Multiuser BASIC-2 Operating System
Release 3.3
Customer Software Release Notice
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PREFACE

This customer software release notice describes the changes and new features of Release 3.3 of the Wang Multiuser BASIC-2 Operating System.

Intended for all users, this release notice is organized as follows:

- Chapter 1 provides a summary of features and the necessary requirements.
- Chapter 2 explains the new enhancements.
- Chapter 3 details the corrected problems.
- Chapter 4 explains the special considerations.
- Chapter 5 discusses the media contents.

For more information on the Make a Reference List of File Names utility, refer to the updated BASIC-2 Utilities Reference Manual (700-6855A.02). For more information on the MXE, refer to the CS/Asynchronous User Guide for Model 2236 MXE Terminal Processor (700-8098A).
CHAPTER 1
INTRODUCTION TO RELEASE 3.3

OVERVIEW

This chapter provides an introduction to Release 3.3 of the Multiuser BASIC-2 Operating System. It includes a summary of features and the necessary requirements.

SUMMARY OF FEATURES

The Wang Multiuser BASIC-2 Operating System is designed for interactive programming and ease of use. Release 3.3 of the Multiuser BASIC-2 Operating System is a general release. It supplies added features and corrects previously reported problems.

Release 3.3 provides the following features:

- A new utility called Make a Reference List of File Names to improve file backups
- Support of the PM060 printer
- Enhancements to the MXE

You can install Release 3.3 yourself. Follow the instructions for installing the operating system described in the introductory or user manual supplied with your CS/2200 system.
REQUIREMENTS

In order to use Release 3.3, the following hardware is required:

- A Wang CS, CS-D, or 2200 MVP, LVP, SVP, or MicroVP with 28 kilobytes (KB) of control memory
- A 2200 terminal
- A diskette drive
CHAPTER 2
ENHANCEMENTS

OVERVIEW

This chapter discusses the added features provided in Release 3.3. For more details, refer to the updated BASIC-2 Utilities Reference Manual.

ENHANCEMENTS OF RELEASE 3.3

Release 3.3 provides enhancements to the operating system and the MXE.

Operating System

Release 3.3 provides the following enhancements to the operating system:

Error Messages -- You can now output error and system messages as uppercase characters only. Release 3.3 modifies the operating system and the REM statement at line 903 of the @GENPART utility. This REM statement describes the procedure. You specify an additional argument to the $INIT statement to make system messages uppercase (i.e., error messages, LIST DT, etc.).

This new feature prevents a mix of US and foreign characters from appearing on the screen of certain terminals. For example, katakana (Japanese characters) terminals print uppercase as English and lower case as katakana.

PM060 Printer -- The CS/2200 series now supports the PM060 printer. This dot matrix printer provides both text and graphics printing capabilities.
**Make a Reference List of File Names Utility** -- The Make a Reference List of File Names utility is now available from the Multiuser BASIC-2 System Utilities menu (see Figure 2-1). With this new utility, you can create or modify a list of file names. You can either save this list temporarily or permanently in a data or program file. Later on, you can edit the list and use it as input to two other file move utilities:

- Copy or modify files on a disk from a disk or disk image
- Copy files to a disk image file

A disk image file is a single disk file that you create from one or more files (from a single surface). This data file consists of index space followed by a copy of the sectors from the original disk files.

If you want to back up file by file to a tape streamer, you should first back up files into disk images and then back up the disk image to tape. After copying the last file into the disk image, the system updates the index space of the disk image file with file name and sector information. You can then recover individual files from a specific disk image file on disk.

Because you can write several disk image files to a single disk surface and then write to a tape streamer from that single surface, this procedure reduces the time required to back up several files from different surfaces to tape. If you keep the disk image file on the disk, you will not need the tape to restore the files.

