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ISO PROSPECT REPORT & LABEL ORDER FORM

REPLY FORM

DISCONTINUED
VS AND 2200
FURNITURE
by Supplies
and Product
Marketing

All Wang equipment built and/or sold in the United States is subject to FCC Class A standards for noise emission. Although many of our older products have been successfully redesigned in order to conform to these standards, Wang has announced the discontinuation of the MT-1 Basic WP Workstation table (part number 279-8012-5), effective immediately. 2200 diskette-drive tables (part numbers 279-8002-5, with right-hand storage space, and 279-8007-5, with left-hand storage space) are also being discontinued, effective immediately.

The discontinued furniture may be purchased from the Supplies Division at a cost of \$525 for either of the 2200 tables and \$760 for the MT-1 workstation table, while supplies last. As an alternative to the discontinued furniture, the following tables, measuring 32 inches wide by 30 inches deep, are available from the Supplies Division:

<u>Part Number</u>	<u>Description</u>	<u>Price</u>
279-8011-5	Multi-Purpose Printer Table	\$ 395
279-8009-5	2200 Peripheral Table	375

NEW VS 85
PACKAGES
ANNOUNCED
 by VS Product
 Marketing

DESCRIPTION

Two new VS 85 packaged systems, the VS85-76F and VS85-147F, are now being offered. The three previously-announced VS 85 packaged systems (VS85E, VS85F, and VS85G) each contain 1 MB of main memory, a bus adapter, a 16-port serial IOP, a 2-port disk IOP, a 3-port communications IOP, an archiving workstation, and disk cables, in addition to the VS operating system, Assembler, and a compiler. The significant configuration difference between the various packaged VS 85 systems is the amount of bundled disk storage, as follows:

VS85E: 90 MB (75 fixed, 15 removable); single disk drive

VS85F: 288 MB removable; single disk drive

VS85G: 150 MB removable; two 75 MB disk drives

VS85-76F: 76 MB fixed; single disk drive

VS85-147F: 147.5 MB fixed; single disk drive

VS85-76F and VS85-147F will contain the following:

- . VS85-1 1 MB main memory, 16-port serial IOP, bus adapter, archiving workstation with hard/soft sector controller, Operating System, Assembler, and a compiler.
- . 22V88-2 2-Port Disk IOP. Supports two disk drives of any combination and their disk switch options.
- . 22V26-3 3-Port Communications IOP. Supports three Data Link Processors.
- . The VS85-76F package will include a 76 MB eight-inch internal fixed disk drive, as currently offered on the VS 25 and VS 45. This disk drive will support up to 76 megabytes of formatted data with a transfer rate of about 1.2 MB per second and a 20 millisecond average seek time.
- . The VS85-147F package will include a new 147 MB eight-inch internal fixed disk. This new disk drive will support up to 147.5 megabytes of formatted data with a transfer rate of 1.2 MB per second and an average seek time of 20 msec.

Support of these disk drives will require VS Operating System 6.30 or later and version 5.04.06 or later of the 22V88 microcode. Each disk drive will be housed in the VS 85 cabinet.

NOTE: For backup purposes, an additional backup device, not included in the package, will be needed. This device could be cartridge tape, reel-to-reel tape, or removable disk.

(continued)

NEW VS 85
PACKAGES
ANNOUNCED
 (continued)

MARKETING STRATEGY

The strategy behind these packaged offerings is to provide users with affordable and highly powerful entry level high-end systems. With the introduction of the two new VS 85 packages, Wang offers more flexibility in packaged configurations with a lower entry price than before. The VS 85 also offers an easy installation capability because of the compact cabinet and the ability to operate with either a 110 volt/25 amp or 220 volt/15 amp power supply.

The VS 85 addresses the needs of users who require the processing capability of the VS 100 but who do not anticipate support for more than 64 users. A typical installation will require both local and remote workstation functionality to support a combination of data processing and word processing applications. As the VS 85 users' needs grow, the system can grow: from an entry-level system without cache, to a medium-size system with cache and increased configuration support.

Pricing of the new packages narrows the gap between the VS 45 and the VS 85, making the growth path to the high-end systems much more attractive. These new packages will attract the VS 45 users who wish to expand their current capabilities within the areas of Office Automation, Data Processing, and Networking. With the VS 85, the user has entered into Wang's high-end product line, affording the capabilities of long-term user growth not only in size and performance but also user tasks and applications.

ORDERING INFORMATION

Prices for the two new VS 85 packages, designed to be very competitive in the 32-bit CPU marketplace, are as follows:

<u>Model Number</u>	<u>Description</u>	<u>Purchase Price</u>	<u>Monthly Maint.</u>
VS85-76F	1 MB Main Memory, 16-port Serial IOP, 3-port TC IOP, 2-port Disk IOP, Archiving Workstation, 76 MB Fixed Disk Drive, VS Operating System, Assembler, Compiler	\$ 70,000	\$ 482
VS85-147F	1 MB Main Memory, 16-port Serial IOP, 3-port TC IOP, 2-port Disk IOP, Archiving Workstation, 147.5 MB Fixed Disk Drive, VS Operating System, Assembler, Compiler	\$ 77,000	\$ 508

(continued)

NEW VS 85
PACKAGES
ANNOUNCED
(continued)

The VS85-76F and VS85-147F packages are expected to be available for volume shipment during June 1984.

Upgrades

All VS 85 packages have been configured with a two-port disk IOP which allows for immediate expansion. The current upgrade capability from VS 85 to VS 100 is not available on these new VS 85 packages. All other expansion options that are currently available on the VS 85 apply to these new VS 85 packages. In order to utilize the cache option, a VS 85 system must be configured with either 2 MB or 4 MB of main memory.

VS FORTRAN 77
COMPILER,
VERSION 1.00.02
 by VS R&D

DESCRIPTION

The FORTRAN 77 compiler, with its associated runtime system, is a new product which supports the full FORTRAN 77 language as defined in ANSI X3.9-1978. The initial release of VS FORTRAN 77, Version 1.00.02, is now available.

HARDWARE PRE-REQUISITES

FORTRAN 77 requires a VS system with short floating point capability. On the VS 50 and VS 80, short floating point is implemented via the Language Board, part number 177-7086, which is a no charge item if purchased with the compiler. On other VS models, short floating point is implemented in the CP microcode. A main memory size of at least 512 KB is recommended.

SOFTWARE PRE-REQUISITES

VS Operating System Release 5.01.51 or later.

ALERTS

Included with this FORTRAN 77 release is version 6.10.01 of the EDITOR, which provides additional functionality for FORTRAN 77. This version of the EDITOR is an upgrade to existing versions of the EDITOR in the field, and can replace them. Any users who currently use FORTRAN 66, however, should keep a copy of their existing editor package for use with FORTRAN 66. For these customers, the earlier EDITOR should be stored in a library other than @SYSTEM@ before installing FORTRAN 77.

ORDERING INFORMATION

FORTRAN 77 is available through normal ordering procedures on 9-track tape as model number 195-2087-7. Support packages are also available, as listed below:

<u>Model Number</u>	<u>Description</u>	<u>Initial Lic.Fee</u>	<u>Monthly Support</u>
195-2087-7	FORTRAN 77 Compiler	\$ 7,000	N/A
195-2087-STD	" Standard Support	N/A	\$ 59
195-2087-CSS	" Central Site Support	N/A	24

For a further discussion of VS compiler support packages, refer to pages 93-94 of ISO Tech News #3, November 1983.

