

SILICON GULCH GAZETTE

---FREE---

ALL OF THE NEWS ABOUT THE FIRST WEST COAST COMPUTER FAIRE

Volume 0, Number 0

The Computer Faire, Box 1579, Palo Alto CA 94302

February 14, 1977

IN THE NEXT ISSUE

Lots more interesting microprocessor and home computer tidbits will be included in the next issue of the *Silicon Gulch Gazette*, if all goes well, than we were able to rush into this issue. We have the information; we just didn't have the time to write it up and typeset it for this first issue.

If you didn't receive this issue by mail, and wish to get the next issue - for free, of course -- drop us a note with your name and address, saying, "Send me the *Gazette*."

INFORMATION ABOUT SPEAKERS

Around March 1st, we will begin to know who will be speaking in the conference sections and what their topics will be. We have about 50 "official commitments," right now, and another 30-40 unofficial verbal commitments or notes from people saying they are going to submit a paper or give a talk. However, until we actually receive the papers or abstracts, we won't really know the line-up or speakers and topics. Since March 1st is the deadline for our receipt of such documents; once we pass March 1st, we will be able to lay out the conference activities of the Computer Faire. We will publish all available details, as soon as we know them.

UPDATED INFORMATION ABOUT COMMERCIAL EXHIBITORS

Each following issue of the *Gazette* will carry a new, updated listing of the firmly (i.e., financially) committed commercial exhibitors. Since it's all in the computer, it's super-quick for us to dump a new listing.

A LIST OF RETAIL COMPUTER OUTLETS

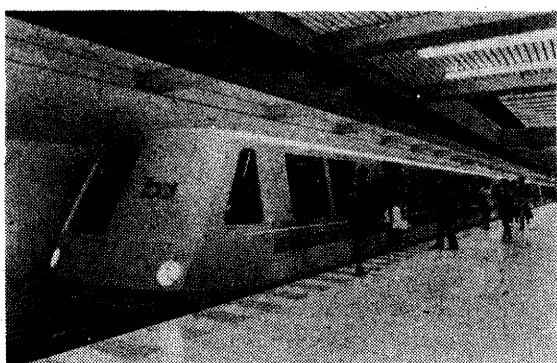
We have been compiling and checking a list of 250-300 known and suspected computer stores and retailers. We will publishing that in the second or third issue of the *Gazette*. We'll ZIP-sort it for easy geographical access.

SILICON VALLEY GOSSIP & RUMORS

One of the more entertaining editorial pastimes is writing a technological gossip column. One of the advantages of residing on the San Francisco Peninsula and having a wide range of contacts with computer phreagues and hobbyists working in the San Francisco Bay Area industry is that "proprietary" information . . . isn't. Of course, sometimes, it also isn't true, but it is entertaining. We will never publish information given us by someone who requests that it be kept confidential, however elektronickers seem to be inveterate gossips . . . includin' us.

STATE, REGIONAL, AND LOCAL MAPS

In the final issue of the *Gazette* preceding the Faire, we will publish maps that should be sufficient to guide you to the Civic Auditorium and the four convention hotels, including the St Francis where the



Computer Faire Banquets To Present Realworld and Futureworld Speakers

The First West Coast Computer Faire will sponsor two extraordinary banquets on April 15th and 16th. Each one will have two major speakers on the dais; one realworld speaker and one futureworld speaker.

On Friday, April 15th, the realworld speaker will be John Whitney, a pioneer computer graphics filmmaker of international reputation. He will speak on "Digital Pyrotechnics: The Computer in Visual Art." The futureworld speaker will be the well known science fiction writer and editor, Frederik Pohl, whose subject will be "Robots You Can Make for Fun and Profit." Each will deliver his own world to the listeners.

The realworld/futureworld theme will continue in the Saturday evening banquet, April 16th. Henry Tropp, the Principal Investigator of the Computer History Project of the Smithsonian Institution, will present "The 1940's: The FIRST Personal Computing Era," anecdotes from the early days of computers. For a futureworld speaker that night, banqueters will hear Ted Nelson, known widely as the author of *Computer Lib/Dream Machines*. He will discuss "Those Unforgettable Next Two Years."

The talks, both evenings, will be followed by a question-and-answer session.

Both banquets will be held in the main banquet facilities of the famous St. Francis Hotel on Union Square in San Francisco. Internationally known, the St. Francis is one of the finest hotels in San Francisco. Reservations for the banquets are separate from admission to the Faire. Information about the two events will be available soon, and will be forwarded upon request.



banquets and other non-auditorium activities will take place.

CHARTER GROUP COORDINATORS

It appears that a number of people are gathering together to form charter groups to travel to the Faire. We will continue to publish all available information about each of these groups -- as we have on the back page of this issue.

COMPUTER CLUBS

We have begun creating a database of known and suspected amateur computer clubs. If we manage to get that completed prior to the final issue of the *Gazette*, we will publish it. If you are a club "wheel," please forward some details about the group: club name and address; chairwheel's name, address, and phone(s); newsletter name (if any), and the name, address, and phone(s) of its editor. We currently have a list of 150-200 clubs, but some of the information is incorrect.

NOTED SCIENCE FICTION AUTHOR TO SPEAK DURING COMPUTER FAIRE BANQUET

Frederik Pohl is widely known as a writer and editor of science fiction. He has also been a speaker at scientific meetings sponsored by NASA, the New York Academy of Sciences, the American Astronautical Society, the American Documentation Association, and other groups. Pohl was Session Chairman at both the First and Second General Assemblies of the World Future Society.

At the Computer Faire on Friday, April 15th, Pohl will talk about "Robots You Can Make for Fun and Profit." It will be a multi-faceted look at the future of information-handling machines, featuring the computer as poet, playwright, and person. Pohl is well known as a dynamic speaker and will hold forth on such topics as amplifying everybody's intelligence with pocket terminals, and will ask the question, "Are there robots among us?" He will also discuss the Universal Town Meeting, which he describes as "a computer-based system for providing the feedback and real-time decision-making capabilities of the New England Town Meeting to a population of millions."

As a writer, Frederik Pohl has authored or co-authored over 90 books and contributed to several hundred magazines. He has won four Hugos and is the only person ever to win that top science fiction prize as both a writer and an editor. Kingsley Amis called him "the most consistently able writer that science fiction, in the modern sense, has yet produced." Among his most recent books are *The Early Pohl*, *Man Plus*, and *Gateway*, the last to be published this year.

GAZETTE TO CARRY NAMES OF PEOPLE ORGANIZING TOUR GROUPS & CAR POOLS TO THE COMPUTER FAIRE

People in a number of areas are known or rumored to be organizing tour groups -- to obtain lower-cost air fares -- or car pools, going to the West Coast Computer Faire in San Francisco. These include groups from foreign countries as well as from around the U.S. The *Silicon Gulch Gazette* will carry information about contacting these individuals and groups, as it becomes known to the *Gazette*.

If you are organizing such a group, please forward all available details as soon as possible to: The Computer Faire, Box 1579, Palo Alto, CA 94302, or phone it in to (415) 851-7664.



GAZETTE IS A COMPUTERISTS' TABLOID, NOTE THE ISSUE NUMBERING

Don Knuth once pointed out that the obsolete, manual approach to numbering items was to begin with "1". The computer phreague's approach -- as we all know so well -- is to begin with "0". Thus, this is "Volume 0, Number 0" just as it should be for such a sophisticated publication as the *SILICON GULCH GAZETTE*.

CHARTER GROUPS MAY USE BUSES, CONDUCT SEMINARS IN-TRANSIT

There is an interesting alternative to expensive air travel, for groups planning to attend the West Coast Computer Faire from the western U.S. and Canada -- charter a bus. First of all, it's significantly cheaper. Secondly, even if there are too few people in a given local area to afford such a charter, it may be possible to make up the difference by picking up others along the route. And thirdly, consider the advantages (? . . .!) of being shut up with a group of computer fanatics for a full day or so:

With nominal planning beforehand, a number of invaluable tutorials and seminars might be organized and conducted *in-transit*. These seminars could be 15 minutes to an hour long, separated by one hour "breathers"; could include handouts; and, could use a large artist's easel sketch pad as a "blackboard". All of the larger clubs, and many of the smaller groups have at least several members who are more than competent to conduct such seminars. For that matter, if a charter group includes someone who will be speaking at the Faire, that person could give his presentation during the bus ride. This would be a "test run" for the speaker, and would then allow the other members of the group to attend some other talk that will be taking place in parallel with the speaker's talk at the Faire. For the convenience of the riders not wishing to "attend" every one of the seminars, the talks could be conducted in the one half of the bus with the other half reserved for sleepers, sight-seers, friendly gossipers, -- and spouses who may be less than enchanted with the prospect of a half-day or more of computer seminars. Hmmm. . . wonder if we'd get enough power out of the bus electrical system to run a system?

Another advantage of using a bus charter over flying is that, effectively, you can take an unlimited amount of baggage -- and equipment. *Manufacturers, vendors, and potential exhibitors of homebrew systems*; please take note.

Anyone wishing to be a coordinator for setting up such a charter should contact the Computer Faire *immediately*, so an appropriate notice may be placed in the next issue of the *Gazette*. Call Jim Warren at (415)851-7664, or write to the masthead address.

Anyone who might be *on the route* between the origin-point of an announced charter group and San Francisco, should contact the coordinator of that group and see if a pick-up could be arranged.

See the back page of this issue of the *Gazette* for information about specific groups already being organized or planned.

The following are examples of the bus charter rates, quoted by the San Francisco Greyhound office.

They assume a proposed fare increase that may take effect on April 1st. No bids were requested from other bus charter companies; they should certainly be queried. These quotes were for the smallest and largest size of buses available; were for round trip; were for chartered, express buses; and were fixed rates, regardless of number of passengers.

Seattle	\$1846.60/38 seater	17 hours
	2015.20/43 seater	
Denver	2397.00/38	29 hours
	2776.00/43	
L. A.	877.80/38	9 hours
	992.60/43	
San Diego	1156.10/38	11 hours
	1307.20/43	
Orange	996.60/38	8-1/2
	1120.70/43	

SILICON GULCH GAZETTE

The Computer Faire
Box 1579
Palo Alto CA 94302
(415) 851-7664

Jim C. Warren, Jr.	Chaircreature
Bob Reiling	Operations Manipulator
Catherine Miya	Fastest Draw in the Gulch
Hans McClutchen	wild Game Editor
Luke Q. Brait	Assayer
Flannigan, Brannigan & Shenanigan	Solicitors

COMPUTALKER CONSULTANTS

If you would like to have your phone answered while you are out or let a voice instead of a bell tell you it is ringing, the answer is not "someday!" Computalker Consultants can do that and more with their Model CT-1 Speech Synthesizer. Among the other things you can do with this speech output system is conduct spelling and pronunciation exercises, make it possible for mutes to call in specific instructions in an emergency, and allow the blind computer users to *listen* to their programs.

The CT-1 Speech Synthesizer board is now in production and being delivered. It can synthesize human speech in any language or dialect, sing (poorly), and play music (Plain Jane) after being programmed by specifying the desired acoustic speech structure.

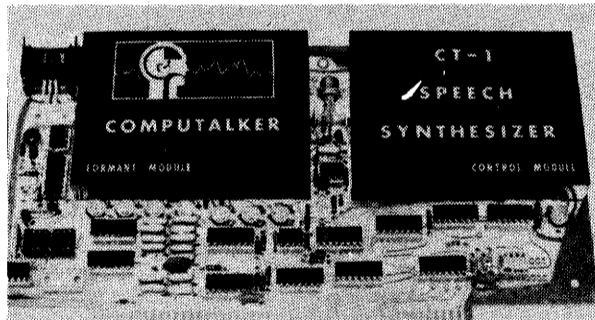
With the purchase of the board come sample data tapes with a demonstration speech. To achieve a voice which sounds like your high school elocution teacher -- well, almost -- takes considerable effort with the board. However help is included with the package. An extensive discussion of how to create the highest quality speech output is provided in the Hardware User's Manual. If you are not a perfectionist, there is a much easier way, but some naturalness and intelligibility will be lost. You can use Computalker's synthesis-by-rule software package coming out early in 1977:

For those who want to hang in there with high quality, natural-sounding speech output, the first step is computer processing of recorded human speech, followed by a fair amount of hand work.

For instance, in the demonstration cassette, the recordings were initially digitalized at 10K samples/second and then analyzed to extract the basic frequencies. Some editing was done by hand, and the amplitude and frequency data converted to stay within a range of 0-255. The above steps took about six hours of time on a DEC PDP-12 set up for speech analysis processing. About twice that time was required to finish the demonstration tape. Alternatively, for a consulting fee of about \$25 per second of speech material, Computalker could supply the basic, rough data from your own tape recording.

Once you have the system down, you can get your computer to talk back to you, tell you what it thinks of you or anyone else, or debug a program vocally. And while you indulge yourself with your computer, it can mention that its time to pick up your spouse at work. All this can be done now

The address of Computalker is P. O. Box 1951 Santa Monica, California 90406.
Phone: (213) 392-5230.

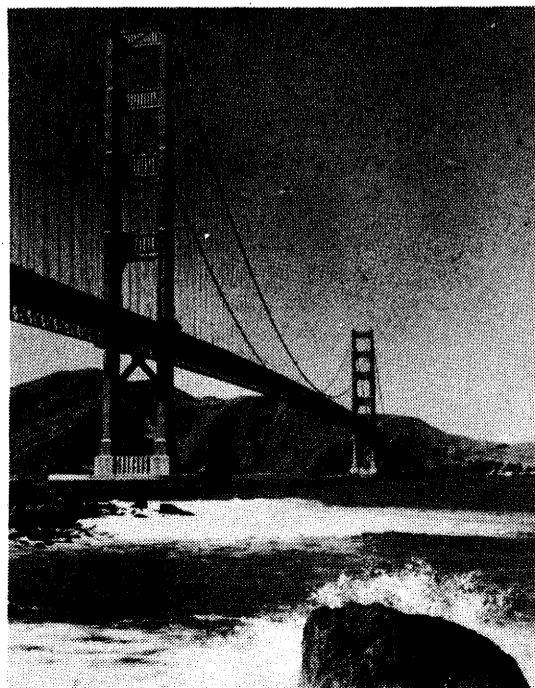


GOOD CONNECTION IN SAN FRANCISCO

If you're heading for San Francisco, you should jot this down: (415)391-2000.

