

PROGRAMMING RPQ

**SERIES/1 REALTIME PROGRAMMING SYSTEM
REMOTE JOB ENTRY
5799-TBK (PRPQ P82575)****PURPOSE**

Series/1 Remote Job Entry provides the Series/1 Realtime Programming System user the ability to transmit jobs and receive their output from a host S/370 having OS/VS2 and JES/2 installed.

HIGHLIGHTS

Supports Binary Synchronous Communications over a point-to-point (switched or nonswitched) line. Input is via the operator station, disk, or diskette. Output is to printer, disk or diskette. RJE runs as a task set in a 16K partition under the IBM Series/1 Realtime Programming System.

In addition, RJE provides:

- Concatenation of input data sets
- Data compression/expansion
- Series/1 command syntax checking
- 3780 emulation
- RJE session statistics
- Logging to a history file (SYSLOG) of pertinent RJE session information

Devices Supported

The following devices are specifically supported by this PRPQ:

- 4962 Disk Storage Unit
- 4964 Diskette Storage Unit
- 4974 Matrix Printer
- 4973 Line Printer
- #2074 Binary Synchronous Single-Line Control
- #2075 Binary Synchronous Single-Line Control - High Speed
- #2093 Binary Synchronous Communications 8-Line Control
- #2094 Binary Synchronous Communications 4-Line Adapter
- 4979 Display Station or Teletypewriter Adapter #7850 supported for use with 3101 Display Terminal or Teletype® Models 33/35 equivalent device.

For specific models of the above devices, please refer to the sales manual page for the IBM Series/1 Realtime Programming System as described below under "Hardware Requirements".

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for this licensed program when it is operated in the following specified operating environment:

HARDWARE REQUIREMENTS

The minimum system for execution of the PRPQ is specified in the version of the IBM Series/1 Realtime Programming System selected. In addition, this PRPQ requires one of the Binary Synchronous features (#2074, #2075, or #2093, and one #2094) and one IBM 4979 or Teletypewriter Adapter #7850 supported for use with Teletype® Models 33/35.

SOFTWARE REQUIREMENTS

The minimum system for installation of this PRPQ is specified in versions of the IBM Series/1 Realtime Programming System and the IBM Series/1 Program Preparation Subsystem.

COMPATIBILITY

This PRPQ is compatible with the Series/1 Realtime Programming System Version 1, Version 2, Version 3 and Version 4; and the Series/1 Program Preparation Subsystem Version 1, Version 2 and Version 3.

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Remote Job Entry Programming RPQ P82575 Users Guide (SC34-1589) ... IBM Series/1 Remote Job Entry Programming RPQ P82575 Licensed Program Specifications (GC34-1599)

PROGRAMMING RPQ

**5799-TBL - SERIES/1 RPS V1.1 DISK SPOOLING
5799-TCG - SERIES/1 RPS V2.1 DISK SPOOLING
5799-TCH - SERIES/1 RPS V3, 4 DISK SPOOLING
SERIES/1 REALTIME PROGRAMMING SYSTEM
DISK SPOOLING**

| 5799-TBL, 5799-TCG NO LONGER AVAILABLE, effective April 1984.

PURPOSE

Series/1 Disk Spooling provides Disk Spooling to Realtime Programming System users. A version of the Disk Spooling is provided to support each version of the Realtime Programming System (V1, V2, V3, V4). Customers must order the PRPQ which supports the version of the Realtime Programming System which will be used for execution of the Disk Spooling.

The function provided in each version of the PRPQ is identical. Version-dependent information in the "Software Requirements" section is identified by version number.

HIGHLIGHTS

Version 1: 5799-TBL to support the IBM Series/1 Realtime Programming System Version 1, Modification Level 1 and subsequent modification levels 5719-PC1

Version 2: 5799-TCG to support the IBM Series/1 Realtime Programming System Version 2, Modification Level 1 and subsequent modification levels 5719-PC2

Version 3: 5799-TCH to support the IBM Series/1 Realtime Programming System Version 3, 5719-PC3 and Version 4, 5719-PC4

When spooling is active, print records (133 byte maximum) will be written to a user allocated spool data set. The support will be available to programs using the Realtime Programming System's write or put level access. This includes programs written in Assembler language, PL/I, or FORTRAN.

