SILICON GULCH GAZETTE

54)

March 1983

Initiative, Inc., 345 Swett Road, Woodside CA 94062

(415) 851-7077

Radio Shack Offers IBM Compatibility

Radio Shack now offers IBM computer compatibility with the introduction of a controller that permits TRS-80 microcomputer products to communicate with IBM hosts operating SNA/SDLC protocol networks. The Tandy T-76 Communications Controller is available through Radio Shack's Special Marketing Group.

The Tandy T-76 permits the TRS-80 Model II and Model 16 microcomputers and DT-1 Data Terminals to function in an IBM SNA/SDLC network environment as

IBM 3278 CRT's with full screen editing capabilities. Additionally, the Radio Shack PT-210 Portable Data Terminal is supported by the T-76 as a printer with the full screen editing capabilities of a CRT. The Tandy T-76 is also compatible with Radio Shack's line of TRS-80 printers which can be used as IBM 3287 printers.

For more information, contact: Radio Shack Special Marketing Group, 1400 One Tandy Center, Fort Worth, TX 76102, (817)-390-2197.

Faire Conference presentation

IBM Personal Computer Group to Address Hardware & Software Producers & Entrepreneurs

Four to five technical specialists from IBM will provide an in-depth discussion of major technical aspects of the IBM PC at the 8th Computer Faire. Still being finalized at press time, the speakers in this program will be engineering and software professionals and managers affiliated with IBM's Personal Computer Group in Boca Raton, Florida.

They will discuss details of the hardware, interfaces, and software for the IBM PC. They will also detail the entrepreneurial opportunities and submissions program for the IBM-run software library for the PC.

This is a technical session designed for serious computer professionals and entrepreneurs interested in developing

hardware and software for the IBM PC market.

An editorial note: We wish to applaud the significant value of such active support of independent innovation and development by a corporation of the stature and quality of IBM. It serves the micro user community well. It serves the micro industry well. It serves IBM well. And, most particularly, this actively cooperative attitude towards other hardware and software producers is a service to the future.

It is a delightful return to the cooperative spirit of microcomputing's early years — a spirit that fostered much of the explosive innovation and rapid improvement that brought this industry to its current state in just eight short years.

THE 8TH WEST COAST COMPUTED DATE:

Friday, March 18 9am-6pm Saturday, March 19 9am-6pm Sunday, March 20 10am-5pm

San Francisco, March 18-20, 1983

Civic Auditorium & Brooks Hall

\$15 Registration (No checks or charges at the site)

Pre-registration available at participating stores & clubs Registration includes Conference Program & Exhibition for all 3 days

Computer Faire • 345 Swett Road • Woodside, CA 94062 • (415) 851-7077

8th Computer Faire Offers Massive Conference Program; Capacity Trade Exhibit

The 8th West Coast Computer Faire appears certain to be the most interesting and valuable micro convention yet convened, and the largest such show open to end-users. Byte columnist Jerry Pournelle, a long-time micro observer and sci-fi author, unequivocably stated in Byte: "For my money, the West Coast Computer Faire has become the most important show of the year."

Dr. Portia Isaacson, President of Future Computing and one of the best-known industry analysts in the micro world, was equally definitive in a recent comment. She stated that she regards the "West Coast Computer Faire to be one of the three or four most significant computer conventions each year, because it always offers an unusually large number of introductions of particularly innovative new products."

The 8th Faire is jammed into every nook and cranny of San Francisco's 4-story Civic Auditorium, plus all of Brooks Hall, plus all major meeting halls in the two largest hotels that are adjacent to the convention center.

Taking place March 18-20, the 8th Faire sold out of its regular exhibit space fully three months before the convention.

A month later — with the Faire still two months away — it rented its last available "microbooth". These 6'x6' microbooths are a service that is unique to the Computer Faires. They offer very low-cost exhibit space for entrepreneurs and computer craftspeople who may be very innovative, but are undercapitalized. For eight Faires, they have always been one of several major focal points for Faire attendees.

Though the Conference program is not finalized at press time, over 100 tutorial and technical papers have been submitted for consideration. Over 150 people have authored these papers, prepared talks, and/or been chosen to serve on panel sessions.

Registration for the entire 8th Faire Conference and Exposition is \$15, with pre-registration discounts available to groups [see details, elsewhere in this issue]. No checks or charges will be accepted at the door.

Gossip Galore

by Jim Warren

(That title sounds like a character from an old James Bond story. Oh well, there's no accounting for the tastes of headline writers. Of course, we will offer no hint as to who the headliner mite be.)

For those who are not familiar with this questionable column: This is a collection of facts, semifacts, and eccentricities – of the micro world – presented for the entertainment, incitement and possible enlightment of our fellow technojunkies.

PE BECOMES CE

If you haven't already noticed, Popular Electronics magazine has become Computers & Electronics. In several ways, PE can be said to be the rag that created personal computing. Back in 1974, it ran articles on the design of the old "Micro-8" – a buildityourself non-kit based on the Intel

Then it ran the January, 1975, cover story on the MITS Altair... and the micro industry was off and running.

Its long-time Editor is Les Soloman, an inveterate, first-rate

electronics hobbyist (after whom, some say, Processor Technology named its Sol computer). Les has had a long, long interest in computing, and it looks like the publishing conglomerate Ziff-Davis (C&E's owner) has acknowledged the importance of computing in "popular electronics," and will now allow Les to publish bit banging to his heart's content.

PC MAGAZINE STAFF BECOMES PC WORLD STAFF

While we are mentioning Ziff-Davis, we might point out that Z-D has recently purchased *PC Magazine* from Tony Gold, the banker behind New York City's Lifeboat Associates.

There is considerable acrimony over this purchase. Virtually every key staff member from the original *PC Mag* left in a fury (that they say was more than justified), claiming broken promises and dishonored written and verbal agreements. This en masse staff defection apparently includes all of the excellent array of special-topics editors who used to work for *PC Magazine*.

Given the phenomenal success (continued on page 2)

Venture Capital for High Tech to be Discussed at Faire

The 8th West Coast Computer Faire, in San Francisco March 18-20, will include an in-depth, 3-hour Conference program of special interest to computer innovators: "Venture Financing for New Technology Companies." This session will be composed of two panel presentations, organized by J. Michael Murphy, President of Pacific Technology Advisors.

Chaired by Frank Kline, the Managing Director of Pacific Technology Venture Management, the first panel includes J.K. Morris, Editor of the "Venture Capital Journal", S. Mendelow and C.A. Tepper, the President and Senior VP of QC Resource Group, and D.L. Larson of R&D Funding.

The second panel will be Chaired by Michael Murphy, and will include J.D. McCamant of the California Technology Stock Letter, T. Fletcher of Rothschild, Uterberg & Towbin, and D. Woodman of Woodman, Kirkpatrick & Gilbreath.

The first panel will cover a variety of topics, including preparation of a business plan for venture capitalists, the relationship between venture groups and entrepreneurs, strategic planning, and how to approach product and prototype development.

The second panel will range over such topics as institutional vs. individual investing, technology stock investments, effective use of stock brokers, and inside details of how to "go public."

Silicon Gulch Gazette

Published in the center of the microcomputer industry, the San Francisco Peninsula

Hot News & Techno-Gossip News of Events **New Product Information** Rambling Rumor & Fascinating Features and, of course, all the details of the 8th Computer Faire

(*worth at least every penny you pay for it!)

Just Write or Call Computer Faire

345 Swett Road

Woodside CA 94062

(415) 851-7077

Future Computing Incorporated

The Fortune 1000 **Personal Computer Market Forum '83**

A symposium for businesses dedicated to meeting the small computer needs of large corporations.

March 21-23 The Mark Hopkins San Francisco (Immediately following the West Coast Computer Faire)

"This is a new market, and in many ways, a unique market. Our forum addresses the market size for the Fortune companies, their special concerns, and the resulting issues that face hardware and software manufacturers, retailers, distributors, and direct sales forces that want to penetrate this market. There's a lot of competition and the big winners will have a clear understanding of their market, and their place within it.'

Dr. Portia Isaacson President and Chief Executive Officer Future Computing Incorporated

For a complete agenda, please call:

Seminar Sales **Future Computing Incorporated** 214 783-9375



Richardson, Texas 75080 Telephone 214 783-9375 TELEX Number 80-4294 (continued from page 1)

that they had made of the original PC Magazine, this team - headed up by David Bunnell - was able to quickly hook up with publisher Pat McGovern, reportedly the largest computer publisher in the world. Among other things, he founded and owns Computer World, ISO World, (a computer trade rag for independent service organizations and dealers), and owns InfoWorld (founded by this column's author, several years ago and later sold to Pat).

Pat even owns the first computer periodical to serve mainland China. He also has a batch of radio and television stations, and is deeply involved in information distribution, focusing on computer information.

With Bunnell as Publisher. McGovern has created the newest magazine to focus on the massive IBM PC market - not surprisingly, naming it PC World. Having been involved in the computer publishing racket since micros came into existence, we are reasonably aware of McGovern's ample capabilities. We have every reason to believe that his new PC World - with its excellent, experienced staff - will be a very strong contender in the race to provide information about the IBM PC and its multitude of compatibles and programs.

BUNNELL KNOWS WHAT HE'S DOING

PC World's Dave Bunnell has been in the publication end of personal computing ever since personal computing existed. He was a tech writer for MITS when MITS President Ed Roberts announced that MITS was going to create a computer in a kit. Dave later became a Vice President of MITS.

He was the first Publisher of Personal Computing magazine, back when it was created by Benwill

He later had the good sense to

move to the San Francisco Bay area (a little provincial myopia, there), which was - and probably still is - the undisputed center of the microcomputing industry. Here, he authored several micro publications on a freelance basis.

When Tony Gold got the idea to do a publication oriented to the IBM PC, Eddie Currie (Dr. Edward Currie, if you please) who is now Prexy of Lifeboat and used to work with Bunnell at MITS, suggested Dave as the proposed pub's Publisher. Dave took the job, and – in less than a year - built PC Magazine into a huge periodical, comparable to Byte's monthly monster encyclopedia.

ZIFF TIFF OVER PC PUBS

Sadly, it is apparent that Bunnell and the original PC Magazine staff were more interested in publishing a great rag, than they were interested in legally delineating their relationship with investor Gold. While Bunnell and the key staff thought they were earning "sweat equity," Gold - and Ziff-Davis - apparently thought the magazine entirely belonged to Gold, and Bunnell, et al, were merely employees.

Gold and the pub's staff disagreed over the way the publication should operate. Acrimony ensued. Gold closed a deal with Ziff-Davis, selling the magazine to Z-D (reportedly for well over \$1 million, plus residuals). And, every key staff member and subject editor walked.

McGovern and this newly unemployed staff quickly struck a deal (this time with legal eagles eyeballing every comma) and PC World came into existence. This was less than enchanting to Ziff-Davis.

Now, Z-D is trying to get an injunction against McGovern's using the name PC World; there is litigation galore; and plenty of attorneys are soaking up a lot of energy that could much better be spent serving

(continued on page 4)

The Silicon Gulch Gazette a publication of Initiative, Inc. 100,000 circulation Number 34 March, 1983

Publisher: Jim Warren

Editorial: Lindsay Yarnall McGrath

Production: Jeannie Ditter Julie Clements

Marketing: Nels Anderson Kathy Rapp

Operations: Vondra Doherty Alan Kucheck

Debbie Pryor Vicki Rupe **Bruce Quinn-Briggs** Max Clark **Judy Smith** Ellen Welch Carol Hartung Mike McDermott

Video Group: David Carlson Dave Ratto

"For my money the Computer Faire is the most important show of the year."

Jerry Pournelle, computer & sci fi author, Byte, July, 1982

The Computer Faire is the only micro convention that has had six major write-ups in Byte magazine, including two articles about the 7th Computer Faire, last March. It is the largest and best-reputed end-user micro convention in the U.S.

The 7th Computer Faire drew over 36,500, had more than 120 Conference speakers, and over 450 exhibitors.

The 8th West Coast Computer Faire is happening in early '83 at the beginning of San Francisco's Spring season. It is expecting 100 speakers (over 160 Speaker Kits have already been distributed), and had rented all of its 690+ exhibit spaces to over 350 exhibitors three months before the March Faire.

Major Conference Program

To name a few expected sessions:

Tutorials for Novices
Educational Computing
Business Applications
Biomedical Computing
Legal Aspects & Applications
Hardware Design
Software Packages
Applications Systems
Conference Proceedings over 400 pages

Massive Product Exposition

If it's significant, it's being exhibited.

To name a few products being exhibited:

IBM, Apple, Osborne, Radio Shack, Heath/Zenith, TI, Commodore, RCA, CompuPro, Casio, Unix, PCDOS, CP/M, Oasis, dbase II, SuperCalc, Peachtree, Insoft, Select, Byte, Interface Age, Creative Computing, InfoWorld, Datamation, PC World, Dr. Dobb's Journal, Buss, Compute! Dialog, Jade, Broderbund, Adventure International, Dysan, 3M, Maxell, On-Line, Software Toolworks, and many, many more.

• User Group & Special Interest Meetings

Including: IBM PC, Apple, Osborne, TRS-80, Heath/Zenith, etc.

• For more information call: Computer Faire, 345 Swett Road, Woodside, CA 94062 (415) 851-7077

Ask for your FREE subscription to the Faire's Silicon Gulch Gazette.



Reston Errs; Says They Will Fix It, But Doesn't Do So

Late last Fall, we received a note from a Computer Faire follower in Australia reporting that he was confused about the 8th Faire dates. He thought, correctly, that the 8th Faire was March 18-20 (as was announced well over a year ago), but had noticed it reported as being March 2-4 in the "1983 Great Computer Calendar", available for \$7.95 from Reston Publishing (a Prentice-Hall company). The calendar contains microworld historical dates, plus dates of upcoming computer events.

We contacted Reston in late November and again in early December, asking that they include an errata sheet with their calendars, and were given strong assurances that they would promptly do so. However, in the middle of January, well over a month after that assurance, we ordered a copy of the calendar, received it, and found no correction and no errata.

Then we started looking at the rest of the contents. We noticed that they reported Wescon as being "WestCon".

They reported that the first issue of InfoWorld was published on January 6, 1980. Actually, its first issue was datelined December 11, 1978 under the name of Intelligent Machines Journal, and the first issue bearing its current name, Info-World, was clearly identified as "Volume 2, Number 1," and datelined February 18, 1980.

We did not check to see whether they had gotten the days of the week correct.

An accurate calendar of past and future micro events is certainly an attractive idea. However, Reston's "1983 Great Computer Calendar" obviously does not fit the descrip-

Additionally, we are less than enchanted with their lack of willingness to promptly correct an error that could cause their readers to spend several thousand dollars to come to San Francisco on the wrong dates, particularly after they specifically assured us that they would do so.

InfoWorld **Product of Year** Awards at Faire

This year, the West Coast Computer Faire will again be the site for presentation of "InfoWorld's" prestigious hardware and software Product of the Year awards.

"InfoWorld," The Newsweekly for Microcomputer Users, which is going into its fourth year of publication, has chosen the renowned annual West Coast Computer Faire as the event at which to make its vearly awards.

Nineteen eighty-two's winner of "InfoWorld's" Hardware Product of the Year is the IBM Personal Computer. The Software Product of the Year winner is Multiplan from Microsoft.

Staff Walks Out on "PC Magazine," Starts New Journal

By Deborah Wise, InfoWorld Staff

Las Vegas, NV-Not all the intrigue and excitement at this year's Comdex came from microcomputer software and hardware manufacturers.

On the opening day of the show, CW Communications, publisher of computer-related publications including InfoWorld and Computerworld, announced it had launched a new company to publish a monthly magazine for IBM Personal Computer users called PC World.

The twist to the story is that PC World will be run by former staff members of PC Magazine, a yearold publication also aimed at IBM Personal Computer users.

A majority of the PC Magazine staff resigned two days after that publication came under the control of Ziff-Davis, Inc., a New York City publisher of computer-related publications last month. After they left PC Magazine, they approached Patrick J. McGovern, chairman of CW Communications, with the idea for PC

David Bunnell, who started PC Magazine and was its editor, was named publisher and editor-in-chief of PC World and president of PC World Communications, a newly formed subsidiary of CW Communications.

The rift with Ziff-Davis occurred because PC Magazine staff members felt their rights had been violated when the majority stockholder and founder of the magazine, Anthony Gold (who is also a founder of Lifeboat Associates), sold his share of the company to Ziff-Davis

Last year Gold put up about \$200,000 to start Software Communications, the company that published PC Magazine. According to Bunnell, Gold owned 55% of the venture. Bunnell and other staff members controlled the remaining 45%.

The agreement with Gold, which

Bunnell said was in the form of several letters, showed that Bunnell's percentage of the stock would be fully vested over a three-year period. It also said that if during that time a controlling interest in the company was sold, the 45% would revert to Bunnell and his staff immediately.

Over the past four months, PC Magazine had been courted by numerous suitors, including CW Communications, Ziff-Davis, CBS Publications, McGraw-Hill Publications and others, Bunnell said. He said all the interested parties, except Ziff-Davis, recognized that Bunnell and his staff controlled 45% of the company. "Ziff-Davis was not our first choice as a buyer.'

Tony Gold promised in writing and orally that he would not conclude a deal with Ziff-Davis until he had (the staff's) approval," Bunnell added.