Last year, 168,100-some people dialed it for a daily rundown on local doings.

The voice at the other end provides a two-minute summary of special events, cultural happenings, sports highlights, and sightseeing tips -- 'round-the-clock.



Computer Film-making & Graphics Pioneer to "Show & Tell" at Computer Faire Banquet

John Whitney -- an internationally recognized pioneer and leader in experimentation and research concerning computer graphics and film-making -- will be one of the two speakers at the kick-off banquet for the West Coast Computer Faire. The banquet will be held Friday evening, April 15th, at the St. Francis Hotel in San Francisco.

Mr. Whitney's presentation, "Digital Pyrotechnics: The Computer in Visual Art," will present both ideas and examples. He will discuss some fascinating ideas and theories he has been developing over the years, relating the well-known principles and theories of music with his own notions of harmony and design in the dynamic visual arts. In discussing these fascinating theories, he will illustrate them with examples from his most recent films -- color, sound cinema that have proven exciting to everyone who has seen them.

Says Whitney, "Harmonic forces give shape to our experience of past and future. This is the dramatic essence of musical experience." Composers have manipulated the harmonic relationships of musical scales more or less intuitively since music has existed. "Evidence is accumulating," Whitney goes on, "to substantiate the need for much further study of harmonic phenomena." His own lines of imaginative investigations led him to believe that the mood and emotion achieved with musical harmony is a direct product of the mathematics of harmonic order and that there are analogous "harmonies" in visual art. Harmony, as well as other musical characteristics, must then be capable of being applied to visual perception. He is therefore exploring harmonics designed for eye instead of ear.

John Whitney's reputation as a pioneer with applications of the computer in visual art was advanced another step with the completion of his film, *Arabesque*, last year. The film has received high honors in the U.S. and abroad. Whitney's 37-year "obsession" with the role of time and movement in visual art led to computer graphics long before that technology was accessible or practical. What for years was only an obscure experimental study is just now evolving into an accepted and recognizable fine art, attracting many young artists. Furthermore, it is now becoming sufficiently inexpensive to be accessible to a growing number of personal computer experimenters.

John Whitney is currently a Lecturer in the UCLA Art Department, where he is also experimenting with computer film-making under a Ford Foundation Grant. In the past, his research has been conducted under grants from the National Endowment for the Arts, Guggenheim Foundation, and IBM.

WHAT'S THE SILICON GULCH GAZETTE?

Why, of course, it's one of those conservative, sophisticated, straight-laced computer periodicals for which the San Francisco Bay Area is so well known. It is comparable to other such internationally-famous, academic research journals as the *Homebrew Computer Club Newsletter*, the *People's Computer Company* newspaper, *Dr. Dobb's Journal of Computer Calisthenics & Orthodontia*, and *On-Line* . . . all of which issue forth from the Bay Area. Its name has been chosen in the tradition of such well-known California organizations as Kentucky Fried Computers (Berkeley), the Computer Shack (San Leandro), Parasitic Engineering (Albany), Morrow's Micro-Stuff (Berkeley), the Electric Brain (Dublin), Micropolis (Northridge), the Barefoot Computer Store (San Luis Rey), Wizard Engineering (San Diego), and that famous computerists' haberdashery -- the Incredible Systems & T-Shirt Company (Menlo Park).

It has been named after the southern end of the San Francisco Peninsula -- known to the less vitriolic as "Silicon Valley"; called, in the olden days, the Santa Clara Valley. This area, within an easy commute of San Francisco, has been so named because it is the undisputed center of the semiconductor industry in general, and microprocessor manufacture in particular. It serves as home for such companies as Intel, National, Signetics, Raytheon Semiconductor, Atari, Fairchild, Hewlett-Packard, and on and on. Mythology has it that the Peninsula would float up into the air if all the electronics industries were removed from it.

However, what is the *Gazette*? Well, what it *really* is, is an informational rag for the First West Coast Computer Faire. But, just to make it interesting, we thought we'd throw in anything else we could scrounge up that might be of interest to computer fanatics. Thus, we have asked manufacturers and vendors to forward their propaganda and news releases to us. We are including them on a space-available basis. Hope you like it. We are planning on publishing one or two more issues before the Faire. Send us a note, and we'll be happy to place you on our mailing list. It's all free . . . and, we hope, more informative and useful than merely sending you a leaflet or poster.

YOU CAN SHOW & TELL AT THE COMPUTER FAIRE

You can participate in the Conference portion of the Computer Faire in several ways:

1. You can give a talk.
2. You can exhibit a "homebrewed" personal computer system. (This isn't really a "conference" activity, but it isn't a commercial exhibit, either. Since it's primarily for education and fun, however, it is herewith placed under the "conference" category.)
3. You can participate in a Panel Session.
4. You can Chair a Conference Section and/or Panel Session.

GIVING A TALK

We encourage you to consider presenting a talk in the Computer Faire Conference. Such a talk should be explicitly oriented towards the use of very inexpensive computer systems, rather than being concerned with commercial- or industrial-level computing. Ideally the talk should focus on the uses of computers by individuals for their own personal needs or entertainment, rather than focusing on corporate or industrial uses of small computers. A talk describing a commercial product is of interest providing (1) the product is directly applicable to personal or home computing, and (2) the talk is explicit information rather than being a sales pitch (which, as anyone who has ever sat through one knows, *always* has exactly the opposite of the desired effect on prospective customers). Please see the enclosure entitled "instructions for Proposing an Exhibit of a Homebrewed Personal Computer System" for additional details.

EXHIBITING A HOMEBREWED SYSTEM

We expect that there will be a number of individuals and groups exhibiting their own system. The "system" may be interesting hardware, software, or an integrated hardware-software system. It should not be a commercial product, and should have been designed and built by a single individual, or a small group of hobbyists. It should be owned by an individual, group, or school, rather than by a company or commercial corporation. Incidentally, just like the old country fairs, we plan to offer prizes for the best homecookin'. Please see the enclosed, "Instructions for Proposing an Exhibit of a Homebrewed Personal Computer System" for additional details.

PARTICIPATING IN A PANEL DISCUSSION

There will be several discussion panels taking place in the Computer Faire Conference. These will concern topics which are currently ill-defined such as industry standards, or predictions of the future, or topics about which there exists a controversy such as proprietary software. If you are interested in serving on such a panel, please send us a letter providing the following information:

- a) name, address, work and home phones
- b) the topic you propose to discuss (i.e. a proposed title for the panel session)
- c) a full-text outline of your viewpoint, typed double-spaced, not exceeding one page
- d) a one-paragraph background sketch, illustrating your experience with the topic you wish to discuss
- e) A list of others (including addresses and/or phones) who you feel would also be appropriate to serve on the panel (in the case of "controversy panels," please include some names of individuals holding opinions that significantly differ from your own)

CHAIRING A CONFERENCE SECTION OR PANEL SECTION

The Chairbeing for a Section does much of the work and receives little of the glory. *We can and will furnish significant assistance to the Chairpeople* in the organizational aspects of their responsibilities.

The Chair for a *Conference Section* (composed of several sessions = speakers) has the primary responsibility for defining the topic for that Section, finding the best possible speakers for it, making sure that the speakers get their papers or abstracts in on time, organizing the Section operation, making brief introductory remarks at the beginning of the Section (including introducing the speakers), and directing any questions that may derive from the audience.

The Chair for a *Panel Session* must do all of the above. Additionally, he or she must also: studiously *avoid* taking sides or inserting comments in the panel discussion, have a backlog of provocative questions with which to restart the panel if it lulls into inaction, and—perhaps most important—maintain

UNIVERSITY OF CALIFORNIA OFFERS EE/CS COURSE IN CONJUNCTION WITH COMPUTER FAIRE

The Computer Faire affords an opportunity to examine all of the available systems currently being marketed to users of personal and home computers. In connection with the Faire's Conference Section, "Personal Computers for Education," the University of California Extension Division is offering a special

Formal and informal educational activities using computers costing under \$1000 are explored. Survey and comparisons of very low-cost equipment; uses of unusual peripherals (computer-controlled video, computer speech); computer-aided instruction (CAI) facilities for personal computers (e.g., PILOT) \$100 computers versus programmable calculators, etc. Uses of personal computers and computer kits; educational games and simulations; learning numeration systems and Boolean mathematics; maximizing conceptual learning while minimizing drudgery; science projects and vocational courses; and subtle and overt education in the home, will also be discussed.

Instructor: LEROY FINKEL, M. S., Vice President, Dymax Corp., Menlo Park.

assisted by: DON INMAN, B. A., Instructor of Mathematics, San Lorenzo Valley High School; JIM WARREN, M. A., M. S., computer consultant and editor, *Dr. Dobb's Journal of Computer Calisthenics*; MARVIN WINZENREAD, Ed. D., Associate Professor of Mathematics, California State University, Hayward.

Schedule: There are two options for the Pre-convention seminars:

Pre-sessions, April 12 and 14, Tuesday and Thursday, 7 to 10 p.m., Richardson Hall, University of California Extension Center, 55 Laguna Street, San Francisco (on-campus metered parking is available).

For those who are coming from out-of-state, a pre-session has been arranged on April 15, Civic Auditorium.

Post-session: April 17, Sunday, 3 to 6 p.m., Civic Auditorium.

Credit: Two quarter units in Electrical Engineering and Computer Sciences, optional.

Fee: \$70, includes instructional material and admission to the Computer Faire.

To Enroll: By mail — fill out and return the form provided. By telephone — if you use Bank Americard; call 642-4111 in Berkeley, 861-6833 in San Francisco. If you enroll and then cannot attend, a refund, less \$10 service charge, will be granted if requested in writing prior to April 12.

For information: Write Continuing Education in Sciences and Mathematics, University Extension, University of California, CA 94720; or telephone 642-1061 in Berkeley.

tight but subtle control over both the panel participants and the audience. Such control is necessary to assure that all panel members have an equal opportunity, and to avoid wasting time with irrelevant trivia or side-issues.

In both cases, the Chairbody must maintain control over the audience during question-and-answer periods. Members of the audience should not be allowed to preempt speakers or panel members by making lengthy statements of fact or opinion. The Chair must be strong enough to exercise that type of control.

If you wish to chair a Conference Section or Panel Session, please forward the following information:

- a) name, address, home and work phones
- b) a proposed title for the section or session (one of your own invention, or one already proposed in Faire announcements)
- c) a one-paragraph outline of the expected content and focus
- d) a list of possible participants, if any come to mind (name, address, and any appropriate additional information)

The Computer Faire, Box 1579, Palo Alto CA 94302 Phone: (415) 851-7664, 323-3111

Featured Product

DTC MICRO FILE HAS IT ALL TOGETHER

The DTC Micro File is one of the most impressive turn-key, floppy disc systems currently available. Though designed and marketed as a commercial system for business and industry users — as opposed to being directed to the hobbyist market — it is more than cost-competitive with comparable hobbyist units. And, it's half the price of the floppy-based systems from the semiconductor houses.

WHAT IS MICRO FILE?

Stated technically, it's an 8080A microprocessor system with up to 56K of Random Access Memory, plus 8K reserved (7K used) of Read Only Memory. Storage exceeding 300,000 bytes is available on each of two flexible discs (the MKIV has four discs). The voice coil positioner for the disc read/write heads allows track access speeds about ten times faster than most floppy disc drives. Two RS232 ports provide communication at speeds from 110 to 9600 baud.

Extremely modular in design, it takes less than an hour for in-plant assembly of a Micro File. This is followed by a week of burn-in and exhaustive testing.

The power supply module has more than ample capacity for 'full-blown' systems. Solid cabinet design presents a rugged unit for heavy duty

The hardware is only part of the story. What makes Micro File complete is the easy-to-use but extremely sophisticated software. First, a whole range of system commands are available that allow file manipulation, creating, copying, transmitting, receiving, renaming, etc. The File Management system takes care of file and disc sector allocation.

Built-in diagnostics and error checking provide system, disk and memory validation.

A powerful text editor is a standard feature. An Automatic Letter Writer is also included that merges names and addresses into a letter to form a personalized document.

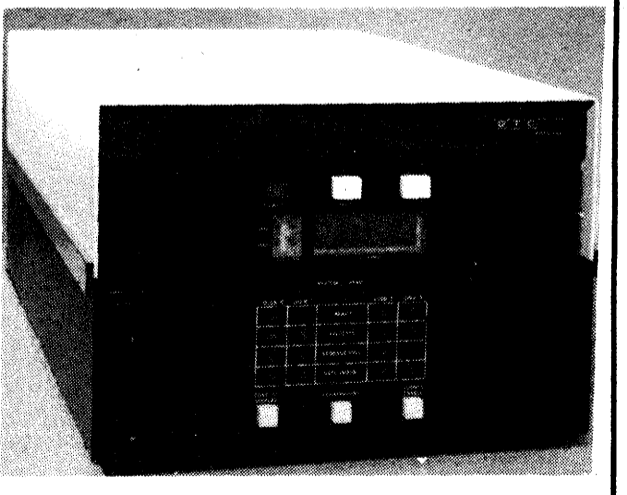
Optional software packages include an 8080 Assembler and a significantly extended BASIC interpreter with full Sequential and Random Access file features. An independent group offers a Fortran Compiler for the system.

In short, Micro File provides full hardware and software capability allowing users to immediately start application programming.

Almost 200 Micro Files are in the field, so it is not an "almost there" product. In fact, DTC is on its seventh release of BASIC, each one offering more features and capability than the last.

DTC has shipped more units abroad than within the U. S. Eight European countries are importing Micro File. Furthermore, DTC recently received orders totalling more than 160 units from Australia.

The Micro File base price is \$4295 which includes 8K of RAM. The minimum system required to run the extended, file-oriented BASIC is only \$5795, including the BASIC software and a total of 24K RAM and 7K ROM. At this price this commercial-quality, fully assembled and burned in unit competes very favorably with the pricing for assembled hobby units with comparable facilities.



