Jun 81
DUMP.SAV			
BLOCK NUMBERS OUTPUT FROM DUMP		7.14.1 M	Aug 81
SLP.SAV			
TERMINATION OF PATCHING SESSION WITH SLP FATAL ERRORS	A	7.15.1 M	Nov 80
SLP GENERATES FATAL ERROR TRAP	B	7.15.2 M	Jan 81
SLP ERROR	B	7.15.3 M	Mar 81
SIPP.SAV			
CORRUPTION OF MULTI-BLOCK LOG FILES	A	7.16.1 M	Jul 80
PAT.SAV			
USE OF THE PAT UTILITY WITH RT-11 V3B PATCHES		7.17.1 N+	Mar 80
HELP.SAV			
PROBLEMS WITH HELP UTILITY	A	7.19.1 M	Nov 80
EDIT.SAV			
EDIT MISHANDLES OUTPUT FILE FULL ERROR	B	7.20.1 M	Jan 81
SYSTEM SUBROUTINE LIBRARY (SYSLIB)			
SYSLIB.OBJ			
PATCH TO ICSI	A	8.1.1 M	Oct 80
IASIGN REDEFINITIONS	A	8.1.2 M	Oct 80
ILUN RESTRICTION		8.1.3 R	Feb 81
SYSTEM MACRO LIBRARY			
.SPFUN PROGRAMMED REQUEST	A	9.1.1 M	Dec 80
ABORT I/O PROGRESS SUPPORT FOR SYSMAC	B	9.1.2 M	Apr 81
.CMKT PROGRAMMED REQUEST		9.1.3 M	Jun 81
SYSTEM GENERATION PACKAGE			
SYSGEN CREATES ONE MORE DEVICE SLOT THAN REQUESTED	A	10.3.1 M	Dec 80
ASSEMBLY ERROR AFTER SYSGEN	B	10.3.2 M	Mar 81
DOCUMENTATION			
RT-11 SYSTEM RELEASE NOTES			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.2.1 N	Jul 80
DOCUMENTATION CORRECTIONS		11.2.2 N	Aug 80
CHANGES TO DUP /I OPTION		11.2.3 N	Apr 81
INCORRECT DUP CUSTOMIZATION PATCHES		11.2.4 N	Sep 81

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
RT-11 INSTALLATION AND SYSTEM GENERATION GUIDE			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.3.1 N	Jul 80
CORRECTION TO AN OPTIONAL PATCH TO LINK		11.3.2 N	Aug 80
DOCUMENTATION ERROR: REFERENCE TO RL02 OMITTED FROM SYSGEN DIALOGUE		11.3.3 N	Oct 80
INCORRECT LINK MAPS FOR DISTRIBUTED MONITORS		11.3.4 N	Dec 80
INCORRECT PATCH FOR CHANGING QUEUE WORK FILE SIZE		11.3.5 N	Dec 80
CHANGING DEFAULT NUMBER OF DIRECTORY SEGMENTS		11.3.6 N	Apr 81
INTRODUCTION TO RT-11			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.4.1 N	Jul 80
RT-11 SYSTEM USER'S GUIDE			
RT-11 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.5.1 N	Jul 80
CORRECTIONS TO SLP CHAPTER: RT-11 SYSTEM USER'S GUIDE		11.5.2 N	Oct 80
DIFFERENCES BETWEEN DEVICE COPYING COMMANDS		11.5.3 N	Dec 80
RT-11 SYSTEM MESSAGE MANUAL			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.6.1 N	Jul 80
CORRECTIONS TO SLP MESSAGES IN "RT-11 SYSTEM MESSAGE MANUAL"		11.6.2 N	Nov 80
NEW SLP ERROR MESSAGE		11.6.3 N	Feb 81
PIP ERROR MESSAGES MISSING		11.6.4 N	Oct 81
RT-11 POCKET GUIDE			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.7.1 N	Jul 80
RT-11 PROGRAMMER'S REFERENCE MANUAL			
