SILICON GULCH GAZETTE

Realism of Three-Mile-Island Software Might Blow You Away

Muse has released two updated versions of its popular educational and recreational game software, Three Mile Island Special Edition and The Best of Muse. Both new issues run on any Apple II or II plus with disk drive.

Now any Apple owner can experience running the Three Mile Island nuclear power reactor by playing this realistic simulation. Three Mile Island has been entirely rewritten in quick-response, machine language. The Special Edition is available to run on any 48K Apple.

The Best of Muse presents five popular game programs including Escape and The Maze Game. This 'greatest hits album' is a must for the library of any game enthusiast. The Best of Muse runs on any Apple with at least 32K.

Creative Computing Award To Be Given at 6th Faire

A special award for outstanding creativity in game programming for small computers will be awarded by *Creative Computing* at the 6th West Coast Computer Faire in San Francisco, April 3-5, 1981.

The award will recognize the programmer of a computer game selected for originality of approach, creativity, and "flow." Flow is the quality of some activities to absorb people completely, causing them to forget such activities as eating, sleeping, and the passage of time.

The editorial staff of *Creative Computing* has been seeking nominations from their regular review staff. Final selection of the winning game is the responsibility of a committee consisting of David Ahl, George Blank, and Betsy Staples.

David Ahl is the publisher of *Creative Computing* magazine, and the collector and editor of *Basic Computer Games* and *More Basic Computer Games*.

George Blank is the newly announced Editorial Director of *Creative Computing's* three magazines. George was formerly the Editor-in-Chief of *SoftSide Magazine, The Software Exchange,* and *Ram ware.* He is also the author of many computer games, including Santa Paravia and Fiumaccio, a simulation of Macciavellian politics and court intrigue in medieval Italy.

Betsy Staples has recently become Editor of *Creative Computing* magazine.

Portable Electronic Typewriters

Portable electronic typewriters were formally introduced by Olivetti at the recent Consumer Electronics Show in Las Vegas. The two typewriters, the Praxis 30 and Praxis 35, are electronic typewriters designed for personal use.

Both models feature automatic correction of the last 10 characters via "memory" and an automatic relocate typing point key. A Praxis can use a variety of daisy wheel typefaces available for use with Olivetti's office electronic typewriters.

On both models, keyboards I and II offer a total of 100 printable characters,

including foreign language symbols for international correspondence.

A Praxis machine, including its carrying case, weighs 17.3 pounds. This compares with approximately 17-20 pounds for Olivetti's standard manual portables, and 25 pounds for Olivetti's electric portables.

These machines are designed for personal use in the home or to satisfy the intermittent typing needs (15-20 hours per week) of a small office.

The Praxis 35 has a suggested retail price of $695. The Praxis 30 which offers only one typepitch — Elite or Pica — has a suggested retail price of $595.

For more infomration: Olivetti Corporation, (914) 631-8100.

Overheard (painfully) locally: The difference between 'unlawful' and 'illegal' is that unlawful refers to something against the law. Illegal, of course, is a sick bird. [sic, sic, sic]

Family Reunification Services

The bulk of the 'Boat People' were accepted by 23 countries. Amongst these refugees, are various split families. These families became split because of a variety of reasons ranging from different departure dates from Vietnam to confusion at the refugee camps to not being on hand when the departure of their final destination was set.

Family Reunification Services is set up, via microcomputers, to search through lists of refugees seeking such a missing relative(s) in the different countries.

A questionnaire describing Mrs. Huynh is completed by the husband, who currently lives in Country A. The same questionnaire is completed by Mrs. Huynh, who lives in Country B, describing her husband.

The computers search the lists till a match occurs.

Following the 'locate' phase, at which time both parties are notified of both addresses, the reunification phase is put into service. It is to be remembered that once a refugee has been accepted by a country as a permanent resident, that person is *no longer* a refugee. Immigration rules, quotas and other related factors come into force.

Most countries, in co-operation with the UNHCR, have bent over backwards to help these split families to migrate from one country to another, on humanitarian grounds.

In this phase, Family Reunification Services, helps to complete the paperwork and advise both parties of precedents and procedures that have been allowed by specific countries in like cases, but while immigration rules are bent, none are expected to be broken.

HOW TO APPLY

1. Ask your local Vietnamese association, there are several within each country, for an application form.

2. After it has been completed and its contents verified as to accuracy, mail it in to the address shown on the face of the form.

3. The computers will do the rest. There is no charge for this service. Accuracy and legible writing are most important. A badly written 'G' in 'Ngoc' may be picked up as 'Ncoc' which will never result in a match. Do not request 'location' or 'reunification' from any address in Vietnam. Such requests will be ignored.

Any Vietnamese association, humanitarian group and related agency is invited to contact: Family Reunification Services, 7203 Huntercrest Road N.W., Calgary, Alberta, Canada T2K 4J9, (403) 274-3894.

Any Microcomputer owner, willing to become part of the network is also invited to respond.

Computer Summer Camp

This summer youngsters can again sign up for an overnight camp in Moodus, Connecticut, where the main activity will be computers. Directed by Dr. Michael Zabinski, Professor at Fairfield University, the computer summer overnight camp is the first offered in the USA, Dr. Zabinski states.

The camp is for kids of all levels of experience including no experience whatsoever. In addition to computers, the campers will enjoy the recreational facilities of the Grand View Lodge.

The 1981 National Computer Camp will feature two one-week sessions: July 19-24, and July 26-31. Campers, ages 10-17, will enjoy small group instruction and mini and microcomputers for ample "hands-on." Dr. Zabinski will be assisted by elementary and secondary school teachers.

For further information: Michael Zabinski, (203) 795-9069, or : Computer Camp, Grand View Lodge, Box 22, Moodus, CT 06469.

Conference Session

The Society For Computer Medicine

The primary purpose of the Society for Computer Medicine is to provide a neutral interdisciplinary forum dedicated to a better understanding of the health care system and to the application of computers and other automated devices to improve its functions. Toward this end, the Society has organized a yearly conference (this year at the 6th West Coast Computer Faire), and also provided a framework for discussion of the various subsystems of the health care system.

"The organizational approach of the Society is toward subject matter rather than specific academic discipline," says past Society president Neal Koss. "In this manner it hopes to nurture the best interdisciplinary communication and foster the application of joint efforts to the solution of health problems.

"We invite all who are interested to join us in this quest for improved systems of medical care."

Conference Session

A Report On USUS

USUS is the user group of the UCSD Pascal language system. "It was begun in June, 1980, and has rapidly evolved," says USUS Software Library Chairman James Gagne, "into a vigorous, vocal, and intensely independent voice of the users of the UCSD p-system, now three languages strong (Pascal, still by far the most popular, as well as Fortran-77 and a structured business Basic). In my talk 'The UCSD p-System Users' Society,' I discuss what's happening in USUS and let you know about the Software Library, one of the services available to USUS members."

Stockpak From Standard & Poor

Now available from Radio Shack for use on their TRS-80 microcomputer systems is Standard & Poor's Stockpak System, a complete stock analysis and portfolio management package.

Stockpak is said to combine the expertise of Standard & Poor's with the latest analytical methods of Wall Street to allow the personal computer owner to duplicate the professional investment strategies used in the financial community.

The system provides for evaluating and managing a stock portfolio of up to 100 securities with as many as 30 transactions on each issue. It also makes it possible to
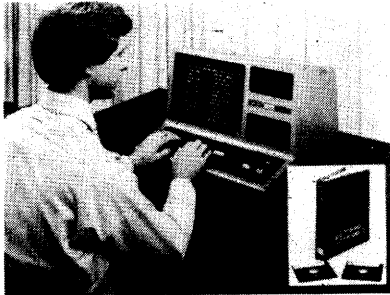
analyze 900 New York and American exchange and over-the-counter common stocks, and generate reports to guide investment decisions.

In addition, the user is able to record buy and sell transactions, price and dividend information, and stock splits. This information may be retrieved instantly for record keeping and tax purposes.

According to Radio Shack, the user can also screen and select from among 900 companies meeting user-defined investment objectives, and compare and analyze companies by industry group. Yields, earnings, price ranges, capitalization and financial positions can be retrieved and ranked.

Another feature of Stockpak is said to be its ability to measure the actual performance of a portfolio and allow the user to create hypothetical situations prior to stock investment decisions.

PROGRAM DISKETTES

The Stockpak System is designed for use with Radio Shack's Model I or Model III TRS-80 32K business computer systems, including four program diskettes and a comprehensive user's manual.

The first program diskette is the Portfolio Management System which provides for the maintenance and control of a portfolio, or a simulation capability for any group of securities to be evaluated.

A second diskette contains the Screen and Select System which offers the capability to apply a variety of investment criteria to the 900 stock data base, identifying securites to meet such requirements as price/earnings ratios of less than 10, selling below a given price, and more. Stocks selected and criteria statements can be stored for instant recall.

Diskette three is a Report Writer System which creates customized reports of stocks meeting user-selected criteria, along with additional pertinent information from the data base.

The fourth diskette is a Demo Data Base which contains a 900 common stock data base of the most widely traded stocks with 30 financial items on each of the companies. Optional monthly updating is available from Standard & Poor's.

Standard & Poor's Stockpak System for the TRS-80 is available from participating Radio Shack stores, dealers and Computer Centers. Price is $49.95.

An annual subscription to the monthly update service, available from Standard & Poor's is $200.

For more information: Radio Shack, 1800 One Tandy Center, Forth Worth TX 76102; (817) 390-3272.

TI: May The Source Be With You

Texas Instruments Inc. recently entered into an agreement with Source Telecomputing Corp., McLean, Virginia, to develop and expand home information and communications service for users of the TI-99/4 home computer.

Designated Texnet, the new subscription service will be available over telephone lines coupled to the home computer via readily available TI-99/4 peripherals. It will offer all the services of The Source information utility plus new data bases that take advantage of the color, graphics, sound, music and speech capabilities of the TI-99/4 home computer. In addition, it will include a text-to-speech capability that allows users to hear any messages typed on the computer keyboard, or transmitted over the Texnet system.

In making the announcement, TI said Texnet is a major step toward the home electronics center that is envisioned as a common household element of the mid-1980's. This center will be a series of integrated systems for home education, family resource management, and home entertainment, with the home computer playing a pivotal role. Information networks like Texnet will bring the outside world into this home electronics center via the telephone to make electronic news services, library and encyclopedia services, consumer buying and travel services, plus home entertainment and education services available to all members of the family.

Texnet will be operated by Source Telecomputing Corp. as an extension of The Source, the first and largest computerized consumer information utility available in the U.S. Since introduced in 1979, The Source has grown to include approximately 7,000 subscribers that have access to some 2,000 subjects via the telephone. The list of subjects includes the services of the United Press International Newswire, world airline schedules and travel services, restaurant and wine guides, consumer buying services, the *New York Times* news and consumer data bases, foreign language drills, a unique electronic mail service, and many other local, regional and international information banks. Texnet will include all of these services plus new data bases that utilize TI graphics, sound and speech capabilities. Texnet service will be available in the first half of 1981.

"When The Source was introduced," said Marshall Graham, newly-elected president of Source Telecomputing Corp., "we perceived it as a new type of telephone system that would serve the information needs of all members of the family — the student with educationally-oriented services, the homemaker with such services as real estate, energy-saving tips, recipes and gourmet cooking, the head of the household with a full range of financial management services, and youngsters of all ages with a variety of services."

Graham went on to say, "We have taken a number of steps recently to expand and improve our information services. We find the application of TI technology most exciting and look forward to working with Texas Instruments to develop this service for TI-99/4 subscribers."

TI said it is actively seeking new software, new data bases, and new peripherals for the TI-99/4, and expects to develop a variety of new services for Texnet, from within the company and from third-party developers.

For more information: Texas Instruments Inc., Consumer Relations, Box 53, Lubbock TX 79408, (800) 858-4565.

Local Networking For Small Systems

Local networking technology has been developed over the past decade, and has gained great visibility within the past year or so. Xerox even features its Ethernet as an "Information Outlet" on TV commercials. New companies such as Ungermann-Bass have been formed with local networks as their only products, and other established companies such as Zilog are featuring local networking products (Z-Net).

"Local Networking for Small Systems," a 6th Faire talk, provides a very brief overview of the local networking field, and then, focusing on a specific local networking product (TNW's Piconet), shows the kinds of benefits that this technology can bring to users of personal/small business computer systems.

"Generally," says speaker Douglas Gage, "a computer network is a communications scheme that allows data processing entities (computers, terminals, and/or peripherals) to communicate with one another. A computer network is referred to as a 'local' network if it displays the following three properties (no, these are not hard-and-fast criteria, but they are accepted by more than one person:

"1. It is "local" — that is, extending over a geographic distance of less than 10 kilometers or so.

"2. It provides a large aggregate communications bandwidth — in excess of, say, 100 kbps. (Most systems offer considerably more, occasionally in excess of 10 Mbps.)

"3. Control of the network is held by the using organization (i.e., you don't subscribe to a local network service, you purchase or lease a local network system."

Graphic Dictators Don't Fade, They Just Lose Their Resolution

A software program, called Micro-Painter, employing high-resolution graphics to "paint" pictures in 21 different colors on the Apple II, was recently released by Datasoft, Inc.

Designed for computer hobbyists and professional programmers, Micro-Painter includes a magnification feature for dot-by-dot coloring, and inverse coloring. Once painted, pictures can be saved or displayed in any combination of colors or in an unpainted state. Pictures can also be repainted at any time.

The program is available for $34.95. For details: Datasoft, 16606 Schoenborn St., Sepulveda CA 91343.

Mita Offers Multiple Industry Benefits

MITA — The Microcomputer Industry Trade Association announces three cost savings benefits for members.

In conjunction with the Mid Peninsula Agencies Inc. and some of the leading insurance carriers in the country: the AETNA and Travelers being just two of the sponsoring companies, MITA has developed a specialized microcomputer industry insurance package which we believe to be one of the broadest and most comprehensive association packages available today.

Through the group purchasing power of our growing industry, you are now able to purchase at substantial savings comprehensive general liability; property, workers compensation; cargo and ocean marine cargo and products liability insurance.

Firms have been saving 25% and more off their current rates while often expanding their existing coverages.

A comprehensive program covering Group Hospitalization, Major Medical, Dental, Life, Disability, and Retirement plans are also available for firms of 2 employees or more, with customized plans for larger groups available to meet specific needs.

These programs are now being offered in all 50 states as well as overseas. We are continually evaluating the Association's coverages so as to offer you the most comprehensive and cost effective packages available today.

MITA invites you to compare and save.

Members can now receive a 20% discount from Vantage Research on *Office Computing Industry Report* and *Personal Computing Industry Report*.

These reports look at the fast growing markets resulting from the convergence of business, microcomputers and office machines in the office environment; and personal computers in business, professional, industrial, educational and consumer end markets.

The monthly reports cover products, technology, distribution, software, business strategy and industry forecasts written for manufacturers, dealers, ISO's, distributors, retailers and suppliers of services to the small computer and business equipment markets.

Both publications are edited and published by Robert F. Wickham, President of Vantage Research.

For more information about MITA contact Richard Linn, Executive Director, Microcomputer Industry Trade Association, 1143 Crane Street, Suite 208, Menlo Park CA 94025, (415) 326-8420.

Tree-Structured File System For PDP-11s Under RT-11

Multi-level directory and file allocation is now available for PDP-11 and LSI-11 users running RT-11 (Versions 3B and 4) or TSX-Plus (a multi-user extension to RT-11). This is similar to the sub-directory structures found on some large operating system. Ths Sub-Device System is an easily-installed software enhancement package. It helps users avoid file naming conflicts and directory overflows. It also relieves user confusion caused by large, single-level directories. Files can now be easily separated by project, user, program version or other convenient definition.

Sub-Devices are variable-sized, virtual devices, complete with volume labels, directories and files. Appearing to the user as physical devices, they are actually files which can be placed on any disc or other random-access directory-structured device. They can be some arbitrary size or, they can be the size of one of several standard RT-11 devices.

Sub-Device files can even be images of physical devices, such as floppy diskettes. Such images allow rapid access to the contents of the slower physical devices. Sub-Devices can be used by RT-11 and TSX-Plus programs and commands without any special coding.

Even for the novice user, everyday use of the Sub-Device system is quite simple, since Sub-Device files are commonly accessed by means of user-generated command files.

This file management aid is immediately available for $200.00 license fee from Menlo Computer Associates, Inc., 801 E. Charleston Road, Suite F, Palo Alto, California 94303; (415) 494-3170.

FREE:
Get Future *Gazettes*

If (1.) you would like to receive free future issues of our glorious *Silicon Gulch Gazette* (worth at least every penny you pay for it), and (2.) the mailing label on this issue does not have the mailing date in square brackets, then send your request to:

Free SGG, Computer Faire
333 Swett Rd
Woodside CA 94062

Kit Allows You To Drive Right Up

Cambridge Digital, a division of CompuMart Corp., is offering a complete kit for interfacing RK05-J disk cartridge drives to the LSI-11 family of microcomputers. The controller kit allows users to operate RK05 subsystems, previously installed on PDP-11/23. The controller will interface up to 8 drives daisy-chained together, for a total capacity of 20Mbytes of online storage.

The controller is 100% software and media compatible with DEC's RKV11/RK11 and will operate under RT-11, RSX-11, RSTS, UNIX and TSX operating systems, which are also available through Cambridge Systems. All disk media will be compatible with that used on PDP-11/Unibus based RK05 drives.

The controller occupies one dual Q-bus slot and can be used in any LSI-11 compatible backplane. The controller includes an integral bootstrap loader.

The kit consists of a controller module, interface cable, diagnostics, user's guide and technical manual. For more information: CompuMart, Cambridge Digital Co., 270 Third Street, Cambridge MA 02139; (617) 491-2700.

Holy Graphics!, Batman.

Due to a technological breakthrough, Atari is able to bring holography to the world of electronic games. After years of research and development, Atari recently introduced the Cosmos Programmable Game System featuring Holoptics.

Holoptics is Atari's exclusive, holographic technique for creating three-dimensional light images of detail and realism on a two-dimensional plane.

Until Cosmos, holograms had not been produced in large volume and were very expensive.

Cosmos is a table top game system that combines 3-dimensional Holoptic images, LED game play and sound effects.

The system is programmable and initially, 8 game cartridges will be available.

For more information: Atari Consumer Division, 1265 Borregas Avenue, P.O. Box 427, Sunnyvale CA 94086, (408) 745-2883.

Conference Session
STARS Will Help Stage Critical Performance

A performing-arts organization can contain aspects of both a profit-making organization, and a non-profit organization.

Some examples of profit-minded management include: the costs and returns expected from an arts performance; effective pricing of theatre performances; marketing and attracting the arts-interested public through effective use of local media.

The principal needs of the non-profit sector include: effective fund-raising; providing of outside services to the community.

