

# **92067A**

## **RTE-IV Software Numbering Catalog**

Software Revision Code 1940



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**Library Index Number  
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This catalog provides cross-reference lists of the 92067A software modules and the media on which the software modules are distributed. The purpose of the lists is to define the software modules currently supported with the product and to indicate the part numbers of different media on which these modules reside.

You will find several uses for this catalog. For example, you can use it to:

- order replacement software on the media type you need.
- find the software residing on any media type.
- determine the names of files on the media's directory.

This catalog contains two lists: the first is collated by software module number; the second by file name. The lists define:

|                  |                                                                                                                                                                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MODULE FILE NAME | The unique, 6-character file name of the software module. The file names are the names used in the file directory of any medium which contains more than one software module (for example, an RTE FMP disc directory or a mini-cartridge directory). |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                   |                                              |
|-------------------|----------------------------------------------|
| MODULE DESCRIPTOR | A concise definition of the software module. |
|-------------------|----------------------------------------------|

|                        |                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------|
| SOFTWARE MODULE NUMBER | The part number of the software module; the paper tape part number of the software module. |
|------------------------|--------------------------------------------------------------------------------------------|

|              |                                                                                                                      |
|--------------|----------------------------------------------------------------------------------------------------------------------|
| Part Numbers | The part numbers of the various media on which the software modules reside. Currently there are seven possibilities: |
|--------------|----------------------------------------------------------------------------------------------------------------------|

|            |                                                                                            |
|------------|--------------------------------------------------------------------------------------------|
| Paper Tape | The number of the software module is the number of the paper tape part.                    |
| 7900 Disc  | A collection of software modules stored as named files on a 7900 RTE master software disc. |
| 7905 Disc  | A collection of software modules stored as named files on an RTE master software disc.     |
| 7906 Disc  | A collection of software modules stored as named files on a 7906 RTE master software disc. |
| 7920 Disc  | A collection of software modules stored as named files on a 7920 RTE master software disc. |

|                                              |                                                                                                          |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 800 BPI (bits per inch)<br>9-Track Mag Tape  | A track-per-track image of a<br>7900 or a 7905/7906/7920<br>disc (as defined above) on<br>magnetic tape. |
| 1600 BPI (bits per inch)<br>9-Track Mag Tape | A track-per-track image of a<br>7900 or a 7905/7906/7920<br>disc (as defined above) on<br>magnetic tape. |

Note that this catalog lists only paper tape numbers. For the following media, all modules listed in this catalog will be included under the part numbers given below:

92067-13001, if you have ordered the product on a 7900 disc cartridge.

92067-13101, if you have ordered the product on a 7905/7906 disc cartridge.

92067-13201, if you have ordered the product on a 7920 disc cartridge.

92067-13501, if you have ordered the 7900 master software disc on an 800 BPI 9-track magnetic tape.

92067-13601, if you have ordered the 7900 master software disc on a 1600 BPI 9-track magnetic tape.

92067-13502, if you have ordered the 7905/7906/7920 master software disc on an 800 BPI 9-track magnetic tape.

92067-13602, if you have ordered the 7905/7906/7920 master software disc on a 1600 BPI 9-track magnetic tape.