PC Magazine was interested in merging with a larger organization that would help finance its growth,

Bunnell said.

"It was a mutually agreed-upon plan between David and me to find somebody who had the publishing and financial resources to develop a very valuable property," said Gold.

Bunnell maintained that his relationship with Tony Gold had been strained because of lack of called us an artistic success and a commercial failure. We felt he didn't care," said Bunnell.

The morale has been low recently at PC Magazine. On November 9, when Tony came to the offices, he harassed the staff so much the entire staff walked out," said Cheryl Woodard, former associate publisher at PC Magazine, who was named PC World's associate publisher.

Gold would not comment on his relationship with Bunnell and the PC Magazine staff. He did say, however, "I sincerely believe my transaction (with Ziff-Davis) didn't disadvantage

David".

Ziff-Davis took control of PC Magazine on Friday, November 19. Bunnell found out the following Monday. He said he turned up for work to find executives from Ziff-Davis waiting at the PC Magazine offices in San Francisco. They informed Bunnell that Ziff-Davis controlled the publication and offered Bunnell and the staff new employment contracts as a substitute for equity, according to Bunnell. "We didn't feel we had a choice but to negotiate," said Bun-

Bunnell then approached CW's McGovern.

No Comment

"The people at PC Magazine came to me and said the sale (to Ziff-Davis) was a great surprise and violated agreements they had with the majority shareholder (Tony Gold)," said McGovern. "They said they couldn't in good faith work for the new publisher and said they would resign and asked if they could join our organization.

Ziff-Davis would not comment on the developments, said Larry Sporn,

executive vice-presient.

At the time this story went to press, no legal action had been taken by any of the parties involved in the negotiations.

The first issue of the new magazine PC World is scheduled for January 1983. "The first issue is going to be on second-generation software for the IBM Personal Computer," said Andrew Fluegelman, former associate editor of PC Magazine, who was named editor of PC World.

Comdex was much the same this vear as last for the former staff of PC Magazine. In 1981, they cruised the aisles trying to sell the idea for a new magazine, called PC, dedicated to the IBM PC user. This year they were doing the same for PC World.

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delight of his bookeeper and the IRS, no doubt).

Gossip . . (continued from page 2) the community.

Footnote: We do find Z-D's objection to the name of the new publication rather questionable. Having written for this industry since its creation in 1975, we can well testify that "pc" has a long history of generic usage as an abbreviation for 'personal computer," dating back to its first use by John Dilks to refer to his first personal computing festival in Atlantic City, that he called

However, reason often has little to do with the law. To lift lines from Heinlein's Stranger in a Strange Land, "Straining at gnats and swallowing camels is a required course in law schools.

GLORIOUS GODBOUT

Wild Bill Godbout - the honcho behind Godbout Electronics and their CompuPro product line - is one of the micro industry's more delightful and notable iconoclasts.

He made his financial nut, back in the early '60's when - as an

EE fresh out of college - he went to work for IBM, joining 'em just when they were stampeding to get a product completed. So, he worked, day and night. So, IBM paid him lots o' overtime. So, he put it in IBM stock . . . which doubled, and doubled again. Q.E.D.

Being just ever so slightly different than your standard 30-year wallflower employee, Bill spun off from Ma IBM to pursue various entrepreneurial ventures. Now, you gotta understand - Bill doesn't just march to a different drummer." He tells the drummer what syncopation to beat. E.g.:

He started Godbout Electronics as a components mail-order operation. It quickly gained the reputation of being one of the most reliable mailorder operations in the industry. Typical of Godbout, his system operated as follows:

He didn't advertise what he didn't have. (See? That's proof that he's an industry eccentric.) The same day an order arrived, it was shipped. The completed order form was then placed in a shoe box, LIFO (to the

GODBOUT MEETS MORROW

When microcomputing along, he was in a natural position to jump into the newfound micro madness. Bill created an industrial menage a trois - he married his own excellent engineering background, with an absolute demand for high quality, and with the equally competent quality services of friend George Morrow. (At the time, among other things, George was a long-time UC-Berkeley Ph.D. candidate, working on such esoterica as mathematical manifolds. No single-talent individuals in Bill's lashup.) Together, they created some of the best-reputed S-100 goodies in the industry.

(Note: Morrow has since spun off and created top-notch systems under such names as Thinkertoys, Morrow's Microstuff, and - now that the industry has become sadly serious and megabucks motivated, his company has the more sedate name of Morrow Designs. Delightfully however,

(continued on page 10)

PC W\\ RLD Extends a Personal Invitation To Attend PC WORLD Day

March 19 at the West Coast Computer Faire

Featuring ...

An entire day of open seminars, free demonstrations, and panel discussions with some of the most highly respected professionals in the personal computing field

Find Out What the PC Phenomenon Really Means

- Where Second Generation Software Is Going
- All About PC Systems Software
- All About Multiprocessing and Communications
- What Is PC Compatibility?

Listen to different experts explain how the personal computer is affecting our lives. Meet the editors of PC WORLD, the leading magazine about the IBM Personal Computer and IBM PC Compatibles. Ask them questions and hear them speak on telecommunications, software and hardware, peripherals and many other subjects. Participate in software demonstrations of Qunix, Lotus 1-2-3, MBA and many more. Talk to people who really know the products.

PC WORLD Day March 19 Program of Events:

Located in the Ballroom of the San Franciscan Hotel, one block from Brooks Hall, San Francisco.

9:30-10:30 a.m. "Systems Software for the PC"

Panel members: Chris Larson, director of marketing, MicroSoft; Gary Kildall, president, Digital Research; David Hughes, independent consultant; Sid Garaghty, president, Quantum Software; Al Irvine, engineer, SofTech.

11:00-12:00 p.m. "The PC Phenomenon"

Panel members: David Bunnell, president and publisher, PC World; Cheryl Woodard, associate publisher, PC World; Ron Posner, chairman, National Training Systems; Portia Isaacson, president, Future Computer; and Martin Alpert, president, Tecmar.

12:30-2:00 p.m. "Second Generation Software"

Panel members: Vern Rayburn, executive vice president, and Mitchell Kapor, president, Lotus Development Corp.; Alan Boyd, product acquisitions manager, Microsoft.

2:30-4:00 p.m. "PC Multiprocessing, Networking, and Communications"

Panel members: Andrew Fluegelman, editor, and Steven Cook, technical editor, PC World.

4:30-6:00 p.m. "PC Add-Ons—What Is Compatibility?"

Panel members: Rod Kenyon, president, Compaq Computers Corp.; Karl Koessel, programming editor, PC World.

The West Coast Computer Faire Is March 18, 19, 20

For pre-registration at a discount for 10 or more call Computer Faire (415) 851-7077. Registration at the door for 3 days including conference program and show is \$15.

Don't Miss PC WORLD Day March 19

Attendance at PC WORLD Day events is free to all participants in the West Coast Computer Faire, but space is limited to the first 500 persons so please come early to ensure you don't miss PC WORLD's presentations.

Also, visit the PC WORLD booth at Brooks Hall. Booth numbers: 1127, 1129, 1131.

Warren Announces First IBM PC Faire

Major Product Exhibition and Conference Slated for August 26-28 in San Francisco

The organizers of the West Coast Computer Faires have announced their first "IBM PC Faire," to take place in San Francisco's Civic Auditorium and Brooks Hall, August 26-28, 1983. The IBM PC Faire will focus on hardware, software, and applications for the IBM Personal Computer. It will include a major Technical Conference, a large product exposition, and a number of user group meetings. Organizers project an attendance of 20,000 to 30,000.

CALL FOR CONFERENCE **SPEAKERS**

"We have just issued a call for speakers and participation in the Technical Conference of the IBM PC Faire, and expect at least 60 to 120

speakers," said Jim Warren, Faire Chair. "We have always felt that information exchange is the essence of any major computer convention, and put considerable effort into creating a large technical program of wellqualified speakers." The PC Faire will also publish a Conference Proceedings expected to exceed 350 pages.

HOW IT STARTED

"Several months ago, we announced an IBM PC Hall within the 8th Computer Faire, being held this March in San Francisco," said Warren. "We expected a positive response, but frankly, we were amazed. The PC Hall sold out of space in less than 10 days! We now have about two dozen companies on a waiting list for any possible opening. That's what gave us the idea for the PC Faire."

MAJOR EXPOSITION EXPECTED

The trade exposition is expected to be comparable in size to the massive exhibitions at the West Coast Computer Faires.

"Almost every PC-oriented company to whom we have mentioned the PC Faire has expressed an immediate, active enthusiasm for the event and has requested exhibit information. They like the focus on the IBM PC; they like the timing, and they like the location," commented Warren. He pointed out that the convention occurs at the best time of the year in one of the nation's most popular tourist cities,

March 19th at the West Coast Com-

puter Faire PC World magazine will

present an entire day of demonstrations,

seminars, and panel discussions with some

of the most highly respected professionals

really means, where second generation software is going, all about PC Systems

Software, and all about multiprocessing

and communications. Participate in soft-

ware demonstrations like Qunix, Lotus 1,

2, 3, MBA, and many more. You will talk

to the people who know the products.

say about personal computers: Portia

Isaacson, President of Future Computing;

Martin Alpert, President of Tecmar;

David Bunnell, President and Publisher of

PC World; Ron Posner, Chairman of National Training Systems; Andrew

Fluegelman, Editor of PC World; Gary

Kildall, President of Digital Research;

Chuck Irvine, Chief Engineer of SofTech

Listen to what these people have to

Find out what the PC phenomenon

in the microcomputing field.

allowing attendees and exhibitors to combine business with their summer vacations.

LARGE ATTENDANCE LIKELY

"We drew over 36,500 to the 7th Computer Faire, last Spring, and are expecting well over 40,000 for the 8th Faire, this March," Warren observed."Every time I've mentioned plans for the PC Faire to computer groups, I have encountered nothing but active interest and enthusiasm. Based on this response, our drawing ability for the Spring Computer Faires, and the 105,000-circulation of the Faire's Silicon Gulch Gazette newspaper heavily biased to the west coast -I feel our 20K to 30K attendance projection is very reasonable.'

Best-Known Micro Industry Analyst Comments on Computer Faires

Dr. Portia Isaacson, President of Future Computing, Inc., and one of the microcomputer industry's bestknown market analysts, has issued the following statement:

"Jim Warren's IBM PC Faire will make a major positive contribution to the IBM Personal Computer industry and to the microcomputer user community, as have his annual West Coast Computer Faires of the past half decade. I recommend attending, exhibiting, and speaking at the IBM PC Faire in San Francisco, next

August [August 26-28, 1983]."
She went on to state: "I also regard Warren's West Coast Computer Faire to be one of the three or four most significant computer conventions each year, because it always offers an unusually large number of introductions of particularly innovative new products.'

İsaacson's market analysis group, Future Computing, is the only market research firm that specializes exclusively in the personal computing marketplace.

Tax Cut Software for IBM PC

It's possible for users to save money on both federal taxes and tax preparation services with TaxCut, a new software program for personal

For tax planning purposes, Tax-Cut allows users to test outcomes of hundreds of tax-related alter-Then, when the data is entered, the taxpayer can print out the complete return-including many schedules which will be ready to sign and mail.

Examples of tax-related decisions TaxCut can handle are IRA's, Keogh plans, and investment in business equipment. The package will quickly

project figures for income averaging, installment sales, investment credit, and others.

All provisions of the latest laws are incorporated including the new deduction for married couples who both work, all savers certificates, charitable contributions for those who don't itemize, and more.

The TaxCut software was designed for the IBM Personal Computer and is currently being converted to the Apple II and CPM-80.

The TaxCut diskette costs \$250. For more information, contact: United Micro Systems, Inc., P.O. Box 3035, Tucson, AZ 85702, (800)-972-

Copyright and Software

Many people put a copyright notice on their software but never actually register it with the U.S. Copyright Office, according to Attorney Daniel Remer, whose 8th Faire talk will be "Registering with the U.S. Copyright Office." Copyright registration is easy, inexpensive, and doesn't require a lawyer don't more people do it?

"There are two reasons besides sheer laziness," says Remer. "The first is that some lawyers recommend that software only be registered if and when there is an infringement.

The second reason that people refuse to register has to do with the fear of making the source code of the program accessible to the public."

Remer's talk will guide programmers through the paperwork necessary to register a copyright in software and discuss registration timing, as well as source code privacy considerations.

Microsystems; Chris Larsen of Microsoft; Mitchell Kapor and Vern Rayburn of Lotus Development Corporation; Alan Boyd, Product Acquisitions Manager of Microsoft; Rod Kenyon of Compac Portable Computers; Steven Cook, Senior Technical Editor, and Karl Koessel, Programming Editor from PC World.

PC WORLD DAY AT THE FAIRE

Meet all the editors from PC World magazine. Ask them questions, hear them speak on telecommunications, software and hardware, peripherals, and much

PC World Day events will be held in the ballroom of the San Franciscan Hotel, one block from Brooks Hall. PC World Day will be held March 19th in conjunction with the 8th West Coast Computer Faire. Registration for three days, including Conference and the show, is \$15. For more information and pre-registration prices, contact: Computer Faire, (415) 851-7077.

Conference Session

Financing with **R&D** Partnerships

Conference Session

Research and Development partnerships, an increasingly popular form of financing for new businesses and projects in ongoing concerns, will be discussed by Attorney Michael Harrison in "Financing Hardware and Software Development Through R&D Partnerships."

"The popularity of R&D partnerships stems from the several tax benefits which are available to investors including current expensing of costs associated with research and development, treatment of royalty income on a capital gains basis, and the possibility of investment tax credits on R&D expenses," he says.

Harrison, a partner in Harrison, Hearn and Berthold, San Jose, California, will survey the benefits of R&D financing for software and hardware projects. Tax considerations and the security law framework will be outlined for this attractive investment vehicle.

Get the Best of the Computer Faires, Volumes I thru VII, while they last At Your Local Computer Store Available By Mail Order

just a few of the topics covered

Tutorials for the Absolute Novice Visions of the Near Future Computer Art & Computer Music **Exotic Computer Games** Machines that Speak & Listen **Public Information Utilities** Electronic Mail & Newspapers

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at the IBM PC Faire

Apple II Game Teaches Anatomy Clarkson College to Issue

Synergistic Software has produced a new type of educational game for the Apple II. "Microbe: The Anatomical Adventure" combines elements of fantasy adventure, arcade action, and accurate medical

Pascal and UCSD p-System to be Detailed in 2-Day Program at 8th Computer Faire

Windsor Brown, the Vice-President of USUS (the UCSD Pascal Independent user's group), has put together a massive technical conference on the UCSD system. Speakers will offer a half-day introduction to Pascal and another halfday intro to the p-System. Others will detail the background of p-machine architecture, and discuss the advanced UCSD Pascal language. Still others will address efficiency issues in p-system programs, and discuss Modula-2. The twoday program will conclude with an Expert User Panel offering attendees the opportunity to address additional issues.

The game has three different levels depending upon the educational level of the players. On the first level the game can be played as a classic adventure game, the goal being to explore the maze-like human body and overcome obstacles while solving the medical problem. On the second level players can learn facts about health care, personal safety, anatomy, and medicine while playing the game. The third level is for college level science students, premeds, and medical students. Playing "Microbe": The Anatomical Adventure" will aid players in learning human anatomy and medical data. Players must know what drugs to prescribe and what immunity levels, blood pressure, heart rates, etc. are healthy or dangerous. The game can be played alone or with a group.

"Microbe: The Anatomical Adventure" costs \$44.95. information, contact: Synergistic Software, 830 N.Riverside Dr., #201, Renton, WA 98055, (206)-226-3216.

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Computers to Student Body

Clarkson College, Potsdam, New York, will provide desktop computers to all incoming freshmen, beginning this Fall.

Clarkson College has selected Zenith Data Systems Corporation's Z100 desktop computers and the subsidiary of Zenith Radio Corporation will be supplying more than 1,000 computers each year for the next four vears. The retail value is estimated to be in excess of \$3.7 million annually.

This is something colleges and universities have been talking about for years," said David Bray, dean of Clarkson's Educational Computing Systems. "If all goes as planned, in the course of time every student at Clarkson will have their own microcomputer and be linked to a campus-wide network.

"We considered everything from Apple to Zenith in our search and in terms of price, quality, capabilities, and expandability Zenith's Z100 had it all," he said. "Especially important was the ability of the system to interface with the school's mainframe computer, an IBM 4341," said Bray.

Clarkson selected the Z100 lowprofile model with a single diskette drive and monochrome graphics. A Zenith high-resolution, 12 inch green monochrome display with a 25 line by 80 character display is also being supplied.

Software being provided includes the CP/M 85 and ZDOS operating system software to run the computer, as well as Z-Basic software for graphics, Fortran and Cobol languages for writing programs, and Multiplan-an electronic worksheet for quick calculations and forecasts.

The Zenith Z100 individually controls 640 dots on 225 lines, a total of 144,000 dots. Creation of three dimensional images of objects, charts and graphs is possible and the unit can be upgraded for color graphics.

The Zenith computer has two microprocessors to run 8-bit software, is widely available on the market, and has 16-bit software. It uses an industry standard expansion structure called the S100 bus with four open slots to permit other computer equipment to operate with the Zenith computer.