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Select an item and press RUN/EXEC:

- Partition Generator
- Partition Status
- Format Disk Platter
- Move File
- Backup Platter
- Recover from Backup
- System Install
- Make a Reference List of File Names
- Initialize Data & Time
- Vertical Format Control
- Game

**Figure 2-1. New System Utilities Menu**
Release 3.3 provides the following enhancements to the MXE:

Improvement Performance -- The performance of the MXE is now similar to the MXD. However, the MXE still includes a real-time clock and telecommunications (TC) capabilities not found on the MXD.

19.2 KB Asynchronous Communication -- Release 3.3 now provides the capability of using a port of your MXE as a telecommunications (TC) port for 19.2 KB asynchronous telecommunication. To select a 19.2 KB TC baud rate for an MXE port, choose the value E, previously undefined, for the setting of the Communications Control Vector Byte 1, low-order hexdigit. Refer to the CS/Asynchronous User Guide for Model 2236 MXE Terminal Processor for more information on the MXE.
CHAPTER 3
CORRECTED PROBLEMS

OVERVIEW

This chapter discusses the problems corrected in Release 3.3. It explains the old problem and how the new release corrects it.

PROBLEMS CORRECTED IN RELEASE 3.3

In addition to new features, Release 3.3 corrects reported problems to the operating system and the MXE.

Operating System

The following problems have been corrected to the operating system in Release 3.3:

**A01 (Memory Overflow) Error** -- When you loaded a program that was too large for a partition (using the automatic bootstrap feature of @GENPART), the system generated a looping A01 (memory overflow) error. You could not reset the partition without rebooting the system. Release 3.3 enables you to reset the partition.

**COPY** -- The system did not verify if the disk you were specifying was fixed to removable or removable to fixed. It assumed fixed to removable. Release 3.3 issues the Error S:19 Missing Word message.

**German Keyboard** -- Release 3.3 issues an error message when you enter FC (underlined umlaut e) and press RETURN during program entry.

**IF THEN/ELSE IF THEN DO** -- In a IF THEN/ELSE IF THEN DO construction, the system executed the DO statement when it skipped over the ELSE statement. In Release 3.3, the system will not execute the DO statement when it skips over the ELSE statement. It will execute the next statement after the END DO.
LIST COM/DIM -- When you executed SELECT #n (n is the largest file number you selected for the program) followed by LIST COM/DIM in the same partition, the system hung. In Release 3.3, the system will execute both commands correctly.

MOVE -- The system did not verify if the disk you were specifying was fixed to removable or removable to fixed. The command tried to execute a MOVE to itself and produced a scratch platter. Release 3.3 issues the Error S:19 Missing Word message.

STOP# -- The system did not always check for the immediate mode STOP# command at the start of a statement line. Release 3.3 checks for the STOP# command and stops program execution.

$GIO -- When printing from one partition to a terminal printer (with an $OPEN statement), you could execute a $GIO statement to the printer from another partition attached to the same terminal. The system ignored the $OPEN and produced output from the two partitions. In Release 3.3, the terminal printer remains attached to the partition issuing the $OPEN statement.

MXE

The following problems have been corrected in the MXE:

Hesitation -- When you typed in characters, the system hesitated (up to one second) displaying these characters on the screen and then issued them in one burst. Release 3.3 corrects the system hesitation.

KEYIN -- After the completion of an INPUT SCREEN, the system intermittently lost rapidly typed characters following KEYIN. With Release 3.3, the system does not lose the characters following KEYIN.

System Clock -- The system clock lost time when using a local printer attached to port 4 of your first MXE. With Release 3.3, the system clock will not lose time.
CHAPTER 4
SPECIAL CONSIDERATIONS

OVERVIEW

This chapter discusses the various special considerations associated with Release 3.3. It explains the condition and a possible solution.