"Closer management of the performing arts sector is vitally needed," claims 6th Faire Speaker David Blow. In his talk "STARS (Subscriber Ticketing, Accounting, and Revenue System) An Automated Manager for Small Performing-Arts Theatres," he notes "it is very difficult to control the variable costs of a performing-arts presentation. By concentrating the data in one place, better decisions can be made as to the quality and production costs of a performance.
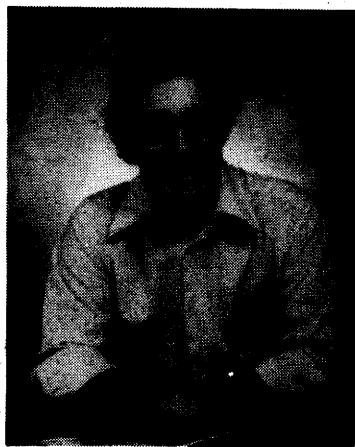
"On the non-profit side, many funds-granting organizations want to know in much greater detail the use of funds granted, and an assurance that all funds that have been granted can be accounted for.

"If there is government support of the arts, the reports on the use of these funds are subject to a specific set of audit standards.

"In addition, significant savings can be realized through centralization of the filing and typing of all the required information."

STARS, developed by David, is for small- to medium-size, performing-arts centers and theatres.

The STARS software was written with the advice of several people in the management of performing arts organizations. The accounting section of the module has been designed on the guidelines of the non-profit sections of the American Institute of Certified Public Accountants (AICPA).

Conference Session

Waxing Ecstatic Over Computer Controlled Carving

"I have been interested in computer graphics for a long time," says 6th Faire speaker David Dameron in his talk, "A Three-Dimensional Computer Input-Output System," "and felt that I could finally purchase something with the advent of microcomputers. I had been doing limited plotter drawings as a graduate student on a batch system with an off-line Calcomp plotter. In 1977 I put together an S-100 Z-80 computer and in early 1978 added a Sylvanhills plotter. Converting this plotter drive to stepping motors, acquainted me with the computer control and mechanics of this type of drive. Once this two-dimensional output device worked well and produced results, I decided that it was time to work on a three-dimensional output device as well as three-dimensional input to the computer.

"My talk describes a computer system for carving three-dimensional objects from two and three-dimensional input data. The input data can be generated from mathematical functions or digitized from contours, projections or fully in three dimensions. Once the data is in digital form, it can be transformed and combined with other data to produce the final three-dimensional object. The object can be previewed as a perspective drawing on an X-Y plotter and then be carved into wax by a computer-controlled sculpture machine."

Fast Program — Of A Sort

Ultrasort II give CP/M and CBasic2 users a fast 8080/Z80 machine-language program to sort, merge, or select records from data files, or to find the number of logical records in a file. It can be used as a stand-alone utility or as a fast subroutine called from CBasic2.

Ultrasort II handles large data files rapidly and will sort records thousands of bytes long. It sorts on up to 5 keys, each independently ascending or descending. Fields may be variable or fixed length. Strings may optionally be floated as numeric fields; numeric fields are automatically floated.

The select capability permits either omitting or including records that are less than, equal to, or greater than up to four independent select keys. Ultrasort II also provides prompted disk changes for work and output files.

The machine-language program increases its speed by using the entire transient program area (TPA) memory as the sort buffer. It writes the entire TPA (including the calling program) to the disk, performs the sort, then reloads the TPA back into memory.

Ultrasort II is available from several software distributors and Computer Control Systems, Inc., 298-21st Terrace S.E., Largo FL 33541.

Computer Consciousness

Addison-Wesley recently announced the publication of *Computer Consciousness: Surviving the Automated 80's* by Dominic Covvey and Neil McAlister. The book provides a description of hardware, software, and the total system in which the computer works, and additionally explains programming, operating systems, and computer languages in a logical progression from the smallest component up to the whole system.

For more information: Addison-Wesley, Higher Education Division, Reading, MA 01867; (617) 944-3700.

C How It Runs

Cromemco recently announced the availability of the C programming language for use on Cromemco Z-80A-based, S-100 microcomputer systems. C is a powerful, general-purpose programming language which features economy of expression, modern control flow and data structures, and a rich set of operators. Originally developed and implemented on the Unix operating system, it is an effective programming language for a wide range of applications. C, which combines the features and powers provided by assembly languages with the structured programming techniques available in higher level languages, is particularly useful for systems programmers. It is effective for writing operating systems, languages, utilities and I/O drivers, communication software, database management systems, file management software, and fast graphics software.

Systems programmers find that the absence of restrictions and the generality of the C programming language make it useful for writing many programs. Furthermore, as it is not tied to any particular hardware or system, it is possible to develop "portable" programs that can be run without change on a variety of hardware.

The C programming language operates under Cromemco's multi-user, multi-tasking Cromix operating system. C produces relocatable code that can be linked with Cromemco Fortran, Cobol, and Assembly language or called from Basic.

Cromemco is the only microcomputer manufacturer who currently supplies the C language. It is available on 5" diskette (Model CCC-S) or 8" diskette (Model CCC-L) including extensive documentation for $595. For additional information: Cromemco, Inc., 280 Bernardo Avenue, Mountain View CA 94043; (415) 964-7400.

Don't miss the 6th West Coast Computer Faire.

Conference Session

Multi-User/Multi-Tasking Operating System Described

The Betasystem II computer, featuring the 3A release of its UCSD-compatible operating system is recently available. "A high level of system reliability, maintainability, expandability, and flexibility has been achieved through careful optimization and matching of the operating system to the system hardware," say speakers Alfred A. Pease and Robert G. Nelson in their 6th Faire talk, "The IBS Multi-User/Multi-Tasking Operating System." Alfred and Robert describe in detail the system, which has features allowing true con-currency for program segments residing in multiple memory banks.

The End Game Can Finish You

The winner of the 1980 International Othello Tournament in London has attributed his chess success to practicing against a computer program.

Last June, in the First International Man-Machine Othello Tournament, Jonathan Cerf (son of the late author and publisher Bennett Cerf) lost to a computer program, called Reversal. (The Reversal program, which is published by Hayden Book Co., Inc., and runs on an Apple computer, came in first in the tournament's software division. It beat out five other computer programs, including one running on a giant IBM 370 computer.) Ironically, Jonathan had advised Reversal's designers on improvements just before losing to it.

Last summer, Jonathan retired to Martha's Vineyard with an Apple computer and a disk holding Hayden's Reversal program to get ready for the fall competition. "Reversal plays end games perfectly," he said. "This is one of my weaknesses. It looks ahead at literally every possible move to the end of the game and picks the best next move. This is something almost impossible for humans. I learned a lot by watching it."

Jonathan says he now knows the program well enough to beat it. ". . . Well, better than 50% of the time, anyway," he adds.

His world Othello championship was the first by an American. Previous contests have been won exclusively by the Japanese.

Jonathan lives on Manhattan's Upper East Side and is a free-lance author of arithmetic books when not trying to beat the computer.

Putting Their Mouth Where Their Byte Is

Byte Industries, Inc., one of the nations wholesale distributors serving the retail microcomputer trade recently announced the establishment of its in-house department providing repair service on the product lines Byte sells.

In conjunction with the establishment of the service department, Byte has instituted a new program of double-guaranteeing products. Byte previously passed on the individual manufacturer's warranty program, but now insures that, in addition, if a problem arises Byte will repair or replace the product, or credit the dealer's account.

Byte stocks over a 1000 line items from over 60 manufacturers.

For more information: Byte Industries, 3501 Arden Road, Hayward CA 94545; (415) 783-8272.

The Valley of Opportunity

By Ron L. Jones

The Silicon Valley is one of the easiest places to become a successful entrepreneur if one does his homework and keeps his eyes and ears open. When opportunity knocks, you can greet it with open arms.

I came to the Valley seven years ago, and during that time I have watched Apple Computer Corporation, Rolm Corporation, and a host of other companies grow from small businesses into huge multi-million dollar businesses. If they could do it here, why can't I have an impact on the market?

I realized, however, I needed help and guidance. I went to a top marketing executive and asked him how can I market my products, without giving away a large part of the profits?

Here's what he told me, "First, cut down and keep your extra curricular activities to a minimum. Focus on one simple idea you can finance, manufacture, and sell, on you own. Also, have a good idea how you're going to market your product. If there is a need and the product is unique, it will virtually sell itself. Concentrate on making one product profitable. With the profits from your first product, you can develop more elaborate products."

I took his advice and decided to test his theory. One profitable idea came to me by obeserving people. At work, I noticed programmers and technicians save their crashed comptuer disk platters for sentimental reasons, and for the natural beauty of the disk. I figured, if a non-functional disk platter had appeal, what would happen if it was functional? So, I took a discarded disk, added a clock module and a little art work (i.e., slogans: Programmers do it virtually all the time, Watch Out! IBM, etc.).

I built four different Crashed Platters Clocks (i.e. Analog and LCD, LED, flourescent digital), and took them to work to conduct a non-scientific test market. I hung them on the wall and waited for a response. I received four orders on the spot. There were several positive remarks, and a few negative remarks. Analyzing the response, I saw a market for Crashed Platter Clocks. I went to the courthouse and got a business license to make it official.

After the clocks proved to be profitable, I expanded my product line to include 8" Floppy Diskette Calendars.

I attempted to sell the 8" Diskette Calendar, called the Floppy Care Calendar, to Apple Computer Corp. as a promotional item. They replied "The calendar is nice, but we do not use or sell 8" diskettes. Sorry, we can't use your calendars." The bad news prompted another product to fill the needs of minidiskette users, and their manufacturing corporations. It's called the Write-on Floppy Calendar which is a take-off from the 8" Floppy Care Calendar.

The business has grown from a one-product company into an eight-product company, based on a simple philosophy of "discovering a unique idea and capitalizing on it." This is a normal occurrence in the Silicon Valley. If you take note, this theory may work for you. It has happened before, and it will happen again.

For more information: Crashed Platter Products, Box 631, Cupertino CA 95015; (408) 446-0777.

Conference Session

Pascal USUS Invites Use

USUS stands for the UCSD (Pascal) System Users Society, and the name is pronounced "Use Us." The UCSD Pascal System is a machine independent system of software which was developed to provide an environment in which software portability is facilitated; the system initially used Pascal as its principal language, but other languages such as Fortran, Cobol, and Basic are either available or will be in the near future. USUS was created to promote and influence the development of, and education and information exchange about, the UCSD Pascal System. To do this, USUS periodically holds meetings around the United States to provide members with a forum for technical presentations and discussions, and news about the status of the UCSD Pascal System and its derivatives. USUS publishes a quarterly newsletter which contains USUS news, technical papers, and UCSD Pascal System news. USUS also supports a Software Exchange library from which USUS members can obtain software at a nominal reproduction charge. Special Interest Groups (SIGs) on topics including Applications, Word Processing, Real Time, Pascal Standardization, and CAI have been formed, and others will form as the interest develops. USUS is applying for non-profit status and is independent of all vendors.

At the 6th Computer Faire, the 4 subsections sponsored by USUS will focus on providing information. They will begin with a 1 hour tutorial on Pascal. The second hour of the morning session will concentrate on implementing the UCSD Pascal System. Details on II.0, III.0, and IV.0 implementations will be presented by experienced USUSers, and there will be ample time for discussion. The afternoon session will begin with presentations on the major activities of USUS, including the Software Exchange Library, the Newsletter, the SIGs, and the Advance Planning Committee. The last hour of the afternoon session will be devoted to UCSD Pascal applications. USUSers will present descriptions of their applications, and information on how Pascal or the UCSD Pascal System helped.

Printer Dots Its I's — And Its T's

The first 80-column, dot-matrix printer in the under $1,000 category designed with rugged, high-quality printing ribbon and paper drive mechanisms was announced recently by Integral Data Systems, Inc.

The new Model 445 addition to the company's Paper Tiger printer family features a reliable seven-wire ballistic-type print head, long-lasting mobius-loop ribbon cartridge system, and heavy-duty print head and tractor feed motor drives.

The print head is driven under microprocessor control by a dedicated heavy-duty drive motor, allowing the Model 445 to achieve undirectional print speeds up to 198 characters per second.

Advanced print control functions include enhanced "bold" text printing, as well as the ability to print 80 columns of text at 10 pitch and 132 columns at 16.7 pitch.

The Model 445 also offers IDS's unique DotPlot graphics capability that gives its users control over each individual dot printed, and enables printing the full range of graphics. The additional 2K-character buffer, included with the optional graphics package, holds the full contents of a standard 1,920-character CRT screen.

For more information: 14 Tech Circle, Natick MA 01760; (617) 237-7610.

Pascal On The Run

UCSD Pascal is now available for Cromemco, Dynabyte, Onyx and Vector Graphic systems. Professional Business Software, (PBS), has written the Bios for the Z-80 Adaptable System so the UCSD Pascal programs now run on these microcomputers. UCSD Pascal from PBS is complete with documentation and is certified by SofTech Microsystems. The UCSD System with Pascal compiler if $450. A run-time-only system is available for $350. For information regarding the availability on other systems: Professional Business Software, 119 Fremont Street, San Francisco CA 94105; (415) 546-1596.

Come join the fun at the 6th Computer Faire.

CP/M & Hard Discs for Zenith-Heath '89's

Magnolia Microsystems of Seattle offers CP/M for the Zenith-Heath '89. Magnolia also modifies the '89 to hold a full 64K of memory. For word processing, the '89 mates easily with Magic Wand software. Eight function keys give a typist one-key control over text, and freedom from endless 'menus.'

Magnolia also offers the Corvus 10 or 20 Mbyte hard disc drives — up to four of them — for the '89.

For further information, visit the Magnolia Microsystems exhibit at the 6th Computer Faire, or call or write them at 2812 Thorndyke Ave. West, Seattle WA 98199, (206) 285-7266.

Micro Architect Offers a Small Draft

Micro Yellow Pages (formerly known as TRS-80 Yellow Pages) is a 20-page catalog/newsletter publication describing all the software produced by Micro Architect Inc.

Micro Yellow Pages is one of the first publications for the TRS-80 computers with the first official issue dated September, 1978. Issue 3.1 describes business software packages for the Model-I, Model-II, and Model-III for the TRS-80, CP/M, and Heath HDOS. For a complimentary copy, please contact Micro Architect Inc., 96 Dothan St., Arlington MA 02174. For immediate response, please send a long, self-addressed, stamped (28¢) envelope to us.

Conference Session

A Homebrew Compiler Project

Runic is a small, interactive computer language intended especially for first-time and home computer users. It features a consistent and friendly computing environment, many functions directly available to the user without programming, and easy extension by adding new language words to an online "active dictionary."

In his 6th Faire talk, "Runic: A Homebrew Compiler Project," speaker Marty Franz tells about the Runic language and describes the design of an interactive compiler that implements its base. Marty says, "I am currently developing the compiler using the CP/M operating system and the C programming language. A version should be available for evaluation by the time of the Computer Faire."

Avoid Waiting in Lines Preregister for the Faire

Although the Computer Faire, itself, is not staffed to handle pre-registration directly, it has arranged for a number of cooperating stores to carry prereg packets. They are listed below.

The stores prefer that you drop by to pick up your prereg — they'd like to see you and have you see what they have to offer ("Know your dealer.") However, should you be unable to do so, several of them are accepting **mail orders** . . . *if* you do the following:

1. Send your mail order *early.* (Remember, the U. S. Snail Service will be handling its delivery in both directions.)
2. Send full payment (phone the store for their reg fee; by FTC regulations, the Faire cannot tell them what to charge), *and* a stamped, self-addressed, legal-size envelope.

The stores accepting **mail order preregistrations** are marked in the following list with an **asterisk** .

Data Domain of Schaumburg* $11
Plaza De Las Flores
1612 E. Algonquin Rd
Schaumburg IL 60195
(312)397-8700

Byte Shop
3616 W 2100 S
Salt Lake Cty UT 84120
(801)973-4446

Opamp Technical Books
1033 W. Sicamore
Los Angeles CA 90038
(213)464-4322

Computerland South Bay* $10
16720 Hawthorne Blvd
Lawndale CA 90260
(213)371-4624

SCR Electronics
9533 Valley View St
Cypress CA 90630
(714)527-2554

Thorpe Datasystems Inc* $9
7114 Owensmouth Av
Canoga Pk CA 91303
(213)703-6900

Computerland
289 E. Highland
San Bernadino CA 92405
(714)886-6838

Computers Plus* $9
1827 State St
Santa Barbara CA 93101
(805)963-4542

MicroXchange* $10
123 W. Padre No.E
Santa Barbara CA 93105
(805)682-1507

Coastal Computers
986 Monterey St
San Luis Obispo CA 93401
(805)543-9339

Computerland
223 S. Broadway
Santa Maria CA 93454
(805)928-1919

Electric Brain
3038 N. Ceder Av
Fresno CA 93703
(209)227-8479

ZacKIT/Monterey* $9
350 Del Monte Av
Monterey CA 93940
(408)375-3144

Affordable Computers* $9
2711 Ransford Av
Pacific Grove CA 93950
(408)373-7177

Kepler's Books
825 El Camino Real
Menlo Pk CA 94025
(415)324-4321

Byte Shop
1415 W. El Camino Real
Mtn View CA 94040
(415)969-5464

Computer Plus
1328 S. Mary Av
Sunnyvale CA 94087
(408)735-1199

Arrow Computer Supply* $9
1301 Harrison
San Francisco CA 94103
(415)864-0900

Computerland
117 Fremont St
San Francisco CA 94105
(415)546-1592

Computerland the Castro
2272 Market St
San Francisco CA 94114
(415)864-8080

AIDS
301 Balboa St
San Francisco CA 94118
(415)221-8500

Computerland El Cerrito
11074 San Pablo Av
El Cerrito CA 94530
(415)233-5010

PC Computers* $9
10165 San Pablo Av
El Cerrito CA 94530
(415)527-6657

North Bay Computers* $9
6526 Washington
Yountville CA 94599
(707)944-8885

Computerland Marin
1930 4th St
San Raphael CA 94901
(415)459-1767

Affordable Computer Sys
3400 El Camino Real
Santa Clara CA 95051
(408)249-4221

Microbyte Computer Systems* $9
2626 Union Av
San Jose CA 95124
(408)377-4691

Byte Shop* $11
6041 Greenback Ln
Citurs Hts CA 95610
(916)969-BYTE

Online Database Services: A Rapidly Developing Industry

Modern computerized databases are providing answers to critical questions for executives in every function of business. Although the industry is still young, revenues generated by online database services will reach $2.99 billion by 1985, according to an analysis of the online database industry just released by Creative Strategies International (CSI), a market research and consulting firm.

A growing concern over professional and managerial productivity, improved software, and an increasing number of databases in a widening range of subject area (over 450 databases currently are online) will all contribute to rapidly developing markets in the reference and source database areas examined by CSI's new Industry Report. Over the next five years, the industry is expected to achieve a compound annual growth rate of 38%.

Information in the reference segment tends to be less business-oriented than in the source area. There are currently more than 225 reference databases, and new ones are coming online monthly. Although some 3.5 million searches were coducted through U.S. public places in 1980, surveys indicate that only 5% of this market has been tapped.

The fastest-growing area within the source segment is the numeric database, which is often used by the decision-maker without the intervention of intermediaries. Although 89% of numeric revenues are from business and economic databases, new database acquisitions will boraden the range offered. New companies are entering this market with innovative ideas, and interesting alliances are developing through acquisition and joint ventures.

The full-text database is a relative newcomer to the source field. Many newspapers are either entering into agreements with online service organizations or at least carefully considering the electronic distribution of information. Although the full-text approach has been well-received within the legal community, the customer base for general news retrieval services is still in question. However, should full-text access become acceptable to the general consumer population, online database services will be able to count their customers in the millions instead of the thousands.

