DESKTOP COMPUTERS

Not the Right Combination

WANG'S OFFICE ASSISTANT TRIES TO JOIN DEDICATED WORD PROCESSING, OTHER APPLICATIONS, WITH AVERAGE RESULTS

BY JOHN LOMBARDS

D edicated word processing systems for offices have been hit hard by the proliferation of personal computers and high-quality word processing software. More flexible and cheaper than the dedicated system, the personal computer seems destined to capture the American office. Wang Laboratories, which made its mark in office automation especially with dedicated word processing systems, has counteded the personal computer onslaught with hardware and software products that capitalize on the company's extensive experience.

The latest is the Office Assistant, which consists of a lightly integrated combination of bardware and software designed to create an efficient, single-user workstation for the business environment. The package reviewed has a high-resolution green screen, Wang keyboard, system unit with one disk drive, an additional disk drive, printer, word processing and text management software, system software, and Microsoft's Multiplan

Although it uses an Intel 80186 microprocessor and runs Multiplain, this hardware bears only a superficial relationship to an MS-DOS standard machine. It is only meant to be a Wang word processing system that also runs some other programs. The most telling sign: The two half-height, 360K disk drives produce disks incompatible with MS-DOS data disks. Instead of waiting for your action, the disk drives automatically read a disk when the door latch is closed. Therefore, you won the able to use any IBM PC-compatible programs with this machine or exchange data disks between Multiplan on a PC, for example, and the Wang machine.

inside the Office Assistant's system box, the main (in fact, the only) circuit board attached to the top shows no slots for add-on boards. The main board contains all the computer's chips, including the 80186

John Lombardi is a professor of history and the author of five books. He has been working with computers since 1567. His colleague E. Lane Bruće, who has extensive experience with dedicated Wang machines, contributed to this report.

microprocessor and 512K of main memory.

The Office Assistant comes on with a loud beep, repeated often when working through the many menus, a beep so loud that office workers are likely to rapidly become tired of the noise. (We could find no way to turn the sound down or off.) After the beep, it tests the hardware, then startle

InfoWorld

WANG OFFICE ASSISTANT

므므	. 8	F.	Good.	F.C.
Performance	-::	ø	⊐	r.
Documentation	_ 0	(P	П	
Ease of Use	U	C	P	Ξ.,
Setup .	ш	œ	ū	=
Serviceability :		·		Ω.

SUMMARY
Designed as a hybrid between Wang's

dedicated word processing machines and a personal computer, the Wang Office Assistant leaves some things to be desired. The word processing program is a faithful, though not complete, copy of the usual Wang software, and the supplied version of Multiplan works as it does on an IBM PC. But the incompatibities between this machine and existing applications, lack of software, and relatively high price make it an inadequate substitute for a personal computer.

PRODUCT DETAILS

List price, \$2,395 (basic model), \$5,949 (as tested). Basic model (2.1) contains an 80186 microprocessor running Wang proprietary operating system. Includes one disk drive: 256K RAM. Printers, 512K RAM, second disk drive optional; includes bundled word processing, text management, and Multiplan software. Manufactured by Wang Laboratories (pc., One Industrial Ave., Lowell, MA 01851; 617): 459-5000.

the system disk provided, which presents the first of an almost never-ending series of menus.

Like many dedicated word processing systems. Office Assistant leads you through all activities and functions with a menu. You continually select and choose, moving from menu choice to menu choice until you get to your work. Even after you are there, however, when you want to change, underline; delete, insert, or whatever, you either select from a menu or press a dedicated function key. The Office Assistant, because it mimics the Wang system, makes extensive use of the Wang key-board's many labeled function keys.

Within the Office Assistant world, everything belongs to an activity. Word processing, printing, forms, typewriter, filing, and maintenance are selected from a menu. You can set up some of these activities in memory at the same time, making it easy to switch from activity to activity, but there is a limit to how many activities and documents can be in memory at the same time.

Each time you begin an activity, you need to put a disk in one of the drives and select from the appropriate menu. When the activity is attached, you can use it simply by pressing a key.

