

comletter

OCTOBER 1979 No. 8

TWO MONTHS TO GO

Only two months remain before the International Conference of Wang Users begins. Scheduled for December 3rd, 4th, 5th, and 6th at the Sheraton-Boston Hotel, estimates point towards a record high attendance of 1000 people.

"Helping People Achieve," our Conference theme, is dedicated to the advancement of the Wang Systems user. This year our Conference will be a joint meeting of both the computer and word processing Societies (WSUS and WOSUS). Directed towards both operations and technical management personnel, the sessions will be organized for both the novice and veteran user.

Sessions on "The VS — Advancing the State of the Art," "2200 Remote Computer Pooling System," "Human Resource Management," "Overview of Telecommunications," "Everything You Wanted to Know About the MVP, But Haven't Had a Chance to Ask," and "Human Resource Management" are just a few of the industry topics that will be discussed. There will also be many opportunities for you to meet with the Wang staff, as well as attend the customer presentations, product demonstrations, question-and-answer periods, and new product announcements.

Do-It-Yourself Workshops — your chance to talk to other users about common interests and ideas — will be held throughout the Conference. Wang Laboratories will provide the room for your informal workshop, and you provide the discussion. When registering, watch for the bulletin board to reserve your time and place.

As a special highlight, Vance Packard, author of **The Hidden Persuaders**, will be the guest speaker at Tuesday evening's banquet. Recognized as one of the most perceptive social critics of our time, his address will discuss the changes which are shaping our lives: trends on how we will travel, how our homes will be reshaped, how long we will live, new patterns of intelligence,

reproduction, education, work and leisure.

To register or to receive more information about the Conference, contact Doug Belnap, Conference Coordinator, at (617) 851-4111.

A COMBINED DATA AND WORD PROCESSING NEWSLETTER?

In addition to COMLETTER, which is published for WSUS members, Wang currently publishes THE IDEA EXCHANGE, a newsletter for our Word Processing (WOSUS) members. COMLETTER addresses only data processing while THE IDEA EXCHANGE addresses only word processing.

In light of the fact that the data and word processing functions are gradually merging, resulting in the burgeoning concept of total office automation, we are giving serious consideration to combining these two Societies' newsletters so as to better reflect the relationship between data and word processing. This would not mean the content of these publications, as Societies' members have known it, would change. Rather, the content of each would simply be combined in one newsletter.

We are interested in knowing how you feel about this and would appreciate your sending us your thoughts.

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Have something to say?
Or a question to ask?

Send your comments to:
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Editor, Comletter

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Lowell, MA 01851

or
Call: (617) 851-4111 x2028

LOCAL USERS NEWS

Two local users groups met recently, one in St. Louis and the other in New Jersey.

The St. Louis Wang Users reported that the By-Laws for the organization were unanimously accepted. Robert Levin, President of the St. Louis group, reminded the membership that their newsletter could be used for advertising equipment or soliciting information.

The remainder of the meeting was devoted to a presentation by Doris Goldman of Viacomp Systems about her search for "Loveable Wang Systems," and a discussion of phototypesetters by Bruce Bramon of Wang Laboratories.

The New Jersey Chapter voted to have a Board of Directors (instead of Officers) who would share the responsibilities of organizing and running the meetings. There was also a discussion as to the possibility of organizing a basic programming course in the Northern New Jersey area, to be followed by an elementary and intermediate course. Those who are interested should contact Les Stern, a member of the WSUS Advisory Board, at (201) 884-0920.

The remainder of the meeting was devoted to a question and answer period, a technical session for programmers, a non-technical session for managers, and an overview of WSUS on a national and local level.

Anyone who would like more information about the New Jersey Chapter should contact Les Stern at the aforementioned telephone number or Del Reedy at (201) 335-9163.



VS-100

The VS-100 is a transaction driven, commercial data processing system that will support many devices, including up to 128 workstations. These devices can be selected from all of those presently offered on the VS except the 2260V - 10MB disk drives and any parallel devices.

