



# HP 1000 SOFTWARE UPDATE NOTICE

For Software Revision 1913



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HEWLETT-PACKARD COMPANY  
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INTRODUCTION

SECTION 1

This notice describes the changes which have occurred in the 1913 Update Cycle to the following software products:

24396A-F	Diagnostics Libraries
24998-14002	HP/1000 Systems Diagnostics Library
91740A/B	DS/1000
91741A	DS/1000/3000
92001B	RTE-II Operating System ←
92060B	RTE-III Operating System
	RTE Drivers —
92063A	IMAGE/1000
92064A	RTE-M Operating System
92065A	BASIC 1000/M
92066A	RTE Measurement and Control (Manual Change)
92067A	RTE-IV Operating System
92101A	BASIC 1000/D
92840A	Graphics/1000 Plotting Software
92903A	DATA CAP/1000

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RECENT ENHANCEMENTS

SECTION 2

The 1913 software will offer support of one new feature and two new peripheral devices.

-- Passing EMA variables by reference is now supported under the 1913 revision of Fortran-IV.

-- The 92840A Graphics Plotting Software now provides support for the 2608A Line Printer. However, there are some limitations to this support, three of which will be listed as follows:

- 1) The 2608A printer under Graphics/1000 is supported only on RTE-IV.
- 2) BASIC cannot be used with the 2608A device subroutine.
- 3) Only straight line output primitives are supported on the 2608A (output text primitives may give spurious results).

-- DATACAP/1000 Data Capture Software has been enhanced to support the new HP 3075A and 3076A Data Capture terminals using the 12790A Multipoint Terminal Interface and the 91730A Multipoint software with DVR07, with or without the 3074A Data Link Adapter. DATACAP will continue to support the 3070A/B terminals through the 40280A Serial Link interface with DVA47.

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CURRENT SOFTWARE CATEGORIES

SECTION 3

### Active Software

Active software is defined as software which may receive periodic enhancements. Regular software maintenance is performed.

Diagnostics Library (24396A,B,C,D,E,F)  
HP/1000 Systems Diagnostics Library (24998-14002)  
HP/1000 Multipoint (91730A)  
Multiplexer Subsystem (91731A)  
Distributed Systems/1000 (91740A/B, 91741A)  
RJE/1000 (91780A)  
RTE Microprogramming Package (92061A)  
IMAGE/1000 Data Base Management System (92063A)  
RTE-M Operating System (92064A)  
BASIC 1000/M (92065A)  
RTE Measurement and Control Package (92066A)  
RTE-IV Operating System (92067A)  
BASIC 1000/D (92101A)  
Sensor-based DAS Utility Library (92400A)  
GRAPHICS/1000 Plotting Software (92840A)  
DATACAP/1000 (92903A)



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### Mature Software

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Mature software is subject to regular maintenance, but is not enhanced.

```
+-----+
|       |
| NOTE: | RTE-III will be obsoleted on       |
| -----| July 1, 1979. The last update to  |
|       | RTE-III will occur in the 1926  |
|       | Revision Cycle.                  |
|       |
+-----+
```

← RTE-II Operating System (92001B)  
RTE-III Operating System (92060B)  
Real Time Plotter Library (92409A)  
\* Basic Control System (BCS) (20855A)  
Distributed Systems/1B' (91700A,91703A,91704A,91705A)

\* Will become obsolete on or before January 1, 1980.

### Obsolete Software

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Obsolete software is defined as software which is no longer actively marketed by Hewlett-Packard. Regular support services are not available for obsolete software. Assistance with software of this class is available only on a Software Consulting basis. Users can continue to purchase parts and manuals for at least five years after the software becomes obsolete.

DOS-III Operating System  
RTE-B Operating System  
RTE-C Operating System



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NOTE: The 1913 Revision of BASIC requires that any  
----- BASIC subroutine that is in an overlay be run in  
a system containing the 1913 Revision (or later)  
of the RTE Compiler Library (92060-12005).

### 4-1 DIAGNOSTICS LIBRARIES (24396A-F, 24998-14002)

Modifications to the Diagnostics Libraries are described below.  
Various diagnostics have been enhanced.

NOTE: The 2631 LINE PRINTER DIAGNOSTIC has been modified.  
Graphics Quality Test (Test 20), and Auxiliary  
Graphics Test (Test 21) have been added for use on  
the 2631G Line Printer. The output of the Character  
Set Test (Test 08) and the Horizontal Tabs Test (Test  
11) has been formatted to improve use of the tests.  
The Diagnostic Serial Number (DSN) is changed to  
105106.

NOTE: The 2635 LINE PRINTER DIAGNOSTIC has been modified.  
The tests have been modified to allow testing of the  
2635 in a configuration using the Extended Serial I/O  
Card (P/N 02635-60164). The Diagnostic Serial Number  
(DSN) is changed to 105107.

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4-2 DS/1000/1000 (91740A/B)

The modifications to DS/1000/1000 are as follows:

NOTE: The buffer format for the module %QUEUE has been changed for communication with the module %QCLM.

NOTE: Various features have been added to the module REMAT:

- A "broadcast" command is now available for sending messages to the operator console at each node in the network.
- A new command for remote cartridge list is available.
- The enhanced directory listing printout now shows if the file is open and if there are extents.
- A complete file directory listing can now be obtained (e.g. all files on a specified disc LU).

NOTE: DLIST has been modified to accommodate the above enhancements for directory and cartridge listings.

NOTE: There are now two versions of LSTEN, the newer one with the capability of the "shutdown" option. Either version is usable at any given node. LSTEN with "shutdown" terminates DS/1000 activity and returns all resources allocated for DS/1000 back to RTE. In addition to the current features of LSTEN, both versions will exhibit the following added capabilities:

- Actual name of the program precedes all prompt and error messages, e.g. /LST09: OPERATION?
- Prevents execution of initialization and shutdown

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functions if run from an ID segment which does not contain the name "LSTEN".

- Comments are now allowed in all transfer files. An asterisk in column 1 denotes a comment.
- Under the upcoming Session Monitor system, LSTEN will no longer accept a "pseudo-file" passed via Class I/O.
- The Nodal Routing Vector now omits printing of the line number in order to avoid confusion.
- A new monitor named RDBAM has been added. Entering an optional /D in response to the initialization prompt "LSTEN: MONITOR NAME?" will result in the following ignorable error message: "ERROR: MON?: RDBAM?"

NOTE: GRPM has been modified to prevent re-queueing and to enhance information passing:

- Prevent re-queueing when a large number of blocks are already queued on a given class. The queue depth is controlled by a value stored in #REQU (#QCNT), which can be changed by the user who requires a different queue limit. However, making the queue limit too high results in the loss of the protective nature of the feature.
- Release any buffers which cannot be threaded to PLOG for the reason given above.
- Include the least significant bit of the communication link LU's subchannel when re-queueing. Formerly, this bit might be cleared, causing part of the preamble to be sent in open-loop mode, which may have caused some spurious error indications.

NOTE: The DS library has been enhanced:

- The submodule D65GT has changed to release buffers which cannot be requeued to PLOG due to a backlogged queue. It now returns at least the first seven words

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of any request buffer to the caller in the event of a request buffer length error.

- The submodule #REQU now checks for invalid link words in class headers and returns an error if necessary. It will also flag an error if there are too many blocks in the class queue. The message is then either retried or returned to the user with a DSOB-type error. The maximum number of blocks is defined at the accessible entry point #QCNT. At present, the maximum number of blocks to be linked onto the destination class is ten.
- The submodule D65MS has been changed so that it will not corrupt itself in the event that it is called with an incorrect number of parameters.

NOTE: PTOPM has been enhanced with new error codes. Refer to the appropriate section in the manual.

NOTE: PROGL has been modified in the following ways:

- The number of retries for line timeouts or parity errors has been increased from 8 to 128.
- An optional message printout is available when down-loads are initiated, and success/failure status printed when they are terminated.
- The least significant bit of the line LU's subchannel is retained when re-queueing.

NOTE: QCLM now has more specific information in the error messages.

PROBLEM: (SSB #4210) After a period of successful communication over a heavily used modem link, it may become impossible to send or to receive any requests. The problem lies in DVA65.

SOLUTION: Recovery procedures have been improved. Rev 1913 microcode is not required for compatibility, but will

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prevent the occurrence of the problem. Other changes have occurred to DVA65 in the areas of:

- Power fail handling.
- Prevent posting of bad data.
- Respond to 'RC' or 'STOP' when waiting for 'TNW' to start transmitting.
- Increment total block transfer count only if 'WRITE' operation successful.
- Force timeout re-synchronization of both sides upon detection of irrecoverable protocol errors.
- Allow transmission of data buffers (PTOP) of specific length = 4080 words.
- Reject new requests when yielding for simultaneous requests.
- Return EQT number on 'READ' errors, thus allowing 'QCLM' to identify the line.

**PROBLEM:** Timeout offset used to allow the system to suspend itself for minutes or even hours during heavy DS/1000 activity.

**SOLUTION:** The timeout is now limited to the value stored in 'RES' as entry point #RDLY, which the user can modify if desired. Its normal value is -200 (2 seconds). This value places a maximum limit on the re-transmission delay. Also, the least significant bit of the line LU's subchannel is retained when re-queveing.

**PROBLEM:** (SSB #4097) The DS loader would not purge a program with a name of one or two characters unless the rest of the field was padded with blanks.

**SOLUTION:** The buffer area is now initialized when reading the name of a program to be purged.

**PROBLEM:** The DS loader LOADD required a correction for COMMON declaration.

**SOLUTION:** The NAM record processor now allows for programs declaring COMMON. COMMON-length checks formerly were made even though the subroutine was not loaded with

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the program. Now, the checks will be made only if the subroutine is referenced and loaded.

**PROBLEM:** RMTIO was not compatible with the 1901 FRMTR.

**SOLUTION:** The remote processing code used in the Rev 1740 version of RMTIO has been integrated into the current version of FMTIO in order to compose the revised RMTIO. The occurrence of repetitious DSxx errors (when remote request fails) has been prevented.