The word processing program looks and feels much like the dedicated version that runs on any of Wang's shared processor machines. The Office Assistant is a faithful imitation of the real thing, although with some limitations. A major one is the great deal of disk shuffling that gees on as you work. After considerable experience and practice, we think this could be minimized, but the structure of the system encourages lots of disk changes.

Compared to Multimate, Wordstar, and other high-end word processing software for personal computers, the Office Assistant's word processing capability ranks about in the middle of the better programs, to does most of what you want but not always as easily or as gracefully as other programs. It does footnotes but doesn't renumber them, it does from our and copy but nothing longer than a page. Sometimes, not even that much will fit in memory. Moved or copied blocks must be remarked after each operation. The program handles mail-merge operations, but materials to be merged cannot exceed 256 characters.

A page-oriented word processor, the Office Assistant can handle pages 120 lines long, or no more than 8,000 characters per page. The largest document possible is about 40 to 60 pages, depending on content, and is limited by disk space. The largest possible page has 120 lines. Like most page-

oriented systems, the software handles page breaks less gracefully than documentoriented systems. The formatting capabilities of the system, however, are superior.

The high-resolution screen provides exceptionally clear characters and the software displays print enhancements on the screen. The screen represents an exact duplicate of the paper, so if you want a 10-space left-hand margin, you will have 10 empty spaces along the left margin of your screen throughout the document being edited. Under these conditions, only lines of 70 characters or less will fit on screen, although the Office Assistant will handle longer lines on the screen by using horizontal scrolling.

The filing and maintenance activities mentioned above take the place of operating system utilities for managing disks and files. Because the programming for each of these activities is contained on a separate disk, more swapping of disks becomes necessary.

The forms activity provides an excellent system for establishing formats for filling out preprinted forms. The system works well, allowing you to create a template on the screen that will match exactly, what appears on a preprinted form. You have to the setup only once using the system printer and the form; every time you need to fill out the form, you call up the forms activity, select the appropriate form, and fill it in. The Office Assistant and the printer type the information exactly where it should appear on the form.

The second interesting activity in this area is the typewriter mode, in which the Office Assistant and printer, become a typewriter. You can either type directly, each keystroke going mimediately to the printer, or type a whole line, correct it, and then send it to the granter. This system works nicely for envelopes and other odd-size items or quick notes.

The Office Assistant supports two different Wang printers. The unit we tested came with the better and faster of the printers the Wang PM014 daisy-wheel printer rated about 50 characters per second. It ziperight along and produces printing of excellent quality. The Office Assistant car support a wide range of daisy wheels including proportionally spaced fonts, all though you do have to use the printer disk to get those font instructions attached to the printing software.

The maintenance activity includes such functions as preparing disks, copying the system disk, changing keyboard characteristics, and installing optional software. It addition to the word and text managemen software that comes with the Office Assistant, the system has the capability to attact other software, although only program specially prepared for the Office Assistan

many dedicated word processing Office Assistant leads you through these and functions with a menu. You lify select and choose, moving from side to menu choice until you get to ork. Even after you are there, when you want to change, et delete, insert, or whatever, you select from a menu or press a function key. The Office Assiscause it minists the Wang system, extensive use of the Wang keymany libeled function keys.

in the Office Assistant world, every-longs to an activity. Word processing forms, typewriter, filing, and alone are selected from a menu. You up some of these activities in at the same time, making it easy to rom activity to activity, but there is to how many activities and docuan be in memory at the same time, time you begin an activity, you put a disk in one of the drives and sem the appropriate menu. When the is attached, you can use it simply by za key.

word processing program looks and uch like the dedicated version that any of Wang's shared processor as. The Office Assistant is a faithful nof the real thing, although with militations. A major one is the great disk shulling that goes on as you after considerable experience and a we think this could be minimized, structure of the system encourages

lisk changes.

ipared to Multimate, Wordstar, and ightend word processing software sonal computers, the Office Assisward processing capability ranks the middle of the better programs, most of what you want but not as easily or as gracefully as other. It does footnotes but doesn't ser then, it does move and copy but longer than a page. Sometimes, not at much will fit in memory. Moved or blocks must be remarked after each on. The program handles mail-merge ons, but materials to be merged exceed 256 characters.

sage-oriented word processor, the Assistant can handle pages 120 lines roo more than 8,000 characters per Trie largest document possible is 0 to 60 pages, depending on content, limited by disk space. The largest page has 120 lines. Like most page

REVIEWS

oriented systems, the software handles page breaks less gracefully than oriented systems. The formalling capabilities of the system, however, are superior.