INSTALLATION INSTRUCTIONS

It is recommended that FORTRAN 77 be installed by procedure, as described on the following page.

(continued)

VS FORTRAN 77
COMPILER,
VERSION 1.00.02
 (continued)

Installation by Procedure

The FORTRAN 77 distribution tape is a BACKUP tape containing the following libraries: INSTALL, @FORT77@, @FTNRTM@, @ERRMSG@, and EDITF77. Library INSTALL contains three files:

<u>File Name</u>	<u># Blocks</u>	<u>Description</u>
QUICK1	1	Installation Procedure
FTQUICK	4	Installation Procedure
INSTALL	6	Installation Program

To install FORTRAN 77, proceed as follows:

1. Run BACKUP, specifying the following parameters:

Input Screen: RANGE = LIBRARY,
 VOLUME = TAPE,
 LIBRARY = INSTALL,
 FUNCTION = RESTORE,
 DEVICE = TAPE

Output Screen: LIBRARY = (library of your choice),
 VOLUME = (volume of your choice)

Backup Screen: PROCEED = YES

EOJ Screen: PF Key 16

2. Then run procedure INSTALL, contained in the output library specified above. Total installation time is about 15 minutes on a VS 100 with a 288 MB disk drive. INSTALL also compiles and runs a small test program, FTQUICK. If this program runs successfully, the install procedure will terminate with a return code of 30.
3. Scratch the holding area libraries @NEWF77@, @NEWFRT@, @NEWEMG@, and @NEWEDF@ after the installation is complete; these libraries are not deleted by the installation procedure.

Manual Installation

For those who prefer to do the installation manually, the libraries on the distribution tape are listed on the following page. The distribution tape was prepared by the BACKUP program.

(continued)

VS FORTRAN 77
COMPILER,
VERSION 1.00.02
 (continued)

Manual Installation (continued)

Library @FORT77@ contains the 6 files which make up the compiler. These files should be placed in @SYSTEM@ on the system volume. The number of 2048-byte blocks allocated for each file is given in the "# Blocks" column.

<u>File Name</u>	<u># Blocks</u>	<u>Description</u>
FORTTRAN	76	Main Program File
WLFPASS1	175	Lexical Analysis & Syntax Check
WLFPASS2	93	Semantics Check
WLFPASS3	192	Code Generator
WLFPASS4	91	Program Formatter
WFOPT	79	Optimizer

Library @FTNRTM@ contains the 162 files which make up the runtime system. This library should be placed on the system volume. 409 blocks are allocated.

Library @ERRMSG@ contains F77EMSG, the error message file for the runtime system. 127 blocks have been allocated for this file. F77EMSG should be placed in @ERRMSG@ on the system volume.

Library EDIT77 contains version 6.10.01 of the EDITOR, which provides support for FORTRAN 77. (See ALERTS 1 on page 281.) The following files are in EDIT77:

<u>File Name</u>	<u># Blocks</u>	<u>Description</u>
EDITOR	12	EDITOR Main Program 6.10.01
WE1EDIT	68	EDITOR Sub-Program 6.10.01

With the exception of F77EMSG, the error message file in library @ERRMSG@, all files on the FORTRAN 77 Version 1.00.02 tape have a protection class of @ ("execute only" access). The F77EMSG has a \$ protection class ("read only" access).

PROBLEMS CORRECTED

Not applicable; initial release

KNOWN ANOMALIES

None

REFERENCES

VS FORTRAN 77 Reference (800-1208-02)

REFURBISHED
2260CR HAWK DRIVE
PRICE REDUCTIONS

by Financed
 Systems
 Marketing

Over the last few months many ISOs have expressed interest in having the 10MB Hawk Drive reduced in price to compete more effectively as a backup device. In response, Wang's Financed Systems Marketing group is pleased to announce that effective March 1, 1984, the 2260CR 10MB Hawk Drive has been reduced from \$5,000 to \$3,500. Additionally, ISO discounts apply to this purchase price.

This price reduction establishes the 2260CR as an inexpensive way of adding both 5MB of backup capability and 10MB of additional storage space. The 10MB Hawk Drive should be considered for adding backup on new "MVP-P" systems as well as for adding backup on currently installed 2200 systems.

The 2260CR is available through normal order processing channels, and orders will be filled on a "first come, first serve" basis. Delivery lead time is 4 weeks from the date the order is booked. This offer is good only in the domestic U.S. ISO discounts apply to the purchase price listed below, and a 90-day warranty is included.

<u>Model Number</u>	<u>Description</u>	<u>Purchase Price</u>	<u>Monthly Maint.</u>
2260CR	Remanufactured 10MB Hawk Drive (5MB Fixed and 5MB Removable) with 22C12 Disk Controller and 2297 stand	\$ 3,500	\$ 108

If you have additional questions, call Wang Laboratories in Lowell at (617) 459-5000 and ask for Lawrence Crooks (x.4540) or Wayne Lucier (x.2468).

MODEL 2229
CARTRIDGE TAPE
DRIVE REPRICING
 by 2200 Product
 Marketing

DESCRIPTION

Wang Laboratories is pleased to announce a 25% price reduction in 2229 Cartridge Tape Drives for the 2200 product line of small business computer systems. The 2229 Cartridge Tape Drive is a start/stop device which employs a serpentine recording technique. This technique records (or reads) data for the entire length of one track, stops, reverses tape direction, and records (or reads) the full length of the logically adjacent track. This process continues until all 4 tracks have been recorded or read. Tape speeds are 30 inches per second (ips) during record/read, and 70 ips during rewind.

Using the 2229 as a backup device, up to 14 megabytes of data may be stored on a single tape cartridge. As many as 39 5 1/4" diskettes would be required to store that same amount of data. Archiving of word processing documents, copying specified files (including documents), or transferring information to other Wang 2200 systems is simplified with the use of the 2229 Cartridge Tape Drive.

The menu-driven utilities included with the device permit the user to:

1. Backup a disk and individual files to tape
2. Recover all or individual files from tape
3. View instructions.

The combination of high performance and a substantial price reduction makes the 2229 Cartridge Tape Drive an attractive peripheral device, greatly enhancing the flexibility of the 2200 product line. Effective February 15, 1984, the 2229 price is as follows:

<u>Model</u> <u>Number</u>	<u>Description</u>	<u>Purchase</u> <u>Price</u>	<u>Monthly</u> <u>Maint.</u>
2229	Four Track, 6400 BPI, 14 MB, 30 ips Cartridge Tape Drive	\$ 4,500	\$ 53

For further information, refer to the Cartridge Tape Drive Data Sheet (700-7714) or the Model 2229 Cartridge Tape Drive User Manual (700-7716).

WANG PC 3278
EMULATION BOARD
ANNOUNCED
by Wang PC
Product
Marketing

DESCRIPTION

Wang Laboratories is pleased to announce the PC 3278 Emulation Board for the Wang Professional Computer. This board is a combined hardware/software product that allows the Wang PC to provide a communications path in native mode attachment (3278) into an existing 3270 terminal network. Once the package is installed, the Wang PC can attach a 3274, 3276, or Integral Terminal Cluster controller.