CONDITIONS

The following conditions are present with Release 3.3:

IF THEN IF THEN DO -- If you use a IF THEN IF THEN DO construction, the system will not see the DO statement and therefore will not execute it. For example, you created the following statement:

10 PRINT "10", : IF 1=2 THEN IF 2=2 THEN DO: PRINT "FIRST", :END DO :PRINT "SECOND"

The system produces the following output

10 FIRST SECOND

To correct the problem, use an AND statement, such as:

40 PRINT "40", : IF 1=2 AND 2=2 THEN DO: PRINT "FIRST", :END DO :PRINT "SECOND"

The system produces the following output

40 SECOND

Printer Driver -- If you print using a printer driver in a partition greater than ten and release your terminal to partition one to print, the printer will receive incorrect command codes. To reset the printer, you must power it on and off.
CHAPTER 5
MEDIA CONTENTS

OVERVIEW

This chapter discusses the media contents of Release 3.3. It details how the release is supplied and what files have been added or changed to the system platter.

MEDIA CONTENTS OF RELEASE 3.3

The system platters provided with Release 3.3 include the operating system and the BASIC-2 language processor, the system diagnostics, and the system utilities. This new release updates some of the existing files and adds new ones.

Release 3.3 is supplied as follows:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Number of Diskettes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>284-0069-3</td>
<td>2</td>
<td>8-inch Single-Sided Single-Density 2270A diskettes</td>
</tr>
<tr>
<td>284-0069-5</td>
<td>1</td>
<td>8-inch Double-Sided Double-Density 2200 LVP/SVP diskette</td>
</tr>
<tr>
<td>284-0069-9</td>
<td>2</td>
<td>5 1/4-inch Double-Sided Double-Density 2275/DS diskettes</td>
</tr>
</tbody>
</table>
The following files are included with Release 3.3:

<table>
<thead>
<tr>
<th>FileName</th>
<th>Type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>@BACKUPa</td>
<td>Program</td>
<td>Backup utility</td>
</tr>
<tr>
<td>@BOOT</td>
<td>Program</td>
<td>Menu for bootstrap</td>
</tr>
<tr>
<td>@CLOC</td>
<td>Program</td>
<td>Initialize date and time</td>
</tr>
<tr>
<td>@DAVFU</td>
<td>Program</td>
<td>Vertical Format Control utility</td>
</tr>
<tr>
<td>@FORMAT</td>
<td>Program</td>
<td>Format disk platter</td>
</tr>
<tr>
<td>@GENPARTa</td>
<td>Program</td>
<td>Partition Generator</td>
</tr>
<tr>
<td>@INSTALLa</td>
<td>Program</td>
<td>System install</td>
</tr>
<tr>
<td>@MENU</td>
<td>Program</td>
<td>System menu program</td>
</tr>
<tr>
<td>@MODSYSF</td>
<td>Program</td>
<td>Convert system configuration file</td>
</tr>
<tr>
<td>@MOVEFILa</td>
<td>Program</td>
<td>Overlay for @MOVEFIL and @INSTALL</td>
</tr>
<tr>
<td>@MOVEFILa</td>
<td>Program</td>
<td>Move file</td>
</tr>
<tr>
<td>@PSTAT</td>
<td>Program</td>
<td>Partition status</td>
</tr>
<tr>
<td>@RECOVERa</td>
<td>Program</td>
<td>Recover from backup</td>
</tr>
<tr>
<td>@SYSMVPBa</td>
<td>Program</td>
<td>Menu for System Utilities</td>
</tr>
<tr>
<td>@TO.CRE0b</td>
<td>Program</td>
<td>Load of create a reference file</td>
</tr>
<tr>
<td>@TO.CREFb</td>
<td>Program</td>
<td>Create reference file</td>
</tr>
<tr>
<td>@TO.DISkB</td>
<td>Program</td>
<td>Copy to disk</td>
</tr>
<tr>
<td>@TO.SUBSb</td>
<td>Program</td>
<td>Overlay for @TO.DISK/IMAGE</td>
</tr>
<tr>
<td>@TOIMAGEb</td>
<td>Program</td>
<td>Copy to disk image</td>
</tr>
<tr>
<td>.STARTD</td>
<td>Data</td>
<td>System menu support</td>
</tr>
<tr>
<td>@@</td>
<td>Data</td>
<td>MVP system menu</td>
</tr>
<tr>
<td>@DATE</td>
<td>Data</td>
<td>Date file</td>
</tr>
<tr>
<td>@DM50/V0</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@LASRJV1a</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@MVPa</td>
<td>Data</td>
<td>MVP microcode</td>
</tr>
<tr>
<td>@MXE0a</td>
<td>Data</td>
<td>MXE microcode</td>
</tr>
<tr>
<td>@PM010V2</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@PM016V3</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@PM017V3</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@PM018V3</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@PM060V0b</td>
<td>Data</td>
<td>Printer driver</td>
</tr>
<tr>
<td>@SYSFILE</td>
<td>Data</td>
<td>MVP configuration file</td>
</tr>
<tr>
<td>@DG</td>
<td>Program</td>
<td>Menu for system diagnostics</td>
</tr>
<tr>
<td>@MRTIAN</td>
<td>Program</td>
<td>Game</td>
</tr>
<tr>
<td>@A</td>
<td>Data</td>
<td>PROM format -- CPU diagnostic</td>
</tr>
<tr>
<td>@B</td>
<td>Data</td>
<td>PROM format -- Control memory test</td>
</tr>
<tr>
<td>@C</td>
<td>Data</td>
<td>PROM format -- Data memory test</td>
</tr>
<tr>
<td>@D</td>
<td>Data</td>
<td>PROM format -- CPU reg. diagnostic</td>
</tr>
<tr>
<td>@E</td>
<td>Data</td>
<td>PROM format -- Chain mode link file</td>
</tr>
<tr>
<td>@P</td>
<td>Data</td>
<td>PROM format -- User menu</td>
</tr>
<tr>
<td>@\</td>
<td>Data</td>
<td>PROM format -- Field service menu</td>
</tr>
</tbody>
</table>