The VS-100 is the largest and newest addition to Wang's general-purpose VS business systems. It is substantially faster and offers greater capacity for file storage than the VS. It will also support concurrent execution of multiple job streams, both batch and interactive. Application programs may be written in a variety of programming languages, all of which can share files.

The VS-100 is offered with main memory sizes starting at 256K bytes, and can grow to a maximum 2.048 megabytes in 256K byte increments. The system's main memory is augmented by a 32K cache memory to provide high-speed read access to the Central Processor. Data is transferred between system components by means of a 64-bit Systems Bus; input and output devices are interfaced via 16-bit data paths.

The system supports all serial devices currently offered on the VS. These devices interface with the system through microprogrammed IO processors, which will be modified via Wang provided microcode to utilize the larger memory space of the VS-100. This modularity and flexibility in design allows for the compatibility of devices and programs now associated with the VS. Microprocessor program changes will be supplied by Wang Laboratories when devices are transferred from a VS to a VS-100.

The VS-100 has enhanced error detection and isolation features. Errors are automatically corrected by techniques utilizing integrity checks in main memory, system bus transfers, and reposition/retry for disk operations. An error transaction log, maintained on disk, records errors occurring on the high speed system bus which interconnects main memory, the central processor, and all input/output devices. The recording and later review of errors will enhance

serviceability and provide for higher "up time" since marginal devices can be repaired before they fail.

2200 Disk Catalog Index Structure

The following description of the 2200 disk catalog index is intended to give the experienced BASIC programmer the information needed to examine the disk index in manners other than those provided by BASIC disk statements. BASIC statements, such as Form 2 of LIMITS and :ERROR on the VP/MVP are to be preferred over examining the disk index with DATALOAD BA. For programmers of earlier 2200 systems, the ISS package provides some useful subroutines such as SEARCH INDEX ('229), which is similar to Form 2 of LIMITS in BASIC-2, and LIMITS NEXT ('226), which is similar to LIST DC.

The need to search the disk index with DATALOAD BA usually arises because of the need to emulate the LIST DC statement: LIMITS can be used to find out about files known to exist on all 2200's. In BASIC-2, LIMITS can also find out about files thought to exist. There is, however, no BASIC statement that allows a program to find out what files actually exist.

The safest way to search the disk index is to use DATALOAD BA to extract the file names and then use LIMITS to get the rest of the data on the file.

The catalog index is always stored on the first sectors of each platter and may consist of 1 to 255 sectors. Each sector of index can hold sixteen file entries, except for the first sector which can hold fifteen. The first entry is sector 0 and describes the platter layout as follows:

byte

- 1* = 00 (or 80)
- 2 = number of index sectors (1-255)
- 3,4* = sector address of the next sector in the catalog area available for storing the next file
- 5,6* = sector address +1 of the last sector in the catalog area
- 7-16 = unused

All other entries in the index are file descriptors where:

byte

- 1 = file status.
 - 00 if unused entry.
 - 10 if active file.
 - 11 if scratched file (the file area is still reserved and file descriptor information still applies).
 - 21 if file area has been reused (a new file has been created using the file area originally reserved for this file. The file descriptor information in this entry no longer applies).
- 2 = file type
 - 00 if data file
 - 80 if program file
- 3,4* = starting sector address of the file
- 5,6* = ending sector address of the file
- 7,8 = unused
- 9-16 = file name

*Early 2200's used the high-order bit of sector addresses and the first byte of the index to indicate fixed (0) or removable (1) platter. This bit is now ignored by all 2200's for disk units utilizing 15-bit sector addresses (e.g., 2270, 2260B, 2260C, 2260BC). The 2200VP/MVP always records this bit as 0. Newer disk drives (e.g., 2280) for the 2200VP/MVP utilize a 16-bit sector address; hence, the high-order bit is significant for these drives. The 2200VP/MVP supports two different disk sequences: one ignoring the 16th bit for compatibility with older 2200 disk platters and the other using 16-bit addresses for the newer disks. If LIMITS is used to get the start and end addresses, the user need not be concerned with whether or not 15- or 16-bit addressing is being used.