This product will provide the Wang PC with 3278, Model 2 emulation capability. While in 3278 emulation mode, the PC has access to the central or mainframe data base via a coaxial cable. In PC mode (local), the PC retains full capability as a standalone system. Through the Local Interconnect Option (PC-PM070), full Wang PC functions will be maintained. The Wang PC can emulate a VS, IIS, or OIS workstation through the Local Communications Option (PC-PM041).

Highlights of the 3278 Emulation Board are as follows:

1. High-speed TTL microprocessor runs independently of the Wang PC's 8086 microprocessor.
2. Does not reduce memory available to the user.
3. Total protocol compatibility with 3278 terminals, including poll/answer turnarounds.
4. Coaxial cable interface to 3270 controllers (3274 and 3276) uses Type "A" Terminal Adapters.
5. Terminal Cluster controller can be remote or channel-attached and can be linked through BSC or SNA/SDLC.
6. Provides display symbol compatibility with the IBM 3278.
7. Fully-buffered board, with 1920-character (80 columns by 24 rows) screen page on the board.
8. Off-line, self-checking diagnostics included.
9. 3278-2 Terminal Emulation Software compatible with MS-DOS 2.0.
10. Subroutines are supplied to allow user access to the screen buffer by custom programs.
11. Wang PC screen images can be saved and converted to a Wang Word Processing document.

(continued)

WANG PC 3278
EMULATION BOARD
ANNOUNCED

(continued)

The Wang PC 3278 Emulation Board allows the user to initiate a 3270 session which will run even if the PC is not receiving screen output. This is done by initiating the session via the 3278 board-resident microprocessor. The Wang PC can then break from a monitoring mode to run PC standalone functions while the 3278 session is maintained. Users can re-enter monitor mode and continue using the 3270 link, which has been maintained (active or inactive) by the 3278-based microprocessor.

MARKETING STRATEGY

The PC 3278 Emulation Board provides a native mode environment for the Wang PC in an existing 3270 terminal network via existing coaxial cable; no modems, phone lines, or special cabling is required. This board gives the Wang PC instant access to the central or mainframe data base or other applications and allows the Wang PC to directly replace an IBM 3278 Model 2 without any special programming or network configuration. With this board, the PC is an intelligent workstation replacement for the 3278. Local processing at the Wang PC makes the central computer available to more users.

The PC 3278 Emulation Board is under its own microprocessor control. The emulation program is loaded from the diskette. Unlike most of the competitive offerings, this ease-of-use allows for easy enhancement of the capabilities because it is easier to change diskette software than it is to change the PROM resident software.

ORDERING INFORMATION

The 3278 Emulation Card and Software require a Wang PC with at least 128 KB main memory and two diskette drives. Industry-standard MS-DOS Operating System 2.00 (included with Wang PC System Software V1.00) or later must be used. Anticipated availability of the 3278 Emulation Card and Software is during April 1984. Pricing is as follows:

<u>Model</u> <u>Number</u>	<u>Description</u>	<u>Purchase</u> <u>Price</u>
PC-PM048	Wang PC 3278 Emulation Card	\$ 900
PC-SS065	Wang PC 3278 Emulation Software	240

Installation documentation is included. Entitled support consists of a 90-day warranty on the hardware and software media and 90-day access to a toll-free PC Customer Hotline. For additional information, refer to the Wang PC 3278 Interface Data Sheet (700-8725).

WANG PC PRICING
CHANGES

by Wang PC
Product
Marketing

Wang Graphics Card -- The list price of the Wang Graphics Card (PC-PM002) will be increased from \$240 to \$300, effective April 1, 1984. Prices of Wang PC models PC-004A (Wang PC with dual diskette drive) and PC-005A (Wang PC with Winchester drive), which include this card, will also be increased by the same amount on orders submitted on or after April 1, 1984.

Upgrade to Advanced Word Processing -- Wang now offers two PC Word Processing packages: PC Word Processing, which requires 128 KB minimum memory, and PC Advanced Word Processing, which requires 256 KB minimum memory. In conjunction with these two packages, customers have the opportunity to upgrade from PC Word Processing to PC Advanced Word Processing. As of April 1, 1984, the price of this upgrade will increase.

Model numbers and pricing changes are as follows:

<u>Model Number</u>	<u>Description</u>	<u>Purchase Price</u>
PC-004A	Wang PC with Dual Diskette Drive (includes Wang Graphics Card)	\$ 4,090
PC-005A	Wang PC with 10 MB Winchester Disk (includes Wang Graphics Card)	6,460
PC-PM002	Wang Graphics Card	300
UJ-3200	Upgrade to Advanced Word Processing	150

WANG PC ADVANCED
BASIC COMPILER
ANNOUNCED

by Wang PC
Product
Marketing

DESCRIPTION

Wang Laboratories is pleased to announce that an Advanced BASIC Compiler (Microsoft's GW-BASIC Compiler) will soon be available for the Wang Professional Computer. The Wang PC Advanced BASIC Compiler is being introduced to provide a method of optimizing the programs generated by the Wang PC BASIC Interpreter for high-speed execution.

The availability of the PC BASIC Interpreter and the new PC Advanced BASIC Compiler affords the best combination of products for fast, interpreter-based program development and debugging and high-speed execution in compiled form. The Microsoft GW BASIC Compiler is being sold, distributed, and supported by Wang.

The PC Advanced BASIC Compiler is an optimizing compiler, providing the mechanism for increased speed of execution and BASIC source code security. The PC Advanced BASIC Compiler is similar in function to the standard PC BASIC Interpreter. All commands found in the Interpreter will be recognized by the Wang PC Advanced BASIC Compiler, including commands for color, graphics, and sound. Advanced functions such as Circle, Paint, Draw, Play, and event trapping found in the PC BASIC Interpreter can be executed by the PC Advanced BASIC Compiler. (Several commands found in the Interpreter are not appropriate with the Advanced Compiler, such as chain/merge, key on/off, and any screen editor or immediate mode functions. These commands will be ignored.)

Once BASIC Interpreter programs are compiled with the PC Advanced BASIC Compiler, they will run three to five times faster. Also, larger programs can be developed with the Compiler than with the Interpreter, since separately compiled modules can be linked together.

MARKETING STRATEGY

Wang is offering the PC Advanced BASIC Compiler, in addition to the MS-BASIC Standard Compiler, to allow software developers to choose between environments. (Use the standard compiler if memory constraints are of concern.)

The PC Advanced BASIC Compiler provides additional verbs not included with standard BASIC and is designed to be compatible with the PC BASIC Interpreter. PC Advanced BASIC contains graphics, sound, RS-232, and cursor positioning commands, and can be considered a superset of standard BASIC. Because increasingly more software is being written in GW Compiled BASIC, the existence of the PC Advanced BASIC Compiler will increase the ease with which software on other microcomputers can be brought over to the Wang PC.

(continued)

WANG PC ADVANCED
BASIC COMPILER
ANNOUNCED
(continued)

ORDERING INFORMATION

The Wang PC Advanced BASIC Compiler will operate on all Wang PC models with no need for extended memory upgrades. Wang PC System Software 1.22 or later will be required. The Advanced BASIC Compiler may be ordered through normal order processing channels, and is scheduled for availability beginning in April 1984. Pricing is as follows:

<u>Model Number</u>	<u>Description</u>	<u>Initial Lic Fee</u>	<u>Monthly Lic Fee</u>
PC-SS015	PC Advanced BASIC Compiler	\$295	N/A

2200 BASIC-2
FOR THE WANG PC
by Wang PC & 2200
Product Mar-
keting & R&D

DESCRIPTION

Wang Laboratories, Inc., is pleased to announce the BASIC-2 language for use on the Wang Professional Computer. Software compatibility with 2200 systems was the principal goal in the design of this Wang PC BASIC-2 interpreter, which supports 2200 BASIC-2 and provides significant compatibility with the earlier 2200 Wang BASIC syntax.