4-3 DS/1000/3000 (91741A)

The modifications to DS/1000/3000 are documented below:

**NOTE:** The module CNSLM has changed to handle only \$STDLIST requests. All others (including \$STDIN) are rejected. The only carriage control CNSLM performs is to skip an extra blank line. The output LU number is taken from the "TO" process number. Since CNSLM knows exactly to which terminal the message is directed, it no longer broadcasts messages to all sessions (although messages continue to appear on the system console).

**NOTE:** QUEX has been modified to increase readability and shorten execution time. The 3000 method of dispatching messages has also been changed.

-- As before, a rejected reply is ignored.

-- HP3000 rejects are treated as replies.

-- As before, Class 0 requests and replies (initialization/termination) are handled within QUEX.



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- Class 5 requests (\$STDIN/\$STDLIST) are treated as replies to a master request, unless the "from process number" or "to process number" is zero. In that case, the request is passed to CNSLM via RQCNU.
- All other requests are passed to the request converter RQCNU.
- All other replies (including Class 5 requests) are passed back to the RTE master. The master's class number is determined by searching the master TCB list (via RSAX) for the sequence number.
- When an abortive error occurs, users are timed out instead of being aborted. As before, the lists in RES are cleaned out, so if a user makes a request after an abortive error he will no longer be logged on and will get an illegal request error.
- QUEX does not print an "UP" message if there is no intervening "DOWN" message. If QUEX receives a bad buffer (i.e. bad stream number, negative data length, header Word 1 zero), it prints the "bad buffer" message on the system console, but does not print an octal dump of the buffer. The QUEX logging facility has been removed.

NOTE: RQCNU now checks for "continuation" requests for PTOP, RFA, and DEXEC reads, then passes them to RPCNV, the reply converter.

NOTE: RPCNV has been enhanced so that it no longer goes dormant when waiting for two kinds of replies. They are handled as follows:

- Data continuation for RFA, PTOP, or DEXEC read: the remaining data is put out on an I/O class. When continuation requests arrive, RQCNU writes them to RPCNV's class. RPCNV then pulls data off the holding class and sends it to QUEX.
- \$STDLIST reply following operator request: the operator command message is written to MPE with the "from process number" set to zero. No reply from the



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HP3000 is sent, so the operator request reply can be sent immediately.

**NOTE:** RMOTE has been altered to be compatible with the revised D3KLB. The bit mask was altered to provide the proper input and output LU numbers.

**NOTE:** Various changes have occurred within D3KLB:

- Because QUEX sends replies to masters based upon the sequence number, the submodule D3KMS no longer needs to check whether the sequence number of the incoming message matches the one it is waiting for.
- Instead of inserting a carriage-return/line-feed in the buffer for an extra blank line after printing, the submodule D3KMS performs a separate print operation for the blank line.
- Calling the submodule PRCNM sets the entry points D\$LOG (for 3000 output) and D\$INP (for 3000 input) to the value obtained from LOGLU, rather than defaulting those values to LU 1.

**PROBLEM:** DVG67 was susceptible to random operation upon receiving spurious interrupts.

**SOLUTION:** The driver now handles spurious interrupts in the standard RTE method and no longer reports them as "ILL INT".

4-4 RJE/1000 (91780A)

The modification to RJE/1000 is described below:

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**PROBLEM:** (SSB #4409) When a Type 4 (large background) program is executed while RJE is running in a RTE-IV environment, the system will go into a loop with the interrupt system turned off.

**SOLUTION:** The fix is the same as that given in the SSB report. RJE uses a privileged driver (DVR50) which resides in the System Driver Area. The user map for a Type 4 program does not contain the System Driver Area. However, the driver had been restoring the user map before it had finished processing an interrupt. This caused it to execute in the wrong map with the interrupts still off. DVR50 has been changed to restore the user map only after it has finished processing the interrupt.

### 4-5 RTE-II/III OPERATING SYSTEMS (92001B, 92060B)

The following changes have been made to the RTE-II and the RTE-III Operating Systems for the 1913 revision cycle:

**NOTE:** Dummy routines have been added to the RTE-II/III System Library to create entry points XLUEx, LUTRU, \$CL1, and \$CL2. These resolve externals caused by the enhancements to the DS/1000 software.

**NOTE:** Since enhanced IMAGE software needs the LIMEM routine to function correctly, the routine has been added to the RTE-II/III System Library. LIMEM returns the correct memory limits for a non-segmented program.

**NOTE:** Generation answer files for the 7900 disc and the 7905/06/20 discs now appear on all grandfathers.

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### 4-6 RTE DRIVERS

Modifications have been made for the 1913 Revision to the following RTE Drivers:

DVA05    DVR05    DVB12    DVR23    DVA47    DVM72

**NOTE:**        The MTIS driver DVM72 has been added to the RTE-IV Operating System software package as well as the RTE-M Operating System software package.

**PROBLEM:**    (SSB #4151) When the RTE system is doing a high level of DMA or privileged driver I/O, the output to the display times out. This results in that line being lost. This problem was introduced in Rev 1805 when changes were made to DVA05. The timeout occurred because the terminal sent an ACK when the card was actually not ready.

**SOLUTION:**    DVR05/DVA05 Rev 1913 holds the terminal off with the clear to the send line. This line exists only on the terminal extended communications card.

**PROBLEM:**    The timeout value (17 sec) of the 2608A driver DVB12 is too short when running self-test if the line printer is in the 8 lines-per-inch mode.

**SOLUTION:**    The DVB12 timeout value has been changed to 32 seconds.

**PROBLEM:**    If a read command is attempted on a blank magnetic tape, the mag tape unit continues to move forward or read until the physical end of tape is reached (the tape is actually pulled off the feed reel).

**SOLUTION:**    The mag tape driver DVR23 has been modified to set a two-second timeout whenever a read command is issued.

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If the timeout is reached, the driver completes normally and returns a zero transmission log.

**PROBLEM:** If the 3070B without printer option was used, softkey #11 was not available as a terminator key, and EQT Word 18 was not properly set.

**SOLUTION:** The 3070B driver DVA47 has been corrected to solve this problem.

4-7 IMAGE/1000 (92063A)

The changes to the IMAGE/1000 software for 1913 are documented below:

**NOTE:** The BASIC/IMAGE interface is being incorporated into the IMAGE/1000 92063A product and is removed from the BASIC/1000 92101A product.

**PROBLEM:** (SSB #4356) DBOPN subroutine of the IMAGE DBMS would cause memory protect violations, thus causing the calling program to abort if it did not previously make a call to the DBINT subroutine.

**SOLUTION:** The DBOPN subroutine was altered to avoid the code which would cause the MP in the case that DBINT had not been called.

**PROBLEM:** (SSB #4365) BASIC/IMAGE overlay could abort with a memory protect error if it had a data base open and a second DBOPN request was sent to it.

**SOLUTION:** This problem was largely due to the problem in DBOPN as noted above (fix to SSB #4356). However, the software now checks for a currently open data base

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when a DBOPN request is received.

**PROBLEM:** (SSB #3932) The BASIC/IMAGE overlay did not properly handle type checking in the case of a real variable which contained the value zero.

**SOLUTION:** BASIC was not passing IMAGE enough information on item types for IMAGE to do the type checking properly. This has been solved by the BASIC subroutine CALSB providing more item type information. The software has also been altered to utilize the additional information when type checking.

**PROBLEM:** (SSB #4220) DBELD would leave the input file and possibly the data base files open when it encountered an error while inputting data.

**SOLUTION:** DBELD, BBLD, BPUT, BCLOS, and CRDIM have been altered to close its input file and any open data base files, if an input error is encountered.

**PROBLEM:** (SSB #4222) DBSPA utility would print the character string "\$\$\$\$" for the record difference on output if the record difference was greater than 9999.

**SOLUTION:** A format statement in DBSPA was altered to use an I6 format item rather than an IS format on the record difference.

### 4-8 RTE-M OPERATING SYSTEM (92064A)

The modifications to RTE-M are described below.

**NOTE:** The RTE-M System Library was changed to include new

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entry points which satisfy external references created by the enhancements to DS/1000.

**NOTE:** The BASIC subroutine library changes have been incorporated into the RTE-M BASIC multimedia part. See the section on BASIC 1000/D (92101A).

**NOTE:** The MTIS driver DVM72 is now available as part of the RTE-M Operating System software package.

### 4-9 RTE-IV OPERATING SYSTEM (92067A)

The following changes were made to the RTE-IV Operating System in Revision Cycle 1913:

**NOTE:** Both 7900 and 7905/06/20 generation answer files now appear on both versions of the RTE-IV grandfather disc.

#### 4-9-1 RTE-IV Relocating Loader

**PROBLEM:** (SSB #4411) Running the loader under batch mode resulted in the command parameter and list output parameter defaulting to the terminal that scheduled the job.

**SOLUTION:** Under batch mode, the default command parameter (where the loader looks for commands) is LU5 and the default list output is LU6.

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**PROBLEM:** When a partition was specified for a program using the loader 'AS,xx' command, a check was made to see if the program would fit into the partition. If it did not fit, an L-21 error occurred. This error was incorrectly occurring for programs which actually did fit into the specified partitions. The partition size was being incorrectly calculated.

**SOLUTION:** The size is now found by indexing into the \$MATA table entry for the given partition.

**PROBLEM:** Certain error conditions were not clearly flagged by the loader.

**SOLUTION:** New error messages were added to the loader. See the appropriate section in the Programmer's Reference Manual.

### 4-9-2 RTE Compiler Library

**PROBLEM:** Truncation of non-extended files was being handled improperly when a son-process used them.

**SOLUTION:** Submodules CLO.C and RUN.C have been modified so that the son-process now handles extended files properly.

**PROBLEM:** The process which scheduled a son did not look for the scheduled program in the permanently loaded list.

**SOLUTION:** The submodule C.RP has been added to the compiler library for the purpose of searching the permanently loaded program list for the son to be scheduled.