Suggested retail price for each unit is less than \$3400. The cost of the computer is being subsidized by restricted grants and students will pay \$200 each semester plus an initial one-time maintenance fee of \$200. At graduation the students will own their computers.

Clarkson is an independent coeducational college with underan independent graduate programs in engineering, management, and science. The school was founded in 1896 and currently has about 4,000 students en-

Conference Session

Learning Music at the Computer

"The future for learning music at the computer is bright indeed. At some point in the future, one could expect people to buy a microcomputer just to learn to play the piano even as many now buy a microcomputer just to play Pac Man or Visicalc. Certainly it is now possible to gain a certain level of musical training by adding a few pieces of equipment to an existing home computer," say music educators Wolfgang Kuhn and Paul Lorton.

In their 8th Faire talk, "Learning Music at the Computer," Kuhn and Lorton, of Stanford University and the University of San Francisco respectively, will discuss current trends in computer music education. They will also comment on whether quality music education is available through microcomputers, using today's hardware and software.

The most important caution is that the fact that a microcomputer can make musical sound of a form and can produce graphic displays which resemble musical notation does not

Faire Smoking

By city ordinance, smoking is permitted only in the entrance lobby of the Civic Aud-itorium. It is explicitly prohibited in the conference halls, perhaps due to limited

mean that they are effective devices with which to learn music. Seeing primitive notation and listening to single voice square wave tunes will not train young musicians," warn the educators.

TRS-80 Educational **Grants Program**

Radio Shack is setting the subject for proposals in the fourth submission cycle of the company's Tandy TRS-80 Educational Grants Program as "Unique and Innovative Microcomputer Applications in Education." Deadline for submissions under this theme is March 31, 1983.

Through the program, TRS-80 hardware, software, courseware and related products totaling \$500,000 per year will be awarded to individuals and non-profit organizations whose proposals are selected in four quarterly cycles as providing the greatest benefit to the American educational community under selected proposal themes.

Information kits are available by written request only from: Tandy TRS-80 Educational Grants Program, Radio Shack Education Division, 400 Tandy Atrium, Fort Worth, TX 76102.

Silicon Gulch Gazette

Educational Computing Major Topic in Faire Conference Program

The 8th West Coast Computer Faire will feature a major Conference Session on computers and education.

Teaching young children important educational concepts will be discussed in "Young Children Use Computer Graphics," by Anne Piestrup of The Learning Company in Portola Valley, California, and "Using the Microcomputer for Teaching Pre-Math Concepts to Young Preschoolers," by a team of educators from Texas Tech University in Lubbock, Texas.

Educators will have a chance to teach each other when speakers deliver talks on evaluating educational software, setting up a school mini-computer system, and a new computer language for teaching and industrial training.

"Evaluating Educational Software," computer lab coordinator, Glee Cathcart will detail features to examine when selecting educational software. Leonard Meuer and Marilyn E. Clinger will describe the implementation of a computer system that dramatically changed computer usage and administrative data processing in a California school district in "Micros to Mini."

H.L. Gray and Alan Elliot will introduce a Computer Assisted Learning Language (CALL) for the IBM PC.

"The second generation of CAI programs will concentrate on making the task of authoring computer assisted instruction easier through menu driven authoring systems. The

Conference Sessions

Computers and **Special Education**

The growing role of computers in special education will be addressed by a large number of talks at the 8th

"The Role of Computers in Special Education" will be reviewed by Ann C. Candler of Texas Tech University. Computerized drill and practice, discovery learning, and specific software will be considered.

Another overview of computers and special education will be presented by Cleborne Maddux and Dee Johnson in "The Future of Microcomputing and the Handicap of Learning Disabilities.'

Specific equipment, such as the Optacon, VersaBraille, and speech output systems, will be reviewed in "What can Computers do for the Visually Handicapped?" The speakers, Virginia Sowell and Vivian Correa of Texas Tech University, will discuss the value and implications of using computers with the visually handicapped.

"Computer Usage with Severely/Multi-Handicapped" will be the topic discussed by Thomas and Donna Irons of Texas Tech University. The educators assert that "access to a carefully selected and highly adapted personal microcomputer is equivalent to the acquiring of vision, hearing, or physical dexterity" for the severely handicapped.

CALL program is an example of such a system," say Gray and Elliot.

Unusual applications of computers in education will be discussed in "Learning Music at the Computer," by Wolfgang Kuhn and Paul Lorton, and "Computers for Exceptional Children: When is the Wedding?" by Dee Johnson, Cleborne Maddux, and Jerry Willis of Texas Tech Univer-

The educators from Texas will speak on the need for the computer industry and the educational community to unite in their efforts to

produce good educational products. Unless a solid working relationship is formed, they say, the "most dire predictions will come to pass: we will end up with a scrap heap of electronic parts and discarded diskettes in our public schools.'

Computer literacy will be the topic of two talks at the Faire, "Computer Tutor Project: Computer Literacy in the School" by Joan Targ and "Computer Prep: Considerations for a Pre-College Computer Science Curriculum" by Monty Swiryn. The speakers, who are from the San Francisco Bay area will discuss the state of computer literacy and whether students who wish a computer related career are being adequately trained.

In "Goodbye Gutenburg? Books or Bytes?" Elizabeth Wall will describe how books are being used with computers for more effective learning. Instead of replacing books, computers can become partners with them in the educational process, she says. Wall will review current books available to help teachers and students with computer awareness, programming, and applications.

Will this year's bells and whistles be next year's hoots and howls?

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Computer Toolbox for the Physician

"A Computer Toolbox for the Resident Physician" is the title of a talk to be presented at the 8th West Coast Computer Faire by Richard Dean Kirkham of David Grant Medical Center, Travis Air Force Base, Vallejo, California.

Kirkham will examine the design of a medical information system from the viewpoint of a physician user.

A physician user of a medical information system would have rapid access to lab and x-ray results, and could reduce paperwork on patient admissions, examinations, and discharges, says Kirkham. Programs could help the physician in designing the therapeutic work-up and regimen, or could review prescribed medications for possible drug inter-

Kirkham sees the encouragement of individual research as the real bonus of medical computing, as residents become able to create their own databases on topics of individual interest.

Conference Session

Computerized **Typesetting**

"You can typeset your own newspaper, using your computer and an inexpensive matrix printer," says Bill Mc Laughlin. He'll describe his graphics program during his talk at the 8th Computer Faire, "Typeset Newspaper on Computer.'

Mc Laughlin sees many uses for his production methods, including company ads, newsletters, and club brochures or publications. presentation will include a technical "how to" explanation, aimed at helping others get started on their own production projects.



Graphics Enhancement Package for Viewpoint Terminals

point and Viewpoint/3A Plus alphanumerics terminals can now buy a fully compatible Gen.II Retro-Graphics terminal enhancement package from Digital Engineering to convert to full bitmap graphics capability.

A second-generation product line, graphics functions of the Tek 4027 (916)-447-7600.

who own Adds View- color graphics terminal. A printed circuit board assembly, Gen.II is powered by an 8-bit microprocessor and provides a screen resolution of 640 by 240 pixels. Once installed, Retro-Graphics does not affect the normal alphanumerics functions of the Adds Viewpoint terminals.

The model RG1000/AD60 Gen.II Gen.II Retro-Graphics features full Retro-Graphics enhancement costs emulation of the Tektronix 4010 \$1095. For more information, con-Series of graphics terminals and tact: Digital Engineering, Inc., 630 monochromatic emulation of the Bercut Dr., Sacramento, CA 95814

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Brainfood

(continued from page 4)

George continues his dedication to

very high quality.)

wonder why Godbout Ever Electronics has the unlikely address of the "Oakland Airport?" Oh, that's 'cause Bill is also an flying junkie. So, of course, he owns a flying service. Who knows, it might even be profitable.

There's also an operational B-29 parked at the Oakland Airport, owned and operated by a nonprofit aircraft historical society, of which Godbout is a member.

And, as a final note, Bill also owns a small piece of an Oakland restaurant. It seems that someone once told him. "Own a restaurant. and you will never go hungry." Like everything else he is connected with, the food is top quality.

COMPETENT COMPUPRO

Actually, our recent acquisition of some Godbout gear was what brought Bill to mind as we wrote this column.

Being inveterate computer fanatics, our offices are heavily computerized. Being heavily computerized, we needed a definitively reliable microcomputer system. And, being reasonably knowledgable of micros, we grabbed a coupla Godbout/CompuPro half-megabyte dualprocessor systems.

Following the adamant advice we give to prospective computer buyers, we got them through a local dealer - G&G Engineering of San Leandro, who are well worth prominent mention. Run by Mike and Dale Gifford, G&G is much more than just another CompuPro dealer - they are the heavy computer hackers who performed the noticably nontrivial task of making CP/M-80, plus CP/M-86, plus multiuser MP/M all run on the CompuPro 8085/8088 system (including a 20MB Fuji winnie) - giving that whole mess the name of MP/M-8/16.

The really nice thing about this dual processor 8-bit/16-bit system is that you can take advantage of all the old, robust, well-debugged 8-bit software that has been around for several years, plus have access to the mountain of explosively developing 16-bit software that is becom-

(continued on page 18)

Note: CHILDREN AT THE **FAIRE**

The Computer Faire is a conference and The Computer Faire is a conference and trade exposition about computing and information processing. It is designed for mature individuals who have a sincere interest in learning about (or learning more about) computing, information management, computers, and "the information society".

These topics are presented at the Faire, presented by adults, and presented for adults.

and mature, seriously interested young people and students. Although the Faire includes some element of entertainment and occasional electronic games, the Faire is not appropriate for children nor for immature young people. (Among other things, this is reflected in the single registration fee, for adults.)

Parents and teachers are discouraged from bringing immature individuals to the Faire. To do so is unfair to the other attendees, unfair to the speakers, unfair to the exhibitors, . . . and unfair to the children.

Therefore: Children found playing or otherwise causing a Children found playing or otherwise causing a disturbance in the convention center may be ejected from the building — just as they would if they were being disruptive in a university classroom, business office, engineering lab, or training seminar (or, for that matter, in a theatre, play, or symphony). The park in front of the Auditorium may be appropriate for children's play; the Faire is not.

NAME

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Inexpensive Videotape Tutorials For New Computer Users

Videotape well may be the wave of the future for providing introductory tutorials to users of new computer systems and software. With over three million video cassette recorders (VCR's) in the U.S., this is a hot new area for computer instruction.

PRODUCT-SPECIFIC INSTRUCTION

Video Initiative, a division of Initiative, Inc. (II), of Woodside, California, is producing such tapes. Within the next several months, they will complete a number of tutorial tapes, including ones covering such topics as: VisiCalc, the IBM PC, CP/M, etc.

These tapes are not vague overviews. They provide explicit instruction about specific systems - e.g. Advanced VisiCalc on the Apple III, or a new user's introduction to the IBM Personal Computer. Each tape is accompanied by a workbook, to be used with the tape, to further enhance the effectiveness and impact of the instruction. Each tape is designed for use by a single individual who can start and stop the VCR as they are watching the tape, performing the exercises on their computer, and using the accompanying workbook.

INDEPENDENT OF VENDORS

Video Initiative's tapes are straight instructional tapes; not promotional tapes from vendors of the hardware and software being presented. Although the writing and production teams are working closely with the product vendors to assure accuracy and timeliness of the material, Video Initiative is entirely responsible for the production of their tapes.

Initiative, Inc. founder Jim Warren commented, "We are establishing ourselves as an excellent source of high-quality, independently-produced information detailing how to use computer hardware and software. We value that reputation, and fully expect to enhance it with this video venture.'

HIGH-QUALITY VIDEO WORK

Each tape is - as they say in the television industry – "highly produced." That is, the production techniques that are customary and expected in first-rate television documentaries are being used in these tapes. These include use of voice-over, freeze-frame, split screen, close-ups, special effects, and much more, to maximize the efficient and effective presentation of information to the new user of a computer or specific piece of software.

This is a far cry from some of the early tapes this industry has seen, that were little more than a lecturer giving a chalk-talk before a camera.

VIDEO INITIATIVE HAS COMPUTER & VIDEO EXPERTS

Initiative, Inc., was created by Jim Warren, a long-time computer professional, well known in microcomputer circles. He has been a computer consultant in the San Francisco Bay area since the late '60's.

Warren has well over ten years' teaching experience. He was first involved in computer education around 1960, working on a high school student enrichment program using an old, drum-memory IBM-650.

has taught in Stanford's Computer Science Department as well as at San Jose State and San Francisco State. He has taught over commercial television (KPIX-TV, San Francisco) and taught a number of computer courses over Stanford's closedcircuit Engineering School television system that serves much of Silicon Valley. He holds two graduate degrees in computing (Stanford, and University of California), and two more degrees in mathematics.

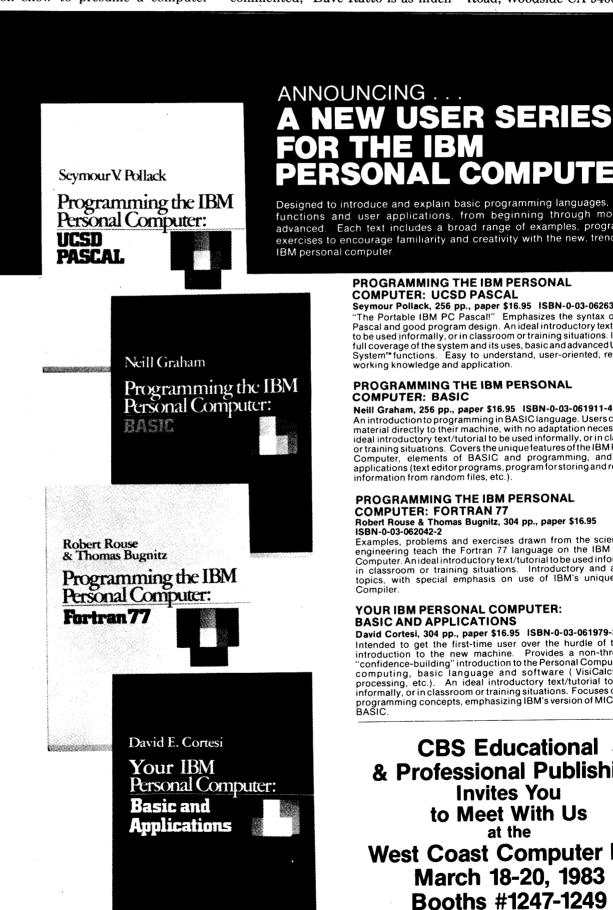
And, he has hosted the "Computer Chronicles," the first weekly television show to presume a computerliterate audience. It has now aired on about 40 PBS affiliates, throughout the U.S.

Video Initiative's Producer is David Carlson. Carlson has worked in documentary and instructional television for years, including stints with the McNeil-Lehrer Report and a number of projects for the College of San Mateo - one of the best-known junior colleges in the San Francisco Bay area.

Similarly, Director Dave Ratto has considerable experience in highquality video production. Warren commented, "Dave Ratto is as much of a video fanatic as I am a computer fanatic. His abilities in directing and using video technology for top-notch results are really impressive.

Warren's video group is working closely with industry writers in scripting the instructional videotapes and in creating the workbooks. Among others, they have been working with Lasselle-Ramsay, a writing and training team that recently spun off from Hewlett-Packard where they had extensive experience in both training and documentation.

Video Initiative is at 345 Swett Road, Woodside CA 94062.



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PROGRAMMING THE IBM PERSONAL

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Examples, problems and exercises drawn from the sciences and engineering teach the Fortran 77 language on the IBM Personal Computer Anideal introductory text/tutorial to be used informally, or in classroom or training situations. Introductory and advanced topics, with special emphasis on use of IBM's unique Fortran Compiler.

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David Cortesi, 304 pp., paper \$16.95 ISBN-0-03-061979-3

Intended to get the first-time user over the hurdle of the initial introduction to the new machine. Provides a non-threatening, "confidence-building" introduction to the Personal Computer and to computing, basic language and software (VisiCalc®, word processing, etc.). An ideal introductory text/tutorial to be informally, or in classroom or training situations. Focuses on central programming concepts, emphasizing IBM's version of MICROSOFT BASIC.

CBS Educational & Professional Publishing **Invites You** to Meet With Us at the **West Coast Computer Fair** March 18-20, 1983 **Booths #1247-1249**

8th West Coast Computer Faire Conference Speakers

This is a partial list of Faire speakers. Papers submitted by these speakers have already been accepted. A number of other papers that have been submitted are currently completing the refereeing process.

