

# WANG SYSTEMS NEWSLETTER

17

WANG



# Systems Newsletter

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SYSTEMS NEWSLETTER  
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## PEOPLE HIGHLIGHTS

### 2200 SERIES SOFTWARE PRODUCT MANAGER APPOINTED

The 2200 Market Planning and Development group is pleased to announce that John A. Sullo has joined Wang Laboratories as 2200 Series Software Product Manager. As 2200 Series Software Product Manager, John's responsibilities will include coordinating development of all 2200 Series Software, developing market specifications for new software packages, and field release of all 2200 Series software, which includes applications, utilities, and system software.

John joins Wang from Infotecs, Inc., a Southern New Hampshire-based minicomputer manufacturer. John was responsible for all application software development for Infotecs in addition to staff management and development of policies and procedures. Prior to Infotecs, John spent three years at Sanders Associates and has many previous years of system design/analysis experience. John graduated from Boston College earning a B.S. in Management and Computer Science.

## SOFTWARE — NEW OR IMPROVED

### NEW VS SOFTWARE RELEASE

VS software release 4.1.8 is now being distributed. The release provides the following support:

Ability to support 43 separate user tasks, of which up to 32 can be workstation-based tasks.

Ability to support all serial workstations.

Support of the band printers and the electronic VFU.

Support of OIS-based word processing capabilities.

Support for 3270 telecommunications.

Various corrections, additions, and improvements to the operating system.

This release does not provide support for remote workstations and the modem sharing unit.

## GBS/MVP RELEASE 1.0/2.0 COMPATIBILITY

Below is a brief explanation of the compatibility between Rel. 1.0 and Rel. 2.0. There has been much debate in the field as to the fit of GBS/MVP Rel. 2.0. The following should put any misunderstanding to rest.

With all modules of GBS/MVP Rel. 2.0 now available, it is important to isolate its position in the market against its predecessor, GBS/MVP Rel. 1.0.

Rel. 2.0 is intended to be a totally new system, available, modifiable, and installable in the new account, new business market, or as a complete replacement of an existing GBS/MVP Rel. 1.0 installation. This means that a currently installed system Rel. 1.0 with all modifications must be completely replaced by Rel. 2.0. All customizations made to Rel. 1.0 must also be included in the Rel. 2.0 version.

Under no circumstances is the Rel. 1.0 version to be interfaced with Rel. 2.0 or vice versa. For example, if a present Rel. 1.0 user of Order Entry and Accounts Receivable wants to install Rel. 1.0 General Ledger on their system, Rel. 1.0 General Ledger/Accounts Payable must be ordered, not Rel. 2.0, even though Rel. 2.0 may be more advantageous.

For further clarification, please contact the Technical Information Center at Extension 2665/2666.

## TECHNICAL NOTES

### OPTIMIZING 2236 CRT OUTPUT SPEED

The method for producing the fastest possible output on the CRT of the 2236D or 2236DE terminal turns out to be the most natural use of the BASIC PRINT and PRINT USING statements. The speed of the serial communication line between the Terminal Processor (2236MXB or 22C32) and the Terminal imposes the most significant restriction to CRT output speed. The Terminal Processor automatically compresses strings of three or more identical characters into a shorter form for more rapid transmission. Basic programs can do little to significantly enhance CRT output speed beyond the automatic optimization performed by the Terminal Processor. In order to compress data, the Terminal Processor must see the context of characters being transmitted. The end of a BASIC statement or the end of a partitions timeslice causes the Terminal Processor to see a break in the context of data. For instance, the slowest way to output five asterisks is:

The following methods of printing five asterisks are equivalent in speed:

```
PRINT "*****"
PRINT A$ — where A$="*****"
PRINT "*****"
$GIO (A000) STR(A$,5) — where A$ = "*****"
```

The fastest method of positioning the cursor to a random place on the CRT is the PRINT AT() Function. Thanks to data compression, the series of line feeds and nondestructive write codes generated by the AT() Function is optimized for rapid transmission.