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### 4-9-3 RTE Fortran IV

**NOTE:** The Fortran-IV compiler now allows EMA variables to be passed by reference.

**NOTE:** The Fortran IV compiler now offers a "Q" option, which gives the approximate relative addresses of Fortran statements on the listing.

**PROBLEM:** (SSB #4383) Equivalence failed to extend the length of labelled COMMON blocks.

**SOLUTION:** Equivalence now extends the length of labelled COMMON blocks.

### 4-9-4 RTE-IV System Library

**NOTE:** New entry points XLUEX, LUTRU, \$CL1, and \$CL2 have been added to the System Library in order to satisfy externals created by the enhancements to DS/1000 software.

**NOTE:** The new routines LIMEM and SEGLD have been added to the System Library to accommodate the enhancements to the IMAGE/1000 software.

**NOTE:** A new routine .ERES has been added to the library for the purpose of resolving EMA addresses.

**PROBLEM:** (SSB #4244) TIVAL did not return the correct value for the day of the year.

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**SOLUTION:** Declare \$TIME as external and do a cross map load of the day of the year value from the system entry point.

**PROBLEM:** IFBRK was made privileged using \$LIBR call at the start of the routine. This caused extra overhead for every call to the IFBRK routine.

**SOLUTION:** The \$LIBR call at the start of the IFBRK routine was replaced by a call to .ZPRV. This allows IFBRK to be used in the memory resident library. IFBRK makes a call to \$LIBR only if the break point was set and must be cleared from the ID segment.

4-10 BASIC 1000/D (92101A)

The changes to BASIC 1000/D are documented below:

**NOTE:** A number of miscellaneous aspects were modified in the BASIC interpreter in order to facilitate compatibility with future products.

**NOTE:** Due to the resolution of a problem in the IMAGE software, the subroutine CALSB, which passes parameters between BASIC and non-BASIC subroutines, now passes a string flag word.

**NOTE:** Error messages within the BASIC Table Generator RTETG have been expanded.

**NOTE:** The BASIC/IMAGE interface, ZBAIMG is no longer supplied under the BASIC product. It is now part of the IMAGE software package.

## SOFTWARE UPDATE NOTICE

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4-11 GRAPHICS/1000 (92840A)

The 1913 changes and enhancements to GRAPHICS/1000 are described below:

NOTE: The Graphics Plotting Software (GPS) package has been enhanced to execute optimally.

NOTE: GPS is now swappable from SAM (all EXEC I/O calls were changed to REIO calls).

NOTE: New subroutines have been added to support the HP 2608A printer under GPS. An entry in the Device Link Table was also created for the device.

PROBLEM: (SSB #4382,4387) Calls to AXES, LAXES, GRID, and LGRID did not always produce the correct results.

SOLUTION: The problem was caused by an inaccurate method of calculating placement of the grids, tic marks, and labels. Changes in the software have been made to rectify the situation.

PROBLEM: (SSB #4378) The DSTAT command duplicated a command in DS/1000 software. This prevented GPS from being generated into a system and could also have caused incorrect program linkage for a user searching both the GPS and DS/1000 libraries.

SOLUTION: The command DSTAT in GPS has been changed to GDSTT to avoid this conflict.

NOTE: A new feature GDSTT(9) has been added to provide access to information regarding character placement within character cells.

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**PROBLEM:** (SSB #4286) The GPS entry point SWTCH duplicated an entry point in system software.

**SOLUTION:** The name of the entry point has been changed to GSWCH.

**PROBLEM:** (SSB #4297) The file type for &DCT01 was not specified in the NAM record.

**SOLUTION:** &DCT01 is now specified as a Type 7 file.

### 4-12 DATACAP/1000 (92903A)

The modifications to DATACAP/1000 are listed below:

**NOTE:** In order to accommodate the new HP 3075 and HP 3076 Data Capture Terminals, the module %ZTMP has been divided into two modules, %ZTMP and %IOM70. A new module %IOM75 has been added.

**NOTE:** The need for more than one copy of TMP when operating more than 18 terminals simultaneously has been eliminated. Only one copy, TMP, is used. Another version, TMPD, is available as a "development" copy.

**NOTE:** The performance of DATACAP has been improved through use of system common for inter-module communication.

## SOFTWARE UPDATE NOTICE

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HARDWARE/FIRMWARE ENHANCEMENTS

SECTION 5

The following enhancements have been incorporated into the DS/1000 Firmware:

- If a system download request fails, seven re-try attempts are made.
- At the end of a block transfer, the missed reception flip-flop on the communications interface card (HP/1000-to-HP/1000) is checked. If it is set, a re-transmission of the block is requested.
- The remote possibility of two nodes getting out of step due to a very noisy communications link has been prevented.
- Improper entry into the microcode due to a programming error has been prevented.

The following applies to Product 91740B (DS/1000 for E-Series and F-Series computers):

The new DS/1000 Driver Microcode ROM part numbers are 91740-80049, 91740-80050, and 91740-80051. The 91740B Firmware Installation Manual (91740-90009) now carries a print date of March 1979.

The following applies to Product 91740A (DS/1000 for M-Series computers):

The latest DS/1000 Driver Microcode PCA Exchange Board (91740-69002) date code is 1913. The 91740A Firmware Installation Manual (91740-90007) now carries a print date of March 1979.

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The DS/1000 Communications Bootstrap Loader (91740-80048) did not change.

Replacement of the DS/1000 Driver Microcode is recommended only for systems involved in high-reliability applications or with noisy communications links. This replacement can be accomplished through the local Hewlett-Packard Service Office at customer expense.

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CHANGES IN PROGRAM SIZES

SECTION 6

There have been some changes in program sizes of some of the software modules of the DS/1000 software.

Program Name	Change
QUEUE	+9 words
REMAT	+164 words (octal)
DLIST (ZDLIS1)	+524 words (octal)
DLIST (ZDLIS2)	+243 words (octal)
LSTEN (w/o shutdown)	+410 words (octal)
LSTEN (with shutdown)	+1605 words (octal) over 1805 LSTEN
DVA65	+70 words (octal)
PTOPM	+41 words (octal)
GRPM	+20 words (octal)
RTRY	+17 words (octal)
ZDSLB1 module	+40 words (octal)
ZDSLB2 module	+7 words
PROGL	+443 words (octal)
QCLM	+252 words (octal)
ZLOADD module	+65 words (octal)
CNSLM	-217 words (octal)
QUEX	+41 words (octal)
RQCNV	+17 words (octal)
RPCNV	+43 words (octal)
RMOTE	-4 words
DVG67	-1 word
ZD3KLB module	-4 words

## SOFTWARE UPDATE NOTICE

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LIST OF MANUALS CHANGED	SECTION 7
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The following manuals have been updated as part of the 1913 Revision Cycle.

### 7-1 DIAGNOSTIC LIBRARIES (24396A-F and 24998-14002)

Part Number -----	Title -----	Type of Update -----
02631-90906	2631 Printer	Revision
02635-90906	2635 Printing Terminal	Revision
02100-90157	Diagnostic Configurator	Change Notice

### 7-2 DS/1000/1000 (91740A/B)

Part Number -----	Title -----	Type of Update -----
91740-90001	DS/1000/1000 Software Numb Catalog	Revision
91740-90002	DS/1000 Programmer's Reference Man	Change Notice
91740-90003	DS/1000 Network Manager's Manual	Change Notice
91740-90007	91740A Firmware Installation (E)	Change Notice
91740-90009	91740B Firmware Installation (M)	Change Notice



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91740-90015 DS/1000 New User's Guide Change Notice

7-3 DS/1000/3000 (91741A)

Part Number	Title	Type of Update
-----	-----	-----
91740-90002	DS/1000 Programmer's Reference Man	Change Notice
91740-90003	DS/1000 Network Manager's Manual	Change Notice
91740-90015	DS/1000 New User's Guide	Change Notice
91741-90001	DS/1000/3000 Software Numb Catalog	Revision

7-4 RJE/1000 (91780A)

Part Number	Title	Type of Update
-----	-----	-----
91780-90005	RJE/1000 Software Numbering Catalog	Revision
91780-90006	RJE/1000 Programmer's Ref Manual	Change Notice

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7-5 RTE-II (92001B)

<u>Part Number</u>	<u>Title</u>	<u>Type of Update</u>
92001-90015	DVR05/DVA05 Driver Manual	Revision
92001-93003	RTE-II Software Numbering Catalog	Revision
92060-90023	RTE Fortran-IV Reference Manual	Change Notice
92202-93001	DVR23 Driver Manual	Change Notice
92900-90005	DVA47 Driver Manual	Change Notice

7-6 RTE-III (92060B)

<u>Part Number</u>	<u>Title</u>	<u>Type of Update</u>
92001-90015	DVR05/DVA05 Driver Manual	Revision
92060-90019	RTE-III Software Numbering Catalog	Revision
92060-90023	RTE Fortran-IV Reference Manual	Change Notice
92202-93001	DVR23 Driver Manual	Change Notice
92900-90005	DVA47 Driver Manual	Change Notice

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7-7 IMAGE/1000 (92063A)

<u>Part Number</u>	<u>Title</u>	<u>Type of Update</u>
92063-90001	IMAGE/1000 Programmer's Ref Manual	Change Notice
92063-90003	IMAGE/1000 Software Numb Catalog	Revision

7-8 RTE-M (92064A)

<u>Part Number</u>	<u>Title</u>	<u>Type of Update</u>
09580-93027	DVM72 Driver Manual	Change Notice
92001-90015	DVR05/DVA05 Driver Manual	Revision
92060-90023	RTE Fortran-IV Reference Manual	Change Notice
92062-90004	DVB12 Driver Manual	Change Notice
92064-90001	RTE-M Software Numbering Catalog	Revision
92064-90002	RTE-M Programmer's Ref Manual	Change Notice
92202-93001	DVR23 Driver Manual	Change Notice
92900-90005	DVA47 Driver Manual	Change Notice

