25b)

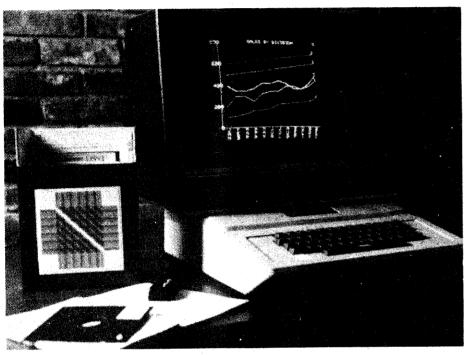
Inexpensive Business Computing

SUMMER'81

Volume 7, Issue 1

Computer Faire, 333 Swett Road, Woodside CA 94062

(415)851-7075



Addison-Wesley's new Micro-DSS/Finance programming language

Software Breakthrough Brings Full-Scale Financial Decision Support to the Microcomputer

Addison-Wesley Publishing Company, a major publisher of educational, technical, business and professional materials, announced this week the July publication of Micro-DSS/Finance, a powerful financial modeling and planning language for the microcomputer. It is the initial publication in Addison Wesley's new Practical Computing Series of software.

Micro-DSS/Finance (DSS/F) is the first microcomputer software to provide the financial manager/analyst with virtually 90% of the features most time-sharing users will ever need. In its year of field-testing, it has been used in a variety of large and small business settings.

A number of financial functions are built into DSS/F, providing automatic calculations at the press of a button (ie: depreciation, internal rate of return net present value, amortization, break-even analysis, tax table look up and tax loss carry-forward). DSS/F will even calculate when is the best time to switch from one type of depreciation to another, and it is capable of solving simultaneous equations. It also allows the user to change the data in a model without changing the model itself—ideal for managers who want to have someone else generate reports.

Another distinctive feature is the flexible report writer, which allows the user to design reports to meet his or her specifications, and which has such automatic features as decimal placement reporting, commas inserted between thousands, brackets around negative numbers, and centered headings... all designed to make financial reports look less like computer printouts and more

like financial reports. To make it easier to input data, DSS/F will generate its own worksheets with blank spaces for needed data.

DSS/F helps the financial manager analyze past performance and monitor current performance; forecast future developments; redesign and format financial reports to fit current needs; ask "what-if" questions; do strategic planning; make presentations to colleagues or clients with the self-contained graphics package (including color graphics and a slide-presentation capability) — in short, it is designed to provide managers who are not computer specialists with a private "computer workshop" environment that enables them to experiment, manipulate data, redesign reports, and construct presentations

Micro-DSS/FINANCE is currently available for the Apple II/48K with Pascal. Other versions of the software are in development. The complete package includes a 5 1/4 diskette containing DSS/F (and a duplicate copy for backup), an introduction that serves as a beginner's guide to solving business problems with DSS/F, a user reference manual, and a graphics display control that permits "slide-show" presentations of graphics on the monitor. MicroDSS/FINANCE was developed as RCS by Ferox Microsystems before its publication by Addison-Wesley Publishing Company. It is currently available from Addison-Wesley (in the U.S. and Canada) with a suggested retail price of \$1500 (U.S.). For additional information, please contact O.C. Graham, Computer Software Marketing, Addison-Wesley Publishing Company, Inc., Reading, MA 01867.

S.F. Convention Focuses on Inexpensive Business Computing

For the first time, San Francisco hosts an exhibition and seminar program exclusively concerned with low-cost computing power for business and finance. Business Computing '81 will be held at San Francisco's Masonic Auditorium Sept. 23 and 24.

Most computer conventions have been for the computer professional and have concerned the use of large, expensive computing systems. This show —

New Radio Shack TRS-80 Litigation Software

Radio Shack, a division of Tandy Corporation, now offers a package of litigation support software for the company's TRS-80 Model II computer of direct interest to law firms, legal offices and attorneys. This software (26-4545) is designed to assist the attorney in implementing an accurate, extremely flexible storage and retrieval filing system, and is available now for \$299 at Radio Shack stores, Computer Centers and participating dealers.

Litigation Support actually creates two complete files, a client file and a form file, both of which provide complete report generation.

The client file holds information on personal background, case history, correspondence and other pertinent data. It has room for up to 350 client records, with up to 12 pleas and up to 10 memos per file. And it generates two mailing labels - one for an individual and one for a client company with a contact.

The forms file works like a paralegal secretary. Upon typing in a subject, topic, case number or keyword, the computer begins reviewing and displaying all matching records, with the user selecting those most pertinent.

The forms file provides room for up to 575 records, with up to 144 characters for sources and up to 255 characters for description.

In addition, the Litigation Support package may be uses in conjunction with SCRIPSIT word processing software and extra disk drive systems for composing letters, documents and reports.

Litigation Support includes complete documentation and no previous computer training or expertise is required for its use.

For further information contact Radio Shack stores, Computer Centers and participating dealers. Business Computing '81 — is the first to focus specifically on low-cost computerized solutions to a wide selection of business problems.

Broad Range of Exhibits

Strongly supported by local dealers, the show has more than 70 exhibits including demonstrations of most major microcomputers — Tandy's TRS-80, Apple, Commodore, Zenith, Heath, Alpha Micro, and many others.

An equally broad selection of applications programs are being demonstrated — accounting, financial planning, stocks, inventory control, inexpensive word processing, and much more.

Shop the Whole Bay Area, All at One Time & Place

Unlike a visit to any one or two computer stores, Business Computing '81 allows the attendee to see and compare the offerings available from most Bay area computer dealers. This provides an excellent opportunity to select the system and price that best suits the needs of each individual business person.

Free Access to Computer Consultants

Several independent, businessoriented, computer consultants are available to Business Computing '81 attendees — without cost — throughout the show, for informal discussion of business problems and their solutions. Their availability has been arranged by the convention organizers; they are not affiliated with the exhibitors.

Two Seminars by Independent Lecturers

The show includes two in-depth, four-hour introductory seminars given by experienced business consultants, independent of the exhibitors and vendors. Both seminars are designed for the business person who is experienced in business but a novice in computers. Both are designed to provide practical, decision-making information.

"An Introduction to Business Computing" offers an overview of systems and applications, and pragmatic suggestions concerning what to look for ... and what to look out for.

"An Introduction to Word Processing" provides a detailed introduction to inexpensive word processing, cluding exotic letter preparation, automatic documentation, mailing list facilities, spelling correctors, etc., as well as the connection between word processing and general business computing.

Each seminar is offered each day of the show. Each meets from 9:30am-12:30pm for a formal presentation, and reconvenes from 4pm-5pm for an extensive question-and-answer period (after registrants have had the opportunity to study the exhibits and discover more

(Please see pg. 4)

Proceedings Papers:

Digital Video For All The News

Mass digital communications, once only a dream, has become hard fact today and three articles deal with this hot new topic in the *Proceedings* of the 6th West Coast Computer Faire.

Jerry Borell predicts that mass market home information systems broadcast by digital means will be the wave of the future, and sees computer graphics as a big part of these systems.

graphics as a big part of these systems.

In his article, "Videotex and Teletext: Computer Graphics Today, Tomorrow Television", Borell discusses the European implementation of broadcast information systems and compares that to the current United States efforts.

Borell warns of exploitation in the consumer marketplace by greedy entrepreneurs for novices, but feels that digital television "will be the basis of home infomation systems in the forseeable future of the United States".

ANOTHER TYPE OF NETWORK

Douglas Gage provides a brief overview of the local networking field, focuses on a specific local networking product (Piconet) and shows the type of benefits that this type of technology can bring to users of small business and personal computer systems, in his paper entitled, "Local Networking for Small Systems".

A computer network, according to Gage, is "a communications scheme that allows data processing entities (computers, terminals, and/or peripherals) to communicate with one another."

Gage explains how a local network is classified, and then describes the "hot" market development of these networks.

PHRENCH PHONES

The French government has developed an integrated system for providing universal access to digital information through both telephone and broadcast systems. It is called "Telematique" and is discussed in a paper entitled, "Telematique: The First Universal Communications Terminal", by Mark Cummings.

The French have committed to provide a computer terminal to every phone subscriber as part of its basic service. These terminals will access an electronic telephone directory service. Field tests have been completed and full scale implementation is expected by next year.

Cummings discusses its strengths and weaknesses as well as describing the system and suggestions for improvements.

Business Computing Show Offers Free Consultants

September's Business Computing '81 exhibition offers attendees a unique facility. The organizers have arranged for several experienced computer consultants to be available throughout the exhibition to address questions from attendees, without charge.

These are independent consultants, not affiliated with any of the exhibitors or product manufacturers.

The exhibition on business computing, taking place in the City's Masonic Auditorium September 23-24, has been scheduled to meet the needs of business people. It will be open on Wednesday, from 9am to 7pm, and on Thursday from 9am to 6pm. Registration for all exhibits is only \$15 and is good for both days. (Note: \$15 is less that a business person would spend in time and travel to visit one or two computer stores; BC'81 has over 70 arbibits)

New General Ledger Software

Microcomputer Consultants has converted its General Ledger software package to the PL/I-80 programming language, a product of Digital Research. General Ledger will run on any CP/M—based microcomputer with 56K of memory and a terminal with an addressable cursor. The package is self—contained, and does not require separate purchase of a run time interpreter or sort utility.

Programs written in PL/I-80 offer a number of advantages over software written in other languages. First, it's fast, providing quicker response time. Second, it's efficient, producing code that requires less memory, yet accomplishes the same task. Microcomputer Consultants uses the additional available space for extensive errordetection routines and a B-Tree file access utility. This utility (Faircom's Micro B+) provides fast data retrieval and eliminates the need to sort or reorganize data files. Finally, numeric data is stored on disk files in binary, rather than ASCII format. This makes it impossible for an unscrupulous employee to manipulate financial data with a text editor.

This general ledger system includes a number of features. For example, account numbers may be up to ten digits long, and are completely user-

definable. Up to 32,000 accounts may be used. Financial statements for an entire firm and individual departments are available. Account balances may be compared with current period and year-to-date budget figures. Reports available from the system include balance sheet, trial balance, income statement, budget report, detailed account inquiry, posting registers, and chart of accounts.

The suggested retail price of General Ledger is \$600, and dealer pricing is available at quantity 1. For more information contact Micro computer Consultants at P.O. Box T, Davis, CA 95617; (916) 756-8104.

Proceedings Papers:

Money and the Micro

Financial and economic planning can be readily accomplished using microcomputing power. Fiscal planning and forecasting on a corporate or individual level can be accomplished faster and more accurately using computer power.

ECONOMICALLY SPEAKING

Dr. David Chereb describes an econometric model which forecasts the major economic variables in the U.S. economy, in his paper, "A Microcomputer Based Econometric Model of the U.S. Economy".

"One of the chief characteristics of econometric models is that they capture many of the interactions in the U.S. economy. For instance, if interest rates increase it is likely to cause a decrease in investment activity. This will later dampen Gross National Product changes which, in turn, should moderate price increases. If inflation is expected to moderate, that is, prices not increasing as rapidly, this should moderate interest rates. Thus, we have come full circle back to interest rates now starting to affect investment all over again," Chereb said.

Chereb feels that only a computerbased model that can account for these interactions can solve these economic models efficiently and at low cost.

STOCKPAK

Standard & Poor's STOCKPAK system is detailed in an article by Harvey Pearlman entitled "Standard & Poor's STOCKPAK System".

The objectives of Standard & Poor's Portfolio Management and STOCKPAK System are:

1. Offer and provide a monthly Common Stock Data Service on a subscription basis.

2. Provide the System Software necessary to facilitate easy access to and analysis of Common Stock information.

3. Provide for an ability to interrogate Common Stock information based on a subscriber's own screening criteria.

4. Enable a subscriber to easily format reports in any desired sequence.

5. Furnish the subscriber with an opportunity to manage and analyze a personal portfolio or customer account.

Provide for a flexible system that will accommodate enhancements on a continuing basis.