Improving Your Memory with 'S700-Family MOS Drivers
Chuck Hastings & Suneel Rajpal, Use Of Computers In Churches George M. Aldridge, Fairfield, CA Monolithic Memories. Enhancements and Compatibility of the Apple IIe from the Apple II+ Peter Baum, Technical Support, Apple Computer M/S 22-J, Sunnyvale, CA
Shading and 3D with Hidden Surface: Techniques That You Can Use On Any
Home Computer Cupertino, CA
Preventive Maintenance
James S. Brannick,
Fremont, CA Mike Higgins, The Computer Entomologist, Duncans Mills, CA
Introduction to Input/Output Programming with your Atari Computer
Winfried A. Hofacker,
Pomona, CA
MDCSTAT: Statistics The Easy Way On Writing Simulators and the Use of Macros Greg Bryant & Joshua Gordon, Virtual Microsystems, Berkeley, CA
Astronomy On Your Home Computer Luc M. Hondeghem, M.D., Ph.D., Professor of Pharmacology, San Francisco, CA Eric Burgess, F.R.A.S., Santa Rosa, CA The Role of Computers in Special Education Computer Usage with the Severely/Multi Handicapped Thomas R. Irons, Ed.D. & Donna Irons, Ed.D., Ann C. Candler, Assoc. Prof. & Charlotte Horner, Doc. Cand., Texas Tech University, Texas Tech University, Lubbock, TX Lubbock, TX
Metacompiler – The Ultimate Forth Tool A Computerized Message System for the Rehabilitation Community John Ĵ. Cassady, Veterans Administration Medical Center, Forth Age, Oakland, C. Palo Alto, CA
Software Quality Assurance: Application for Personal and Microcomputer
Software Development Evaluating Educational Software

Glee Cathcart, Computer Lab Coordinator, Morrill Middle School, USAF Satellite Control Facility, Systems Integration, Sunnyvale AFS, CA San Jose, CA
Simulation: See For Yourself Computers for Exceptional Children: When is the Wedding? Edward Cherlin, District Sales Manager, InfoSoft Computers, Dee LaMont Johnson, Jerry Willis & Cleborne D. Maddux, Texas Tech University, Palo Alto, CA

Using a PAL to Emulate the Internal State Counter of the MMI 'S516 LSI

Multiplier/Divider

Vincent J. Coli, Applications Engineer, Lubbock, TX Systems Impact of 32-Bit Microprocessors Thomas L. Johnson, Systems Engineer,
Motorola, Inc.,
San Jose, CA
5-1/4" Diskette Format Standards
Eric M. Kadison, Product Planning & Development VP,
Media Systems Technology,
Leving CA Monolithic Memories, Sunnyvale, CA Your Role in Computer Book Publishing Raymond A. Collins, Editorial Vice President, TAB Books, Blue Ridge Summit, PA
Microprocessor Based Aids for Employment that Handicapped Persons Need Irvine. CA A Computer Toolbox for the Resident Physician Richard Dean Kirkham, Travis AFB, CA Susan H. Phillips, Dir. of Dev. & Sharon Connor CEDP Prog. Mgr., Sensory Aids Foundation, Palo Alto, CA Financing the High-Technology Company with an R & D Limited Partnership Role of Software Requirements R & D Funding Corp, Russell A. Cook Menlo Park, CA System Analysis Engineer, System Analysis Engineer,
San Jose, CA
On Starting A Computer Camp
Thomas P. Copley, Ph.D. Exec. Dir.,
Yellow Springs Computer Camp,
Yellow Springs, OH
What Can Computers Do For The Visually Handicapped?
Virginia Sowell, Assoc. Prof. & Vivian I. Correra, Lecturer,
Tayne Tach University/College of Education Learning in the Game Grid: Advancing Computer Literacy Instruction Jeff Levinsky, Director of Research, Interactive Sciences, Inc. Palo Alto, CA "Solo/NET/works - A Microcomputer Network Learning Environment" Blaise W. Liffick, Assistant Professor,
Department of Mathematics and Computer Science, Texas Tech University/College of Education, Lubbock, TX Learning Music At The Computer Microcomputer Applications for Individuals with Fine Motor Impairments Wolfgang Kuhn, Stanford, CA Paul Lorton, Jr., Dennis Dahlquist, M.S. & Ann Preszler, M.A., Assistive Device Center, Sacramento, CA
Certain Legal Aspects of the Computer Industry San Francisco, CA The Future of Microcomputing and the Handicap of Learning Disabilities Cleborne D. Maddux & Dee LaMont Johnson, Assoc. Profs., Jay Dratler, Jr. Fenwick, Stone, Davis & West, College of Education/Texas Tech University, 32-Bit Microcomputers & Microprocessors
Gene A. Finkler, Lubbock, TX National Standards for Amateur Packet Radio Networks H.S. Magnuski, KA6M, Menlo Park, CA Cupertino, CA
Who's Playing These Games Anyway? Using Window Graphics in BASIC on Olivetti's M20 Graduate Group in Science & Math Education, Richard Mateosian, Berkeley, CA
Instruction Modification Techniques on the 6502
W. D. Maurer, Professor, Choosing and Designing Multiuser Systems
Lew Gaiter III, Software Engineer,
OSM Computer Corp, Dept. of Electrical Engineering & Computer Science, Santa Clara, CA
Business Ethics & Small Computers Washington, DC Typeset Newspaper on Computer
Bill Mc Laughlin, Bruce Goldstein, President, Executect Consultants. Burlingame, CA
Computer Assisted Learning Language (CALL) An Authoring Language for Teaching and Industrial Training
Dr. H. L. Gray, Dean,
Dedman College,
Dellag TV San Luis Rey, CA Strategic Planning is Necessary for Starting and Operating Your Business Sam Mendelow, President, QC Resource Group, Dallas, TX Alan C. Elliott, M.A.S., Micros to Mini Leonard T. Meuer & Marilyn E. Clinger, Travis Unified School District, Travis AFB, CA Dallas, TXBusiness Planning for Exporting Computer Software Under the U.S. Export Regulations
Fred M. Greguras & Jacqueline A. Daunt, RATFOR: Pascal-Like Syntax for FORTRAN
Alan R. Miller, Professor of Metallurgy, Socorro, NM Fenwick, Stone, Davis & West, Palo Alto, CA Programming the Apple IIe - The Familiar New Computer **Buying Business Programs for Your Computer**

Bill Grimm, Cupertino, CA

San Jose, CA

Michael L. Harrison, Harrison, Hearn & Berthold,

Financing Hardware and Software Development Through R & D Partnerships

June B. Moore, J.D, San Anselmo, CA

San Francisco, CA

LISP - A Short Introduction Richard A. Munoz, Project Manager, Friends of LISP/Logo & Kids,

8th West Coast Computer Faire Conference Speakers

An Experimental Voice Input Computer Game

Allen Munro & Harry Abramowski Behavioral Technology Laboratories

Redondo Beach, CA

Investing in Public Technology Companies
J. Michael Murphy, C.F.A., President,
Pacific Technology Advisers,

San Francisco, CA
What to Look for (and Avoid) in a Word Processor

Oakland, CA

A Microcomputer-Videotape Recorder Interface Program for Special Education Inservice Training

Jacqueline K. Pederson & Ann C. Candler,

College of Education, Texas Tech University, Lubbock, TX

Beyond Authoring Systems: A Program Generator for Education Ted Perry, Computer Tech. Prgm. Spec. & Barry Cole, Comp. Spec.,

Sacramento City School District,

Sacramento, CA

Computer Vision and Image Recognition

Dr. Henry Pfister,
Los Angeles, CA
Young Children Use Computer Graphics
Ann M. Piestrup, Ph.D.,
Chairman, The Learning Company,
Postele Vis. CA

Portola Vly, CA

Data Bases for Business

David M. Pittle,

Smart Management Systems,
San Rafael, CA
Keeping Your Feet on the Ground: Believable Video Animation
Tom Pittman, Consultant,

San Jose, CA
The Pascal Prime Project

Jerry Pournelle, % Byte Magazine,

Hancock, NH

Word Processing, Some Questions to Ask Larry Press, President,

Small Systems Group, Santa Monica, CA

How to Make Money with a Computer Robert K. Ramers, Pres., Computer Alternatives,

Larkspur, CA
The Next Generation: Integrated Program Generators, Data Base Managers, and Business Software on Small Business Computers

Robert K. Ramers, President, Computer Alternatives,

San Rafael, CA
Forth and numeric co-processors: an extensible way to floating point computa-

Dana Redington

Sleep Research Center, Stanford University,

Stanford, CA

Registering with the US Copyright Office

Daniel Remer, Esq., Remer, Remer & Dunaway, Mountain View, CA



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Kentyn Reynolds,
Santa Fe, NM

Evolution of the Amateur Packet Radio Network

Paul L. Rinaldo W4RI,

Amateur Radio Research & Devel.Corp.(AMRAD),

SURVIVING IN THE MARKET JUNGLE: Your Survival Tools are Words on

Nicholas Rosa

Nicholas Rosa Assoc., Campbell, CA Sharon Rosa Wood,

Valley Technical Writing Service,

Los Gatos, CA Raster Graphics

Maria Runyo Applications Engineer,

San Jose, CA

Brainwayes on a Budget: A Home EEG Data Analysis System
Robert E. Schaffer,
Houston, TX
B-I-T-S: Life Sciences Literature Files on Floppy Disks

Louise Schultz, Systems Development Director,

BioSciences Information Service,

Philadelphia, PA
Tort Liability of Computer Vendors
Michael D. Scott,

Manhattan Beach, CA
Corporate Attitudes Toward The Microcomputer

P. Michael Seashols, VP of Marketing, Dynabyte Business Computers, Milpitas, CA

Evaluating Computer Speech Devices For Your Application Carol A. Simpson,

Psycho-Linguistic Research Associates,

Menlo Park, CA
Using the Microcomputer for Teaching Pre-Math Concepts to Young Preschoolers

Mary Tom Riley, Ed.D., Dale Smith & Vincent L. Taylor,

Texas Tech University/Institute for Child & Family Services, Lubbock, TX

FORTH-83 DO-Loops

Robert L. Smith, FORTH Standards Team, Mtn View, CA

Report on FORTH-83

Robert L. Smith, FORTH Standards Team,

Mountain View, CA

Developing Special-Purpose Languages Sheldon D. Softky,

Menlo Park, CA

Algebraic Expression Evaluation in FORTH Michael Stolowitz,

Danville, CA

Computer Prep: Considerations for a Pre-College Computer Science Cur-

Monty Swiryn.

Computer Tutor Project: Computer Literacy in the School Joan Targ, President,

Interactive Sciences.

Palo Alto, CA

Get More from Visicalc and Supercalc Stanley R. Trost, Walnut Creek, CA

Goodbye, Gutenburg? Books or Bits? Elizabeth S. Wall,

Media Consultant,

Nokomis, FL

Quill Pens Have No Downtime - Six Ways to Reduce Employee Resistance to

Dr. Sanford B. Weinberg, Chairman,

Saint Joseph University/Dept. of Admin. Sciences,

Philadelphia, PA
An Introduction to Modula-2 for Pascal Programmers

Lee Jacobson & Bebo White, San Francisco, CA

Copyright, Software and Piracy

Kenneth S. Widelitz, Kenneth Leventhal & Co,

Los Angeles, CA
Using VisiCalc for Real Estate Financial Analysis

Kenneth S. Widelitz, Kenneth Leventhal & Co,

Los Angeles, CA

QWERTY: The worst possible keyboard (except for all the others)
Dr. Douglas H. Williams, Ph.D.,
Psycho-Linguistic Research Associates,

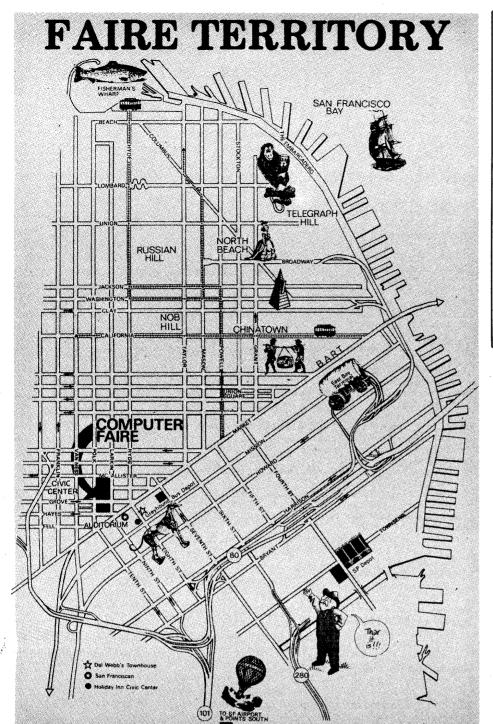
Menlo Park, CA

Digital Image Processing with a Personal Computer

Edwin M. Winter, Donna M. Winter,

Technical Research Associates, Inc.,

Camarillo, CA



Conference Session

Make Money with Your Computer

"Many people are torn between a vision of a computer as a toy, an educational aid, a hobby and a money-making tool. For those who want to get the most economic benefit from a computer a major perceptual reorientation is necessary," says Robert Ramers, President of Computer Alternatives in San Rafael, "If you can develop a California. mental discipline which allows you to think of a computer in the same way you would think of a bulldozer if you were planning to build a house, you are on the way to developing the mental attitude necessary to make money with a computer."

In his 8th Faire talk, "How to Make Money With a Computer," Ramers will tell listeners how to make money with a computer whether you use it in an existing business or want to start a computer-based business of your own. He will discuss how to know if you're a hobbyist or business person, how to choose your equipment and define your moneymaking objectives, how to identify the lowest and highest paying computer applications, and more. He will also report on the tax benefits involved in financing your computer with a purchase/lease agreement.

Dual Tasking Forth

Dual Tasking Forth by Timin Engineering is a microcomputer language that permits simultaneous execution of two programs. Typical uses include machine and process control, data logging, and mathematical modeling. The user may write such a program in Forth, run it, and then continue to use the Forth system for other uses. Normal program development activities may be continued while the background task is executing. Two different programs may be run concurrently. The foreground task may be used to monitor and control the background task.

No interrupts or real time clocks are required, although they may be used if desired. The system produces a pseudo-real-time-clock value which may be used for event synchronization or other purposes. Less than ten percent of processor time is devoted to the Dual Tasking function, and extra memory is required.

All facilities of Timin Forth release 3 are included, such as the Visual Editor and the CP/M Utility package. (Timin Forth release 3 is a superset of Fig Forth.)

Timin Dual Tasking Forth will run on Z-80 hardware systems with at least 32K RAM and any version of CP/M or CDOS. Dual Tasking Forth costs \$285.

For more information, contact: Timin Engineering Co., 6044 Erlanger St., San Diego, CA 92122, (714)-455-9008.

Real Estate Software

Real Estate Analysis, from Digital Marketing, is a new program based on large mainframe routines used by institutional investors, yet designed for the individual investor. It is geared for financial advisors, developers, architects, attorneys or real estate brokers. The program is available for personal desktop microcomputer systems using the CP/M operating system.

Real Estate Analysis forecasts one investment for one-to-ten years under different criteria, such as price, loans, income, etc. From user-supplied data, it will project: gross income, operating expenses, resale value, pre-tax cash flow, after-tax cash flow, loan analysis data, and depreciation data. Real Estate Analysis was developed and tested in a commercial real estate practice on properties ranging from \$300,000 to \$14,000,000. It costs \$195.

For more information, contact: Digital Marketing Corp., 2670 Cherry La., Walnut Creek, CA 94596, (415)-938-2880.

Apple Statistical Analysis System

SoftCorp International, Inc. has introduced speedStat, a statistical analysis system for Apple II computers. SpeedStat Volume 1: Frequencies & Crosstabs, has a capacity of over 10,000 data points and over 30 different statistical measures. Designed for small business and professional users, the system assumes no computer background.

SpeedStat requires an Apple II or Apple II Plus with 48K and two disk drives. It costs \$250. For more information, contact: SoftCorp International, Inc., 229 Huber Village Blvd., Westerville, OH 43081, (800)-543-1350.

Security Symposium

The 1983 Symposium on Security and Privacy sponsored by the IEEE Computer Society will take place April 25-27, 1983, at the Claremont Hotel in Oakland/Berkeley, California.

For more information, contact: IEEE, P.O. Box 639, Silver Spring, MD 20901, (301)-589-3386.

Conference Session

Quill Pens have no Downtime

"The computerization of American business may well cause the major managerial crisis of the decade, due not to problems of hardware or software, but to personnel disasters resulting directly from employee resistance," says Sanford B. Weinberg, head of the Administrative Sciences Department of St. Joseph's University in Philadelphia.

In his 8th Faire talk, "Quill Pens have no Downtime," Weinberg will discuss fear of machines, or cyberphobia, and six ways managers can reduce employee resistance to computers. He will explain the importance of giving employees a voice in computer decisions and of considering all the options before buying a computer system. He will also discuss worker retraining, system implementation, and documentation.

"Much like the frustration of leading a horse to water, we can effectively bring automated machines into a vast variety of corporate settings, but getting employees to drink of the information resources computers can make available is a challenge still yet to be met," says Weinberg.

Conference Session

Micros and the Learning Disabled

Children with learning disabilities may have a new chance in mainstream education now through the use of microcomputers. If "active," rather than "passive," uses of microcomputers with learning disabled (LD) children are developed, the great potential of microcomputers may be realized, say some special educators.

Cleborne Maddux, Ph.D., and Dee LaMont Johnson, Ph.D., both of Texas Tech University, will define "The Future of Microcomputing and the Handicap of Learning Disabilities" at the 8th Faire.

Involving LD children actively as programmers using the Logo language, as writers using word processing, and in simulation programs, can lead them through a series of situations which they would not normally experience, explain Maddux and Johnson.

"It is important for the involvement to be 'active' in order for it to make a difference in the way children think," claim the authors. "The microcomputer should be more than an expensive secretary."

Vector Users 'Conect' with Public Databases

One of the major uses of small business computers is the ability to access the wealth of information provided by public databases. help its system users tap this information, Vector Graphic, Inc. has introduced the Conect communications package.

Using the various public information services, Conect users have access to information about stocks, bonds, mutual funds, news, weather, science, technology, and entertainment.