The following functions will be provided by Disk Spooling:

- Start/Stop of Spooling
- Spool File Allocation
- Print Job Start/Stop
- Job/Page Restart
- Multiple Printer Support
- Forms Control
- Display Print Queue Status
- Change Print Queue Sequence
- Cancel Print Jobs

Devices Supported

The following devices are specifically supported by this PRPQ:

- 4962 Disk Storage Unit
- 4963 Disk Subsystem
- 4974 Matrix Printer (multiple)
- 4973 Line Printer (multiple)

For specific models of the above devices, please refer to the sales manual for the Realtime Programming System as described below under "Hardware Requirements".

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for these licensed programs when they are operated in the following specified operating environment:

HARDWARE REQUIREMENTS: None

SOFTWARE REQUIREMENTS

The minimum system for execution of this PRPQ is as specified for the appropriate IBM Series/1 Realtime Programming System version.

PRPQ Version 1 will execute with Realtime Programming System Version 1, Modification Level 1 and subsequent modification levels. It will not execute with Version 1, Modification Level 0.

PRPQ Version 2 will execute with Realtime Programming system Version 2, Modification Level 1 and subsequent modification levels. It will not execute with Version 2, Modification Level 0.

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Realtime Programming System Disk Spooling Programming RPQ P82574 User's Guide (SC34-1594)

**5799-TBM - SERIES/1 RPS V1.1 4978 DISPLAY SUPT.
5799-TCD - SERIES/1 RPS V2.1 4978 DISPLAY SUPT.
5799-TCE - SERIES/1 RPS V3.4 4978 DISPLAY SUPT.
SERIES/1 REALTIME PROGRAMMING SYSTEM
4978 DISPLAY SUPPORT**

5799-TBM, 5799-TCD NO LONGER AVAILABLE, effective April 1984.

PURPOSE

Series/1 4978 Display Support provides 4978 Display Support to Realtime Programming System users. A version of the 4978 Display Support is provided to support each version of the Realtime Programming System (V1, V2, V3, V4). Customers must order the PRPQ which supports the version of the Realtime Programming System which will be used for execution of the 4978 Display Support.

HIGHLIGHTS

Version 1: 5799-TBM to support the IBM Series/1 Realtime Programming System Version 1, Modification level 1 and subsequent modification levels 5719-PC1.

Version 2: 5799-TCD to support the IBM Series/1 Realtime Programming System Version 2, Modification level 1 and subsequent modification levels 5719-PC2.

Version 3: 5799-TCE to support the IBM Series/1 Realtime Programming System Version 3, 5719-PC3 and Version 4, 5719-PC4.

The functional capabilities provided by Display Station Support are:

Scroll

Scroll up or down.
Scroll variable number of lines between user-defined window boundaries.
After Scroll, user may read or write variable number of bytes, either protected or unprotected.
User-defined event (or event list) to be posted upon operation complete.
Various erase operations.

Write Full/Part Screen

User-defined pre- and post-cursor positions.
User-defined byte count.
User-defined event (or event list) to be posted upon operation complete.
Write either protected or unprotected.
Write with erase after.

Read Full/Part Screen

User-defined pre- and post-cursor positions.
User-defined byte count.
User-defined event (or event list) to be posted upon operation complete.
Read either protected or unprotected.
Boundary terminators.
Read with erase after.

Erase Full/Part Screen

User-defined pre- and post-cursor positions.
User-defined number of bytes to erase.
User-defined event (or event list) to be posted upon operation complete.
Erase either protected or unprotected.
Boundary terminators.

Audible Cursor Alarm, RPQ D02060, is supported by this PRPQ.

Multiple Interrupt Keys

Multiple interrupt keys will be handled by providing the following options:

1. The user can define up to six events which are to be posted when interrupting keys are pressed.
2. The user can define one event which will be posted when any interrupting key is pressed. In either case, the code for the interrupting key will be passed to the user, if the user Task Set is not rolled out.

Read Field Address Function (4978 only)

Address information (identifying the modified field) will be passed to the user. No data comparison logic will be performed by this product.

Character Font Definition Function

A function will be provided to allow the user to interactively generate the matrix pattern and to define other key attributes for each key. The output of this function will be an updated Attachment Control Store Load.

Attachment Initialization (4978 only)

The initialization function will be invoked by the user program to load Display Attachment from storage, the 4962, or 4964.

Attachment Control Store Loads (4978 only)

An attachment control store load will be supplied on diskette with each keyboard RPQ. This storage load can be copied to the 4962 using a Realtime Programming System Utility (COPY).

Changes to this storage load can be made using the Character Font Definition function or the Realtime Programming System Utility (PATCH).

Limitations

No device exercisers are provided.
Not supported as System Console in Starter System from PID.