### POS WITHIN A LITERAL

The BASIC-2 Language supported on the 2200VP and 2200MVP extends the BASIC Language supported on earlier 2200 CPU's by allowing literals enclosed in quotes or HEX literals in most places where the earlier WANG BASIC restricted the program to alpha variables only, and vice versa. A particularly useful instance of this is the POS Function. By specifying the first argument of the POS Function as a literal and the last argument as a variable, the POS Function becomes a means of comparing a one-byte variable against a list of one-byte alternatives. The POS Function returns a number corresponding to an alternative; counting from left to right if there is a match, or zero if there is no match. When POS within a literal is combined with ON GOTO, the program has a convenient means of dispatching to several places depending upon one-byte subroutine return codes, such as those returned by KFAM.

Example 1:

```
100 GOSUB '232(I,P,A$): ON POS ("NXB" = Q$) GOTO
110,120,130,140
110 STOP "ERROR N: Key not found."
120 STOP "ERROR X: File not open."
130 STOP "ERROR B: Record in use."
```

Example 2:

```
100 LINPUT "Do you wish to continue (Y or N)?",A$
110 ON POS(YyNn" = A$) GOTO 200,200,130,130
120 PRINT HEX(07); "Answer Y for YES or N for NO!":
GOTO 100
130 STOP "End of job."
```

### HIGHEST SECTOR ADDRESSED ON 2270A DISKETTES

The highest sector address available on the 2270A diskette drives is 1231. Many 2200 users have developed the habit of only using the diskette out to sector 1023, the highest sector address available on the 2270 Drive. If you have an MVP system, your diskette drives are 2270A's. If there is no reason for your installation to remain compatible with 2270 drives, you should take advantage of the extra storage capacity offered on the 2270A. Check your diskettes with LIST DC

Command. If the end of the catalog area is 1023 and the diskette was formatted on a 2270A drive, you may enlarge the catalog area to sector 1231 with the MOVE END command and gain 52K bytes of storage.

## NEWS YOU CAN USE

### GBS/VIS USAGE CHANGE

As of January 1, 1980, the following prices will be effective for GBS/VIS. Please make note of the usage which has changed from the past as well as the price.

Single Use	\$ 1,500 Per Application
12 Use Multiple Use	\$ 3,000 Per Application
25 Use Multiple Use	\$ 4,500 Per Application
50 Use Multiple Use	\$ 6,750 Per Application
100 Use Multiple Use	\$10,000 Per Application

The conversion of a single-use license to a multiple-use will be done at 50%. This means that 50% of the cost of a single-use license will be credited to the multiple-use license of the same application.

### CONSULTANT SOFTWARE DIRECTORY

The Consultant Software Directory has now been distributed to each Wang field office. It contains pertinent information concerning many of the vertical market packages which are available from the Wang network of software consultants. The directory is in the charge of the field analyst in each office. Vendors may contact the analyst in their local area if they wish to seek entrance to the directory or examine its contents. However, it will remain a Wang proprietary document.

Updates and future releases covering additional vertical markets are coming soon. This should expose some good packages, and generate hardware sales.

Any questions concerning the directory, which cannot be handled locally, should be directed to Pete Donlan at the home office in Lowell. (You may use the abstract mailer in the back of this Newsletter if you wish.)

### DIRECT LINES FOR SUPPLY ORDERING

Any U.S. customer or vendor wishing to order supplies directly from the home office may do so on our new direct lines.

Dial: 800-225-0234 or (617) 256-1400

Vendors: To ensure prompt service, please specify that you are a Wang vendor when you phone for supplies.

NOTE: It is impossible to transfer from these lines to other home office extensions.

## **"FACTS" — The Latest In Wang Training**

The Education Department is undergoing a total rewrite of all courses. This program, known as "FACTS," has been undergoing active development since last fall. The results of this effort will begin to appear sometime this spring. Much of the material will be given at branch or area training centers now being established throughout the United States.

The training programs for new Wang sales personnel — sales representatives, systems analysts, and customer service representatives — are tailored for each position. A pretraining evaluation determines job-skill levels in Wang terms and the areas of training needed for a particular position.

The first stage of training involves a self-teaching program at the branch office or area training centers. A staff of product-line instructors assists students while they gain hands-on experience with Wang systems. Then they return to their branch offices for on-the-job assignments with experienced Wang personnel. Finally, the students will visit our home office Training Center for advanced, formal classes on Wang products, industry marketing, sales productivity, and sales/support techniques.