The introduction of PC BASIC-2 enables the migration of existing 2200 applications to the Wang PC, the development of new software, and the capability to run those software applications on both the Wang PC and the 2200.

PC BASIC-2 runs under the industry-standard MS-DOS 2.0 single-tasking Operating System and uses MS-DOS files. There is no concept of background partitions in the PC BASIC-2 implementation. PC BASIC-2 offers the following functionality:

Math Capability

PC BASIC-2 has its own decimal math package, compatible with the 2200. The results of numeric operations will be identical to those delivered by the 2200. This implementation of PC BASIC-2 does not use the 8087 numeric co-processor chip or the 8087 software emulator. The math instruction set includes numerous system-defined mathematical and trigonometric functions with results accurate to 13 digits. Results can be either rounded or truncated. All calculations are performed in decimal, eliminating conversion problems common to binary math packages.

Character Manipulation

Alphanumeric data can be compared, analyzed, and modified with an extensive array of data manipulation statements. These statements permit the programmer to manipulate characters at the bit and byte levels and to perform various Boolean and binary arithmetic operations.

General-Purpose Statements

A set of general-purpose BASIC-2 statements include statements to facilitate common programming tasks such as formatting printed output, decision-making, branching, looping, passing data to subroutines, controlling the format of the CRT display, overlaying program modules, and accepting and processing operator entered data.

Special-Purpose Statements

Several groups of special-purpose statements are provided which perform such operations as code conversion, sorting, matrix arithmetic, and customized I/O control.

(continued)

2200 BASIC-2
FOR THE WANG PC
 (continued)

Error Detection

PC BASIC-2 provides an extensive set of error detection features designed to automatically detect and report a wide range of error conditions. When the system detects an error condition, it immediately terminates the current operation and displays a highlighted error message on line 25 of the screen.

Differences Between 2200 and PC BASIC-2

Every effort is being made to ensure minimal need for software conversion in migrating 2200 software to the Wang PC. However, some changes are necessary to best use the capabilities of the Wang PC architecture and MS-DOS. Differences in PC BASIC-2 as compared to 2200 BASIC-2 are listed below.

- . Since MS-DOS is a single-user, single-tasking operating system, no multi-user operations or background tasks are supported under PC BASIC-2. The following 2200 BASIC-2 statements will be ignored on the Wang PC:

LIST I	DEFFN @PART
\$ALERT	\$DISCONNECT
\$CLOSE	\$RELEASE PART
\$MSG	\$RELEASE TERMINAL
\$OPEN	

- . The CONFIG.BS2 file, provided with PC BASIC-2, must be edited to map 2200 device addresses to the appropriate Wang PC device driver or disk image.
- . All \$GIO control microcommands, with the exception of "12r1" and "13", have been implemented in PC BASIC-2. Data input from the keyboard and data output to the CRT are supported. Unless the address of the keyboard or the screen is selected, I/O commands will be ignored. I/O commands with "acknowledge", "echo", and "input request" have not been implemented.
- . Scrambled 2200 programs will not be loaded since the unscrambling code would become available to the public through the debugger. The integrity of the algorithm would be compromised and it will lose its value to 2200 software developers.
- . Temporary files are not implemented under PC BASIC-2 (i.e. no extension of the disk image by BA, DA statements).

MARKETING STRATEGY

The marketing strategy for PC BASIC-2 can best be understood by an evaluation of its five essential design goals, which are given on the following page.

(continued)

2200 BASIC-2
FOR THE WANG PC
(continued)

PC BASIC-2 design goals:

1. Enable 2200 applications to run on the Wang PC
PC BASIC-2 has been designed to permit the portability of 2200-developed applications software to the Wang PC. Consequently, BASIC-2 programs which have been developed for the 2200 product line can be executed on the Wang PC.

2. Migrate 2200 software as painlessly as possible
As a result of the maturity and acceptance of the 2200 product line, a substantial base of 2200 applications software exists for a broad spectrum of vertical markets. With PC BASIC-2, these applications can be harnessed for use on the Wang PC.

3. Minimize the need for software conversion
PC BASIC-2 has been developed using the 2200 BASIC-2 specifications. Consequently, there will be minimal need for software conversion. However, due to the fact that the 2200 operating system supports a multi-user environment and the Wang PC's MS-DOS operating system presently supports only a single-user environment, conversion may be necessary for 2200 multi-user applications software packages. 2200 BASIC-2 applications that make use of the CRT, keyboard, printer, and disk devices only will easily migrate to the Wang PC.

4. Provide a high-level BASIC for the Wang PC
2200 BASIC-2 has historically been regarded as an ideal small business development language. Its functions and interactive development environment ensure a high measure of programming productivity. With unique features such as decimal arithmetic functions, low-level I/O control facilities for peripheral devices, and high-level operations like SEARCH and SORT, PC BASIC-2 represents a powerful tool for personal computers.

5. Provide a 2200 programming environment for the Wang PC
2200 BASIC-2 has proven to be an excellent environment for the interactive development of complex applications software. This same environment will now be available to Wang PC users through PC BASIC-2.

(continued)

2200 BASIC-2
FOR THE WANG PC
(continued)

ORDERING INFORMATION

PC BASIC-2 will require a Wang Professional Computer with at least 256 KB of main memory, and at least one 5 1/4 inch DSDD diskette drive. In the first release of PC BASIC-2, the user program area will be restricted to 32 KB. If the PLOT and PRINT BOX statements are to be used, a medium resolution graphics board (PC-PM002) will also be needed. Only the medium resolution monitor will be supported in the initial release of PC BASIC-2. PC BASIC-2 requires Wang PC System Software Version 1.21 or later.

PC BASIC-2 is scheduled for availability in April 1984. Order PC BASIC-2 through normal order processing channels by specifying the following model number:

<u>Model</u> <u>Number</u>	<u>Description</u>	<u>Initial</u> <u>Lic Fee</u>	<u>Monthly</u> <u>Lic Fee</u>
PC-SS016	PC BASIC-2 Interpreter	\$395	N/A

WANG/RANDOM HOUSE
ELECTRONIC
THESAURUS
 FOR THE WANG PC
 by Office Systems
 Product
 Marketing

DESCRIPTION

Wang Laboratories announces the Wang/Random House Electronic Thesaurus^R, an optional software author aid which delivers advanced documentation creation capabilities to Wang PC Advanced Word Processing. The Wang/Random House Electronic Thesaurus automates the time-consuming task of looking up synonyms manually in a book, enabling a user to replace selected words with more appropriate synonyms quickly and effortlessly. Like Wang's spelling verifier, the Wang/Random House Electronic Thesaurus is based on the Random House Dictionary^R.