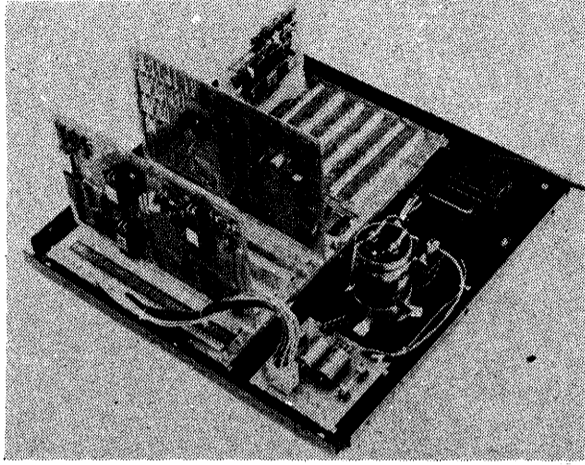
The Computer Faire has obtained the use of a DTC MicroFile for storage and processing of all of the data and records necessary to the efficient operation of a convention of the Faire's magnitude. It is featured, here, as a statement of appreciation to DTC for their active cooperation and assistance, and because it was the only low-cost unit that was available in January, 1977, — as a well-integrated hardware and software system, including a file-oriented BASIC — that the Computer Faire operations group felt had the reliability and ease-of-use necessary for Faire data.

Watch Dr. Dobb's Journal of Computer Calisthenics & Orthodontia, sometime after April, for an evaluation of the MicroFile's joys and sorrows.

M6800 Based Low Cost Microcomputer System Kit

Southwest Technical's SWTPC Computer System kit is based on the Motorola M6800 family of parts. The low \$395.00 price includes all components, boards, hardware and documentation necessary to build a computer system which includes a ROM-stored mini-operating system, 4096 words of RAM memory, RS-232/TTY serial interface, power supply, chassis and cover. The system is expandable to 16,384 words of RAM memory with up to eight serial or parallel interfaces making it ideal for both stand alone and prototyping applications. For more information ask for the 6800 Computer System brochure.

Southwest Technical is at 219 W. Rhapsody, San Antonio, Texas 78216. Phone: (512) 344-0241



The February 1977 issue of the MUMPS IMPLEMENTATIONS & APPLICATION SOFTWARE

The MUMPS User's Group (MUG) has issued a new list of MUMPS vendors. This list names 24 vendors of MUMPS implementations and applications. MUMPS implementations have been made for a large variety of minicomputers, including DEC's PDP-11 series and Data General's NOVA and ECLIPSE lines. Applications are primarily medical, but many uses of MUMPS occur in nonmedical areas such as banking and shipping.

The February 1977 issue of the MUMPS News will be a special documents and vendor's issue, in which the many documents available on MUMPS and existing MUMPS systems and services will be described. A free copy may be obtained from the MUMPS Users Group, 700 South Euclid Avenue, St. Louis MO 63110.

Advanced Medical Systems Corporation, 130 East 59th Street, New York NY 10022. Alexander Bass; (212) 486-2730. (Appl)

Ames Medical Record Systems Division, 21 Properzi Way, Somerville MA 02143. Tom Barnes, Bill Lawler; (800)225-1138 X144. (Appl)

Artronix, Inc., 1314 Hanley Industrial Court, St. Louis MO 63144. Arne Roestel and Don Overton; (314) 968-4740. (Implem & Appl)

Automated Concepts, Inc., 386 Park Avenue, South, New York NY 10016. Stanley M. Rose; (212) 725-4540. (Appl)

Automated Medical Evaluation, Inc., 2765 Felton Drive, East Point GA 30344. Dr. Edgar Brady, Bruce Gruber; (404)768-5880. (Appl)

B-D Spear Medical Systems, 123 Second Street, Waltham MA 02154. Fred T. Davidson; (617)890-4800. (Appl)

Burlington Data Processing, 164 College Street, Burlington, VT 05401. Robert Hoehl; (802)658-2664. (Appl)

Computer Services Corporation, 6565 Arlington Blvd., Falls Church VA 22046. John White, Charles Pavey, John Doggett; (617)275-8505. (Appl)

Digital Equipment Corporation, 200 Forest Street, Marlboro, MA 01752. Local DEC sales office. (Implem)

Dimensional Systems, Inc., 31 Hartwell Ave., Lexington MA 02173. Michael Barry; (617)862-2700. (Appl)

Hoskyns, Inc., 75 Rockefeller Plaza, New York NY 10019. James Stewart; (212)541-4740. (Appl)

Interactive Systems and Management, 1500 Cardinal Drive, Little Falls NJ 07424. Alexander J. Phillips; (201) 256-4512. (Appl)

Interactive Systems N.V./S.A., Rue Dautzenberg 27/Dautzenbergstraat 27, 1050 Brussels, Belgium. Robert Rothstein, Martin Levin; (02)649.65.88. (Appl)

Interpretive Data Systems (IDS), 29 Harvard Street, Brookline MA 02146. Phillip T. Ragon, Paul Egerman, Carl Lazarus; (617)566-6800. (Appl & Implem)

LHJ Systems, 130 E. 59th Street, New York NY 10022. Sandra Kee; (212)486-2710. (Appl)

Logic Systems Inc., 4100 Southwest Freeway, Suite 102, Houston TX 77027. D.L. Richardson, Luis Swetlik; (713)621-4051. (Appl)

Maher Terminals, Inc., 40 Journal Square, Jersey City NJ 07306. Roger Nortillo, Ray Venezia; (201)963-2100. (Appl)

Medical Information Technology, Inc. (Meditech), 255 Bent Street, Cambridge MA 02142. Kent Bradford, Jud Pratt, Larry Polimeno, Neil Pappalardo; (617)354-3000. (Appl & Implem)

Paragon Data Systems, 6630 Harwin Drive, Suite 175, Houston, TX 77026. Dale A. Ladtner; (617)664-3401. (Appl)

Philips Medical Systems (C.H.F. Mueller), Rontgenstrasse 22, 2 Hamburg 63, W. Germany. G. Tesche; (040) 28-86-4.

Rapid Medical Services, 6200 N. Hiawatha Avenue, Chicago IL 60646. Leon P. Kass; (312)736-0797. (Appl)

RRC International, Inc., 24 Wade Road, Latham NY 12110. Dr. Allen Belsack, William Hoover; (518)783-9001. (Implem)

Shared Medical Systems Corporation, 650 Park Avenue, King Of Prussia PA 19406. Joe Napkora; (215) 265-7500. (Appl)

TOPACS, Inc., Kasumigaseki Building, No. 2-5, 3-chome, Kasumigaseki, Chiyoda-ku, Tokyo, JAPAN Michiya Togashi; (03)580-2389. (Appl & Implem)

COMPUTER HISTORIAN TO TELL OF "THE OLD DAYS" - THE PERSONALITIES AND MACHINES OF THE FIRST PERSONAL COMPUTING ERA

Professor Henry Tropp was the Principal Investigator for the Computer History Project, jointly sponsored by the Smithsonian Institution and AFIPS - the American Federation of Information Processing Societies. In that capacity he traveled periodically for several years throughout the United States and Europe, interviewing the "oldtimers" of computing. He conducted in-depth, half-day to week-long interviews with most of the pioneers who brought computer technology into existence.

In his Saturday evening banquet talk, "The 1940's: The FIRST Personal Computing Era," Tropp will take his listeners into the times of those pioneers. The early years of computing (generations -1, 0 and 1) covered the period from about 1935 to 1955. Tropp's chronicle of that age will focus on the efforts and determination of certain key individuals. What each of these pioneers did was indeed so individual that one worker in that period said he could look at the design of a new machine and identify its geographic area of birth and, in many cases, the individuals who created it.

The manufacturers of "machines" in those early days were just as individual as the designers and the computers. At one period, there were 75 different makers producing only 98 kinds of machines. Most of them were willing to swap plans and drawings. Individualism and sharing characterized that early environment where few could see the future explosion of the "computer revolution," which still exists today. The audience will learn about some of the early revolutionaries, and are likely to note some interesting comparisons with the current personal computing movement.

Henry S. Tropp is Professor of Mathematics at Humboldt State University in California. He has taught there since 1957, taking several years leave of absence to work on the Computer History Project. He received that university's Outstanding Professor award for 1975-76. Professor Tropp has been a National Science Foundation Faculty Fellow twice and has published extensively.

COMPUTER CLUB NEWSLETTER EDITORS MAY HOLD SPECIAL SEMINAR

The conference activities taking place at the First West Coast Computer Faire quite possibly will include a seminar/working session for editors of club newsletters. John Marshall, the Editor of the *NORTHWEST COMPUTER CLUB NEWSLETTER* (Seattle area), is currently organizing the session.

Topics may include such esoteric topics as electronic newsletters via phone or radio, machine-readable articles, machine-readable text and programs, and user-maintainable mailing-list data-bases. It will more surely include such nuts-and-bolts topics as copy preparation, inexpensive reproduction/printing, article exchange networks, computer-assisted production of newsletters, and home computer mailing list maintenance. The session is expected to present information of explicit value to both large clubs and very small groups.

Those interested in being a part of this session or suggesting topics should contact John Marshall, NCCN, Box 242, Renton WA 98055, or more preferably, call him at (206)226-7775.

EDUCATIONAL SYSTEMS GROUP MEET

15th Annual Convention of Association for Educational Data Systems, April 25-29, 1977, at Green Oaks Inn, Fort Worth, Texas. National Headquarters: 1201 Sixteenth Street, N.W. Washington, D.C. 20036 (202) 833-4100.

COMPUTER FAIRE HEADQUARTERS HOTEL HAS EXOTIC HISTORY

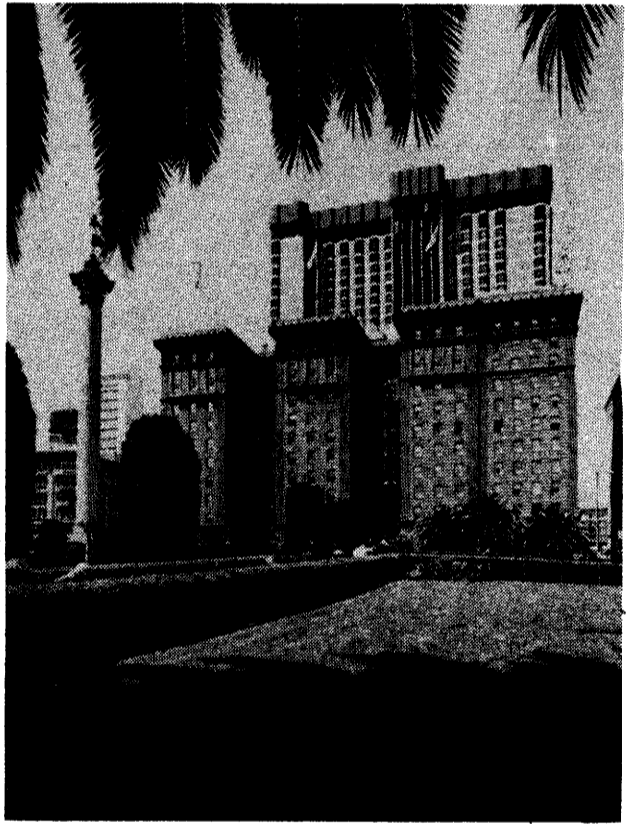
The St. Francis Hotel on Union Square in San Francisco is the headquarters hotel for The First West Coast Computer Faire. Today's St. Francis was built in 1904, survived the earthquake and fire of 1906, and became a distinguished landmark and internationally known hostelry. Its ancestor also had an unusual place in the City's history.

In September of 1849, the Saint Francis opened its doors on Clay and Grant. Its restaurant was a tent of crude canvas thrown over four poles



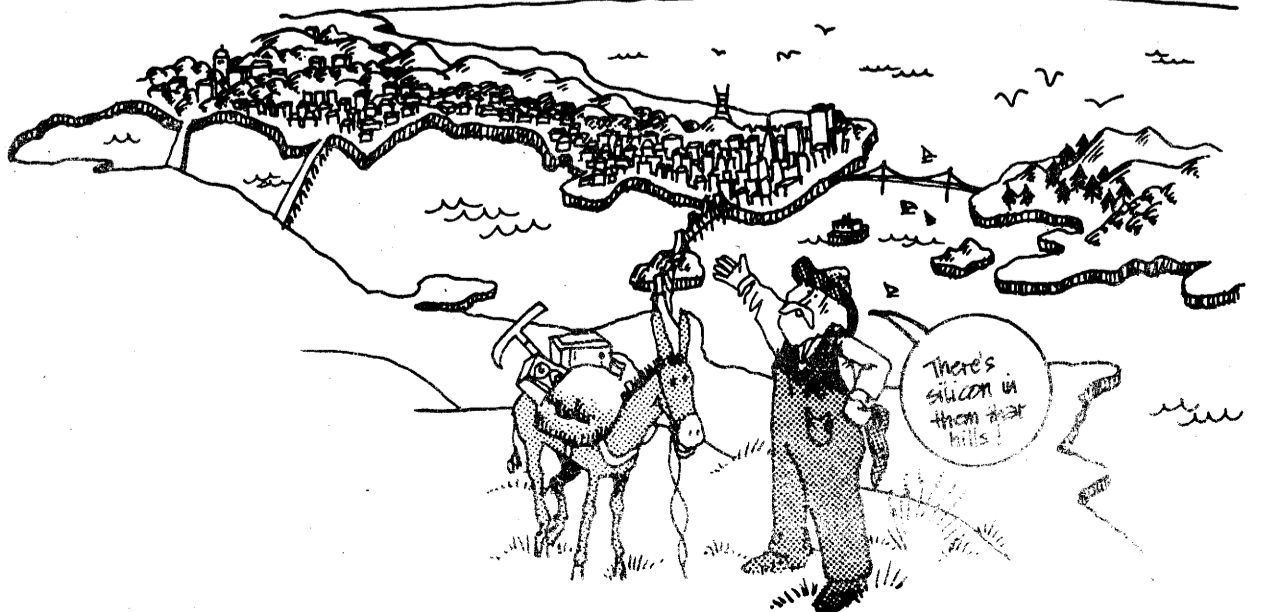
outside the hotel. But it proved to be "a caravansary worthy of standing at the threshold of the Occident and as the representative of California hospitality," its first brochure stated. Furthermore, it was the first hotel to introduce bedsheets to the City, and the first at which "a lady could safely be accommodated."