Each month Standard & Poor will mail Common Stock information to its subscribers, consisting of securities listed under New York, American and Over-the-Counter Stock Exchanges. Monthly newsletters and a news service update on the diskette will keep the information timely.



Britain Announces Portable Computer

A British-made "computer in a briefcase" contains a word processor, an 8" x 8" viewing screen with a capacity of 480 characters, a bubble me mory and a telephone coupler.

The MICRODATA 8400 weighs less than 17 lbs. and has a standard "QWERTY" keyboard. It can operate anywhere in the world because it works on power supplies from 105-265 V. The acoustic coupler allows the unit to transmit or receive data or programs over public telephone lines. It operates

on both American and European communications standards. The 94-K capacity bubble memory stores the data and is not erased when the power is switched off.

The portable computer comes in a briefcase and can be carried as hand luggage.

For further information contact: Mr. B. P. Wallace, Microdata Computers, Belvedere Works, Bilton Way, Hayes, Middlesex UB3 3ND England; Telephone: 01 848 9871; Telex: 934110.

Jim C. Warren, Jr.

Inexpensive Business Computing

a Computer Faire publication, 333 Swett Road, Woodside CA 94062 (415)851-7075

publisher
editor
contributing editors
advertising
typesetting
production
printing
distribution

databases & lists

office expansion

sanity maintenance staff

bookkeeping

new projects

exhibits

Lindsay McGrath
Laurie McLean, Tony Bove, Cheryl Rhodes
Nels Anderson
Tina Redse, Alpha Information
April Kepler, Christine Botelho, Victoria Nagel
Meredith Publications
California Mailing, U.S. Snail Service

Computer Faire

Puter Faire
Sarah Candelario, Johanna Immerman
William L. Bruneau
Vicki Rupe
Stephan Bahnfleth, Kathy Stark
Bruce Quinn-Briggs
Larry Dean, Lee West

Subscriptions: Upon request, random issues will be sent without cost. To receive all issues, subscription price for U.S. is \$6.00 per year. Please write for foreign rates. Send subscriptions and requests for sample copies to: Computer Faire, 333 Swett Rd., Woodside CA 94062.

All the products, All in one place, All at one time.

"Solutions for Your Business Problems"

Tutorials & Product Demonstrations

Business Compu

Over 70 product demonstrations:

digital telecommunications receivables & payables bookkeeping systems financial forecasting scheduling systems payroll packages word processing mailing systems electronic mail job estimating -- & much more!

A Show for Modern Business Decision-Makers

Exhibits registration: \$15 covers both days

San Francisco lasonic Auditorium

Three-hour in-depth tutorials:

Survey of Business Computing Survey of Word Processing includes systems selection criteria lists

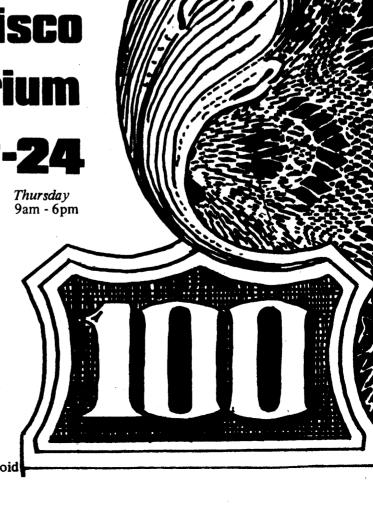
Lecturers are highly qualified, independent consultants.

Tuition: \$85 including published notes exhibit registration

Enrollment is limited. Preregistration strongly advised. call (415)851-7075.

produced by Computer Faire 333 Swett Road, Woodside CA 94062 **Sept. 23-2**

Wednesday 9am - 7pm



FREE! Request a subscription to the Inexpensive Business Computing tabloid

Biomedical Computing

The ninth section of the 6th West Coast Computer Faire Proceedings "Biomedical Computing," contains eight articles on the impact of computers on medicine. Star Trek's "Bones" may be the physician of the future, writes one author in his paper on computers and medical diagnosis. Another writer describes the bright future of computer applications in laboratory management. All things considered, the biomedical computing industry looks very healthy.

COMPUTERS IN MEDICINE

In their paper "Computers in Medicine," L. Berkenbile M. D. and F. Berkenbile Ph.D. call for knowledgable programmers and physicians to combine their talents. The authors discuss the need for medical hardware and software developments for data base and lab research, literature file, medical record, and educational applications.

"These are areas which require software and hardware developments, but which are not that far removed from reality," the Berkenbiles note.

KEEP ON TREKIN'

"Star Trek's" Dr. McCoy will be the physician of the future, writes Michael Richardson, M. D. in his "Computers and Medical Diagnosis." Richardson has some special thoughts about McCoy's "tricorder", a computerized diagnostic device roughly the size of a pocket cassette recorder.

"The tricorder, or something like it, seems to be where we are ultimately heading in medicine," says Richardson, a specialist in diagnostic radiology at the Travis Air Force Base Grant Medical Center.

Computers are now used to form images of the human body, analyze abnormal findings in a patient and make a diagnosis. Richardson's paper gives examples of current computer diagnostic techniques and renders an opinion on the future of computer medicine.

THREE MEDICAL APPLICATIONS PROGRAMS

The availability of inexpensive desktop computers opens the door to exciting medical applications, writes Mark Spohr, M.D. in "Three Medical Applications Programs." The physician's paper discusses a Drug Interactions, Medical History and Medical Clinic Statistics program and other systems currently under development.

The programs described are available for the Radio Shack TRS 80 Model I, II, III and the Apple. Computers in the office means more time for the physician, Spohr writes.

"More time means more personal attention and better care. This is the real power of the desktop computer," he concludes.

SMART WHEELCHAIR

An estimated 30 million Americans are "handicapped," many of them confined to wheelchairs, writes David Jaffe in his "Smart Chair" paper.

To help the quadriplegics among them enjoy independent mobility, a "smart" microprocessor-based electric wheelchair has been developed by the Palo Alto Veterans Administration Medical Center and Stanford University. Ultrasound distance ranging technology is used to track the user's head in two dimensional space to determine the chair's direction and speed. Obstacle detection, wall-following, and cruise-control modes are other features of the chair intended to make handicapped persons' lives more free and productive.

APPLICATIONS IN LAB DATA ACQUISITION AND MANAGEMENT

The LABOL real time operating system described in "Microcomputer Applications in Laboratory Data Acquisition and Management," grew out of the need of the North Dakota State Health Department for a high performance, modest cost lab management system.

The paper, authored by J. L. Cawley, F. Barberis, and L. Kary of Northwest Analytical, Inc. discusses the system's ability to handle large volumes of data generated by many modern labs. They maintain that such systems are less expensive and more easily maintained than frequently used large computers. A system flow chart accompanies the article.

COMPUTER MEDICINE SOCIETY

Neal Koss, M. D. outlines the purposes, goals, and accomplishments of a unique organization in his paper "The Society for Computer Medicine."

The Society aims to provide a neutral interdisciplinary forum dedicated to a better understanding of the health care system and the computer's place in it. Society membership includes physicians, nurses, administrators, computer professionals, lawyers, and others. Clinics, conferences, and publications are all part of the Society's program.

WHAT'S UP DOC?

"An Update on SOFTDOC: A Disk-Based Medical Computer Journal and Network," by James L. Gagne, M. D. gives readers the scoop on what's happening with this new publication.

The health professionals' journal, originally announced at the 5th West Coast Computer Faire, has not yet begun publication, Gagne reports. The focus of SOFTDOC has changed, he adds, from one individual publishing a journal to a network, linked via a disk-based journal, of individuals using microcomputing in health care. The Society for Computer will collaborate with SOFTDOC in building a network of supporting individuals. With this information gathering effort, SOFTDOC should begin publication soon.

COMMUNICATIONS NETWORK

Electronic medical information networks are the wave of the future, writes Allan Lundell in his paper "A Medical Communications Network."

Lundell's company, Medical Communications Network, Inc., will introduce a medical information network that they expect to be used by 16,000 users within five years. The service will include such features as medical library access, continuing medical education, a medical news network, and electronic publishing.

Business Computing Show (Continued from pg. 1)

questions). Registration for the seminars is extra.

Extensive Cross-Index to Products & Dealers

An Exhibitor Guide is given to each Business Computing '81 registrant. It lists all exhibitors, their addresses, and a description of their products and services.

Additionally, a second booklet — Program & Seminar Notes — includes all Exhibit Guide information, plus a crossindex to exhibitors by generic name of product and service, plus another crossindex by brand names. It also includes the complete lecture notes of both introductory seminars, including a check-off list of questions to ask and points to consider when examining a business computing system or word processing system. This reference book is included in the seminar registration fee, and is available to other attendees for a nominal fee.

Late Hours Accommodate Business Attendees

Business Computing '81 will take place in the Masonic Auditorium across from Grace Cathederal on top of Nobb Hill (California & Taylor Streets), September 23rd & 24th. The exhibits will be open 9am-7pm on Wednesday the 23rd, and 9am-6pm on Thursday the 24th.

Registration

Registration to attend the exhibition is only \$15 (that's less than the cost of the time and gasoline it would take to visit just one or two computer stores — BC'81 has over 70 exhibits). Exhibition registration is available at the door. Advance registration for the exhibition is not necessary.

Each of the two seminars is \$85 — \$70 plus the \$15 exhibition registration. Seminar registration also includes a copy of the *Program & Seminar Notes*, which includes the notes for both of the seminars.

Pre-registration for the seminars is STRONGLY advised. Each seminar will be limited to 75 registrants, and all are expected to be heavily subscribed. To pre-register, call the BC'81 office at (415)851-7075.

New Radio Shack TRS-80 Medical System

Radio Shack now provides a software package that permits patient and office record maintenance for medical offices on TRS-80 Model I and Model III computer systems equipped with a printer and disk drivers. The package, Medical Office System (26-1568), is available now for \$299 at Radio Shack stores, Computer Centers and participating dealers.

The Medical Office System software can store up to 3960 patient accounts using the TRS-80 Model I, or up to 4200 accounts using the Model III. It can record and store up to 3685 transactions per month using the Model I, up to 7700 with the Model III. Insurance forms can be printed while a patient is seen, or at a later time as needed.

This software also provides space

to accomodate 200 different processors, and for 200 different diagnoses. Monthly procedural and diagnostic statistics are available, too.

Transaction entry is quick, including all procedures performed and payments received, with detailed billing statements printed at the end of each month. Accounts receivable can be aged up to 120 days, and an optional password may be used to maintain the confidence of all records.

The Medical Office System package includes complete step-by-step instructions on the use of this software, and no previous computer experience or training is necessary. For more information, contact: Radio Shack, 1800 One Tandy Center, Fort Worth, TX 76102.

Free Micro Users Catalog Available

The first catalog dedicated to meeting the entire supply, accessory, and cable needs of microcomputer users is now available from Inmac. Called *The Microcomputer User's Idea Book*, the 32-page publication lists over 1000 of the latest products—from software packages and CRTs to flexible disks, printer ribbons, and EDP-tailored furniture.

A free one-year subscription to the Microcomputer User's Idea Book can be obtained by writing: Inmac, Dept. 12, 2465 Augustine Dr., Santa Clara, CA 95051

Avalon Hills Ball Game

In celebration of the end of this summer's baseball strike, Avalon Hill Games has released a computer version of its best selling baseball game.

of its best selling baseball game.