A number of organizations in the reference and source segments of the market publish databases as well as providing online services. Although a few companies are moving in this direction, it is too early to tell whether there is a trend toward integrated services. On the other hand, database publishers are very concerned about the migration from print to online access. Print subscriptions may be lost at a greater rate than online-access revenues are generated.

Participants

Four major groups particpate in the online database industry: database producers; online service organizations (also called vendors); integrated services; and users. Already over 270 producers and vendors are involved in the industry in the U.S., Canada, and Europe. While some overlap between source and reference vendors is evolving, other companies such as general timesharing firms have found they can be very successful packaging database use with other services.

Competition among database producers is generally less intense than among online services. While nonexclusive agreements between producers and vendors tend to increase competition, producers have the opportunity to benefit from

Are You Game?

Hayden Book Company, Inc. recently announced a new computer game series, called Gameware. The first three games in the series are: Hayden's Reversal, winner in the software division of the First International Man-Machine Othello Tournament; Blackjack Master, a game that allows players to test their betting and playing strategies over thousands of games in minutes; and the Sargon II chess game.

For more information: Hayden Book Company, Inc., 50 Essex Street, Rochelle Park NY 07662, (201) 843-0550.

several vendors' selling strategies and customer bases. Often, vendors carrying the same database focus their marketing effort on different users, thereby all securing a segment of the market.

Producers themselves constitute a potential competitive threat to online service companies. Some producers already offer their information online while leasing it to other services. But both producers and vendors can reduce their risks by entering into joint ventures. Besides sharing costs, joint ventures enable all concerned to shorten lead time — an important factor in this business. More and more companies are also realizing that in forming a joint venture each side brings a special expertise.

Database software programs have been available for producers to develop online services. Yet one of the biggest problems the industry faces is the need to develop search methods that are easier for users to employ. Differences in current software programs stem from the wide variety in the databases themselves. As the online industry progresses, systems and protocols from different srevices will become increasingly similar. In addition, the promise of user-oriented "transparent" systems will reduce the need for users to understand different protocols.

Exciting new technologies such as videodisc and viewdata are on the horizon. However, Creative Strategies expects that online information retrieval will not encounter any serious competition from other technologies in the next five years. For all its advantages, however, online information retrieval has aptly been called one of the best-kept secrets in the information industry. Those in the database industry face a formidable task in educating the "information needy" about the benefits to be realized using electronic information systems.

Creative Strategies International's new report, Online Database Services, examines the market for database producers, online service organizations, and integrated services.

Online Database Services, which sells for $1200, includes an up-to-date analysis of industry and technology trends, shifting user demands, growth opportunities, and competitive factors impacting the industry.

For further information: Creative Strategies International, 4340 Stevens Creek Blvd., Suite 275, San Jose CA 95129; (408) 249-7550.

Conference Session

Come Forth
And Be Annointed

Forth is a computer language developed a little over 10 years ago by Dr. Charles Moore, at the National Radio Astronomy Observatory, to allow him to build control programs for the radio telescopes quickly and accurately, and to give him interactive control of the resources of the computer in real time.

After leaving the NRAO, Dr. Moore founded Forth, Inc., to apply the techniques and insights gained in building and using Forth to the production of commercial software systems.

"What's it good for?" queries 6th Faire speaker Samuel Bassett in his talk, "Forth – The System Tool." "Anything. Forth is capable of doing anything that any other computer language, or combination of languages can. It is structured, modular, and has all of the best features of existing languages. Forth is best in any application which demands both speed and memory conservation – it is almost as fast as machine language, and usually requires about half the memory space that an equivalent machine code program would.

"Forth allows custom compilers, which will run on any computer, to be built cheaply. These custom compilers can accept source code for any version of any language, and turn out Forth code which will run on any machine. This raises the possibility of being able to move established, tested software from machine to machine, something which has not been possible before.

Dedicated Forth programmers tend to preach and evangelize about the virtues and glories of the language, prompting people to ask whether it's a programming language or a religion – the answer, of course, is 'yes!'

"We want to present Forth and the way it works clearly and accurately, so that as many people as possible can become "born-again programmers" and go out and do all of those wonderful things that we can see are possible."

Alpha Pascal
Talks Business

Alpha Micro recently announced the availability of AlphaPascal release 2.0, a programming language expressly developed for the Alpha Micro Business Computer.

AlphaPascal, fully integrated into the multi-user, multi-tasking, timesharing Alpha Micro Operating System (AMOS), supports both sequential and random data files. It is also compatible with Alpha Micro's AlphaBasic programming language. AlphaPascal has the ability to separately compile and link Pascal modules to form one program, easing the task of developing and maintaining programs.

In addition, other AlphaPascal features include the ability to add user-defined routines to an external library where other Pascal programmers can make use of them; the ability to call external assembly language subroutines; full 11-digit accuracy for Real variables; and labeling of Begin-End blocks.

Alpha Micro provides full software support for this new version of AlphaPascal. Programs written in standard Pascal will require very little modification before being operable under AlphaPascal. Alpha Micro also includes their new "AlphaPascal User's Manual" with the software.

For more information: Alpha Micro, 17881 Sky Park North, Irvine CA 92713, (714) 957-1404.

Landlord Software Manages Pet Peeves As Well As Pet Deposits

MIN Microcomputer Software, Inc., recently announced The Landlord, an apartment-management, software package for Apple II computers. The system can be used for apartment properties of up to 400 units.

The Landlord provides property owners and managers with listings of apartments, residents, and past residents, as well as reports on vacancies, lease expirations, intents to vacate, and resident payments. Records of disbursements and other financial transactions are maintained by the system and a monthly property analysis statement is produced.

The Landlord allows entry of resident charges and payments using up to 26 different account codes. Security and pet deposits, returned checks, and overpayments are also handled by the system. An outstanding-balance report allows expedient follow-up of delinquent residents.

The package is designed to be used by managers who have no prior computer or data processing experience. The manual included with The Landlord as well as the instructions that appear on the Apple's screen are completely non-technical in nature.

The software requires an Apple II computer w/48K RAM, 2 disk drives, and either a Silentype or Centronics 779 printer. The Landlord will be sold exclusively through retail computer outlets.

For more information: MIN Microcomputer Software, Inc., 5835 A Peachtree Corners E., Norcross GA 30092, (404) 447-4322.

Faire Dates Thru 1984

The Computer Faire is scheduled to take place in San Francisco through 1984.

The site will be San Francisco's Civic Auditorium and Brooks Hall, the largest convention facilities in Northern California.

In addition to the 6th Computer Faire, scheduled for April 3-5, 1981, future dates are:

1982 March 5-7
1983 March 2-4
1984 March 21-23

So remember to save your next three Springtimes for San Francisco — and the Computer Faire.

6th West Coast Computer Faire Conference Program

PROGRAMMING SYSTEMS

Development of The Last One: British Software Which Writes Complete, Bug-free Computer Systems, *David Tebbutt, David James*

Warnier-Orr Diagrams; Some Extensions, *W.N. Nawatani*

Flexible Versus Rigid Software, *Thomas P. Bun*

SAL/80: A Structured Assembly Language for the 8080/8085/Z80, *R. Steve Newberry*

GETTING INTO MICROS

Winning the Micro Game, *Don Lancaster*

You Too Can Be A Microprocessor Programmer, *R. David Pogge*

CP/M & MP/M FOR USERS

New CP/M & MP/M Developments, *Dr. Gary Kildall*

CP/M Applications Software, *Tony Gold*

A User's Perspective of CP/M, *Bruce Kendall*

DESIGNING HARDWARE & SOFTWARE FOR MERE HUMANS

Designing Hardware and Software for Mere Humans, *Dr. Douglas H. Williams*

Toward Display Oriented Operating Systems, *Carl T. Helmers*

The Bridge to the Future, *Chris Langewis*

Linguistic Chauvinism, *Mark Cummings*

OPEN INDUSTRY MEETING:

Microcomputer Industry Trade Association, *Dennis Barnhart, Richard Linn*

DETAILS OF SELECTED HARDWARE

Heath Company's H8: The Computer Enthusiast's Choice, *Charles Floto*

Single-Chip Microcomputer Programs EPROMs, *Jerry Randal Bauer*

The Anatomy of a Single Chip Microcomputer, *Peter M. Redford*

IN SEARCH OF BETTER I/O (Part 1)

A Simple Computer Eye, *Henry L. Pfister*

The Design of a Slow Scan TV System, *Ken Rothmuller*

IN SEARCH OF BETTER I/O (Part 2)

The Tyranny of QWERTY, *David D. Thornburg*

Bar Code Technology: Past, Present, and Future, *Walter Banks, Carl T. Helmers Jr.*

HOMEBREWING HARDWARE

After Building a Computer, Try a Robot!, *Melvin L. Zeddies*

Design Considerations for a Computer-Controlled Home, *Mark M. Lambert*

Life on the Frontier: A Homebrew 16-Bit Computer, *Frederick A. Knox*

An 8035 Homemade Computer, *Darrell D. McKibbin*

Doing Your Own High-speed Digital Arithmetic, *Chuck Hastings*

MICROS IN ENGINEERING APPLICATIONS

Design Automation for Microcoputrs, *David W. Russell*

Microcomputer Use for Studying Interconnected Electric System Frequency, *R.K. Adams, J.M. McIe*

Development of Mcrocomputer System and their Applications at the Laboratory of Wave Information Processing of Hokkaido University *Yosinao Aoki*

Pascal Programming fo Engineers: General Least-Squares Curve Fitting, *Alan R. Miller*

COMPUTERS IN MEDICINE

Computer and Medical Diagnosis, *Michael L. Richardson, M.D.*

Computers In Medicine, *L. Berkenbile, M.D., F. Berkenbile, Ph.D.*

Microcomputer Applications in Laboratory Data Acquisition and Management, *J. F. Barberis & L. Kary*

THE ULTIMATE PERSONAL COMPUTER: AIDS FOR THE PHYSICALLY IMPAIRED

Smart Wheelchair, *David L. Jaffe*

Discussion Panel: The Johns Hopkins st National Search for Personal Computing Applications to Aid the Handicapped, *Dan Van Horn, David L. Jaffe*

TALKING MACHINES: HOW THEY DO IT

Access to Speech Synthesis and its Applications, *Carol A. Simpson*

Expanding the TI Speak and Spell's Vocabulary With Speech Sound Concatenation, *John P. Cater*

Programming 'Phoneme" Voice Synthesizers Phonetically, *Carol A. Simpson*

MORE ON SOFTWARE

Runic Compiler Project, *Marty Franz*

Guidelines for Choosing an Object-Oriented Programming Style in LISP, *Jim Schmolze*

The LISP Steamroller, *Michael Burke*

Introduction to the ACCESS/80 Report Generation Language and System, *Fredric C. Gey*

RECRUITMENT: FINDING COMPUTER PROFESSIONALS

Finding & Keeping Computer Professionals During the Explosive 1980's, *Michael P. Harkins*

A Sign of the Times: Recruitment and Relocation Policy Update, *The Relocaton Center*

Low-Cost Computing with Plug Compatible Peripherals and Mainframes, *Joseph T. Simone*

INEXPENSIVE BUSINESS COMPUTING

Acquiring the Small Business Computer: Take the Backwards Approach, *Nicholas Rosa*

"It Loves Me; It Loves Me Not": Micros in the Small Business, *Jim Schreier*

The Angry Consumers Guide to Word Processors, *Martin L. Dean*

Some Reflections on a Commitment to Quality, *James L. Gagne, M.D.*

THE HOW, WHERE & WHEN OF USING CONSULTANTS

How to Use Hardware Consultants (or How to Keep Your Brownie Points), *William R. Maclay*

Marketing Your Software *Victor M. Wyman*

Deciding on a Software Package or Custom Software, *Catherine M. Sinclair*

Panel: On Consultants & Consulting, *V. H. Finefrock, Victor M. Wyman, Catherine M. Sinclair, Leon A. Wortman, Carl Ramesey, William Maclay, James R. Lavelle, III*

RADIO TELETYE (3-day ongoing demonstration)

Amateur Communications Society (RTTY) Seminars & Demonstration, *Stuart Neblett*

LISP TUTORIALS (half-day programs, all three days)

LISP: Beginning Tutorial, *Lois Patricia Flynne, Michael Burke, Tom Davis*

LISP and More LISP: Continuation Tutorial, *J. Allen*

VIDEOTAPE (all day, Friday)

Personal Computing: Help for the Handicapped (closed captioned), *David L. Jaffe*

COMPUTING IN EDUCATION

The Computer Goes to Nursery School, *Dr. Kathleen M. Swigger, Dr. James Cambell*

The Micro-Redy Project, *Barry Cole*

On Using the Tutorial Mode in CAI, *Edward A. Zeidman*

AIM: Remedial for Secondary Students, *Craig Walker, Jerri Jenkins*

Educational Software Formats, *Geoff Zawalkow*

APPLIED COMPUTER GRAPHICS

Microcomputer Production of Animated Maps, *John E. Westfall*

COMANDER I - COMposition of Artwork and Document Editing and Report Generation System, *Jim Blum*

Dedicated Document Production, *Sidney Levin, M.D.*

IMAGES OF COMPUTERS: GREAT GRAPHICS

Microprocessors in Image Processing, *Gregory A. Baxes*

4 Billion Colors on the Apple?, *Ted Perry*

EXTRAVAGANZA: VIDEO GRAPHICS

Computing for the Right Brain, *Fred H. Lakin*

Computer Graphics and Computer Design, *Aaron Marcus, Christopher Keith & Michael Arent*

Creative Futuristics, *Howard Pearlmutter*

ELECTRONIC MUSIC & ARTS

FM Synthesis and the Casheab 32 Channel Sythesizer, *Ceaser Castro*

STARS, An Automated Manager for Small Performing Arts Centers, *David J. Blow*

A Three-Dimensional Computer Input-Output System, *David Dameron*

FOR THE NOVICE: INTRODUCING MICROCOMPUTERS

Introducing Microcomputers (and How To Use Them), *Tony Bove & Cheryl Rhodes*

TELECOMPUTING FOR EVERYONE

Videotex and Teletecomputer Graphics Today, Tomorrow Television, *Jerry Borrell*

Local Networking For Small Systems, *Douglas W. Gage*

Telematique: The First Universal Communications Terminal, *Mark Cummings*

EXOTIC COMPUTER APPLICATIONS

Computers and Horticulture, *Frederic E. Davis*

Minicomputer Applications in Antitrust Litigation, *David Bradwell*

Autospec and Autocast: Book and Booklet Design and Castoff By Computer, *Stanley Rice*

Computer-Generated Puzzles, *Chuck Adams*

MICRO-BASED DATA BASES

D B Master: A Sophisticated Data Base Management System for the Apple II, *Barney Stone*

Natural Language Access to Database Management Systems, *Bil Lewis*

DISCUSSION PANEL:

Experiences with Computers in Education, *Fred Waters*

COMPUTER BUSING & DRIVERS

Slave Processor for the S-100, *Allen Heaberlin*

The PI Bus: A Processor Independent Bus Structure, *Anton Pietsch*

Discussion: Proposed Advanced Microcomputer Systems, Backplane Bus-P896, *Andrew Allison*

THE IEEE 696/S-100 STANDARD

Status of Standard Approval, *Howard Fullmer*

S-100 Standard DMA Protocol, *Kels Elmquist*

What Does IEEE-Compatible Really Mean? *Mark Garetz*

UNUSUAL COMPUTER-AIDED INSTRUCTION ENVIORNS

Personal Computer-Assisted Instruction in Music, *Wolfgang Kuhn, Paul Lorton, Jr.*

Microcomputer-Assisted Instruction in Psychology, *Philip L. Hartley, Ph.D.*

A Comparison of Traditional and Computer-Based Methods of Teaching Students to Administer Individual Intelligence Tests, *Dee LaMont Johnson, Jerri Willis*

LOW-COST COMPUTING IN EDUCATION SYSTEMS (Part 1)

Personal Computers in Educational Administration, *Eugene J. Muscat, Paul Lorton, Jr.*

Competency Exams and Micro Computers, *Leonard T. Meuer*

Purchasing Microcomputer System Components From Two Vendors Considered Dangerous, *Ronald S. Lemos*

Conference Session

Don't Soft-Petal the Flowering Horticultural Computer Uses

Horticulture is the science of growing plants. It is a science which was born into an information crisis from which it has never fully recovered. There are an estimated half a million species of plants in the world. Each of these plants has its own characteristic genetic makeup, nutrient requirements, cultural requirements, growth pattern, leaf form, flower form, and potential uses which can all be expressed as variables of the half a million or so plant species. Add to this, a rapidly increasing number of artificially produced hybrids with their individual characteristics and you can get an idea of the amount of data that there is to deal with in the horticultural industry.

In his 6th Faire talk, "Computers and Horticulture," Frederic Davis says "today's powerful (yet affordable) small computers provide an excellent way for horticulturalists and others to gain access to large bodies of information about plants, information which has been vastly underutilized." An overview is given of six important applications for small computers in horticulture: 1. landscape and nursery industry; 2. plant breeding; 3. plant pathology; 4. plant taxonomy; 5. greenhouse automation; and 6. business applications for the retail florist.

"Small computers can provide the means to organize information about plants; this is of global importance," Frederic says, "since plants provide us with basic life necessities such as food, fuel and medicine."

FORTH Interest Groupies Exceed 2500 Members

The FORTH Interest Group now has over 2500 members, worldwide (all 50 states and 34 foreign countries). Fifteen chapters are meeting or in the process of forming. In keeping with the spirit of the FORTH language, several groups meet on the fourth Saturday of each month.

All members receive the bimonthly publication, *Forth Dimensions*. The list of publications from FIG (FORTH Interest Group) has expanded greatly over the past year. There are now seven different source listings for specific CPU's with several more being developed. A number of user's manuals can be obtained as well as FIG T-shirts and posters.

The popular micro computers can now be programmed in the FORTH language. Various FORTH programmers and vendors have implemented the language and applications on mini and mainframe computers.

1981 looks like the year of FORTH. A number of manuals and books are in the works. More and more vendors are selling FORTH implementations and programs. The utilization of FORTH is spreading from micros to robotics, business applications, product development and many control applications. *Forth Dimensions* will keep members abreast of these activities.

FIG will be in booth 1137C in the 6th Computer Faire.

Memberships are $12.00 per year ($24.00 Foreign) and include six issues of *Forth Dimensions*. FORTH Interest Group, PO Box 1105, San Carlos, CA 94070; (415) 962-8653.

Correction

In a recent ad from *Interface Age Magazine* the 2-year subscription price was shown as $20. It should have been shown as $30.

Would You Tell A Friend What You Would Teleprinter?

There is no hope that teleprinters will break the $1,500 price barrier in 1981. Only 9% of all teleprinter models marketed today cost less than $1,500, and there are no significant trends that indicate a breakthrough this year. This was revealed in the latest edition of the *GML Teleprinter Supplement*.

The *Supplement* shows that the majority of teleprinters, or 60%, are priced between $1,500 and $4,000. Most devices priced above $6,000 are multiterminal cluster systems.

According to GML graphs and figures, teleprinter prices have dropped only a modest 20% since 1970 and have somehow managed a stability not indigenous to most computer product markets.

GML says that evidence is available to indicate that prices will continue to hold above the $1,500 barrier. A major indication for the status quo being that prices have declined at a slower rate in recent years. Further support for this prediction is the lack of new technological innovations on the present horizon that could contribute to cost reductions.