## SOFTWARE MODULE NUMBERS

| Software<br>Module Number | Module<br>File Name | Module<br>Descriptor            | Part Numbers   |           |                |               |           |
|---------------------------|---------------------|---------------------------------|----------------|-----------|----------------|---------------|-----------|
|                           |                     |                                 | Mini-Cartridge | 7900 Disc | 7905/7906 Disc | Flexible Disc | 7920 Disc |
| 09580-16079               | %DVM72              | RTE MTIS DRIVER                 |                |           |                |               |           |
| 09580-16126               | %DSCHD              | RTE MTIS TRAP ROUTINE           |                |           |                |               |           |
| 09601-16021               | %DVR15              | RTE 7261A CARDFEADER DRIVER     |                |           |                |               |           |
| 12732-16001               | %DVR33              | RTE FLEXIBLE DISC DRIVER        |                |           |                |               |           |
| 20808-60001               | %CAL10              | RTE CALCOMP PLOTTER DRIVER      |                |           |                |               |           |
| 20810-60001               | %CALIB              | RTE CALCOMP PLOTTER LIBRARY     |                |           |                |               |           |
| 24306-60001               | %DECAR              | RTE DECIMAL STRING ARITHMETIC   |                |           |                |               |           |
| 24998-16001               | %RLIB1              | RTE/DOS RELOC. LIBRARY, PART 1  |                |           |                |               |           |
| 24998-16009               | %RLIB2              | RTE/DOS RELOC. LIBRARY, PART 2  |                |           |                |               |           |
| 24998-16011               | %RLIB3              | RTE/DOS RELOC. LIBRARY, PART 3  |                |           |                |               |           |
| 24998-16002               | %FF4.N              | FORTRAN IV FORMATTER            |                |           |                |               |           |
| 29013-60001               | %DVR31              | RTE 7900A DISC DRIVER           |                |           |                |               |           |
| 29028-60002               | %DVR12              | RTE 2767A/9866A LINEPRINTER DVR |                |           |                |               |           |
| 29029-60001               | %DVR00              | RTE TTY/PUNCH/PHOTOREADER DVR   |                |           |                |               |           |
| 29030-60001               | %DVR11              | RTE 2892A CARD READER DRIVER    |                |           |                |               |           |
| 59310-16002               | %1DV37              | RTE HPIB DRIVER WITHOUT SRQ     |                |           |                |               |           |
| 59310-16003               | %2DV37              | RTE HPIB DRIVER WITH SRQ        |                |           |                |               |           |
| 59310-12001               | %IB4A               | HP-IB RTE LIBRARY               |                |           |                |               |           |
| 59310-16005               | %SRQ.P              | SRQ.P TRAP UTILITY              |                |           |                |               |           |
| 72008-60001               | %1DV10              | RTE 7210A PLOTTER DVR-COMplete  |                |           |                |               |           |
| 72009-60001               | %2DV10              | RTE 7210A PLOTTER DVR-MINIMUM   |                |           |                |               |           |
| 91200-16001               | %DVA13              | RTE 91200A TV MONITOR DRIVER    |                |           |                |               |           |
| 91200-16002               | %TVLIB              | RTE 91200A TV MONITOR LIBRARY   |                |           |                |               |           |
| 91200-16004               | %TVVER              | 91200A TV MON INTERFACE VERIFY  |                |           |                |               |           |
| 92001-16020               | %DVA12              | RTE 2607/10/13/14/17/18 LP DVR  |                |           |                |               |           |
| 92001-16027               | %4DV05              | RTE 2644/45 DRIVER (WITH CTU)   |                |           |                |               |           |
| 92001-16028               | %0DV05              | RTE 2640A/B DRIVER (NO CTU)     |                |           |                |               |           |
| 92001-16035               | %DVA05              | RTE 264X MODEM DVR (WITH CTU)   |                |           |                |               |           |
| 92002-12001               | %BMPG1              | BATCH MONITOR PROGRAM, PART 1   |                |           |                |               |           |
| 92002-12001               | %BMPG2              | BATCH MONITOR PROGRAM, PART 2   |                |           |                |               |           |
| 92002-12001               | %BMPG3              | BATCH MONITOR PROGRAM, PART 3   |                |           |                |               |           |
| 92002-16006               | %BMLIB              | BATCH LIBRARY                   |                |           |                |               |           |
| 92002-16010               | %EDITR              | RTE EDITOR                      |                |           |                |               |           |
| 92060-12005               | %CLIB               | RTE COMPILER LIBRARY            |                |           |                |               |           |
| 92060-16031               | %DVR32              | RTE 7905/06/20 DISC DRIVER      |                |           |                |               |           |
| 92060-16039               | %SAVE               | RTE SAVE PROGRAM                |                |           |                |               |           |
| 92060-16040               | %RESTR              | RTE RESTORE PROGRAM             |                |           |                |               |           |
| 92060-16041               | %VERFY              | RTE VERIFY PROGRAM              |                |           |                |               |           |
| 92060-16042               | %COPY               | RTE DISC COPY PROGRAM           |                |           |                |               |           |
| 92060-16043               | %DBKLB              | RTE DISC BACKUP LIBRARY         |                |           |                |               |           |
| 92060-16044               | %DSKUP              | RTE OFF-LINE DISC BACKUP        |                |           |                |               |           |
| 92060-16045               | %RDNAM              | RTE READ NAME PROGRAM           |                |           |                |               |           |
| 92060-16052               | %KEYS               | RTE SOFT KEY UTILITY            |                |           |                |               |           |
| 92060-16053               | %KYDMP              | RTE SOFT KEY DUMP UTILITY       |                |           |                |               |           |
| 92060-16092               | %FTN4               | RTE FORTRAN IV, MAIN            |                |           |                |               |           |

# SOFTWARE MODULE NUMBERS

| Software<br>Module Number | Module<br>File Name | Module<br>Descriptor           | Part Numbers   |           |                |               |           |
|---------------------------|---------------------|--------------------------------|----------------|-----------|----------------|---------------|-----------|
|                           |                     |                                | Mini-Cartridge | 7900 Disc | 7905/7906 Disc | Flexible Disc | 7920 Disc |
| 92060-16093               | %FFTN4              | RTE FORTRAN IV, SEGMENT ID     |                |           |                |               |           |
| 92060-16094               | %0FTN4              | RTE FORTRAN IV, SEGMENT 0      |                |           |                |               |           |
| 92060-16095               | %1FTN4              | RTE FORTRAN IV, SEGMENT 1      |                |           |                |               |           |
| 92060-16096               | %2FTN4              | RTE FORTRAN IV, SEGMENT 2      |                |           |                |               |           |
| 92060-16097               | %3FTN4              | RTE FORTRAN IV, SEGMENT 3      |                |           |                |               |           |
| 92060-16098               | %4FTN4              | RTE FORTRAN IV, SEGMENT 4      |                |           |                |               |           |
| 92060-16101               | %5FTN4              | RTE FORTRAN IV, SEGMENT 5      |                |           |                |               |           |
| 92060-18046               | %UPDAT              | RTE UPDATE TRANSFER FILE       |                |           |                |               |           |
| 92060-18047               | %PKDIS              | RTE PACK DISC TRANSFER FILE    |                |           |                |               |           |
| 92062-16003               | %LP31               | RTE 2631A LP SUBROUTINE        |                |           |                |               |           |
| 92062-16004               | %DVB12              | RTE 2608A LINE PRINTER DRV     |                |           |                |               |           |
| 92064-16086               | %MSAFD              | RTE FLEX DISC BACKUP UTILITY   |                |           |                |               |           |
| 92067-16001               | %4PVMP              | RTE4 PRIV MAPPING ROUTINES     |                |           |                |               |           |
| 92067-16002               | %4LDR               | RTE4 RELOCATING LOADER         |                |           |                |               |           |
| 92067-16003               | %4MTM               | RTE4 MULTI TERMINAL MONITOR    |                |           |                |               |           |
| 92067-16004               | %4DP43              | RTE4 POWER FAIL                |                |           |                |               |           |
| 92067-16005               | %4AUTR              | RTE4 AUTO RESTART, RELOCATABLE |                |           |                |               |           |
| 92067-16006               | %\$CNFX             | RTE4 CONFIGURATOR EXTENSION    |                |           |                |               |           |
| 92067-16007               | %4WHZT              | RTE4 WHZAT PROGRAM             |                |           |                |               |           |
| 92067-16008               | %LGTAT              | RTE4 TRACK ASSIGN. TABLE LOG   |                |           |                |               |           |
| 92067-16009               | %RT4G1              | RTE4 GENERATOR, PART 1         |                |           |                |               |           |
| 92067-16009               | %RT4G2              | RTE4 GENERATOR, PART 2         |                |           |                |               |           |
| 92067-16010               | %4SWTH              | RTE4 SWITCH PROGRAM            |                |           |                |               |           |
| 92067-16011               | %4ASMB              | RTE4 ASSEMBLER, MAIN           |                |           |                |               |           |
| 92067-16012               | %4XREF              | RTE4 CROSS REFERENCE GENERATOR |                |           |                |               |           |
| 92067-16013               | %\$EMA              | RTE4 EMA FIRMWARE VERIFIER     |                |           |                |               |           |
| 92067-16014               | %CR4S1              | RTE4 MEMORY RESIDENT OP SYS-1  |                |           |                |               |           |
| 92067-16014               | %CR4S2              | RTE4 MEMORY RESIDENT OP SYS-2  |                |           |                |               |           |
| 92067-16028               | %4SPO1              | RTE4 SPOOL, PART 1             |                |           |                |               |           |
| 92067-16028               | %4SPO2              | RTE4 SPOOL, PART 2             |                |           |                |               |           |
| 92067-16035               | %4SYLB              | RTE4 SYSTEM LIBRARY            |                |           |                |               |           |
| 92067-16070               | %4ASB0              | RTE4 ASSEMBLER, SEGMENT 0      |                |           |                |               |           |
| 92067-16071               | %4ASB1              | RTE4 ASSEMBLER, SEGMENT 1      |                |           |                |               |           |
| 92067-16072               | %4ASB2              | RTE4 ASSEMBLER, SEGMENT 2      |                |           |                |               |           |
| 92067-16073               | %4ASB3              | RTE4 ASSEMBLER, SEGMENT 3      |                |           |                |               |           |
| 92067-16074               | %4ASB4              | RTE4 ASSEMBLER, SEGMENT 4      |                |           |                |               |           |
| 92067-16075               | %DBGUR              | RTE4 DEBUG SUBROUTINE          |                |           |                |               |           |
| 92067-18005               | %4AUTR              | RTE4 AUTO RESTART, SOURCE      |                |           |                |               |           |
| 92067-18033               | %AN4F0              | RTE4 7900 GRANDFATHER ANS FILE |                |           |                |               |           |
| 92067-18034               | %AN4F5              | RTE4 7905/06/20 GF ANS FILE    |                |           |                |               |           |
| 92202-16001               | %DVR23              | RTE 7970 9-TRACK MAG TAPE DVR  |                |           |                |               |           |
| 92900-16002               | %2DV47              | RTE 92900A DVR W/O DMS         |                |           |                |               |           |
| 92900-16003               | %3DV47              | RTE 92900A(3070) DVR WITH DMS  |                |           |                |               |           |