Computer Major League Baseball is ready to run on any of the following computers and is available for these suggested retail prices: TRS-80, Model I, Level II, 16K Cassette, \$25; Apple II, 32K Memory Cassette, \$25; TRS-80, Model I, Level II, 32K Diskette, \$30; Apple II, 48K Memory Diskette, \$30. An Atari 800 version is also available.

For more information contact: The Avalon Hill Game Company, 4517 Harford Road, Baltimore, MD 21214; (301) 254-5300.

Proceedings Papers:

Doctoring with Computers

The tenth section of the 6th West Coast Computer Faire *Proceedings*, "Computers for the Physician's Office," is devoted to efficiency in the computerized office.

DOCTORING WITH COMPUTERS

Physicians usually introduce a computer into their office, not for some space-age medical procedure, but to take care of the billing, report F. Berkenbile and D. Tessman in "A Medical Billing System."

This paper acquaints prospective purchasers with guidelines for choosing

the right system for their office. Buying or leasing a computer, deciding on a system yourself or hiring a consultant to do it, and employee acceptance of the system are all covered in this paper.

Finding the "perfect" medical office system is a tough task, writes Mark H. Spohr, M. D. in his paper "Selecting a Desktop Computer for your Medical Office." Before purchasing a system, a physician should consider many things, including service and software support, he writes. The pleasures and pitfalls of having a consultant select a system are also discussed.

two seminars for modern business executives

1. Introduction to Business Computing

Some of the questions that will be answered:

What can a business executive really do with an inexpensive computer?

Can the computer really help complicated decision-making, job quotations, financial planning, graphic presentations, information management, staff efficiency, electronic filing & retrieval, etc.?

How can the small computer be effectively and practically used in today's fast-paced, highly competitive, rapidly changing business environment?

What does a business person need to know about how the equipment works, what computer programs are and what they do, and what equipment and programs are available that apply to modern business?

The Lecturer

Michael Levy

Independent management consultant and business systems analyst

Trouble-shooter for groups of Massachusetts venture capitalists

Experienced business executive, including several years as President of GRI Computer Corp a multi-million dollar, east coast manufacturer (specialized systems, not represented in the BC'81

Lecturer and author - with a practical, clear, jargon free style that is helpful for the computer novice, and equally useful to business executives who have some experience with computers but are frustrated with the volume of technical information that cannot be related to practical

Member since 1979, Board of Directors of the Microcomputer Industry Trade Association Graduate studies at MIT and Northeastern University

B. S., 1951, William and Mary

The Seminar

The Problem & the Solutions

Definition of the problem

Problem-solving tools available today

State of business operations

State of business & financial programs and systems

Hardware - The Computer Equipment

Comparative survey of today's most popular microcomputers What you are looking at when you see a computer

What it all means for the business person

Software - Getting the Computer to Do What It Does

Operating systems: the programs that make computers easier to use

Applications software: the programs that solve specific business problems

Questions & Answers focusing on registrants' specific problems

Seminar notes will include:

A bibliography for the experienced business person who may be a novice about computing A listing of sources of applications programs that are particularly applicable to business and financial problem environments and decision-making.

A check off list to use in shopping for a computer and its software - what questions to ask, what to look for, what to look out for

2. Introduction to Word Processing

Some of the questions that will be answered:

What is word processing and how is it useful and cost-effective?

What does a business person need to know about the equipment and facilities of word processing systems?

How can word processing systems interact with other computers, or be used for other purposes than simply word processing?

What can be expected in the way of training, documentation, warranties, service, and system expandability?

The Lecturer

Dr. Larry Press

Independent consultant, specializing in small systems since 1974
Professor & lecturer at USC, San Fernando State, and University of Lund (Sweden), 1963

Consultant to the Research Director, Systems Development Corp., 1965-1969 Consultant, data processing and operating systems researcher, IBM, 1960-1967 Ph.D (1976), MBA (1965), BS(1960) from UCLA in Information Processing

The Seminar

Examples of word processing applications in business The spectrum of word processing systems Details of word processing on low-cost personal computers: Equipment and components

Word processing software

Text editors, automatic text formatting

Integrated word processing systems Ancillary functions

Auxiliary word processing

Spelling correctors

Report generators, index builders

Automatic "personalized" form letters

Mailing list systems

Interaction with other computer systems Training and documentation

Warranties, maintenance, service

System expansion and updates

Survey of products and vendors

Questions & Answers addressing registrants' specific needs

Seminar notes will include a check-off list of characteristics to consider, questions to ask, what to look for, and some of the things to look out for.

Schedule

Each of the two seminars will be offered Wednesday, and offered a second time for another group on Thursday, Septe

Each seminar will meet for a formal presentation from 9:30am to 12:30pm, and will reconvene from 5pm to 6pm for an indepth question and answer session (this will give the participants the opportunity to apply what they learned in the morning session to the systems in the exhibit hall, and return and ask the additional questions that will undoubtedly arise during the day.

Both seminar leaders will be available at the Consultants' Booth in the exhibit hall, during most of the hours between 12:30

Location

All seminars will take place in lecture rooms in San Francisco's Masonic Hall, adjacent to the Business Computing '81 exhibition hall, located on Nob—Hill across from Grace Cathedral (Taylor & California Streets)

Registration

Preregistration is strongly advised. Seminars are limited to 70 participants and are expected to be heavily subscribed. Seminar registration is \$85 and includes registration for the product exhibition (\$15) as well as a copy of the Program & nar Notes for both seminars.

To preregister: Call the Seminar Registration Desk at BC'81 Headquarters, (415)851-7075, 9am-4pm, Monday through Fri-

To register on site: Enter the Masonic Auditorium via the "On-Site Seminar Registrant" desk 'ushers will direct y Note: Those who delay registering for a seminar until the days of the convention may find all seminars filled by those who

to preregister & assure a place in a seminar, call the Seminar Coordinator, (415)851-7075. Monday through Friday, 9am to 4pm.

Heath Product News

Heath To Give Free **Operating Systems**

Heath Company has introduced a full line of assembled computer hardware and peripherals designed for commercial use. During this presentation, Heath will give a free operating system, a \$150 value, to purchasers of the assembled Zenith Data Systems Z-89-FA Commercial All-In-One Computer.

Purchasers who buy the Z-89-FA will receive their choice of the Heath Disk Operating System (HDOS) or the Heath CP/M Operating System, in either 5.25-inch or 8-inch floppy disk version.
The assembled Z-89-FA Commer-

cial All-In-One Computer features two Zilog Z-80 microprocessors, Random Access Memory (RAM) capacity of 64K bytes (48K RAM standard), a built-in 5.25-inch floppy disk drive with 100K bytes of on-line storage, a high-capacity video display, a typewriter-style keyboard and three RS-232C Serial I/O Ports for printer and telecommunications expandability.

For more information write for a catalog to: Heath Company, Dept. 350-235, Benton Harbor, MI 49022, or pick up a copy at a Heathkit Electronic

New Software

An air traffic controller game is just one of the software offerings featured in the latest Heathkit catalogue from Heath Company. Other products include wordprocessing, genealogy soft-ware and a Satellite Earth Station, capable of receiving television signals from satellites orbiting Earth.

Microsoft MACRO-80, for \$69.95. is a complete Assembly Language programming package. This software package is said to assemble code, generating relocatable object modules for the LINK-80 Editor. Other software include C BASIC, a noninteractive BASIC including a pseudo-code compiler and run-time interpreter designed for the H-8, H-89 and Z-89 computers, priced at \$115.

WordMaster, a Video Text Editor, features video edit mode, automatic floppy disk I/O, scratchpad memory, fast response to most commands, and is priced at \$99. SuperSort offers sorting, merging and selecting power and is priced at \$195. FOB in either 5.25-inch or 8-inch floppy disk version.

To receive the Heathkit Catalog, write Heath Company, Dept. 350-195, Benton Harbor, MI 49022. Free catalogs are also available at Heathkit Electronic



The latest Heathkit catalog features a new Satellite Earth Station kit.

Independent Heath/Zenith **Vendor** List

A wide variety of hardware and software for Heathkit computers can be found in the fourth revision of the Buss Directory. Over 130 independent suppliers and clubs are listed along with their wares in this new, up-to-date edi-

The Buss Directory is available for \$7.50 from Buss, 325-F Pennsyl vania Ave. S. E., Washington, DC 20003; (202) 544-0900.

Database Management on Micros

"Systems: Database Management on Micros," the twenty -fifth Section of the West Coast Computer Faire Proceedings offers reader some interesting database management concepts.

"Natural Language Access to Database Management Sys tems," by Bil Lewis, is a description of language and computational linguistics. An analysis of problems in machine language under standing and an examination of some Stanford Institute Systems are included.

Barney Stone describes a new data base management program for the Apple II in "D B Master: A Sophisticated Data Base Management System for the Apple II." He discusses data base management in large and small computer environments, program design philosophy, its file management program, and the way it can be used to emulate the hierarchical type of data base management used on larger computers.

Proceedings Papers:

IN THE **BEGINNING**

The first section of the 6th West Coast Computer Faire Conference Proceedings is reserved for the novices this year. The three articles that comprise 'For the Novice: Introductions to Computing" acquaint beginners with the major kinds of computers, the concept of computer literacy, and guidelines for

purchasing the "perfect system."

In their paper, "Introducing Microcomputers (and How to Use Them)," Tony Bove and Cheryl Rhodes introduce three microcomputers and illustrate some of their applications for the novice user

The co-editors of DataCast magazine discuss the cost and uses of: small personal computers, used primarily for hobby programming, games and education; business systems, used for lowvolume data processing, etc.; and larger development systems used primarily to develop software for microprocessorbased products.

New users can profit from microsystems once they are educated, say Bove and Rhodes. Using the computer should always be costeffective, they say, and, in time, the computer should pay for itself. It's usually at this point, after the new user has tested the microcomputing water, that he or she is ready to take the plunge into programming.

LITERATE COMPUTING

Once you understand it, the truth about computers will set you free, promises June Moore in her paper "How to Learn about Microcomputing or Computer Literacy at Your Fingertips. Moore says that if novices will read all the computer publications they can get their hands on - including those they don't understand - eventually all that "computerese" will make sense.

A myriad of computer operating system, program language manuals, dictionaries, books and periodicals are available for the curious novice. To help the new user get started on a list of references, Moore has included a bibliography at the end of her piece.

HEALTHY PARANOIA

When considering a computer purchase novices should use a checklist before a checkbook, writes Tony Severa in his 6th West Coast Computer Faire Proceedings paper "Dear Novices, I've Got Good News and Bad News for You!" The Vacaville, California Apple Orchard merchant comments on the future of the computer industry and supplies readers with a 15-question buying checklist that can help save time and money.

If new users are going to get "carried away" by all the new, fascinating computing devices, they should carry a checklist with them, Severa stresses. 'All I ask of you is to be a healthy paranoid, cautious but reasonable," he says, "Have fun!"

Radio Shack's New Moog Synthesizer

A polyphonic musical synthesizer designed for club or concert performance, composing, rehearsing or personal enjoyment is the newest offering from Radio Shack. The Realistic MG-1 Synthesizer (42-2000) by Moog (trademark of Norlin Industries) is available now for \$499.95 at Radio Shack stores and dealers.

The Realistic MG-1 features a 2 1/ 2-octave full-chromatic keyboard and a versatile control panel, divided into related sections and colorcoded.

Two independent three-octave tone sources feature variable waveshape. Tone Source One offers a 2:1 sync selector, 3-position octave selector and 2-position (square/ triangular) waveshape selector. Tone Source Two offers a detune control for dissonant or fullinterval offsetting of its pitch, 3-position octave selector and 2-position waveshape selector. The mixer offers a selection of tone one, tone two, a noise source, a bell tone or polyphony.

The Realistic MG-1 which comes with a manual is U.L. listed for AC operation.

For more information contact: Radio Shack, 1800 One Tandy Center, Fort Worth, TX 76102.