The *GML Teleprinter Supplement* not only contains an overview of the entire teleprinter industry, complete with graphs and charts, but includes prices, specifications, features, software, and marketing data. More than 250 teleprinter models made by 61 companies are included in this 137-page, bound volume.

For more information on this publication, call or write GML Information Services, 594 Marrett Road, Lexington MA 02173; (617) 861-0515.

DISTRIBUTE FREE *GAZETTES* TO FRIENDS & ASSOCIATES

The Computer Faire would be pleased to ship you any reasonable quantity of *Gazettes* you wish to request, for distribution to your friends, professional associates, and fellow employees. These are available without cost; the Faire will pay all charges, including UPS shipping fees.

Just write or call and tell us (1) how many you wish to receive, and (2) where to ship 'em (it must be a street address: UPS is prohibited from delivering to a P.O. Box).

Typically, a *Gazette* will include a variety of information of general interest, as well as — of course — all the details of the forthcoming West Coast Computer Faire.

6th West Coast Computer Faire Conference Program

LOW-COST COMPUTING FOR EDUCATION SYSTEMS (Part 2)

The Microcomputer and Management of the Time-Bound Educational Program,
David K. Mosow, Frank Turner

Justifying the Cost of Microcompuers in the Classroom: A Problem in BASIC Math,
Madeline Fish, Brian Sakai

UCSD PASCAL: TUTORIALS

Pascal Tutorial, *Neal Iscoe*

How to Implement UCSD Pascal on Your Computer, *John Tibbets*

PASCAL: DETAILS

UCSD Pascal, Version IV: A User's View, *Charles Chapin*

The IBS Multi-User/Multi-Tasking Operating System, *Alfred A. Pease, Robert G. Nelson*

Progressing from 1.0 to 1.1 A Review of the New Apple Pascal, *Carl Helmers*

Digicomp Research Pascal-100: High Performance UCSD Pascal on th S-100 Bus, *Mark Bodenstein*

How to Add I/O Device Drivers to UCSD Pascal, *Barry Demchek*

THE PASCAL MICROENGINE

A User Looks at the Pascal Microengine: One Year Later, *Tom Pittman*

UCSD PASCAL: USERS SOCIETY

USUS on Pascal; UCSD p-System Users' Society: A Service for Computer Users, *A. Winsor Brown*

A Report on USUS: The UCSD p-System Users' Society, *James L. Gagne, MD.*

USUS Advanced Planning Commttee, *Rand Bush*

UCSD PASCAL: APPLICATIONS & SUPPORT SYSTEMS

The PCIF Productivity Package A UCSD p-System Based Package for Productvity Improvement,-
Robert W. Peterson

DataTool: The Application Development System for Computers, *Dick Karpinski*

The SPI-2000: A Distributed Microcomputer System and It's UCSD Pascal-Based Application
Software, *Peter Eichorst*

Screen Control and the User Interface: A CRT Screen/Form Code Generation System, *Neal Iscoe*

Milestone: A Project Management Program Written in Pascal for Use on UCSD and CP/M Computer
Systems, *Dr. Michael R. Posehn*

OPEN MEETING: ACM SG ON PERSONAL COMPUTING

Assocation for Computing Machinery Special Interest Group on PC, *Liza Loop*

OPEN MEETING: COMPUTER DEALERS & RETAILERS

Bob Moody, Chair

FOR THE NOVICE: COMPUTER LACY

How to Learn About Microcomputing or Computer Literacy at Your Fingertips, *June B. Moore, JD*

Dear Novices, I've Got Good News and Bad News for You!, *Tony Severa*

THE COMPUTER BUSINESS

Microcomputer Tunnel Vision Why I Designed and Built a New Microcomputer, *Adam Osborne*

Write the Right User's Manual for Your Business Applications Software *Sharon Rosa*

Preparing Product Announcements for the Media, *Frank Vaughn*

Public Relaations for High-Technology Entrepreneurs, *Dennis Lewis, William Schwartz*

BASIC: WHY NOT

The Bankruptcy of Basic, *John R. Allen*

BASIC: HOW TO

Programming With Free Basic, *Richard Mateosian*

Programming Data Files in Basic, *LeRoy Finkel, Jerald R. Brown*

GOING FORTH

FORTH: A Conceptual Introduction, *John S. James*

A Guided Tour Through the FIG-FORTH Model, *William F. Ragsdale*

What is FORTH?, *Henry Laxen*

FORTH: The System Tool, *Samuel B. Bassett*

Software Quality and FORTH Programs, *Kim R. Harris*

LEGAL SAFEGUARDS & SOFTWARE

Software Protection: Legal Fact or Fable?, *David B. Harrison*

Panel: Legal Safeguards for Software Users, *Susan Nycum, Mike Kane, Mark Spohr, M.D,*

MONEY & MICROS

Standard & Poor's Stockpack System: Using a Stock Market Database and Portfolio Management
System for Investment Purposes, *Harvey E. Pearlman*

A Microcomputer Based Econometric Model of the U.S. Economy, *Dr. David M. Chereb*

MACROCOSMIC VIEWS OF MICROCOMPUTING

Toward an Electronic Bill of Rights, *Dean Gengle*

LISP, GREEK and ARETE: Musings on a Classical Education on the Computer Age,
Lois Patricia Flynne, Ph.D.

Computerization, Communication and Organization Theory, *Paul M. Armetta, Ph.D.*

INFORMATION PROCESSING FOR MANAGEMENT PLANNING

PERT/CPM Network Analysis: Management & Project Management, *Dennis Starkovich*

COMPUTERS IN MEDICAL PRACTICE

Evaluation and Design of Software for the Private Practice Physician, *Allan Lundell*

A Psycholigist's Wish List for Small Computers in Health Care, *David E. Bresler, Ph.D.*

Computer Medicine and the Society for Computer Medicine, *Neal Koss, M.D.*

An Update on SOFTDOC: A Disk-Based Medical Computer Journal & Network,
James L. Gagne, M.D.

Micro COSTAR: An Outpatient Medical Record System, *Larry Stoneburner, M.D.*

COMPUTING IN THE PHYSICIAN'S OFFICE

Three Medical Applications Programs, *Mark H. Spohr, M.D.*

A Medical Billing System, *F. Berkenbile Ph.D., D. Tessman*

Selecting a Desktop Computer for Your Medical Office, *Mark Spohr*

OPEN USER MEETINGS:

PROTEUS: the Processor Technology Sol Users Society, *Stan Sokolow*

San Francisco Apple Users Group, *Rick Kershner*

NorCal Digital Group Users Group, *Jim Jacobsen*

Conference Session

Softdoc Update

The Society for Computer Medicine ("SCM") has been given all but final approval to make Softdoc an affiliate and an official service for its members. SCM has said that it will contribute medical computing expertise to aid in getting Softdoc started. It is expected that SCM members will be of particular assistance in finding and correcting computer programs, and in assisting in publicizing the existence of this service.

"One year ago at the Fifth West Coast Computer Faire," says 6th Faire speaker James Gagne in his talk, "A Disk-Based Medical Computer Journal and Network," "I announced the formation of Softdoc, a disk-based computer journal for health professionals. During the process of gathering sufficient software to begin publishing the journal, it became evident that the task of finding material requires the establishment of a network of supporting individuals. Therefore the focus of Softdoc has changed from one individual publishing a journal to a network linking via a disk-based-journal, individuals using microcomputers in health care. Major assistance for this project will come from the recently completed alliance with the Society for Computer Medicine. Adequate assistance is expected to allow publication to begin shortly.

Conference Session

Pascal-100: Taking the High Road On the S-100 Bus

Pascal-100 is a 16-bit plug-in CPU module for the IEEE-696 (S-100) bus. It consists of two S-100 cards mated by a cable. The two-board unit occupies adjacent slots in an S-100 mainframe.

Pascal-100 incorporates two microprocessors: the Western Digital Pascal Microengine, which directly executes version III.0 UCSD Pascal P-code, and a Zilog Z80A processor. Switching between processors is software controlled via a switch-selectable output port.

Pascal-100 runs version III of the UCSD Pascal system, including the screen-oriented editor, Pascal compiler, linker, filer and other utility programs. "A version of this system is available from Digicomp to run on Pascal-100 in any environment that supports CP/M and has at least 48K bytes of memory," says speaker Mark Bodenstein in his 6th Faire talk, "Digicomp Research Pascal-100: High Performance UCSD Pascal on the S-100 Bus."

"Pascal-100 also supports programs written for the Z80 or 8080 on the S-100 bus, including the CP/M operating system and all associated software."

Conference Session

Serious Speech Synthesis Talks With Tongue-in-Chip

Traditionally, synthesized speech has provided experimental stimuli for the investigation of human speech perception. Speech synthesizers were driven by large computers, and generation of speech was not in real time. Only recently, has it become technologically and economically feasible to build systems commercially that are light weight, low in power consumption, economical in memory requirements, and capable of real-time speech generation. Phoneme synthesizers have been reduced to single boards and even to a single Complementary Metal Oxide Semiconductor (CMOS) chip. This reduction in size and cost had made mass-produced talking machines with unlimited vocabulary feasible. There remains, however, a great deal of research to be done in order to determine the appropriate functions for speech, and to develop human factors design principles for its implementation in man-machine systems.

"My 6th Faire talk, 'Access to Speech Synthesis and its Applications,' " says Carol A. Simpson, "is a concentrated summary of technical and human factors aspects of the application of speech synthesis for voice displays.

Conference Session

MICRO-REDY Project

The MICRO-REDY Project (Making Instructional Computers Realize Optimum Results for Educationally Disadvantaged Youth) is a project operating in the Sacramento City Unified School District using microcomputers in the 4th, 5th, and 6th grades.

The MICRO-REDY curriculum consists of three different types of instructional programs: Computer Managed Instruction, Computer-Assisted Instruction, and Computer Drill and Practice programs. Each fulfills a different need.

6th Faire speaker Barry Cole in his talk, "The MICRO-REDY Project," notes outcomes of the project so far, which should not be mistaken for formally validated results: "Most students in the class doubled their pretest scores, and many tripled their scores. Many students voluntarily stayed in at recesses and came after school to drill on basic facts in math and language.

"Results from the post-testing to be done in May, 1981, will be compared with tests already given to formally evaluate the project's effectiveness."

The 6th Computer Faire has 160 speakers.

Conference Session

Marketing Your Software

"If you have developed software or plan to develop software and hope to make money by marketing it," says 6th Faire speaker Victor M. Wyman, "my talk, 'Marketing Your Software,' is addressed to you.

"Software ranges from a few lines of source code to tens of thousands of lines. It may be a sub-routine for inclusion in another program; it may be an individual program; or it may be a complex system of programs. Software applications are extensive in number and type. Software packages are sold to businesses of all sizes, governments and to users of personal computers. Further, software is now sold in a wide variety of ways.

"I have chosen to discuss four specific topics of relevance to marketing:

"Packaging: What has to be done to prepare working software for commercial exploitation?

"Promotion: Communicating about your software to potential customers and some ways of generating sales.

"Protection: Ways of protecting your proprietary interest.

"Pricing: What price is to be put on the software.?"

From the Counter To The Bottom Line

The growth of personal computer technology has completely changed the computer market. No longer are computers the sole province of large companies. More and more they are becoming available to the small businessman. But how does the small businessman use the computer? *From the Counter to the Bottom Line* provides some of the answers.

Not only does the book cover the basic accounting systems: inventory and purchasing, billing, accounts receivable, accounts payable and general ledger, but it discusses the procedure for implementing these computerized systems in a business. The book explains the purpose, scope and applications of each procedure.

Written by the past editor-in-chief of *Interface Age Magazine*, Carl Warren, and the president of Matrix Publishers, Merl Miller, the book's intent is to aid readers in making up thier minds whether they want and need a computer in their place of business.

The 289-page paperback sells for $13.95 and is sold at Kroch's and Brentano's, B. Dalton's, computer stores, or can be obtained directly from dilithium Press: Box 606, Beaverton OR 97075; (503) 243-1160.

Time & Billing Seeks Counsel

Lifeboat Associates now distributes a time and billing system for the legal profession. It operates with most microcomputers under the CP/M operating system.

ESQ-1 is a completely-integrated, information system which was specifically written with the first-time, computer user in mind. It is functionally separated into several distinct modules for transaction entry (time incurred and disbursements), posting, file maintenance and inquiry, billing, receipts, reports, end of day backup, end of period updating, and client analysis.

ESQ-1 records billable and non-billable time, cash receipts and escrow receipts, and escrow transfers. Inquiries into all files can be made with numerous criteria such as by client/matter, responsible attorney, invoice number, etc. The system provides complete billing and payment ledgers and optionally allows the user to apply receipts to the oldest invoices first or to specific invoices.

ESQ-1 will print on continuous forms or single-sheet, letter-head paper. Some of the reports included are pre-billing worksheet, detailed aging of accounts receivable by client/matter or billing attorney, attorney productivity, mailing labels, etc.

For more information: Lifeboat Associates, 1651 Third Avenue, New York, NY 10028, (212) 860-0300.

Should the proposed new ZIP code be called a 'ZAP code,' based on effect on users?

Judge for Yourself: Software Legal Guides

Cross Communications Company now offers electronic legal services in cooperation with Irving Kerner, attorney at law.

Two of these new services are documents of concern to all software program developers. The first, *Software License Planning Guide*, is a publication containing information and forms designed to enhance the ability of the software owner to protect his proprietary interests when licensing use of his product.

The second document is a legal planning guide: *Criteria to Consider in Software Licensing, Distributing, Franchising, and Marketing*, that aids software owners in their efforts to market and promote software products. Each guide is available for $15, or both may be purchased for $25.

Cross Communications Company also has added a new legal counselling service called "ELLA" (ELectronic Legal Advice), meaning that the legal advice is available only through electronic terminals in the home or office. Cross Communications provides the electronic communications link between client and attorney.

Irving is lecturer in telecommunications law at the University of Colorado. Irving's practice is limited to problems in telecommunications, software matters, cable television, and other communications law issues.

Details are available from: Cross Communications Company, 934 Pearl, Suite B, Boulder CO 80303; (303) 499-8888.

TI Offers to Work with 3rd Party Software Producers

TI is actively involved in expanding the library of software available to TI-99/4 users, but recognizes that the company cannot produce all the software required for all of the applications for which the TI-99/4 is well-suited. In an attempt to meet as much of this demand as possible, TI offers software development systems for sale to those third-party software authors who want to develop their own Solid State Software command modules (ROM packs).

Command modules use an assembly-level Graphics Programming Language (GPL) developed specially by TI to provide the best possible combination of machine-code compaction, execution speed, and ease of program development for the TI-99/4 home computer. It offers the programmer more capability and flexibility for color, music, sound effects, high-resolution graphics, and synthetic speech than does TI BASIC, the user programming language designed into the computer.

The Solid State Software command module approach to software development for the TI-99/4 is designed for the major software publisher seeking to produce approximately 1,000 command modules.

Third-party software authors interested in developing programs for the TI-99/4, as well as for other small computers, also have the option of using UCSD Pascal and the new TI development system recently made available. UCSD Pascal, Version IV.O, is a highly structured, easy-to-learn, and more flexible language that offers more efficient use of memory space as well as greater program execution speed than interpreted BASIC programs. This new system adds a number of new features to TI-99/4 software including:

— a Pascal compiler to compile Pascal programs in "p-code". The "p-code" is a low-level code that is then interpreted into the machine language for the TI-99/4 Home Computer.

— an assembler and linker which will allow programming in assembly language.
— editors to provide full screen editing capabilities.
— a filer which will help manage disk files.

The new development system for Pascal programming includes a modified TI-99/4 Home Computer console and a Solid State Software command module designed for debugging assembly language programs. In addition, the development system includes two disk drives and a disk controller, the Pascal compiler software, a modified RS-232 interface peripheral, and a prototype p-code software development peripheral. The UCSD p-System has been combined with 32K bytes of additional random-access memory (RAM) in prototype unit that will allow software authors to develop Pascal software. They may also be able to develop other languages on the same system when those compilers become available from TI.

To promote the development of software for the TI-99/4, TI has run separate incentive programs for programmers within TI and outside the company. In addition, a program has been implemented within the company to convert existing BASIC programs into TI BASIC.

Texas Instruments is working with a number of third-party software publishers and consultants to expand the software library for the TI-99/4. Some of these third-party participants include:
    Scott, Foresman & Company
    Charles Mann & Associates
    Image Producers
    Instant Software
    Microcomputers Corporation
    99/4 Home Computers Users-Group.

For more information on third-party software development programs and the TI-99/4, call (800) 858-4565 (outside of Texas) or (800) 692-4279 (inside Texas), or write to: Texas Instruments Incorporated, Consumer Relations, P.O. Box 53, Lubbock, TX 79408.

Friday, 81 April 3

	Conference Room 1	Conference Room 2	Conference Room 3	Conference Room 400
9am				
10am		Details of Selected Hardware		
11am	Programming Systems		Computing in Medicine	Recruitment: Finding Computer Professionals
Noon		In Search of Better I/O (Part 1)		Low-Cost Computing with Plug Compatibles
1pm		In Search of Better I/O (Part 2)		
	Getting into Micros		The Ultimate Personal Computer: Aids for the Physically Impaired	
2pm			Inexpensive Business Computing	
3pm	CP/M and MP/M for Users	Homebrewing Hardware		
			Talking Machines: How They Do It	
4pm			The How, When & Where of Using Consultants	
5pm	On the Design of Hardware & Software	Micros in Engineering Applications	More on Software	
			Panel Discussion on Using Consultants	
6pm	Microcomputer Industry Trade Association Open Meeting			

4th Floor — LISP Demonstrations

4th Floor — LISP: Beginners' Tutorial

SATURDAY

	Conference Room 1	Conference Room 2	Conference Room 3
9am			
10am		Electronic Music & Arts	Computer Busing and Drivers
11am	Computing in Education	FOR THE NOVICE: Introducing Computers	
Noon		TeleComputing for Everyone	The IEEE 696/S10... Standard
1pm	Applied Computer Graphics		
2pm		Exotic Computer Applications	Unusual Computer Aided Instruction Environs
3pm	Images of Computers: Great Graphics		
4pm		Micro-Based Data Bases	Low-Cost Computing in Education Systems (Part 1)
5pm	Video Graphics Extravaganza		Low-Cost Computing in Education Systems (Part 2)
6pm		Discussion Panel: Experiences with Computers in Education	

Conference Room 400

UCSD Pascal: Tutorials

UCSD Pascal: Details

The Pascal Microengine

UCSD Pascal: Users Society

UCSD Pascal: Applications and Support Systems

4th Floor

Association for Computing Machinery Special Interest Group on Personal Computing Open Meeting

LISP Demonstrations

4th Floor

LISP: Beginners' Tutorial

LISP and More LISP: Follow-up Tutorial

	Conference Room 1	*Conference Room 2*	*Conference Room 3*	*Conference Room 400*	*4th Floor*	*4th Floor*
10am						
11am	TRS-80 Users' Anarchistic* Gathering	Apple Users' Anarchistic* Gathering	Commodore Pet Users' Anarchistic* Gathering	Proteus Users Group Open Meeting [Processor Technology Sol users]	NorCal DG Users Group Open Meeting [Digital Group users]	Lisp: Beginners' Tutorial
Noon	Computer Dealers & Retailers Open Meeting			Information Processing for Management Planning	San Francisco Menza Apple Users Group Open Meeting	
1pm	FOR THE NOVICE: Computer Literacy — An Introduction to Computing	BASIC: How To	Legal Safeguards and Software			
2pm		BASIC: Why Not	Micros & Money	Computers in Medical Practice		LISP and More LISP: Follow-up Tutorial
3pm	The Computer Business				LISP Demonstrations	
4pm		Going FORTH	Macrocosmic Views of Microcomputing	Computing in the Physician's Office		
5pm						

Speech Synthesizer Is Simply Utterly

Telesensory Speech Systems recently announced the introduction of a new speech synthesizer module which can accomodate both standard and custom vocabularies up to a total of 256 utterances.