## SOFTWARE UPDATE NOTICE

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7-9 BASIC 1000/M (92065A)

Part Number	Title	Type of Update
92065-90001	RTE-M BASIC Programmer's Ref Manual	Change Notice
92065-90002	RTE-M BASIC Software Numb Catalog	Revision

7-10 RTE Measurement and Control Package (92066A)

Part Number	Title	Type of Update
29009-93001	DVR62 Driver Manual	Change Notice

7-11 RTE-IV (92067A)

Part Number	Title	Type of Update
09580-93027	DVM72 Driver Manual	Change Notice
92001-90015	DVR05/DVA05 Driver Manual	Revision
92060-90023	RTE Fortran-IV Reference Manual	Change Notice
92062-90004	DVB12 Driver Manual	Change Notice
92067-90001	RTE-IV Programmer's Reference Manl	Change Notice
92067-90004	RTE-IV Software Numbering Catalog	Revision
92202-93001	DVR23 Driver Manual	Change Notice

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92900-90005 DVA47 Driver Manual Change Notice

7-12 BASIC 1000/D (92101A)

Part Number	Title	Type of Update
-----	-----	-----
92060-90016	BASIC User's Manual	Change Notice
92101-90001	BASIC 1000/D Software Numb Catalog	Revision

7-13 GRAPHICS/1000 (92840A)

Part Number	Title	Type of Update
-----	-----	-----
92840-90001	GRAPHICS/1000 User's Manual	Change Notice
92840-90005	GRAPHICS/1000 Software Numb Catalog	Revision

7-14 DATACAP/1000 (92903A)

Part Number	Title	Type of Update
-----	-----	-----
92903-90001	DATACAP/1000 Prog Reference Manual	Change Notice
92903-90003	DATACAP/1000 Software Numb Catalog	Revision

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LIST OF SOFTWARE CHANGED	SECTION 8
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The following software modules have been updated in the 1913 Revision Cycle.

B-1 DIAGNOSTIC LIBRARIES (24396A-F and 24998-14002)

Part Number	DSN	Designation	Type of Change	Rev
02631-16001	105106	2631 Printer	Update	1913
02635-16001	105107	2635 Printing Terminal	Update	1913

The above changes have necessitated modifications to the following 24396A-F and 24998-14002 multi-media parts.

Part Number	Description	Rev	Type of Change
02631-16001	24396A Paper Tape	1913	Update
02635-16001	24396A Paper Tape	1913	Update
24396-13001	24396B 7900/01 Disc	1913	Update
24396-13101	24396C 7905/06 Disc	1913	Update
24396-13501	24396D 7970B Mag Tape (800 BPI)	1913	Update
24396-13601	24396E 7970E Mag Tape (1600 BPI)	1913	Update
24396-13305	24396F Mini-cartridge #5	1913	Update
24998-13304	HP 1000 System Mini-cartridge #4	1913	Update

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8-2 DS/1000/1000 (91740A/B)

Part Number	Module Name	Module Description	Prior Rev	New Rev
91740-12001	ZDSLBI	DS/1000 Base Library	1840	1913
91740-12002	ZDSLBI2	HP1000 to HP1000 Library	1840	1913
91740-12004	ZDSML1	RTE-M Only with File Sys Libr	1740	1913
91740-12005	ZDSML2	RTE-M Only w/o File Sys Library	1740	1913
91740-16001	ZLSTEN	Network Initialization Module	1805	1913
91740-16007	ZPTOPM	PTOP Communication Mgmt Monitor	1740	1913
91740-16009	ZDLIS1	Directory List for RTE-III/IV	1740	1913
91740-16010	ZDLIS2	Directory List for RTE-M Floppy	1740	1913
91740-16012	ZPROGL	Remote Down-Load Monitor	1805	1913
91740-16013	ZQUEUE	Interrupt Request Handler	1813	1913
91740-16014	ZGRPM	Request Pre-Processor	1740	1913
91740-16015	ZRTRY	Comm-Line Write/Retry Processor	1740	1913
91740-16016	ZQCLM	Communications Error Logger	1740	1913
91740-16019	ZLOADD	Remote Loader RTE-III	1805	1913
91740-16024	ZREMAT	Network Operator Interface	1840	1913
91740-16037	ZRMTIO	FTN-IV Remote I/O Formatter	1740	1913
91740-16071	ZDVA65	Communications Driver	1813	1913
91740-16072	ZLSTNS	LSTEN with Shutdown Feature	New	1913

Customers who have ordered Option 20 on the Software Subscription Service for DS/1000/1000 will receive updated software on the following minicartridges:

Part Number	Description	Type of Change
91740-13301	DS/1000 Cartridge #1	Modified
91740-13302	DS/1000 Cartridge #2	Modified
91740-13303	DS/1000 Cartridge #3	Modified
91740-13304	DS/1000 Cartridge #4	Modified

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### B-3 DS/1000/3000 (91741A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
91741-12001	%D3KLB	HP1000 to HP3000 Link Library	1840	1913
91741-12002	%D3KL2	1000 to 3000 Only Link Library	1740	1913
91741-16001	%DVG67	HP3000 Communications Driver	1840	1913
91741-16003	%QUEX	HP3000 Communications Monitor	1840	1913
91741-16004	%RQCNV	HP3000 Request Converter	1740	1913
91741-16005	%RPCNV	HP3000 Reply Converter	1740	1913
91741-16006	%CNSLM	HP3000 \$STDLIST Monitor	1740	1913
91741-16007	%RMOTE	Operator Access to the HP3000	1840	1913

Customers who have ordered Option 20 of the Software Subscription Service for DS/1000/3000 will receive updated software on the following minicartridge:

Part Number	Description	Type of Change
91741-13301	DS/1000/3000 Link Cartridge	Modified

### B-4 RJE/1000 (91780A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
91780-16011	ZRJE	RJE/1000 Main	1840	1913



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91780-16015 ZDVR50 RJE Priv Driver DVR50 1840 1913

Customers having Software Subscription Service Option 20 for RJE/1000 will receive updated software on the following minicartridge:

Part Number	Description	Type of Change
91780-13302	RJE/1000 Minicartridge	Modified

B-5 RTE-II (92001B)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92001-16005	ZSYLIB	RTE-II/III System Library	1813	1913
92001-18033	&AN2F0	RTE-II 7900 Answer File	1901	1913
92001-18034	&AN2F5	RTE-II 7905/06/20 Answer File	1901	1913
92060-12005	ZCLIB	RTE Compiler Library	1901	1913
92060-16092	ZFTN4	Fortran-IV Main	1901	1913
92060-16093	ZFFTN4	Fortran-IV Seg File Names	1726	1913
92060-16094	Z0FTN4	Fortran-IV Segment 0	1901	1913
92060-16095	Z1FTN4	Fortran-IV Segment 1	1901	1913
92060-16096	Z2FTN4	Fortran-IV Segment 2	1901	1913
92060-16097	Z3FTN4	Fortran-IV Segment 3	1901	1913
92060-16098	Z4FTN4	Fortran-IV Segment 4	1901	1913
92060-16101	Z5FTN4	Fortran-IV Segment 5	1901	1913
92001-16027	Z4DV05	2644/45 Terminal Driver	1806	1913
92001-16028	Z0DV05	2640 Terminal Driver	1806	1913
92001-16035	ZDVA05	264x Modem Driver	1806	1913
92202-16001	ZDVR23	DVR23 Mag Tape Driver	1840	1913
92900-16002	Z2DV47	HP3070 Driver w/o DMS	1840	1913

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Customers having Software Subscription Service Option 20 will receive updated software on the following minicartridges:

Part Number	Description	Type of Change
---	1913-AAA	---
---	1913-BBB	---

### B-6 RTE-III (92060B)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92001-16005	ZSYLIB	RTE-II/III System Library	1813	1913
92060-18050	&AN3F0	RTE-III 7900 Answer File	1901	1913
92060-18050	&AN3F5	RTE-III 7905/06/20 Answer File	1901	1913
92060-12005	ZCLIB	RTE Compiler Library	1901	1913
92060-16092	ZFTN4	Fortran-IV Main	1901	1913
92060-16093	ZFFTN4	Fortran-IV Seg File Names	1726	1913
92060-16094	Z0FTN4	Fortran-IV Segment 0	1901	1913
92060-16095	Z1FTN4	Fortran-IV Segment 1	1901	1913
92060-16096	Z2FTN4	Fortran-IV Segment 2	1901	1913
92060-16097	Z3FTN4	Fortran-IV Segment 3	1901	1913
92060-16098	Z4FTN4	Fortran-IV Segment 4	1901	1913
92060-16101	Z5FTN4	Fortran-IV Segment 5	1901	1913
92001-16027	Z4DV05	2644/45 Terminal Driver	1806	1913
92001-16028	Z0DV05	2640 Terminal Driver	1806	1913
92001-16035	ZDVA05	264x Modem Driver	1806	1913
92202-16001	ZDVR23	DVR23 Mag Tape Driver	1840	1913
92900-16003	Z3DV47	HP3070 Driver with DMS	1840	1913

Customers who have Option 20 of the Software Subscription Service for RTE-III will receive updated software on the

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following minicartridges:

Part Number	Description	Type of Change
---	1913-AAA	---
---	1913-CCC	---

B-7 IMAGE/1000 (92063A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92063-12001	%DBLIB	IMAGE Management System	1840	1913
92063-16003	%DBBLD	Utility DBBLD	1840	1913
92063-16014	%DBSPA	Utility DBSPA	1805	1913
92063-16019	%BAIMG	BASIC/IMAGE Interface	New	1913

Customers on Software Subscription Service Option 20 for IMAGE/1000 will receive updated software on the following minicartridges:

Part Number	Description	Type of Change
92063-13301	IMAGE Libraries	Modified
92063-13304	IMAGE Utilities	Modified