Homebrew or Commercial Software

The twenty-sixth section of the West Coast Computer Faire Conference Proceedings, "Homebrew and Commercial Software," offers readers three papers on this vital topic.

Report Generation Language and and operation.

System," by Frederic Gey of Friends Software, outlines this powerful system that runs on the Z80 or 8080microprocessors under the CP/M operating system. The paper provides a tutorial description of the ACCESS/80 "Introduction to the ACCESS/80 commands, file description language,

Proceedings Papers:

Japan's Third Wave

There are three phases to the historical development and the circulation of the personal computer in Japan. The first phase is an era of application which consists of combining a single board computer with tiny BASIC. The second phase is an era when large quantities of Apple II, CBM-PET, and TRS-80 were imported from the United States and employed in Japan. The third stage is when personal computers have played an active role in displaying a functional,

more qualified and more reasonable products.

So says a paper in the Proceedings of the 6th West Coast Computer Faire by Professor Toshiaki Yasuda, entitled, "The Third Wave' of Personal Computer in Japan'

Professor Yasuda describes the introduction of the personal computer in Japan and details the characteristics of several leading Japanese personal com-

The fifteenth section of the 6th West Coast Computer Faire Proceedings, "Computing for Business Applications, describes how computers can best be utilized in small businesses. Do you have a love-hate relationship with your company computer? Buying a small business system, and developing an amicable working relationship with it is covered in

BACKWARD COMPUTING

this four paper section.

Habitually, aspiring computerists start off buying hardware and then cast about to get it programmed, writes Nicholas Rosa in his paper "Acquiring the Small Business Computer: Take the Backwards Approach." The head of The head of Nicholas Rosa Associates urges computer consumers to detail what the "ideal" system would do for their business. From this analysis, he says, businesses can determine their software and then their hardware needs

"It Loves Me, It Loves Me Not," is the name of Jim Schreier's paper on the problems of automating a business. Contrary to popular opinion, he writes, some businesses may not profit from a microcomputer. The importance of employee training and system support

Proceedings Papers:

DOCUMENT IT WITH COMPUTERS

New and noteworthy word and graphics processing systems are discussed in the eighth section of the 6th Computer Faire Conference Proceedings, "Computers for Document Production."

A combined text and graphic color composition system called COMANDER I is discussed in a paper of the same name by Jim Blum of Comagraph, Campbell, Ca., creators of the system. COMANDER I features complete page make-up with user-defined fonts and graphic aids. Blum explains that with the COMANDER I a complete novice should be able to do text processing and graphic design entirely on the system.

'Dedicated Document Production," is the topic explored in Sidney Levin's paper. Levin describes several custom designed dedicated document programs including one for professional appraisers, letter and article writers. Programming techniques, advantages and disadvantages of the system are discussed.

Children at the Show

Business Computing '81 is a computer conference and trade exposition about electronic information processing for business. As such it is open to and appropriate for everyone who has a sincere interest in learning about (or learning more about)

computing, information management, computers, and "the information society".

These topics are discussed at BC'81, presented by adults, and presented for adults. As such, BC'81 is not appropriate for children nor for most tennagers.

BC'81 is not appropriate for children nor ior most teenagers.

Children who are not sincerely interested in computing and/or who may be disruptive should not be brought to the show. To do so is unfair to the attendees, unfair to the speakers, unfair to the exhibitors, ... and unfair to the children.

Therefore: (1) There is only a single registration fee — the fee for mature individuals, sincerely interested in knowing more about information systems and computing.

(2) Children found playing in the convention hall, in any way being rowdy or disruptive will be

any way being rowdy or disruptive will be immediately ejected from the Faire — just as they would if they were being disruptive in a university classroom, business office, engineering lab, or training seminar.

are also discussed in the paper.

"The Angry Consumer's Guide to Word Processors," by Attorney Martin Dean is a paper to educate consumers in search of a good word processor.

"Remember, word processing software is expensive, and most people selling it are rank amateurs. Buyer beware," writes Dean in his overview of the word processing world.

Computing economy is the focus of "Low-Cost Computing with Plug Compatible Peripherals and Mainframes," by Joseph T. Simone. Simone, of Decision Data Computer Corporation, discusses the history of computing and the cost saving opportunities it offers in schools, businesses, and industry.

New Mercator **MBS3000**

Designed for the small businessperson using a computer for the first time, the new MBS3000 from Mercator Business Systems, Inc., is the second in the company's family of business computer systems.

The MBS3000 is priced at \$19,900 for the entry-level (single user) system, and \$27,100 for the fully configured

The heart of the MBS3000 is a high-speed 16-bit microprocessor. Onboard memory includes 64K bytes of Random Access Memory (RAM), with expansion possible to one-half megabyte.

Memory storage is provided by 10or 20-megabyte 8-inch Winchester disks, with fast and inexpensive backup in the form of a tape cartridge.

Inexpensive Business Computing

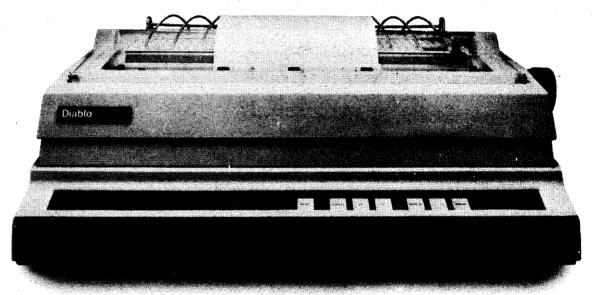
Sep. 1981

page 7

For more information contact: Mercator Business Systems, 1294 Lawrence Station Road, Sunnyvale, CA 94086; (408) 734-5134.

Give your business computing power, read the 6th West Coast Computer Faire Proceedings.

If you want a choice in print wheels, here's the first choice in printers.



The Diablo 630.

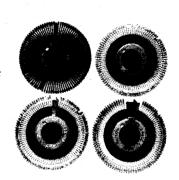
It's the first printer that lets you use either metal or plastic print wheels. So you can choose the print wheel that's just right for the job.

The 630 works as well with a 96-character plastic daisy print wheel as it does with an 88-, 92-, or 96-character metal daisy print wheel. In over 100 different type styles.

Every 630 has fewer moving parts than competitive printers, which makes it more reliable. And it offers unsurpassed print quality. Compatibility with Diablo supplies. And bi-directional printing capability.

So if you want to change your print wheels, you'll just have to change your printer.

To a Diablo 630 printer.



Diablo Systems

Proceedings Papers:

Personnel-ly Speaking

Three articles in the Proceedings of the 6th West Coast Computer Faire deal with finding employees who will fit into your company and how to keep them

ON KEEPING YOUR BROWNIE POINTS

"You were probably promoted to a first management position by demonstrating superior ability," says William McClay in his article "How to Use Hardware Consultants (Or How to Keep Your Brownie Points.)'

McClay feels that a consultant can help you save your brownie points and solve your technical problems with maximum efficiency — as long as you give them all the available information you have on the job.

NEW RECRUITS

"Considering the tremendous leaps in housing costs and interest rates, the attractiveness of the "California-life style" has diminished significantly," says an article entitled, "A Sign of the Times -Recruitment and Relocation Policy Update"

This article espouses the view that standard methods of compensation are not enough anymore to entice potential employees to your company. Instead, items such as company cars plus gas and maintenance and bonuses are being offered instead of or in addition to a salary increase.

PERSONALITY PLUS

Chemistry between the manager and subordinate is the critical factor when it comes to job performance and job satisfaction, says Michael Harkins in his article, "Finding & Keeping Com-puter Professionals During the Explosive 1980's".

Harkins describes and explains the theory behind Dr. William Marston's Activity Vector Analysis of personality as it relates to hiring employees.

KCSM Initiates Weekly Program Focusing on Microcomputing

KCSM-TV is creating a weekly half-hour television program that will focus on microcomputers and microcomputing. With a new 1.5 million-watt transmitter, this UHF station (Channel 60) now blankets the San Francisco Bay area, including the San Francisco Peninsula's internationally known "Silicon Valley". A Show for Computer Folk

The show will address current events and issues in microcomputing, including applications, new products, personalities, business issues, forseeable futures, etc. Although the show will make a reasonable effort to be intelligible to the layperson, it is designed for viewers who have some interest in lowcost computing power or personal computers - people who are are at least semi-literate about computing.

The show is scheduled for a nearoptimal time-slot - 7pm-7:30pm on Thursday evenings, just before primetime network shows. The show will be repeated late Saturday afternoons, 5:30pm-6pm. It will begin airing September 17th.

KCSM-TV is associated with the Public Broadcasting System. Producer Dave Carlson expects that - as the show proves itself - it will be picked up by PBS affiliates located in other areas oriented towards high technology.

One of the unusual aspects of the show is a plan to directly interface the video output from demonstration microcomputers to the broadcast video. This direct connection will allow viewers' televisions to become temporary display terminals for computer and software demos, whenever it is useful. The station engineers - normally minimally interested in much of the station's programming - are unusually enthusiastic about this program and the opportunities it offers for their special brand of wizardry.

First Shows: Osborne, Felsenstein, Whitneys

September 17th, 7pm

One of the newest entries to the lowcost computer market is the Osborne I - the brainchild of publisher Dr. Adam Osborne and electronics wizard Lee Felsenstein. Both men are well known personalities in the micro industry, known for their innovation, and for their strong views about the present and

future of mass microcomputing.

The Osborne I will be demonstrated and its design and software discussed. Of equal interest. Osborne and Felsenstein will be interviewed on topics ranging from their recollections of the chaotic early days of personal computing and its personalities to their views of the forseeable futures.

September 24th, 7pm

John Whitney and his son are well known innovators in the area of computer graphics. Both will show samples of their exotic computer graphic creations, discuss how they were produced and principles behind graphic computer art, and will offer projections of the future of computer graphics, electronic art, and computerized animation.

John Sr. is internationally known for his early work in the area of computer art and grahics, and has recently completed a book based on that early research that addresses the interelations between music, harmony, and visual art. John Jr. has followed in his father's footsteps to become an equally innovative technologist/artist working with computer art and graphics.

Jim Warren to be Show Host KCSM-TV conducted a reasonably extensive search for appropriate personalities to anchor the show. They were interested in finding a host or hosts who were technically competent, known and respected in the microcomputer industry, and who could com-municate effectively in a television setting.

Producer Carlson investigated a number of possibilities, including having a permanent panel, or cycling through several hosts. After discussing it with a number of people in the industry, Carlson and the station's General Manager, Stewart Cheifet (who has been a personal computing enthusiast for several years), chose to invite Jim Warren to serve as the show's single, permanent host.

Warren's name had come up repeatedly in the search. He is well known in the area for having organized and chaired the West Computer Faires. He served as the first Editor of Dr. Dobb's Journal of Computer Calisthenics, and was the originator and pub-Calisthenics, and was the originator and publisher of the microcomputing industry's first newspaper (later sold to ComputerWorld and named InfoWorld). He has Chaired local chapters of the ACM (Association for Computing Machinery), SIGMICRO and SIGPLAN, and served on Program Committees for the NCC and the IEEE'S Compcon.

He holds graduate degrees in computing from Stanford and the University of California, and had completed all but his dissertation for a Stanford Ph.D. He also holds two degrees in mathematics.

Prior to entering the computer profession, he had taught mathematics for most of a decade, including conducting a 13-week series on mathematics for KPIX-TV (Channel 5, San Francisco) while Chairing the Mathematics Department at the College of Notre Dame.