DOCUMENTATION CORRECTIONS		11.8.1 N	Sep 80
INCORRECT PROGRAMMED REQUEST EXAMPLES		11.8.2 N	Mar 81
RT-11 SOFTWARE SUPPORT MANUAL			
RT-11 V4.0 DOCUMENTATION CORRECTIONS AND ADDITIONS		11.9.1 N	Jul 80
SOFTWARE SUPPORT MANUAL CORRECTION		11.9.2 N	Jun 81
ERROR IN DESCRIPTION OF .DRSET MACRO		11.9.3 N	Sep 81
DEBUGGING UTILITIES			
VDT.OBJ			
NOTES ON USING ODT OR VDT IN AN XM ENVIRONMENT		12.2.1 N	Jan 81
BATCH PACKAGE			
BATCH.SAV			
PATCH BATCH TO USE MONITOR SUFFIX	A	15.1.1 M	Oct 80
SPOOLING PACKAGE			
QUEUE.REL			
SUPERFLUOUS LINEFEED FROM QUEUE	B	16.1.1 M	Mar 81
NARROW BANNER PAGES FROM QUEUE		16.1.2 F	May 81
/R FOLLOWING /S IF NO OUPTUT QUEUED MAY CAUSE FATAL ERROR IN QUEUE		16.1.3 M	Aug 81
QUEMAN.SAV			
PROBLEMS WITH QUEMAN	B	16.2.1 M	Jan 81
KEYPAD EDITOR			
KED			
MAKE TERMINAL SETUP OPTIONAL IF MTATCH FAILS	A	17.1.1 F	Aug 80
PROVIDE A .CHAIN INTERFACE FOR KED	A	17.1.2 F	Aug 80
PROVIDE REASONABLE ACTIONS AND ERROR MESSAGES WHEN DEALING WITH DEGENERATE FILES	A	17.1.3 M	Oct 80
SEARCH FAILS IF TARGET IF FIRST OR LAST STRING IN THE FILE	A	17.1.4 M	Nov 80
KNOWN ERRORS AND RESTRICTIONS		17.1.5 R	Dec 80
"SET SEARCH EXACT JUNK" COMMAND CRASHES KED		17.1.6 M	Jul 81
REPEATED USE OF THE "APPEND" FUNCTION CRASHES KED		17.1.7 M	Jul 81
DISABLE REVERSE VIDEO DISPLAY BY KED		17.1.8 F	Jul 81
FILE SAMPLE.KED OMITTED FROM DISTRIBUTION		17.1.9 N	Aug 81

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
K52			
MAKE TERMINAL SETUP OPTIONAL IF MTATCH FAILS	A	17.2.1 F	Aug 80
PROVIDE A .CHAIN INTERFACE FOR K52	A	17.2.2 F	Aug 80
PROVIDE REASONABLE ACTIONS AND ERROR MESSAGES WHEN DEALING WITH DEGENERATE FILES	A	17.2.3 M	Oct 80
SEARCH FAILS IF TARGET IS FIRST OR LAST STRING IN THE FILE	A	17.2.4 M	Nov 80
KNOWN ERRORS AND RESTRICTIONS		17.2.5 R	Dec 80
"SET SEARCH EXACT JUNK" COMMAND CRASHES K52		17.2.6 M	Jul 81
REPEATED USE OF THE "APPEND" FUNCTION CRASHES K52		17.2.7 M	Jul 81
NO EQUIVALENT PATCH FOR K52 FOR SEQ 17.1.8		17.2.8 N	Aug 81
FILE SAMPLE.KED OMITTED FROM DISTRIBUTION		17.2.9 N	Aug 81
AUTOMATED PATCHING FACILITY PACKAGE			
PACKAGE NOTES			
AUTOPATCH SERVICE FOR RT-11		19.1.1 N	Jun 81
FMS-11/RT-11 V1.1			
ANNOUNCING FMS-11/RT-11 V1.1		33.1 N	Aug 80
FRED V1.1			
ZERO IMPURE AREA SIZE PROBLEM		33.3.1 M	Sep 81
BASIC-11/RT-11 V2.0			
INTERPRETER			
REPUBLICATION OF PATCHES		35.1.1 N+	Mar 80
PRINT USING - PATCH A	A	35.1.2 M+	Mar 80
RESEQ - PATCH B	A	35.1.3 M+	Mar 80
EDITING A DIM #n STATEMENT - PATCH C	A	35.1.4 M+	Mar 80