Devices Supported

The following devices are specifically supported by this PRPQ:

- 4962 Disk Storage Unit
- 4963 Disk Subsystem
- 4964 Diskette Unit
- 4969 Disk Magazine Unit
- 4978 PRPQ Display Station
- 4979 Display Station (PRPQ Version 2, 3 only)

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for these licensed programs when they are operated in the following specified operating environment:

HARDWARE REQUIREMENTS

PRPQ Version 1 will not execute with IBM Series/1 Realtime Programming System Version 1, Modification Level 0. It will execute with Version 1, Modification Level 1 and subsequent modification levels.

PRPQ Version 2 will not execute with IBM Series/1 Realtime Programming System Version 2, Modification Level 0. It will operate with Version 2, Modification Level 1 and subsequent modification levels.

In addition, the following EC levels apply:

- 1) Display Station 4978 attachment card (RPQ D02038) must be PN 4413882, at EC 754933 level or later.
- 2) Keyboard Diskette Prerequisite. If the keyboard provided by RPQ D02056 is installed, the corresponding keyboard load Diskette must be at EC 755384 level or later.

If the keyboard provided by RPQ D02057 is installed, the corresponding keyboard load Diskette must be PN 8333616, at EC 755384 level or later.

SOFTWARE REQUIREMENTS

The minimum system for execution of this PRPQ is as specified for the IBM Series/1 Realtime Programming System version.

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Realtime Programming System IBM 4978 Display Station Support Programming RPQ P82572 (5799-TBM) (GC34-1593) ... User's Guide (SC34-1592)

PROGRAMMING RPQ

**5799-TBN - SERIES/1 RPS V1.1 INDXD ACCESS METH
5799-TCA - SERIES/1 RPS V2.1 INDXD ACCESS METH
5799-TCB - SERIES/1 RPS V3, 4 INDXD ACCESS METH
SERIES/1 REALTIME PROGRAMMING SYSTEM
INDEXED ACCESS METHOD**

| 5799-TBN, 5799-TCA NO LONGER AVAILABLE, effective April 1984.

PURPOSE

Series/1 Indexed Access Method provides an Indexed Access Method to Realtime Programming System users. A version of the Indexed Access Method is provided to support each version of the Realtime Programming System (V1, V2, V3, V4). Customers must order the PRPQ which supports the version of the Realtime Programming System which will be used for execution of the Indexed Access Method.

The function provided in each version of the PRPQ is identical. Version-dependent information in the "Specified Operating Environment" section is identified by version number.

HIGHLIGHTS

Version 1: 5799-TBN to support the IBM Series/1 Realtime Programming System Version 1, Modification Level 1 and subsequent modification levels (5719-PC1)

Version 2: 5799-TCA to support the IBM Series/1 Realtime Programming System Version 2, Modification Level 1 and subsequent modification levels (5719-PC2)

Version 3: 5799-TCB to support the IBM Series/1 Realtime Programming System Version 3 (5719-PC3) and Version 4 (5719-PC4)

The Indexed Access Method support provides keyed access to user data to support a wide variety of applications ranging from batch processing to multi-user interactive applications.

The data file organization is designed to provide efficient random and sequential processing of files. This is accomplished by using cascading index techniques for random processing and by sequence chaining of the data blocks for sequential processing.

The access method design supports files which have high add/delete activity (such as open order files) to minimize performance degradation. This is accomplished by distributing free space for additions throughout the file, by updating and inserting additions in place, and by dynamically reclaiming space after deletions.

Indexed Access Method supports multiple tasks sharing the same data files. In a shared environment, data integrity is maintained by record level locking to prevent multiple concurrent updates of the same record.

DESCRIPTION

The following user services are provided:

Open - Initiates and connects user to requested data files

Modes:

- Load - Initial load of file
- Process - Access file for input, output, or update

Close - Terminates and disconnects user from requested data file. Forces buffer flush and releases any outstanding record locks.

Get - Retrieves a single record from the data file and moves it into a user area.

Modes:

- Update - Retrieves a record and obtains a record lock.
- Read Only - Retrieves a record.

Access:

- Direct (by key) - Retrieves the record from the file which has a key equal (EQ), greater than (GT), or equal to or greater than (GE) the requested key. This operation can operate on a full or partial key.
- Sequential - Retrieves the next record (in ascending key order) from the point of the last access whether random or sequential.

Put - Moves a single record from a user area to the data file.