Show Title Debated

There was considerable debate over the title of this show. Originally, it was called
"Bits & Bytes", internally at the studio, a title
for which Warren expressed little enthusiasm.
Considering that the show would draw
from the massive electronics and computer

resources of the San Francisco Peninsula, resources of the San Francisco Peninsula, additional proposals ran along the lines of "The Silicon Valley something" — e.g., "The Silicon Valley Sentinal", or "The Silicon Valley Weekly Connection". For the more grandiose, "The Silicon Valley Weekly Oracle" was proposed. [Of course, Warren known to be ever so shy and bashful — rejected this title.] For the more sedate — "The Silicon Valley Computer Journal".
Then, for the Saturday night red-eyes, there was the proposal of "Live — From Silicon Valley!

In the end, it was decided to be neither technonut nor provincial — the title of the show will be "The Computer Chronicles" (with appologies to Ray Bradbury).

Products, Personalities & Sayers of Sooth

Reviews of interesting products and events, as well as investigations of interesting applications will be a regular part of "The Computer Chronicles". If you have suggestions of such products, applications, or events, please forward them to Jim Warren, 345 Swett Road, Woodside, CA 94062. (Please write; do not phone.)

Interviews with microcomputing experts will be a regular part of the show. If you have suggestions of individuals who are particularly competant in any of the areas of microcomputing technology, software design and development, business and entrepreneural effort, interesting applica-tions, or market and futures projections, please send your suggestions to Jim Warren.

Note: This is a request for the origina-tors and designers of interesting systems and applications, and for proven entrepreneurs who would be of interest to the viewing audience as personalities. With few if any exceptions, marketing and PR people will not be invited to be guests on this show.

Toys for the Mind!

don't miss the -

Silicon Gulch Games Faire

all the latest computers & electronics for entertainment & education



Apple Fest

glorious goodies for your Apples

This Xmas, Give the Future to Your Kids!

just before Xmas

November 21-22

San Jose Convention Center Saturday & Sunday

a Computer Faire event, 333 Swett Rd., Woodside CA 94062 (415) 851-7075

Arts and Computer Symposium

The Symposium on Small Computers in the Arts, (formerly, the Personal Computer Arts Festival), will be held November 20-22 in Philadelphia. The three-day affair will feature tutorials, workshops, demonstrations, paper and film/video presentations, a prints and plots gallery, and the Fourth Annual Computer Music Concert. All will increase awareness of computer technology in the audio and visual arts.

The arts gathering is sponsored by the Philadelphia Area Computer Society, University of Pennsylvania, the Institute of Electrical and Electronics Engineers Computer Society, and the IEEE Philadelphia Section.

Workshops will feature hands-on

experience with the most current equipment in graphics and music. Registrants will receive a copy of the proceedings and a guide to small computer music and graphics equipment.

The Symposium will be held at the University City Holiday Inn on the Penn Campus. Rooms are available on a firstcome-first-served basis for manufacturers to set up demonstrations or exhibits. Attendance will be limited to 250, and reduced room rates will be available to early registrants.

For more information contact: Symposium on Small Computers in the Arts, P.O. Box 1954, Philadelphia, PA 19105, or call the Philadelphia IEEE office. (215) 243-8109

Proceedings Papers:

Some Observations

"The U.S. Constitution specifically the Bill of Rights — has operated largely within a non-electronic, paper environment. What we need to do quickly...is to make the Bill of Rights human rights generally — explicit in the telecommunications processes at our dis-

So says Dean Gengle in an article entitled, "Toward an Electronic Bill of Rights", found in the 6th West Coast Computer Faire Proceedings.

About Computing

COMPUTERIZATION AND SOCIETY

Computers are revolutionizing mass communications and manipulation of information and this affects the humans involved in many unique ways.

Dr. Paul Armetta, argues that conflicts in roles, status, norms and standard procedure could develop as a result of the new role computers are playing in the communications process.

The Computer Goes to School fessional ear training, melodic and harmonic dictation and developing basic

Educators and students have been asking for good computer assisted learning materials — both software and hardware - and eight articles in the Proceedings of the 6th West Coast Computer Faire discuss the advances in Computer Assisted Instruction (CAI).

HELPING JOHNNY LEARN

In an article entitled, "On Using the Tutorial Mode in CAI", Edward Zeidman says that although most of the available CAI material has been written in the relatively simple "drill and practice" mode, computers can be programmed to act as more than mere 'flash cards"

Zeidman explores the "tutorial mode" of CAI, where the student needs help, not merely the correct answer. By using his "Elementary Math Program as an example, Zeidman summarizes the advantages and shortcomings of CAI tutorials and offers suggestions for improvements.

EDUCATIONAL SOFTWARE

Three formats of educational software are discussed and compared in "Educational Software Formats," by

Canned software are commercially developed programs. The advantages of this type of software are it is cost effective and easy to use.

Teacher developed software lets the teacher become the author of new educational software. greater adaptation capabilities and can be modified to the teacher's specifications

Authoring systems allow a teacher to put individualized lessons into the computer. It allows the teacher more flexibility than the previous two systems, however, it requires a greater time expenditure on the teacher's part.

Zawalkow suggests that the choice of hardware purchased by an educational institution be based on the type of educational software compatible to and available for it.

TAKE AIM IN MATH

Arrowview Individualized Math (AIM) is an "individualized, diagnosticprescriptive remedial instructional program for grades 7-12," according to Craig Walker.

In his article, "AIM: Remedial Math for Secondary Students," Walker describes AIM, and explains how it can help remedial students prepare for proficiency/competency examinations.

AIM is characterized as being individualized, diagnostic, prescriptive, and assessive. It has provided motivation for students who have had major problems in this area in the past. It also requires little attention from teachers once the student gets going, and it is not unusual to see a gain of three years in a semester or less.

AIM is available to any school free of charge, if Walker is provided with a 50 foot or longer cassette tape on which to record it. The paper version of AIM costs

For further information contact Craig Walker at Arrowview Junior High School, 2299 N. G Street, San Bernadino CA 92405.

MICRO MUSIC

Microcomputer based music systems are becoming widely available at a relatively low cost. So say Wolfgang Kuhn and Paul Lorton, Jr., in their paper entitled "Personal Computer Assisted Instruction in Music".

Stanford University Music Department has developed a program for computer assisted instruction in music as an adjunct to basic courses in music theory. The three major capabilities needed are graphic display, a flexible sound source and musically appropriate input.

Kuhn and Lorton discuss the differences between music composition versus instruction and examine in detail the microcomputer music project at Stanford.

'As a complete music system, the various teaching strategies make use of the following devices:

Visual display of lessons.

Actual musical sounds of all examples and exercises

Directions and instructions for

Positive and negative reinforcement messages. Error messages

Suggestions to the student on how to proceed

In this manner, melody, harmony rhythm, tone quality and musical form or design are taught, as well as pre-pro-

FREUDIAN COMPUTING

keyboard skills.

Dr. Philip Hartley, of Chaffey College, has developed a number of computerized learning modules in basic psychology for use with a microcomputing

In his article entitled, "Microcomputer Assisted Instruction in Psychology", Hartley explains how students are using microcomputers to study psy-chobiology, aspects of learning and memory, abnormal psychology and social psychology.

PRE-SCHOOL COMPUTING

"The Computer Goes to Nursery School", by Dr. Kathleen Swigger and Dr. James Cambell, discusses a series of computer-based materials that can be used by three and four year-old children for the purpose of teaching them pre-reading skills.
"We were seeking to discover

whether it was possible to have small children gain control over a computer,' Swigger and Cambell said, "And, just as important, we wanted to know what would happen to them once they had this control.

Swigger and Cambell found that none of the children were afraid of the machine or incapable of executing the programs. Another finding was that the children performed better when adults were not in the room. They were "playing" with the computer rather than trying to please the adults.

They predict that children of all ages can use computers. The questions that now remain are what sorts of activities are best suited for computer learning, and what effects will computer learning have on small children.

REDY OR NOT

Barry Cole discusses his experiences with the MICRO-REDY Project in the Sacramento City Unified School District in his paper, "The MICRO-REDY Project".

The program consists of computer assisted instruction, computer managed instruction and computer drill and practice programs.

MICRO I Q

Dee LaMont Johnson and Jerry Willis compare a computer-assisted training method and a traditional training method of teaching the administration of the Weschler Intelligence Test for children in their paper, "A Comparison of Traditional and Computer-based Methods of Teaching Students Administer Individual Intelligence

Groups of students were divided into a No Practice group, a Child Practice group and a Computer Practice group. The data compiled after the training suggests that computer stimulation is an effective means of teaching students the clerical and procedural

skills of intelligence test administration.

Johnson and Willis feel that as computers become cheaper, more school districts will encorporate them into their

DESIGN GRAPHIX

AFFORDABLE COMPUTER AIDED DESIGN

APPLICATIONS

- * BUSINESS GRAPHICS
- * ENGINEERING
- * P C LAYOUT
- * ARCHITECTURAL
- * PIPING & INSTRUMENT DIAGRAMS
- * LOGIC DIAGRAMS

FEATURES

- * FULL 3 DIMENSIONAL
- * MULTI-TASKING
- * EXPANDABLE MULTI OPERATOR
- * TURNKEY
- * EDITING
- * REMOTE DIAGNOSTICS



P.O. Box 80318 Baton Rouge, Louisiana 70808

SEE DESIGN GRAPHIX AT BOOTH 121

BUSINESS COMPUTING '81

REPRESENTED BY Zytronix, Inc.

13820 Ravenwood Dr Saratoga, Ca. 95070 PH (408) 374-3876 PH (408) 866-7407

Datapro Report Compares 262 Minicomputers

Datapro Research Corporation has published a new report on minicomputers that enables one to scan quickly a comprehensive list of available systems, together with their primary specifica-tions and prices. Titled All About Minicomputers, the report contains over 75 pages listing 262 different systems from 63 vendors and includes user ratings.

The report includes an eight-page introduction to minicomputer hardware and software, 53 pages of detailed comparison charts that describe each system in detail, and a list of vendor addresses and telephone numbers.

Designed to bring one up to date on the rapidly advancing state of the art in minicomputers, the report answers questions such as: What's available today in the fast-moving minicomputer marketplace?

All About Minicomputers. reprinted from a recent supplement to Datapro Reports on Minicomputers, is available for \$15 a copy from Datapro Research Corporation, 1805 Underwood Blvd., Delran, NJ 08075.

Graphic Software For Epson MX-80

Computer Station has released another software package for the Apple Computer. This software driver allows the user to dump the contents of the high resolution pages (options for Page 1 or Page 2) out to the new Epson-MX-80 printer to obtain hard copy graphics. The Enhanced version of the graphics software was designed for both ease of use for the novice as well as flexibility for the more advanced user. The options for printing are presented in menu fashion. The user must know what type of printer interface card is being used and which slot number it is in. The types of interface cards are listed on the beginning menu. They are Apple's parallel/ Centronics, Epson parallel, Apple serial, Apple Communications, California Computer Systems's serial, and California Computer System's parallel (models 7720A, 7720B, and 7728). Other interface cards may work, but are not supported by the Computer Station. The printer interface card is standardly placed in slot #1 of the Apple II (or the Apple II Plus) but the software may be set to use any of the slot numbers except

Proceedings Papers:

Smart Terminal Programs for Radio Shack Modem I

A series of smart terminal programs for the Radio Shack Modem I is available from the MicroPeripheral Corp. The programs, called SMART, are supplied on cassette or disk for the Model I (Smart 80/D- &79.95) or Model III (SMARTIIIC/D-\$99.50).

The smart terminal software permits the transfer of data (BASIC programs, text and source or object code) between computers.

Another feature unique to the SMART terminal programs for the Radio Shack Modem I is the provision for formatting the line length on the CRT. The line will feed on a space and not hyphenate the word. Also featured is software selectable half or full duplex operation, baud rate, word length, parity selection and stop bits to match virtually any host computer.