Training doesn't end here. After the students are in the field, a combination of formal and informal training keeps them up-to-date on product introductions/changes and marketing strategies.

## **COMPUTER CAMP**

This summer, youngsters can sign up for an overnight camp in Moodus, Connecticut, where the main activity will be ... COMPUTERS. This unique recreational and educational experience is directed by Dr. Michael Zabinski, a Professor at Fairfield University. It is believed to be the only summer overnight computer camp currently offered in the U.S.A.

An action-packed week is planned from June 29 to July 4. The campers, ages 10-17, will enjoy small-group instruction and mini and microcomputers for ample "hands-on." Dr. Zabinski will be assisted by high school teachers.

The camp is for kids of all levels of experience including no experience whatsoever. In addition to computers, the campers will enjoy the superb recreational facilities of the Grandview Lodge, including swimming and tennis.

For further information, contact Michael Zabinski, Ph.D., at (203) 795-2069, or write Computer Camp, Grandview Lodge, P.O. Box 22, Moodus, CT 06469.

## **USER'S SOCIETY COMBINED**

The Wang User Societies known as the Wang Office Systems Users Society (WOSUS) and the Wang Systems Users Society (WSUS) have been merged and now have a new name. The new name, which was first announced to our users at our December conference, is the International Society of Wang Users, which will be made up of both word and data processing customers and will continue to provide existing users services.

The merging of the two societies reflects the overall industry and company direction toward the use of Integrated System products. We anticipate that the International Society of Wang Users will be enthusiastically received by our customers and intend to see that it becomes recognized as the best word and data processing users' group in the industry.

## **NEW PRODUCTS**

### **WANG DATA CENTER ANNOUNCES TSO**

A Time Sharing Option, known as TSO is now available for use by Wang's Data Center customers.

With TSO, the execution of each job is controlled primarily by the remote terminal user. The user can enter problems, statements and other input into the system as they are developed, and receive immediate results via CRT, thereby improving job turnaround. As a user, one is able to be constantly aware of the progress of a job within the system.

## **BOOK REVIEW**

### **IMPLEMENTING SOFTWARE FOR NON-NUMERIC APPLICATIONS**

William M. Waite  
Prentiss - Hall, 1973  
110 Pages Hard Cover \$21

*Implementing Software For Non-numeric Applications* is a textbook on list and string processing languages. It covers the basics of lists and strings, and how to implement languages in order to deal with these data types. There are two major reasons why a computer hobbyist might want to read this book: to learn how such languages work and to learn how to implement them.

Most of the book is about list. It begins with the discussion of what lists are, and then presents an ideal machine for

processing them (cf Pascal p-code), a fairly simple list-processing language called HELP, and then LISP. The discussion of LISP focuses fairly heavily on what LISP does internally and why. After more discussion of complex LISP, the book proceeds to a discussion of strings; SNOBOL 4 is introduced but not discussed in the detail that LISP is treated. The final section is on implementation.

The author of the book favors implementation by abstract machine modeling; this is the way in which Pascal is implemented. It has the advantage that a compiler or an interpreter, once written, can be implemented on new machines with much less effort than would otherwise be the case. The discussion of implementation is more than just theoretical; the appendices contain complete FORTRAN listings for an abstract machine model, and for HELP language compiler and interpreter.

HELP is a language similar to LISP. The software may be directly implemented if you have a FORTRAN compiler; otherwise, it has to be translated into Assembler (or perhaps BASIC, if execution speed is not important). I cannot say how successful this would be; I already have LISP for my Z80 processor and so was not tempted to implement HELP.

In conclusion, this book is fairly heavy going. If you want a thorough introduction to how LISP languages work, why they do what they do, and how to implement them, this is an excellent book. If you want an introduction to LISP, it would probably be better to first read an introductory text. Then read *Implementing Software for Non-numeric Applications* to really understand the way things work.

John A. Lehman  
716 Hutchins, No. 2  
Ann Arbor, MI 48103

## RECENT PUBLICATIONS

The following items have been released from Lowell between January 1, 1980, and January 31, 1980.