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### B-8 RTE-M (92064A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92064-12007	ZCLIBM	RTE-M Compiler Library	1901	1913
92064-16081	ZMSYLB	RTE-M System Library	1901	1913

Customers who have ordered Software Subscription Service for RTE-M will receive the updated software on the following listed multimedia parts, depending on the Subscription Option ordered:

Part Number	Description	Option	Type of Change
92062-13302	RTE-NonMeas DR1 Cartridge	020	Modified
92062-13304	RTE-NonMeas DR3 Cartridge	020	Modified
92062-13308	RTE-NonMeas DR8 Cartridge	020	Modified
92064-13306	RTE-M System Libraries	020	Modified
92064-13309	RTE-M System Libraries	020	Modified
92064-13401	RTE-M Generation Disc	040	Modified
92064-13402	RTE-M Program Prep Disc	040	Modified

### B-9 BASIC 1000/M (92065A)

The changes in BASIC 1000/D have necessitated the updating of the following BASIC 1000/M multimedia parts. Customers on Software Subscription Service for this product will receive the updates on either flexible disc or minicartridge, depending on

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the Subscription Option ordered:

Part Number	Description	Option	Type of Change
92065-13302	RTE-M BASIC Libraries	020	Modified
92065-13401	RTE-M BASIC Interpreter/Libraries	040	Modified

8-10 RTE-IV (92067A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92067-16002	Z4LDR	RTE-IV Relocating Loader	1901	1913
92067-16035	Z4SYLB	RTE-IV System Library	1901	1913
92067-18033	&AN4F0	RTE-IV 7900 Answer File	1901	1913
92067-18034	&AN4F5	RTE-IV 7905/06/20 Answer File	1901	1913
92060-12005	ZCLIB	RTE Compiler Library	1901	1913
92060-16092	ZFTN4	Fortran-IV Main	1901	1913
92060-16093	ZFFTN4	Fortran-IV Seg File Names	1726	1913
92060-16094	Z0FTN4	Fortran-IV Segment 0	1901	1913
92060-16095	Z1FTN4	Fortran-IV Segment 1	1901	1913
92060-16096	Z2FTN4	Fortran-IV Segment 2	1901	1913
92060-16097	Z3FTN4	Fortran-IV Segment 3	1901	1913
92060-16098	Z4FTN4	Fortran-IV Segment 4	1901	1913
92060-16101	Z5FTN4	Fortran-IV Segment 5	1901	1913
92001-16027	Z4DV05	2644/45 Terminal Driver	1806	1913
92001-16028	Z0DV05	2640 Terminal Driver	1806	1913
92001-16035	ZDVA05	264x Modem Driver	1806	1913
92202-16001	ZDVR23	DVR23 Mag Tape Driver	1840	1913
92900-16003	Z3DV47	HP3070 Driver with DMS	1840	1913

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Customers on the Software Subscription Service for RTE-IV will receive updated software on the following media, depending on the Subscription Option ordered:



Part Number	Description	Option	Type of Change
---	1913-AAA	020	---
---	1913-DDD	020	---
---	1913-EEE	020	---
92067-13501	RTE-4 7900 G.F. on 800 BPI Mag Tape	050	Modified
92067-13601	RTE-4 7900 G.F. on 1600 BPI Tape	051	Modified
92067-13502	RTE-4 7906/20 G.F. on 800 BPI Tape	052	Modified
92067-13602	RTE-4 7906/20 G.F. on 1600 BPI Tape	053	Modified

B-11 BASIC 1000/D (92101A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92101-12001	ZBAIN1	BASIC Interpreter	1901	1913
92101-12003	ZBASLB	BASIC Subroutine Library	1826	1913
92101-16008	ZBATGN	BASIC Table Generator	1805	1913

Customers on Software Subscription Service Option 020 for this product will receive the following updated minicartridges:

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Part Number	Description	Type of Change
92101-13301	BASIC Minicartridge #1	Modified
92101-13302	BASIC Minicartridge #2	Modified

### B-12 GRAPHICS/1000 (92840A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92840-16001	ZGPSCM	GPS Commands	1901	1913
92840-16002	ZGCBIM	GPS Link Modules	1901	1913
92840-16003	ZDVG01	2648A Device Subroutine	1819	1913
92840-16004	ZDVG02	9872A,7245A,7225A Device Subs	1901	1913
92840-16005	ZDCT02	9872A Command Table	1819	1913
92840-16006	ZDCT03	7245A Command Table	1901	1913
92840-16007	ZDVG07	9874A Command Table and Dev Sub	1840	1913
92840-16009	ZDCT08	7225A Command Table	1901	1913
92840-16010	ZDVG04	2608A Device Subroutine	New	1913
92840-16011	ZDVG05	7221A Device Subroutine	1840	1913
92840-16012	ZDVZ12	2608A Graphics Driver	New	1913

Customers on the Software Subscription Service for GRAPHICS/1000 will receive the updated software on the following minicartridges:

Part Number	Description	Type of Change
92840-13301	Graphics/1000 Cartridge 1	Modified
92840-13302	Graphics/1000 Cartridge 2	Modified
92840-13303	Graphics/1000 Cartridge 3	New

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B-13    DATACAP/1000 (92903A)

Part Number	Module Name	Module Description	Prior Rev	New Rev
92903-16001	%GPLB4	DATACAP Gen Purpose Library	1840	1913
92903-16100	%TMSLB	Trans Monitor Sys Library	1805	1913
92903-12300	%TGPLB	Trans Gen Prog Library	1805	1913
92903-16350	%TGP	Trans Gen Prog Main	1805	1913
92903-16351	%TGPO	Trans Gen Prog Segment	1805	1913
92903-12301	%TGP1	"	1805	1913
92903-12302	%TGP2	"	1805	1913
92903-16358	%TGP3	"	1805	1913
92903-16359	%TGP4	"	1840	1913
92903-12303	%TGP5	"	1805	1913
92903-12304	%TGP6	"	1805	1913
92903-12311	%TGP7	"	1805	1913
92903-12305	%TGP8	"	1805	1913
92903-12306	%TGP9	"	1805	1913
92903-12307	%TGP10	"	1805	1913
92903-12308	%TGP11	"	1805	1913
92903-12309	%TGP12	"	1805	1913
92903-12310	%TGP13	"	1805	1913
92903-16391	%TGP14	"	New	1913
92903-12400	%TMGLB	Trans Monitor Prog Library	1805	1913
92903-12401	%TMGL1	"	1805	1913
92903-16451	%TMPGN	Trans Monitor Prog Generator	1805	1913
92903-16452	%TMPG0	"	1805	1913
92903-16453	%TMPG1	"	1805	1913
92903-16454	%TMPG2	"	1805	1913
92903-16455	%TMPG3	"	1805	1913
92903-16456	%TMPG4	"	1805	1913
92903-16457	%TMPG5	"	1805	1913
92903-16540	%STORA	Trans Monitor Prog Module	1805	1913
92903-16550	%STORB	"	1805	1913
92903-16520	%TSE	"	1805	1913
92903-16530	%TSMG	"	1805	1913
92903-16510	%ZTMP	"	1840	1913
92903-16560	%IOM70	Trans Monitor HP3070 Module	New	1913
92903-16570	%IOM75	Trans Monitor HP3075/6 Module	New	1913



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92903-16200	ZDCMON	DATACAP Monitor Program	1805	1913
92903-18319	/TGP	Transfer File to RP TGP	1805	1913
92903-18320	\TGP	Transfer File to OF TGP	1805	1913
92903-18410	/TMPGN	Transfer File to RP TMP	1805	1913
92903-18413	\TMPGN	Transfer File to OF TMP	1805	1913
92903-18204	*DATCA	DATACAP Instal. Trans. File	1805	1913
92903-18203	*TYPED	Trans. File for MT,LP,CTU's	1805	1913
92903-18321	)TGP	Loader File for TGP	1805	1913
92903-18412	)TMPGN	Loader File for TMPGN	1805	1913
92903-18207	SWIPDB	Schema for WIP Database	New	1913
92903-18208	DWIPDB	Data File to Build WIP	New	1913
92903-16205	ZDISEX	Example Display Subroutine	New	1913
92903-16206	ZVALX2	Example Validation Subroutine	New	1913
92903-16580	ZOFLPO	Off-Line Print Module	New	1913
92903-17001	DCEXLB	Sample Transaction Module	New	1913

Customers on the Software Subscription Service for DATACAP/1000 will receive the updated modules on the following minicartridges:

Part Number	Description	Type of Change
92903-13301	DATACAP Cartridge 1	Modified
92903-13302	DATACAP Cartridge 2	Modified
92903-13303	DATACAP Cartridge 3	Modified
92903-13304	DATACAP Cartridge 4	Modified
92903-13305	DATACAP Cartridge 5	Modified
92903-13306	DATACAP Cartridge 6	Modified
92903-13307	DATACAP Cartridge 7	Modified
92903-13308	DATACAP Cartridge 8	Modified
92903-13309	DATACAP Cartridge 9	Modified
92903-13310	DATACAP Cartridge 10	New
92903-13311	DATACAP Cartridge 11 DCEXLB	New

# SOFTWARE UPDATE NOTICE

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+-----+-----+
| CURRENT SOFTWARE REVISION CODES | SECTION 9 |
+-----+-----+
  
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9-1 RTE-II (92001B)

The following is a list of relocatable modules and revision codes of software on the RTE-II grandfather disc.