a These files have been revised.

b These files have been added.

5-2 Media Contents
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---|---|---|---|---

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☐ ☐ ☐ ☐ ☐

Readability — Is the manual easy to read and understand?

☐ ☐ ☐ ☐ ☐

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☐ ☐ ☐ ☐ ☐

Examples — Were they helpful, realistic? Were there enough of them?

☐ ☐ ☐ ☐ ☐

Organization — Was it logical? Was it easy to find what you needed to know?

☐ ☐ ☐ ☐ ☐

Illustrations — Were they clear and useful?

☐ ☐ ☐ ☐ ☐

Physical Attractiveness — What did you think of the printing, binding, etc?

☐ ☐ ☐ ☐ ☐

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After reading this document do you feel that you will be able to operate the equipment/software? ☐ Yes ☐ No ☐ Yes, with practice

What errors or faults did you find in the manual? (Please include page numbers) __________________________________________

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<th>1</th>
<th>Customer Number (If Known)</th>
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</thead>
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<td>2</td>
<td>Bill To: Ship To:</td>
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<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Customer Contact:</td>
</tr>
<tr>
<td></td>
<td>Phone ( ) Name ( )</td>
</tr>
<tr>
<td>4</td>
<td>Date Purchase Order Number</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Taxable Tax Exempt Number Credit This Order to</td>
</tr>
<tr>
<td></td>
<td>Yes No A Wang Salesperson A Salesperson's Name</td>
</tr>
<tr>
<td></td>
<td>Please Complete Employee No. RDB No.</td>
</tr>
<tr>
<td>6</td>
<td>Document Number Description Quantity Unit Price Total Price</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

- **Authorized Signature** 
- **Date**
- **Sub Total**
- **Less Any Applicable Discount**
- **Sub Total**
- **Local/State Tax**
- **Total Amount**

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