By 1903, the new St. Francis had been conceived and was to be the ideal for modern hotels. The 12-story building opened in March, 1904, and quickly became the center of the City's society life.



The refurbishing after the 'quake and fire was the work of many craftsmen and artists from around the world.

The St. Francis housing those who attend the Computer Faire combines a long tradition of excellence with an expanded, modern style of service. San Franciscans and visitors alike still meet "under the clock" in the Lobby Court. From there, the choices are many. The glassed-in, outdoor elevators take you to Victor's for dinner 32 floors above the City, or to the Penthouse for lunch, cocktails, or nightly dancing. The Dutch Kitchen and the Grand Ballroom provide even more opportunities for guests to enjoy one of San Francisco's finest hotels.



THE FIRST WEST COAST COMPUTER FAIRE

REQUEST FOR HOTEL RESERVATIONS

April, 1977

MAIL TO:
 WCCF Housing Bureau
 S.F. Convention & Visitors' Bureau
 1390 Market St., Room 260
 San Francisco CA 94102

CANCELLATION:
 If you must cancel your reservation, notify the Housing Bureau up to 15 days prior to the reservation date. Within the last 15 days, notify the hotel, directly.

NOTE:
 Reservations will not be held after 6 p.m. unless a later arrival time has been requested, and the hotel has been notified.
 Expecting late arrival? No Yes

	SINGLE	DOUBLE	SUITE	SUITE	EXTRA PERSON
		(double or twin beds)	(parlor & 1 bedrm)	(parlor & 2 bedrms)	IN A ROOM
St Francis Hotel	\$37-\$55	\$49-\$70	\$95-\$175	\$143-\$253	\$15
The Computer Faire Headquarters Hotel					
San Franciscan	\$24-\$34	\$28-\$38	\$55-\$85		\$5
Townhouse	\$26	\$29	\$58		\$5
Holiday Inn	\$26-\$33	\$33-\$40			\$7

Rates are subject to a 6 1/2% sales tax.

HOTEL

Please indicate accommodations choices:
 TYPE OF ACCOMMODATIONS DESIRED

HOTEL	1st	2nd	3rd	TYPE OF ACCOMMODATIONS DESIRED	number	price	ARRIVAL	DEPARTURE
				Single		\$	(hour/date)	(hour/date)
				Double		\$		
				Twin		\$		
				Suite, 1-Bedrm		\$		
				Suite, 2-Bedrm		\$		

Rooms will be occupied by (Please designate those who will share same rooms. List additional names on separate sheet. Be sure to show arrivals and departures.):

NAME (please print)

CITY & STATE

ARRIVAL (hour/date)

DEPARTURE (hour/date)

FOR BUREAU USE ONLY

NAME _____ TITLE _____ DATE _____

COMPANY _____ ADDRESS _____ PHONE (____) _____

CITY _____ STATE _____ ZIP/POSTAL CODE _____

You will receive confirmations from the Housing Bureau.
 Do not send payment to the Housing Bureau.
 Instructions for deposits, when required, will be shown on your confirmation.

(NOT A) PREREGISTRATION FORM

Well . . . We just ran out of time. Ya see, this was supposed to be our dandy little preregistration form. But, we were shorthanded and had a shorter press deadline. So, please watch for the next exciting (!) issue of the *Silicon Gulch Gazette*. It will include the prereg form.

WHY BOTHER WITH PREREGISTRATION?

By preregistering, you can *save money*. Here are SOME of the details:

At-the-door admission will be \$9.00, including the 6.5% state and county tax. This admission will allow you to attend any of the Faire Conference Sessions you wish. (We expect to have 70-100 such Sessions, ranging from basic tutorials for the novice through exotic esoterica for the expert.) It will also give you free access to all of the commercial exhibits. (We expect about 200 commercial exhibitors to occupy the 265 available booths.) Finally, it will allow you to wander freely about, examining the many expected homebrew exhibits. (We have no idea how many of these there will be, at this time.) The admission is good for all day, both Saturday and Sunday, April 16th and 17th.

Significant savings will be available to those who preregister. Watch for the details in the next issue of the *Gazette*.

More significant savings are available to members of the many co-sponsoring organizations.

Certified students -- secondary school and college or university level -- with current student identification cards, will have an at-the-door admission of \$6.00.

Students who preregister (using the form available in the next issue) can save even more.

Finally, secondary school student GROUPS consisting of four or more students plus one or more supervising teachers -- i.e. field trippers -- will be admitted for \$4.00 per person, **IF THEY PREREGISTER**. Teachers wishing to organize and sponsor such a field grip should write to the Computer Faire for the special School Group Preregistration Form and necessary instructions.

GET YOUR FREE COPY OF SILICON GULCH GAZETTE

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- Plus lots more, just to make it interesting:
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 - Product announcements, equipment descriptions, hardware & software news, and feature articles, etc.
- Details of the *Proceedings* of the Computer Faire
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 - The Computer Faire
 - Box 1579
 - Palo Alto CA 94302
 - (415) 851-7664



THE FIRST WEST COAST COMPUTER FAIRE

A Conference & Exposition on Personal & Home Computers

San Francisco Bay Area - Where It All Started - Has Its First Home Computing Convention

7,000 to 10,000 People

100 Conference Sessions

Publication of *Proceedings* Being Planned

200 Commercial & Homebrew Exhibits

Special Interest Social Centers

Two Banquets with Presentworld & Futureworld Speakers

To Be Held in the San Francisco Civic Auditorium, Northern California's Largest Convention Facility

CONFERENCE SECTIONS ON HOME COMPUTING

Being Planned

- Computer Graphics on Home Computers
 - Computer-Driven & Computer-Assisted Music Systems
 - Speech Synthesis Using Home Computers
 - Computers & Amateur Radio
 - Computer Games: Alphanumeric & Graphic
 - Personal Computers for the Physically Handicapped
 - Computers & Systems for Small Businesses
 - Tutorials for Hardware Novices & Software Novices
- AND MUCH MORE —

CO-SPONSORS INCLUDE AMATEUR, PROFESSIONAL, & EDUCATIONAL GROUPS

- The two largest amateur computer groups:
 - Homebrew Computer Club
 - Southern California Computer Society
- Both Bay Area Chapters of the Association for Computing Machinery
 - San Francisco Peninsula Chapter
 - Golden Gate Chapter

April 15-17, 1977 • San Francisco

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- AND MUCH MORE —

PRESENT-WORLD & FUTURE-WORLD BANQUET SPEAKERS

Fascinating Speakers will Discuss the Past, Present, & Future

- Banquets to be Held in San Francisco's St. Francis Hotel
- Frederik Pohl, Science Fiction Writer, & Lecturer to NASA, NY Academy of Science, etc.
 - Robots You Can Make for Fun & Profit*
- John Whitney, Pioneer Computer Film Maker under grants from Natl Endow., for Arts, Guggenheim, IBM
 - Digital Pyrotechnics: The Computer in Visual Arts*
- Henry Tropp, Smithsonian Institution Researcher in History of Computers, & Mathematician
 - The 1940's: The FIRST Personal Computing Era*
- Ted Nelson, Author, Director of the Xanadu Electronic Literary Network, & Swarthmore College Lecturer
 - Those Unforgettable Next Two Years*

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- Software Design for Personal Computers
- Microprogrammable Microprocessors for Hobbyists
- Optical Scanning for Inexpensive Program & Data Input
- Floppy Disc Systems for Home Computers
- Hardware & Software Standards for Personal Systems
- Seminars for Club Leaders, Editors, Organizers, etc.
- Personal Computers in Education (associated with a University of California short-course)

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- IEEE Computer Society, Santa Clara Valley Chapter
- California Mathematics Council
- Stanford University's Electrical Engineering Department
- University of California's Lawrence Hall of Science
- People's Computer Company, & Community Computer Center

April 15-17, 1977 - San Francisco

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- Send speakers' instructions.
- Send homebrew exhibitors' instructions.
- Send commercial exhibitors' prospectus.
- Send details on the expected Computer Faire *Proceedings*.

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A Conference & Exposition on Personal & Home Computers

I PLAN TO PROPOSE GIVING A TALK

Notification to the Computer Faire

The following information is needed by the Computer Faire organizers, as soon as possible, for use in planning the Conference portion of the Faire.

I have read the "Instructions for Proposing to Give a Talk," and plan to submit:

- a full-text paper for a formal presentation
- an abstract for an informal talk

please print or type

Name _____ Home phone (____) _____

Mailing _____ Work phone (____) _____

address _____

City _____ State _____ Zip or Postal Code _____

Approximate title of the presentation: _____

Very brief outline of the content of the presentation: _____

Time required for the presentation: Half hour One hour

Date by which I expect to forward the paper or abstract in its final form, including all associated materials: _____

- My signature, below, indicates that I have read and understand the following:
1. I will have no opportunity to change or modify the materials I submit, once I mail them to the Computer Faire.
 2. The Editors of the *Proceedings* may edit the materials I submit to meet the Computer Faire publication requirements.
 3. Any necessary approvals and clearances will have been obtained by me, prior to my forwarding the paper or abstract.
 4. I expect to be able to attend the Computer Faire, and plan to personally present the talk that I am proposing.
 5. If my talk is accepted by the Computer Faire, then the paper or abstract that I forward, and all of the accompanying materials may be published and distributed under the direction of the Computer Faire, without compensation to me, and without obtaining further permission from me.

Signature _____ Date _____

Please return this as soon as possible to: The Computer Faire, Box 1579, Palo Alto CA 94302

I PLAN TO PROPOSE EXHIBITING A HOMEBREWED PERSONAL COMPUTER SYSTEM

Notification to the Computer Faire

The following information is needed by the Computer Faire organizers, as soon as possible, for use in planning the homebrew exhibits & contest portion of the Faire.

I have read the "Instructions for Proposing an Exhibit of a Homebrewed Personal Computer System," and would like to exhibit one:

- just for fun
- competing for prizes and/or requesting a Grant-in-Aid to help defray shipping costs

please print or type

Name _____ Home phone (____) _____

Mailing _____ Work phone (____) _____

address _____

City _____ State _____ Zip or Postal Code _____

Description of the system:

- This is strictly a hardware exhibit
- This is strictly a software exhibit
- This is an integrated hardware-software exhibit
- This is *something else!*

Please describe the system (attach another page, if necessary): _____

Space required for exhibition of the system: _____ feet by _____ feet

Is a table needed? yes no

Are chairs needed? yes no If "yes", how many? _____

How much power is needed? _____ watts at _____ volts

Please indicate any additional requirements or eccentricities of the system that might impact planning its exhibit area: _____

Application for a Grant-in-Aid to Assist with Shipping Costs

My signature, below, indicates that I have read and understood the following:

1. My system meets the criteria outlined in the first paragraph of "Instructions for Proposing an Exhibit of a Homebrewed Personal Computer System."
2. I will submit a complete system description and documentation in the specified form, no later than March 1, 1977.
3. Transporting my system to San Francisco for the Computer Faire will cost significantly more than \$20, and I would like the Computer Faire to consider reimbursing me for most of the shipping costs.
4. If the Computer Faire chooses to furnish a Grant-in-Aid to help defray shipping costs, I will furnish a copy of the shipping invoice indicating what costs I incurred.
5. I do not expect to receive payment of such a Grant-in-Aid unless (i) I have received written notification from the Computer Faire indicating that such assistance will be available to me, and (ii) I actually set up and exhibit the system at the Computer Faire, and submit the shipping invoice noted above.
6. If I receive a Grant-in-Aid, then any or all of the system description and documentation that I forward may be published and distributed under the direction of the Computer Faire, without compensation to me, and without obtaining further permission from me.

I wish to apply for a Grant-in-Aid not to exceed \$ _____ or \$20 less than my actual shipping expenses (as given on a shipping invoice), whichever is the lesser amount.

Signature _____ Date _____

Please return this as soon as possible to: The Computer Faire, Box 1579, Palo Alto CA 94302

76-11-12d

INSTRUCTIONS FOR PROPOSING TO GIVE A TALK

We encourage you to propose a talk to be presented by you in the Conference portion of the First West Coast Computer Faire. You may propose to give such a talk in either of two ways:

1. You may offer to make a "formal presentation" by submitting a full-text paper that, at the least, contains all of the information you would expect to present in your talk.
2. You may propose to give an "informal talk" by submitting an abstract containing the major points you would like to present in an off-the-cuff talk.

NOTE: A FORMAL PRESENTATION IS MORE DESIRABLE THAN AN INFORMAL TALK. We expect that there will be eight Conference sessions going on in parallel, throughout the two days of the Conference. This means that anyone attending one of the sessions must also miss seven others. We are planning to publish *Proceedings* of the Conference so that one may read the presentations that he or she is unable to attend. Given this situation, it is obviously highly desirable for you to submit a *complete* article detailing the information you would like to present in a Conference talk. The only reason we are even suggesting the possibility of accepting some informal talks is that we recognize there may be a few people who are excellent speakers and have some very exciting information to present, but who simply won't take the time to prepare a full-text article.

Let Us Know

If you plan to offer a presentation, please complete and return the enclosed form entitled "1 Plan to Propose Giving a Talk" as soon as possible.

Formal Presentation

A full-text paper should be submitted in the "standard format," (detailed later). It should begin with a brief abstract that gives the essentials of the paper, followed by the full text of the article, concluding with a single paragraph giving pertinent aspects of your background/biography, and followed by a list of references and bibliography (if any).

Informal Talk

An abstract containing the major points and essentials of your proposed informal presentation should be submitted in the "standard format," (detailed next). It should be at least 100 to 500 words in length. The more information and details you can provide, the more likely it will be accepted, and the more useful it will be if included in the *Conference Proceedings*. Please include the abstract (beyond the 100-500 words) with a single paragraph providing information about your professional and technical background.