### DATA SHEETS

2281W Printer/Plotter Data Sheet (700-5743)  
2200 IDEAS (Inquiry Data Entry Access System) Data Sheet (700-5747)  
WP PIO Phototypesetter Input Option (Paper Tape Punch and Translator) Data Sheet (700-4420C) 1/29

### MANUALS

GBS/MVP Payroll User Manual (Interim) (700-5759)  
OIS Supervisor's Reference Guide (700-5741)  
OIS Operator's Reference Guide (700-5740)  
OIS Operator's Guide Rev. 2.1 (700-5739)

OIS BASIC Language Reference Manual (700-5750)  
WP Procedures Model for Office Systems Supervisors (700-5738) 1/14

### BULLETINS

VS Software Bulletin #3 (800-3100-03)

### REPRINTS

Word Processor 5541WC Wide Carriage Printer Data Sheet (700-4786A)  
OIS Supervisor Procedures (Interim) (700-5562A)  
VS Operating System Services Pocket Guide (800-6204OP-02)  
Word Processor Twin Sheet Feeder User Manual (700-4664B)  
2200 BASIC Language Summary Card (700-3500F)  
PCS II Text Editing Utilities User Manual (700-4452B)  
OIS/130 Data Sheet (700-5016C)  
VS System Software Data Sheet (800-2101-04)  
Word Processor 5, Model II Data Sheet (700-4735D)  
VS System Management Guide (800-1104SM-03)  
Word Processor IP41F Intelligent Image Printer Data Sheet (700-5060B)  
VS/WP Integrated Information System Data Sheet (800-2103-03)  
2254 IEEE-488 Interface Data Sheet (700-4008C)  
OIS Forms Management Application Sheet (700-5285A)  
GBS/VS General Ledger Application Manual (800-1404GL-03)  
VS Peripherals Data Sheet (800-2102-05)  
Printer Spacing Chart (700-3181D)  
SARS Attendance Introductory Manual (700-4701B)  
Word Processor 30 Configuration Poster (700-5219A)  
Synchronous/Asynchronous Communications Controller User Manual (700-4670A)  
OIS/130 Configuration (700-5053C)  
Graph Utility System Application Data Sheet (700-4322A)  
Word Processor 25 Configuration Guide (700-4685F)  
OIS/6550-1 WISE (Wang Inter-System Exchange) Data Sheet (700-5532B)  
Word Processor Typeface Listing (700-5021C)  
Buffered Asynchronous Communications Controller User Manual (700-4114C)  
VS PROCEDURE Language Reference Manual (800-1205PR-02)  
VS Release 4.01 Sysgen Procedure (800-8201SP-02)