The Wang/Random Electronic Thesaurus is integrated with PC Advanced Word Processing for direct user access within the word processing editor. The Electronic Thesaurus is designed to provide instant, on-line synonym referral from within a Wang PC word processing document with a single command. Once a key word is selected, by positioning the cursor anywhere within the word, the Wang/Random House Electronic Thesaurus retrieves its synonyms immediately. The key word and the synonyms are displayed on the bottom of the screen, using as many screen lines as needed. Once the desired synonym is selected, it can be modified (e.g., the word "question" can be changed to "questionable" or "questioning") before replacing the highlighted key word in the text.

One of the synonyms displayed for a key word can be selected as the new key word (if it is one of the 5,000 index words). Then the synonyms for that word can be retrieved. In this manner, users can "page" through the Wang/Random House Electronic Thesaurus, checking the synonyms of any index word desired. There is no practical limit to the number of searches a user can generate while in the Wang/Random House Electronic Thesaurus.

The Wang/Random House Electronic Thesaurus is structured in an easy-to-use dictionary format, listing its synonyms by parts of speech. Although users may not add words to the Electronic Thesaurus, approximately 60,000 synonyms, indexed to 5,000 key (index) words, are provided. Synonyms are "prioritized" based on how close the synonyms come to matching the meaning of the key word, with the most similar word listed first. This feature aids the user in choosing the synonym with the correct meaning and usage.

(continued)

^RWang/Random House Electronic Thesaurus is a registered trademark of Wang Laboratories, Inc.

WANG/RANDOM HOUSE
ELECTRONIC
THESAURUS
FOR THE WANG PC
 (continued)

MARKETING STRATEGY

With the addition of the Wang/Random House Electronic Thesaurus option to its other author aids (spelling verifier and personal dictionary), the Wang PC provides sophisticated and unique solutions to a wide variety of user needs. The Wang/Random House Electronic Thesaurus -- with its user-friendly interface, speed of operation, and minimal disk requirement (only 204 KB of disk space for over 50,000 synonyms) -- is the most advanced electronic thesaurus in the industry. This powerful tool also facilitates correct spelling and word usage. By using appropriate words to add color and clarity to text, Thesaurus users can become better writers and more effective communicators.

The Wang/Random House Electronic Thesaurus, in combination with Wang PC Advanced Word Processing, is a unique solution appropriate for users who need sophisticated text processing tools. The Wang/Random House Electronic Thesaurus should be sold as part of the total Wang PC product offering.

ORDERING INFORMATION

The Wang/Random House Electronic Thesaurus requires the following minimum hardware configuration:

- . Wang PC Base Unit with Monitor
- . 256 KB Main Memory
- . Two 360 KB Diskette Drives or a 10 MB Winchester and a Single 360 KB Diskette Drive

The following software is required to support the Wang/Random House Electronic Thesaurus option:

- . Wang PC System Software Release 1.21 or above
- . PC-AS002-2 Advanced Word Processing

Anticipated availability for the Electronic Thesaurus Software is June 1984.

<u>Model</u> <u>Number</u>	<u>Description</u>	<u>Price</u>
PC-AS014	Wang/Random House Electronic Thesaurus	\$ 150

PC SOFTWARE RELEASE LEVELS

Currently-released core software for the Wang Professional Computer is listed below. Although an attempt has been made to list hardware and software requirements of each software release, this list of requirements may not be complete. Newly-released software is indicated by an underscored version number.

MODEL #	I/U*	DESCRIPTION	PKG. #	VERSION	HARDWARE REQUIREMENTS**	SOFTWARE REQUIREMENTS
<u>System Software</u>						
PC-SS001	U	System Software Diskette	195-2326-9	V1.22	128K RAM, 1,2,3+,4 or 5	(V1.21 Printer Support Menu changed)
PC-PM050	I	CP/M-80 Emul. Card & Sft.	195-2738-9	V1.00	128K RAM, 1,2,3+,4 or 5, 6 or 7	System Software V1.00 or later
PC-SS005	I	CP/M-80 Emul. Software Only	195-2738-9	V1.00	128K RAM, 1,2,3+,4 or 5, 6 or 7	System Software V1.00 or later
<u>Languages</u>						
PC-SS010	I	MS-Compiled BASIC	195-2327-9	V1.00	128K RAM, 1,2,3+,4 or 5	System Software V1.00 or later
PC-SS012	I	MS-FORTRAN	195-2329-9	V3.04	256K RAM, 1,2,3+,4 or 5	System Software V1.00 or later
PC-SS011	I	MS-Pascal	195-2328-9	V3.04	256K RAM, 1,2,3+,4 or 5	System Software V1.00 or later
PC-SS013	I	MS-COBOL	195-2330-9	V1.07	256K RAM, 1,2,3+,4 or 5	System Software V1.00 or later
PC-SS022	I	M'Focus Lev.II COBOL Comp.	195-2756-9	<u>V2.1</u>	256K RAM, 1,2,3+,4 or 5	System Software V1.21 or later
PC-SS023	I	M'Focus FORMS-2	195-2764-9	<u>V2.1</u>	256K RAM, 1,2,3+,4 or 5	System Software V1.21 or later
PC-SS024	I	M'Focus ANIMATOR	195-2765-9	<u>V2.1</u>	256K RAM, 1,2,3+,4 or 5	System Software V1.21 or later
PC-CS003	I	M'Focus COBOL Pgm. Envir.	196-0003-9	<u>V2.1</u>	256K RAM, 1,2,3+,4 or 5	System Software V1.21 or later
<u>Productivity</u>						
PC-AS001	U	PC Multiplan	195-2338-9	V1.06.05	128K RAM, 1,2,3,4 or 5	System Software V1.10 or later
PC-AS002	U	PC Word Processing	195-2339-9	V1.11	128K RAM, 1,2,3+,4 or 5	System Software V1.10 or later
PC-AS002-2	I	PC Advanced Word Process.	195-2755-9	V2.0	256K RAM, 1,2,3+,4 or 5	System Software V1.21 or later
PC-AS003	I	PC Business Graphics	195-2462-9	V1.00	256K RAM, 1,2,3+,4+ or 5	System Software V1.21 or later
PC-AS005	I	PC Notebook	195-2621-9	V1.0	128K RAM, 1,2,3R,4 or 5	System Software V1.10 or later
PC-CS001	I	Productivity I (Multiplan/WP/Async.)	196-0002-9	N/A	128K RAM, 1,2,3+,4 or 5	System Software V1.10 or later
<u>Telecommunications</u>						
PC-SS020	I	PC Async.Comm. (inc.2200)	195-2331-9	V1.00	128K RAM, 1,2,3,4 or 5	System Software V1.00 or later
PC-PM041	I	PC Local Communications	195-2647-9	V1.01	128K RAM, 1,2,3,4,6	System Software V1.10 or later
PC-SS063	I	3276 SNA/SDLC Emulation	195-2605-9	V1.08E	128K RAM, 1,2,3,4 or 5, 8	System Software V1.10 or later
PC-WSNT-MS	I	PC Multipoint Secondary***	195-2803-9	V2.1	128K RAM, 1,2,3,4 or 5, 9	System Software V1.10 or later
PC-WSNT-BSS	I	BSS File Trans./Term.Em.***	195-2806-9	V2.1	128K RAM, 1,2,3,4 or 5, 9	System Software V1.10 or later
PC-SS060	I	Batch 2780/3780/WPS Option	195-2337-9	V2.01	128K RAM, 1,2,3,4 or 5, 9	System Software V1.10 or later