Modes:

- Update - Replaces the record previously retrieved and releases the lock.
- New - Inserts a new record into the data file. The new key must be unique from those in the data file.
- Delete - Logically and physically deletes the record previously retrieved and releases the record lock.
- Delete - Logically and physically deletes a record from the data file.
- Release - Frees a previously obtained record lock. This eliminates the need for the user to replace unmodified records. Release also can be used

Define -

with a sequential option to terminate a sequential operations.

Calculates the disk space required for the data file, indexes, and control information based on user supplied information. Also defines data set information to the Realtime Programming System.

Users of high level languages (PL/I and FORTRAN) can write Macro Assembler language subroutines to be CALLED by application programs written in the high level languages, and thus take advantage of the functions provided by the Indexed Access Method.

Fixed length user data records are supported. The user records may be blocked in the data file.

User keys must be unique in each file. The keys must be fixed length (254 byte maximum) and must be imbedded and contiguous in the data record.

Devices Supported

The following devices are specifically supported by the PRPQ:

- 4962 Disk Storage Unit
- 4963 Disk Subsystem
- 4964 Diskette Storage Unit
- 4966 Diskette Magazine Unit

For specific models of the above devices, please refer to the pages for the Realtime Programming System as described below under "Hardware Requirements".

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for these licensed programs when they are operated in the following specified operating environment:

HARDWARE REQUIREMENTS

PRPQ Version 1 will not execute with IBM Series/1 Realtime Programming System, Version 1 modification level 0.

PRPQ Version 2 will not execute with IBM Series/1 Realtime Programming System, Version 2 modification level 0.

SOFTWARE REQUIREMENTS

The minimum system for execution of this PRPQ is as specified for the appropriate IBM Series/1 Realtime Programming System version.

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Realtime Programming System Indexed Access Methods Programming RPQ P82570: User's Guide (SC34-1590).

PROGRAMMING RPQ

**5799-TBP - SERIES/1 REALTIME PROGRAMMING
SYSTEM BASIC SORT (P82573)**

NO LONGER AVAILABLE, effective April, 1984.

PURPOSE

Series/1 Basic Sort provides a set of functional modules to be used in conjunction with the Realtime Programming System for sorting disk- or diskette-based data files into ascending or descending sequence.

HIGHLIGHTS

The Basic Sort is macro-based and is assembled into a program by the user. A macro source module and object modules, all on a diskette, will be provided. The CALL interface to the object modules will be generated by the expansion of the Basic Sort macro with user-defined parameters.

Input - The input to this expanded macro routine is the disk or diskette file to be sorted. Multiple input data sets are supported, up to a total of seven.

Input record length must be defined by the user. Maximum record length is 1,024 bytes. The maximum sum of key lengths is 248 bytes, and up to 12 sort fields can be specified.

A user exit is provided in order to permit modification of input data prior to processing.

Records can be selected or omitted based on comparison with the hexadecimal value in a user-specified field.

Control fields (keys) can be in different locations in the records. They can be sorted in ascending or descending sequence, or mixed (some ascending and some descending).

Output - This program creates a tag file as output. It is the user's responsibility to provide a routine to use the tag file to construct an output file consisting of the desired records and in the desired record format.

The sort output is a file consisting of records containing a double-word binary tag and the data keys used to perform the sort function. Note: The data key(s) appended to the double-word binary tag are equal to a user-defined record size.)

Each entry in the output file consists of the double-word whose value will be in the range of +1 through N, followed by the data keys associated with that input record. The tag numbers appear in the tag file in the sequence dictated by the user-provided sort parameters. The first byte of the double word is a unique file identifier and the remainder of the double word is the relative record number of the record within the file.

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for this licensed program when it is operated in the following specified operating environment:

HARDWARE REQUIREMENTS

- IBM 4962 Disk Storage Unit
- IBM 4964 Diskette Storage Unit
- IBM 4974 Matrix Printer
- IBM 4973 Line Printer

SOFTWARE REQUIREMENTS

The minimum system for program preparation of this PRPQ is specified for the version of the IBM Series/1 Realtime Programming System/Program Preparation Subsystem selected.

COMPATIBILITY

This PRPQ is compatible with the licensed programs which are identified in the System Requirements section above.

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Realtime Programming System Basic Sort Programming RPQ P82573 Licensed Program Specifications (GC34-1597) ... IBM Series/1 Realtime Programming System Basic Sort Programming RPQ P82573 Users Guide (SC34-1596) ... IBM Series/1 Realtime Programming System Basic Sort Programming RPQ P82573 Logic Manual (LY34-0585).