DOUBLE PRECISION HANG - PATCH D	A	35.1.5 M+	Mar 80
SAVE dev: AND REPLACE dev: - PATCH E	A	35.1.6 M+	Mar 80
SINGLE PRECISION HANG AND NUMERIC CONVERSION PROBLEM - PATCH F	A	35.1.7 M+	Mar 80
SAVE .XXX & UNSAVE .XXX - PATCH G	A	35.1.8 M+	Mar 80
NEW - PATCH H	A	35.1.9 M+	Mar 80
RESEQ - PATCH I	A	35.1.10 M+	Mar 80
LISTNH / OLD - PATCH J	A	35.1.11 M+	Mar 80
SYS(1) - PATCH K	A	35.1.12 M+	Mar 80
CALL - PATCH L	A	35.1.13 M+	Mar 80
DOUBLE PRECISION INTEGER VARIABLES - PATCH M	A	35.1.14 M+	Mar 80
FILESIZE 0 - PATCH N	A	35.1.15 M+	Mar 80
INTEGERS IN DOUBLE PRECISION BASIC-11		35.1.16 N+	Mar 80
REM STATEMENTS ON MULTI-STATEMENT LINES - PATCH O	A	35.1.17 M+	Mar 80
INT FUNCTION - PATCH P FOR SINGLE USER BASIC-11	A	35.1.18 M	Nov 80
RETRACTED		35.1.19 M	May 81
PRINT USING - PATCH R FOR SINGLE USER BASIC-11	B	35.1.20 M	Jan 81
OMITTING TRIG FUNCTIONS FROM BASIC-11	B	35.1.21 N	Jan 81
STRING CONCATENATION - PATCH S FOR SINGLE USER BASIC-11	B	35.1.22 M	Mar 81
PROBLEM WITH BASIC-11 PATCH Q		35.1.23 N	May 81
UTILITIES			
CONVERSION PROGRAM		35.2.1 M+	Mar 80
BASIC-11/RT-11 V2 CONVERSION PROGRAM PATCH 1		35.2.2 M+	Mar 80
DOCUMENTATION			
OVERLAYING WHILE IN A SUBROUTINE		35.3.1 R+	Mar 80
OPERATION OF CTRLC, RCTRLC AND SYS(6) FUNCTIONS AND THE CTRL/C COMMAND		35.3.2 N+	Mar 80
OPERATION OF OLD, RUN, CHAIN, AND OVERLAY WHEN THE SPECIFIED FILE IS NOT FOUND		35.3.3 N+	Mar 80
CREATING AND ACCESSING VIRTUAL ARRAY FILES		35.3.4 N+	Mar 80
STORAGE OF THE NULL CHARACTER IN STRING VARIABLES AND VIRTUAL STRING ARRAYS		35.3.5 N+	Mar 80
USE OF COMPILE COMMAND		35.3.6 N+	Mar 80
STRING MANIPULATION IN ASSEMBLY LANGUAGE ROUTINES		35.3.7 N+	Mar 80
MAXIMUM ARRAY SUBSCRIPT SIZE		35.3.8 N+	Mar 80
NEW MANUAL AVAILABLE FOR BASIC-11/RT-11		35.3.9 N	May 81

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
MU BASIC-11/RT-11 V2.0			
INTERPRETER			
CHAINING WITH COMMON - PATCH A		36.1.1 M+	Mar 80
VIRTUAL FILE I/O - PATCH B		36.1.2 M+	Mar 80
SYS(1,n) FUNCTION - PATCH C		36.1.3 M+	Mar 80
RESEQ - PATCH D		36.1.4 M+	Mar 80
VALUES IN PATCHES A, B, C		36.1.5 N+	Mar 80
LISTNH / OLD - PATCH E		36.1.6 M+	Mar 80
CALL - PATCH F		36.1.7 M+	Mar 80
DOUBLE PRECISION INTEGER VARIABLES - PATCH G		36.1.8 M+	Mar 80
INPUT #/PRINT # - PATCH H		36.1.9 M+	Mar 80
OLD OF A ZERO BLOCK FILE - PATCH I		36.1.10 M+	Mar 80
ADDITION TO PATCH B - PATCH J		36.1.11 M+	Mar 80
DEVICE MNEMONIC PROBLEM - PATCH K		36.1.12 M+	Mar 80