Standard Format

Use this format for submitting both full-text papers, and abstracts of informal talks. The copy you submit will be cut and pasted to form the final, camera-ready master for printing in the *Proceedings*. As such, it should be:

- a) single-spaced on only one side of white paper
- b) cleanly typed using a new, black ribbon
- c) typed in upper and lower case (*not* on a Teletype, or upper-case-only terminal)
- d) typed using a standard type-face (*not* using a script, or dot-matrix type style)

The text you submit will be pasted up in a two-column-per-page format, and photo-reduced to 65% of its original size to fit standard magazine-sized pages. Therefore, length is of minimal concern, however width is crucial and care must be taken with contextual references:

- a) set typewriter margins for 5 1/4" (5.25 inches) line-width (and, please don't exceed them)
- b) phrase all references to other parts of the text in terms of "preceeding", and "following" (*not* "above," or "below," nor by page reference)
- c) refer to diagrams or figures by number or title
- d) (again note:) single-space between lines, and use only one side of the white paper
- e) this original text should not exceed twenty, 11" pages in length (which will reduce to no more than 7 pages in the *Proceedings*)

All diagrams or figures should be submitted in camera-ready form, oversized, and identified:

- a) number and/or title each drawing
 - b) everything must be clear, black copy on white paper (if any guidelines must be used, they must be in very light blue)
 - c) use a separate sheet of white paper for each drawing or diagram
 - d) make drawings over-size—either 5 1/2" wide, or 11" wide (depending on whether the drawing is to take up one column, or two columns, respectively)
 - e) type or, very neatly print all alphanumeric information and symbols on each drawing
- Computer programs and routines may be submitted whenever they are useful to the talk:
- a) they should be clear, black copies on white paper (or white and very light blue paper)
 - b) assembler-level programs should be the "listing pass" that includes addresses and object code as well as original source code
 - c) any program listing should include as extensive documentation and annotation as its translator will allow

Photographs and pictures should be over-sized, unscreened, glossy, black-and-white photos, and should not have anything typed or written on them. An identifying number or label should be written on a separate piece of paper, and taped to the back of each photograph.

Submitting the Paper or Abstract

What to send: Forward the original and two clear copies of the full-text article, or the abstract for an informal talk. Include a self-addressed, stamped envelope if you wish to have photographs and drawings returned. Only the final version should be submitted. **Where to send it:** The Computer Faire, Box 1579, Palo Alto CA 94302. (415) 851-7664.

DEADLINE: Papers and abstracts must arrive no later than March 1, 1977.

Notification regarding acceptance of your proposed presentation will be mailed to you before March 22nd.

76-11-12c

THE FIRST WEST COAST COMPUTER FAIRE

A Conference & Exposition
on

Personal & Home Computers INSTRUCTIONS FOR PROPOSING AN EXHIBIT OF A HOMEBREWED PERSONAL COMPUTER SYSTEM

The First West Coast Computer Faire will include an exhibit of "homebrewed" personal computer systems. These are systems—CPUs, hardware, software, integrated systems, and uniquely personal computer applications systems—that have been designed and built by individuals or small groups of hobbyists. They are not commercial products, and are owned by the individuals who built them (i.e., they are personal property rather than the property of a company or corporation).

Furthermore, just like the old county fairs, prizes will be awarded for the best home cookin'. The prizes will be products of significant value, donated by various of the commercial exhibitors. First, Second, and Third Prizes will be awarded in at least the following areas:

- Best Hardware Design
- Best Software Design
- Best Integrated Hardware-Software System

Depending on the quantity, quality, and variety of such exhibits, we may choose to define more than the three areas given above, and have prizes in each such area (e.g., Best Hardware Design might be divided into Best Discrete-Circuit CPU, Best Micro-processor-Based Computer, and Best Hardware for a Personal Computer Application).

Shipping Costs

We recognize that those who live some distance from San Francisco may be unable to afford the shipping costs that would be charged for transporting such homebrewed systems to the Computer Faire. Therefore, a limited amount of funds are available for Grants-in-Aid to partially defer shipping costs for particularly interesting homebrew systems. These Grants-in-Aid will be available only on a refereed basis; that is, they will be awarded only for use in transporting systems of unusual merit. These Grants-in-Aid are only for the purpose of helping with shipping costs for the system (excluding the human operator, if any), and will be disbursed to the grantees only after the system is set up in the San Francisco Civic Auditorium.

We will also help those wishing to transport an interesting homebrewed exhibit from some distance to find other assistance. Specifically, we will attempt to put them in touch with a vendor located in their area who is planning to be a commercial exhibitor at the Faire with the possibility in mind that the vendor may be willing to "piggyback" the homebrew exhibit on the shipment of his own products. (We have no idea how successful we will be in this, but we will try to help.) We will also seek other sources of financial aid (e.g., grants from manufacturers interested in seeing the homebrewed exhibits, and generally interested in supporting this activity as a worthwhile venture).

Two Ways to Exhibit: Compete for Prizes, or Only for Fun

There are two ways in which you may exhibit a non-commercial, homebrewed system at the Computer Faire:

1. Complete and forward the enclosed Proposal for Exhibiting a Homebrewed Personal Computer System, indicating your space and power requirements. We will provide space and power to you, provided the space is still available. If you choose to submit your system in this way, you will NOT be eligible for any of the prizes, and you will NOT be eligible for any of the Grants-in-Aid. You will be exhibiting it just for the fun of showing everyone your system.

2. In order to be eligible for prizes and possible assistance with shipping costs, you must propose your exhibit in the following way: complete and return the enclosed Proposal for Exhibiting a Homebrewed Personal Computer System, indicating you wish to exhibit a system and compete for the prizes, and telling us your space and power requirements. Submit complete details of your system, including explicit permission for the Computer Faire to publish them in the *Proceedings* of the Computer Faire, and otherwise place them in the public domain via possible publication elsewhere. In the case of hardware, the "complete details" should include a detailed description of the system and its function; complete, reproducible schematics for the system; and a parts list. Photographs may also be included. In the case of software, the "complete details" should include complete user documentation; details of the internal organization and structure; a complete, annotated code listing (source and object); and a description of the hardware requirements for the system. *This documentation will be considered as part of the system in the judging for awarding of prizes.* See the "Standard Format" instructions given on the reverse side of this sheet, for details concerning preparation of this documentation.

Proposing an Exhibit

Please complete and return the enclosed "1 Plan to Propose Exhibiting a Homebrewed Personal Computer System." This should be forwarded as soon as possible. The system description and documentation may be forwarded at a later date.

Where to send it: The Computer Faire, Box 1579, Palo Alto CA 94302; (415) 851-7664.

DEADLINES: To exhibit a system in the competition for prizes and/or to apply for a Grant-in-Aid, all papers, documentation, reproducible schematics, and program listings must arrive no later than March 1, 1977. Notification regarding acceptance of your proposed exhibit will be mailed to you before March 22nd.

To simply exhibit a system without being eligible to compete for the prizes, your proposal for exhibiting a homebrewed system must arrive no later than April 8, 1977. Notification regarding acceptance will be mailed to you before April 11th.

**Authors of Original Tiny BASIC
Develop New BASIC Interpreter**

Binary System Corp. recently introduced an interpreter program for 8080-based microcomputers. Called BASIC ETC, the new interpreter was co-developed by John Arnold and Dick Whipple of Tyler, Texas, authors of the original Tiny BASIC programming language.

An interpreter, in contrast to a compiler, translates and executes the user's program directly. A compiler generates a machine code program which is subsequently executed independently of the high level source program.

Arnold said they decided on an interpretive translator for convenient editing and quick program development capability.

"Our goal was to develop a variant of BASIC designed specifically for the hobbyist and small business user, keeping in mind that the most important priorities -- from the user's standpoint -- were ease of program development and straight-forward, one-step program execution."

"We feel we've accomplished that goal, and with a memory-efficient program, too," he said.

BASIC ETC uses the lower 8 KB of memory plus at least 1 KB of RAM for scratchpad. Since BASIC ETC is for games and business applications, the less frequently used scientific functions of Dartmouth BASIC are not available.

According to Arnold, BASIC ETC is readily software adapted to the individual's system, and best answer today for the 8080-based microcomputer owner shopping for an easy-to-use high level language."

The BASIC ETC kit, which includes the program -- on either audio cassette tape or paper tape -- and a 32 page, detailed user's manual, sells for \$25.00. The manual sells for \$6.00 separately.

Kits may be ordered from the Micro Store, 634 S. Central Expressway, Richardson, Texas, 75080. The Micro Store is the retail affiliate of Richardson-based Binary Systems, Inc. Orders should include a check or money order for the price of the item. For cassette tape, the purchaser must indicate his choice of either the Kansas City or Suding/Digital Group recording technique.



Features of BASIC ETC are:

- Immediate delivery
- Readily software adapted to user's system
- Resides in only 8 KB of memory
- Supplied on either cassette tape (Kansas City or Suding/Digital Group format), or on paper tape
- Thorough explanatory manual
- Full string capability -- up to 255 characters string variable
- N-dimensional arrays
- Variable precision arithmetic
- Easily handles assembly language routines
- Direct memory and I/O addressing
- 27 error codes
- Both character and line erasure editing
- Subroutine nesting permitted
- 31 commands and statements
- 8 functions plus user defined functions
- Null control: 0 to 25 seconds
- Formatted output statements.

Binary Systems, Inc. is located at 634 S. Central Expressway, Richardson, Texas, 75080. Expressway, Richardson, Texas, 75080. Ask for David Wilson, (214) 231-- 1096.

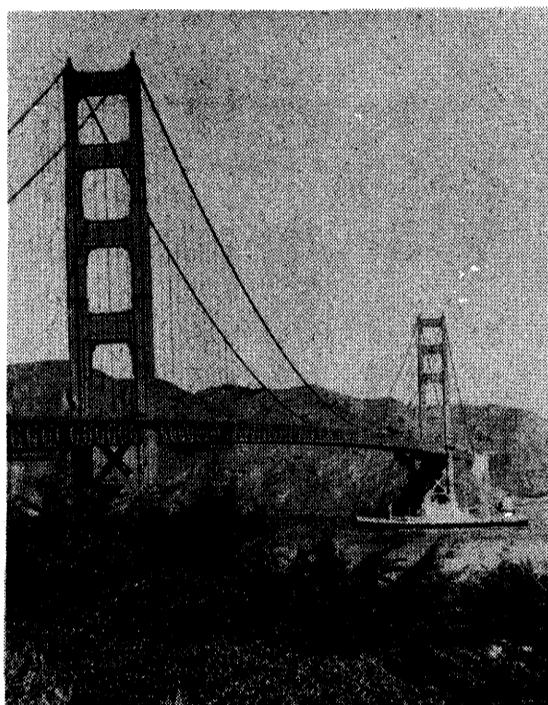


**WHAT YOU AND YOUR FAMILY CAN DO
IN SAN FRANCISCO IN ADDITION TO
ATTENDING THE COMPUTER FAIRE**

The San Francisco Bay area was the birthplace of the microprocessor, so it is fitting that the First West Coast Computer Faire will be held in San Francisco. There are, in addition to the Faire itself, a number of retail computer stores in the area, and just south of San Francisco is Santa Clara County, sometimes referred to as Silicon Valley for its intense semiconductor activity.

While you are in San Francisco for the Faire, there are many other things for you to see and do-- and even more for a friend, spouse, or family who may not want to spend an entire weekend with computers. On the Faire dates, April 15th to 17th, a number of events will be taking place. That weekend is the beginning of Cherry Blossom Festival, which takes place primarily at the Japan Center. It spreads out into the rest of Japantown, which is near downtown. On the 15th, the San Francisco Giants open their home baseball season at Candlestick Park. And for music lovers, the Spring Opera Theatre begins on April 14th at the Curran Theatre.

Shopping in San Francisco is one of the highlights for resident and visitor alike. From the plush Gumps to the inexpensive Cost Plus Imports (a warehouse of imported goods from all over the



world), days could be spent just looking. There are clusters of shops at the Cannery (a converted cannery, in fact) and at Ghirardelli Square, a refurbished old chocolate factory. Union Street, just west of Van Ness Avenue, has blocks of shops with a turn-of-the-century style. For shopping for Italian foods and cookware, North Beach is the place, and next to it is San Francisco's famous Chinatown.

Children of all ages can enjoy the Zoo, which is home to more than 1,000 inhabitants, including rare snow leopards and the white rhinoscerus. Storyland, for the very young children, is next to the Zoo. Everyone can appreciate the Exploratorium, too. Located at the Palace of Fine Arts, it is an activity-oriented center of science, technology, and human perception. Other family treks might include the Maritime Museum, a tour of Alcatraz, or a hike across the Golden Gate Bridge, toll-free.

In 1975, for the first time in survey records, food came in first as the main attraction for visitors coming to San Francisco. Before that, other leading attractions had been the Golden Gate Bridge, the hotels, and the climate. Clearly, though, the dining experiences of the city have come of age. Everything from franchise chains to Iranian restaurants can be found here, including French, Chinese, Japanese, German and Italian foods among others even more exotic. Night life after dinner is just as rich and varied a fare.

There are many tours of and around San Francisco. Grayline conducts several kinds of excursions, as do other travel services. For a good look at the Bay, there are helicopter rides, ferries which cross the Bay, and longer cruises around it, including a dinner cruise. North of the City in Marin County, Mount Tamalpais is a popular destination for hikers and provides a magnificent view of the Bay on a clear day.

Once in San Francisco, you will find many free publications with information about more of the City's events and attractions. A daily check with the San Francisco Convention and Visitors Bureau will keep you up-to-date with what's going on around town.

4K and 8K BASIC (c)

Southwest Technical Products Corp. has just released its 4K and 8K Basic (c) software. Both feature fixed and floating point math with a full 1.0E-99 to 9.999999999E+99 number range. In addition to the line number mode a direct (no line number) mode of execution is provided on most statements to create a calculator-like mode of entry for short programs. Provisions have been made in both packages for saving and loading BASIC programs to and from either cassette or paper tape. A USER function is even provided for jumping to machine language subroutines.