VP to MVP UPGRADE

In order to determine what is required for a VP to MVP upgrade the following items must be checked:

1. The only terminals supported on the MVP are the 2236D and 2236DE. These are controlled by

either a 223 MXD or 22C32 triple controller. (See the last issue of Comletter for details on the 22C32).

- The only diskette drive supported on the MVP is the 2270A. Even if you have a 2270A, it may need an update to make it MVP compatible.

2270-2270A conversion
(Part #200-0270) —
\$400 plus installation

- All hard disks (2230, 2260, etc.) may be used on the MVP. The disk controller may require updating as mentioned in point 4.

- Disk controllers must be inspected to insure that they are MVP compatible. The 2224 disk multiplexer and 22C31 are not supported. Older 22C03 controllers may require updates.

22C03 disk controller —
\$200 plus installation
22C11 printer/disk controller — \$200 plus installation
22C32 printer/disk/2236 terminal — \$200 plus installation

- All printers except the 2202 plotting typewriter are usable on the MVP. All plotters compatible with the 32-pin 22C02 printer controller may also be used.

- Printer controllers remain the same on the MVP. The only reason to replace the controller is if the one presently used is part of a 22C31 triple controller.

22C02 printer controller —
\$200 plus installation

- VP-to-MVP CPU conversion and subscription to MVP system software releases:

VP to MVP upgrade
(Part #200-0200-2) —
\$2000 plus installation

- Peripherals not supported or offered on the MVP are:

2210A/B	2207A	2226 A/B
2250	2209	2252A
2270	2254	2244A
2202	2203	

Wang Classified

for those who buy or sell!

FOR SALE

2200T-6, 2210B, 2227B, 2281, S. Lugert, P.O. Box 439, Peck Slip, N.Y. 10038, 212/438-0949.

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Wang 2200T-4, 16K CPU; 2226A CRT/keyboard, 112 in., (64x16); 2221W, 200 cps matrix printer; 2270-3 .75MB triple floppies, 8002-5 desk, CRT cutout, disk enclosures; 8006-5 2231W printer stand. System is three years old and has been under a maintenance contract for the entire period. The system has been used for bi-monthly payroll for 35 employees. Gerald E. Nichols, 333-Y Troy Circle, Knoxville, Tenn. 37919, 615/584-2311.

...

2200C, 24K, with GIO and SORT ROMS, screen and keyboard, and 2230MX Disk Multiplexer; 2200WS, 24K Disk Work Station; 2260 10 Meg Disk Unit; 2270-1 diskette unit; 2221 matrix printer. David Fitch, Lifestream Natural Foods, 12411 Vulcan Way, Richmond, British Columbia, Canada V6V 1J7, 604/278-7571.

new Wang advertising

If you want to catch the action, be sure to tune into the Wang 1979 Television Advertising Schedule. Based on Eastern Standard Time, TV spots are as follows:

The CBS NFL Pre-game show	Nov. 22 Dec. 15, 23, 29, 30	Times to be announced
Walter Cronkite's CBS Evening News	Oct. 3, 25 Nov. 23 Dec. 25	6:30-7:00 p.m.
The NBC Today Show	Oct. 22 Nov. 13 Dec. 15, 27	7:30-8:00 a.m.
NBC Meet The Press	Oct. 7, 14, 21, 18 Nov. 4, 11, 18, 25 Dec. 2, 9, 16, 23, 30	12:30-1:00 p.m.

WANTED

PCSI-4. John Hammond, John F. Hammond, CLU, 55 Mitchell Boulevard, Suite 6, San Rafael, Calif. 94903, 415/479-3013.

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2200 VP CPU; 2200 MVP CPU; 5 MB disk units; 2261W printer. Clem Ogden, Abel/Noser Corp., 90 Broad Street, New York, NY 10004, 212/344-2610.

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