CLOSE - PATCH L		36.1.13 M+	Mar 80
REM STATEMENTS ON MULTI-STATEMENT LINES - PATCH M		36.1.14 M+	Mar 80
DEASSIGNING A TERMINAL - PATCH N		36.1.15 M+	Mar 80
INTEGERS IN DOUBLE PRECISION MU BASIC-11		36.1.16 N+	Mar 80
USE OF SYS(1,n) FUNCTION WHEN ',n' IS OMITTED - PATCH O		36.1.17 M+	Mar 80
DISABLING CR/LF USING TTYSET - PATCH P		36.1.18 M+	Mar 80
HANDLER FETCH ERROR MAY LEAD TO MONITOR FAULT - PATCH Q		36.1.19 M+	Mar 80
REMOTE LINES - PATCH R FOR MULTI-USER BASIC-11		36.1.20 M	Nov 80
INT FUNCTION - PATCH S FOR MULTI-USER BASIC-11		36.1.21 M	Nov 80
PRINT USING - REVISED PATCH T FOR MULTI USER BASIC-11		36.1.22 M	Apr 81
RETRACTED		36.1.23 MM	Jan 81
OMITTING TRIG FUNCTIONS FROM MU BASIC-11		36.1.24 N	Jan 81
SYS(1) FUNCTION - PATCH V FOR MULTI USER BASIC-11		36.1.25 M	Jan 81
STRING CONCATENATION - PATCH W FOR MULTI USER BASIC-11		36.1.26 M	Mar 81
CARD READER EOF - PATCH X FOR MULTI USER BASIC-11		36.1.27 M	May 81
CLOSE GIVES ILLEGAL FILES SPEC - PATCH Y FOR MULTI USER BASIC-11		36.1.28 M	May 81
TTSET GIVES TRAP TO 10 - MU BASIC PATCH Z		36.1.29 M	May 81
PROBLEM WITH MU BASIC-11 PATCH U		36.1.30 N	Jul 81
UTILITIES			
MU BASIC-11/RT-11 V2 CONFIGURATION PROGRAM PATCH 1		36.2.1 M+	Mar 80
MU BASIC-11/RT-11 V2 CONVERSION PROGRAM		36.2.2 F+	Mar 80
DOCUMENTATION			
OPERATION OF CTRLC, RCTRLC AND SYS(6) FUNCTIONS AND THE CTRL/C COMMAND		36.3.1 N+	Mar 80
MEMORY REQUIREMENTS OF OPTIONAL FUNCTIONS, ETC.		36.3.2 N+	Mar 80
OPERATION OF OLD, RUN, CHAIN AND OVERLAY WHEN THE SPECIFIED FILE IS NOT FOUND		36.3.3 N+	Mar 80
CREATING AND ACCESSING VIRTUAL ARRAY FILES		36.3.4 N+	Mar 80
STORAGE OF THE NULL CHARACTER IN STRING VARIABLES AND VIRTUAL STRING ARRAYS		36.3.5 N+	Mar 80
USE OF COMPILE COMMAND		36.3.6 N+	Mar 80
STRING MANIPULATIONN IN ASSEMBLY LANGUAGE ROUTINES		36.3.7 N+	Mar 80
ERROR IN TABLE 4-1 OF THE USER'S GUIDE		36.3.8 N+	Mar 80
RESTRICTION ON USR RESIDENCY WHEN RUNNING IN FOREGROUND		36.3.9 N+	Mar 80
MAXIMUM ARRAY SUBSCRIPT SIZE		36.3.10 N+	Mar 80
ASSEMBLING SOURCE FILES (SOURCE LICENSE HOLDERS ONLY)		36.3.11 N+	Mar 80
USE OF PATCH UTILITY		36.3.12 N+	Mar 80
APL-11 V2.0			
PACKAGE NOTES			
APL IS AVAILABLE IN THE DECUS LIBRARY		38.1.1 N	Sep 81
FORTRAN IV/RT-11 V2.1			
COMPILER			
PATCH 1		44.1.1 M+	Mar 80
PATCH 2		44.1.2 M+	Mar 80
PATCH 3		44.1.3 M+	Mar 80
REGISTER ALLOCATION - PATCH 8		44.1.4 M+	Mar 80
FORTRAN FAILS TO COMPILE DO-LOOPS - PATCH 11		44.1.5 M+	Mar 80

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