Both packages have been written for the SWTPC 6800 Computer System. The 4K Basic (c) requires a minimum of 8K of memory with 12K recommended. The 4K Basic (c) tape and manual sell for \$4.95 on "Kansas City" cassette tape and \$10.00 on paper tape. The 8K Basic (c) tape and manual sell for \$9.95 on "Kansas City" cassette tape and \$20.00 for paper tape. All prices are postpaid in the US.

Southwest Technical Products Corp is at 219 W. Rhapsody, San Antonio, Texas, 78216.
COMMANDS: LIST RUN NEW SAVE
LOAD PATCH

STATEMENTS: END GOTO* ON...GOTO*
STOP GOSUB*ON...GOSUB*
NEXT INPUT IF...THEN*
PRINT* PATCH*
†DES †PEEK †POKE

FUNCTIONS: ABS INT RND SGN
CHR USER TAB †VAL
†EXTS †LENS †LEFTS †MIDS
†RIGHTS †SIN †COS
†TAN †EXP †LOG †SQR

MATH OPERATORS: - * / + - (exp)

RELATIONAL OPERATORS:
Equal Not Equal
Less Than Greater Than
Less than or Equal
Greater Than or Equal

*Direct Mode Statements
†8K Version only

SWTPC'S Attitude on Software

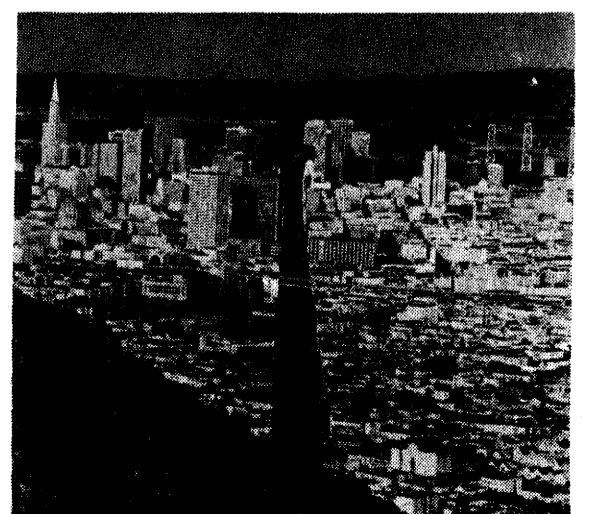
Southwest Technical

Unlike some of our competitors, we at Southwest Technical Products Corp. have realized for some time that you can't profitably sell software to hobbyists. Of course, you can always sell a few copies, but before you know it there will be five to ten copies in existence for every one sold. The best alternative as we see it is to absorb the cost of the software within the selling price of the computer itself and only charge that amount necessary to cover the expense of program duplication and handling; and that's just what we are doing. None of the programs available from SWTPC are proprietary. Where available, you may either purchase a tape and instruction manual from us or copy them from a friend. We don't care.

We encourage program writing and will do our best to offer on tape or print actual listings of outstanding programs submitted to us within issues of our 6800 Computer Newsletter. We will also acknowledge worthy outside sources of 6800 software when brought to our attention.

In addition to the short programs listed in the SWTPC 6800 Computer System Documentation Notebook, newsletters and instruction sets, SWTPC is offering the following programs on "Kansas City" compatible cassette tape:

- 4K Basic tape with manual \$ 4.95
- 8K Basic tape with manual \$ 9.95
- Editor/Assembler tape with manual \$14.95
- Blackjack and Tic-Tac-Toe tape \$ 4.95



**"WEST COAST" COMPUTER FAIRE
SHAPING UP TO BE
"INTERNATIONAL" COMPUTER FAIRE
ATTENDEES EXPECTED FROM
JAPAN, & THE BRITISH ISLES**

January 29, 1977 - To date, the Computer Faire - originally planned as a West Coast/regional convention - has received queries concerning attendance from individuals or groups in Japan, Ireland, and England. These queries have included lengthy phone calls from both Japan and England! At least one, and possible several tour groups appear to be shaping up to come to the Faire from Japan. Those interested in joining such groups might consider contacting the individuals who have contacted the Faire. The queries have been from:

JAPAN

Koji Yada, Computer Center Manager
Electrotechnical Laboratory, Tanashi Branch
5-4-1 Mukodai-Machi, Tanashi-Shi
Tokyo JAPAN
0424(61)2141

M. Akahoshi
Electronic Materials
42-3, Tezukayama-Naka Sumiyoshi-Ku
Osaka 558 JAPAN

Fumio Narazaki, President
Control Space Service Co., Ltd.
103 Sangubashi, Silk Heights
5-52-6 Yoyogi Shibuya-Ku
Tokyo 151 JAPAN

T. Ninoseki, Sr. Sales Representative
Trans World Airlines, Inc.
Room 101 Hibiya Park Bldg.
8-1 Yuraku-cho, 1-chome
Chiyoda-ku, Tokyo JAPAN

Yuki Sano, Int'l Sales & Service Rep.
Trans World Airlines, Inc.
Box 8008, International Airport
San Francisco, CA 94128 USA
(415)877-4120

Paula Tartaglia (tour organizer)
Dempa Publishers
380 Madison Ave.
New York NY 10017 USA
(212)867-0900

IRELAND

Lewis Leith
Computer Department
Trinity College
Dublin 2 IRELAND

ENGLAND

John Burnett
Computer Workshop, Ltd.
174 Ifield Rd.
London SW10 9AG ENGLAND
(01)373-8571

**TRANSPORTATION IN
AND AROUND SAN FRANCISCO**

Getting around San Francisco and the Bay Area involves everything from an antique transportation system to one of the most modern in the country.

The famous San Francisco cable-car network has been around for over a hundred years. It is a nightmare to efficiency experts and transportation economists, but a delight to residents and visitors alike. The cars are open and slow, affording a good look at the city and a slow ride up the steep hills. A crosstown ride can take you from downtown, over Nob Hill, by Chinatown, North Beach, and the Italian section, to Fisherman's Wharf and the Maritime Museum.

The ultra-modern BART system - Bay Area Rapid Transit - operates from south of San Francisco, through the City, and under the Bay in a tube to many East Bay communities. Berkeley and Oakland are on the line, which stretches more than 70 miles. BART is one of the most ambitious public transit projects in the history of this country. The system was conceived of as "fully automated," eventually to be completely operated by computers. This aim has not been achieved yet, but may be someday, after years of debugging.

In between the cable cars and BART, there are gas and electric buses, and trolleys for getting around San Francisco, as well as taxis, which are expensive.

To go north into Marin County, the Golden Gate Bridge transit system has buses to Sausalito, the once-tiny fishing village, and into Sonoma County, which is Wine Country.

South of San Francisco on "the Peninsula" there are two modes of transportation to get you to the hardware havens between Palo Alto and San Jose. Buses run from the City south to San Jose and beyond. The Southern Pacific has commuter service by train to the same communities.

**COMMITTED
COMPUTER FAIRE EXHIBITORS**

As of January 26, 1977

We wanted to include a more up-to-date list of the 100 or so exhibitors, as of the dateline of this issue of the *Gazette*. But, we just ran outa time on the *Gazette's* press deadline, and didn't have the time to update and print out the more up-to-date list (the updating effort was the problem). Sorry 'bout that. The next issue should carry a completely up-to-date list.

6502 PROGRAM EXCHANGE
ACM, BAY AREA
ACTION AUDIO ELECTRONICS
ADVANCED MICROCOMPUTER PRODS
ANDERSON-JACOBSON
APPLE COMPUTERS
BENDER PUBLICATIONS
BOARD BYTERS
BYTE MAGAZINE
CENTER FOR STUDY OF FUTURE
COMPUTALKER CONSULTANTS
COMPUTER MAGAZINE
COMPUTER STORE OF S.F.
CREATIVE COMPUTING
CROMEMCO
DATA TERMINALS&COMMUNICATIONS
DAVIS LABORATORIES
DIGITAL GROUP
ECD CORP.
ERUDITIONIUM
EXTENSYS CORP.
GALAXY SYSTEMS
GIMIX, INC.
GODBOUT ELECTRONICS
HAL COMMUNICATIONS CORP.
HAYDEN BOOK COMPANY, INC.
IMSAI
INTERFACE AGE
INTERSIL, INC.
KILOBAUD MAGAZINE
LOGIC DESIGN, INCORPORATED
MICRO DESIGNS
MICRO-TERM INC.
MICROCOMPUTER ASSOCIATES
MICROPOLIS CORP.
MICROTECH COMPUTER CO.
MICROTRONICS
MINI-MICRO SYSTEMS
MINITERM ASSOC.
NEWMAN COMPUTER EXCHANGE
NORTH STAR COMPUTERS, INC.
NOVAL, INC.
OLIVER AUDIO ENGINEERING
PENINSULA MARKETING SERVICES
PEOPLE'S COMPUTER CO.
PERIPHERAL VISION
PERSCI
PERSONAL COMPUTING
POLYMORPHIC SYSTEMS
PROCESSOR TECHNOLOGY
PROF.& TECH.CONSULTANTS ASSN.
RIGEL FOUR
SCIENTIFIC RESEARCH INSTRUMENT
SOLID STATE MUSIC
SOUTHERN CALIF. COMP. SOCIETY
SOUTHWEST TECHNICAL PRODUCTS
SUNRISE ELECTRONICS
SUNSET TECHNOLOGIES
SZERLIP ENTERPRISES
TARBELL ELECTRONICS
TECHNICAL DESIGN LABS INC.
TECHNICAL SYSTEMS CONSULTANTS
VECTOR GRAPHIC INC.
VIDEO TERMINAL TECHNOLOGY
WESTERN DATA SYSTEMS
WIZARD ENGINEERING
XYBEK

**CONWAY JOINS SIGNETICS
AS EDP PROGRAM MANAGER**

Joseph C. Conway has been appointed EDP Program Manager at Signetics, Sunnyvale, California. The new position, in Signetics' Logic Division, involves marketing responsibility for a broad range of advanced bipolar LSI/microprocessors, including the 8X300, 8X02, system logic and macrologic.

He reports directly to Frank A. Brunot, Product Planning Manager, Microprocessor and LSI.

Conway has extensive experience in product design and application. He was Senior Design Engineer at Sperry Univac for three years before joining Signetics. Earlier he was a Design/Applications Engineer with Digilog Systems and Senior Tech Specialist with Control Data Corporation.

Conway attended Pennsylvania State University where he majored in Electronics Technology. He is a resident of Sunnyvale, California.

**TED NELSON TO BE COMPUTER
FAIRE BANQUET PROGNOSTICATOR**

Ted Nelson has been described as "flamboyant, exciting, creative, and innovative." He is certainly well-known, far and wide, as the author of *Computer Lib/Dream Machines*, a counterculture book based on his conviction that anyone can understand computers if they want to, and should.

For his night at the Faire, Saturday, April 16th, Nelson will speak on "Those Unforgettable Next Two Years." He brings a rare quality to the podium. Ted Nelson not only brainstorms computer revolutions, but he is also implementing a major personal computing application. It is the Xanadu Project, which is working toward a literary network, a "library" like none before it. In this library, one copy only of many publications would be stored. Anyone who belongs to the network can retrieve any publication by telephone, and read it as it shows on a television screen. When desired, the reader can insert notes by splitting the screen - the book would show on one side, note-taking space on the other. The notes can then be stored locally, independent of the original "publication."

Certain problems suggest themselves, such as the adequacy of present copyright laws. In Nelson's realizable fantasy, he wants to protect the artist, publisher, and patron as well. There are a few tentative solutions, and Nelson will discuss them.

Though he calls himself a "one-time, seventh-grade dropout," Ted Nelson now holds a B.A. in philosophy, and an M.A. in sociology. Largely self-taught in computers, Nelson is on the editorial board of *Computer Decisions*, and is listed in *Who's Who in Computers*. He also refers to himself as a "compulsive explainer," which explains why he has taught art, sociology, and computer education. He is now the director of the Xanadu Electronic Literary Network and is a Lecturer at Swarthmore College.

**THE COMPUTER FAIRE IS REALLY
COOL...DRESS ACCORDINGLY**

Since the Computer Faire is in April, participants and their families may get a chance to see how unpredictable Bay Area weather is during that month. San Francisco winters are never very cold - almost never freezing. The summers are never very warm. In ordinary years, it usually rains in winter and is foggy during nights and mornings in summer. Fall is the warmest season, with the most sun. In April, though, it may rain or it may not, may be warm or may be cool.

Those general conditions apply only to San Francisco, and microclimates abound in the Bay Area. While not precisely accurate, there is an adage which says that for every 10 miles inland, the temperature goes up 10 degrees in spring and summer. Some of the exceptions to that rule are close enough to the city to interest-Computer Fairegoers. It may be a comfortable 65 degrees in San Francisco, while a few miles north in Marin County temperatures are in the 80's. Going south on the Peninsula toward Palo Alto and San Jose, the climate is also generally warmer. The East Bay - Berkeley, Oakland, Livermore - is considerably warmer, too.

All of this brings up the question of clothes. In general, the best rule is to dress basically for cool weather. Be prepared for cool weather mornings and evenings. Of course, "warm" and "cool" depend on personal thermostats. To be more specific, April's daily mean maximum is 63 degrees, the daily mean minimum 49 degrees.

Obviously, that is not the kind of weather for shorts or resort-wear. And, there is no need for beach-wear. The ocean and Bay, year round, are too cold, except for the Polar Bear Club.

Light-to-medium weight suits or sport clothes are suitable for men, with an all-weather topcoat for evenings. And, while it has nothing to do with the weather, a number of San Francisco restaurants require jacket and tie.

For women, the most appropriate clothing is suits, pantsuits, or street dresses with a jacket or topcoat. Knits, light wools, and worsteds are better than light cottons or silks. Rain gear might include an umbrella or light raincoat, and for fog gear a headscarf. It is a good idea to bring walking shoes. San Francisco is small in area, hilly, and is a walker's or cable car rider's city.