The new Series III Speech Module consists of TSI's own speech synthesizer as well as vocabulary data memory, an onboard speech filter and an audio amplifier. Its TTL compatible I/O and +5V single-supply, simplify interfacing the module to a microcomputer.

"The Series III offers unusual versatility in terms of the size of vocabulary
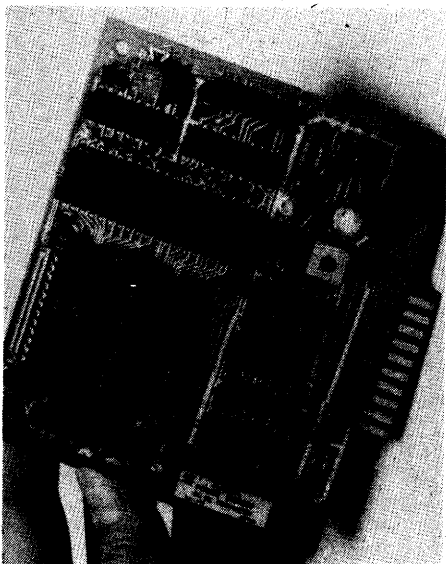
memory and in the numerous possibilities for end-use of speech synthesis," commented Telesensory Systems vice president Dr. Gabe Groner.

"The memory can be any combination of one or two 16K, 32K or 64K ROMs or PROMs providing up to 128K bits. For example, Series III can accomodate one 32K ROM for a TSI standard vocabulary plus one 16K bit PROM for a special-use custom vocabulary. Vocabularies can be provided in English and most other languages," he continued.

With the Series III, about 100 seconds of speech can be stored in ROM memory so individual words and phrases can be retrieved on command. When provided with an 8-bit parallel binary address code and a START signal, the Custom ROM Controller (CRC) fetches appropriate data from the ROM and converts the digital information to an analog audio signal via an on-chip D/A converter. The analog signal is then filtered and amplified on the module resulting in a clear, highly-intelligible male voice.

The Series III Speech Module from Telesensory Speech Systems is a totally electronic system which can be interfaced directly to a microcomputer bus or I/O port. This facilitates use in a wide range of applications, from automated test equipment to warning systems.

Telesensory Systems, Inc. designs and markets high technology electronic components and products. Although the company has been involved in speech synthesis since 1975, its products have been developed primarily for disabled persons. Recently, however, a Speech Systems Division was established to serve the growing need for speech synthesis products in commercial and industrial OEM markets.

For more information: Telesensory Systems, 3408 Hillview Avenue, Palo Alto CA 94304, (415) 493-2626.

Disk Drives Into Europe

Seagate Technology recently announced the signing of agreements assigning full European manufacturing and marketing rights for the firm's 5¼-inch micro-Winchester disk drives to Cii-Honeywell Bull of Paris, France.

Cii-Honeywell Bull will purchase both complete drives and drive kits until it can go into full manufacturing of the units in its Belfort, France, facility. Cii-HB will utilize the 5¼-inch Winchester drives in their own systems and market the drives on an OEM basis throughout the world except for North America and Japan.

"Our goal when we started marketing the micro-Winchester drives was to establish two sources for our drives in all markets," stated Seagate vice president Finis Conner, "and we have now accomplished this with the naming of Texas Instruments domestically and now Honeywell-Bull for Europe and the rest of the world. In this way we are establishing an industry standard and gaining industry acceptance quickly. These second source agreements offer customers a choice of fully compatible drives and full protection of their source of supply of drives in volumes that they need in order to grow."

For more information: Seagate Technology, Finis Conner (408) 438-6550.

Indignant Floppies Get Exercised

Ava Instrumentation, Inc. recently announced the Model 103B Floppy Disk Exerciser which retains all the features of the Model 103, a low-cost, lightweight portable exerciser designed exclusively for 8" and 5-1/4" floppy disk drives.

New features include: switch-selectable step-rates, nominally 3, 10 and 40 ms; compatibility with any drive using Shugart or ANSI X3T9 interface; provision for 18 ms seek settle time delay on direction change; "low write current" interface line provided on 8" interface; and automatic alternative seeks between any two track addresses.

Features common to both models include: small size (8" X 6-1/2" X 2-1/2") fits in a briefcase, weighs only 1-1/2 lbs.; two interface connectors provided, one

34-pin for mini-floppy drives, and one 50-pin for 8" floppy drives; Model 103B uses power from the drive under test; interface cables are optional and may be purchased separately as the user needs them, power cables are included with the interface cables; a pattern of all ones or zeroes can be written from index to index, for single or double density drives; and surface select for double-sided drives.
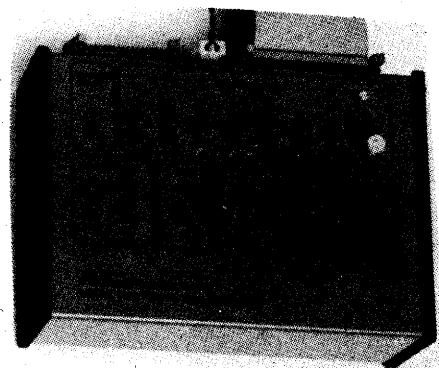
The Model 103B can exercise single or double-sided, single or dual density drives, simplifying head alignment, index detector adjustment, track 0 adjustment and other normal maintenance procedures.

For more information: Ava Instrumentation, Inc., 9672 Manzanita Avenue, Ben Lomond CA 95005; (408) 336-5048.

Free Catalog From dilithium

dilithium Press recently announced the availability of its new catalog, free on request. The catalog lists over 65 books specializing in the burgeoning microcomputer field. It covers a wide range of microcomputer subjects, broken down into several categories. The first of these categories is books for the general public, which are aimed at the beginner. These are introductory books.

The second category is made up of books for the educational market. These books are geared toward the educational use of computers in teaching. Another category is directed at the managers of small businesses, who are usually not "computer nuts," but want some direction in deciding on the type of computer best for them. The final area of books are those written for professionals in other fields, who are becoming compelled to learn about computers.

For a free copy of the catalog, write or call dilithium Press, 30 NW 23rd Place, Portland OR 97201, (503) 243-1158.

Mini to Micro

The formation of Datasoft, Inc., to develop and market application software packages for personal and small business computers, has been announced by John Demos, President and Chief Executive Officer.

Formerly producers of software programs for DEC, Hewlett-Packard, Burroughs, IBM and NCR, among others, Datasoft has adapted its products to popular microcomputer-based systems for standard accounting and inventory control functions, as well as vertical markets such as attorneys, physicians, and retailers.

The firm's new Micro Division also provides packages for sophisticated electronic games, supporting Apple, Atari, Radio Shack, Commodore, NEC and others.

For further information: Datasoft, Inc., 16606 Shoenborn Street, Sepulveda CA 91343; (213) 894-9154.

Cabineted Printer Makes Quiet Impression

TEI recently announced Model 3432 Printer which joins the Model 3431 in its line of dot-matrix printers. The Model 3432 Printer has the same printer mechanics as Model 3431, plus sound-proofing, and placement in a wood-grain, low-boy cabinet.

"The Model 3432 is the first dot-matrix printer offered for small systems that is reliable, quiet, and built in a cabinet for an office environment," states Harry Rayner, vice president of sales.

Model 3431 and 3432 Printers offer up to 136-column printing at 150 CPS. The Printer uses a 9x7 dot format to form 94 ASCII characters including lowercase letters (with descenders!), symbols, and double-wide characters. The unit offers true bidirectional printing under microprocessing control. The pin-fed tractor accepts continuous forms from 1.5" to 14", plus multipart (to five sheets). The TEI 3431 and 3432 are available with parallel interface (standard) or RS-232C serial interface (optional).

For further information: TEI, 5075 S. Loop E., Houston TX 77033, (713) 738-2300.

PASCAL BOOKS

Sybex, the Berkeley-based publisher specializing in microcomputer education announced the publication of two new books on PASCAL.

Introduction to PASCAL (including UCSD PASCAL), a step-by-step guide to UCSD and Standard Pascals, is written as a tutorial for beginners — even those with no programming experience — yet includes complex concepts for experienced programmers.

The PASCAL Handbook is a comprehensive, alphabetical dictionary of every PASCAL symbol, reserved word, indentifier and operation for most existing versions of Pascal, including Jensen & Wirth (Standard and CDC versions), H-P1000, OMSI (DEC), Pascal/Z, ISO and UCSD Pascal.
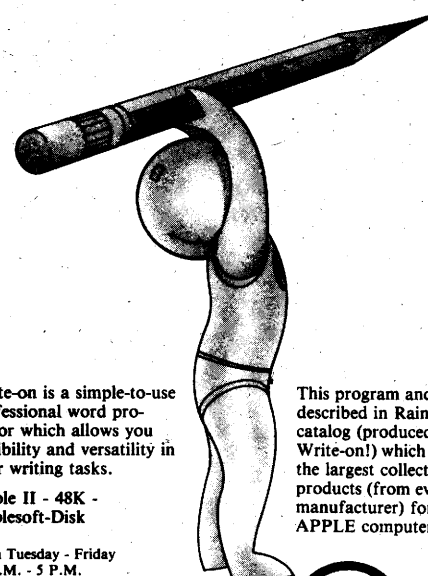
6502 and 8080 Reference Cards

Micro Chart is a plastic, 3-color, instant microprocessor reference card for programmers, engineers, and students. Important information is extracted from the manuals and displayed in a concise and clear format. Its durable, credit-card-type plastic is 8½" by 11" in a one-sheet, two-sided format. It includes: instruction set, hex to instruction table, ASCII, hex to decimal, compare vs. jump table, interrupts, pinout, effect on flags, cycle times, and much more.

"6502 (65xx)" and also "8080A/8085A" are $4.95 each plus $1 P&H per order, from: Micro Logic Corp., Dept CEI, POB 174, Hackensack NJ 07602; (201) 342-6518.

Conference Session

Econometric Model Figured by Computer

Econometric models of the U.S. economy began to develop after World War II, with the introduction of digital computers. These models require a great deal of number crunching and, thus, were not expanded into their current form until some method of rapidly processing the data was available. One of the chief characteristics of econometric models is that they capture many of the interations 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.

In a practical sense it is only with a computer-based model, which can account for these interactions, that we are able to solve these models efficiently and at low cost. Some of the large, commercial econometric models contain close to 1,000 equations of the U.S. economy. "However," says David Chereb in his 6th Faire talk, "A Microcomputer-Based Econometric Model of the U.S. Economy," "only a few of these, much less than 100, are really needed in order to solve for some of the most important economic variables, such as Gross National Product, inflation, interest rates and unemployment. The model of my talk contains about 30 equations, and this is adequate to solve for the variables of interest. An interesting statistical phenomenon is that the accuracy of these models for predicting Gross National Product is not directly related to the number of equattions. Models with as few as five or six equations do fairly well at predicting Gross National Product, in fact, almost as well as models which contain 500 or 800 equations."

Conference Session

Software Protection: Legal Fact or Fable?

Noting widespread disappointment and frustration in the microcomputing community based on "a widely perceived unwillingness or inability of the legal system to provide worthwhile protection for software," 6th Faire speaker David Harrison surveys the scene in his talk, "Software Protection: Legal Fact or Fable?"

He discusses pertinent cases, and reviews the protection offered by copyrights, patents, and trade secrets.

A multitude of special-interest groups and user organizations will be holding meetings at the West Coast Computer Faire. These include language groups, hardware groups, groups interested in special applications areas, minority groups, and industry groups.

LOVELY LISP LAYOUT

The 6th Faire program includes a major invasion of Lisp lovers. Not only are there a number of technical and philosophical Conference presentations about the joys of Lisping, but there are half-day demonstrations of micro-based Lisp systems and applications all three days of the Faire, as well as half-day beginning and intermediate tutorials for Lisp novices.

For those unfamiliar with Lisp, it is the dominant computer language used in artificial intelliegence applications and research. Until relatively recently, it was available only to wealthy researchers on big machines. Now, it is available on a variety of inexpensive microcomputers.

Furthermore, its creator, John McCarthy, is home-based a half-hour south of San Francisco at Stanford University. Who knows, perhaps he may walk up the Bay and sprinkle holy paranatheses on the faithful.

CP/M and MP/M USERS

Sol Libes, the founder of the Amateur Computer Group of New Jersey and current Editor of S-100 Microsystems, has organized a Conference session for users of CP/M and MP/M — the default-standard floppy-disc operating systems for microcomputers from Digital Research (Pacific Grove, California). Speakers will include Gary Kildall, chief guru and originator of CP/M, and Tony Gold, one of the major creators of CP/M-compatible systems software and CP/M modifications.

UCSD PASCAL USERS

There will be a full day of Conference sessions devoted to Softech Microsystem's UCSD Pascal systems. These will include tutorials, sessions on implementation details, UCSD Pascal applications, and special support systems for UCSD Pascal. Part of the program will include details of USUS — the UCSD Pascal users society. USUS will also be staffing a booth in the exhibition area, allowing more leisurely discussion of its activities.

FORTH PHREAQUES

There is a half-day Conference program devoted to the Forth computer language, its design, implementations and applications. FIG — the Forth Interest Group will also be available for gossip and information exhange in an exhibition area booth.

ACM SIG PC

Liza Loop will chair an open meeting of the Association for Computing Machinery's Special Interest Group on Personal Computing.

SOCIETY FOR COMPUTER MEDICINE SPEAKER

The Sunday Conference program includes a presentation about the Society for Computer Medicine.

NORTH STAR USERS

The North Star Users Group will hold an open meeting, all day Saturday. Additionally, they will be staffing a NSUG booth in the exhibition area.

Mass User Meetings at 6th Faire

PROTEUS — SOL USERS

Proteus, the organization of users of Processor Technology's Sol computer, will gather for a Sunday morning meeting, open to all Sol users. They also have a booth in the exhibition area.

TRS-80 USERS

Two groups — the TRS-80 Nybblers, and the Marin County TRS-80 Users Group — will be swapping information with attendees from their exhibit-area booths.

And, of course, Tandy is running a giant commercial exhibition.

APPLE USERS

The San Francisco Menza Apple Users Group will hold an open meeting for Apple afficianados, Sunday afternoon.

The San Francisco Apple Core will be discussing their Apple adventures in their exhibit booth.

TRS-80, APPLE, & PET

The Faire has allocated time and rooms for "no host" (no chair, no formal program) anarchistic gatherings of TRS-80 users, Apple users, and Commodore Pet users who may wish to find and commiserate with each other. These gatherings will each be all morning, Sunday morning.

Note: These meetings are without leadership as of the writing of this article. Past experience implies that — by Faire time — some fireball user group leaders will step forward at the last minute to request time and space for such gatherings, and pull together highly useful information exchanges for those meetings.

CSUC T-S USERS

The California State University Computers Time-Sharing Users Group will be exchanging problems and solutions in their booth in the exhibition area.

BLACK D-P PROS MEET

The Black Association of Data Processing Professionals will be discussing their activities, staffing one of the exhibit area booths.

JAPAN MICROCOMPUTER CLUB DEMOS ACTIVITIES

For the second time, the Japan Microcomputer Club has again chosen to send a group to the Computer Faire. They will be occupying an exhibit booth, showing examples of their homebrewed hardware and systems, brought all the way from Japan.

RTTY DEMO & DISCUSSION

Once again, the Amateur Communications Society will run three days of demonstrations and informal seminars at the Computer Faire. These activities will concern digital radio communications.

CONSULTANTS GATHER

PATCA — the Professional and Technical Consultants Association — will be staffing a booth in the exhibit area. Additionally, there will be a Friday Conference program addressing issues of interest to consultants (and consultants, consumers).

MITA MEETS

The Microcomputer Industry Trade Association will hold a major meeting, open to all interested members of the microcomputer industry. The meeting will begin immediately after the close of the exhibits, Friday evening at 6pm. MITA will also be available in an exhibit booth.

DEALERS MEET

Bob Moody, marketing honcho for Alpha Information (Palo Alto), will again chair a Sunday noontime meeting of computer dealers, retailers, and distributers.

Note: Exhibit space for all of these groups is being furnished, without cost to the groups, by the West Coast Computer Faire.

Conference Session

Voice Synthesizers Programmed to Speak Up

When speech synthesizers were first introduced as off-the-shelf, speech output devices, one would have expected everyone with a computer to give his or her favorite machine the gift of spoken word. It didn't happen. Price tags of $3000 to $7000 for Votrax "phoneme" synthesizers in the early seventies no doubt discouraged many would be "speech programmers." The Computalker parallel parameter synthesizer at $300 to $500 did a brisk business when it was announced. But the computer masses remained nonvocal.

"The greatest obstacle," notes Carol A. Simpson in her 6th Faire talk, "to widespread application of speech synthesis has been the lack of a suitable, properly human-factored, speech-editor. Part of the speech-editor problem is the lack of a standard, easily used symbology, at least for computer terminals, for phonetic programming. Another problem is confusion over the meaning of the word 'phoneme' and the conceptual difference between 'phonemic' and 'phonetic' transcription of speech. My talk introduces some basic concepts in phonetic transcription and describes the Modified International Phonetic Alphabet (MIPA) which I developed and have successfully applied to the phonetic programming of several different speech synthesizers over the course of the last six years."

A Quick Peek At Slow Scan TV

Slow scan tv is a narrow-band tv system which uses slow frame rates to transmit pictures over voice-grade radio and telephone channels. Ken Rothmuller's 6th Faire talk, "The Design of a Slow Scan TV System," describes the hardware and software design considerations encountered during the development of a slow scan tv system. A popular personal computer was chosen as the system cornerstone and it was augmented by a special I/O board and application software to provide a complete, turnkey system.

SSTV specifications are reviewed, followed by potential applications of this new form of video communications. The system features and objectives are then outlined. Given these design requirements, the various hardware and software design tradeoffs are analyzed and the resulting system is presented. Special attention is given to gray scale simulation on a bilevel display and the software optimization strategy used.

Finally, the system is compared to available commercial products which have been implemented using more conventional "hardwired" logic.

WANT ADS

The Silicon Gulch Gazette *will accept want ads for publication in future issues. 50,000 distribution is guaranteed for each edition. 100,000 distribution is guaranteed for each issue.*

SGG is published 4 times each year. The next issue will be published in two editions: on February 16 (Eastern edition) and March 16 (Western edition). Copy deadlines are February 11 and March 11, respectively.

Want ads must be paid for on the basis of number of words in the copy. A "word" is defined by SGG as a phone number or any alphnumeric group delineated by a non-alphanumeric character.