The SMART series is fully compatible with Radio Shack VISICALC, PROFILE and SCRIPSIT. Data generated by these programs, or messages and text prepared with SCRIPSIT can be transmitted or received by SMART. For those who do not have this word processing program, SMART also incorporates a message/text preparation program.

For additional information, con-

For additional information, contact the MicroPeripheral Corporation, 2643 151st Pl. N.E., Redmond, WA. 98052. Tel. (206) 881-7544.

Proceedings Papers:

Unusual Computing

The second section of the 6th West Coast Computer Faire Proceedings "Microcomputing: Very Unusual Applications," has papers about everything from farming to fame.

HORTICULTURAL COMPUTING TAKES ROOT

"Horticulture is a science in the midst of an information crisis," writes author, Frederic E. Davis, in his paper "Computers and Horticulture." With a half million plant species in the world, Davis says there are important uses for computers in the retail florist and nursery industries, plant breeding, pathology, and taxonomy, and greenhouse automation. In his six page treatise, Davis describes how computer use can bloom in these areas.

A "STARS" IS BORN

"Stars, an Automated Manager for Small Performing Arts Theatre," can do just about everything for your theatre company but sign autographs, writes David J. Blow. In his paper, Blow describes the functions important to a profit or non-profit companies that Stars performs, including: performance costs and returns, theater pricing, marketing techniques, and grant accounting. The system is already being used in theaters across the country, says Blow.

COMPUTER CROSSWORDS

Modern crosswords have fascinated millions of people since 1913 when the first one appeared in the New York World newspaper. Now Chuck Adams of North Texas State University's Computer Sciences Department tells how to create computer crosswords in "Computer Generated Crosswords." The rules included in this paper are simple and easy to implement in both high level languages and assembly language routines. Eight sample puzzles are included in Adams' paper.

ABOUT THE COMPUTER BUSINESS

"About the Computer Business," the sixteenth section of the 6th West Coast Computer Faire Proceedings, covers such diverse topics as writing a user's manual, preparing media product announcements, public relations for computer entrepeneurs and marketing software.

A QUALITATIVE DIFFERENCE

"Some Reflections on a Commitment to Quality," is James Gagne's paper on his philosophy concerning excellence in the computer industry. The physician, who started DataMed Research, says he went into business, "as a way to exercise my passion for computing and to see if at the same time, I could make a profit without feeling trapped or

guilty." According to Gagne, after a number of years in business he can do just that.

"A poor or mediocre manual can render software totally useless by misrepresenting its function and use," writes Sharon Rosa in "Write the Right User's Manual for Your Business Applications Software." This paper explains the function of a user's manual, some ways to identify its readers, and tips on writing style. Rosa is a partner in Nicholas Rosa Associates.

"Software ranges from a few lines of source code to tens of thousands of lines," writes Victor Wyman, "Since there are so many variations, the subject of software marketing is very broad." In his paper "Marketing Your Software," Wyman of Technology Watch, discusses the importance of packaging, promotion, protection, and pricing. By cultivating a knowledge of these four areas, software dealers can keep from making major mistakes on the open market.

In "Preparing Product Announcements for the Media," Frank Vaughan draws on his experience as a trade press editor and public relations manager to tell readers how press releases are handled by the media. The key to press coverage of your product, no matter how trivial, is a well written press release, he says. Vaughan tells readers how they can author effective releases or find a competent professional to do it for them.





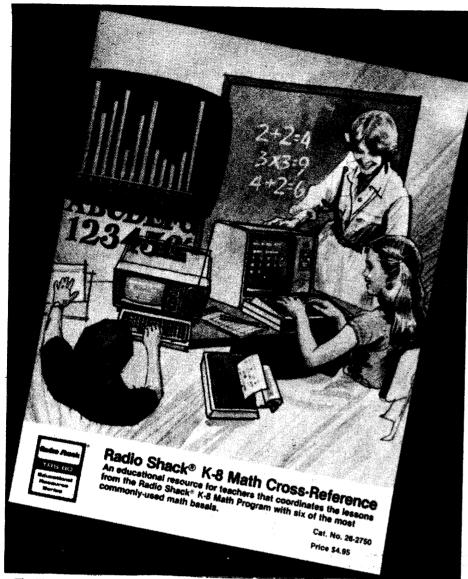
Unpack a solution (not a pile of hardware).

We know the kind of service it takes to turn a computer into a solution. From system selection to financing, installation, software, training, maintenance, future enhancements, and capability or performance upgrades.

And the final cost and ultimate success of your system can vary tremendously, depending on how well your vendor supports you in these critical areas

So when you want a computer, buy a vendor. Shop several. We don't just welcome comparison. We encourage it.





The "Radio Shack K-8 Math Cross-Reference," is the company's newest educational product.

Business Computing Show Offers Seminars for Business People

Business Computing '81, being held in San Francisco's Masonic Auditorium, September 23-24, includes two 4-hour introductory seminars for those who are experienced in business but novices in computing. The seminar leaders are experienced business consultants, accustomed to efficiently providing practical decision-making information to practical business people who value their time and spend it wisely.

Both seminars will include a check-off list of quantient to ask and points to consider

Both seminars will include a check-off list of questions to ask and points to consider when examining business computers, programs, or word processing systems.

"An Introduction to Business Computing" surveys the applications, equipment, and computer programs now available to assist in solving business and financial problems. The instructor is Mr. Michael Levy, an

The instructor is Mr. Michael Levy, an experienced management consultant and long-time international business trouble-shooter for groups of Massachusetts venture capitalists. He has given a multitude of seminars around the country, introducing business people to the capabilities — and limitations — of inexpensive business computing. He recently completed several years as President of a multimillion-dollar east coast manufacturer of business-oriented minicomputing systems (not exhibiting in BC'81), and has returned to independent consulting.

"An Introduction to Word Processing" examines this widely-used first level of office automation. It includes a discussion of equipment, options, applications (such as automatic "personalized" form letters, document preparation and automatic indexing, spelling correctors, mailing list systems, etc.), as well as the interaction between word processing systems and general business computing.

Dr. Larry Press is the lecturer. For over seven years, he has been a consultant to business and industry specializing in the area of business information processing and small business systems. Prior to that, he was a systems specialist with IBM for most of a decade, and has taught a number of information processing courses at both U.S. and European universities.

The seminars will take place 9:30am-12:30pm, with a follow-up question-and-answer period 5pm-6pm, after registrants have examined the exhibits and developed additional ideas and questions.

Registration for either of these semi-

nars is \$85, including admission to the exhibition and including a copy BC'81's Program & Seminar Notes, a publication that includes extensive cross-indices to the exhibitors and their products as well as complete seminar notes from both seminars, and the check-off lists for examining business computers, software, and word processing systems.

Preregistration is STRONGLY advised. The seminars are limited to 75 participants and appear likely to be filled to capacity. To preregister, call BC'81 Headquarters at (415)851-7075.

16 Phone Multiplexer

Radio Shack has a new Communications Multiplexer which allows the company's TRS-80 Model II computer to respond to information requests from as many as 16 telephone lines at once. This capability makes the Model II suitable for use as a host computer in private Videotex information retrieval networks, allowing communications with a number of Videotex-type text terminals simultaneously for easy access to virtually any data base.

The TRS-80 Communications Multiplexer is available in two versions, either with eight-line capability for \$6000, or expanded to 16-line capability for \$8000. The Communications Multiplexer is available by special order only from Radio Shack Special Marketing, 1600 One Tandy Center, Fort Worth, TX 76102,

New Radio Shack K-8 Cross Reference

Radio Shack is publishing a "K-8 Math Cross Reference (26-2750)", the newest addition to the company's line of computer-based educational materials for kindergarten through eighth grade mathematics instruction. This teacher's reference coordinates the lessons in the Radio Shack K-8 Math Program for the company's TRS-80 Model I and Model III computers to materials in six of the most commonly used elementary math textbooks.

tbooks.

"This makes it more convenient for a teacher to use our K-8 Math Pro-

gram in a classroom to supplement regular instruction," said William Gattis, director of Radio Shack's education division.

The elementary math texts cited are referenced through permission of their publishers: Harcourt Brace Jovanovich; Addison-Wesley; D. C. Heath; Holt, Rinehart and Winston; Scott, Foresman and Company; and Silver Burdett Company.

For more information contact: Radio Shack, 1800 One Tandy Center, Fort Worth, TX 76102.

Advice on Alphanumeric Display Terminals From Datapro

A new 67-page report on the purchase of general purpose, nonuser-programmable alphanumeric display terminals is now available from Datapro Research Corporation.

"All About Alphanumeric Display Terminals", includes market perspectives of terminal characteristics, a summary of user experience with over 11,300 installed units, and comparison charts of 262 commercially available terminals from 68 vendors.

The ratings of 101-users provide "hands on" independent reviews of inuse alphanumeric display terminals and serve as a buying guide.

serve as a buying guide.

A 12-page introduction provides buying guidelines, including an analysis of display media, "human-factor"

ergonomics, and major display markets. The market perspectives provided in the introduction are useful in understanding the terminal characteristics utilized in the 53 pages of comparison charts.

The charts allow a "quick scan" first-level search of commercially available terminals through "side-by-side" listings of terminal descriptions and availability; display, keyboard, and transmission parameters; ancillary devices; and pricing

devices; and pricing.

"All About Alphanumeric Display Terminals", reprinted from "Datapro Reports on Data Communications" is available for \$15 a copy from Datapro Research Corporation, 1805 Underwood Blvd., Delran, NJ 08075.



*APPLE II's *APPLE III's *DISK DRIVES *MONITORS *PRINTERS *SOFTWARE



BRING CASH, COMPANY CHECK, VISA, MASTER CHARGE STOCK ON HAND IMMEDIATE DELIVERY OR SHIPPING AVAILABLE

The Computer Past

.....781 W. Hamilton Ave., Campbell

Phone (408) 866-6246

It's Time to Stop Student Exploitation

editorial by Jim Warren

Proceedings Papers:

More on Learning Experiences

Personal computers are coming into wide-spread use in school systems across the country. As more and more educators and administrators turn towards computers, alternate learning methods applications continue to grow.

Five articles in the *Proceedings* of the 6th West Coast Computer Faire address the issue of purchasing a computer system for educational purposes and how to efficiently use the computing power you obtain.

ADMINSTRATION APPLICATION

The first article entitled "Personal Computers in Educational Administration", deals with the advantages, disadvantages and possible applications of personal computers in educational administration.

Authors Eugene Muscat and Paul Lorton, Jr., cite the low cost, small size, and ease of maintenance as a few of the advantages of a personal computer used in education. The two major disadvantages are its size (because no one takes it seriously), and the fact that it is a computer (causing over-zealous administrators to see it as a solution to all their administrative problems).

But Muscat and Lorton feel that the advantages of educational computing power far outweigh the disadvantages.

Applications such as word processing, personnel records management, attendance records, student data base management, individualized education programs, business management applications, general ledger and accounting information, budget and planning and inventory control have proved useful and effective.

The authors stress that effective planning is required to take full advantage of any personal computing system.

TIME BIND

David Moscow and Frank Turner deal with the problem of temporal restrictions on projects in their article, "The Microcomputer and Management of the Time Bound Educational Program".

Moscow and Turner describe how their computer monitored staff activities for a Teachers Corp Project at the University of South Alabama, and made the operation more efficient.

the operation more efficient.

"By utilizing the summation of hours spent with respect to each objective, it becomes obvious which objectives should be investigated to determine if more concentrated effort is needed," the authors concluded

THE COMPETENT COMPUTER

Leonard Meuer discusses "Competency Exams and Microcomputers" and compares the microcomputer-assisted method and the traditional method for administering the exams.

Meuer feels that the students liked taking the exams better on a computer, were more organized and efficient, and scoring is easier for the administrator.