* I = Initial Release; U = Updated Version

** Hardware Requirements:

- 1 - Wang PC CPU Board #210-8221, with V1.00 Boot EPROMs (ECO 26344)
- 2 - Wang PC Keyboard
- 3 - One 5.25" DSDD diskette drive
- 3+ - Two 5.25" DSDD diskette drives preferred
- 3R - Two 5.25" DSDD diskette drives or one 10 MB Winchester drive required
- 4 - PC-PM004 Wang Monochrome Monitor with PC-PM001 character resolution board #210-8243
- 4+ - PC-PM004 Wang Monochrome Monitor with PC-PM001 character res. board #210-8243 and PC-PM002 graphics res. board #210-8233
- 5 - Industry-standard monitor (RGB or B&W) with PC-PM003 character/graphics board #210-8222 using 80-column mode only
- 6 - PC-PM041 Wang PC Local Communications Option Card Set (Data Link Board #210-8245 and CPU Board #210-8246)
- 7 - PC-PM050 Wang PC CP/M 80 Emulation Card #210-8248
- 8 - PC-PM042 Wang PC Multipoint Controller Card #210-8251
- 9 - PC-PM040 Wang PC Remote Telecommunications Card #210-8232

*** Wang Systems Networking (WSN) software formerly bundled as Remote WangNet with the PC-PM040 Remote Communications Option. Orders for PC Remote WangNet must now specify a Transport (such as PC-WSNT-MS), a Service (PC-WSNS-BSS Basic Support Service, containing File Transfer and VS Terminal Emulation), and the Wang PC Remote Telecommunications card (PC-PM040). The three items were formerly bundled in PC-PM040. Color (RGB) monitors do not function with these Wang PC WSN software packages.

WANG PC MS-DOS
PRINT SPOOLER
FEATURES AND USE
by New York Area
PC Support

PRINT.COM is the MS-DOS print spooling utility provided by Microsoft with MS-DOS versions 2.0 and above. On the Wang PC this PRINT utility has two features -- spooled DOS text files and spooled Wang Word Processing documents.

Spooled DOS Text Files

The first feature of the PRINT utility (PRINT.COM) is to spool DOS text files for background printing. For example, if several files were received as the result of a TTY session, the user could spool them to print and continue to work on other applications. (Note, however, that PRINT.COM only functions during DOS non-busy states, such as waiting for keystrokes, etc. Any application which writes to device #4 will write to the printer that PRINT.COM uses, and has priority over the spooled printout, which would cause that printout to be intermixed with the spooled printout.)

To use PRINT.COM to print text files which have been saved, perform the following steps:

1. Enter the DOS Command Processor, or "Other" from the menus.
2. Type PRINT, followed by the file name(s). If the files are called DATA1.TTY and DATA2.TTY, for example, type: PRINT DATA1.TTY DATA2.TTY
File names must be separated by a space and must not contain the characters "*" or "?". Up to ten file names may be specified in the PRINT request.
3. The screen display will indicate that DATA1.TTY is printing and DATA2.TTY is queued.

Three options are available for use with PRINT.COM:

- C In order to cancel a spooled print request, enter DOS and type PRINT DATA1.TTY -C. The file DATA1.TTY will be cancelled, and a message to that effect will be printed. After a -C request has been issued, the spooler remains in "Cancel Print Request" mode until a -P request is made.
- T To cancel all currently spooled files (including requests issued by other users), type PRINT -T. The -T request causes the spooler to remain in "Cancel Print Request" mode until a -P request is issued.
- P To reactivate print spooling after a -C or -T request has been issued, enter DOS and type a -P request for a particular file, such as: PRINT DATA2.TTY -P

(continued)

WANG PC MS-DOS
PRINT SPOOLER
FEATURES AND USE
(continued)

The PRINT.COM options can be made more "user friendly" by adding them to menus. To do this, use the Modify Systems Menu utility accessible from the System Utilities Menu. A further discussion of PRINT utility options is included in the Wang PC Utility Programs User Guide (700-8389).

Spooled Word Processing Documents

The second feature of PRINT.COM allows WP documents to be spooled to print from Wang PC Advanced Word Processing. From "Special Print Functions" in Advanced Word Processing V2.0, the user may select "Print Spooling". The print spooling screen looks like a standard print menu with two additions: "Create file only" and "Print file - local".

"Create file only" will create a spooled version of the WP document which may be submitted to the printer at a later time. (Spooled files differ from both WP documents and text files; they consist of the exact character stream, including control codes, which is presented to the printer device driver.) For a document called DEMO.DOC, for example, "Create file only" would create another file called DEMO.SPL, which could be printed later using the first PRINT.COM feature, discussed above. This process enables WP files to be "collected" for later printing in batch mode. Normally, files created with Wang Word Processing cannot be printed using PRINT.COM (unless they are first converted to text files using the Convert Document to Text utility).

"Print file - local" creates a spooled file such as DEMO.SPL above and starts printing it immediately. To spool WP documents directly to print, PRINT.COM must be loaded into main memory before entering Word Processing. Once PRINT.COM has been loaded, a message is displayed indicating that the "Resident portion of PRINT.COM is installed". If PRINT.COM has not been loaded prior to requesting local spooling, the message "Background printer is not accessible" will be generated. In the "local" mode, Word Processing documents can be spooled to the printer without being saved first, as in the "Create file only" option, discussed above.

DW/OS-55
DAISY PRINTER
ANNOUNCED
 by Peripherals
 Product
 Marketing

DESCRIPTIONS

Wang Laboratories is pleased to announce the worldwide availability of the model DW/OS-55 daisy printer as the newest family member of letter-quality printers. This new printer is a highly reliable, standard width (15-inch carriage) 64K bi-directional daisy wheel printer. The DW/OS-55 is available for the OIS, Alliance and VS product lines. An RS-232 version of this printer for the Wang PC is targeted for availability in Q4 FY'84.

The DW/OS-55 is rated 50-55 characters-per-second when printing the industry standard Triple A text with a 12-pitch printwheel. Overall throughput of the DW/OS-55 daisy printer is enhanced by using techniques intended to print text in the fastest possible way, and by the availability of automatic paper handling devices such as the DSF-55 sheet feeder described on pages 303-304.

DW/OS-55 Product Highlights

- . Replacement for the 6581W daisy printer
- . Highly reliable -- 3,000 hours (MTBF) at 25% duty cycle
- . Competitively priced
- . Supports all 6581W metal and plastic Wang print wheels
- . Uses snap-in multi-strike and fabric ribbon cartridges
- . Supports a dual-bin variable-width sheet feeder
- . Accommodates paper widths of 3.5" (7.62 cm) to 15" (38.10 cm) and up to six-part forms

The model BFT-55 bi-directional forms tractor, available as an option for the DW/OS-55 daisy printer, allows continuous form feeding and enables the printing of superscripts and subscripts.

The DW/OS-55 printer is equipped with an automatic diagnostic program and "Test" button to aid the operator and the Wang customer engineer in diagnosing any problems which occur. The automatic diagnostic program is executed during the powering on of the DW/OS-55 printer and will report the type of failure into a digital readout display. This display is located inside the front cover of the printer. Additional diagnostics may be obtained via the Test button located on the printer control panel. When activated, the Test button provides a sample printout.