## SOFTWARE MODULE FILE NAMES

| Module<br>File Name | Module<br>Descriptor           | Part Numbers |                |           |                |               |           |
|---------------------|--------------------------------|--------------|----------------|-----------|----------------|---------------|-----------|
|                     |                                | Paper Tape   | Mini-Cartridge | 7900 Disc | 7905/7906 Disc | Flexible Disc | 7920 Disc |
| %DSKUP              | RTE OFF-LINE DISC BACKUP       | 92060-16044  |                |           |                |               |           |
| %#EMA               | RTE4 EMA FIRMWARE VERIFIER     | 92067-16013  |                |           |                |               |           |
| %\$CNFX             | RTE4 CONFIGURATOR EXTENSION    | 92067-16006  |                |           |                |               |           |
| %0DV05              | RTE 2640A/B DRIVER (NO CTU)    | 92001-16028  |                |           |                |               |           |
| %0FTN4              | RTE FORTRAN IV, SEGMENT 0      | 92060-16094  |                |           |                |               |           |
| %1DV10              | RTE 7210A PLOTTER DVR-COMplete | 72008-60001  |                |           |                |               |           |
| %1DV37              | RTE HPIB DRIVER WITHOUT SRQ    | 59310-16002  |                |           |                |               |           |
| %1FTN4              | RTE FORTRAN IV, SEGMENT 1      | 92060-16095  |                |           |                |               |           |
| %2DV10              | RTE 7210A PLOTTER DVR-MINIMUM  | 72009-60001  |                |           |                |               |           |
| %2DV37              | RTE HPIB DRIVER WITH SRQ       | 59310-16003  |                |           |                |               |           |
| %2DV47              | RTE 92900A DRVR W/O DMS        | 92900-16002  |                |           |                |               |           |
| %2FTN4              | RTE FORTRAN IV, SEGMENT 2      | 92060-16096  |                |           |                |               |           |
| %3DV47              | RTE 92900A(3070) DVR WITH DMS  | 92900-16003  |                |           |                |               |           |
| %3FTN4              | RTE FORTRAN IV, SEGMENT 3      | 92060-16097  |                |           |                |               |           |
| %4ASB0              | RTE4 ASSEMBLER, SEGMENT 0      | 92067-16070  |                |           |                |               |           |
| %4ASB1              | RTE4 ASSEMBLER, SEGMENT 1      | 92067-16071  |                |           |                |               |           |
| %4ASB2              | RTE4 ASSEMBLER, SEGMENT 2      | 92067-16072  |                |           |                |               |           |
| %4ASB3              | RTE4 ASSEMBLER, SEGMENT 3      | 92067-16073  |                |           |                |               |           |
| %4ASB4              | RTE4 ASSEMBLER, SEGMENT 4      | 92067-16074  |                |           |                |               |           |
| %4ASMB              | RTE4 ASSEMBLER, MAIN           | 92067-16011  |                |           |                |               |           |
| %4AUTR              | RTE4 AUTO RESTART, RELOCATABLE | 92067-16005  |                |           |                |               |           |
| %4DP43              | RTE4 POWER FAIL                | 92067-16004  |                |           |                |               |           |
| %4DV05              | RTE 2644/45 DRIVER (WITH CTU)  | 92001-16027  |                |           |                |               |           |
| %4FTN4              | RTE FORTRAN IV, SEGMENT 4      | 92060-16098  |                |           |                |               |           |
| %4LDR               | RTE4 RELOCATING LOADER         | 92067-16002  |                |           |                |               |           |
| %4MTM               | RTE4 MULTI TERMINAL MONITOR    | 92067-16003  |                |           |                |               |           |
| %4PVMP              | RTE4 PRIV MAPPING ROUTINES     | 92067-16001  |                |           |                |               |           |
| %4SPO1              | RTE4 SPOOL, PART 1             | 92067-16028  |                |           |                |               |           |
| %4SPO2              | RTE4 SPOOL, PART 2             | 92067-16028  |                |           |                |               |           |
| %4SWTH              | RTE4 SWITCH PROGRAM            | 92067-16010  |                |           |                |               |           |
| %4SYLB              | RTE4 SYSTEM LIBRARY            | 92067-16035  |                |           |                |               |           |
| %4WHZT              | RTE4 WHZAT PROGRAM             | 92067-16007  |                |           |                |               |           |
| %4XREF              | RTE4 CROSS REFERENCE GENERATOR | 92067-16012  |                |           |                |               |           |
| %5FTN4              | RTE FORTRAN IV, SEGMENT 5      | 92060-16101  |                |           |                |               |           |
| %BMLIB              | BATCH LIBRARY                  | 92002-16006  |                |           |                |               |           |
| %BMPG1              | BATCH MONITOR PROGRAM, PART 1  | 92002-12001  |                |           |                |               |           |
| %BMPG2              | BATCH MONITOR PROGRAM, PART 2  | 92002-12001  |                |           |                |               |           |
| %BMPG3              | BATCH MONITOR PROGRAM, PART 3  | 92002-12001  |                |           |                |               |           |
| %CAL10              | RTE CALCOMP PLOTTER DRIVER     | 20808-60001  |                |           |                |               |           |
| %CALIB              | RTE CALCOMP PLOTTER LIBRARY    | 20810-60001  |                |           |                |               |           |
| %CLIB               | RTE COMPILER LIBRARY           | 92060-12005  |                |           |                |               |           |
| %COPY               | RTE DISC COPY PROGRAM          | 92060-16042  |                |           |                |               |           |
| %CR4S1              | RTE4 MEMORY RESIDENT OP SYS-1  | 92067-16014  |                |           |                |               |           |
| %CR4S2              | RTE4 MEMORY RESIDENT OP SYS-2  | 92067-16014  |                |           |                |               |           |
| %DBKLB              | RTE DISC BACKUP LIBRARY        | 92060-16043  |                |           |                |               |           |
| %DBGUR              | RTE4 DEBUG SUBROUTINE          | 92067-16075  |                |           |                |               |           |