The classified ad rate for want ads is $1.00 per word, with a $25.00 minimum.

Payment must accompany the typewritten ad copy. Ads and payment must be sent to: Silicon Gulch Gazette, 333 Swett Road, Woodside CA 94062.

ARTIFICIAL INTELLIGENCE STUDY. Proceedings of 2nd Seminar of Scientific Go Theory now available. Send $12.00 to Sabaki Go Company, Box 4195-G, Wilmington DE 19807.

HELP WANTED. Electronics Instructor. Full time Position requires minimum of two years industrial experience in Digital and/or Analog Electronics. No degree or previous teaching experience required. Professional status, competitive Salary and Benefits. Send resume to: Robert Capon, Suburban Technical School, 175 Fulton Avenue, Hempstead NY 11550.

DON'T DUMP OR BURN THOSE PAPER FILES! Collector will buy your accumulations of office papers, family records, photos, correspondence, travel brochures, maps, etc. Especially interested in the 1930's and earlier. Before you consign it to the fire, or send it to the dump, write or call Mitch's Archives. 155 Yale Road, Menlo Park, CA 94025 (415) 324-4574.

FOR SALE. EDISON RADIO. Console model, ca. 1928-30. Turned legs, fancy speaker grille, dark wood cabinet. Lights up, but no reception. Mitch. 155 Yale Road, Menlo Park, CA 94025 (415)324-4574.

EARLY RADIO SERVICE MANUALS. Rider, Gheradi, etc. Will buy your old bound volumes. Send description with asking price. Mitch's Archives. 155 Yale Road, Menlo Park, CA 94025 (415)324-4574.

A Business Graphics' Intelligent Development

Image Resource, makers of the Videoprint full-color, photographic hardcopy devices, has entered into an agreement with Intelligent Systems Corporation (ISC) of Norcross, Georgia, to sell their products together as business graphics systems. ISC manufactures intelligent, color terminals. This combination will expand the breadth of uses of computer graphics in computer-generated business reporting.

The Videoprint 3000 will be sold with ISC models 3621 and 3651 color terminals for various MIS applications. The output of these systems can be 35mm slides, 4" x 5" prints with enlargeable negatives, or instant prints from Polaroid SX-70 film.

This relationship brings together the largest seller of low-cost, intelligent, color terminals with the lowest-cost, photographic hardcopy system to bring business graphics into a new epoch.

For more information, contact Warren Sullivan, Image Resource Corp., 2260 Townsgate Road, Westlake Village CA 91361, (805) 496-3317.

OLD EDITORS NEVER DIE, THEY JUST WANDER AROUND
by Jim Warren

Well, Carl Helmers has finally left as editor of *Byte*, handing the reins over to Chris Morgan. With his departure, every significant micro periodical has now seen the departure of their founding editor. Carl was the first editor of a major commercial micro magazine; he was the last to leave. He has returned to being a computer professional; he's about to market a batch of business software he developed under UCSD Pascal.

John Craig was the first editor of what is now *Kilobaud Microcomputing*. But he moved on to edit *Creative Computing*, and has now left the editing business to be the publisher of *InfoWorld*. (Us ol' timers remember that *Kilobaud Microcomputing* was originally named *Kilobyte*, then renamed *Kilobaud* after *Byte* folks expressed something less than pleasure over the original name. Wanna bet that it eventually becomes simply, 'Microcomputing'?)

Sol Libes was the founder of the Amateur Computer Group of New Jersey — the second oldest computer club in the U.S. (second, by about a week, to the San Francisco Peninsula's Homebrew Computer Club) — and the editor of its ACGNJ Newsletter. (Sol sez that the ACGNJ is now the largest computer club in the U.S.) He has authored several books on electronics. However, what qualifies him for mention in this article is that he has now created a significant hobbyists' hardware magazine, *S-100 Microsystems*. He originated it . . . then found out that doing quality editorial work was a minor part of running a rag. The major effort concerns such uninteresting activities as pleading with printers, pacifying the post office, systemizing subscriptions, and — most importantly (if one wishes to pay one's publishing bills) — anointing advertisers . . who furnish most of the loot that commercial periodicals receive. Relatively quickly, Sol decided he was an editor; not a publisher, and sold *S-100 Microsystems* to Dave Ahl, thereby letting Dave do the loot pursuit, while Sol did the exotic editing.

Art Childs was the first editor of *SCCS Interface* for the Southern California Computer Society. Art is long gone from the editing racket. And SCCS is equally long gone from the club racket . . . as *SCCS Interface* is long gone from the periodical game. It's follow-on, *Interface Age*, has seen several editors come and go, including Carl Warren (now with *EDN*), and Frank Vaughan (previously with *ComputerWorld*, and now covering the electronics beat for a Phoenix newspaper).

Dave Ahl originated *Creative Computing* and was its first editor, but has long since moved to the position of pure (?) publisher. *CC* had several other notable editors come and go, including Steve Gray (founder of the Amateur Computer Society, several decades ago), and John Craig.

Then there's People's Computer Company. It goes through editors like a hot knife through butter (though sometimes not as smoothly).

PCC began under the flamboyant and farsighted leadership of Bob Albrecht. PCC was first a 'walk-in & use-a-computer' center for kids of all ages, back in the hippie '60's.

Then Bob spun off from the center, created a newspaper called 'People's Computer Company' and thereafter created a nonprofit educational corporation of the same name (we wouldn't want to leave the public unconfused by naming it something different now, would we?). Bob, of course, was *PCC's* first editor. All that happened back in October, 1972 . . making *PCC* the oldest of the "personal computing" rags (much older than the phrase itself. "Personal computing," was first widely used by John Dilks when he created his first Personal Computing trade show in Atlantic City in August of '76).

Bob lasted a long time (for this industry) — he edited *PCC* until the summer of '76. (He later was the editorial power behind the scenes of the short-lived *Calculators/Computers*, a mag for educational computing.)

When Bob left *PCC* (the newspaper), Phyllis Cole took over as its editor, renaming it *People's Computers*. She left and is now a wheel in documentation for Apple.

Then Bob came back to edit the rag for a while — which, by then had changed from newspaper format to magazine format — and again renaming it, this time calling it *Recreational Computing*, orienting its content to computer games . . . an ongoing Albrecht fascination. Now, Bob has moved on to a project called 'Computertown USA' — the computerization of Menlo Park, California (good luck!). *PCC=PC=RC* has gone through several more editors, and is currently vascilating about the possibility of a new name, new editor, and new direction.

Back in the early days (daze?) of hobby computing, when Altair was the big name (you do remember the Altair, don't you?), Bob roped Dennis Allison into writing a series of software design articles for publication in *PCC*. The upshot of this was a deluge of letters from readers asking for more and consistant articles on microcomputer software design and implementation.

Meeting one afternoon in PCC's executive conference room (the local pizza pub), Bob and Dennis decided to create a brief newsletter addressing design of small versions of Basic for micros. They turned the copy over to their production artist, Eric Bakalinsky, telling him to dream up a title for it as he pasted it up. After some questioning regarding the topic (Eric knew nothing of computing), he named it *Dr. Dobb's Journal of Basic Calisthenics and Orthodontia* (Dobb for Dennis and Bob, calisthenics for computer exercises, and orthodontia reflecting avoidance of 'overbyte' — excessive memory consumption).

Bob allowed as how he wasn't going to edit such a 'heavy' technical rag — his bag was Basic and computers for kids. Dennis quickly refused to edit *DDJ*; he had his hands full being an Important Computer Consultant. So, they found a sucker from Stanford to edit it.

I had just been told by my Ph.D. thesis advisor that he was dropping my support (as he evacuated Stanford for a position with industry) because I "couldn't write well enough to produce a dissertation." I was, therefore, an obvious candidate to be *DDJ's* first editor. Beginning in January, 1976, I quickly exercised the computer snob's sneering displeasure with Basic by renaming it to be *Dr. Dobb's Journal of Computer Calisthenics*. I remained its real editor for most of a year (and official editor for more like a year and a half), spinning off to create the Computer Faire (an idea that grew out of John Dilks' Atlantic City show in '76) . . . and the Faires' support publication, the *Silicon Gulch Gazette*. A coupla years later, I created the micro industry's first fast-turnaround newspaper, the *Intelligent Machines Journal* (originally named the *Journal of Intelligent Machines*, but renamed after I — even I — couldn't tolerate the mnemonic for it).

Tom Williams had been *DDJ's* editor, after me at PCC. And, since he had been there most of a year, it was certainly time to move on. So, he became my editor for *IMJ*.

Then I got tired of running *IMJ* (I was more interested in its editorial content than its financial content; hardly the way to continue publication), and sold it to Pat McGovern, the owner of *ComputerWorld* . . . and about 15 other computer publications, internationally (as well as a TV station and several radio stations). Pat renamed it 'InfoWorld', hired John Craig away from *Creative Computing* to become its publisher, and kept Tom as its editor . . . for a while. Now, however, Tom has moved on to be a west coast editor for *Electronic Design*, and *InfoWorld* has just installed its newest (third) editor, Maggi Canon.

All in all, it seems like the editorship of microcomputing periodicals closely parallels the volatile, highly mobile character of the technical community they serve. After all, if the microcomputer industry considers an employee who remains with the same company for two years an 'old timer', who can be suprised that microcomputer editors hike from rag to rag on a similar cycle?

It may be chaotic, but it sure is fun bein' a part of it.

6th West Coast Computer Faire

listing of

Exhibitors & Booths

97% filled as of: 81 Feb 16

Exhibitor	Booth
3M/Data Recording Products Div.	1121, 1123C
A.I.D.S. Compu-Centers	427H
Acorn Software Products, Inc.	103
Action Computer Enterprise, Inc.	1431
Adaptive Data & Energy Systems	1620
Advance Data Concepts	1134, 1136C
Advanced Computer Products	1219H
Adventure International	1233H
Allen Gelder Software	12
Alpha Information Systems	1227Q
Alpha Omega Computer Systems, Inc.	1507, 1509
Alpha Supply Co.	113, 114C
Altos Computer	527H
American Ink Products Co.	07
American Word Processing Co.	1327C, 1329
Anchor Pad of N. Cal Inc	1645
Anvil Cases, Inc.	1032
Apple Shoppe	10
Arcadian Newsletter	09
Argos Computers	1104C
Arkenstone, Inc.	410
Arrow Computer Supply	111, 112
Artec Electronics, Inc.	327Q
ASAP Computer Products, Inc.	1609
Associated Computer Industries	1343C, 1345
Automated Simulations	1429
AVA Instrumentation, Inc.	1428
AVS Audio-Video Systems	1129
Axiom Corporation	1545, 1547
Base 2, Inc.	1809, 1810
Basic Systems Corp.	1029, 1031
Berg Publications	41
Berkeley Microcomputer	1512C
Black Assoc of Data Proc Profs	1549
Boles & Company, Inc.	1533
Broderbund Software	1629
Buss: Indep. Nwsltr of Heath Computers	23
Byte & onComputing	519, 521, 523C
Byte Industries, Inc.	1411, 1413C
C.D.E. Northstar Software	04
California Computer Systems	218C, 220, 222
Casheab	16
Century Electronics	311
CoEvolution Quarterly	1132
Commercial Mailing Accessories	1706
Commodore Business Machines	406C, 408
ComPac	17
Compiler Systems, Inc.	1722C
Complete Business Services Corp.	1035
Component Sales, Inc.	1023C
Compu TA	38
Compumart Corp.	1618C
Compumax, Inc.	1131
Compute! Magazine	1627C
Computer Alternatives	1710
Computer Connection	1205S
Computer Discount of America	1808
Computer Funiture & Accessories	1422C
Computer Headware	417C, 419
Computer Products Center	06
Computer Stop Corp	1647
Computer Systems Design Group	18
Computer T-Shirts	1804
Computer Technology Associates	1643C
Computer TEXTile	110
Computer Ventures, Inc.	1802
Concord Computer Components	1333, 1335, 1337C
Continental Software	1535, 1537C
Corvus Systems, Inc.	605C, 607, 609
Cosmos/Head Office	1551C
Cosmos/Sapporo, Hudson Soft	1551C
COSMOS/U.S.A.	1551C
Crashed Platter Products	1037C
Creative Computing	512, 514C, 01
Cromemco, Inc.	418C, 420, 422, 424C
CSUC Time Share Users Grp	1445
Cybernautics	1421
Cybertek	1632
Data Capital Co.	101C, 102
Data Equipment Supply Corp.	1523C
Data Trans, Inc.	28
Datamation Magazine	613C
Datasoft, Inc.	1619C, 1621
David Dameron	27
Decision Data Computer Corp.	1718C
Design Enterprises of S.F.	03
Designer Software	1018, 1020
Diablo Systems, Inc.	307, 305C
Digicomp Research Corp	1434
Digital Deli Computer Store	1506, 1508
Digital Research	421
Digital's Computer Store	214C, 313C
dilithium Press	104
Direct, Inc.	1605C, 1607
Disco-Tech	1409
Dorsett Educational Systems Inc	44
Dual Systems Control Corp	1026
Durango Systems Inc	1004, 1006
Dysan Corporation	1447, 1449
E.B.G. & Associates	1120
Eakins Associates, Inc.	02
Educational Programming Systems	1135
Elcomp Publishing, Inc.	1611
Electro Service Corp.	14
Electronic Systems Furniture	1119C
Encyclopedia Britanica	309
Escon Products	1534
Ex-Cell-O Corp./Remex Division	1505C
Exatron Corp.	1519C, 1521
Forth Interest Group	1137C
Friends Software	1510
H & E Computronics, Inc.	608C, 610, 612, 614C
Hayden Book Co.	617C, 619
Heath Co.	221C, 223, 225, 227C
Hobby World Electronics	1111Q, 1108, 1110
Horsetrader Magazine	05
Houston Instrument	1226C, 1228
Howard Industries, Inc.	319
Howard W. Sams & Co., Inc.	1126C, 1128
Huntington Computing	31
IBM Corp.	1218C
Information Unlimited Software	224C
InfoWorld	1236C, 1234
Interactive Fiction	25
Interface Age Magazine	627Q
Intnl North Star Users Assoc	1022
Island Cybernetics	33
Ithaca Intersystems	312, 411, 314C, 413C
Jade Computer Products	1103H
Japan Microcomputer Club	405C
John Bell Engineering	317C
John Wiley & Sons, Inc.	1405C, 1407
Kilobaud Microcomp/80 Microcomp	1011, 1013C
Lang Systems, Inc.	1436C
LAX Computer Products	1351C, 1450C
Leedex Corp.	407, 409
Lifeboats Associates	1220
Lobo Drives International	1518C, 1419C
Macrotronics, Inc.	1130
Magnolia Microsystems	20
Magnum Opus	43
Marin Co. TRS-80 Users Grp	1028
Marinchip Systems	1423C
Matthew Jew & Eric Kilk	34
Mauro Engineering	1632
McGraw-Hill Book Co.	517C
Measurement Systems & Controls	1526C, 1528
Merrill Lynch,Pierce,Fenner & Smith	1708
Micoperipheral Corp.	1522C
Micro Business Associates	1444
Micro Business Systems	30
Micro Data Base Systems, Inc.	1613C
Micro Focus, Inc.	213
Micro Mainframes	1531
Micro Matrix	29
Micro-Ap, Inc.	215C
Micro-Expander Inc	1736C
MICRO: The 6502 Journal	1543C
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MicroApplications Associates	36
Microbyte Computer Systems	201B
Microcomputer Consultants	210
Microcomputer Technology, Inc.	1426C
MicroDaSys	1112C
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Micromation, Inc.	1005C, 1007
Micropolis Corp.	507, 509
MicroPro	321, 323C
Microsoft	306C, 308, 310
MITA	1016
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Mountain Computer, Inc.	1623C
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Nordic Systems	209C
Novation, Inc.	1631, 1633
On-Line Systems	1432
Oracle Electronics & Trading Co	1446
Orange Micro, Inc.	1622C
Organic Software	1430
Orthocode Corp.	1536C, 1437C
Osborne Computer Corp.	1612C, 1513C, 1610, 1511
Osborne/McGraw-Hill	518C, 520
OSM Computer Corporation	1635
Pacific Exchanges	1106
Pacific Mountain States (PMS)	1122C
Panamax	13
Passport Designs, Inc.	1812C
PATCA	1008
Patrick & Co.	1021
People's Computer Company	109
Percom Data Co., Inc.	1805, 1806
Performance Software Corp.	1433, 1435
Personal Micro Computers, Inc.	600B
Personal Software, Inc.	506C, 508, 510
Phase One Systems, Inc.	1443C
Philips T&M	1222C
Prentice-Hall, Inc.	211
Programma International, Inc.	318C, 320
Prosoft Medical Billing	08
Proteus	1448
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Q.T. Computer Systems, Inc.	1347, 1349
Quality Software	206C, 208
Quest Electronics	322, 324C, 423C
R.H. Electronics	39
Radio Shack	1303H
RCA MicroComputer Products	620C, 622, 624, 626C
RCI Computer Services	1024
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Rochester Data, Inc.	1742C
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S-100 Computer Design & Cnslt Corp.	32
S.pee.k uP Software	21
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Sebree's Home Computers	1331
Select Information Systems, Inc.	1830B
Shasta General Systems	1604C, 1606
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Silverman Associates	1811
Sinclair Research Ltd.	1027C
Sirius Software, Inc.	1127C
Skyles Electric Works	1418C
Small Business Applications, Inc.	1636C
Softape	1704C
Softech International Corp	1651C
Softsel, Inc	1133
Software Concepts	1009
Software Express	1232
Sorcim	1427C
Source Telecomputing Corp.	1530, 1532
Southwestern Data Systems	1420
Spellguard by ISA	1728
SSM Microcomputer Products	1319C, 1321, 1323C
Stacey's Bookstore	1118C, 1019C
Standard & Poor's Corp.	1504C
Stone Age Microcomputers	19
Stoneware Microcomputer Products	1828, 1829
Strategic Simulations, Inc.	1520
Structured Systems Group, Inc.	505C
Succinct Systems	40
Sybex, Inc.	524C, 623C
SZ Software Systems	11
Taranto & Associates, Inc.	621
TARCO Development Corp	1827C
The Purchasing Agent	1442C
The Software Exchange	1626C, 1527C, 1628, 1529
TNW Corp.	1230
Triac Computer Systems	611
Trillium Group	45
TRS-Nybblers	1033
UCSD p-System Users' Society	1544
United Detector Technology	1803
Vandata	212
Videx, Inc.	1630
Vodex - A Votrax Company	1642C
Wabash Tape Corp.	1637C
Washington Computer Services	22
West-Ware, Inc	1726C
Western Micro Systems	1311Q
White Computer Co	105, 106
Xcomp, Inc	1807
Zendex	1712C

Conference Session

Laboratory Applications Take Microcomputer to (Multi)Task

Microcomputers used in distributed processing networks provide a powerful tool for gathering laboratory data and managing laboratory operation. In an application discussed at the 6th Faire by Jeffery Cawley, "Microcomputer Applications in Laboratory Data Acquisition and Management," one CPU is operating under the LABOL (Laboratory-Oriented Language), real-time data acquisition system and a second CPU in time sharing mode performs sample log-in, data file management, report generation, and laboratory quality control.

This discussion will focus on operational aspects of the LABOL real-time executive. Jeffery notes that "the generalized nature of the system gives the user tremendous versatility in data systems in both laboratory and process control applications.