PROGRAMMING RPQ

**SERIES/1 CONTROL PROGRAM SUPPORT
EXTENDED FUNCTION
5799-TBQ (PRPQ P82535)****PURPOSE**

This Series/1 PRPQ provides a set of functional modules that provides Control Program Support for extended function disk and printer devices and enhances system usability.

HIGHLIGHTS**Hardware Support**

The Control Program Support Extended Function PRPQ provides support for the following hardware units:

4973 Model 1 & 2 Line Printers

The 4973 model 1 & 2 Line Printers are supported at a level equivalent and compatible to the 4974 Matrix Printer support. Support for concurrent operation of multiple 4973 and 4974 printers is provided with identical user interfaces. The 4974 Matrix Printer support is extended to provide line spacing of 6 or 8 lines per inch.

4962 Model 3 & 4 Disk Storage Units (13.9 MB)

The Disk File Support is extended to support one or more 4962 model 1, 1F, 2, 2F, 3 or 4 disk storage units in any combination. The user's interface to all disk and diskette devices is identical.

4962 Model 1F & 2F Fixed Head Feature

Support of the 4962 disk storage unit is extended to include the fixed head facility of that unit.

Software Support

The Control Program Support Extended Function PRPQ includes the following software enhancements:

Table of Contents

Provides the ability to create, maintain, and dynamically locate symbolic files on all models of the 4962 Disk Storage Unit and 4964 Diskette Unit. Additionally, there is transportability between diskettes written on a Realtime Programming System configuration and a system running Control Program Support. This support includes data set definition, deletion, open, symbolic copy, and other data set manipulation utilities.

Operator Message I/O

This function provides the user with a capability to send messages to operator consoles. Messages can be informational only or informational with a request for a reply or acknowledgment. Messages requiring a reply are numbered for operator convenience. Two types of macros are provided. The first macro provides for an interface to the I/O communications support routines. The second macro is used to construct the messages.

Operator consoles supported include the:

- 4978 Display Station
- 4979 Display Station
- Teletypewriter Adapter 7850 with:
 - 3101 Display Terminal
 - Teletype® Models ASR 33/35

Multiple consoles and alternate backup consoles are supported for system messages and operator commands.

Relocating Loader/Overlay Manager

A facility is provided which allows the loading from disk or diskette of relocatable program modules into various user controlled overlay areas. There are three parts to this support:

Relocatable Module Preparation Utility

This program is executed immediately following the Basic Program Preparation Facility Linkage Editor to reformat the load module into the format required by the relocating loader.

Resident Relocatable Loader

This routine accesses and optionally relocates a program module from a disk or diskette using disk/diskette table of contents support and loads it into a storage area specified at load time for immediate or delayed execution.

Overlay Manager

This facility manages a system overlay storage pool as defined by the user. The overlay area is segmented into smaller areas which are dynamically allocated to accommodate multiple program modules of varying size.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for this licensed program when it is operated in the following specified operating environment:

HARDWARE REQUIREMENTS

The system requirements for an application which uses this IBM Series/1 PRPQ in an execution environment are dependent on the application. The use of 8-lines-per-inch printing on the IBM 4974 Printer requires RPQ D02072. Series/1 Base Program Preparation Facilities (5719-PA1).

SOFTWARE REQUIREMENTS

Version 1, Modification 1 of IBM Series/1 Control Program Support PRPQ (5799-TAA) is required. An IBM 4962 disk or a 4964 diskette is required for error logging. The Disk Table of Contents PRPQ (5799-TAW) is required by the relocating loader and overlay manager facilities of this product. This is a no charge RPQ that provides hardware diagnostics.

Program Preparation

See the Program Preparation section of the Control Program Support (5799-TAA).

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

DOCUMENTATION

(available from Mechanicsburg)

IBM Control Program Support Extended Function User's Guide (SC34-1570) ... Licensed Program Specifications (GC34-1586)

PROGRAMMING RPQ

SNA Remote Management Utility (cont'd)**COMPATIBILITY**

This PRPQ is compatible with the licensed programs which are identified in the "Specified Operating Environment" section above. In addition, this PRPQ is compatible with host communications facilities as identified in the pages for selected version of the Realtime Programming System.

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Realtime Programming System SNA Remote Management Utility User's Guide (SC34-1712) ... IBM Series/1 Realtime Programming System SNA Remote Management Utility Licensed Program Specifications (GC34-1711).