Besides access to the public databases, the terminal software allows Vector microcomputers to communicate with other Vector systems, with larger mini and mainframe computers, time sharing services, and electronic mail.

Conect runs on all Vector systems including the new Vector 4 8/16-bit dual processor business computer, and the software provides asynchronous data communications in any one of four basic operating

In the interactive mode, a Vector microcomputer can communicate with minicomputers or mainframe systems without any special software at the host end of the link. It is also in this mode that the software allows access to the databases.

In the send/receive mode, data files can be transmitted between any two Vector systems equipped with Conect and the link mode allows transfer of files or programs between computers, has the support necessary for remote diagnostics, and permits the implementation of bulletin boards on Vector systems.

The terminal mode configures the Vector system to emulate Hazeltine 1500 dumb terminal, converting the microcomputer into an interactive communications terminal that can send or receive data.

Vector systems using Conect can communicate via a standard RS-232 interface and a variety of acoustic or direct-coupled modems at either 300 or 1200 baud. The software is priced at \$150.

For more information, contact: Vector Graphic, Inc., 500 N. Ventu Park Rd., Thousand Oaks, CA 91320, (805)-499-5831.

New Data Reporter for IBM PC

Synergistic Software has released The Data Reporter for the IBM PC, a new database management software package.

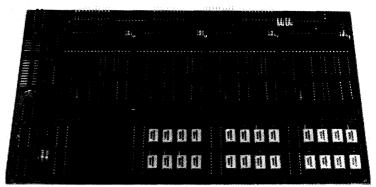
It is written in machine language and Basic, and has many features including search and sort routines to manipulate files, file merge, a reformatter, global editing, menu driven commands, a label making utility, and data calculation abilities.

The Data Reporter package includes sample setups with data to help users learn its features, as well as optional password protection, batch file processing of recurring tasks, a fully copyable disk, and seven different types of search routines.

Two more accessory packages will be available early this year. The Report Writer has basic word processing capabilities which help users create form letters, financial reports, and documents. A statistical and plotting package allows users to graph data in the database.

The IBM Data Reporter costs \$250, while the Report Writer and statistical package will be \$100 each.

The IBM Data Reporter requires an IBM PC with 64K and MS DOS. For more information, contact: Synergistic Software, 830 N. Riverside Dr., #201, Renton, WA 98055, (206)-226-3216.



OSM Introduces ZEuS4

manufacturer of ZEuS multiuser, multiprocessor microcomputers, has introduced the ZEuS4, its next generation tiny-footprint multiuser. multiprocessor microcomputer.

The Z80-based ZEuS4 utilizes

OSM's multiuser System Executive (MUSE) operating system to support up to four users simultaneously in a totally segregated operating environment fully compatible with CP/M.

The ZEuS4 holds four userreplaceable modules: Winchester disk (up to 19 MB), switching power supply, floppy disk (5-1/4 inch standard; external 8-inch option available), and system/user board module.

The system/user board module contains the two-board master

OSM Computer Corporation, the processor and a separate user card with 10 square inches of circuitry for each user. The user board is factory-configured for up to four physically segregated CPUs, each with 64K RAM, and two serial ports, providing a separate computer for each user. A fully configured system has a total of ten serial ports and two parallel ports.

> The basic single-user ZEuS4, with a Z80A microprocessor, 64K RAM, 6.3MB of 5-1/4 inch Winchester disk storage, and 250KB 5-1/4 inch floppy disk drive, lists for \$4595. user and four user configurations are available at \$1000 per increment.

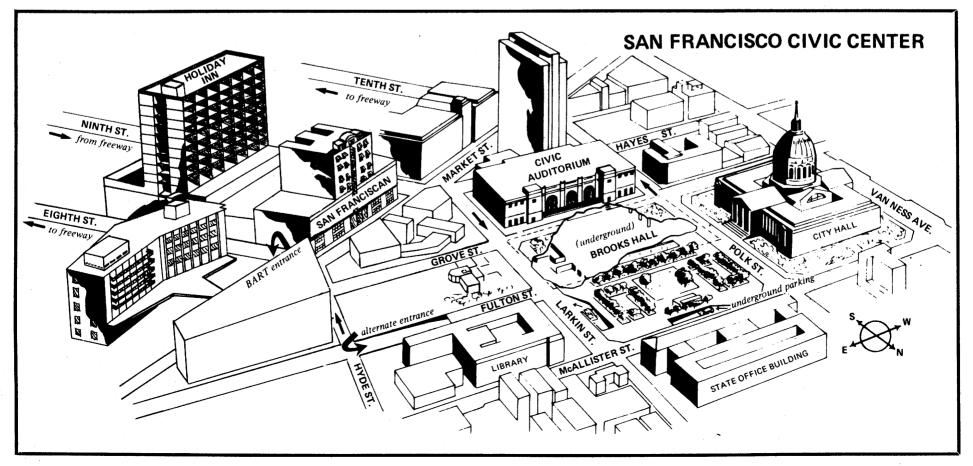
> For more information, contact: OSM Computer Corp., 2364 Walsh Ave., Santa Clara, CA 95051, (408)-

Conference Session

Software Requirements

"Just as a well planned dinner begins with the grocery list, followed by the trip to the supermarket, so should a software package begin with a requirements list prior to development or purchase," says Russell Cook. In his 8th Faire talk, "Role of Software Requirements," Cook will show how software requirements can help software consumers and desig-

Cook's software requirements can be divided into two categories: function dependent requirements (including function, input/output) and nonfunction dependent requirements (including language, program size, modularity, and others). His discussion will expand on these two categories and examples will be given to support his ideas.



The 8th West Coast Computer Faire

San Francisco

March 18-20, 1983

3M/Data Recording Products Division 800-Software, Inc. A.I.D.S. Computer Center Stores APPLE **Abacus Software** Accent Software, Inc. **Access Matrix Corporation** Acorn Systems Inc. Addcom Electronics Inc. Addison-Wesley Publishing Co.,Inc. **Addmaster Corporation Advanced Communications International Advanced Computer Controls Advanced Computer Products Advanced Logic Systems Adventure International** Affordable Software Inc. **Agile Company** Algoram Computer Products, Inc. The Alien Group Allen Gelder Software Allenbach Industries, Inc. Almaden Systems, Inc. Alpha Computing Supply, Inc. **Amdek Corporation** American Ink Products Company **Anaheim Publishing Company Analog Computing Magazine** Analytical Engines, Inc. Anchor Pad of Northern California Antic Publishing Co. Anvil Cases, Inc. Appalogue Apparat, Inc. Apple Computer **Applegate Computer Enterprises Applied Innovations** Arcade Plus, Inc. Arcadian Newsletter for Arcade Arfon Microelectronics, Inc. Arnds & Arnds Micro Management Systems Arrow Computer Supply Arrow Electronics, Inc. Artec Electronics, Inc. Artra, Inc. Artworx Software Company, Inc. Ashton-Tate Atari, Inc. **Atech-Tokyo Electronics** Athena Computer & Electronic Systems **Ault Associates Avalon Hill Microcomputer Games Avant-Garde Creations** Axlon, Inc. BASC Bausch & Lomb **Berkeley Microcomputer** Berzurk Systems **BIT 3 Computer Corporation** Broderbund Software, Inc. BudgeCo Business Computer Systems (magazine) Buss: Independent Heath/Zenith Newsletter Byte Publications c-systems Westape Calsoft Carousel Microtools, Inc. The Casemaker Casheab Casio Catherine Kent Associates Caxton Software Ltd CBS Educational & Professional Publishing Checks To-Go Codys Books **Colby Computer** Commercial Mailing Accessories, Inc. **Commodore Computer Center** Commsoft Comp-U-Card of America, Inc. Compac Microelectronics

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Component Sales, Inc.

Exporting Software

There are many international business opportunities for selling or licensing computer software, both to end-users and for further distribution. However, U.S. companies will need to consider the U.S. export regulations. Usually two export licenses are required, one for the software and the other for the media.

In a conference session to be held at the 8th West Coast Computer Faire "Business Planning for Exporting Computer Software Under the U.S. Export Regulations" will be ex-Fred Greguras and Jacqueline Daunt, attorneys with Fenwick, Stone, Davis & West in Palo Alto, California, will review current federal regulations and their application to the computer industry.

"Top management must give export compliance responsibilities their close attention because the penalties imposed for non-compliance can be severe," warn the authors.

Distribute Free Gazettes to Friends and 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 ship-

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, 345 Swett Road, Woodside CA 94062, (415)

Specific Solutions

(8th Faire Exhibitor List Cont.)

PC Magazine PC World Peachtree Software International Penguin Software People's Computer Company Persyst (Personal Systems Tech.) Phase One Systems, Inc. Plantronics/Frederick Electronics Portable Computer Magazine Practical Peripherals, Inc. Prasek Computer Systems, Inc. Prentice Hall/R.J. Brady Program Design, Inc. Pterodactyl Software The Purchasing Agent Quadram Corporation Quality Software Quentin Research, Inc. Quest Electronics Quiet Designs, Inc. R&R Software Radio Shack RC Data, Inc. RCA Micro Computer Products RCE Ralston-Clearwaters Electronics Reston Publishing Co. **RKS Industries** Robotics Age Magazine Rocky Mountain Software Systems Romox, Inc. Rothenberg Information Systems, Inc. SAFT America, Inc. Sam Clar Office Furniture, Inc. San Francisco Apple Core SBT Corp **Scitor Corporation** Select Information Systems, Inc. **Selectone Computer Products Division** SemiDisk Systems Serial Data Systems Sierra On-Line Systems, Inc. Sigma Designs Inc. Sirius Software, Inc. Smart Management Systems Softalk Publishing Inc. SoftCorp International, Inc. Softsel Computer Products, Inc. Softsync, Inc. Software Options Inc. **Software Productions** Software Review Magazine Software Toolworks **Software Training Company** The Software Works, Inc. System Software Services Sorcim Corporation Sorrento Valley Associates, Inc. Source Edp

SpreadTech, Inc. SSM Microcomputer Products Inc. Stacey's Bookstores Stahler Company Stanford Bookstore, Med/Tech. Div. Star Business Systems Starflower Technology, Inc. State of the Art Computers Stoneware Incorporated Strategic Simulations Inc. Strawberry Tree Computers Structured Design, Inc. Structured Systems Group, Inc. **Sweet Micro Systems** Sybex Synapse Software Syntauri Systemics Tab Books, Inc. Tall Tree Systems **Tape-Tronics** Texas Instruments, Inc. TexaSoft **TG Products** Tiger Electronic Toys, Inc. Time Arts, Inc. **TNW Corporation** Totl Software, Inc. Trionyx Electronic Inc. TriStar Business Systems, Inc. U.S. Micro Sales Unidot. Inc. User's Guide to CP/M USI International Computer Products Vector Electronic Co., Înc. Vectrix Corporation Veritas Technology, Inc. Victory Computer Systems, Inc. Videx Inc. Visionary Electronics Inc, Wabash DataTech, Inc. Wadsworth Electronic Publishing Co. Wayne Green Inc. Webster, McEvoy & Assoc. Wesper Microsystems West Coast Business Products, Inc. Blue Book for the Apple Computer WEE (Modem Division) William Kaufmann, Inc. Win/Mill Research Inc. Wood & Clay Company Woolf Software Systems **Word Associates** Wordtech Systems Workman & Associates Worldwide Software Publishers Xcomp

Xebec Systems Total listed exhibitors: 386

Sorcim Enhances SuperCalc

Sorcim Corporation has released an enhanced version of its CP/Mand MS-DOS-based spreadsheet program, SuperCalc. The enhanced program, called SuperCalc 2, takes advantage of the memory size, processing speed, and color display capabilities found in new 16bit microcomputer systems.

SuperCalc 2 contains a calendar clock to automate date calculations and time periods, along with conditional summation of modular arithmetic for increased expression of flexibility. A memory extender function allows larger spreadsheets.

Additional features include an execute command allowing repetitive commands to be entered only once to facilitate worksheet linking

SuperCalc 2 is compatible with Z-80, 8080, 8085, 8086, and 8088 CPUs, and runs under the CP/M 2.2, CP/M-86, MP/M-86, MS-DOS, and IBM PC-DOS operating systems. Minimum system main memory required is 48K bytes for Z-80/8080-based systems or 64K bytes for 8086/8088based systems.

Users of 16-bit systems having

256K bytes of memory can fill all 16,002 cells of the SuperCalc 2 worksheet-enough space for a ten year projection by month. Also, users with color capabilities will see negative values and diagnostic messages displayed in red, with protected formulas shown in yellow.

SuperCalc 2 features capabilities including: consolidation, sort facility, rounding function, additional formatting options, and additional print options.

Using the new data exchange standard, SuperCalc 2 can share information between Sorcim SuperWare products, and other CP/M-based applications programs, and vice-versa. A user may transfer financial information from SuperCalc 2 to a letter via SuperWriter, and onto the SuperData-File Manager database, and even add graphics using the Super-Chart program, or perform the same task using another CP/M-based pro-

SuperCalc 2 costs \$345. For more information, contact: Sorcim Corp., 2310 Lundy Ave., San Jose, CA 95131, (408)-942-1727.

Do You Care or Don't You*

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If you don't - you should consider:

CP/M - MSDOS - UNIX - Basic - COBOL - Fortran - Pascal -C - Forth - SuperCalc - Multi Plan - general ledger - payroll accounts receivable and payable - inventory - DBASEII business graphics - CAD - typesetting - communications point of sale - loan applications - office automation forms design - data input ...

VICT⊜R 9000

In its review of the Victor 9000, BYTE magazine said, "... the machine is an excellent microcomputer with an outstanding array of standard

The leading German computer magazine called it, "The Computer of the year'

The Professional Machine priced like a personal ...

Unidot is your franchised Victor 9000 dealer in Santa Clara County with full sales, support, and service. At Booth 1119 at Computer Faire Unidot will be showing software for the Victor 9000 that has never been seen on a microcomputer before - come by and take a look.

But don't wait for your **Victor 9000** ... Call today - **408-745-0505**.



568 Weddell Dr., Suite 4 Sunnyvale, CA 94086

"More about hardware than software, that is —

Southern California Research Group

Homebrew Computer Club

the oldest microcomputer club in the United States

meeting 7:30pm-10:30pm in the Fairchild Auditorium Stanford Medical Center Stanford University

Thursday, February 17th Thursday, March 10th

open to everyone without charge

Conference Session

Developments in Raster Graphics

Photographic detail, cinematic animation, and an unlimited range of colors are some of the major benefits offered by the raster-scan technique of computer graphics. Maria Runyon, an application engineer, will explain the technology of "Raster Graphics" at the 8th West Coast Computer Faire.

The availability of versatile, lowcost microprocessors has produced a surge of development interest in raster graphics, previously available only to a few specialized applications such as medical instrumentation and flight simulation.

"We have already seen advances in picture quality previously available only with vector-type displays, inthe-terminal-intelligence from inexpensive semiconductor memory, and anti-aliasing techniques for smoothing the stair-stepping image," says Runyon. "All of these advances have allowed us to become further involved in raster technology, with its advantages of color, flicker-free display of even the most complex images, and the capability to generate interactive and moving displays.'

Raster's presentation will also be published in the Proceedings of the West Coast Computer Faire, available at the show in March.

Power Pack With Concurrent CP/M-86

Digital Research, Inc. and Percom Data Corporation have made a joint business arrangement to distribute a Winchester hard disk and concurrent operating system for the IBM Personal Computer.

The two companies have agreed to produce PC Power Pack, a package consisting of a Percom Data Winchester 5-1/4 inch hard disk drive, a 256K RAM board and controller, and Digital Research's Concurrent CP/M-86, a single user, multitasking operating system.

For more information, contact: Digital Research, P.O.Box 579, 160 Central Ave., Pacific Grove, CA 93950, (408)-649-3896.

Toshiba Joins Drexler's **Memory Card Program**

Toshiba Corporation, one of the largest electronics manufacturers in Japan, has become the first participant and licensee in Drexler Technology's Laser Memory Card Equipment Program.

This recently launched program will lead to the development of prototype write/read equipment for Drexon Laser Memory Cards and Optical Software Cards. The program is designed to accelerate commercialization of this new technology by offering companies the opportunity to take nonexclusive licenses for equipment manufacturing and to establish industry standards for cards and equipment.

Drexler Technology, the developer of the Drexon cards, plans to be the principal supplier of cards and is establishing manufacturing facilities for this purpose.

Gossip . . . (continued from page 10)

ing available. And, under G&G's MP/M-8/16 operating system on the CompuPro box, you can virtually ignore the fact that you are running software designed for two different CPU's. The OS sorts out whether you have called an 8-bit version of a word processor that is to be run on the 8085, or a 16-bit spreadsheet like SuperCalc (which is super), to be run on the 8088 directly addressing the entire memory space.

COMPUPRO HARDFACTS

These Godbout Godzillas are unimpressive from the outside of their desktop mountings - just your ho-hum black box with power switch and reset button. But, their innards are exquisite. They're sorta like a Caterpillar tractor - beautiful only

The Laser Memory Card can store 16 million bits (2 megabytes) of data, the equivalent of 800 pages of text, and can be used for writing and reading data for a variety of applications. The Optical Software Card, capable of storing more than 20 software programs typical of those currently used in personal computers and video games, is for loading software into microprocessors, microcomputers, and minicomputers. These types of wallet-sized cards could be used with personal computers, video games, office systems, manufacturing data systems, data distribution systems, medical data systems, banking terminals, identification, access control, and other digital information systems.