"Networked microcomputers have demonstrated the capability of successfully handling the large volume of data generated by many modern laboratory facilities. Such systems are a less expensive and more easily maintained alternative to the larger computer that are frequently used.

"The microcomputer approach also creates a "friendlier" system than many larger machine options. For example, with a real system such as LABOL, the laboratory can often reconfigure their system without being forced to use the original vendor."

DoubleSpeak: "ZIP code." 'Zip' conotes 'rapid.' Ha. Ha.

Comstar for Northstar

Comstar, a full compiler system for North Star Basic, is available for all double or quad density North Star systems.

The Comstar compiler translates a North Star type 2 (program) file into an assembly language program and thence into a fully-operational, machine language program. The resulting programs run faster than their Basic equivalents and as machine code, fully protect the original source Basic program.

Comstar is available for double or quad density systems only. Neither the compiler nor the compiled programs will read or write single-density disks. A dual drive disk system is desirable, and mandatory for large Basic programs. The compiler consumes approximately 12K memory with additional space required for data storage.

Compiled programs typically require substantially more memory than their Basic equivalents. The increased memory requirement arises partly because of the compilation process and partly because the variable storage areas are included within the compiled program. Compiled programs can use either software floating point functions or the North Star floating point board (for a very substantial increase in computational speed). Programs generated by Comstar perform all their I/O through the North Star DOS.

Programs developed with Comstar for commercial distribution must bear notice to that effect, but otherwise require no royalties. Complete documentation is included, and full user support is provided by mail or phone. For further information: Allen Ashley, 395 Sierra Madre Villa, Pasadena, CA 91107, (213) 793-5748.

Business Consultants Offer Advice on Small Computers

Although it is acknowledged that computers can save hours, money and much work, there still exists a futuristic aura about them which makes many small businesspersons hesitate about delving into the subject. A new book published by dilithium Press, may strip away this mystique.

Small Computers for the Small Businessman, a 200-page paperback ($12.95), was written by business consultants rather than programmers. Nicholas Rosa is a
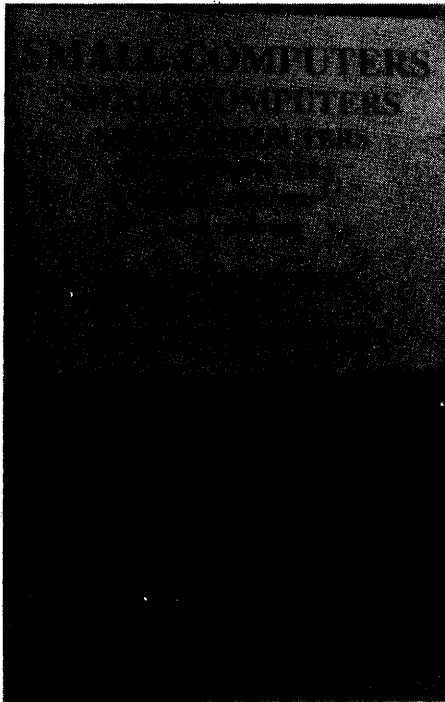
consultant with a long list of magazine editorial and technical writing credits to his name in the field of scientific and technical publishing. In addition to editorial stints at Electronics World, Electronics Illustrated, Science World, and Oceans, Nicholas has co-authored a number of books on astronautics, ecology and life sciences. From her base as a math and science instructor, Sharon Rosa entered the technical writing field in 1973 and in 1978 joined Nicholas Rosa and Assoc. as a partner specializing in software documentation.

The authors tell the readers: How and where to shop for a computer successfully, What they can expect their computer to do for them, How much computer is necessary for them, How to select software, Whether or not to use a consultant, How to introduce the computer to the staff, And more.

This book is available at B. Daltons, Kroch's and Brentanos, computer stores or directly from dilithium Press, Box 606, Beaverton OR 97075, (503) 243-1160.

Software Multiplies Terminal Capacity

Clyde Digital Systems, a division of Clyde Enterprises, Inc., recently announced a stand-alone software package for the DEC PDP 11 and VAX 11 computers that extends a single computer terminal to four interactive terminals. It works for any kind of terminal. The session context can be swapped from one job to another without interruption. This may be done at any point in an interactive session. In addition, all key-strokes entered by the user and all information that is presented to the terminal by the computer are captured in a log file.

For more information: Janet, Clyde Digital Software, Sales, Box 348, Bedford MA 01730; (617) 275-6643.

Telephone System Unbundled For Individual Rapping

Telephone Management Systems, Inc. recently announced unbundling of their ZAP-CALL/CCS telephone information systems designed for client chargeback in professional firms in law, accounting, engineering, consulting, and similar businesses. Available in three models that handle 125 to 1000 extensions and 10,000 to 41,000 calls, standard ZAP-CALL/CCS Systems include a 12-digit client and matter code — with the ability to isolate either in reports, the capacity for up to 2,000 client numbers, and self-generating client files. The systems are compatible with over 15 major computerized PABX's, a prerequisite for purchase, and designed for on-site, on-demand use.

Newly unbundled, optional features are multi-processing, direct computer entry, client number edit, individual call extraction, network manager, system expander, taskmaster, selective retrieval, multi-terminal access, and remote access.

John Dretler, president of TMS, explained the decision to unbundle ZAP-CALL/CCS Systems, "Every professional firm doesn't necessarily require or want to pay for each individual feature associated with all turnkey telephone chargeback systems. For example, firms with multiple sites would find multi-terminal access and remote access essential, whereas most single-location organizations would not. Similarly, firms with highly variable chargeback file volumes would benefit greatly by system expander, which allows a virtually unlimited storage capacity; yet firms with relatively constant storage needs would not. It's also critical," he continued, "that these options give professional firms the best price-performance for present requirements, while allowing room for expansion. But most important, ZAP/CCS Systems aren't just effective information tools; they're powerful solutions to a big problem. Firms with 40-50 employees typically sacrifice at least $20,000 a year to lost client phone billings. ZAP/CCS Systems eliminate the problem."

For information: Telephone Management Systems, Inc., 180 Bear Hill Rd., Waltham MA 02154, (617) 890-6565.

Pascal Pilots Instructional Course

Richard Frank, president of Sorcim Corp., recently announced that the University of Texas at Austin chose Pascal/M to teach beginnning Pascal programming in a pilot, instructional course in computer sciences.
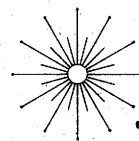
Orshalik, coordinator for the new course at the University of Texas, said, "This course represents a new concept in programming instruction. Our students utilize Pascal/M, Sorcim Corp.'s, implementation of the Pascal language, to gain first-hand, program development knowledge. Through a combination of multimedia classroom instruction and hands-on laboratory experience, the students are taught programming in a real-world environment, learning to define their programming problems logically and concisely by working through a series of 14 program instruction modules at their own pace. By using Pascal/M in conjunction with Z80, S-100-based microcomputers running under CP/M, they gain invaluable experience in microcomputer program development."

"We have concluded," continued Orshalik, "that Pascal/M is especially suited to our purposes. Pascal/M's diagnostics, file interface intrinsics, symbolic debugger and complete documentation make it excellent for teaching programming concepts. Because it runs on CP/M and conforms to the ISO standard, students can transport programs to other University of Texas computers."

There are currently 130 students actively involved in the pilot program, with plans for 180 in the spring semester. The program is expected to expand to between 600 and 800 students per year as laboratory facilities are added reflecting the emphasis of the Pascal language in computer science instruction.

Sorcim Corp. produces software tools for microcomputers including Pascal/M, the A.C.T. series of universal cross assemblers, and the Trans 86 microprocessor code translator.

For further information: Richard Frank, Sorcim Corp., 1333 Lawrence Expressway, Suite 418, Santa Clara, CA 95051, (409) 248-5543.

Conference Session

Linguistic Chauvinism
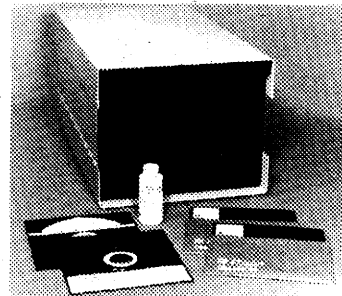
There has been a lot of talk recently about the ultimate computer language. "Efforts to increase the ease of use and benefits produced by using computers is laudable," says 6th Faire speaker Mark Cummings in his talk, "Linguistic Chauvinism." "However, some seem to think that in the conceptual world of languages, there is one computer language which is so far superior to all others, that if we can just find it, it will replace all others. This is a subtle form of linguistic chauvinism.

"The search for a Lingua Franca has been further confused by the idea that there is a natural human language. The idea is that all existing computer lan-guages are 'unnatural' and that this 'un-naturalness' acts as a barrier to the wide-spread use of computers. Here again, making the man-machine interface more efficient is a laudable goal, but this line of inquiry falls into the same trap of linguis-tic chauvinism. The underlying assump-tion seems to be that there is one ap-proach to language which by virtue of its naturalness is so far superior to all others that it will replace them.

"Rather than a new super language which will replace all previous computer languages, what we need is a Lingua Franca which will allow the continued evolution of specialized languages while allowing users of different ones to inter-communicate. How such a language might be constructed will be discussed in a second talk by me at the 6th Faire."

Conference Session

If You're Feeling a Little Boulder, Get a Milestone For Your Millstones

Critical-path-network-analysis is a technique originally devised in the late '50s to aid in the planning and develop-ment of the Polaris weapon system. The basic technique is to divide a complex project into a series of smaller and more easily understood tasks and then to ana-lyze their timing to see which ones are critical to the overall completion of the project — critical in the sense that any de-lay in a job on the critical path results in a delay of the entire project.

Until Milestone was made available, there were basically two competing meth-ods of critical path analysis, PERT and CPM.

The acronym PERT stands for Perfor-mance Evaluation and Review Technique. It treats a project as a series of *events* oc-curring in a time sequence and is consid-ered to be a good tool for reporting the progress of a project.

CPM stands for Critical Path Method (not to be confused with the microcom-puter operating system known as CP/M for Control Program/Monitor). In con-trast to PERT, CPM treats a project as a series of *activities* and is generally consid-ered to be useful for planning a project.

Implementations of PERT and CPM have been expensive and cumbersome to use. They typically cost thousands of dollars, require a large mainframe or mini-computer, and operate in a non-interac-tive batch mode.

In his 6th Faire talk "Milestone — A Project Management Program Written in Pascal for Use on UCSD and CP/M Com-puter Systems," Michael R. Posehn claims "Milestone combines the best fea-tures of other critical path techniques into a package that is inexpensive, runs on a desktop computer, and is simple enough for anyone to use. It is designed to expand the application of critical path analysis to areas where, because of the cost, it has never before been considered. It is not designed to replace some of the more sophisticated PERT and CPM im-plementations with features such as schedule optimization.

"Milestone's design is a product of many years of experience in the "real world" of small-project management. In such an environment the primary pur-pose of planning is to help the project leader clarify the task at hand and to help him communicate his ideas to his subordi-nates and superiors. For these two rea-sons, the designers of Milestone stressed its interactivity and comprehensive re-porting.

"For Milestone a *project* is simply any task made up of steps that must be per-formed in sequence. After dividing a proj-ect into its composite steps, Milestone can help you plan, schedule, and control the project.

"Specifically here are some of the things you can do:

* Find out which activities are time criti-cal and can't be delayed.
* Discover which activites have slack time and can be delayed without de-laying the entire project.
* Prepare a detailed cost estimate based upon a summation of each activity's individual equipment and manpower expenses.
* Change an activity and instantly see the impact on the overall project schedule.
* Investigate the tradeoffs between man-power, dollars, and time.
* Keep track of your project's progress by periodically updating the schedule to reflect changes in the plan and com-pleted activities.
* Communicate your plan to your sub-ordinates by giving them a clear pic-ture of what is expected of them, and when.
* Use Milestone's printed reports to help convince your superiors that your plan is sound.

"By defeating its critical path option, it can also be used as a sophisticated planning calendar to:

* Create an activity calendar to keep track of your special meetings, con-ferences, business trips, and vacations.
* Plan your organization's projected workload for the coming year.
* Allocate the rental or other use of equipment or resources."

Conference Session

Lisp, Greek and Arete: Musings on a Classical Education

"Unlike Fortran and its pidgin bastard Basic, which hang on by virtue of their ubiquity, the amount invested in software, and the reluctance to retool," says 6th Faire speaker Lois Patricia Flynne in her talk "Lisp, Greek and Arete: Musings on a Classical Education," Lisp contrives to hold its place of preeminence in a demanding field because, in all its twenty-one years, those bright restless minds in Artificial Intelligence have not managed to come up with a replacement, despite their other considerable achievements. That is no small tribute considering that the half life of innovation in the computer field is five years. Certainly, replacements for the number crunchers like Fortran and Basic have long been with us, Pascal, C, PL1, APL, Forth, ADA. Moreover, Lisp has never been supported by a computer company, nor, for that matter, much promoted by its admirers, as have been many of the languages that currently dominate. Nor, was it put in power by government decree, as in the case of Cobol and, more recently, ADA. Lisp has stood the test of time on merit alone

"I am not suggesting that somewhere down the track Lisp will not be displaced by something better. However, as Wegner urges, Education . . . should emphasize enduring fundamental principles rather than transient current technology. Enduring fundamental principles are the essence of Lisp."

Conference Session

## Electric System Management Doesn't Have to be Re-volting

The electric power system of the continental U.S. consists of local, area and regional utilities that generate and distribute electricity. These utilities, except for a very few, are interconnected by transmission lines to improve individual service reliability margins and economic operation. In an interconnected system all generators operate at the same average frequency. Transients caused by sudden loss of generation or load in any part of the system may be observed everywhere within the system. Power system frequency serves as an indicator of the balance between generation and load. Excess generation increases frequency, while a deficiency of generation results in lower frequency. The system is not self-regulating and must be governed by automatic controls.

Interconnected electric system frequency continually varies about the value of 60Hz in response to electric load changes and as generation is adjusted to match load. "The need for power system load management due to generation constraints has prompted us," say R. K. Adams, J. M. McIntyre, and R. W. Rochelle, " to make a detailed study of this system frequency."

Their 6th Faire talk, "Microcomputer Use for Studying Interconnected Electric System Frequency," is based on much earlier studies of system frequency stemming from their overall interest in precision measurement and control. The use of microcomputers allows a wider variety of measurements of power system frequency than was previously feasible. They have used microcomputers both to record the output of frequency measuring instruments and to directly measure system frequency. Although applied here to power system frequency, the techniques they have used are generally applicable to the accurate measurement and monitoring of a wide range of frequencies.

12-Volt (DC) Printer

Syntest Corporation recently announced the newest addition to its digital printer family. The SP-314 dot-matrix alphanumeric printer features 12 volt D.C. operation allowing complete independence from power lines. Other features of
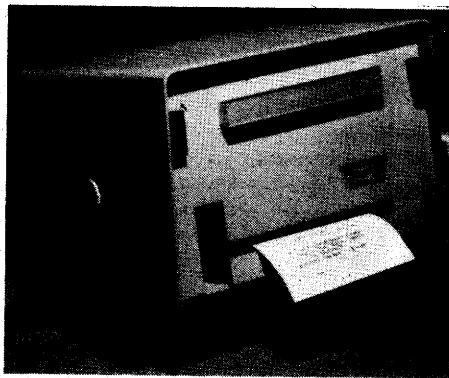
the SP-314 are comparable to its line operated cousins: Buffered 40 column impact printing, RS-232 serial and parallel inputs, crystal controlled baud rate, 96 character ASCII set plus double width, and a self test routine. In addition this new unit includes graphic capabilities for special printer applications.

For further information: Syntest, 169 Millham Street, Marlboro MA 01752, (617) 481-7827.

Calculator Kits For Cars and Taxes

Two new calculators from Texas Instruments Incorporated, are designed for special uses — one for tracking automobile performance, and one for simplifying and speeding completion of tax forms.

The TI-1850 Visor Kit can be used to track automobile performance. The kit which includes a TI-1850 calculator, auto record pad, ball point pen and tire gauge comes on a vinyl organizer which can be clipped onto a sun visor. The user can record miles per gallon of gasoline, enter routine service information and keep track of periodic maintenance needs.

For use at tax time is the new 1040A TaxPak calculator package. The 1040 TaxPak provides: a Do-It-Yourself Tax Guide, Internal Revenue Service 1040A forms, and instructions and envelope for mailing the completed tax form.

The TI-1850 Visor Kit carries a suggested retail price of $19.95. The TI-1040 TaxPak has a suggested retail price of $16.95. For more information: Texas Instruments Incorporated, Box 53, Lubbock TX 79408; (214) 995-4028.

Catalog Is All DECked Out

Cambridge Digital, a division of CompuMart Corp., has published a new 36-page catalog featuring the DEC LSI-11 microcomputers and DEC LSI-11 compatibles. The illustrated catalog offers systems and options designed to solve day-to-day computing needs for engineering, research, educational, and general purpose applications.

In addition to extensive listings of hardware and systems from the Digital Equipment Corporation: DEC compatible hardware from manufacturers like C. Itoh, Data Systems, Netcom, Western Dynex, Control Data, Emulex, Texas Instruments and others are also listed.

DEC Software plus word processing, time sharing, Cobol, Pascal, Dbl and financial applications are included as well.

This catalog, featuring exclusively LSI-11 equipment and LSI-11 packaged systems is the first of its kind.

To obtain a free copy, write to CompuMart Corp., Cambridge Digital Division, Box 568, Dept. 73, Cambridge MA 02139; (617) 491-2700.

SoftCare Medical Billing System

A new medical billing system, SoftCare prepares patient bills and insurance claims for up to 30 doctors. Accounts receivable are maintained by patient and insurance company, and detail is retained to permit tracking of individual claims. The user-friendly design requires little or no operator training. The fill-in-the-blank screen formats are practically self-explanatory, and error checking takes place as information is entered. "Browsing" capability lets the user inquire and page through the files. No patient ID's are required. Patient files are updated as transactions are entered so that bills and claims can be prepared upon demand. SoftCare is written in UCSD Pascal and runs on most Z-80, 6502, and LSI-11 based machine. A system configuration program permits the user to select the specifications for the terminal and printer, and the set-up program allows the doctor to tailor the package to his practice through a series of multiple-choice questions. For more information: Professional Business Software, 119 Fremont St., San Francisco CA 94105; (415) 546-1596.

Conference Session

Computer Wave-Applications: The Tide Is Coming In

Recent progresss in microcomputer techniques impacts signal processing, where small computers can be built in data acquisition and processing systems, resulting in on-line and real-time processing systems.

"In the Laboratory of Wave Information Processing," says Professor Yoshinao Aoki, in his 6th Faire talk, "Development of Microcomputer Systems and Their Applications at the Laboratory of Wave Information Processing of Hokkaido University," we have, using already-developed microcomputer systems, constructed systems for signal processing, and imaging systems of various kinds of waves such as microwave, sound- and ultrasonic wave.

"I introduce our microcomputer systems, and their applications to imaging systems, holography, computer tomography, and others."

SoftCare Medical Billing System

Conference Session

Doctor Your Records With Medical Programs

The availability of inexpensive desktop computers opens the door to many medical applications. Computers potentially can be used in the following areas of a medical practice: medical records (creation, access, storage); business management (billing, accounting, payroll, word processing, patient scheduling); diagnosis and care information (decision making); and education (both physician and patient).