Furthermore, San Francisco being the very tolerant city that it is, both very formal clothing and very informal clothing - from patched jeans on up - is equally acceptable in all but the most posh environs. In fact, informality and levis will probably be the order of the day at the Computer Faire, and - to a lesser extent - at the banquets. (Rumor has it that Jim Warren, the General Chairman of the Faire, has no intention of modifying his blue jean habit for the Faire nor for the banquets.)

LESS THAN ONE THIRD OF THE RETAIL COMPUTER OUTLETS IN THE COMPUTER FAIR'S DATABASE

This is a listing of *some* of the computer stores known to the Computer Faire. There are considerably more than these, known or suspected. The second or third issue of the *Gazette* will carry a much more complete listing ('cause we will have more time to update our database than we have had for this rush job.).

COMPUTERMASTER SYSTEMS LTD
CANADA M4Y 1L8
COMPUTER SHOP
CANADA T2T 4T9
INTELEX, S.A.
MEXICO 18, D.F.
COMPUTER STORE
BURLINGTON MA 01803
COMPUTER MART OF MASSACHUSETTS
WALTHAM MA 02154
COMPUTER MART OF NEW HAMPSHIRE
NASHUA NH 03060
COMPUTER STORE
WINDSOR LOCKS CT 06096
HOBOKEN COMPUTER WORKS
HOBOKEN NJ 07030
WILLIAM ELECTRONICS SUPPLY
EDISON NJ 08817
COMPUTER MART OF NEW JERSEY
ISELIN NJ 08830
COMPUTER STORE OF NEW YORK
NEW YORK NY 10018
COMPUTER CORNER
WHITE PLAINS NY 10601
COMPUTER STORE, INC.
ALBANY NY 12211
ITHACA AUDIO
ITHACA, NY 14850
PERSONAL COMPUTER CORP.
FRAZIER PA 19355
COMPUTER WORKSHOP, INC.
ROCKVILLE MD 20852
COMPUTER HOBBIES UNLIMITED
RICHMOND VA 23235
COMPUTER SYSTEMCENTER
ATLANTA GA 30305
ATLANTA COMPUTER MART
ATLANTA GA 30340
SUNNY COMPUTER STORES, INC.
CORAL GABLES FL 33146
DOC'S COMPUTER SHOP
NASHVILLE TN 37211
DATA DOMAIN OF LOUISVILLE
LOUISVILLE KY 40220
DATA DOMAIN OF LEXINGTON
LEXINGTON KY 40502
ELS SYSTEMS ENGINEERING
E. CLEVELAND, OH 44112
DATA GROUP, INC.-BYTE SHOP
INDIANAPOLIS IN 46250
DATA DOMAIN OF INDIANAPOLIS
INDIANAPOLIS IN 46268
QUANTUM COMPUTER WORKS
HAMMOND IN 46323
DATA DOMAIN OF W. LAFAYETTE
W. LAFAYETTE IN 47905
COMPUTER SPECIALIST
W. LAFAYETTE IN 47906
GENERAL COMPUTER STORE
TROY, MI 48084
DATA DOMAIN OF SHOREWOOD
SHOREWOOD WI 53211
BYTE SHOP COMPUTER STORE #21
EAGAN MN 55121
MICROPROGRAMMING INC.
BURNSVILLE MN 55337
MONTANA COMPUTER CENTER
BILLINGS MT 59102
LILLIPUTE COMPUTER MART, INC.
SKOKIE IL 60045
DATA DOMAIN OF LOMBARD
LOMBARD IL 60148
QUALITY SECURITY SYSTEMS, INC.
EVERGREEN PARK IL 60642
COMPUTER WORKSHOP OF KS CITY
KANSAS CITY MO 64152
MICRO STORE
RICHARDSON TX 75080
PRINTING & OFFICE SUPPLY CO.
HOUSTON TX 77002
POLARIS COMPUTER SYSTEMS
HOUSTON TX 77006
COMMUNICATION CENTERS
HOUSTON, TX 77036
HOUSTON COMPUTER MART
PASADENA TX 77505
SAUNDERS CO.
BOULDER CO 80301

A POSSIBLE TOUR GROUP FROM THE DEEP SOUTHEAST TO THE COMPUTER FAIRE

Those interested in the possibility of joining a tour group going to the West Coast Computer Faire from Florida or the surrounding states should get in touch with Paul Zimmerman, Department of Mathematics, Florida Atlantic University, Boca Raton, FL 33432. He can be reached by phone at (305)395-2907 or (305)395-5100 ext. 2775. Paul is interested in coordinating the formation of some sort of low cost air or bus charter group to attend the Computer Faire in the middle of April in San Francisco.

WASHINGTON STATERS ORGANIZING TOUR GROUP TO ATTEND COMPUTER FAIRE

Bob Wallace of Seattle's Retail Computer Store and the Northwest Computer Club is the prime mover behind organizing a tour group from the Northwest to attend the First West Coast Computer Faire in San Francisco, April 15th-17th. Such a group should offer significant savings in transportation costs for those attending the Faire from that area of the country.

For further information, contact: Bob Wallace, (206) 524-6359.

COMPUTER ROOM
SALT LAKE CITY UT 84105
COMPUTERS & STUFF
PROVO, UT 84601
COMPLETE ELECTRONIC SUPPLY
PHOENIX AZ 85012
BITS & BYTES COMPUTER SHOP
PHOENIX AZ 85023
BYTE SHOP-WEST
PHOENIX AZ 85029
ARIZONA MICRO SYSTEMS
PHOENIX, AZ 85029
BYTE SHOP-EAST
TEMPE AZ 85282
DESERT DATA COMPUTER STORE
TUCSON AZ 85702
COMPUTER STORE [THE 1ST ONE]
SANTA MONICA CA 90401
SUNSHINE COMPUTER CO.
CARSON CA 90749
BYTE SHOP COMPUTER STORE #24
THOUSAND OAKS CA 91360
COMPUTER POWER & LIGHT CO.
STUDIO CITY CA 91604
DATA BUS
CLAREMONT CA 91711
CYBERDUX
ENCINITAS CA 92024
COMPUTER CENTER
COSTA MESA CA 92627
BITS N BYTES
FULLERTON CA 92631
BYTE SHOP COMPUTER STORE #14
WESTMINSTER CA 92683
COMPUTER EMPORIUM
NEWPORT BEACH CA 92707
PETE'S ELECTRONICS
SANTA BARBARA CA 93110
PROKO ELECTRONICS SHOPPE
SAN LUIS OBISPO CA 93401
BYTE SHOP
MOUNTAIN VIEW, CA 94040
SMALL BUSINESS COMPUTER CO.
SAN BRUNO CA 94066
RECREATIONAL COMPUTER CENTER
SUNNYVALE CA 94087
COMPUTER CENTER, INC.
SAN FRANCISCO CA 94111
COMPUTER SYSTEMS UNLIMITED
HAYWARD CA 94545
COMPUTER SHACK
SAN LEANDRO CA 94577
BYTE SHOP COMPUTER STORE #11
WALNUT CREEK CA 94596
COYOTE COMPUTERS
DAVIS CA 95616
MICROBYTE
CHICO CA 95926
SMALL COMPUTER SYSTEMS
HONOLULU HI 96816
SMALL COMPUTER SYSTEMS
HONOLULU, HI 96816
BYTE SHOP COMPUTER STORE #04
PORTLAND OR 97201
REAL OREGON COMPUTER CO.
EUGENE OR 97401
AMATEUR RADIO SUPPLY CO.
SEATTLE WA 98108
ALMAC/STROUM ELECTRONICS
SEATTLE WA 98108
ABC COMMUNICATIONS
SEATTLE WA 98155

DENVER CHARTER GROUP BEING ORGANIZED TO ATTEND COMPUTER FAIRE

Those who live in Denver (Colorado) area -or who live between Denver and San Francisco -should contact Steve Patterson at Denver's Computer Hut, 1764 Blake, Denver CO 80202, (303)573-4895 or (303)433-5630 (home). Steve will be coordinating the formation of a charter travel group from the Denver area to San Francisco for the Computer Faire. Currently, Steve is thinking of the possibility of using a chartered bus for the trip, rather than a plane. The trip should take around 29 hours, would be much less expensive than air travel, would allow essentially unlimited luggage, and - Steve is thinking of organizing some seminars to be conducted during the trip, right on the bus.

NORTHERN ORANGE COUNTY GROUP ORGANIZING TO ATTEND COMPUTER FAIRE

Those planning to attend the West Coast Computer Faire from the Orange County (California) and LA County areas might wish to get in touch with Gary Covington III, 1714 Larkspur Drive, Placentia, CA 92670, (714)528-4438 (evenings). Gary is organizing a travel group from that area to go to the Computer Faire in San Francisco, April 15-17. This is sure to include a number of members from the North Orange County Computer Club, but will also be open to non-member fellow computer fanatics.

Depending on the number of people interested, the group might ride up in Gary's large motor home, or might charter a bus. . . "and leave the driving to us."

NORTHWEST COMPUTER CLUB MEMBERS WORK WITH AMATEUR RADIO SUPPLY TO DISTRIBUTE 15,000 COMPUTER FAIRE ANNOUNCEMENTS

Members of Seattle's Northwest Computer Club are working, marathon style, inserting announcements of the First West Coast Computer Faire in the February issue of the *Amateur Radio Supply Co. Flyer, Newspaper*. The Amateur Radio Supply Company is distributing about 15,000 copies of the *Newspaper*. It is being sent to every licensed amateur radio operator - as given in the hams' "Call Book" - in Washington, Montana, Alaska, and Idaho.

For anyone who doesn't already know: The Northwest Computer Club address is Box 242, Renton, WA 98055 (a new address). Amateur Radio Supply Company is located at 6213 13th Avenue South, Seattle, WA 98108, (206) 767-3222.

Computer Music Journal



The *Computer Music Journal* is devoted to the development of computer systems which are capable of producing high fidelity music. The following topics are covered: production of natural sounding quality of tone by Fourier series like synthesis (with up to 256 ultra low distortion sine waves from one digital oscillator) or FM synthesis and new methods; design of real time playable instruments with controllers like organ keyboards, pressure sensitive surfaces and new designs; circuit design of microcomputer controlled digital oscillators; schematics; high speed multiplication (16 bit X 16bit → 16 bit product in less than 200nsec); review of hardware components; cost of hardware / quality of sound tradeoffs; homebrew computer music instruments; choral effects; digital filtering; control of analog synthesizers with a small computer; digital generation of any shape of envelope (not just exponential or linear attack, sustain, and decay, but any shape curve); digital reverberation and movement of spacial location with Doppler shifting; high resolution, high speed D/A converters; analysis of acoustic instruments; psychoacoustics; music theory; generation of different musical scales including just, meantone, and equal tempered (with 5, 7, 12, 19, 29, 31, or 43 notes per octave) tuning; and reviews of books about computer music, acoustics of musical instruments, psychoacoustics, music theory, computer design, and electronics. The first issue of the journal is a little over 50 pages in length. The journal will increase in size as the number of subscribers increases. A one year subscription costs \$14 and is published non profit by PCC (1010 Doyle St./Box E, Menlo Park, Ca. 94025) every other month.

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GULCH

GAZETTE

ALL OF THE NEWS ABOUT THE FIRST WEST COAST COMPUTER FAIRE

APRIL 15-17 in SAN FRANCISCO

Volume 0, Number 1

Computer Faire, Box 1579, Palo Alto CA 94302

March, 1977

RUMORS MONGERED HERE

The Santa Clara Valley — Silicon Gulch as it is often called — is the headquarters for the majority of semiconductor manufacturers in the U.S. These include Fairchild, Intel, National, Signetics, AMI, AMD, Raytheon Semiconductor, etc. It is also home of a large number of electronics manufacturers in general, and hobbyist manufacturers in particular.

There is a considerable amount of personnel swapping among these firms. The talented and the discontented motor from company to company over the years — and, not uncommonly, spin off and create their own companies. This corporate commuting combines with the variety of professional organizations and amateur groups such as the anarchistic Homebrew Computer Club to provide a high bandwidth information exchange — a rumor mill that would make Heda Hopper envious, and makes corporate security officers old before their time. The rumors are delightful; some are even true. We are happy to provide the following myths for your entertainment.

Intel is rumored to have a CRT chip in the works that will include the facility for a light pen input. It's supposed to be available in the First Quarter — they better hurry.

H-P is purported to be building a daisy-wheel printer that will use wheels compatible with the Diablo and Qume printers. It's supposed to be around \$4K. The carriage head is rumored to have no motor in it and house only one solenoid (for the hammer).

Someone may be forming the Fastan Loos Computer Company. It will sell hardware, software, firmware, and underware. (Ech! Where'd that one come from?)

The latest mythology from Zilog is particularly fascinating. Supposedly, they have done all they're gonna do on the Z-80 systems, and are now going on to the 800 series. This is to be a language-oriented microprocessor explicitly designed to execute a metacompiler. Finally! Someone may be manufacturing a computer designed for the users instead of for the engineers doing the design. Reportedly, the first user language that will be implemented on the system will be a version of PASCAL.

Microcomputer Associates is supposed to publish a JOLT users' periodical. The first issue is rumored to be due around the second week in March.

A reliable "rumor" is that a company will be exhibiting a bipolar, bit-sliced microcomputer kit at the Computer Faire, priced for hobbyists. It will be built around the 2901, will include the option of a 4K by 64 *writable* control store, and can be expanded to 32 or 36 bits in the width of its data paths. Yes, folks — this means that one will be able to emulate a 370 or PDP-10 in their garage. In fact, one of the papers in the Faire Conference will discuss exactly that.

Fact: We are delighted to announce that the Byte Shop of Palo Alto has seen fit to make discount cards available to all members of the Homebrew Computer Club, offering a 15% discount on all books and magazines in the store. Bob Moody, the store master, has made the offer in recognition that the HCC is the source from which many of his blessings flow.