The high-resolution screen provides exceptionally clear characters and the software displays print enhancements on the screen. The screen represents an exact duplicate of the paper, so if you want a 10-space left-hand margin, you will have 10 empty spaces along the left margin of your screen, throughout the document being edited. Under these conditions, only lines of 70 characters or less will ful on screen, although the Office Assistant longer lines on the screen by using horizontal scrolling.

The filing and maintenance activities mentioned above take the place of operating system utilities for managing disks and files. Because the programming for each of these activities is contained on a separate disk, more swapping of disks becomes necessary.

The forms activity provides an excellent system for establishing formals for filling out preprinted forms. The system works well, allowing you to create a tremplate on the screen that will match exactly what appears on a preprinted form. You have to do the setup only once using the system printer and the form; every time you need to fill out the form, you call up the forms activity, select the appropriate form, and fill it in. The Office Assistant and the printer type the information exactly where it should appear on the form.

The second interesting activity in this area is the typewriter mode, in which the Office Assistant and printer become a typewriter. You can either type directly, each keystroke going immediately to the printer, or type a whole line, correct it, and then send it to the printer. This system works nicely for envelopes and other odd-size items or quick notes.

The Office Assistant supports two different Wang printers. The unit we tested came with the better and faster of the printers, the Wang PM0.14 daisy-wheel printer, rated at about 50 characters per second. It aips right along and produces printing of excelent quality. The Office Assistant can support a wide range of daisy wheels, including proportionally spaced fonts, although you do have to use the printer disk to get those font instructions attached to the printing software.

The maintenance activity includes such functions as preparing disks, copying the system disk, changing keyboard characteristics, and installing optional software. In addition to the word and text management software that comes with the Office Assistant, the system has the capability to attach other software, although only programs specially prepared for the Office Assistant.



The Office Assistant from Wang attempts to bridge the gap between dedicated word processing machines and personal computers, without much success.

environment will work. This test system came with Multiplan 2.1, which attaches to the system with the name Plan. This version of Multiplan works just like it does on the IBM PC.

Because the Wang Office Assistant is a non-standard system, products from the IBM PC or other microcomputer libraries cannot be attached. Moreover, once you have installed a program on one Office Assistant, it will not work on any other. Office Assistant, although you can make backup copies. Worse yet, there are no instructions provided for moving text files from the Office Assistant to any other computer system. For a machine that might be attractive in an environment with dedicated Wang machines and IBM PCs, the capability to move files would be a major advantage.

The documentation that comes with this system is quite extensive and serves well as user training manuals. The large, clear, and comprehensive Word Processing Training Guide offers excellent instruction on the basics and includes some technical information not included in the user guide. The user guide provides a reference manual for each of the activities and menus available in the system. Both manuals include descriptions of error messages and indexes, although the indexes are a bit skimpy. Our copy of Multiplan did not come with a manual, although one is evidently available.

The printer manual has good instruc-

tions and a technical specification section that outlines its capabilities. There is also a good Unpacking and Installation Gurde and an update with various errata identified. The system includes a small scheduling program that can send phone numbers to a compatible telephone device. We did not test this feature.

Wang is famous for lots of support, and this product has several levels of assistance. First, there is a toll-free hot line that provides prerecorded information on a wide range of topics. You need a touch-tone phone, as well as persistence, to use this system. We called on Sundays, evenings, tate nights, and early mornings and always got busy signals. There is also a call-back support service for more complex technical problems that we did not use. The manuals say these services are available for a period of time but don't specify that period.

On balance, the Wang Office Assistant might be a good choice for a Wang office environment in which strict control over machines and software may be desirable. The word processing software with the product is adequate for office use but not any better than what is available on standalone machines from many manufacturers. The closed nature of the system, the lack of alternative additional software and other accessories, and the difficulty of transferring files severely limits the usefulness of the Wang Office Assistant as a substitute for a full-feature personal computer.