PROGRAMMING RPQ

5799-TEH - SERIES/1 LETTER WRITER VERSION 1*NO LONGER AVAILABLE, effective April 1984.***PURPOSE**

Series/1 Letter Writer (P82630) provides letter writing capabilities for the Series/1. This program permits multiple users to create, edit, print and manage letters or multi-page documents via 3101 Display Terminals. This program also provides the capability to merge defined data processing files with user-created letters to produce integrated mass mailings. The number of terminals that can be supported and the performance that can be expected is dependent upon a number of factors, for example: System configuration ... available storage ... other applications running in the same system. Boca Raton MSC approval is required prior to proposing. Contact the manager of RPS/Communications Systems Support for approval.

HIGHLIGHTS

The Series/1 Letter Writer PRPQ (5799-TEH) allows the Series/1 to be used as a letter-writing system. It provides the ability to merge data processing files with a user-created document to produce customized documents for mass mailing or other applications.

The Series/1 Letter Writer consists of a number of programs that execute under control of the Realtime Programming System and the Multiple Terminal Manager. The following Document Edit functions are provided:

- Delete Character
- Delete/Restore Word
- Delete/Restore Sentence
- Delete/Restore Line
- Delete/Restore Paragraph
- Delete/Restore Page
- Move Unit (via Delete and subsequent Restore actions)
- Copy Unit (via Delete/Restore/Restore actions)
- Insert Character
- Bulk Text Insert mode
- Margin Definition
- Tab Definition
- Text Alignment Definition (left, right, center).
- Text Justification (not supported by feature codes #5052, #5053 or #5054)
- Text Adjustment Definition (text flow, or leave as entered)
- Begin Continuous Underscore
- Word/End Continuous Underscore
- Dynamic On-screen Reformatting
 - Most simple reformatting actions occur in real time, as the user types (Auto Work Wrap, Character Delete/Insert, etc.)
 - All other reformatting occurs each time the user presses the ENTER key.
- 'Ghost' Cursor (an indicator in the screen heading that graphically shows column position)
- Tab Rack (identifies tab and margin settings at all times)
- Edit Status heading (other information about the edit session):
 - Document Name
 - Page Number
 - Line Number on Page
 - Adjust Setting
 - Alignment Setting
 - Control Character Type
 - Edit/Browse Mode
 - Scroll Amount
- Automatic date insertion at print time (not supported by feature codes #5052, #5053 or #5054)
- Margin text and automatic page numbering (not supported by feature codes #5052, #5053 or #5054)
- Standard Paragraph Support: This allows the user to interactively merge documents by selecting pages (from another document) to be copied into the current document being edited. (Only supported by feature codes #5058, #5059, #5060)

DESCRIPTION

A Spelling Aid is provided with a dictionary containing up to approximately 130,000 predefined words. The dictionary consists of a combination of General, Medical and Legal dictionaries. Up to 2,000 user-defined words may also be defined and included in the dictionary. Operationally, the user places the cursor under a word whose spelling is

questioned. The 'Spelling Verification' key causes a search for the word in the dictionary. If it is found, the user is notified that the word is correctly spelled. If it is not found, the Spelling Aid will display a number (possibly none) of candidate words whose spelling is phonetically close to the word on the screen. The user may select one of these words to automatically replace the one in question.

The installation process will allow the user to select the General dictionary only (approximately 80,000 words), or the combined General/Medical/Legal dictionary (approximately 130,000 words).

Document access control is provided via authorized user names, passwords, user access codes, and document access levels. Any individual user may only view a subset of the documents in the document library as defined by the combination of user access codes and document access levels. A document may not be modified by general users (other than the owner) if it is marked 'Read-Only'. Document lists displayed interactively contain status information such as Date-Last-Accessed, Date-Last-Archived, Date-Last-Printed, etc.

The Letter Writer PRPQ also provides a number of full-screen-oriented utilities. These utilities support the following functions:

- Select Documents via document access lists
- Select Documents via Principal Name (not supported by feature codes #5052, #5053 or #5054)
- Copy Document
- Rename Document
- Delete Document
- Place Document on Class Queue for Printing
- Manage Print Class Queues
- Proof Print
- Pagination
- Start/Stop Printer
- Manage Printer
- Archive/Retrieve Documents
- Manage Document Library
- Build User Spelling Aid Dictionary
- Browse Archive/Print Log
- Manage User/Document Passwords, Access Codes, and Access Levels

The system is designed for use by non-data processing personnel.

The Letter Writer program can be used in conjunction with other data processing application products in commercial environments such as insurance agencies.