## 9 SOFTWARE MODULE FILE NAMES

| Module<br>File Name | Module<br>Descriptor            | Part Numbers |                |           |                |               |           |
|---------------------|---------------------------------|--------------|----------------|-----------|----------------|---------------|-----------|
|                     |                                 | Paper Tape   | Mini-Cartridge | 7900 Disc | 7905/7906 Disc | Flexible Disc | 7920 Disc |
| %DECAR              | RTE DECIMAL STRING ARITHMETIC   | 24306-60001  |                |           |                |               |           |
| %DSCHD              | RTE MTIS TRAP ROUTINE           | 09580-16126  |                |           |                |               |           |
| %DVA05              | RTE 264X MODEM DVR (WITH CTU)   | 92001-16035  |                |           |                |               |           |
| %DVA12              | RTE 2607/10/13/14/17/18 LP DVR  | 92001-16020  |                |           |                |               |           |
| %DVA13              | RTE 91200A TV MONITOR DRIVER    | 91200-16001  |                |           |                |               |           |
| %DVB12              | RTE 2608A LINE PRINTER DRV      | 92062-16004  |                |           |                |               |           |
| %DVM72              | RTE MTIS DRIVER                 | 09580-16079  |                |           |                |               |           |
| %DVR00              | RTE TTY/PUNCH/PHOTOREADER DVR   | 29029-60001  |                |           |                |               |           |
| %DVR11              | RTE 2892A CARD READER DRIVER    | 29030-60001  |                |           |                |               |           |
| %DVR12              | RTE 2767A/9866A LINEPRINTER DVR | 29028-60002  |                |           |                |               |           |
| %DVR15              | RTE 7261A CARDREADER DRIVER     | 09601-16021  |                |           |                |               |           |
| %DVR23              | RTE 7970 9-TRACK MAG TAPE DVR   | 92202-16001  |                |           |                |               |           |
| %DVR31              | RTE 7900A DISC DRIVER           | 29013-60001  |                |           |                |               |           |
| %DVR32              | RTE 7905/06/20 DISC DRIVER      | 92060-16031  |                |           |                |               |           |
| %DVR33              | RTE FLEXIBLE DISC DRIVER        | 12732-16001  |                |           |                |               |           |
| %EDITR              | RTE EDITOR                      | 92002-16010  |                |           |                |               |           |
| %FF4.N              | FORTRAN IV FORMATTER            | 24998-16002  |                |           |                |               |           |
| %FFTN4              | RTE FORTRAN IV, SEGMENT ID      | 92060-16093  |                |           |                |               |           |
| %FTN4               | RTE FORTRAN IV, MAIN            | 92060-16092  |                |           |                |               |           |
| %HPIB               | RTE HPIB DEVICE SUBROUTINE      | 59310-16004  |                |           |                |               |           |
| %KEYS               | RTE SOFT KEY UTILITY            | 92060-16052  |                |           |                |               |           |
| %KYDMP              | RTE SOFT KEY DUMP UTILITY       | 92060-16053  |                |           |                |               |           |
| %LGTAT              | RTE4 TRACK ASSIGN. TABLE LOG    | 92067-16008  |                |           |                |               |           |
| %LP31               | RTE 2631A LP SUBROUTINE         | 92062-16003  |                |           |                |               |           |
| %MSAFD              | RTE FLEX DISC BACKUP UTILITY    | 92064-16086  |                |           |                |               |           |
| %RDNAM              | RTE READ NAMR PROGRAM           | 92060-16045  |                |           |                |               |           |
| %RESTR              | RTE RESTORE PROGRAM             | 92060-16040  |                |           |                |               |           |
| %RLIB1              | RTE/DOS RELOC. LIBRARY, PART 1  | 24998-16001  |                |           |                |               |           |
| %RLIB2              | RTE/DOS RELOC. LIBRARY, PART 2  | 24998-16009  |                |           |                |               |           |
| %RLIB3              | RTE/DOS RELOC. LIBRARY, PART 3  | 24998-16011  |                |           |                |               |           |
| %RT4G1              | RTE4 GENERATOR, PART 1          | 92067-16009  |                |           |                |               |           |
| %RT4G2              | RTE4 GENERATOR, PART 2          | 92067-16009  |                |           |                |               |           |
| %SAVE               | RTE SAVE PROGRAM                | 92060-16039  |                |           |                |               |           |
| %SRQ.P              | SRQ.P TRAP UTILITY              | 59310-16005  |                |           |                |               |           |
| %TVLIB              | RTE 91200A TV MONITOR LIBRARY   | 91200-16002  |                |           |                |               |           |
| %TVVER              | 91200A TV MON INTERFACE VERIFY  | 91200-16004  |                |           |                |               |           |
| %VERFY              | RTE VERIFY PROGRAM              | 92060-16041  |                |           |                |               |           |
| %4AUTR              | RTE4 AUTO RESTART, SOURCE       | 92067-18005  |                |           |                |               |           |
| %AN4F0              | RTE4 7900 GRANDFATHER ANS FILE  | 92067-18033  |                |           |                |               |           |
| %AN4F5              | RTE4 7905/06/20 GF ANS FILE     | 92067-18034  |                |           |                |               |           |
| %PKDIS              | RTE PACK DISC TRANSFER FILE     | 92060-18047  |                |           |                |               |           |
| %UPDAT              | RTE UPDATE TRANSFER FILE        | 92060-18046  |                |           |                |               |           |