DW/OS-55 Product Specifications

Height: 9 in. (22.86 cm.)
 Depth: 18 in. (45.72 cm.)
 Width: 24 in. (60.96 cm.)
 Weight: 63 lbs. (24.95 kg.)

(continued)

DW/OS-55
DAISY PRINTER
ANNOUNCED
 (continued)

DW/OS-55 Product Specifications (continued)

Vertical Print Format: 6 or 8 lines-per-inch
 Horizontal Print Format: 132 characters at 10-pitch
 158 characters at 12-pitch
 198 characters at 15-pitch

Cabling: 25 ft. (7.62 M) coaxial included with printer
 Up to 2000 ft. (609.6 M), optional

Power Requirements: 100, 120, 220, 240 Volts AC
 50 or 60 Hz, 300 watts

Environment: 50°F to 95° F (10° to 35° C)
 20% to 80% relative humidity, non-condensing
 (35% to 65% recommended)

MARKETING STRATEGY

The model DW/OS-55 daisy printer is now available as a plug-compatible, cost-effective replacement for the 6581W daisy printer currently offered on the OIS, Alliance and VS systems. The DW/OS-55 provides additional features such as faster print speeds, greater reliability and self-test diagnostics. Other differences in the two printers are as follows:

<u>Feature</u>	<u>DW/OS-55</u>	<u>6581W</u>
Print Speed (Triple A)	50-55 cps	32-35 cps
Paper Width	Variable	Fixed
Test Button	Standard	Not Available
Typewriter Mode	No	Yes
Forms Tractor (Mono-dir.)	Not Available	Standard
Forms Tractor (Bi-dir.)	Option BFT-55	Option BFT-1
Twin Sheet Feeder	Option DSF-55	Option TSF-31
Envelope Feeder	Not Available	Option EF-1
<u>Ribbon*</u>		
Multi-strike	Yes (725-1239)	Yes (279-5204)
Fabric	Yes (725-1242)	Yes (279-5234)
Single Strike	Not Available	Yes (279-5203)

* DW/OS-55 and 6581W ribbons are not interchangeable.
 All Wang print wheels can be used on both machines.

(continued)

DW/OS-55
DAISY PRINTER
ANNOUNCED
 (continued)

ORDERING INFORMATION:

The DW/OS-55 daisy printer is available now through normal order processing channels at a purchase price of \$5,000 with a \$43 monthly maintenance fee. The following items will be automatically enclosed with the DW/OS-55 daisy printer:

<u>Item</u>	<u>Part Number</u>
DW/OS-55 User Manual	700-8095
Delegate 10 Print Wheel	719-6093
Courier 12 Print Wheel	719-6077
2 Multi-strike Ribbons	725-1239
25 ft. Coaxial Cable	220-0148

Among the optional supplies available for the DW/OS-55 printer are the following:

<u>Description</u>	<u>Part Number</u>	<u>Purchase Price</u>
Twin Sheet Feeder	DSF-55 (see p.303)	\$ 2,000
Bi-dir. Forms Tractor	BFT-55	300
Metal print wheels	See Supplies Catalog	35 (each)
Plastic print wheels	See Supplies Catalog	20 (3/pkg)
Multi-strike ribbon*	725-1239-6	30 (6/box)
Fabric ribbon*	725-1242-6	30 (6/box)
Sound Hood*	725-1248	399
Raised Sound Hood*	725-1288	529

* Sound hoods and ribbons for the 6581W are not compatible with the DW/OS-55 daisy printer. The raised sound hood (725-1288) is designed to accommodate a sheet feeder.

DSF-55 DUAL-BIN
SHEET FEEDER
ANNOUNCED
by Peripherals
Product
Marketing

DESCRIPTION

Wang Laboratories is pleased to announce the model DSF-55 dual-bin sheet feeder as an option for the newly announced DW/OS-55 daisy printer. The DSF-55 is designed to automatically feed single sheets of paper from either of two user-selectable trays into the DW/OS-55 daisy printer.

The DSF-55 has the ability of accommodating several paper widths from 7.25" (18.42 cm) up to 11.7" (26.67 cm), with a maximum length of 14" (35.56 cm). From an operational standpoint, multiple page sizes cannot be printed during the same print operation. Separate print requests must be issued each time the page size changes.

Unlike Wang's current twin sheet feeders, the paper is seated in a horizontal position on the DSF-55, contributing to the product's improved reliability. The paper trays have a capacity of 200 sheets each of 20 pound paper. Paper weights may be from 18 to 24 pounds with a rag content of up to 25%. Copy-grade paper is not recommended.

Currently, any combination of six removable cartridge style paper trays may be used. In addition, single sheets, multiple-part forms and envelopes may be fed manually by the use of the tilt-back feature.

MARKETING STRATEGY

The model DSF-55 dual sheet feeder is positioned as a highly reliable, price-competitive, variable-width sheet feeder for the newly announced DW/OS-55 daisy printer. The DSF-55 Sheet Feeder is installable on the DW/OS-55 Daisy printer only. The TSF-31 twin sheet feeder will not be supported on the DW/OS-55 printer. The DSF-55 will operate like the TSF-31, with the following enhancements:

<u>Feature</u>	<u>DSF-55</u>	<u>TSF-31</u>
Variable Width Paper	Yes	No
Top Margin Default	Line 1	Line 6
Tilt Back Feature	Yes	No
Visible Indicators	Yes	No

These new features, along with the improved reliability of the DSF-55, will provide application solutions that were not previously available.

(continued)

DSF-55 DUAL-BIN
SHEET FEEDER
ANNOUNCED
 (continued)

ORDERING INFORMATION

The DSF-55 dual sheet feeder is available through normal order processing channels. Two models of the dual sheet feeder are offered to cover both domestic and international requirements:

<u>Model Number</u>	<u>Description</u>	<u>Purchase Price</u>	<u>Monthly Maint.</u>
DSF-55	Dual Sheet Feeder (Std.)	\$ 2,000	\$ 21
DSF-55I	Dual Sheet Feeder (Int'l)	2,000	21

Automatic enclosures with the dual sheet feeder consist of one DSF-55 User Manual (700-8605), one silencer shield, and two paper trays. The DSF-55 includes two 8.50" x 11.00" paper trays and the DSF-55I includes two 210 x 297 mm paper trays. Additional paper trays can be purchased at the following prices:

<u>Paper Tray Sizes</u>	<u>Part Number</u>	<u>Purchase Price</u>
8.5"x11" (21.59 x 27.94 cm) vertical	725-2777	\$ 75
11" x 8.5" (27.94 x 21.59 cm) landscape	725-2779	80
8.5" x 14" (21.59 x 35.56 cm) legal	725-2778	80
DIN A4 (210mm x 297mm) vertical	725-2780	80
DIN A4 (297mm x 210mm) landscape	725-2782	125
7.25" x 10.5" (18.42 x 26.67 cm) Monarch	725-2781	125

SSF-20 SINGLE-BIN
SHEET FEEDER
ANNOUNCED

by Peripherals
Product
Marketing

DESCRIPTION

The model SSF-20, a new single-bin sheet feeder, is now available for use on OIS-PTR20 and PC-PM012 daisy wheel printers. There is no external mechanical or electrical power needed and no additional connection is required between the sheet feeder, printer, or host system. A manual override feed slot provides for easy insertion of odd-sized sheets, labels, and envelopes without removing the sheet feeder. The feeder comes complete with a modified sound baffle for quiet operation in the office environment.