## TRADE SHOWS AND EXHIBITS

### TRADE SHOW EXHIBIT SCHEDULE FEBRUARY 1, 1980

Feb.		
5 — 6	ROAD SHOW	Portland, OR
6 — 8	Alaska Surveying & Mapping Conference	Anchorage, AK
14 — 15	ROAD SHOW	Atlanta, GA
14 — 16	Minnesota Land Surveyors Association	Bloomington, MN
19 — 20	ROAD SHOW	Kansas City, KS
21 — 24	Southern Educational Congress of Optometry	Atlanta, GA
26 — 28	1980 IWP Spring Symposium	New York, NY
26 — 29	Info Trek '80"	Denver, CO
27	Nat'l Secretaries Assoc. Seminar	Tulsa, OK
27 — 28	ROAD SHOW	Miami Springs, FL
March		
3 — 5	NCC Office Automation Conference (National)	Atlanta, GA
4 — 5	IWP Equipment Show	Albuquerque, NM
5 — 6	ROAD SHOW	Boston, MA
11 — 12	Data Processing Management Assoc.	Bloomington, MN
11 — 12	ROAD SHOW	Tampa, FL
11 — 13	Vancouver Island Business Show	Victoria, BC
11 — 13	Firelands Business Fair	Sandusky, OH
12 — 13	ROAD SHOW	Chicago, IL
13 — 16	Gutenberg Festival	Long Beach, CA
17 — 20	Interface '80 (National)	Miami Beach, FL
19 — 20	Federal Office Systems Expo	Washington, DC
19 — 21	WP X-Change 1980	Seattle, WA
19 — 21	Computer & Office System Expo 80	San Mateo, CA
25 — 26	ROAD SHOW	Dallas, TX
25 — 27	Southwestern Computer Conference	Oklahoma City, OK
30	1980 Annual Builder Mart	Baltimore, MD
30 — Apr 2	Oregon Dental Association	Portland, OR
Apr.		
1 — 2	ROAD SHOW	Bloomington, MN
1 — 2	ROAD SHOW	San Diego, CA
1 — 3	Word Processing Exposium 80	Lake Geneva, WI
3 — 10	Southern Int'l Knitting & Machinery	Greensboro, NC
11 — 12	Kentucky Society of Prof. Engineers	Mitchell, KY
12 — 19	Print '80	Chicago, IL
15 — 17	Cleveland Business Show	Cleveland, OH
15 — 17	MOSES '80	Indianapolis, IN
17	AMS/IWP Business Show	Towson, MD
18 — 23	Tri State Hospital Assembly	Chicago, IL
21 — 23	DPMA Region II Spring Conference	Eugene, OR
23 — 25	National Conference on Law Office Economics and Management (National)	San Francisco, CA
24	IWP Seminar	Des Moines, IA
28 — 30	Federal DP Expo	Washington, DC
29 — 30	WP Association of Minnesota	Minneapolis, MN
29 — May 1	Piedmont Industrial Show	Greensboro, NC
30 — May 2	Computerized Office Equipment Expo	Rosemont, IL
30 — May 3	Association of Legal Administrators Conference (National)	Miami, FL



<b>May</b>			4 — 5	Office Systems West	San Francisco, CA
7 — 9	DPMA Business Expo	Tampa, FL	24 — 26	IWP Syntopian VIII	Minneapolis, MN
14 — 15	Industry and Business Expo '80	St. Louis, MO	<b>Sept.</b>		
19 — 22	National Computer Conference (National)	Anaheim, CA	10 — 14	Spotlight Columbus	Columbus, OH
21 — 23	New England Computer Conference	Merrimack, NH	<b>Oct.</b>		
21 — 23	Produx 2000, Inc.	Philadelphia, PA	30 — Nov 1	Print Pacific	San Francisco, CA
<b>June</b>			<b>Nov.</b>		
3 — 6	Southern California Business Show	Los Angeles, CA	4 — 6	WP & Office Equipment Show	San Jose, CA



To help us to provide you with the most useful information possible, please make your comments and suggestions concerning this publication of the form below. Then detach, fold, tape closed and mail to us. All comments and suggestions become the property of Wang Laboratories, Inc. For a reply, be sure to include your name and address. Your cooperation is appreciated.

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TITLE: **Wang Systems Newsletter**  
**Comments, Criticisms, Suggestions, Etc.**

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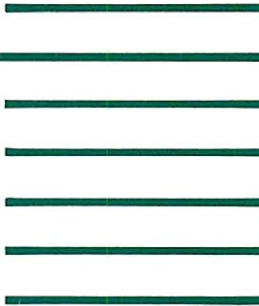


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Attention: System Support Coordinator — Marianne Roy

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**SOFTWARE PACKAGE LISTING**

**DATE:** \_\_\_\_\_

VENDOR: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONTACT: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

INDUSTRY: \_\_\_\_\_

APPLICATION: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_  
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INDUSTRY: \_\_\_\_\_

APPLICATION: \_\_\_\_\_

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INDUSTRY: \_\_\_\_\_

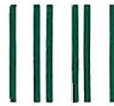
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MINIMUM H/W CONFIGURATION: \_\_\_\_\_  
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Attention: Peter Donlan — System Support Coordinator

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<b>Colorado</b> Englewood	<b>Illinois</b> Chicago Morton Park Ridge Rock Island Rosemont	<b>Minnesota</b> Eden Prairie	<b>North Carolina</b> Charlotte Greensboro Raleigh	<b>Tennessee</b> Chattanooga Knoxville Memphis Nashville	
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Dominican Republic	Norway
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Finland	Portugal
Ghana	Saudi Arabia
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