# GRANDFATHER DISC CARTRIDGE

APPENDIX

A

This appendix provides you with some information about the structure, contents, and initial use of your 92067A grandfather disc cartridge. When you order 92067A on a 7900/7905/7906/7920 disc cartridge, you receive what we call a grandfather disc cartridge. Your grandfather disc platter contains a standard RTE-IV system containing a file manager cartridge. The part number for your grandfather disc cartridge is:

92067-13001, if you have ordered the product on a 7900 disc cartridge,  
92067-13101, if you have ordered the product on a 7905/7906 disc cartridge.  
92067-13201, if you have ordered the product on a 7920 disc cartridge.

Notice the label on the upper surface of your grandfather disc cartridge:

GRANDFATHER RTE DISC CARTRIDGE.  
MASTER FILES. DO NOT ERASE OR  
RUN DISC DIAGNOSTIC.

Please use this disc cartridge carefully; it contains the 92067A master files for your system.

## DISC CARTRIDGE CONTENTS AND STRUCTURE

The grandfather disc contains the current 92067A product, organized as a standard system containing a file manager cartridge. Included in the system's file manager cartridge are the files listed in the tables on pages 3 and 5 of this manual. **THESE FILES ARE THE CURRENT 92067A PRODUCT.** The file manager cartridge has been assigned a file manager cartridge reference number of 32767, its master security code is NULL, and it starts at track 100 of the 7900 system platter or track 125 of the 7905/7906/7920 system platter. Each file in CR 32767 has a security code of RT.

The file &AN4Fx (where x = 0 for a 7900 disc platter and = 5 for a 7905, 7906 or 7920 disc platter) contains the answer file used to generate your grandfather disc. It may be used to regenerate the disc.

In addition to the files listed in this manual, CR 32767 contains 3 files created during the manufacturing process of the grandfather disc cartridge. They are named:

**WELCOM** A file which displays a welcome message each time the system is booted up from this disc.

**&LISTF** A generation map of the system created when the master disc was generated.

**!BOOT** A bootstrap loader created when the master disc was generated.

Note that WELCOM, &LISTF, and !BOOT are created by the software manufacturing process. They do not have part numbers; they cannot be ordered (this is why they do not appear in the lists of part numbers for 92067A).

## DISC CARTRIDGE BACKUP AND UPDATING

We strongly urge you to back up the disc cartridge as soon as practicable after you receive it. You can back up the disc cartridge onto magnetic tape or onto another disc cartridge by following the instructions contained in the "Disc Backup Programs" section of the *RTE Utility Programs Reference Manual* (92060-90017).

You should use the disc cartridge as a storage place for the current version of 92067A. That is, as changes to the software modules in the product occur, you should update your disc cartridge to insure that you always have the current version of every 92067A software module. You can find procedures required for updating this product in the *RTE Utility Programs Reference Manual*, in the "Disc Update Program" section.

Note that the reason this grandfather disc cartridge is distributed with a file manager cartridge reference number or 32767, and the reason that all files in CR 32767 have a security code of RT is that these values are prerequisites for the use of the updating procedures described in the "Disc Update Program" section of *RTE Utility Programs*.

## DISC CARTRIDGE I/O STRUCTURE

Your grandfather disc cartridge has been copied and verified from a master software cartridge which was generated at the factory to a standard I/O configuration. The basic information on the grandfather disc cartridge I/O structure is given in Table 1. Information for the 7900 disc structure is given in Table 2, and information for the 7905/7906/7920 disc structure is given in Table 3 and illustrated in Figure 1.

## BOOT-UP OF DISC CARTRIDGE

The disc cartridge can be booted up using the standard I/O and memory configurations, or it can be booted up with reconfigured I/O and/or memory structure. Below are brief explanations of both procedures.

1. Standard boot-up procedures can be found in the *HP 12992 Loader ROM Installation Manual*. Note that if no I/O or memory reconfiguration is to be done, bit 5 of the switch register should be set to 0.