CR=32767

ILAB=R2.5/2 NXTR=0142 NXSEC=092 SEC/TR=096 LAST TR= 0202 DR

FILE NAME	MODULE NAME	REVISION CODE
ZRDNAM	RDNAM	?????-????? 760413
ZXREF	XREF	92060-16028 REV.A 750420
Z1FTN	FTN	(NO REVISION LEVEL SUPPLIED)
Z2FTN	FTN01	(NO REVISION LEVEL SUPPLIED)
Z3FTN	FTN02	(NO REVISION LEVEL SUPPLIED)
Z4FTN	FTN03	(NO REVISION LEVEL SUPPLIED)
Z5FTN	FTN04	(NO REVISION LEVEL SUPPLIED)
ZALGL1	ALGL1	(NO REVISION LEVEL SUPPLIED)
ZFF.N	FF.C	(NO REVISION LEVEL SUPPLIED)
ZDVR30	DVR30	(NO REVISION LEVEL SUPPLIED)
Z1DV10	DVR10	(NO REVISION LEVEL SUPPLIED)
Z2DV10	DVR10	(NO REVISION LEVEL SUPPLIED)
ZAUTOR	AUTOR	(NO REVISION LEVEL SUPPLIED)
ZMTM	PRMPT	92001-16003 REV.B 741216
Z2DP43	DVP43	92001-16004 REV.1633 760810
ZCAL10	DVR10	(NO REVISION LEVEL SUPPLIED)
ZCALIB	PLOT	760218
ZASMB	ASMB	92060-16022 REV.B 760924
ZALGOL	ALGOL	24129-60001 REV.D 761020

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XDVA13	DVA13	91200-16001 REV 1648 -- 761124	
XTVLIB	CHARS	91200-16002 REV 1648 -- 761124	
XTUVER	TVERF	91200-16004 REV 1648 -- 761203	
XDECAR	SADD	(NO REVISION LEVEL SUPPLIED)	
XVERFY	VERFY	92060-16041 REV.1704 761201	
XCOPY	COPY	92060-16042 REV.1704 770214	
XKEYS	KEYS	(NO REVISION LEVEL SUPPLIED)	
XKYDMP	KYDMP	(NO REVISION LEVEL SUPPLIED)	
XDVR11	DVR11	29030-60001 REV 1710	3-1-77
X\$CMD2	\$\$CMD	92001-16029 REV.1710 770216	
XDVR31	DVR31	29013-60001 REV.1710 770216	
XHPIB	HPIB	59310-16004 REV. 1710, 770224	
XWHZT2	WHZAT	92001-16030 REV.1726 770520	
XLDR2	LOADR	92001-16002 REV.1732 770811	
XDVR00	DVR00	29029-60001 REV 1740 770808	
XMSAFD	SAFD	(NO REVISION LEVEL SUPPLIED)	
XLP31	LPCON	92062-16003 REV. 1805 5-19-77	
XDVR33	DVR33	12732-16001 REV 1805 10-20-77	
XDVR12	DVR12	29028-60002 780103 REV 1805	
XDVR24	DVR24	(NO REVISION LEVEL SUPPLIED)	
XMESS	MESS	59310-16011 REV 1805 780105	
XSRQ.P	SRQ.P	59310-16005 REV 1805 780110	
X2SPO1	\$SPOL	92002-16001 REV. 1805 771116	
X2SPO2	SMP	92002-16002 REV. 1740 770908	
XDVA12	DVA12	92001-16020 780511 REV 1826	
XSWTCH	SWTCH	92060-16038 REV.1826 780510	
XRT2G1	RT2GN	92001-16031 REV.1826 780508	
XRT2G2	RT2G3	92001-16031 771219	
XCR2SY	\$CRSY	92001-16012 REV.1840 780810	
X1DV37	DVR37	59310-16002 REV. 1840 780811	
X2DV37	DVR37	59310-16003 REV. 1840 780811	
XDVR32	DVR32	92060-16031 REV 1840 780515	
XDVR15	DVR15	09601-16021 781108 REV 1901	
XBMPG1	\$BMON	92002-12001 REV.1901 781103	
XBMPG2	MR..	92002-16008 760621	
XBMPG3	CO..	(NO REVISION LEVEL SUPPLIED)	
XBMLIB	\$BALB	92002-16006 REV.1901 781108	
XSAVE	SAVE	92060-16039 REV.1901 781108	
XRESTR	RSTOR	92060-16040 REV.1901 781108	
XDBKLB	DBKLB	92060-16043 REV.1901 781108	
XEDITR	EDITR	92002-16010 REV 1901 780913	
XRLIB1	RLIB1	24998-16001 REV.1901 781109	
XRLIB2	RLIB2	24998-16001 REV.1901 781109	
XRLIB3	RLIB3	24998-16011 REV.1901 781122	
XFF4.N	FF4.A	24998-16002 REV.1901 781107	
XODV05	DVR05	92001-16028 REV. CODE 1913	9-28-78

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X4DV05	DVR05	92001-16027	REV.1913	9-28-78
XDVA05	DVA05	92001-16035	REV. CODE 1913	9-28-78
XDVR23	DVR23	92202-16001	REV.1913	- 790202
X2DV47	DVA47	92900-16002	REV.1913	781122 RTE-II
XFTN4	FTN4	92060-16092	790112	REV. 1913
XFFT4	SEG.F	92060-16093	770531	REV. 1913
X0FTN4	F4.0	92060-16094	790125	REV. 1913
X1FTN4	F4.1	92060-16095	790103	REV. 1913
X2FTN4	F4.2	92060-16096	781212	REV. 1913
X3FTN4	F4.3	92060-16097	781212	REV. 1913
X4FTN4	F4.4	92060-16098	790206	REV. 1913
X5FTN4	F4.5	92060-16101	790103	REV. 1913
XCLIB	\$CLIB	92060-12005	REV.1913	790105 \$CLIB
XSYLIB	\$YSLB	92001-16005	REV.1913	790307

## SOFTWARE UPDATE NOTICE

FOR SOFTWARE REVISION 1913

9-2 RTE-III (92060B)

The following is a list of relocatable modules and revision codes of software on the RTE-III grandfather disc.

CR=32767

ILAB=R3.5/2 NXTR=0143 NXSEC=024 SEC/TR=096 LAST TR= 0202 DR

FILE NAME	MODULE NAME	REVISION CODE
=====		
%RDNAM	RDNAM	?????-????? 760413
%XREF	XREF	92060-16028 REV.A 750420
%1FTN	FTN	(NO REVISION LEVEL SUPPLIED)
%2FTN	FTN01	(NO REVISION LEVEL SUPPLIED)
%3FTN	FTN02	(NO REVISION LEVEL SUPPLIED)
%4FTN	FTN03	(NO REVISION LEVEL SUPPLIED)
%5FTN	FTN04	(NO REVISION LEVEL SUPPLIED)
%ALGL1	ALGL1	(NO REVISION LEVEL SUPPLIED)
%FF.N	FF.C	(NO REVISION LEVEL SUPPLIED)
%DVR30	DVR30	(NO REVISION LEVEL SUPPLIED)
%1DV10	DVR10	(NO REVISION LEVEL SUPPLIED)
%2DV10	DVR10	(NO REVISION LEVEL SUPPLIED)
%3DP43	DVP43	92060-16001 REV.1633 760810
%AUTOR	AUTOR	(NO REVISION LEVEL SUPPLIED)
%MTM	PRMPT	92001-16003 REV.B 741216
%\$PUMP	\$PUMP	92060-16035 REV.A 750505
%CAL10	DVR10	(NO REVISION LEVEL SUPPLIED)
%CALIB	PLOT	760218
%ASMB	ASMB	92060-16022 REV.B 760924
%ALGOL	ALGOL	24129-60001 REV.D 761020
%DVA13	DVA13	91200-16001 REV 1648 -- 761124
%TVLIB	CHARS	91200-16002 REV 1648 -- 761124
%TVVER	TVERF	91200-16004 REV 1648 -- 761203
%DECAR	SADD	(NO REVISION LEVEL SUPPLIED)
%VERFY	VERFY	92060-16041 REV.1704 761201
%COPY	COPY	92060-16042 REV.1704 770214
%KEYS	KEYS	(NO REVISION LEVEL SUPPLIED)
%KYDMP	KYDMP	(NO REVISION LEVEL SUPPLIED)
%DVR11	DVR11	29030-60001 REV 1710 3-1-77
%\$CMD3	\$CMD	92060-16036 REV.1710 770216
%DVR31	DVR31	29013-60001 REV.1710 770216

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XHP1B	HPIB	59310-16004 REV. 1710, 770224	
XWHZT3	WHZAT	92060-16006 REV.1726 770520	
XLDR3	LOADR	92060-16004 REV.1732 770811	
XDVR00	DVR00	29029-60001 REV 1740 770808	
XMSAFD	SAFD	(NO REVISION LEVEL SUPPLIED)	
XLP31	LPCON	92062-16003 REV. 1805 5-19-77	
XDVR33	DVR33	12732-16001 REV 1805 10-20-77	
XDVR12	DVR12	29028-60002 780103 REV 1805	
XDVR24	DVR24	(NO REVISION LEVEL SUPPLIED)	
XMESS	MESS	59310-16011 REV 1805 780105	
XSRQ.P	SRQ.P	59310-16005 REV 1805 780110	
X3SP01	\$SPOL	92002-16001 REV. 1805 771116	
X3SP02	SP.CL	92060-16034 REV.A 750505	
XDVA12	DVA12	92001-16020 780511 REV 1826	
XSWTCH	SWTCH	92060-16038 REV.1826 780510	
XRT3G1	RT3GN	92060-16037 REV.1826 780508	
XRT3G2	RT3G3	92060-16037 771219	
XCR3SY	\$OPSY	92060-12003 REV.1840 780810	
X1DV37	DVR37	59310-16002 REV. 1840 780811	
X2DV37	DVR37	59310-16003 REV. 1840 780811	
XDVR32	DVR32	92060-16031 REV 1840 780515	
XDVR15	DVR15	09601-16021 781108 REV 1901	
XBMPC1	\$BMON	92002-12001 REV.1901 781103	
XBMPC2	MR..	92002-16008 760621	
XBMPC3	CO..	(NO REVISION LEVEL SUPPLIED)	
XBMLIB	\$BALB	92002-16006 REV.1901 781108	
XSAVE	SAVE	92060-16039 REV.1901 781108	
XRESTR	RSTOR	92060-16040 REV.1901 781108	
XDBKLB	DBKLB	92060-16043 REV.1901 781108	
XEDITR	EDITR	92002-16010 REV 1901 780913	
XRLIB1	RLIB1	24998-16001 REV.1901 781109	
XRLIB2	RLIB2	24998-16001 REV.1901 781109	
XRLIB3	RLIB3	24998-16011 REV.1901 781122	
XFF4.N	FF4.A	24998-16002 REV.1901 781107	
X0DV05	DVR05	92001-16028 REV. CODE 1913	9-28-78
X4DV05	DVR05	92001-16027 REV.1913	9-28-78
XDVA05	DVA05	92001-16035 REV. CODE 1913	9-28-78
XDVR23	DVR23	92202-16001 REV.1913 - 790202	
X3DV47	DVA47	92900-16003 REV.1913 781122	RTE-IV
XFTN4	FTN4	92060-16092 790112 REV. 1913	
XFFTN4	SEG.F	92060-16093 770531 REV. 1913	
X0FTN4	F4.0	92060-16094 790125 REV. 1913	
X1FTN4	F4.1	92060-16095 790103 REV. 1913	
X2FTN4	F4.2	92060-16096 781212 REV. 1913	
X3FTN4	F4.3	92060-16097 781212 REV. 1913	
X4FTN4	F4.4	92060-16098 790206 REV. 1913	