For more information, contact: Drexler Technology Corp., 2557 Charleston Rd., Mountain View, CA 94043 (415)-969-7277.

to the Cat connoisseur who worships quality and reliability.

The power supply is so potent that it can even overcome the frail power offered that we have, out here in the redwood boondocks of the San Francisco peninsula. (Two neighbors turn on their electric ovens and the power drops to 114v.) Even with the box loaded full of power-hungry boards, the system doesn't whimper.

The PC boards are a particular delight. The traces are well-designed and solid; the soldering is neat and clean; the sockets are clearly labeled. Why, they even have card-pullers on 'em (such a joy, after tugging at the antique boards in our antique old computer). O' course, you don't need to pull the boards for repair; just for system modification.

We should also mention the holy mnemonic, "CSC." Godbout offers you the option of getting regular boards, or CSC boards - Certified System Components. Godbout will tell you that such CSC boards are burned in for a week or more - which is true. What he doesn't mention is that they also use faster chips. Thus, if you spend the nominal extra loot to get CSC boards, not only do you lessen an encounter with "infant mortality," you also get a faster system.

Furthermore, if you get the system through G&G, they cook it for another week or two – giving you a hi-temp 200+ hours of burn-in.

All in all, we find the CompuPro hardware plus MP/M-8/16 operating system to be most impressive. So

(continued on page 22)

Company on Go Supports Faire

The Sabaki Go Company of Carlisle, Pennsylvania recently sent us a letter full of good wishes for the 8th West Coast Computer Faire. The promoters of the oriental board game wrote that they "want to express support for this important event. Its success gives momentum to innovation and entrepreneurial opportunity.'

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Data Broadcasting Introduced by TCP Business Systems

A Toronto company has combined broadcasting and computer technologies to open up a new field of computer communications. TCP Business Systems debuted this new technique, called data broadcasting, at the Canadian Computer Show held in Toronto last November.

With data broadcasting, data can be broadcast from one computer to any number of others using a standard television signal. The key to data broadcasting is Alpha Micro's converts data into a standard TV video signal.

Alpha Micro is a California manufacturer of multi-user mini and micro business computers. systems retail in Canada for between \$12,000 and \$65,000 (\$9,000 to \$50,000 U.S.). Over a year ago, Alpha Micro introduced the Video Link to users through its 200 dealers in 32 countries. The Video Link allows users to connect video cassette re-

Video Link, a controller board that corders (VCR's) to their Alpha Micro computers. With a capacity of over 100 megabytes per video tape, the VCR's provide a low cost, back-up system for Winchester disks.

But it was Toronto-based TCP Business Systems, that extended the application of the Video Link to include data communications. TCP, also known as The Computer Place, is a division of Azcar Technologies

TCP determined that the video

signal created by Alpha Micro's Video Link is identical to the signal television broadcasters use and that with the Video Link it was possible to transmit data in the form of a video signal from one computer to numerous points. Existing broadcast facilities, including cable, microwave, and satellite can be used to broadcast data.

During the Canadian Computer now, TCP presented a special Show, demonstration of data broadcasting to introduce the concept to computer professionals.

TCP booked time with Telesat Canada on one of the occasional use video channels on the Anik B satellite. An Alpha Micro AM-1000 computer was installed and waiting for instructions in Telesat's facilities at Allen Park, just south of Owen Sound. It received its command at 1:40 p.m. on November 17, when TCP President Murray Desnoyer gave the go ahead from a remote terminal in TCP's booth.

Immediately, the AM-1000 in Allen Park sent a dozen files containing text and data up to the Anik B satellite. TCP could have broadcast any type of information at all, including software programs, graphics, or daily stock quotations. From the "bird," 38,000 kilometers out in space, the transmission was broadcast back to earth. TCP received the signal at a three meter dish in the parking lot outside the Canadian Computer Standard television cable brought the text and data to the booth where it completed its journey at a second AM-1000 computer.

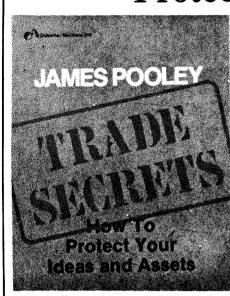
Satellite transmissions can be received equally well anywhere within the satellite's receive pattern, or footprint. Anik B's footprint covers all of Canada, and a bit of the northern U.S. TCP's transmission could have been received clearly in Resolute, Frobisher Bay, St. Johns, New York, Minneapolis, Vancouver, and Dawson, as well as any point between those sites.

Most conventional methods of data transmission can be received at only one point at one time. rate at which the information may be sent and received is faster by video (whether satellite or cable) than by existing methods. Additionally, high speed transmissions are available only between major centers, and tend to be expensive (several thousand dollars per month per cen-

Satellite signals can be received in both metropolitan and remote For about \$15,000 in the areas. U.S. the business user can purchase a 10 Megabyte multi-user Alpha Micro computer system, with Video Link, plus all of the equipment required to receive a satellite signal. There are no additional line charges.

For more information, contact: TCP Business Systems, 233 Carlaw Ave., Toronto, Ontario. M4M 3E9, (416)-465-2493.

Protect Your Trade Secrets!



Osborne/McGraw-Hill has just published a book on a timely subject, "Trade Secrets," by Attorney James Poolev

Rapid technological change and employee mobility have contributed to increasing litigation based on theft of trade secrets and customer information. Millions of dollars are spent every year on unfair competition lawsuits involving customer list disputes and employee piracy. Exactly what is "intellectual property" and how can

it be guarded?
In "Trade Secrets" Pooley emphasizes preventative techniques. Employers can learn how to protect their intellectual assets using patent, copyright and trade secret methods, as well as how to tighten company security systems and improve employee relations. Employees can learn how to develop their commercial ideas and, for the more enterprising, how to begin a competing business without being sued.

Should litigation arise, Pooley describes the components of a typical lawsuit, how it begins and proceeds from trial to settlement. He cites various cases and points out tactics and risks for both plaintiff and defendant. Appendices allow the reader to become acquainted with relevant legal forms.

The 145-page paperback costs \$11.95. For more information, contact: Osborne/McGraw-Hill, 630 Bancroft Way, Berkeley, CA 94710, (415)-548-2805.

Computer Professions Hot for 1980's

Computer mechanics, systems analysts, and programmers will be the most sought after professionals in the 1980's, according to the U.S. Bureau of Labor Statistics. Also featured on the Bureau's list of fasttrack occupations for the decade are paralegal personnel, aero-astronautic engineers, employment interviewers, tax preparers, and fast food restaurant workers

Workers not in demand will include farmers and farmworkers, railroad car repairers, timber and logging workers, private household workers. teachers, taxi drivers, textile weavers, and shoemaking machine operators, according to the Bureau.

Conference Session

Believable Video Animation

The computer display of a figure walking will be demonstrated using Activision and UAL video games during Tom Pittman's 8th Faire talk, entitled "Keeping Your Feet on the Ground: Believable Video Animation.'

Animated video games usually spend a lot of their precious compute time and code space moving objects around the screen. The computer display of a person walking may involve changing anywhere from 50 to 100 pixels (picture elements) just for one step of one person. Pittman will discuss how linking the motion of the object to sequencing of shapes can make for more effective graphics.

"Believable animation in objectoriented graphics can be achieved by careful synchronization of the leg and object motion," says Pittman. "Look at the two games demonstrated when this talk is given at the Faire. Which one looks better? Look at the video arcades and some of the games for your Apple, Atari, IBM, and others. When you write a video game, your graphics will look 100% better than these commercial products, just for a small amount of attention to this little detail.'

Simulation Software for Micros

A powerful simulation program developed on minicomputers is now available from Applied i for the Apple II, CP/M computers, IBM PC, and PDP-11. Tutsim, (Twente University of Technology Simulator), is an engineering design tool and teaching aid which models complex continuous systems such as electronic circuits, chemical reactions, and the human heartbeat, and displays the results numerically or graphically.

A larger minicomputer version of Tutsim is in use at a European chemical company to model a complete chemical plant. Operator training, process development, and plant troubleshooting are all carried out in Tutsim.

The microcomputer version of Tutsim is helping in the design of floppy disk drives, motorcycles, and particle accelerator power supplies.

It is also suited for demonstrating the principles of mechanics, electronics, thermodynamics, chemistry, other scientific and engineering topics at either the high-school or college level. Simulation answers many questions about new designs more quickly, at lower cost and sometimes more safely than building and testing prototypes. In teaching, it makes visible the meaning of abstract principles and lets students work with models of systems that are too complex for hand calculation.

Models are built up from more than 50 predefined function blocks and bond graph elements, plus user defined functions. Creating and running models are fully interactive. The user can modify parameters and choose which variables to plot on the X and Y axes during a run. Some of the available functions are

analog resistors and capacitors, digital flipflops, time delays, amplifiers, integrators, and noise generators. The Apple II and CP/M versions can handle up to 999 blocks in a single model, and the IBM PC will have greater capacity. Blocks average five or six bytes each, depending on the number of parameters to be set.

Tutsim supports the CCS arithmetic processor board for the Apple and the Intel 8087 Arithmetic Coprocessor for the IBM PC. Graphics hardcopy is also supported.

Apple Tutsim costs \$375. CP/M Tutsim is \$400. PC Tutsim pricing will be announced. The PDP-11 versions, nominally \$3000 and up, are available to qualified educational institutions at minimal cost.

For more information, contact: Applied i, 200 California Ave., #205, Palo Alto, CA 94306, (415)-325-4800.

Faire Smoking

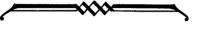
By city ordinance, smoking is permitted only in the entrance lobby of the Civic Aud-itorium. It is explicitly prohibited in the conference halls, perhaps due to limited

Avoid Long Lines, Pre-register for the Faire!

Although the Computer Faire, itself, is not staffed to handle preregistration, it has arranged for a number of sources for preregistration.

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 - marked below by an asterisk - are accepting mail orders, IF you do the following:

- 1. Phone the store for their reg fee. By FTC regulations, the Faire cannot tell them what to charge. full payment, and a stamped, selfaddressed, legal-size envelope.
- 2. Send your mail order in time to reach the store by March 1st. (Remember, the U.S. Mail Service will be handling its delivery in both directions.)



Data Domain of Schaumburg* 1612 E.Algonquin Rd Schaumburg IL 60195 (312)-397-8700

Opamp Technical Books
1033 N.Sycamore Ave
Los Angeles CA 90038
(213)-464-4322
Deans Music City* \$12

802-704 Miles Ave. Indio CA 92201

(619)-347-5245
Digital Information Systems* \$13.50

416 E. State St Redlands CA 92373 (714)-798-0033

Computerland 289 E.Highland Ave San Bernardino CA 92404 (714)-886-6838

Computer Wave Inc. 6791 Westminster Ave Westminster CA 92683

(714)-891-2584

Computer Wave Inc.
14980 Goldenwest Ave
Westminster CA 92683

(714)-891-2584
Computer Ware
6791 Westminster Ave

Westminster CA 92683 (714)-891-2584 MicroXchange 222 E.Carrillo St #101 Santa Barbara CA 93101

(805)-963-9441 Coastal Computers 986 Monterey St San Luis Obispo CA 93401 (805)-543-9339

Washington Jr High School* \$15

Sanger CA 93657 209-875-6365

209-875-6365
Micro Pacific Computer Ctr* \$11
5148 N.Palm
Fresno CA 93704
(209)-229-0101
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3202 E.Ashlan Ave Fresno CA 93726 (209)-227-8479

ZacKit/Monterey Monterey CA 93940 (408)-375-3144

Affordable Computers 716 A Lighthouse Ave Pacific Grove CA 93950 (408)-373-7177

Computerland - Belmont 1625 A El Camino Real Belmont CA 94002

(415)-595-4232
Leo Grandi \$12
300 Davey Glen Rd #3925
Belmont CA 94002
(415)-433-4548

Computerland - Burlingame \$13.50 264 Lorton

264 Lorton
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(415)-348-7731
Lotus Century
Westlake Shopping Ctr
64 Westlake Mall
Daly City CA 94015
(415)-992-5230
Computerland
4546 El Camino Real
Los Altos CA 94022
(415)-941-8154
Nycom Inc.* \$15
4500 El Camino Real
Los Altos CA 94022

Los Altos CA 94022 (415)-948-4500

Keplers Books \$13 821 El Camino Real Menlo Park CA 94025 (415)-324-4321

(410)-024-7021

Byte Shop

1415 W.El Camino Real

Mtn View CA 94040

(415)-969-5464

Digital Deli 80 W.El Camino Real Mtn View CA 94040 (415)-961-2670

Mission Computer Ctr 2065 B El Camino Real W Mtn View CA 94040 (415)-964-7063

Heathkit Electronics Ctr* \$11 2001 Middlefield Redwood City CA 94063 (415)-365-8155

(415)-365-8155
Computer Plus
1328 S.Mary Ave
Sunnyvale CA 94087
(408)-735-1199
Microplus Business Systems \$14
1020 East El Camino Real
Sunnyvale CA 94087
(408)-737-2525
Arrow Computer Supply* \$15

(405)-131-2525 Arrow Computer Supply* \$15 1301 Harrison St San Francisco CA 94103 (415)-864-0917

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(415)-781-0200 Computerland - the Castro 2272 Market St San Francisco CA 94114 (415)-864-8080

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Hayward CA 94541
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Computerland 22634 Foothill Blvd Hayward CA 94543 (415)-538-8080 Ken's Electronics* \$12.50

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Microland Computers 6050 Mowry Ave Newark CA 94560 (415)-790-0410

Best Computer Store Stoneridge Shopping Ctr 5516 Springdale Pleasanton CA 94566

Home Business & Computer Ctr
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Pleasanton CA 94566
(415)-846-3944

Computer Store - San Leandro \$15 701 Mac Arthur Blvd San Leandro CA 94577 (415)-569-4174

(415)-569-4174

North Bay Computers
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Yountville CA 94599
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Computer Store - Oakland

1320 Webster St Oakland CA 94612 (415)-763-7900

Computer Center Inc 1514 University Ave Berkeley CA 94703 (415)-845-6366 Technika Berkeley

2120 Dwight Way Berkeley CA 94704

(415)-841-5323

Berkeley Computer* \$15
1569 Solano Ave
Berkeley CA 94707
(415)-526-5600

Bookshop Santa Cruz \$15 1547 Pacific Garden Mall Santa Cruz CA 95060 (408)-423-0900

Computer Room

Computer Room
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Scotts Vly CA 95066
(408)-438-5001
Quality Data Processing* \$14
953 Foxswallow Ct
San Jose CA 95120
(408)-997-3730

Computer Emporium 5821 Cottle Rd San Jose CA 95123 (408)-227-5414 Computa-Mania \$13

18285 Hwy 108 #5 Jamestown CA 95327

(209)-984-4221

Computer Magic Inc \$13
3125 McHenry Ave #1
Modesto CA 95350
(209)-527-5156

Computer Ware 4031 15th St Modesto CA 95354 (209)-578-9739

(209)-578-9739

Santa Rosa Computer Ctr
604 7th St
Santa Rosa CA 95404
(707)-528-6480

ECI*\$13

10700 Ford St Mendocino CA 95460 (707)-937-0138

Computer Scene \$12 753 S.State St Ukiah CA 95482 (707)-462-1578 Computer Stores Inc

6041 Greenback Ln Citrus Heights CA 95610

(916)-969-2983
Capitol Computers
212 Harding
Roseville CA 95628
(916)-786-8715

Capitol Computers 1009 L St Sacramento CA 95814

(916)-446-3101 System Design \$13 280 Commerce Cir Sacramento CA 95815 (916)-929-1642 Capitol Computers

2800 Arden Way Sacramento CA 95825 (916)-483-7298

(916)-483-7298

Sym Users' Group
20 Sunland Dr
Chico CA 95926
(916)-895-8751

Computer Store - Corvallis* \$13.50
2015 NW Circle Blvd
Corvallis OR 97330
(502) 754 0811 (503)-754-0811

Sunnyvale to San Francisco

Bus Transportation to the Faire

For the fourth year in a row, the Computer Plus Bus will carry people from Sunnyvale to the Computer Faire and back. This service is Faire and back. This service is offered by Computer Plus at the corner of Mary and Fremont, at De Anza Square Shopping Center in Sunnyvale, CA.

On Friday, March 18, the bus will leave Computer Plus at 8:00 a.m., and begin its journey back from the Computer Faire at 3:30 p.m. Saturday, March 19, the bus will leave Sunnyvale at 8:30 a.m., and leave the Faire at 3:30 p.m.

Reservations with full payment must be made by Friday, March 11. For more information call: Computer Plus (408) 735-1199, 10 a.m. - 6 p.m., Monday and Saturday, 10 a.m. p.m., Tuesday through Friday.

Play Your Hand With CompuBridge

CompuBridge, a division of Barclay Bridge Supplies, has introduced a new series of computer bridge programs, designed for the Apple II.

The programs are available in two versions, elementary and complete. Both start from the very basics, including vocabulary, mechanics of the game, and simple point count, and then progress to opening bids, responses, rebids, opening leads, and declarer play. The complete course introduces common conventions and goes into greater detail on responses, forcing bids, doubles, and overcalls. Random hands test the user's progress throughout the lessons.