Below is an example of the switch register settings if the 12992B RPL-compatible 7905/7906/7920 disc ROM loader is used:

- Bits 0-2 = surface number of the disc where the RTE-IV system starts (surfaces are numbered starting at 0).
- 3-4 = reserved.
- 5 = 1 if I/O or memory reconfiguration is desired,  
= 0, otherwise.
- 6-11 = select code of the disc.
- 12 = 1 to indicate a manual boot from the switch register.
- 14-15 = loader ROM selection; i.e., number of the ROM cell that contains the disc boot loader.

2. If I/O and/or memory reconfiguration is to be done, set bit 5 of the switch register to 1 and follow the specific procedures given in the Memory and I/O Reconfiguration section of the *RTE-IV Programmer's Reference Manual (92067-90001)*.

Note that reconfiguration of I/O and/or memory can be made permanent, but be sure that the grandfather disc has been properly backed up before beginning this procedure.

See the *RTE-IV Programmer's Reference Manual* for an explanation of any error messages that may be encountered during boot-up.

Table 1. Standard System Assignments for 92067A Grandfather Disc Cartridge

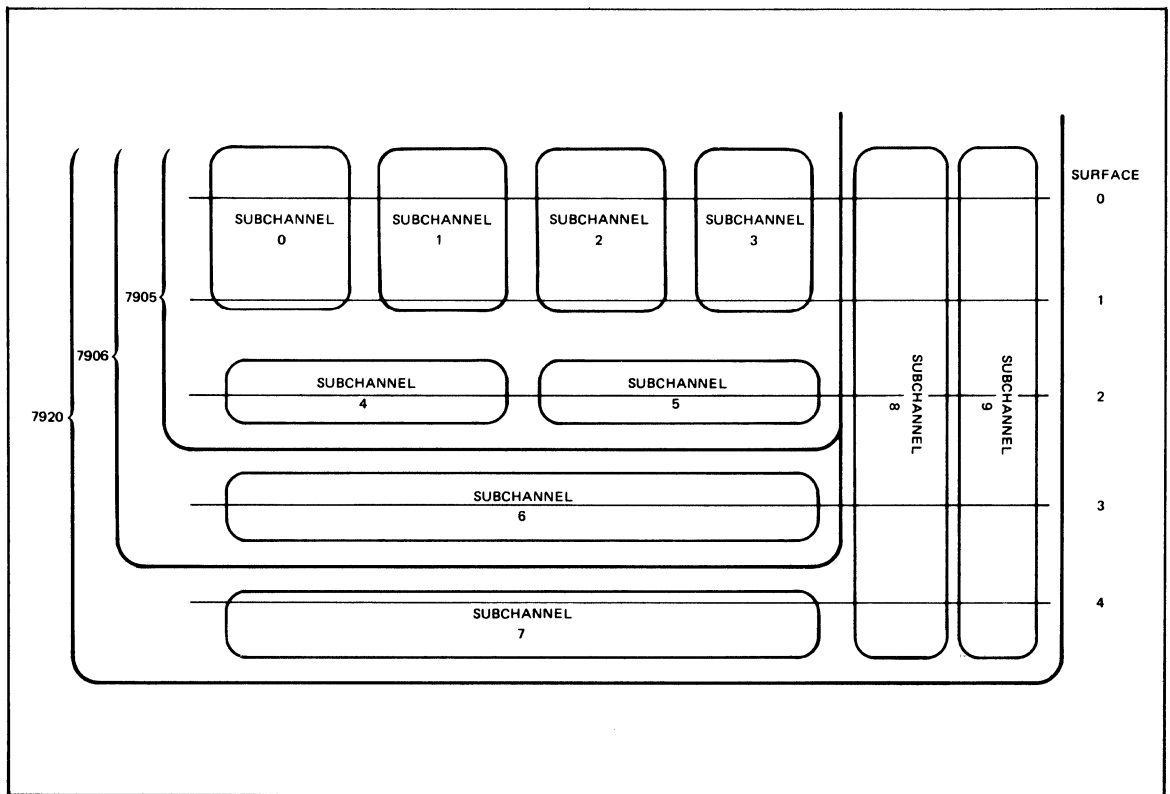
| Device or Accessory                                                                                                                                                                                                                                                                                                                                                                                                | Driver Is | Uses DMA ? | Buffered Output ? | Timeout Value = | EQT Extension | I/O Slot | LU #                                     | EQT #                           | Subchannel                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-------------------|-----------------|---------------|----------|------------------------------------------|---------------------------------|----------------------------------------------|
| Time-base Generator 12539C                                                                                                                                                                                                                                                                                                                                                                                         |           |            |                   |                 |               | 10       |                                          |                                 |                                              |
| Disc, if 7900                                                                                                                                                                                                                                                                                                                                                                                                      | DVR31     | Yes        |                   |                 |               | 11<br>12 | 2<br>10                                  | 1<br>1                          | 1<br>0                                       |
| Disc, if 7905 or 7920*                                                                                                                                                                                                                                                                                                                                                                                             | DVR32     | Yes        |                   |                 |               | 11       | 2 14<br>10 15<br>11 16<br>12 17<br>13 18 | 1 1<br>1 1<br>1 1<br>1 1<br>1 1 | 0 5<br>1 6<br>2 7<br>3 8<br>4 9              |
| System Console 2645                                                                                                                                                                                                                                                                                                                                                                                                | DVR05     | No         | Yes               | T=12000         | X=13          | 13       | 1<br>4<br>5                              | 2<br>2<br>2                     | 0 (console)<br>1 (left CTU)<br>2 (right CTU) |
| Terminal 2600                                                                                                                                                                                                                                                                                                                                                                                                      | DVR00     | No         | Yes               |                 |               | 14       | 7                                        | 6                               | 0                                            |
| Photoreader 2748B                                                                                                                                                                                                                                                                                                                                                                                                  | DVR01     | No         |                   | T=50            |               | 15       | 9                                        | 7                               | 0                                            |
| Magnetic Tape 7970B                                                                                                                                                                                                                                                                                                                                                                                                | DVR23     | Yes        | Yes               | T=9999          |               | 16<br>17 | 8                                        | 3                               | 0                                            |
| Line Printer 2607/13/17/18                                                                                                                                                                                                                                                                                                                                                                                         | DVA12     | No         | Yes               | T=100           |               | 20       | 6                                        | 8                               | 0                                            |
| Line Printer 2767A                                                                                                                                                                                                                                                                                                                                                                                                 | DVR12     | No         | Yes               | T=100           |               | 21       | 20                                       | 5                               | 0                                            |
| Tape Punch 2895B                                                                                                                                                                                                                                                                                                                                                                                                   | DVR02     | No         | Yes               | T=50            |               | 22       | 19                                       | 4                               | 4                                            |
| Unassigned                                                                                                                                                                                                                                                                                                                                                                                                         |           |            |                   |                 |               |          | 3                                        |                                 |                                              |
| <p>Note: This information is compiled from the &amp;LISTF file; you may wish to get a copy of &amp;LISTF to ensure that this information is current.</p> <p>*If your grandfather disc is a 7905, do not attempt to execute a "MOUNT CARTRIDGE" command for the LU#'s 15, 16, 17, or 18. If your grandfather disc is a 7906, do not attempt to execute a "MOUNT CARTRIDGE" command for the LU#'s 16, 17, or 18.</p> |           |            |                   |                 |               |          |                                          |                                 |                                              |