In a paper at the 5th Faire (see Volume V of the *Proceedings*), Mark H. Spohr, M.D. discussed the above possibilities in some detail. At the 6th Faire, Mark will describe three specific applications programs that are now available: Drug Interactions, Medical History, and Medical Clinic Statistics. He will also give you a preview of other programs currently under development.

Conference Session

Computer Puzzles Are Apt To Generate Cross Words

Modern crossword puzzles have fascinated millions of people since 1913 when the first modern crossword puzzle appeared in the December 21, 1913 Sunday supplement *Fun* in the *New York World* newspaper. The modern crossword puzzle was preceded by word squares that appeared in England during the 19th Century. The word square, a group of words arranged so the letters formed words when read vertically and horizontally, appeared in children's puzzle books and various periodicals.

With the advent of the computer, and in particular the microcomputer, the ease of generating all such puzzles is within the easy reach of any owner of a small or large computer. The rules are simple and easy to implement in both high-level languages and assembly language routines. The results produced using a 6809-based computer and an assembly language program are shared by Chuck Adams in his 6th Faire talk, "Computer-Generated Crossword Puzzles."

On Resume Writing

by Stephanie Buchholz & Bill Baumann

It is important to put time and thought into the writing of your resume. Keep in mind that the purpose of the resume is to clearly define your skills and to generate an interview. We use the following format:

Name
Address   Salary
Phone Number

Objective:	Use the job title you have or are seeking.
Summary:	List your proven skills, abilities, expertise, number of years experience.
Software:	Languages, operating systems, applications.
Hardware:	Computers, peripherals.
Education:	If your degree is in a field that trained you for your job put education here; if not, put it after Experience.
Experience:	State the dates of employment, company, city, job title, description. For example:

7/78 - present	Omicron, Inc., Menlo Park CA Professional Recruiter

Definition of your responsibilities.

If you have done unpaid related work, list it. It has occasionally been helpful for people with little work experience to attach excellent written references and a cover letter.

Resumes should be *brief and precise* Use action verbs that have meaning. For example, "Responsible for the PDP 11/34 program" does not describe your duties. It should say, "Designed, coded, tested, implemented and maintained a *(state the application)*, written in *(language)* on the *(computer)*. List operating system. This information proves your summary.

Check your resume for correct spelling and grammer. Forget the gimmicks: pictures, fancy paper, spilled coffee, cat paw prints. Use white or buff paper and black ink. Leave off the personal information. Have you ever seen a resume that mentioned poor health? Listing publications is rarely useful, however patents can be denoted.

Don't Lie — misrepresentation can cost you the job even if you are performing well.

Be brief and concise, but write enough to communicate your experience. Try not to go over two pages remembering the second page is rarely read. The first half-page is what generates interest.

Keep your resume up-to-date so you never need to spend more than a few minutes preparing it for use.

In summary, remember the cardinal rules: Keep it brief, keep it accurate, keep it clear.

Bill Baumann and Stephanie Buchholz, are consultants with Omicron, a San Francisco peninsula professional recruiting firm which serves a broad spectrum of the computer industry ranging from hardware and software vendors to corporate data processing departments. Bill works with hardware people, and can be reached at Omicron, 710 Lakeway, Suite 280, Sunnyvale, CA 94086, (408) 245-7300. Steffi, who works with software people, can be reached at Omicron, 525 Middlefield Road, Suite 120, Menlo Park, CA 94025, (415) 328-6150.

Don't Miss The
6th West Coast Computer Faire
April 3-5, 1981
San Francisco
Civic Auditorium & Brooks Hall

Other Views of Employment Counselors

To the Editor: 80 Dec 15

I must take the strongest exception to the article "Hunting the Headhunter" [SGG Vol. 6 No. 1] by Bill Baumann and Stephanie Buchholz. I am a manager in a Fortune 500 corporation offering computer communications services. My personnel assist in presales support, installation and postsales support efforts in the western region.

The exception is based upon personal experiences both as the applicant and the hiring manager. These experiences are not associated with a single employment agency but rather with a dozen to two dozen.

The article states that Employment Counselors (I refuse to use the term Head Hunter) are "empathetic of other people's needs". It is my observation that the empathy is a lot closer to ones commission check than the job applicant.

The article has a list of "benefits" that are to be obtained by using an employment counselor. There is one item that is a very definite plus.

Conference on Microcomputers in Education

The First Annual Southern California Microcomputers in Education Conference will be held on May 15 & 16, 1981 at Bloomington High School, Bloomington CA. The conference is for teachers of grades K-12 and is sponsored by Computer-Using Educators.

The conference will focus on the use of computers in the classroom. All areas of the curriculum will be covered, including reading, math, science, language, multicultural, special education, classroom management, etc.

Major speakers at the conference will be Dr. Gary Bitter, Arizona State University, and Dr. Dave Moursund, University of Oregon. Every hour, experts on microcomputers in education will conduct sessions designed to help teachers get started with this exciting educational tool.

Some of the topics covered will be how to get grant money to buy computers for your school, what to do if you don't know anything, hardware and software comparisons, evaluating microcomputer systems, and preparing kids for proficiency/competency tests.

A free software exchange will make available all of the programs in the CUE software library for the small cost of material and preparation.

Two-hour hands-on workshops will introduce teachers to basic programming. All major brands of computers will be displayed along with educational software.

Pre-registration of $12 must be sent by May 1st to Forrest Miller, Pre-registration Chairman, San Bernardino County Schools, 602 S. Tippecanoe, San Bernardino CA 92415. On-site registration is $15; students, $7.50.

For more information: Craig Walker, Conference Director, Arrowview Jr. High School, 2299 N. "G" Street, San Bernardino CA 92405, (714) 886-9118.

Faire Registration Subsidies Available

Treasury Regulation 1-162-5 permits an income tax deduction for educational expenses (registration fees, and cost of travel, meals and lodging) undertaken to (1) maintain or improve skills required in one's employment or other trade or business; (2) meet express requirements of an employer or a law imposed as a condition to retention of employment, job status or rate of compensation. The IRS recommends you keep a daily log of expenses in accordance with this regulation.

Instruction to the Applicant on the Proper Technique of Interviewing

More than likely, but not necessarily, the employment counselor has had contact with the hiring company and understands the procedures involved that are unique to that corporation. Items such as "Don't drink at lunch, the hiring manager is a total abstainer" or "The personnel manager is a non-smoker" can give an applicant an advantage over the competition.

The remaining items, in my opinion, in the list significantly tip the scales against the employment counselor.

Confidentiality

I will usually attempt to call applicants who show some of the job requirements on their resume, however if all of the requirements are not shown and the resume is anonymous, it becomes difficult to screen the applicant. Normally I don't bother to contact the employment agency for further information.

In my own personal job searches the only time I desired "Confidentiality" was when replying to a "Blind Box" newspaper advertisement. Normally a newspaper will protect your confidentiality if you instruct the newspaper to whom you don't want your resume circulated.

Rewriting Your Resume

My resume is me and I don't want a third party expanding upon, altering or changing the resume. There are cases where the individual's resume was altered to fit a position. This technique appears to be good for the job applicant as it usually succeeds in getting the interview but in the vast majority of the cases, the interview actually wastes everyones time. The applicant interviews for a position that they aren't qualified, the interviewing manager is interviewing unqualified applicants, and the employment counselor loses credibility with the hiring company. The resume is a picture of the applicant and shows the applicants ability in written communication. The distorted resume is more frequent from the employment counselor than the applicant, especially when the applicant is purchasing typing services for the resume from an outside source.

Presenting the Job Hunter in Positive and Honest Way

Positive, yes; honest, not always. Again we have the commission check syndrome. If the applicant is not placed, no commissions.

Addressing and Advice on "Discomforts" Salary

Personally I will not discuss salary with anyone other than the applicant. The employment counselor is told the range (low-mid-high) and the desired entrance point for the position. The entrance point is negotiated on an individual basis with the applicant.

Experience has shown that applicants salaries have been inflated by a "standard" 10% and in the same breath I have been told "The applicant will move for a lateral transfer". In another instance an employment counselor represented by current salary and salary requirements in such a manner that a position was lost.

The Commute

This one is difficult. Unless the employment counselor actually commutes the same route you will be commuting, the information is an educated guess. Get a map of the area and measure the route you will have to take. Use an average of 35 mph for freeways and 25 mph for major streets and 20 mph for city streets for an estimate of commute times. This will apply to public bus transportation also. Rail transportation will be very close to published schedules. As for commute costs, public transportation rates are published and fixed. For automotive costs take the commute mileage from your map and use 90% of your car's "City EPA" mileage as the basis. I have been told that the distance was 15 miles as the crow flies and traffic should slow me down to take 25 minutes. The real time was 45 minutes to an hour and the distance was 22 miles.

Unclear Communication

Exactly why you don't want a third party involved. Any reasonable question and most unreasonable questions will be answered without reflection upon the applicant. Most questions are in the area of benefits and it is best to get copies of the descriptions of the plans from

the prospective employer. These are usually distributed freely by the personnel department.

Growth

Personal experience has shown that the employment counselor has either inaccurate information or does not know. As a manager I have never been asked by an employment counselor about the growth potential of the position. The other side is that incorrect salary range information was presented by an employment counselor and consequently I was hired into the top 8% of a salary bracket.

Clear Focus

This item is perhaps better described as "look at the great position I found for you". This usually results from the employment counselor getting an offer from the hiring company for you and then wanting you to accept it rather than looking further and accepting an offer not associated with the agency.

In defense of agencies there are agencies that will set up three to eight interviews with the hopes of getting three offers for you. Then you don't accept the first offer and stop looking. The situation becomes a choice of position rather than "take what you got". Personally, I do not take afront to being rejected by an applicant, it is part of the process of hiring employees. The next time the applicant will reject my competition. In both cases, the competition and I, have an employee that selected a position and not one who took what was offered because it was the only one. Usually the employee is a happy one.   —Rich Flynn

Authors' Response

As recruiters who have been in the business for several years, we recognize that there are recruiters who have been less than honest in their business dealings. Mr. Flynn missed the point of the article. We wrote it to provide guidelines for people to use when selecting a recruiter precisely to avoid the kinds of experiences Mr. Flynn has had.

— On confidentiality: We usually speak of it in the sense of discretion. If you choose to have no one know that you are looking, we will respect that.

— On the resume: Many hiring managers in the industry prefer to see a concise description of an individual's history and experience. Many individuals have concentrated their studies and effort on engineering and design techniques rather than descriptive writing. For better communication between the two parties we will rewrite the resume, often with the candidates' help. If we receive a resume that is clear and concise, we do not rewrite.

— On honest and positive presentation of candidates: Honest business dealings will provide us with multiple opportunities to do repeat business. Dishonest business dealings will not.

— On commute determinations: In conjunction with a commute-time formula, we often suggest a "dry run" so the candidate will know what the actual time is.

— On unclear communication: Regarding information about benefits, Mr. Flynn's suggestion that the candidate get that information from the personnel department is a good one. Regarding the other areas, one of the things we do is help people who are unfamiliar with the interview process focus on what information they need to get, and what information they need to give.

— On growth: We are sorry that Mr. Flynn has not had the experience of working with a recruiter who is interested in his long term potential. One of our standard questions asked of hiring managers is the nature of growth opportunities for our candidates. It is in everyone's interest to have as much accurate information as possible for our clients.

— On clear focus: Evidently Mr. Flynn has always known exactly the direction he would take with his career. Unfortunately, there are many people who do not know their long term direction. Also, some are unrealistic as to the kinds of jobs for which they qualify. We arrange interviews for jobs for which they are qualified and in which they will be interested. We don't push people into jobs. They need to make the choice themselves because they have to live with the decision. Our goal is satisfied clients and candidates who will provide repeat business.

We wish to stress that the purpose of our article was to assist people in the selection of a recruiter who will perform a positive service for them. Screen your recruiter carefully as you would your doctor. Remember our guidelines.

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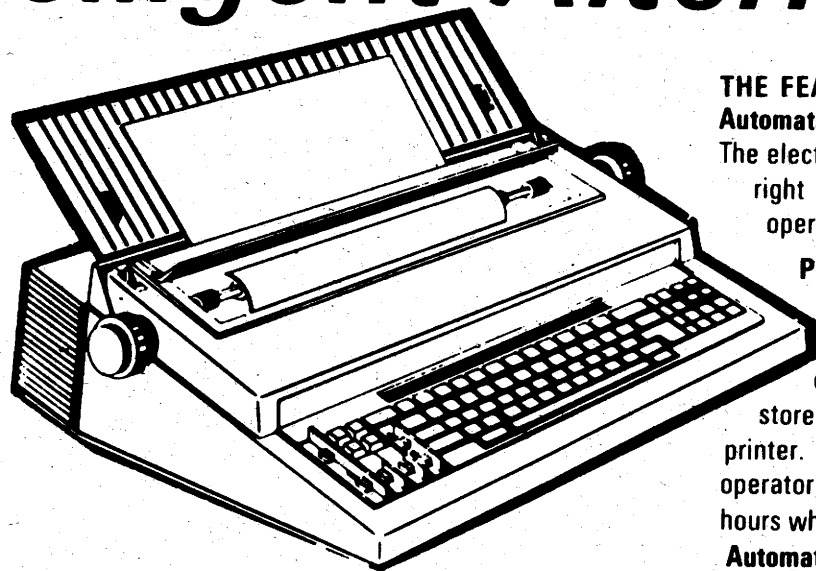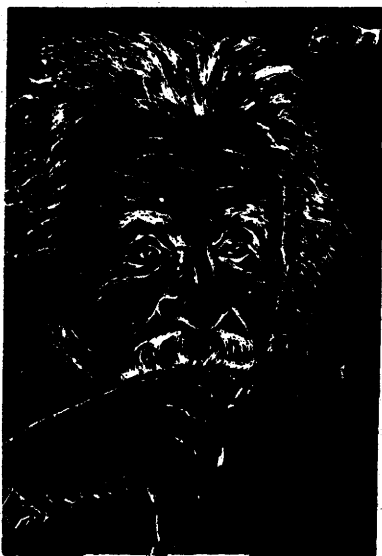COMPUTER FAIRE   333 Swett Road   Woodside, CA 94062   (415)851-7075

## order form

An Intelligent Alternative

TYPRINTER 221

In the research you are doing before purchasing your computer printer, you are probably confused by the various claims, speeds, choices, shapes and prices. Well, we'd like to clear the air a bit and tell you about the most unusual computer-printer around — the TYPRINTER 221.

You see, it's unusual because it is **totally compatible** with **every** computer and word processing program . . . from the largest to the smallest. It's versatile to the point of incredibility . . . We'll discuss the broad advantages and explain the details.

THE DAISY WHEEL

The special daisy wheel supplied is of a unique design consisting of a 100 character carrying radii. Each radii is formed of two distinct types of plastic — an "elastic plastic" for the stalk of the radii, and a comparatively "hard plastic" used to form the character area. This, combined with a very narrow character profile and a special positioner on each of the 100 radii, guarantees a uniform character density. There is near perfect geometric positioning of the character with no character higher or lower than the others. And because of its unique dual material design, micro-vibrations have virtually been eliminated, leaving your final copy clean, clear and smudge free. The copy produced is comparable to that produced by metal daisy wheels and at a fraction of the cost.

HARD SECTION
ELASTIC SECTION
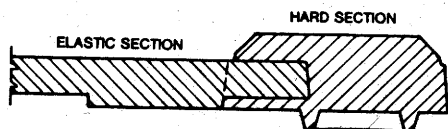
THE KEYBOARD

The keyboard has been referred to as a triumph of human engineering - from the way the keys seem to have been custom designed to fit your fingers, to the way the special feature switches have been grouped. A flip of a switch (or under computer control of course) and the printer becomes a foreign language machine. Push a button, and like magic the printer automatically locates and lines up columns of figures, perfectly balanced between the margins. This incredibly fast, extraordinarily quiet electronic keyboard puts more programming power at you fingertips then printers costing five to ten times as much.

THE DISPLAY

The TYPRINTER 221 presents a new dimension in operator/machine communications. In the manual (typewriter) mode, the printer controls and verifies all entries before printing. The display exhibits the last 15 characters of the text, word-by-word, until the end of the line. The operator may control what will be printed before the actual printing takes place. This new found flexibility enables you to make modifications along the entire line and in both directions. This 20 character plasma display has the ability to scroll backwards as well as forwards; will give the operator a visual indication as to which print mode is currently being selected as well as the number of characters remaining before the right margin is reached. The display will also indicate to the operator:

The number of characters available in the memory	What characters will be inserted into an existing text
When the printer is in an error condition	When the memory for the previous line has been selected
When a pre programmed form lay out has been selected	A warning message that the end of the page is being approached
When the printer is operating from the internal memory.	That a hyphenation decision must be made

PRINT MODE

The TYPRINTER 221 will allow you to automatically highlight individual characters, words or complete sentences. Whatever is entered from the keyboard or from the computer, even an existing text file, can be printed in one or more of the five different modes:

- traditional printing;
- underlined characters;
- true bold characters where the horizontal component of the character is increased without disturbing the vertical component;
- characters which are both bold and underlined, and;
- a feature unique among computer printers- printing in reverse — white on black, sort of reverse video on paper.

MULTILINGUAL CAPABILITY

A unique and useful feature of the TYPRINTER 221 is its capability of being able to print in several languages without changing the daisy wheel. In addition to English, every standard daisy wheel has the ability and the necessary characters to print in French, Spanish, Italian and German.

THE FEATURES

Automatic justification of the right margin
The electronics of the TYPRINTER 221 have made right hand justification a simple, automatic operation.

Phrase and format storage
Phrases, dates, addresses, data, etc. that may be stored in your computer's memory may be sent over to the printer and stored in one of the "memory bins" of the printer. This information may then be used by the operator in the manual mode. This can save you hours when trying to get a form "just right."

Automatic centering
The TYPRINTER 221 will not only center any title between the pre-set margins, but will also center over one or more columns, or over any specific point and will even align copy with the right margin independent of the left margin.

Automatic vertical lines
A command from the computer enables an automatic feature which prints vertical lines at any point on the paper.

Automatic tab sequence recall
With the TYPRINTER 221 you may store and recall the most frequently needed margin and tab sequences for applications such as daily correspondence, statistical reports, etc. This guarantees consistent high quality appearance of each document.

Paragraph indent
A computer command instantly sets a temporary margin in order to print one or more indented paragraphs with respect to the right margin.

Automatic decimal point location
No matter how many figures to either the left or right of the decimal point, the TYPRINTER 221 will automatically line up the figures with the decimal point in any position you choose. Statistical printing has never been easier.

Column layout
This feature allows you to obtain automatic and perfect distribution of spaces between columns in respect to the margins. A perfect page balance is assured without the need to carry out calculations or additional operations.

There is a wide variety of options that you can add to TYPRINTER 221.

By now you are probably convinced that **we are sold** on our machine, and we hope you can understand why. In fact, why don't you use these facts to measure against any and/or all the other computer printers on the market.

When you do, you will realize the TYPRINTER 221 is an intelligent electronic typewriter, a text formatter — and a brilliant computer printer — available at a suggested list price of only $2850.

TYPRINTER 221 is available at your local computer shop — or we'll tell you where you can see and try one if you call us at

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