The Elementary program is available on a 32K cassette for \$19.95; the complete program is on a 32K cassette for \$29.95 or a 48K diskette for \$39.95. All programs are in Basic. An adapter card is needed for machines which only use AppleSoft.

CompuBridge's Dusco program, for use by duplicate bridge clubs, is programmed in AppleSoft and costs

For more information, contact: CompuBridge, 8 Bush Ave., Port Chester, NY 10573, (914)-937-4200.

Conference Session

Campy Computers

"Computer camps for children are an outgrowth of the mushrooming computer literacy movement in the United States today," says Thomas Copley, executive director of Yellow Springs Computer Camp, Yellow Springs, Ohio. In his 8th) Faire talk, Copley will discuss the joys and frustrations of starting an independent, non-profit day camp that offers riding, swimming, unicycle riding, and other activities, as well as computing.

Save 26% on Faire Registration

By gathering your friends and associates together, you can all save \$4 on 8th Faire registration fees — paying \$11 each, instead of the \$15 "at the door" fee. (Or, you can "deal" registrations and earn a few extra dollars for yourself or your group.) Here's how:

Purchase Faire registrations in blocks of ten or more, no later than March 7, advancing \$110 for a minimum order of ten (prepaid). (There is a small shipping and collection charge on COD orders.)

You can return up to half the number of registrations ordered, by March 17 (the day before the Faire), for a refund of \$11 per returned/unused registration.

To take advantage of this offer send your check or COD order for ten or more registrations (advancing \$110 @ on prepaid orders) to:

Pre-registration Desk Computer Faire 345 Swett Road Woodside CA 94062

Include your street address for certified UPS delivery. We pay shipping on prepaid orders. You pay shipping and collection charges on COD's.

Lifetime Warranty on Flexible Diskettes

BASF Systems Corporation has introduced a first in the history of computer media – a complete line of flexible diskettes certified 100 percent error free and carrying a lifetime warranty.

The FlexyDisk line is the first in BASF's family of computer media products to earn the company's Qualimetric seal representing a new international standard of quality.

These second-generation, worldclass floppies are also being introduced with new packaging which, along with the Qualimetric seal, differentiates the new BASF products from the old.

Included in each FlexyDisk box is a newly designed brochure which explains the standards each BASF FlexyDisk must meet to earn the Qualimetric seal.

BASF has improved its disk coating and processing techniques, developed an ultra-clean manufacturing environment, and made three design changes in the diskette jacket alone – all of which are engineered to guarantee the user a BASF FlexyDisk with a long and reliable life.

Quality tests are made at each step in the production process which

SGG Want Ads

FOR SALE: Computerized Typesetters. Various brands at very low prices. Use your WP or CPU for a front end — or purchase complete unit. (415) 851-4167, Monday through Friday only, please.

WANTED: To purchase almost anything electric or electronic — or — any items new or used that can be re-sold. Please call Max Clark, Mon-Fri (415) 851-4167.

FOR SALE: Computerized Typesetting. Incredible prices for large-needs account. Same for same back-up unit. Catalogues, lists, etc. Max Clark, (415) 851-4167, Monday through Friday only, please.

Free Future Copies of the Silicon Gulch Gazette

Just send your name and mailing address to Computer Faire, 345 Swett Road, Woodside CA 94062 ensure that each FlexyDisk shipped from BASF is manufactured to the highest performance standards in the world. Only when a BASF FlexyDisk meets 100 percent error-free requirements is the product made available for shipment to the customer.

For more information, contact: BASF Systems Corp., Crosby Dr., Bedford, MA 01730 (617)-271-4000.

Conference Session

System Impacts of 32 Bit Micros

Thomas Johnson, a Motorola systems engineer will paint a bleak picture of the possibility of fully utilizing new 32-bit processors in his 8th Faire talk "System Impacts of 32-Bit Microprocessors." He will discuss areas of hardware and software design that should be examined before embarking on a 32-bit design.

"It is imperative that prior to starting a 32-bit design, the overall system be closely examined for possible performance flaws, and the question be asked: 'Does this design REALLY require a 32-bit processor?'" says Johnson. "It is better that more performance be pulled from one of the existing 16-bit machines than idling one of the 32-bit monsters, just so the marketeer can say he has a 32-bit system."

Privacy and Security

The Privacy and Security Committee of the Computer and Business Equipment Manufacturers Association (CBEMA) has updated its publication, "CBEMA Privacy & Security Bibliography."

The bibliography contains 750 entries on books, reports, and journal articles published in English on computer security, information privacy, and privacy and security aspects of transborder data flows.

For further information on how to obtain a copy of the "CBEMA Privacy & Security Bibliography," contact: Privacy and Security Committee, CBEMA, 311 First St. N.W., Washington, DC 20001, (202)-737-

Intelligent Robot For Home Experimenters

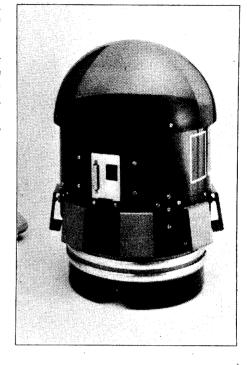
The RB5X Intelligent Robot, a manufactured unit designed for home experimenters, is now available.

Manufactured by RB Robot Corporation of Golden, Colorado, the RB5X learns from its experien-With its own microprocessor, memory, programs, and tactile sensors, the robot detects and responds to objects in its path. Once a successful random response is achieved, the RB5X remembers its actions and repeats the correct response when confronted again with the same situation. These same principles are intended to be applied with other sensors and with more complex programs by the home experimenter using the RB5X as a starter system.

Designed for technically-oriented consumers (engineers, scientists, computer programmers, educators, hobbyists, etc.), RB5X features allow experimentation in robotics. Users may increase the "experience" and capability of the robot by installing additional mechanical functions and additional sensors, such as Polaroid's Rangefinder sonar sensor.

The robot's standard RS-232 interface makes it compatible with the Apple, TRS-80, IBM PC, and other popular microcomputers to allow for program entry and data transfer. For example, its memory can be transferred to a personal computer to enable the user to study memory patterns generated and alter RB programs accordingly.

One circuit in the RB5X enables it to recharge its batteries automatically. The robot senses when its batteries are low, seeks out its battery



charger, fully charges over a period of time, and detaches itself from the charger to resume its adventures.

The basic RB5X unit sells for \$1195. A special option package with additional memory, the Polaroid Rangefinder sonar sensor, and a pulsating light option is also available for \$295.

New features under development include a mechanical arm, a voice synthesizer, and digital radio communications between RB5Xs.

For more information, contact: RB Robot Corp., 14618 W. Sixth Ave., #201, Golden, CO 80401, (303)-279-5525.

Statistics the Easy Way

The computer does most of the work in the statistics package developed by Luc Hondeghem, M.D., PhD, Professor of Pharmacology at University of California, San Francisco. He'll describe the package's unique features during his talk, "MDCSTAT: Statistics the Easy Way," at the 8th West Coast Computer Faire.

Hondeghem linked together a collection of statistical programs to run under CP/M in Microsoft's Basic, then added an extensive data manipulator program, capable of performing a variety of statistical functions.

The G-key plots Y versus X and produces an annotated graph for review. The U-command will evaluate two related variables, by reviewing 100 functions and choosing the one to best describe their relation (e.g., linear-linear, log-linear, coscube, log linear and 97 more). When necessary, an X-command automatically displays the appropriate section of the manual on the screen.

"Statistics is the art to figure and refigure the figures till they figure significantly," comments Hondeghem.

Conference Session

Computer Vision and Image Recognition

Computer vision and image recognition has always been a problem in robotics and machine intelligences research. But Henry Pfister says it is now possible to assemble a computer imaging system with high computational capability for under \$4000.

In his 8th Faire talk, "Computer Vision and Image Recognition," the University of Southern California, Los Angeles, faculty member will discuss the system. It is comprised of an Apple II, a DS-65 video camera digitizer, and an Acorn 68000 processor.

The **Jackson Amateur Computer Society** of Gold Hill, Oregon, is organizing a tour to the 8th Computer Faire.

For more information, contact:

Jackson Amateur Computer Society c/o Paul Myers PO Box 320 Gold Hill, OR 97525

New Information **Database**

Users of personal computers at home or office can tap into a new information retrieval service covering topics from aerodynamics to zerobase budgeting as well as reviews of books, movies and vacation resorts.

The new service is Knowledge Index, offered by Dialog Information Services, Inc.

Subscribers will be able to scan more than four million entries from over 10,000 journals and other publications, many updated daily. Information covers computers, electronics, engineering, law, medicine, agriculture, business, psychology, and education. A wide range of information from newspapers, magazines and government publications is also included.

The cost of Knowledge Index is \$24 per hour.

The one-time initiation fee of \$35 includes two free hours of access plus an instructional manual.

For more information, contact: Knowledge Index, Dialog Information Services, Inc., 3460 Hillview Ave., Palo Alto, CA 94304, (800)-

New Payroll, Ledger Software

TCS Software's Client Ledger System now runs on the IBM Personal Computer without the use of a CP/M card. The TCS Client Ledger System is a general ledger designed for public accounting firms, and for those who provide accounting services to small businesses.

It features a fully integrated passive payroll subsystem, userdefined profit and loss statement formats, ledger consolidation, workin-progress sub-ledger, and over 50 reports. In addition, CLS provides three user-defined reports.

The newest revision of CLS features the accelerated cost recovery (ACRS) depreciation schedule, a floating decimal point, an edit mode in the "Enter transaction" option, and printer capability to select either compressed or standard print mode based on the report size.

For more information, contact: TCS Software, 3209 Fondren Rd., Houston TX 77063, (713)-977-7505.

Conference Session

Enjoy your Lisp

Although many computists have lauded Lisp as one of the best computer languages available in recent months, it is still unknown to many.

In his 8th Faire talk, "Lisp, A Short Introduction," Richard Munoz will present Lisp as a "universal programming tool with many advantages when compared to traditional languages." Munoz, project manager of Friends of Lisp/Logo & Kids will discuss the language's origins, applications, and advantages.



New DTC Daisy Wheel **Printer for Micros**

tions has introduced a new daisy wheel printer, the DTC 380Z for the personal computer user.

The specification includes a 48,000 character buffer memory for high speed throughput. This allows the computer to fully load up the printer memory within a few seconds, then be used for further applications while the 380Z prints 24 or more pages. Print speed is always dependent on the nature and layout of the text and the 380Z prints at up to 32 characters per second. Interconnecting cables are available to enable the DTC 380Z to work with all major personal computers including Osborne, IBM, Apple, and TRS-80.

Other features are full bidirectional printing, automatic proportional spacing, serial and

Data Terminals and Communica- parallel interfaces, software compatible with the Diablo 1640/1-650/630, graphic plotting, 50 to 19.2K baud, and a momentary pause capability for paper, printwheel and ribbon changing. The printwheel is available in 12 different print styles and works with standard ribbons. A self-diagnostic test will completely test the unit and the four internal CPU's, while the printer is completely isolated from the computer. Error conditions are indicated by status lights.

> Optional extras include forms tractor, and a variety of type fonts and interconnecting cables. The printer costs \$1199.

more information, tact: Data Terminals and Com-590 Division St. munications. Campbell, CA 95008, (408)-378-1112 a word processor will be presented at the 8th West Coast Computer Faire by Larry Press, of the Small Systems Group in Santa Monica, California. "Word Processing, Some Questions to Ask" will review the nuts and bolts questions regarding hardware and software.

Word Processing,

Questions to Ask

A thoughtful guide to purchasing

Conference Session

Press says, "The first question to ask in choosing a word processor is How will I be using it? prepare many short documents of relatively few long ones, is final ap pearance critical, will I be doing mass mailing, will I be assembling documents from pre-written boilerplate? ...Your planned use will determine your requirements."

After thinking through the ways in which you will use your system and visiting several potential dealers for hands-on demonstrations, Press recommends reviewing hardware considerations such as the type of keyboard and display you will need, the sort of printer, the amount of memory and disk storage, and the CPU and operating system which would best fit the bill.

Software should be chosen carefully, says Press. Important considerations discussed will include: the speed and convenience of basic editing, the complexity of advanced editing functions, quality of document assembly, command structure, disk access, editing and printing transitions,

and text formatting.

Press will also talk about a system's compatibility with other software, the quality of the documentation, the file system and directory structure, and how long it takes to learn to use a word processing system.

IBM Personal Computer Product

Electronic File Cabinet

Information Unlimited Software has released a new software package for the IBM Personal Computer, designed to work as an "electronic file cabinet" for the user.

Called EasyFiler, the program offers a method of storing and retrieving data on the IBM PC. User definable and modifiable, EasyFiler allows the user to design a customized form for storing customer lists, telephone numbers, sales records, and other pertinent data. Unlike some other database programs currently on the market, which employ predefined forms, the IUS package is unique to each user's application,

EasyFiler features built-in report capability combined with a built-in full screen text editor. It gives the user the ability to key on up to six different fields and interfaces with IUS's word processor, EasyWriter II. EasyFiler interfaces with the full line of IUS software.

EasyFiler retails for \$400. For more information, contact: Information Unlimited Software, Inc., 2401 Marinship Way, Sausalito, CA 94965, (415)-331-6700.

Gossip . . (continued from page 18) much so that we paid significant loot

to get a pair of 'em.

Note: CompuPro gear is definitely not for the bottom-of-the-line economy shopper. If you want to spend little money, but probably spend lots of time on malfunctioning gear, get something else. If you want something that – for sure – is likely to run and run and run, and let you spend your time on something other than repairs . . . we recommend the CompuPro line. Remember, "cheap" is not the same as "inexpensive."

SORCIM'S SUPERCALC IS

Of course, a reliable computer is nice, and a robust operating system is a pleasure, but applications-oriented software is what makes a computer more than an ornament.

More than any other single factor computerized financial spreadsheets are probably what truly popularized personal computers . . . in the business community. We have tried several of these spreadsheets and are particularly impressed with SuperCalc from Sorcim (especially if it is running on an 8086 or 8088 system with its massive memory space).

Sorcim has given considerable attention to assuring that SuperCalc is very congenial in its interactions

with naive users. It minimizes the demand for users to be computerknowledgable, and it minimizes the necessity for users to remember contorted sequences and obscure codes.

Though we recognize that application software is changing and improving with phenomenal speed, we certainly recommend that anyone needing a "what if" spreadsheet system take a careful look at SuperCalc.

AND PASCAL/M

While we are mentioning Sorcim software that we are using, we should mention their Pascal/M translator. It outputs p-code. Listings can easily be sent to the console, disk, or printer (unlike some Pascals that "know what's best" for the user). It offers a number of significant extensions to Pascal as Wirth originally defined it, however - unlike some socalled "Pascal" translators on micros, it will translate programs that are written in standard Pascal.

It includes a good debugger -PASDDT - that, among other things, allows you to single-step through your program.

There is one other thing about Sorcim: It's run by a long-time computer pro of ample ability, named Richard Frank. In an industry where a few vendors are becoming increasingly

(continued on page 26)

Enhanced Word Processing

A new word processing package that runs with Unix and Unix "lookalike" operating systems was introduced today by Horizon Software Systems, Inc. The software is designed for use in instrumentation, automation, and data processing environments.

Horizon WordProcessing offers full-screen editing, complete format-

Multicolor Printing Program

Multicolor printing, book style justified type, decorative effects and a range of other printing features can now be created with a new software product called Colortext. Developed and marketed by Jupiter Island Corporation, Colortext gives microcomputer users access to the capabilities of the IDS Prism Printer without programming.

Colortext enables text editor users to print in eight colors, six type sizes, and a variety of line spacing options. Other printing features include automatic centering, micro-spacing, proportional and fixed character spacing, subscript and superscript, reverse line spacing, a high speed draft mode, and characters for six foreign languages.

Colortext runs on CP/M, IBM PC-DOS or MS-DOS. The system must also be equipped with a text editor or word processing program, an IDS Prism Printer, and a Process color

Colortext costs \$149. For more information, contact: Jupiter Island Corp., 1900 Powell St., #1135, Emeryville, CA 94608, (415)-655ting and document management. Documentation includes a primer, reference card, tutorial, experienced users' reference manual, and on-line "help" tutorials.

All functions needed to edit, format, expand, delete, merge, recall, display, and print a text are included in Horizon. More complex formatting is handled by imbedded standard formatting commands. Users can preview documents before they printed. Imbedded commands provide extended capabilities including justification, automatic hyphenation, running headers and footers, footnotes, superscripts, subscripts, automatic page numbering, and typesetting.

Once the document has been entered and edited, Horizon provides a standard output format which the user may change to meet specific output requirements.

Horizon allows the user to define top, bottom, right and left margins, lines per inch, characters per inch, number of blank lines between paragraphs, page lengths, automatic headers and footers, and page numbering.

addition. Horizon users may select right, left, centered or two-column page justification. Paragraphs may be numbered and have the first line indented or out-The user controls the dented. way words, phrases, and hyphenated words are split at the right margin. "Hard spaces" and "hard hyphens" may be used to suppress a random break.

Horizon runs on any Unix-based operating system with a video display screen terminal and a system printer.

The software is available for \$750. For more information, contact: Horizon Software Systems, Inc., 220 Downey St., San Francisco, CA 94117, (415)-751-1311.