The SSF-20 sheet feeder supports variable width paper and is installed onto the printer platen, resting on the printer cover. The printer platen gear provides input and drive. The feeder's top margin is set by the operator to feed a new sheet of paper after an established number of lines of platen motion. A variety of paper sizes from 6" to 14" wide and from 7" to 14" long is accommodated by the input paper bin. The manual override feed slot accommodates odd-sized sheets, labels, and envelopes for versatility and flexibility of printed documents.

MARKETING STRATEGY

Recent studies have shown that automatic sheet feeding capability has evolved from a printer option to an essential component for printer acceptance in many applications. The demand for sheet feeders has translated into a major selling point for printers. Customers wishing to do unattended printing with the PC-PM012 or OIS-PTR20 daisy printer will find the model SSF-20 sheet feeder a low-cost solution to this need.

ORDERING INFORMATION

Each Model SSF-20 will be shipped with a specially designed sound baffle for use on the OIS-PTR20 or PC-PM012 daisy printer. The sound baffle fits on the printer with the sheet feeder and significantly reduces the printer's sound level. Each Model SSF-20 will also include a Model SSF-20 User Manual (700-8699) containing complete installation and operating instructions.

<u>Model Number</u>	<u>Description</u>	<u>Purchase Price</u>	<u>Monthly Maint.</u>
SSF-20	Single-Bin Sheet Feeder	\$ 500	\$ 10

5548Z TYPESETTER
& PIO-1 INTERFACE
DISCONTINUED
by Peripherals
Product
Marketing

When Wang Laboratories introduced the 5548Z in 1978, there were relatively few typesetter products from which office system users could choose. Over the years, both typesetter technology and the number of vendors offering typesetters have increased dramatically. Typesetters have shifted from peripheral devices in office automation systems to full standalone systems providing advanced word processing and display screens along with native typesetting features.

Wang recognizes the need to be present in the typesetting market. With the shift in typesetter technology, however, it has become apparent that customer needs are best met by offering third party interfaces on a source document level. As of November 1, 1983, Wang Laboratories discontinued its 5548Z typesetter and PIO-1 papertape typesetter interface. When the current limited inventories are depleted, no further orders for these two products will be accepted.

The need to interface with third party typesetters is answered by Wang's 9038 Interface Series, which offers this capability for many second and third generation typesetters. The 9038 is, in effect, a telecommunications "black box", which provides a dual-coaxial-cable 928 data link to a VS or OIS system, and an RS-232 link to the third party typesetter. The 9038 transmits Wang word processing documents to the third party typesetter; all typesetter formatting, including hyphenation and justification, must be done by third party software/hardware.

Wang offers several 9038 models as special products, which provide compatibility with the following typesetters:

<u>Model Number</u>	<u>Third Party Typesetter Compatibility</u>
9038-A	Autologic APS-5
9038-B	Compugraphic Advantage
9038-C	Compugraphic Unified
9038-D	Compugraphic Unisetter/Videosetter
9038-F	Compugraphic 8600
9038-LN	Linotron 202N
9038-LP	Linotron 202 (Paper Tape)
9038-LT	Linoterm
9038-L	Linotron 202 or 404
9038-M	Merganthaller VIP
9038-P	Itek Pacesetter
9038-T	OMNI Tech 2000
9038-V	Varityper Comp/set and VID

The 9038 is available through normal ordering channels at a purchase price of \$5000, with a \$35 monthly maintenance charge. Discussions are currently underway to expand the range of interface capabilities to include recently introduced state-of-the-art third generation typesetters.

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NON-DISCLOSURE AGREEMENT

WANG LABORATORIES, INC., a Massachusetts corporation ("WANG") and

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1. Confidential Information means any information, oral or written, that is not generally known outside of WANG including, but not limited to, information relating to WANG's products, designs, methods of manufacture or research; information relating to WANG's business operations such as its marketing plans, customer lists, and pricing methods as well as its personnel and organizational data; and, in particular, information relating to _____ .

2. RECIPIENT will receive and maintain all Confidential Information in confidence using at least reasonable care and except as provided herein, shall not use Confidential Information for its own benefit or disclose it to third parties without the written consent of WANG.

3. Upon request, RECIPIENT shall immediately return to WANG all tangible materials made available or supplied to RECIPIENT by WANG including, but not limited to, drawings, documents, hardware, disks and tapes without retaining any copies, notes or extracts.

4. RECIPIENT's obligation of confidentiality under this Agreement shall not apply to information which: (a) is already known to RECIPIENT or is publicly available at the time of disclosure; (b) is disclosed to RECIPIENT by a third party who is not in breach of an obligation of confidentiality; or (c) becomes publicly available after disclosure through no act of RECIPIENT.

5. Nothing in this Agreement shall obligate WANG to disclose any information to RECIPIENT nor shall it be construed as granting any rights, by license or otherwise, in any software or invention of WANG. RECIPIENT's obligations under this Agreement shall survive the termination of its association with WANG regardless of the manner of such termination and shall be binding upon RECIPIENT's heirs, successors and assigns. This Agreement shall be governed as a sealed instrument under Massachusetts law.

WANG LABORATORIES, INC.

RECIPIENT

Witness

By _____

Title _____

Date _____

ISO PROSPECT REPORT & LABEL ORDER FORM

To order either reports or labels based on the National Business List yellow pages data base, complete and return this form, together with a signed non-disclosure agreement. If you have questions, call Anne Hills at 617-459-5000 x.5598 or Lori-Ann Russell at 617-459-5000 x.2049.

If the desired territory is defined by ZIP code, please provide the 5-digit ZIP codes in Section A. Ranges of ZIP codes(e.g. 02101 to 02199) or individual ZIP codes may be used. If the territory includes an entire county or state, or is solely defined by county and/or state, please complete either the county or state information in Section B. Please note that either section A or section B must be filled in or both may be filled in if you cover ZIP code segments in addition to entire counties or states.

SECTION A

SECTION B

Zip Code		Zip Code	County Name	State
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !
! ! ! ! ! !	TO	! ! ! ! ! !	_____!	! ! !

Mail Reports/Labels to:

Name

Company

Street Address

City, State and ZIP Code

Telephone

Wang ISO Account Rep. (signature)

Date

Wang Branch Manager (signature)

Date

(over)

SECTION C

The following vertical market(s) is/are to be included _____ or excluded _____ from the desired territory.

C1 If you are only interested in certain SIC codes in the territory, please place an "X" on the appropriate line. If you are only interested in a sub-segment of a SIC, complete section C2.

_____ Medical	_____ Utility	_____ Banks
_____ Constr/Mining	_____ Distribution	_____ Hospitals
_____ Legal	_____ Retail	_____ Transportation
_____ Government	_____ Services	_____ Insurance
_____ Membership	_____ Education	_____ Agriculture
_____ Communications	_____ Miscellaneous	_____ Manufacturing

C2 If only a sub-segment of a SIC is desired, complete the desired SIC codes left-justified.

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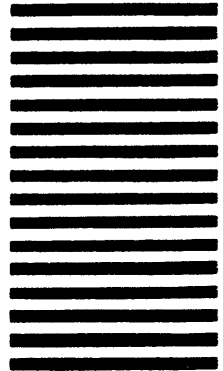


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