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X5FTN4	F4.5	92060-16101	790103	REV. 1913	
XCLIB	*CLIB	92060-12005	REV.1913	790105	*CLIB
XSYLIB	*YSLB	92001-16005	REV.1913	790307	

## SOFTWARE UPDATE NOTICE

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9-3 RTE-IV (92067A)

The following is a list of relocatable modules and revision codes of software on the RTE-IV grandfather disc.

CR=32767

ILAB=RTE4.5 NXTR=0189 NXSEC=064 SEC/TR=096 LAST TR= 0255 DR

FILE NAME	MODULE NAME	REVISION CODE
XDVR33	DVR33	12732-16001 REV 1805 10-20-77
XDVR31	DVR31	29013-60001 REV.1710 770216
XDVR12	DVR12	29028-60002 780103 REV 1805
XDVR00	DVR00	29029-60001 REV 1740 770808
XDVR11	DVR11	29030-60001 REV 1710 3-1-77
XDVA13	DVA13	91200-16001 REV 1648 -- 761124
X\$CNFX	\$CNFX	92067-16006 REV.1805 780112
X1DV10	DVR10	(NO REVISION LEVEL SUPPLIED)
X2DV10	DVR10	(NO REVISION LEVEL SUPPLIED)
X4ASMB	ASMB	92067-16011 REV.1805 780112
X4ASB0	ASMB0	92067-16070 REV.1805 771017
X4ASB1	ASMB1	92067-16071 REV.1805 771102
X4ASB2	ASMB2	92067-16072 REV.1805 770919
X4ASB3	ASMB3	92067-16073 REV.1805 771102
X4ASB4	ASMB4	92067-16074 REV.1805 770919
X4AUTR	AUTOR	92067-16005 REV.1805 771219
X4MTM	PRMPT	92067-16003 REV.1805 780119
X4PVMP	PVMP4	92067-16001 REV.1805 771219
X4XREF	XREF	92067-16012 REV.1805 771121
XCAL10	DVR10	(NO REVISION LEVEL SUPPLIED)
XCALIB	PLOT	760218
XCOPY	COPY	92060-16042 REV.1704 770214
XDBUGR	DBUGR	92067-16075 REV.1805 780214
XDECAR	SADD	(NO REVISION LEVEL SUPPLIED)
XHPIB	HPIB	59310-16004 REV. 1710, 770224
XKEYS	KEYS	(NO REVISION LEVEL SUPPLIED)
XKYDMP	KYDMP	(NO REVISION LEVEL SUPPLIED)
XLGTAT	LGTAT	92067-16008 REV.1805 780321
XMESS	MESS	59310-16011 REV 1805 780105
XMSAFD	SAFD	(NO REVISION LEVEL SUPPLIED)
XRDNAM	RDNAM	?????-????? 760413



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XRT4G1	RT4GN	92067-16009	REV.1805	780320	
XRT4G2	RT4G3	92067-16009	REV.1805	780302	
XSRQ.P	SRQ.P	59310-16005	REV 1805	780110	
XTVLIB	CHARS	91200-16002	REV 1648	-- 761124	
XTVVER	TVERF	91200-16004	REV 1648	-- 761203	
XVERFY	VERFY	92060-16041	REV.1704	761201	
XLP31	LPCON	92062-16003	REV. 1805	5-19-77	
X EMA	EMA	92067-16013	REV.1805	780323	
X4SP01	GASP	92067-16028	REV.1805	780323	
X4SP02	SMP	92067-16028	REV.1805	771115	
XDVA12	DVA12	92001-16020	780511	REV 1826	
X1DV37	DVR37	59310-16002	REV. 1840	780811	
X2DV37	DVR37	59310-16003	REV. 1840	780811	
XDVR32	DVR32	92060-16031	REV 1840	780515	
XCR4S1	\$CSY4	92067-16014	REV.1840	780811	
XCR4S2	\$TRN4	92067-16014	REV.1805	780104	
X4DP43	DVP43	92067-16004	REV.1840	780731	
X4WHZT	WHZAT	92067-16007	REV.1840	780727	
X4SWTH	SWTCH	92067-16010	REV.1840	780810	
XDVR15	DVR15	09601-16021	781108	REV 1901	
XBMPG1	\$BMON	92002-12001	REV.1901	781103	
XBMPG2	MR..	92002-16008	760621		
XBMPG3	CO..	(NO REVISION LEVEL SUPPLIED)			
XRMLIB	\$BALB	92002-16006	REV.1901	781108	
XSAVE	SAVE	92060-16039	REV.1901	781108	
XRESTR	RSTOR	92060-16040	REV.1901	781108	
XDBKLB	DBKLB	92060-16043	REV.1901	781108	
XEDITR	EDITR	92002-16010	REV 1901	780913	
XRLIB1	RLIB1	24998-16001	REV.1901	781109	
XRLIB2	RLIB2	24998-16001	REV.1901	781109	
XRLIB3	RLIB3	24998-16011	REV.1901	781122	
XFF4.N	FF4.A	24998-16002	REV.1901	781107	
X4SYLB	\$YSLB	92067-16035	REV.1913	790119	
X4LDR	LOADR	92067-16002	REV.1913	790201	
X0DV05	DVR05	92001-16028	REV. CODE 1913	9-28-78	
X4DV05	DVR05	92001-16027	REV.1913	9-28-78	
XDVA05	DVA05	92001-16035	REV. CODE 1913	9-28-78	
XDVB12	DVB12	92062-16004	REV 1913	- 790126	
XDVR23	DVR23	92202-16001	REV.1913	- 790202	
X2DV47	DVA47	92900-16002	REV.1913	781122	RTE-II
X3DV47	DVA47	92900-16003	REV.1913	781122	RTE-IV
XDVM72	DVM72	09580-16079	REV.B	771024	
XDSCHD	DSCHD	09580-16126	REV. A	770315	
XFTN4	FTN4	92060-16092	790112	REV. 1913	
XFFTN4	SEG.F	92060-16093	770531	REV. 1913	
XOFTN4	F4.0	92060-16094	790125	REV. 1913	

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X1FTN4	F4.1	92060-16095	790103	REV.	1913
X2FTN4	F4.2	92060-16096	781212	REV.	1913
X3FTN4	F4.3	92060-16097	781212	REV.	1913
X4FTN4	F4.4	92060-16098	790206	REV.	1913
X5FTN4	F4.5	92060-16101	790103	REV.	1913
XCLIB	*CLIB	92060-12005	REV.1913	790105	*CLIB

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### 9-4 SUBSYSTEMS

The following subsections list the revision levels of subsystem software modules. Revision levels are given for modules of products which underwent modification for the Revision 1913 Cycle. Note that some subsystem library modules may not appear to reflect the correct revision level because the header record had not been updated.

#### 9-4-1 DS/1000/1000 (91740A/B)

CR=00054

ILAB=LU54 NXTR=0014 NXSEC=022 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE
=====	=====	=====
XDSLBI	DSLBI	91740-12001 REV 1913 790131
XDSLBI2	DSLBI2	91740-12002 REV 1913 790214
XDSLBI3	DSLBI3	91740-12003 REV 1740 771027
XDSML1	DSML1	91740-12004 REV 1913 790214
XDSML2	DSML2	91740-12005 REV 1913 790214
XRTMLG	RTMLG	91740-16045 REV 1740 770912
XLGLIB	DCMCC	91740-16052 REV 1740 770310
XLSTEN	LSTEN	91740-16001 REV 1913 790126
XUPLIN	UPLIN	91740-16002 REV 1840 780726
XRFAM1	RFAM	91740-16003 REV 1740 771019
XRFAM2	RFAM	91740-16004 REV 1740 771019
XEXECM	EXECM	91740-16005 REV 1840 780721
XOPERM	OPERM	91740-16006 REV 1740 770314
XPTOPM	PTOPM	91740-16007 REV 1913 781130
XEXECW	EXECW	91740-16008 REV 1740 770728
XDLIS1	DLIST	91740-16009 REV 1913 790111
XDLIS2	DLIST	91740-16010 REV 1913 790111
XDLIS3	DLIST	91740-16011 REV 1740 770404

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XPROGL	PROGL	91740-16012	REV 1913	790128
XQUEUE	QUEUE	91740-16013	REV 1913	781130
XGRPM	GRPM	91740-16014	REV 1913	790128
XRTRY	RTRY	91740-16015	REV 1913	790128
XQCLM	QCLM	91740-16016	REV 1913	790128
X2APLD	APLDR	91740-16017	REV 1840	780721
X3APLD	APLDR	91740-16018	REV 1840	780721
XLOADD	LOADR	91740-16019	REV 1913	780811
XNDTGN	NDTGN	91740-16021	REV 1805	771123
XEDITD	EDITR	91740-16022	REV 1901	780913
XREDIT	REDIT	91740-16023	REV 1740	770518
XREMAT	REMAT	91740-16024	REV 1913	790129
XRMTIO	RMTIO	91740-16037	REV 1913	790129
XSGPRP	SGPRP	91740-16070	REV 1805	771118
XDVA65	DVA65	91740-16071	REV 1913	790127
XLSTNS	LSTEN	91740-16072	REV 1913	790126