YOUR BASIC MATH PROBLEM

"The problem: In an era of declining resources, how can the individual teacher justify a request for money for micros?"

Madeline Fish poses this question in her paper, "Justifying the Cost of Microcomputers in the Classroom".

Ms. Fish outlines the major capital expenditures she had to justify as her school district upgraded and added to their microcomputer system, then explains her reasoning for such expen-

... And higher education wonders why its having difficulty retaining public support!

One of our staff has been interested in pursuing a publications career. She was taking time off to take the journalism program at a local junior college. Unlike this writer — who has computer expertise but little formal journalistic training — she was actually spending her own time, effort, and money to obtain a 'proper' journalistic background.

But folks, she didn't git it! She encountered a "professional journalist" — her instructor — who illustrated by personal deed some of the worst characteristics possible in journalism and in teaching.

Extra Credit,
But Only If You Perform Free Labor
It is easy for a journalist — who con-



The new "CompuChair"

Technical Products, Inc. introduces Antistatic Chair

A new anti-static chair "Compu-Chair", which helps eliminate electro static discharge in static sensitive environments, has been developed by United Technical Products, Inc.

Information may be obtained from United Technical Products, Inc., 32 Southwest Industrial Park, Westwood, MA 02090.

CDC Delivers Hawk Drive Number 100,000 To Alpha Micro

It stood only three feet high, a foot and half wide. But in order of significance it was one of the largest deliveries Alpha Micro ever received — Control Data Corporation's (CDC) Hawk Drive bearing the CDC serial number 100,000.

The occasion was celebrated with a luncheon at Alpha Micro, a tour of the company for CDC, and a presentation ceremony where Alpha Micro President Robert Hitchcock received the Hawk and a plaque from Bruce Dobberteen, Vice President, Oklahoma City, Disk Operations; Magnetic Peripherals, Inc., a subsidiary of CDC.

trols publicity — to abuse the power he or she has — using it to wheedle or coerce personal benefits or free goods and services that would not normally be offered.

Similarly, it is easy for a teacher — who controls academic credit — to abuse their power by demanding free services that would not normally be offered. The worst example of this is the instructor who demands sexual favors in exchange for better grades. Different only in degree is the instructor who expects labor that primarily benefits the instructor or the instructor's pet projects, rather than benefiting the student

rather than benefiting the student.

Examples of the latter are well known in university graduate programs. All too often, grad students are required to do grunge labor on professors' research projects where their effort provides little educational experience. An example that comes to mind is the southern California students who wrote one I/O driver after another for a portable compiler system, being paid paltry R. A. wages or given credit in a programming lab for so doing. The first time or two, it was educational; thereafter, it was straight-out exploitation.

Auburn Enrolls A. B. Dick Processor

What's faster than a speeding bullet...as changeable as the weather.. a superhero of sorts? According to Auburn University in Auburn, Alabama, it's the A. B. Dick MAGNA SL word processor, which recently revolutionized operations at the School of Education.

Under the skilled direction of Dr. Dan Wright, the word processor has broken out of its traditional role as "office equipment" used primarily for text editing. Its new applications include scheduling classes, assigning classrooms, checking materials in and out of the Learning Resources Center and even determining which courses best suit the needs of Auburn's student body. Routines which were once performed manually via the trial and error method are now done quickly, efficiently and automatically with word processing precision.

Computing Show Offers Product & Service Cross-Index

Attendees at San Francisco's September Business Computing '81 exhibition will find a valuable cross-index to Bay area computer products, services, and dealers. The show's *Program & Seminar Notes* publication will list all exhibitors, plus a cross reference, indexed by generic product/service name, plus another cross reference indexed by brand name.

Additionally, it will include complete notes from the two introductory seminars on business computing and word processing, and will include the check-off lists of points to consider when approaching the purchase or rental of such systems.

Another example is the case of our staff member: The students in the journalism course were given writing assignments. They were told they could get extra credit if their stories were published . . . in the school newspaper. At first glance, that sounds reasonable — if the works are good enough to be published, then it is certainly appropriate for extra credit to be granted.

The ringer, however, was that extra credit was not being offered for publication. Academic credit was offered to those students who donated the products of their labor for inclusion in the school newspaper — sponsored and controlled by the journalism "teacher" who was teaching the course. More particularly, our staff member (who was part of the Faire staff; not part of the IBC editorial staff), wrote a story we planned to publish in one of our 50,000-copy editions, a story for which we were willing to pay. I. e., she produced a commercially viable journalistic product. But, the instructor was unwilling to give her the extra grade credit for publication . . . unless it was published in the small-circulation school paper that he sponsored. Academic credit was being offered — not for publication-quality writing — but for performing unpaid labor for the instructor's pet project!

Though student exploitation for the benefit of instructors and their projects has a long tradition, it is no longer appropriate. It is not appropriate in a nation where the business of education is big business with a huge federal budget, \$100,000+ NSF grants offered to explore whatever titilates the academician's fancy — and may produce an "academically acceptable" but otherwise useless publication, nor in a state where education is the single largest budget item — and tax expenditure.

tax expenditure.

It is particularly not appropriate at the junior college level. J. C. instructors have no publication demands, teach 15-25 hours/week for a 8.5-month work-year, have no discipline problems, and generally excellent educational facilities.

Arrogant Paternalism Prevails

There is an even more infuriating footnote to this sad tale.

Both journalists and teachers are in positions that require a high degree of sensitivity to personal and human concerns and issues. Yet, this teacher — this "journalist" — exhibited outrageous insensitivity, to wit:

Our staff member is an adult. She has been supporting herself for most of a decade, including paying the taxes that help support the j.c. she was attending.

She was attempting to improve herself and her marketable skills — encouraged only by her own will power; not the prodding of her parents. When the instructor piled on a mass of writing assignments at the end of the semester (that could have been spread over the period if the instructor had planned more carefully), and she had the audacity to object — this instructor had the audacity to suggest that she quit her job and move back in with her parents if she didn't have the time to do the work!

Incidentally, the writer of this editorial taught mathematics, full time, for ten years, and has taught computing courses part-time, for another ten years... and is quite aware of the problems and limitations of teaching.

VECTOR BUSINESS COMPUTERS



WORD PROCESSING • FORECASTING
TIME/BILLING • ACCOUNTING
INVENTORY • PROPERTY MANAGEMENT
SYSTEMS FROM \$6995
SALES • SERVICE • LEASING

CALL FOR A

Advance Data DEMONSTRATION

Advance Data Demon

2280 Diamond Boulevard Concord, California 94520 (415) **671-9016**

SEVENTY-FIVE NOVICES AND A NUN

A recently held "Show and Tell" conference, sponsored jointly by the San Mateo County Office of Education (SMCOE) and Computer-Using Educators (CUE), drew about 75 computer novices and one nun to the San Mateo County Education Office in Redwood City, CA, to see demonstrations of microcomputer software for the classroom. Over 100 attendees participated in the conference. The demonstrations were given by educators for educators, and consisted of both public domain and commercially available programs that are proven to be useful in a

classroom setting.

The "Show and Tell" conference introduced many educators to the SMCOE's microcomputer center and to SOFTSWAP— a joint project of SMCOE and CUE. SMCOE established the microcomputer center in the library of

the San Mateo Educational Resource aware of the potential of microcom-Center in June of 1980. At that time SMCOE compiled a directory of computers used in the schools of San Mateo County, and found that 102 microcomputers and 79 computer terminals were being used in 31 schools from 15 dis-

Four months later, SMCOE updated the directory to show that 164 microcomputers and 77 computer terminals were used in 54 schools from 18 districts. SMCOE plans to publish a third edition of the directory soon.

SMCOE recently hired Leroy Finkel, an educator and an author of several books on microcomputers, as a part-time microcomputer consultant for all schools in San Mateo County. Santa Clara and Alameda Counties have also hired microcomputer consultants, which shows that Silicon Gulch schools are

puters for education, and are committed to providing the necessary support.

According to Leroy Finkel and other computer-using educators, much of the commercial software is not usable or appropriate for education. Educators who are beginning to explore the possibilities of using microcomputers in the classroom are extremely vulnerable to mail-order ripoffs and inferior quality software. SMCOE and CUE are establishing the center and SOFTSWAP as a new service to teachers that will help avoid such bad experiences.

The intent is to provide a setting for educators to use and evaluate commercially available hardware such as Apple, Atari, TRS-80, Compucolor and Commodore microcomputers. The San Mateo county microcomputer center also provides both tape and disk storage devices, so educators get a chance to see the advantages and disadvantages of choosing tape storage over disk storage, before making any buying decisions.

By providing both software and many different types of computers in one place, educators can independently compare and evaluate the capabilities of each machine and the software available for it. The microcomputers have been placed in the center on long-term loan from the manufacturers, partly due to the efforts of Computer-Using-Educators (CUE). CUE has over 1500 members in

28 states and 8 foreign countries. CUE members provide much of the volunteer effort needed to maintain the SOFTSWAP library which is housed in the SMCOE microcomputer center.

SOFTSWAP currently offers over 200 instructional programs, all of which are in the public domain. The programs, written by teachers, students, and administrators, are available on computer disks for low cost mail-order distribution, and can be copied by visitors to the center, without charge, if the visitors bring their own blank disks to store their

Major publishers of educational software have been asked to place review copies of their educational software in the SOFTSWAP library (copyrights are respected). The responses so far have been very encouraging. Administrative software, including word processing and data base management programs, are also being reviewed.

In addition to software, the SOFTSWAP also provides microcomputer literature for review. Since critical reviews are rare and many educators prefer to make their own evaluations, this service is a popular one with both novices and experienced computer users in ^ducation.

Individual visitors are welcome anytime, and small groups are requested to call Janice Marshall, (415) 363-5472, for an appointment.

DEC Users Get Automated Security Monitor

Clyde Digital Systems is introducing a utility software package for automated, active system security. Named MONITR, this tool inserts itself between selected job sessions and their keyboards. Literally every byte that passes in either direction between them is recorded in a secured log file.

This capability is now offered for the DEC PDP11 (RSTS) and is being implemented on the VAX system.

The monitoring activity is invisible to the job session and to the user at the keyboard, and may be initiated or released at any point during a job session without effect on the job's correct execution. It makes no difference what is taking place between the processor and

user's keyboard.

Even in cases in which a keyboard is assigned to another job as an I/O channel, MONITR can insert itself and observe the flow of data.

MONITR is table driven and may monitor the entire system according to powerful, flexible criteria for job selection. Such parameters as account numbers, program names, keyboard numbers, and others may drive the monitoring activities. This includes random monitoring or total monitoring of everything on the system.

For more information contact: Clyde Digital Systems, P.O. Box 348, Bedford, MA 01730.



ALEPH COMPUTER SYSTEMS' COMPLETE "TURN-KEY" SOLUTIONS

We guarantee complete solutions to your data processing needs in the preas of:

- Manufacturing
- Accounting Order entry Inventory control Bill of materials Work order release Production control Cost control Material requirements planning
- Car Rental

Accounting Counter operation Car control Car maintenance

- Accounting
- General ledger Accounts receivable Accounts payable Payroll **Fixed Asset** accounting
- Wholesale Distribution Accounting

Order Entry Inventory control

- Financial Planning
- Word Processing

We offer a full money-back guarantee for six months after installation date. Complete hardware and software maintenance agreements available.

Aleph Computer Systems 1549 Shattuck Ave. Berkeley, CA 94709 (415) 843-4443



A New Publication That Provides Documentation

The DataCast subscription ad includes a famous engraving by Schongauer, "St. Anthony Tormented by the Demons," and the copy reads:

"POOR DOCUMENTATION BUG-

"POOR DOCUMENTATION BUG-GING YOU? Too many choices in new systems? Can't sort out your application needs? Need the latest information on mass digital communications? SUBSCRIBE NOW to DataCast (the hardcopy version)."