These application programs may be written to control specific Letter Writer functions (Print, Edit, Browse, Copy, Rename, Delete, etc.) on behalf of the terminal user. For example, a Multiple Terminal Manager application program may directly invoke the Letter Writer Edit screen for a particular document on behalf of the terminal user. Feature codes #5052, #5053 and #5054 allow direct control of the Print function only.

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of the program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for this licensed program when it is operated in the following specified operating environment:

HARDWARE REQUIREMENTS

The hardware required is the same as for the base operating system with at least one additional IBM 3101 display terminal.

Feature codes #5052, #5053, #5054, #5055, #5056, and #5057 require a minimum of 128K bytes of storage for execution. Feature codes #5058, #5059, and #5060 require a minimum of 192K.

SOFTWARE REQUIREMENTS

The IBM Series/1 Letter Writer PRPQ can be obtained with two types of installation procedures; one designed for ease-of-use, and one designed for flexibility.

The installation procedure designed for ease-of-use provides pregenerated Realtime Programming Systems and a pregenerated Multiple Terminal Manager, as well as a question and answer-driven procedure to install Letter Writer and the pregenerated systems. The installation procedure designed for flexibility provides some usability aids to help the user do custom generations of the Realtime Programming System and the Multiple Terminal Manager.

IBM 3101 Display Terminal

Series/1 Letter Writer Version 1 (cont'd)

All feature codes support all models of the IBM 3101 in character mode only via the teletypewriter adapter (feature #7850) or feature-programmable multiline communications adapters (8-line controller feature number #2095 and 4-line adapter feature number #2096). Feature codes #5055, #5056, #5057, #5058, #5059, and #5060 add support for the multifunction attachment (feature #1310).

It is recommended that the IBM 3101 Display Terminals operate with a 9,600 bps line speed. Note that the Feature-programmable Multiline Communications Adapters support a maximum aggregate throughput rate of 64,000 bps. Therefore, only six IBM 3101 Display Terminals running at 9,600 bps can be configured to a single Feature-programmable 8-line Controller.

Printer Support

All feature codes support the IBM 4974 printer and the IBM 4973 line printer for medium and high speed proof printing of documents. The line printer requires the 96-character print belt (#9492). All feature codes also support teletypewriter-type printers with the 96-character ASCII character set.

Feature codes #5055, #5056, #5057, #5058, #5059 and #5060 support the IBM 4975 printer. The IBM 4975 (models 1L and 2L only) printer is supported with the following capabilities:

- Proportional spacing in quality mode
- Ten-pitch font in draft mode
- Nominal ten or twelve-pitch fonts in quality mode
- Automatic quality mode for final print

Feature Code #5052 - Letter Writer Version 1 with no Pregenerated Systems

Prerequisites:

- Realtime Programming System Version 4.2 (5719-PC4)
- Multiple Terminal Manager Version 1.2 (5799-TCY)

Prerequisite: (for custom installation process only)

- Program Preparation Subsystem Version 4.2 (5719-AS4)

Feature Code #5053 - Letter Writer Version 1 with Basic Pregenerated Systems

Prerequisite: (for custom installation process only)

- Program Preparation Subsystem Version 4.2 (5719-AS4)

The user must be a licensed user for the following products:

- Realtime Programming System Version 4.2 (5719-PC4)
- Multiple Terminal Manager Version 1.2 (5799-TCY)

Feature Code #5054 - Letter Writer Version 1 with pregenerated systems packaged with the 4978 Support, Indexed Access Method and Disk Spooling licensed programs

Prerequisite: (for custom installation process only)

Program Preparation Subsystem Version 4.2 (5719-AS4)

The user must be a licensed user for the following products:

- Realtime Programming System Version 4.2 (5719-PC4)
- Multiple Terminal Manager Version 1.2 (5799-TCY)
- Disk Spooling Version 3.2 (5799-TCH)
- Indexed Access Method Version 1.2 (5719-AM1)
- IBM 4978 Display Station Support Version 3.2 (5799-TCE)

Feature Code #5055 - Letter Writer Version 1 with No Pregenerated Systems

Prerequisites:

- Realtime Programming System Version 5.1 (5719-PC5)
- Multiple Terminal Manager Version 1.2 (5799-TCY)

Prerequisite: (for installation process only)

- Program Preparation Subsystem Version 5.1 (5719-AS5)

Feature Code #5056 - Letter Writer Version 1 with Basic Pregenerated Systems

Prerequisite: (for custom installation process only)

- Program Preparation Subsystem Version 5.1 (5719-AS5)

The user must be a licensed user for the following products:

- Realtime Program System Version 5.1 (5719-PC5)
- Multiple Terminal Manager Version 1.2 (5799-TCY)

Feature Code #5057 - Letter Writer Version 1 with Pregenerated systems packaged with the Indexed Access Method Licensed Program

Prerequisite: (for custom installation process only)

- Program Preparation Subsystem Version 5.1 (5719-AS5)

The user must be a licensed user for the following products:

- Realtime Programming System Version 5.1 (5719-PC5)
- Multiple Terminal Manager Version 1.2 (5799-TCY)
- Indexed Access Method Version 1.2 (5719-AM1)

Feature Code #5058 - Letter Writer Version 1 with no pregenerated systems

Prerequisites:

- Realtime Programming System Version 5.2 (5719-PC5)
- Multiple Terminal Manager Version 3.0 (5719-MT1)
- Program Preparation Subsystem Version 5.1 (5719-AS5) (for installation process only)

Feature Code #5059 - Letter Writer Version 1 with Basic Pregenerated Systems

Prerequisite: (for custom installation process only)

- Program Preparation Subsystem Version 5.2 (5719-AS5)

The user must be a licensed user for the following products:

- Realtime Programming System Version 5.2 (5719-PC5)
- Multiple Terminal Manager Version 3.0 (5719-MT1)

Feature Code #5060 - Letter Writer Version 1 with Pregenerated System packaged with the Indexed Access Method licensed program

Prerequisite: (for custom installation process only)

- Program Preparation Subsystem Version 5.2 (5719-AS5)

The user must be a licensed user for the following products:

- Realtime Programming System Version 5.2 (5719-PC5)
- Multiple Terminal Manager Version 3.0 (5719-MT1)
- Indexed Access Method Version 2.0 (5719-AM2)

Note: The Programming Preparation Subsystem Version 5.2 (5719-AS5) and the Realtime Programming System Version 5.2 (5719-PC5) are available as maintenance releases of these products.

DOCUMENTATION
(available from Mechanicsburg)

IBM Series/1 Letter Writer Version 1 Programming RPQ P82630 Licensed Programming Specifications (GH30-0711) ... IBM Series/1 Letter Writer Version 1 Programming RPQ P82630 Operation Manual (SB30-0461) ... IBM Series/1 Letter Writer Version 1 Programming RPQ P82630 User Procedure Notebook (SB30-0462) ... IBM Series/1 Letter Writer Version 1 Programming RPQ P82630 Installation Manual (SB30-0463) ... IBM 3101 Display Terminal Keyboard Label Series/1 Letter Writer Programming RPQ P82630 (SB30-0452).

PROGRAMMING RPQ

**SERIES/1 CONTROL PROGRAM SUPPORT
4965 DISKETTE DRIVE
5799-TEK (PRPQ P82636)****PURPOSE**

This Series/1 PRPQ provides the Series/1 Control Program Support user with basic software to support the 4965 Diskette Drive. This support enables Control Program Support 4964 Diskette device users to upgrade to a larger and more flexible diskette media. It also allows Control Program Support programs executing on a 4952 mdl C to access the integrated diskette drive(s) in that processor.

HIGHLIGHTS

The Control Program Support 4965 Diskette Device PRPQ provides the user with a basic read/write level of support (via cylinder, head, sector mode). Diskette Types 1, 2, and 2D are supported. Standalone utilities are provided for Copy and Diskette Initialization. IPL support is provided.

This PRPQ is also applicable to the diskette drive included with the 4952 model C Processor. The use of Control Program Support with the 4952 model C Processor provides the user with the capability of tailoring an application with a minimum storage, diskless configuration.

CUSTOMER RESPONSIBILITIES

The customer is responsible for the installation and use of this licensed program.

SPECIFIED OPERATING ENVIRONMENT

Support will be provided for this licensed program when it is operated in the following specified operating environment:

HARDWARE REQUIREMENTS

The minimum system requirement for this PRPQ is:

- IBM 4965 Diskette Drive and I/O Expansion Unit or IBM 4952 model C processor
- Minimum Control Program Support System Configuration

There may be additional hardware requirements dependent upon the particular application.

SOFTWARE REQUIREMENTS

IBM Series/1 Control Program Support PRPQ (5799-TAA).

DOCUMENTATION

(available from Mechanicsburg)

IBM Series/1 Control Program Support 4965 Diskette Drive User's Guide PRPQ P82636 (SC34-1718) ... IBM Series/1 Control Program Support 4965 Diskette Drive Licensed Program Specification (GC34-1717)