9-4-2 DS/1000/3000 (91741A)

CR=00055

ILAB=LU55 NXTR=0003 NXSEC=010 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE			
=====	=====	=====			
XD3KLB	D3KLB	91741-12001	REV 1913	790104	
XD3KL2	D3KL2	91741-12002	REV 1913	790102	
XDVG67	DVG67	91741-16001	REV 1913	781115	
XQUEZ	QUEZ	91741-16002	REV 1740	770830	
XQUEX	QUEX	91741-16003	REV 1913	790117	
XRQCNU	RQCNU	91741-16004	REV 1913	790104	
XRPCNU	RPCNU	91741-16005	REV 1913	781229	
XCNLSM	CNLSM	91741-16006	REV 1913	781114	
XRMOTE	RMOTE	91741-16007	REV 1913	790119	

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9-4-3 RJE/1000 (917B0A)

CR=00054

ILAB=LUS4 NXTR=0002 NXSEC=068 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE		
ZRJE	RJE	91780-16011	REV.1913	790131
Z#COMN	COMN	91780-16012	REV.1840	780725
Z#BSC	BSC	91780-16013	REV.1840	780725
Z#DIAL	DIAL	91780-16014	REV.1840	780725
ZDVR50	DVR50	91780-16015	REV.1913	790131
Z#TRAC	RETRV	91780-16016	REV.1840	780725
Z#TDMP	DCODE	91780-16017	REV.1840	780725

9-4-4 IMAGE/1000 (92063A)

CR=00055

ILAB=LUS5 NXTR=0013 NXSEC=076 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE		
ZDECAR	SADD	(NO REVISION LEVEL SUPPLIED)		
ZDBLIB	DBOPN	92063-12001	REV.1913	790220
ZDBDS1	DBDS	(NO REVISION LEVEL SUPPLIED)		
ZDBELD	DBELD	92063-16003	REV.1913	790126
ZDBSTR	DBSTR	92063-16004	REV.	1645
ZDBRST	DBRST	92063-16005	REV.1840	780717
ZDBULD	DBULD	92063-16006	REV.	1805 771101
ZDBLOD	DBLOD	92063-16007	REV.	1645
ZBORL	BORL	(NO REVISION LEVEL SUPPLIED)		
ZQS001	QUERY	REV.1826	771018	
ZQS003	QS12	92063-16012	REV.	1826 771027
ZRECOV	RECOV	(NO REVISION LEVEL SUPPLIED)		

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XDBSPA DBSPA 92063-16014 REV.1913 790125  
 XBAIMG IMAG 92063-16019 REV.1913 790314

9-4-5 BASIC 1000/D (92101A)

CR=00054  
 ILAB=LUS4 NXTR=0008 NXSEC=066 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE
X694BS	A6940	29102-16003C 12DEC75
XA2313	A2313	29102-80016B 05JUN75
XBAIN1	BASIC	92101-16001 REV.1913 781108
XBAMLB	TRAP	92101-16010 770208
XBASLB	BASLB	92101-12003 REV. 1913 790206
XBATGN	RTETG	92101-16008 REV.1913 790130
XTSKSC	SCHD	92101-16013 750724
XBATG4	T.TRF	92101-16023 REV.1805 771103
XBATG3	T.TRF	92101-16024 REV.1805 7711013
XALARM	ALARM	92413-16007B 19SEP75

9-4-6 GRAPHICS/1000 (92840A)

CR=00056  
 ILAB=LUS6 NXTR=0009 NXSEC=058 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE
XGPSCM	LIMIT	92840-16001 REV.1819 780515
XGCBIM	GCBIM	92840-16002 REV. 1819 780515
XDVG01	DVG01	92840-16003 REV.1913 790123
XDVG02	DVG02	92840-16004 REV.1913 790123

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XZCT02	DCT02	92840-16005	REV.1913	790123
XZCT03	DCT03	92840-16006	REV.1913	790123
XZV07	DVG07	92840-16007	REV. 1913	790123
XZV05	DVG05	92840-16011	REV.1913	790123
XZCT08	DCT08	92840-16009	REV.1913	790123
XZV04	DVG04	92840-16010	REV.1913	790129
XZV12	DVZ12	92840-16012	REV.1913	790110

9-4-7 DATACAP/1000 (92903A)

CR=00056

ILAB=LU56 NXTR=0040 NXSEC=076 SEC/TR=096 LAST TR= 0159 DR

FILE NAME	MODULE NAME	REVISION CODE		
=====				
XZDLIB	DBOPN	92063-12001	REV.1913	790220
XZCMON	DCMON	92903-16200	REV.1913	781212
XZDECAR	SADD	(NO REVISION LEVEL SUPPLIED)		
XZSLB1	DSL81	91740-12001	REV 1913	790131
XZPLB4	GPLB4	92903-16001	REV.1913	781218
XZSTORA	STORA	92903-16540	REV.1913	790122
XZSTORB	STORB	92903-16550	REV.1913	790119
XZTGP	TGP	92903-16350	REV.1913	790209 0945
XZTGP0	TGP0	92903-16351	REV.1913	790110 0900
XZTGP1	TGP1H	92903-12301	REV.1913	790131
XZTGP10	TG10H	92903-12307	REV.1913	790131
XZTGP11	TG11H	92903-12308	REV.1913	790131
XZTGP12	TG12H	92903-12309	REV.1913	790131
XZTGP13	TG13H	92903-12310	REV.1913	790131
XZTGP14	TGPI4	92903-16391	REV.1913	790118 1400
XZTGP2	TGP2H	92903-12302	REV.1913	790131
XZTGP3	TGP3	92903-16358	REV.1913	790112 1015
XZTGP4	TGP4	92903-16359	REV.1913	790124 1630
XZTGP5	TGP5H	92903-12303	REV.1913	790131
XZTGP6	TGP6H	92903-12304	REV.1913	790131
XZTGP7	TGP7H	92903-12311	REV.1913	790131
XZTGP8	TGP8H	92903-12305	REV.1913	010931
XZTGP9	TGP9H	92903-12306	REV.1913	790131
XZTGPLB	TGPLB	92903-12300	REV.1913	780511

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XTMGL1	TMGL1	92903-12401	REV.1913	790130
XTMGLB	TMGLB	92903-12400	REV.1913	790130
XTMPG0	TMPG0	92903-16452	REV.1913	790119
XTMPG1	TMPG1	92903-16453	REV.1913	790212
XTMPG2	TMPG2	92903-16454	REV.1913	781113
XTMPG3	TMPG3	92903-16455	REV.1913	790122
XTMPG4	TMPG4	92903-16456	REV.1913	790122
XTMPG5	TMPG5	92903-16457	REV.1913	790130
XTMPGN	TMPGN	92903-16451	REV.1913	781109
XTMSLB	TMSLB	92903-16100	REV.1913	790130
XTSE	TSE	92903-16520	REV.1913	790226
XTSMG	TSMG	92903-16530	REV.1913	790105
XZTMP	ZTMP	92903-16510	REV.1913	790203
XIOM70	IOM70	92903-16560	REV.1913	790201
XIOM75	IOM75	92903-16570	REV.1913	790302
XDISEX	DISEX	92903-16205	REV.1913	790203
XVALX2	VALX2	92903-16206	REV.1913	790130
XOFLPO	OFLPO	92903-16580	REV.1913	790126



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UPDATE PROCEDURES

SECTION 10

Customers who are signed up for the Software Subscription Service, and those customers still under warranty, will receive minicartridges or paper tapes with the new modules. This section contains hints to assure a successful update.

### 10-1 General Instructions

- DD: "Backup" your grandfather disc before starting the update procedure. Then, if you make a mistake, you can always go back to what you had and start over.
- DD: Verify your backup copy. It is suggested that you make two copies and verify them both.

### 10-2 Software Updates on Paper Tape (Option 010)

If you are receiving software on paper tape, the following procedure is recommended for updating the grandfather disc from each tape:

- 1) Put the tape in the photoreader.
- 2) Run the FMGR and perform the following steps:
  - a. :ST,5,X::::-1,BR (You may wish to add a security code and/or cartridge reference number.)

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- b. When the tape has been read successfully, purge old file (security code is "RT", cartridge is "32767" for RTE-II/III) and rename "x" to be the new file. Notice that using this procedure, you do not lose the old file until you are sure the new one has been read properly.
- c. You may need to pack the disc periodically to recover space.

### 10-3 Library Minicartridges (Subscription Option 020)

If you are receiving library minicartridges (not associated with the grandfather disc concept), then simply replace the old version of each cartridge with the new version shipped.

### 10-4 Grandfather Disc Updates on Minicartridges

This is also Subscription Option 020 to RTE-II,III, and IV. However, instead of updated library minicartridges, software is received in the form of update cartridges, i.e. the modified software modules are grouped on minicartridges labelled by Rev Code (e.g. 1901-AAA, 1901-BBB, etc.). For this case, the procedures described in the RTE Utilities Manual (92060-90017) must be followed for updating via the utility program UPDAT.

#### After the Update

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**DO:** Generate your system right away. If there have been any errors in the transfer process, they probably will be detected in this way.

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- DO: Check the revision codes against those listed at the end of this SUN to be sure that you have not left out any modules.
- DO: Make backup copies of your newly updated grandfather disc.
- DO NOT: Use the same tape to backup your new system. Keep the old copy until it is time to update once again, and then use it to copy the next "new" system.
- DO: Keep the update paper tapes or minicartridges together with your old backup tape. If you discover problems later, you will always be able to get back to where you started and go through the update procedure again.