What's this? A computer magazine using art from antiquity? "We chose our first cover [an Albrecht Durer engraving titled "Melancholia"] to depict

a sense of subtle frustration over using existing tools in scientific and artistic endeavors," remarked Tony Bove, one of the editors of *DataCast*. "Durer was an artist at the time of Gutenberg's invention who felt this frustration, and had not yet 'turned on' to the possibilities of the printing press. This similar frustration is felt by today's artists and scientists who have not yet used microcomputers."

DataCast is not a literary magazine, but it is well-written. DataCast is also not a computer magazine — it's more like a "bookzine" or "magabook"

that sits on a micro user's reference shelf. DataCast's editorial content is for users — the articles are about CP/M and MP/M systems and other microcomputer systems in that price range. DataCast also covers data communications, information services and future videotex offerings for the users of these systems.

DataCast's editorial policy is unique: most of the articles are written by the editors (who are technical writers), and are consistent in style and terminology. The articles focus on the usefulness of available software packages and information services, and

provide user documentation and reference guides. The editorial concept could be applied to any family of systems, but *DataCast* chose to focus on the CP/M family of systems in order to better serve the world of CP/M users.

DataCast is not a speculative or scoop driven weekly or monthly. The information is up-to-date and complete in order to be useful — it is not based on rumor. DataCast can provide objective documentation since the publisher is not also a hardware or software manufacturer, distributor, or dealer.

Software manufacturers need to provide complete documentation, yet they usually do not have the resources to provide good tutorials or application notes. DataCast has useful articles that focus on the use of a software product in typical applications.

DataCast's first issue featured a report on AT&T's videotex protocol, including illustrated explanations of the protocol's picture description codes that reconstruct graphic images. Other features included an "Impatient User's Guide to CP/M," a CP/M command summary and reference guide, an illustrated CP/M tutorial, and an overview of home information services.

DataCast also reviewed Digital Research's Independent Software Vendor Seminar Program. To support the CP/M software cottage industry, DataCast provided software documentation protocols for typography and notational conventions, for use in manuals produced with typesetters, daisy-wheel printers, or typewriters. The protocols serve both users (who benefit from standard notational conventions) and software providers (who benefit from consistent appearance and style)

The editors have extensive backgrounds with CP/M systems and microcomputers in general. Cheryl Rhodes has coordinated computer awareness projects, worked in the ComputerTown USA! and Apple Van Projects, developed and tested courseware in classrooms, managed a computer lab for engineers, and worked in corporate data processing departments. Tony Bove has been a technical writer for Data General and Intel, has won awards for manuals, and contributed material for Sybex's The CP/M Handbook.

DataCast will continue to focus on CP/M software, other major microcomputer systems and their software, telecommunications for home and business, consumer-oriented issues in future videotex proposals, and the independent software vendor and information provider marketplace.

DataCast Number Two, due out in October, will focus on writing and doing research with CP/M systems. Articles focus on writing and producing documents with CP/M software, and researching data bases available from several information services. The popular WordStar word processing program will be covered in tutorial and reference articles.

DataCast is a series of issues that provide documentation for CP/M and other similar microcomputer systems and their software packages, and updates and evaluations of digital communications for micros. DataCast is published six times a year (every two months) by Wireless Digital, Inc. (a Jim Warren publication), and a subscription costs \$18 a year. For advertising informmation and closing dates, contact Nels Anderson at DataCast, 345 Swett Rd., Woodside CA 94062 (415-851-7075).

Poor Documentation Bugging You?

Too many choices in new systems?
Can't sort out your application needs?
Need the latest information on mass digital communications?

SUBSCRIBE NOW to

PataCast

(the hardcopy version)

DataCast is a user's reference publication for major microcomputer software systems and mass digital communications.

DataCast provides application oriented tutorials, software documentation and user's reference guides, and progress reports on new computerized information services. The content is up-to-date and complete, the writing style is consistent, and the documentation is designed for long-term use.



SUBSCRIBE.

CLIP THE FORM BELOW AND SEND IT TO: DATACAST, 345 SWETT ROAD WOODSIDE CA 94062

	my subscription with the second issue (I have the first issue)	IBC9
 I enclose \$18 (U.S.) for one year's subscription (bimonthly). Please bill me. I will promptly pay, so my subscription can promptly begin. 	Do you use a computer system? If so, what operating system?	
[Please send me foreign rates.	What software packages do you use?	
[] Please bill to my charge card; [] Master Charge, [] VISA No	What applications do you use a computer for?	
expires M/C bank code(please type or print)	What devices do you use with your computer system?	
name		
mailing	Do you use any information services or computer networks?	
address	What services do you recommend?	
city	· · · · · · · · · · · · · · · · · · ·	
stateZIP code	What information do you regularly receive?	

Best of the Computer Faires

Conference Proceedings of the

West Coast Computer Faires

THE BEST OF THE COMPUTER FAIRES, VOLUME I Conference Proceedings of the 1st West Coast Computer Faire **Banquet Presentations** Tutorials for the Computer I People & Computers Human Aspects of Syste CLEARANCE PRICE SO EACH Personal Computers for Legal Aspects of Pe Heretical Propos Computer Art Electron 14 38 v Small Business 6 peech Synthesis by vare Systems Design 11 of Software Systems & vel Languages for Home Computers 15 Multi Tasking on Home Computers 9 Homebrew Hardware 8 **Bus & Interface Standards** Microprogrammable Microprocessors for Hobbyists 18 Amateur Radio & Computers 11 Commercial Hardware 8

[2]

THE BEST OF THE COMPUTER FAIRES, VOLUME II Conference Proce Section **Banquet Presentations** An Introduction for the Abso Computers for the Physical CLEARANCE PRICE SO EACH Computers for the Visual **Exotic Computer Gap** Computers in the Legal Aspects Computer Ex Communi 21 16 21 achines 41 le & Craftspeople 28 11 39 eur Radio ware Standards Hardware 19 with Microprocessors Commercial Hardware High Level Languages & Translators 35 Block Structured High Level Languages for Microcomputers

THE BEST OF THE COMPUTER FAIRES, VOLUME III Conference Proceedings of the 3rd West Coast Computer Faire

Section	Pages
Introduction for Novices	18
Visions of Near Future	9
Computer Music Systems	9
Intelligent Machines to Aid the Physically	
Impaired	4
Low-Cost Computers in Biomedical Environs	
& Health Delivery Systems	27
Computers for Education & Teaching	40
Computer Games & Puzzel Solving	9
Potential Legislation Affecting Computer Use	
& Owners	5
Low Cost Aid to Government	8
Legal Aspects of Computers & Software	18
Inexpensive Computing for Business	15
The Business of Inexpensive Computing	18
Business Systems Software	13
Floating Point Standards & Mathematical	10
Micros	28
Microcomputing Software	21
Peripherals: Plain & Fancy	45
Communicating Computers	17
The Unclassifieds: A Potpourri	23
Post Partum Paper: Arrival After the Press	
Began to Roll	11
205mi 40 100H	1.1

[4]

THE BEST OF THE COMPUTER FAIRES, VOLUME IV Conference Proceedings of the 4th West Coast Computer Faire

Conterence Proceedings of the 4th West Coast Computer Fa	ire
Section	ages
The Effect of Computers on Society	22
Designing Computers for Humans	12
Computer Communications for Human	
Communication: An Overview	15
Computer Communications for Human	
Communication: Digital Broadcasting	28
Computer Communications for Human	
Communication: Bidirectional	28
Microcomputers Energy Management &	
Environment	38
Low Cost Educational Computing	50
Personal Computing for Physicians & the	
Physically Impaired	14
Inexpensive Business Computing	33
Microcomputer Applications	29
Musical Computing	9
Systems Software: Pascal	9
Systems Software: Forth	23
Systems Software: Pilot	4
Potpourri: Plain & Fancy	52
Micro Peripherals	16
Amateur Radio & Microcomputing	15
BULK ORDERS	1
Computer Faire proceedings may be ordered in	
bulk quantities at a discount.	
For complete details, write or phone Computer Faire, 333 Swett Road, Woodside CA 94062.	

(415) 851-7075

[5]

THE BEST OF THE COMPUTER FAIRES, VOLUME V
Conference Proceedings of the 5th West Coast Computer Faire

Section	Pages
Tutorials for the Novice	14
Artificial Intelligence & M:	10
Computer Games & Canada Strain	11
Low Cost Comput:	21
Teaching Abovi	16
Computer (S)	
Impai	8
Medica	11
Busines OC CK	26
Computer Impaired ALMOST Impaired OUT OF Busines Computer STOCK	26 8
Personal de acrocomputers	26
Unusual M. pplications	5
Legal Aspect	10
Micro Softwal gineering	15
Significant Software for Inexpensive Machine	12
Pascal & Pascal Machines	5
Micro Hardware & Interface	16
Potpourri	16
33.77	

orderform

ad Woodside, CA 94062 (415)851-7075	333 Swett Road	COMPUTER FAIRE
Phone Number	Zip	State
	r to USPO box ade	(UPS cannot deliver to USPO box address)
1		Address
	. 12	(please type or print)
		Name
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Signature
sa Card Number Expiration date]Mastercharge	Please charge this to my Mastercharge Visa Card Number
, in full payment of my order, freight prepaid.	S	Enclosed is my check for S
PIEASE GIVE ME YOUR BEST DEAL: all six volumes for \$72,00 = \$	ME YOUR BEST	☐ PLEASE GIVE
1979) \$ 15.00 ca. 80) \$ 15.00 ca. \$ 15.00 ca.	rourin Computer Faire (1979) Fifth Computer Faire (1980) Sixth Computer Faire (1981)	Volume IV: Fourt Volume V: Fifth Volume VI. Sixth
	Necond Computer Faire (1978, Spring) Third Computer Faire (1978, Fall)	
5	First Computer Faire (1977)	
outer Fa	Computer Faires:	Best of the
Please send me a total of copies of Best of the Computer Faires, as indicated below:	copies of Bes	Please send me a total of _

order form

Now, most any size business can afford the microcomputer with a name you can trust.

Simplify your business.

Now practically any size business can enjoy the speed and economies of automated accounting, data preparation or word processing. A new Z89 desktop microcomputer from Zenith Data Systems now brings these advantages within the reach of even the small businessman. For about the same investment of a small copying machine. But the Z89 microcomputer will do a lot more for your business than make copies.

Accounts payable and accounts receivable are just the beginning.

The business operations you can simplify with a compact Z89 Zenith microcomputer are far reaching! You can also put a tighter rein on inventory; set up any number of accounting reports to provide more up-to-date information; do your own automated direct mail typing; improve correspondence with clean, professional-looking word processing; reduce time and increase accuracy of customized repetitive documents and much more.

Simplify your decisions. We can help you choose the Zenith Data Systems' computer that fits your particular business operation. We can also counsel you regarding the many business application programs available for your Zenith system. Programs that operate on simplified, "plain English" commands for many business applications, plus other programs that meet the needs of highly technical or scientific applications. All of these programs (or software) are fully "documented" to give you the smoothest, error-free performance possible. In addition, Zenith computers are compatible with an extensive list of currently available business programs.

Quality you can trust. Quality you can afford. When you do decide to incorporate the many advantages of business computers into your operation, above all, be certain to select a *quality* system. Zenith microcomputers provide you with quality you can trust,



at a price you can sensibly afford. And on-site service if it's needed. With every Zenith Data Systems product you get the benefit of over 60 years of electronics experience. Assurance that "the quality goes in before the name goes on". See the complete line today.



FOR YOUR NEAREST DEALER CONTACT:

LUM-BUCKLES 410 Townsend Street San Francisco, CA 94107 (415) 495-0339