COMMON SUBEXPRESSION OPTIMIZATION - PATCH 17		44.1.6 M+	Mar 80
BYTE COMPARISON AND COMMON SUBEXPRESSION OPTIMIZATION - PATCH 20		44.1.7 M+	Mar 80
DIRECT ACCESS READ - PATCH 21		44.1.8 M+	Mar 80
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INSTALLING FORTRAN IV V2.1 UNDER RT-11 V4		44.3.2 N	Aug 80

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ANNOUNCING PDP-11 FORTRAN IV/RT-11 V2.5		45.1.1 N	Sep 80
THE COMPILER INCORRECTLY PARSES SOME EXPRESSIONS IN I/O LISTS	A	45.1.2 M	Nov 80
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THE COMPILER GENERATES INCORRECT CODE FOR EQUIVALENCED ARRAYS (PAT 12)		45.1.4 M	Sep 81
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PATCH TO ALLOW THE PLACEMENT OF THE FORTRAN OTS WORK AREA BETWEEN THE PROGRAM'S HIGH LIMIT AND THE BASE OF THE FIRST VIRTUAL OVERLAY FOR PRIVILEGED FORTRAN JOBS	B	45.2.3 F	Feb 81
BOUNDARY CONDITION ON FORMATTED I/O CORRUPTS I/O (PAT 6)	B	45.2.4 M	Mar 81
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EMBEDDED BLANKS OVERRIDE THE ICNT PARAMETER IN THE ASSIGN ROUTINE		45.2.11 M	Oct 81
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FULL DUPLEX, EXTENDED MEMORY DUP DRIVER WON'T BUILD		50.3.1 M	Aug 80

COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
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DDCMP BRANCH OUT OF RANGE AND Q ELEMENT RETURN PROBLEMS		50.5.1 M	Aug 80
NSP			
NSP CORRUPTS PHYSICAL LINE ERROR CODE		50.6.1 M	Aug 80
NFT			
NFT INCORRECTLY ALLOCATES RT-11 QUEUE ELEMENTS		50.9.1 M	Jun 80
FAL			
FAL INCORRECTLY ALLOCATES RT-11 QUEUE ELEMENTS		50.10.1 M	Jun 80
FAL MAY HANG ON ASCII TRANSFERS OF UNFILLED BLOCKS		50.10.2 M	Aug 80
FAL WILL NOT ALLOW ACCESS COMPLETE AFTER CONTROL CONNECT		50.10.3 M	Aug 80
NFARS			
DAP ROUTINES DO NOT REPORT PHYSICAL LINE ERRORS		50.11.1 M	Nov 80
DAP ATTEMPTS TO MULTIPLY RETURN BUFFERS ON ERROR		50.11.2 M	Aug 80
DAP SEND ONE CHARACTER ON ZERO LENGTH TRANSMITS		50.11.3 M	Nov 80
DAPAST CLEARS THE USER CHANNEL NUMBER TOO SOON		50.11.4 M	Aug 80
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DBUILD			
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TWO PROBLEMS WITH DKED		51.7 M	Aug 80
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COMPONENT	AUTOPATCH KIT	SEQUENCE	MON/YR
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MEMORY CORRUPTION PROBLEM		56.1.3 M	Dec 80

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