Table 2. 7900 Grandfather Disc Configuration

| The 7900 grandfather disc contains two subchannels with 203 tracks each. The disc configuration is as follows: |           |                |                  |
|----------------------------------------------------------------------------------------------------------------|-----------|----------------|------------------|
| LU NUMBER                                                                                                      | PLATTER   | STARTING TRACK | NUMBER OF TRACKS |
| 2                                                                                                              | 1 (upper) | 0              | 203              |
| 10                                                                                                             | 0 (lower) | 0              | 203              |

Table 3. 7905/7906/7920 Grandfather Disc Configuration

| The 7905/7906/7920 grandfather disc contains ten subchannels. The disc configuration is as follows: |            |                |                  |               |                 |             |                        |
|-----------------------------------------------------------------------------------------------------|------------|----------------|------------------|---------------|-----------------|-------------|------------------------|
| LU NUMBER                                                                                           | SUBCHANNEL | STARTING TRACK | NUMBER OF TRACKS | STARTING HEAD | NUMBER OF HEADS | UNIT NUMBER | NUMBER OF SPARE TRACKS |
| 2                                                                                                   | 0          | 0              | 256              | 0             | 2               | 0           | 8                      |
| 10                                                                                                  | 1          | 132            | 203              | 0             | 2               | 0           | 5                      |
| 11                                                                                                  | 2          | 236            | 203              | 0             | 2               | 0           | 5                      |
| 12                                                                                                  | 3          | 340            | 138              | 0             | 2               | 0           | 4                      |
| 13                                                                                                  | 4          | 0              | 203              | 2             | 1               | 0           | 5                      |
| 14                                                                                                  | 5          | 208            | 198              | 2             | 1               | 0           | 5                      |
| 15                                                                                                  | 6          | 0              | 400              | 3             | 1               | 0           | 11                     |
| 16                                                                                                  | 7          | 0              | 400              | 4             | 1               | 0           | 11                     |
| 17                                                                                                  | 8          | 411            | 1024             | 0             | 5               | 0           | 26                     |
| 18                                                                                                  | 9          | 621            | 985              | 0             | 5               | 0           | 25                     |



7700-128

Figure 1. 7905/7906/7920 Grandfather Disc Layout

# LOADING FROM MAGNETIC TAPE

APPENDIX

B

This appendix provides you with some information about the structure, contents, and initial use of your 92067A grandfather disc cartridge image on magnetic tape. When you order 92067A on magnetic tape, you receive what we call a grandfather disc cartridge image on magnetic tape. Your magnetic tape is a track-per-track image of a grandfather disc platter that contains a standard RTE-IV system containing a file manager cartridge. The part number for your magnetic tape is:

92067-13501, if you have ordered the 7900 master software disc on an 800 BPI 9-track magnetic tape.

92067-13601, if you have ordered the 7900 master software disc on a 1600 BPI 9-track magnetic tape.

92067-13502, if you have ordered the 7905/7906/7920 master software disc on an 800 BPI 9-track magnetic tape.

92067-13602, if you have ordered the 7905/7906/7920 master software disc on a 1600 BPI 9-track magnetic tape.

If you ordered the 92067A product on magnetic tape, you will also receive the disc backup utility program (!DSKUP) on mini-cartridge (part number 92067-13301) and on paper tape (part number 92060-16044). Follow the procedures in this appendix to load !DSKUP from either the mini-cartridge or from the paper tape, and then execute this program to copy your magnetic tape onto a disc. See the *HP 12992 Loader ROM Installation Manual* for further instructions for using the mini-cartridge and paper tape ROM loaders.

## CAUTION

If you are replacing a previous version of the grandfather disc, you should back up that disc on magnetic tape before overwriting it with the new grandfather. See the *RTE Utility Programs Reference Manual* for further instructions regarding disc backup.

## LOADING !DSKUP FROM MINI-CARTRIDGE

The procedures given below for loading the disc backup utility assume the presence of an HP 2644/2645/2648 Display Station terminal on the system. Note that the mini-cartridge has a file directory as its first file.

1. Put the terminal in local mode by making sure the REMOTE key is not depressed, and press the CAPS LOCK key down.
2. Press the RESET key twice to clear terminal memory.

3. Insert the mini-cartridge into the left cartridge tape unit (CTU).
4. Press the gold key, f1 function key (FROM: L.TAPE), f7 function key (TO: DISPLAY) and then the READ key. The choice of the left cartridge tape unit is purely arbitrary. If the right CTU is used, press f2 instead of f1.