IBM PC Form Processing Database

Applied Software Technology has released an IBM PC version of the VersaForm Business Form Proces-

The IBM PC version shares a standard VersaForm user interface. Current VersaForm users can implement their form templates on an IBM PC without modification.

The IBM PC version, compiled under version IV.O of UCSD Pascal, implements several hardware features of the IBM system. Multimode reverse screen video for easier data entry; full "function key" support to speed command selections; the use of floppy disk drives of up to 400 Kbytes per diskette for increased data storage capacity; the utilization of main RAM memory as a logical disk drive (384 Kbytes of a maximum of 512 Kbytes permitted on the IBM PC) are standard PC version

Exchange of forms data is permitted between Apple II/III and IBM PC Systems, regardless of source machine, through a communications sub-system (e.g. modem, local area network, etc.) or a hard disk network (e.g. Corvus, Omninet, Santa Clara Systems SCS-series, etc.). System requirements for the IBM PC version are 128 Kbytes of system memory (RAM) and two double sided floppy

IBM PC VersaForm costs \$389. For more information, contact: Applied Software Technology, 14125 Capri Dr., Los Gatos, CA 95030, (408)-370-2662.

Computer Science Encyclopedia

"The Encyclopedia of Computer Science and Engineering Second Edition," a one-volume reference, has just been published by Van Nostrand The book, with more Reinhold. than 550 entries and over 700 illustrations, tables, and charts covers nine broad subject areas: hardware, computer systems, information and data, software, mathematics of computing, theory of computation, computing methodologies, computer applications, and computing milieux.

The book costs \$87.50. For more information, contact: Van Nostrand Reinhold, 135 W. 50th St., New York, NY 10020, (212)-265-8700.

Conference Session

Author, Author! Your Role in Computer Book Publishing

"My objective is to present a short history and a look into the future of microcomputer book publishing, as well as a strong argument - I hope - for your writing a computer book, says Raymond Collins of his 8th Faire talk "Your Role in Computer Book Publishing.

Collins, a vice president of Tab Books, Inc., will explore areas of interest to all novice computer book authors. He will discuss choosing a topic, investigating the computer book market, querying a publisher, and authors' rights. Now is the time for authors to break into this burgeoning market, says Collins.

The market for computer books is so strong that it resembles the market for books about a fad. We have all learned in book publishing, however, that microcomputers are not part of any fad," says Collins.

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Meeting Someone at the Faire??

Suggestion: Ask friends and associates to meet you in the balcony area of the Civic Auditorium. Specify the left, right, or center section. It has ample seating and overlooks the Civic Auditorium exhibition area.

Note: The public addresss system is NOT available for paging individuals, except for medical emergencies.

Conference Session

Special-Purpose Languages

"The message I would like to present is that personal computers can be programmed by people who don't want to fuss with programming languages," says Sheldon Softky, who will speak on "Developing Special-Purpose Languages" at the 8th Faire. "All that is needed is that developers of application software provide their systems with 'user-oriented' input and control languages for each special use. These user-adapted languages we call Special Purpose Languages."

Softky will discuss how Special Purpose Languages can allow many non-software programmers to program their own work for simple applications. He will show how the same software development principles used for big computer systems can be helpful in developing small application programs.

The paper will be published in the Proceedings of the 8th West Coast Computer Faire, available at the March show.

High Level Cobol Supports Kanji

The first portable microcomputer Cobol compiler to support the Japanese Industry Standard (JIS) set of Kanji characters has been introduced by Micro Focus.

The High Level compiler processes alphabetical, numeric, and Kanji symbols as it reads the source code. Level II Cobol also supports Katakana characters, the Japanese ideograms for Western words not represented by other existing Japanese symbols.

Programmers using Level II Cobol can reach Japan's office automation market with applications that present Kanji text on screen displays and printouts, and permit users to enter Kanji via the keyboard. Application users will see Kanji characters rather than less familiar alphabet symbols because programmers can now define paragraph names, data names, and literals in Kanji as they write source code.

The portability of Level II Cobol allows programmers to create applications for a broad range of microcomputers, and its compatibility with Cobol applications on large computers permits programmers to bring mainframe application software to desktop computer users. With Level II Cobol, microcomputers can also be used as software development and maintenance stations for mainframe computers running ANSI '74 standard Cobol applications.

Level II Cobol is certified at the High Level, the most sophisticated level of implementation, by the United States government. It is certified with zero errors by the U.S. Federal Compiler Testing Center.

For more information, contact: Micro Focus, Inc., 1860 Embarcadero Rd., #235, Palo Alto, CA 94303, (415)-856-4161.

Getting from the Airport to San Francisco

Flying in for the Faire?

Once you step off your flight at the San Francisco Airport, watch for these shuttles to take you into the city.

The Airporter Bus will deliver you to its downtown San Francisco terminal in 30 minutes for \$4. After you arrive at the terminal, located at the corner of Ellis and Taylor, you'll need to take a cab to reach your hotel or the Civic Center.

The Airporter Bus leaves San Francisco International Airport every 15 minutes from the lower level TWA baggage claim area or carousel 5 of the United baggage claim area. For more information, call (415)-495-8404.

Limousine service to the Civic Center is offered by The Airport Connection. For \$42, five people can share a limo to the Civic Center. Call ahead for reservations, or be prepared to wait for up to an hour for a car. The Airport Connection's number is (415)-877-0901.

REQUEST for HOTEL RESERVATIONS

SAN FRANCISCO CIVIC CENTER



MARCH 18-20,1983

For your convenience, Computer Faire has arranged for San Francisco Convention and Visitors Bureau to handle accommodations at the following hotels. These rates are only valid on reservations received by February 17, 1983. Rates are subject to 9.75% Hotel Tax, used in part to pay for San Francisco convention facilities.

Please complete this form and mail to:

West Coast Computer Faire Housing Bureau San Francisco Convention and Visitors Bureau Box 5612

San Francisco CA 94101

Advance reservations under this plan must be made on this form. Telephone reservations cannot be accepted

HOTEL		Single	Twins	Suites	
THE SAN FRANCISCAN (Headquarters) 231 Market Street I block from Civic Auditorium)		\$60-\$72	\$70-\$82	\$140-\$160	
HOLIDAY INN/CIVIC CENTER 50 Eighth Street (1½ blocks from Civic Auditorium)		\$68	\$78	Note: Reservations held to 6pm day of arriva	
SHERATON PALACE 639 Market Street (8 blocks from Civic Audi	itorium)	\$100 \$110			
AMERICANIA 121 Seventh Street (2% blocks from Civic Center)		\$53-\$55	\$57\$59	\$71-\$80	
CARRIAGE INN 140 Seventh Street (2½ blocks from Civic Center)		\$53-\$55	\$57-\$59		
HOTEL BRITTON 112 Seventh Street (2½ blocks from Civic Center)		\$32	\$38		
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Tort Liability and **Computer Vendors**

While a breach of contract action is still the most frequent legal move taken against a vendor who doesn't deliver what was promised, there is a growing trend toward tort claims, because they can avoid limitations and disclaimers found in a vendor's form contract, according to Attorney Michael Scott.

In his 8th In ... Liability or Scott, Faire talk. Computer dors," Scott, publisher of the "Computer/Law Journal," "The Scott Report," and "Software Protection," will discuss the applicability of tort doctrines to computer disputes.

"Tortious conduct can come in many guises. However, it can be divided into two clearly defined categories - negligent conduct and intentional conduct," says Scott. He will discuss several tort theories in each category and how they can be applied to the sale or leasing of computer hardware and software.

San Francisco Events Hotline

Looking for some night life while you're in San Francisco for the Faire? Call the San Francisco Convention And Visitors Bureau Hotline at (415) 391-2000. The taped message will tell you about dance, comedy, music, theater, opera, and sports events in the city.

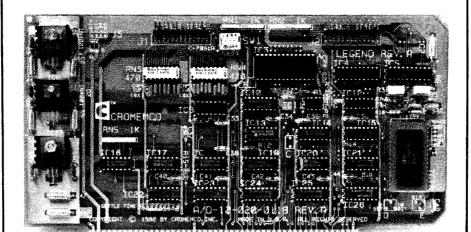
Third Edition of CP/M Index

The third edition of the Small Systems Group's "CP/M Software Index" has just been published. The Index lists 1688 professionally supported programs, offered by 507 vendors. A brief description, the vendor's name, address, and phone number, the price, and operating system versions are shown for each package. All indexed programs are available for the CP/M-80 operating system and many are also available under CP/M-86, MP/M-80, MP/M-86 and Concurrent CP/M-86.

The Index is organized into five major areas: systems programs, general applications, accounting applications, utility applications and industry specific software. These areas are broken down into 89 categories. Examples of the categories are data management (66 entries), integrated accounting packages (54 entries), higher level language processors (105 entries), medical packages (30 entries), and construction packages (32 entries). Less obvious categories, for instance, dairy and cattle programs (17 entries) and sports (10 entries) are also indexed.

In spite of the recession, the rapid growth of the software industry is shown by the fact that this edition of the Index contains more than twice as many programs and vendors as the second edition did.

Single copies of the Index are \$10, prepaid (\$14 outside of North America). For more information, contact: Small Systems Group, P.O. Box 5429, Santa Monica, CA 90405, (213)-392-1234.



Cromemco Conversion Boards

by Cromemco will facilitate the use than 25 microseconds. its S-100 bus compatible commonitoring and control applications.

The two new products are designated the DAC12, a two channel, 12 bit digital to analog I/O board, and version time for the DAC12 is five

Two new data conversion boards microseconds and for the ADC12, less

No special software is required to puters in real time data acquisition, convert the signals in either direction. Instead, a simple output instruction executed by the computer initiates the conversion process in both products.

For more information, contact: the ADC12, a sixteen channel, 12 Cromemco, Inc., 280 Bernardo Ave., bit analog to digital I/O board. Con- Mountain View, CA 94043, (415)-

Programmable Spreadsheet for IBM Computer

Information Unlimited Software, Inc. today introduced its newest piece of productivity software, a package offering a programmable spreadsheet capability to IBM Personal Computer users.

Called EasyPlanner, the program is aimed at middle management users in the general business audience. However, it is also a tool for professionals such as physicians and attorneys, whose financial analysis applications are often too complicated to be performed efficiently in a manual system.

Conference Session

Modification on the 6502

"Instruction modification - the changing of the instruction codes of a program, by that program, and for a specific purpose – is a technique that was much used in the early days of computing," says W.D.Maurer, of the Department of Electrical Engineering and Computer Science at George Washington University in Washington D.C.

At the 8th West Coast Computer Faire, Maurer will describe "Instruction Modification Techniques on the 6502". The Apple II+, Apple III, Atari 400, Atari 800, PET, KIM, and many other microcomputers are

Applications of this technique may include modification of addresses, of instruction codes, of immediate data, and of the 8-bit relative addresses in conditional branch instructions.

"These techniques can lead to savings in both time and space over their alternatives, and in a few cases can provide facilities not available otherwise," says Maurer. But he cautions, "Like any programming techniques, these must be used with care.'

According to IUS Vice President of Sales and Marketing William Lohse, EasyPlanner should not be confused with VisiCalc and similar spreadsheet programs currently available to personal computer users. Unlike many others, EasyPlanner is programmable, allowing the user to specify the steps he or she needs to take in performing financial worksheet calculations.

EasyPlanner costs \$250. more information, contact: Information Unlimited Software, Inc., 2401 Marinship Way, Sausalito, CA 94965, (415)-331-6700.

Conference Session

Metacompiler -**Ultimate Forth Tool**

Metacompiling is an activity fairly common in Forth, but not generally applicable to other computer languages. John Cassady will present a non-technical introduction to the metacompiler as a programming aid during the 8th West Coast Computer His talk will be entitled "Metacompiler-The Ultimate Forth

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MUMPS Users' Group Annual Meeting May 31-June 4, 1983 San Francisco Hilton

For further information, contact: MUMPS Users' Group 4321 Hartwick Road, Ste. 308 College Park, MD 20740

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Unix Benchmark Programs

Aim Technology is offering a portable Unix Benchmark tape to measure actual end-user throughput and multi-user performance. Nine distinct tests, consisting of shell scripts with "C" programs, run unattended on any Unix based system (Unix V7, Unix System III, Xenix, etc.) Each test prints comparative graphs, as well as raw measurements.

Aim Portable Unix Benchmarks test Version 7 Unix command list completeness, C Compiler efficienand several common aspects of hardware performance applicable V7, as well as System III. CPU measurements include looping and floating point calculations. Benchmarks examine disk transfer speeds for various record lengths. Compiler optimization is examined for short integer, and long types.

Memory/paging throughput is measured, as well as interprocess communications speeds. Multi-user performance is examined for simulated multiple users doing sorting and editing.

The tests are provided on nine track, 1600 BPI Tar tape with documentation and sample benchmarks from VAX 750, VAX 780 and PDP 11/70 for comparison. The suite runs in approximately 45 minutes on an unloaded VAX 750 and produces about 15 pages of report

The price of the Aim Portable Unix Benchmark Programs is \$1250. For more information, contact: Aim Technology, 3333 Bowers Ave., #199, Santa Clara, CA 95051, (408)-727-

Conference Session

Lost Children & Lost Parents

At the Computer Faire

Although the Computer Faire is intended for mature individuals, if you take young children to the Computer Faire (which we do not encourage), please instruct them to go to the Computer Faire office if they get lost from you.

Older children, family, friends & business associates might be asked to meet you in the balcony (left, right or center; seating available overlooking the main arena).

The Faire will not use the public address system to page for lost children or adults.

Researchers in the life sciences field using microcomputers will soon have direct access to current research literature which relates to their special interests. A subscription service is being developed which will deliver diskettes containing new listings, drawn from a file of well over a million references.

Louise Schultz, systems develop-ment director of BioSciences Infor-Transfer Service.

Life Sciences Database

mation Service of Philadelphia, Pennsylvania, will describe the search system during her 8th Faire talk "B-I-T-S: Life Sciences Literature Files on Floppy Disks." B-I-T-S stands for BIOSIS Information

Advanced Digital Corporation has added an error-correcting, microprocessor-based hard disk controller board to its line of S-100 based products.

Identified as the Model HDC-1001, the unit provides the S-100 based computer user with a compact. cost-effective controller capable of operating up to four 8-inch or four 5 1/4 inch hard disk drives.

The error correcting capability includes a 32-bit computer generated polynomial, which according to Advanced Digital Corporation President Hossein Asadi, will detect and correct errors before the user is even aware of them. Other features are: up to 8bit single burst correction, multiple burst detection, and programmable correction/detection span.

Error Correcting Hard

Disk Controller for S-100

The Model HDC-1001 is completely S-100, IEEE 696 standard compatible and provides control for up to four drives and up to eight R/W heads. It has built in data separation and features data rates of up to 5 MBytes/sec, 256 sector addressing range, CRC generation/verification on ID fields, unlimited sector interleave capability, automatic retries on all errors, and automatic restore and re-seek on seek error.

The new Model HDC-1001 Hard Disk Controller comes with a CP/M BIOS diskette and a price of \$500.

For more information, contact: Advanced Digital Corp., 12700 B Knott Ave., Garden Grove, CA 92641, (714)891-4004.

allows the M20's 256x512-pixel bit-

mapped display to be divided into up

to 16 independent rectangular win-

Conference Session

Window Graphics on Olivetti's M20

Management of windows may appear difficult to programmers who have not worked with them before. In his 8th Faire talk, "Using Window Graphics in Basic on Olivetti's M20," Richard Mateosian will attempt to show the ease with which window management can be accomplished.

Mateosian will discuss the Olivetti M20 Personal Computer which uses a version of Microsoft Basic 5.2 that

dows. Mateosian will share examples from his own desk assistance program which is written in Basic on the M20. The program uses separate windows for simultaneous time, calendar and appointment displays, a desk calculator, telephone directory, and a variety of utility functions.

Gossip . . . (continued from page 22) concerned with the bottom line of their balance sheet and decreasingly concerned with quality and service to their customers, we are delighted to encounter the likes of Mssr. Frank. He exhibits consistent loyalty to his friends, his customers and his industry, and it is well-reflected in the

quality and ethics of his business dealings.

dbase II IS DE BASE TO SEE

We have recently been perimenting with Ashton-Tate's "dbase II" (yes, it's lower-case) database system. For a microcomputer, it is a massive, robust DBMS certainly earning its "system" classification.

It now includes a very handy screen formatting program called "zip" that works along the same lines as the "what you see is what you get" CRT-oriented text editors.

Though it is certainly nontrivial to learn - as would be any system of its power and generality - we have, so far, found it to be significantly easier to use and faster in execution than several other database systems we have examined. Also - if you tried it some time ago - there have been significant enhancements over earlier releases, including better documentation, and access to multiple files.

FOR FORTH FANATICS

Shortly before press time, we received two Forth compilers for the 8086/8088 family - one from Laboratory Microsystems (8086 Forth), and one from Forth, Inc. (Forth, Level II). Both are well documented.

The 8086 Forth includes a "Towers of Hanoi" program that beautifully demonstrates some of the language's more impressive capabilities. demo executes quickly, and consists of less than six screens of reasonably sparse code.

Forth - Level II is a comprehensive, stand-alone system for the IBM PC. It runs outside of the PC's normal operating system, among other things, allowing it to increase execution speed under some circumstances.

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