The Directory file at the beginning of tape will be displayed on the terminal screen. This step is necessary to get past the first file (Directory file), which cannot be read by the tape cartridge ROM Loader during bootup. The tape is now positioned at the beginning-of-file for the absolute disc backup utility program. Although the first file could be skipped in REMOTE mode, the off-line procedure is recommended for display to ensure that the correct mini-cartridge is inserted.

5. Press the REMOTE key down to put the terminal in REMOTE mode.
6. At the computer control panel, display the S-register by pressing the Register Select switch until the indicator light is over the S-register label.
7. Press the CLEAR DISPLAY switch.
8. Enter the address of the Tape Cartridge ROM Loader in bits 14 and 15. Enter the select code of the system console in bits 6-11.
9. Press the STORE switch, then press the IBL switch.
10. Press the PRESET switch, then press the RUN switch.

If you have followed the procedures correctly, the disc backup utility program will be read into main memory from the tape cartridge. The loading process will be indicated by the blinking of the green indicator light on the CTU.

When the loading is completed, a halt of 102077 will be displayed in the T-register. The CTU indicator light will emit a steady glow, and the mini-cartridge can then be rewound and removed.

## **LOADING !DSKUP FROM PAPER TAPE**

Follow the procedures given below for loading the disc backup utility from paper tape.

1. Insert the disc backup utility paper tape into the photo reader and ready the tape reader.
2. At the computer control panel, display the S-register by pressing the Register Select switch until the indicator light is over the S-register.
3. Press the CLEAR DISPLAY switch.
4. Enter the address of the Paper Tape ROM Loader in bits 14 and 15. Enter the select code of the photo reader in bits 6-11.
5. Press the STORE switch, then press the IBL switch.

6. Press the PRESET switch, then press the RUN switch.

If you have followed the procedures correctly, the disc backup utility program will be read into main memory from the photo reader. When loading is completed, a halt of 102077 will be displayed in the T-register.

## STORING TO THE DISC FROM MAGNETIC TAPE

Follow the procedures given below to execute the !DSKUP program and load the magnetic tape onto disc. Note that further information regarding the use of the disc backup utility program can be found in the *RTE Utility Programs Reference Manual*.

1. Load the master mag tape for the product to be produced onto the 7970 mag tape drive and set the mag tape drive to ON-LINE.
2. Place one of the following disc cartridges in the appropriate disc drive (depending on which product is to be created) and set either the LOAD/UNLOAD switch (7900) to LOAD or the RUN/STOP switch (7905/7906/7920) to RUN:
  - a. 9164-0045                      7900 Disc Cartridge
  - b. 12940-60001                  7905/7906 Disc Cartridge
  - c. 13394A                         7920 Disc Pack.
3. Display the S-register on the computer control panel by pressing the Register Select switch.
4. Enter the system console select code in bits 0-5. Press the STORE switch.
5. Display the P-register by pressing the Register Select switch until the indicator light is over the P-register label.
6. Press the CLEAR DISPLAY switch, then set address 2 (octal) in the DISPLAY register.
7. Press the STORE switch and then press the PRESET switch. Press RUN to begin execution.

The disc backup utility will then execute and the following message will be displayed on the console.

### DISC BACKUP UTILITY TASK?

The next two subsections will describe the dialogue that will take place with the operator when restoring the magnetic tape master to 7900 or 7905/7906/7920 discs, respectively. Operator responses will be in capital letters and messages output by the utility will be in boldface type.

Note that the operator may type a double question mark (??) in response to any question, and a description of the desired entry will be printed on the console.

The operator may also restart the utility by typing AB in response to any question.

## STORING TO A 7900 DISC FROM MAGNETIC TAPE

The following dialogue occurs when storing to a 7900 disc:

### TASK?

RE (restore)

### MAG TAPE CHANNEL #?

Enter the lower-numbered select code of the mag tape.

### MT FILE#?

1 (enter a 1 for the first file)

### FILE ID:

The program will read the file ID off the mag tape and display it on the console.

### TAPE #: 01

### OK?

If the file ID number is correct, type YES.

### DEST DISC CHANNEL #?

Enter the lower-numbered select code of the disc.

### DEST DISC DRIVE #?

Enter the unit number of the disc drive to be used.

### TO TRACK #?

0 (begin at track 0)

### PLATTER #?

1 (removable platter)

### VERIFY?

YES (the transfer should always be verified)

The program will proceed to store from the master mag tape to the disc. When it has finished, it will rewind the mag tape, print the following message on the console, and then proceed to do the verification:

### VERIFYING

When the verification is complete, the mag tape will be rewound, and the following message will be displayed:

### VERIFY COMPLETE

### TASK?

The mag tape can now be removed from the mag tape drive, and the disc can be booted up by following the procedures described in Appendix A.

## **STORING TO A 7905/7906/7920 DISC FROM MAGNETIC TAPE**

The following dialogue occurs when storing to a 7905, 7906, or 7920 disc:

**TASK?**

RE (restore)

**MAG TAPE CHANNEL #?**

Enter the lower-numbered select code of the mag tape.

**MT FILE #?**

1 (enter a 1 for the first file)

**FILE ID:**

The program will read the file ID off the mag tape and display it on the console.

**TAPE #: 01**

**OK?**

If the file ID number is correct, type YES.

**DEST DISC CHANNEL #?**

Enter the lower-numbered select code of the disc.

**DEST DISC DRIVE #?**

Enter the unit number of the drive to be used.

**VERIFY?**

YES (the transfer should always be verified)

The program will proceed to store from the master mag tape to the disc. When it is finished, it will rewind the mag tape, print the following message, and then proceed to do the verification:

**VERIFYING**

When the verification is complete, the mag tape will be rewound, and the following message will be displayed.:

**VERIFY COMPLETE**

**TASK?**

The mag tape can now be removed from the mag tape drive, and the disc can be booted up by following the procedures described in Appendix A.

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