Marty Hellman, an Associate Professor of EE
please continue on page 2

COMPUTER FAIRE SCHEDULE

Friday, April 15th:

University of California Short Course X402B
"Computers for Education"
pre-conference seminar for registered students
Kick-off Banquet
speakers: Frederik Pohl & John Whitney
St. Francis Hotel
banquet hall opens: 6:30pm (cash bar)
dinner: 7:30pm
speakers: 8:45pm

Move-in Day for exhibitors.

Exhibits will NOT be open to the public on Friday.

NOTE: No Conference Sessions will be scheduled for Friday.

Saturday, April 16th:

Civic Auditorium doors open: 8:30am
Exhibit area opens: 9:00am
Conference Sessions begin: 9:00am
Civic Auditorium, exhibits, and conference sessions close: 6:00pm
Saturday night banquet:
speakers: Professor Henry Tropp and Ted Nelson
St. Francis Hotel
banquet hall opens: 6:30pm (cash bar)
dinner: 7:30pm
speakers: 8:45pm

Sunday, April 17th:

Civic Auditorium doors open: 9:30am
Exhibit area opens: 10:00am
Conference Sessions begin: 10:00am
Civic auditorium, exhibits, and conference sessions close: 6:00pm
6:02pm - Faire organizers and exhibitors collapse

SO NOW YOUR COMPUTER TALKS BACK TO YOU

It's bad enough to make mistakes and have the computer type you an error message, but if D. Lloyd Rice has his way, computers will soon be able to voice their opinions of your endeavors. The ability to synthesize speech from phonemes gives the computer abilities that eventually will become standard capabilities. Rice will tell how in his conference presentation at the Faire.

Immediate practical applications include computer interfaces for the blind and mute, and whenever users wish to keep their visual attention somewhere other than on the computer terminal.

Rice is not concerned merely with the mechanical stringing out of syllables, one after the other, in a typical stereotyped robotic fashion. He will explore the rules that make speech sound natural. The talk will include slide presentation of the phonemic structures.

Mr. Rice, who holds a B.A. in Linguistics from UCLA, is currently a partner of Computalker Consultants in Santa Monica, California, involved with the design of speech synthesis circuitry and related software for home computers.



STANFORD'S AI ROBOT TAKES PICTURE OF VISITOR TAKING PICTURE OF ROBOT.

A CHICKEN IN EVERY POT AND AN IBM 370 IN EVERY GARAGE?

If the hobbyist can afford a micro computer today, then what will they be able to afford next year? Wyland's talk at the Computer Faire argues that an IBM 370 homebrew look-alike can be implemented for less than a kilobuck, and is a practical way to go. The I/O channel controllers, presently satellite computers in the 360/370 structure, could be 8080 based, S-100 bussed satellite computers in Wyland's scheme.

Two advantages cited are the larger memory addressing capability and the wealth of literature and software already available. Since, according to Wyland, the present cost of a 16K board will buy you 256 bytes four years from now, the current microprocessor addressing limit of 64K will be an undesirable constraint in the development of home computers in the near future.

The IBM 370's 24-bit address bus allows direct addressing to 29 megabytes.

The talk will include a description of the relevant details of the IBM architecture from the hobbyist viewpoint. It will be a good opportunity to see what the big bruiser computers do that's different.

Editors Note: A 32-bit microprogrammable microcomputer for hobbyists is expected as one of the exhibits at the Faire. It will be a commercial product, within a consumer's budget, and, will include the option of a writable control store. Wyland's proposal should be easily implementable... in April!

Out-of-Area Visitors:

IF YOU WANT TO STAY IN ANY OF THE FOUR FAIRE HOTELS, MAKE YOUR RESERVATIONS NOW! Hotel space is tight in San Francisco, and the Computer Faire's contract with those hotels says that any rooms not already reserved by Faire participants may be released to the general public within 30 days of the convention. That's just about now.

TRIPPING THE LIGHT FANTASTIC (OR, A FANTASTIC LIGHT TRIP)

Light the lasers and loose the loudspeakers. Ron Pellegrino of *The Real Electric Symphony* will present an informal talk and better still, a demonstration of his art in a conference session at the Computer Faire.

Ron points out that electronic image makers and music makers have dropped in price, paralleling the decline in the cost of computers that has made the personal computer possible. Like computers, lasers and synthesizers are now available off-the-shelf. In his demonstration, he will only use commercially available components.

Pellegrino's system is hybrid, incorporating both digital and analog elements. His set-up includes a real-time performance-oriented synthesizer, the Synthi AKS. It will drive a pair of General Scanning Inc.'s optical scanners. The scanners will be used to modulate a one mW Spectra Physics helium-neon laser to make moving Lissajous figures as the music is generated on the synthesizer.

One of the main points of the demonstration is that this kind of equipment, though exotic, is within the price range of the individual. It no longer requires institutional backing to put on light shows and run electronic music studios.

And even if you can't tell a solenoid from a screwdriver, you can please your ears and amaze your eyes at Pellegrino's cybernetic symphony.

PROPOSED PAPERS PROVIDE PEEK AT POSSIBILITIES

Presentations at the Computer Faire promise to be diverse, and span the gamut from pure computer science to pure fun. Styles of presentation range from scholarly lectures to light shows. There will be something for everybody, and it seems that everybody is doing something with microcomputers.

In looking over the proposals we found that they fell into a few categories, the largest of which was "miscellaneous". Here's a rundown of some of the papers we hope will be presented.

THE RESPONSIBLE COMPUTERIST: SOCIAL IMPLICATIONS AND HUMAN INTERACTION

"A look at how computers (especially small ones) can and are being used to serve society and enhance people's lives" is how one writer describes his intended contribution to the Faire. Another presentation we hope to see covers the all-important human/human interface, which by another name is called "documentation".

Better languages make for happier programmers. At least four different languages are among the proposed papers for this historic meeting. The languages range from pragmatic to the wistful and from the dialects of existing languages to far-out designs that are sure to give the audience something to think about.

A number of other proposals touched on the social implications of personal computers.

EDUCATIONAL APPLICATIONS POPULAR

It is a good guess that a generation that grows up programming will think somewhat differently than have most people in the past. Proposed papers discuss fascinating topics.

"A Classroom Symbol-Communication System for the Non-Verbal Physically Handicapped" describes a system that while very helpful to these students would have been prohibitively expensive and difficult to build just a year or two ago. Tiny BASIC may well be the ideal language for teaching programming in grades K through 8 according to one speaker's offering. Another paper we hope to see, studies the role of the microcomputer in college and universities. More than one proposal deals with a post facto analysis of existing educational installations, and should help prevent some re-inventing of wheels.

PROPOSED DISCUSSIONS OF HARDWARE

The hoped-for hardware papers range from the very general such as "Hardware Design Style, the Vital Element", to the very specific, for example: "An Electro-myographic Switch for Microprocessor

MICROPROGRAMMABLE MICROPROCESSORS MATERIALIZE

Programming microcomputers is not micro-programming. John Birkner of Monolithic Memories, a prominent Silicon Valley manufacturer, will be spelling out the advantages of microprogramming in a conference talk at the Faire.

"The hobbyist", Birkner says, "will be surprised to find that state-of-the-art microprogrammed hardware design is well within his capability."

Where high performance is necessary the wider data paths and larger address space can be an advantage. Construction is facilitated by a building block approach.

On the other hand, very little software is available, with the exception of a few cross-assemblers on time-sharing services. Birkner feels that, for the present, the microprogrammed home computer will be used only by the avowed do-it-yourselfer. However, with the rate of progress the industry is exhibiting, this will soon change.

Birkner's talk will be an open sesame to the many visitors to the Faire who want to know more about the ins and outs of microprogramming.

VAN TASSEL FINDS COMPUTERS RAMPANT IN SCI FI

"The Computer in Science Fiction" is the title of Dennie Van Tassel's presentation at the Faire. Van Tassel, who works at the Computer Center of the University of California at Santa Cruz, finds most computers in science fiction are cast as villains. The villains range from out-and-out evil creatures invented for destructive purposes to sadly misguided mechanical minds, such as HAL in *2001*. The talk spans a wide range of time, from Samuel Butler's *Erewhon* to the latest *Vonnegut*.

The paper that will be published in the *Proceedings* of the Faire will contain a bibliography of science fiction works which feature computers as well as articles about computers in science fiction.

Van Tassel is well known as an author. He has written *Computer, Computer, Computer: The Computer in Fiction and Verse*, as well as many articles delineating the computer's role in the world of imagination.

control". Other papers review existing home computer equipment.

We expect to have a presentation explaining the ins and outs of interfacing Selectric typewriters to microprocessors. The speaker plans to discuss particular problems during a question-and-answer period.

The Fairchild CRT-Terminal-on-a-Chip is the subject of a proposed half-hour presentation.

Submissions to the Faire tackle the knotty problems and controversial aspects of standards for the S-100 bus. Proposals for buses with from 44 to 120 lines are the topics of other talks. At least one intended presentation will try to tie down the exact timings and signal relationships on the present S-100 bus (or is it a fleet of buses?)

Discs are "in" and it seems that everyone has one or is about to get one. The proposed talk on "A Low Cost Floppy Disk and Operating System" should be popular.

LEGAL PROBLEMS, DISTRIBUTORS PROBLEMS, PROGRAMMING PROBLEMS, & MUCH MORE

We have on hand some proposals for papers on the legal problems personal computer buffs encounter. They sound fascinating. One discusses your legal rights under warranties. Another examines the impact of existing and newly-enacted Federal and State legislation. This would be of special interest to the many hobbyists who have started high-technology cottage industries.

The role of the distributors and how to deal with them will interest the same group, and forms the topic of yet another proposed paper.

The paper, "Personal Computing and Communications", proposes to examine home information retrieval, entertainment programming retrieval, and two-way communications using personal computers.

Structured programming rears its much-touted head in company with another popular topic: speech synthesis. How the two work together is the planned subject of one talk at the Faire.

Other possible papers will cover Television Broadcast Automation, presentation of the tax implications of the home computer, (one day too late), how to program floating point calculations, and a host of others as varied as these.

A potentially explosive panel discussion of user complaints and praise for particular products (with the representatives of the companies in attendance) is planned to be a high point of the West Coast Computer Faire. (Our motto: speak softly and carry a big power supply.)

The world of microprocessing is proving to be just as large as the world of large scale computing, and all facets will be shining at the Faire.

PUTTING THE MICRO ON THE COUCH: PSYCHOLOGY AND THE COMPUTER

Doing extensive computer applications in any area forces us to learn much more about the subject to which we are applying the computer. This somewhat unexpected synergy is the topic of Ken Berkum's presentation at the West Coast Computer Faire.

Berkum is a senior at UC Davis specializing in human/computer interaction. He predicts that the personal computer is opening the door to general acceptance of computers by the public, and may even become more a part of our way of life than the TV.

Sometimes the computer is like a parent, Berkum observes, telling us what we've done wrong and scolding us for our errors. At other times it is a humble servant, working at our bidding. Then again, it is a game-loving child. Thus three behavior patterns typical of humans are reflected in the behavior of the computer.

In the other direction, computer concepts such as interrupts and polling often serve as models for describing human activities.

The time has come, says Berkum, to make computers more personal and less scary than they have ever been.

A MARK I MEETING?

During one of the days of the Computer Faire, how about a "Mark I" luncheon for those of us who worked on the Mark I, ENIAC, etc? Or at least those who have been in computers more than 25 years.

John T. Blake, PE
213-465-1380 (office)
213-465-0734 (home)

continued from page 1

at Stanford gave a talk at the January meeting of the local IEEE Computer Society Chapter that should have been noticed in Washington . . . but evidently wasn't. As many IBM system users know, IBM has proposed a data encryption standard for the coding of proprietary information in computer systems. The Feds obediently adopted this standard as the official National Bureau of Standards Encryption Standard. They did this, in spite of the fact that Hellman had told them of the design of a special purpose machine that could break the code in about one day for a cost of about \$5000. At the CS meeting, Hellman described the machine and discussed some possible improvements to it. (Maybe it will eventually prove cheap enough that the general public can afford to break the official NBS coding scheme . . . instead of being available only to well-to-do corporations and government.)

Everyone has heard that Fairchild has a Nova on a chip, haven't they?

We have in hand a copy of a "preliminary information" spec sheet for the Am9511, donated by a friend, from AMD. It specifies an MOS arithmetic processor chip that offers fixed point, floating point, and trigonometric operations. The floating point is 32-bits. The unit can run at 4MHz, and requires +5 and +12 volts. Wonder if we'll see it this year? Rumor sez availability is Second Quarter, and price will be \$90-\$100.

Intel has a 10300A, an 8K dynamic RAM that has never been announced. It has a 500ns full-cycle time, and can be had with a 200ns or 300ns access time.

AED has a floppy disc prototype running, in-house, that can store a megabyte of data. No details as to whether or not it's using double-sided recording. If it is, then that's not really so flashy — since it would merely be a little more than double-sided, double-density recording for a standard floppy.

Tidbits from more distant sources . . . which have at least some taint of truth:

OSI is now shipping MicroSoft's 8K BASIC for the 6502. (MicroSoft is the crowd that actually produced the versions of 8080 BASIC that are so often misnamed "Altair" or "MITS" BASIC.) This 6502 BASIC is reportedly source-compatible with the 8080 8K BASIC, but runs 8-14 times faster. Gee Whizzzzzz.

Watch *Pop'tronics* for some interesting features — such as a voice input device and another voice output unit. Currently, the prototype widgets are hooked to a SOL in Les Solomon's basement playpen. He speaks to it, and it answers. (We just phoned Les and cleared this for release; it's for real.) The article will appear in the May *P.E.* issue. The unit is the Speechlab unit from Heuristics. It costs \$250, and plugs into an S-100 bus . . . at least, it plugs into the SOL. They currently have Lichen Wang's Palo Alto Tiny BASIC modified to include speech input commands. It takes 64 bytes of storage per vocalized word. Les calls his system the SOL-1000. He sez the SOL-9000 will go to Jupiter, but it won't read lips (for you 2001 aficionados).

There's lots more, but we gotta go to press.

SILICON GULCH GAZETTE

The Computer Faire
Box 1579
Palo Alto CA 94302
(415) 851-7664

Jim C. Warren, Jr.	Chaircreature
Bob Reiling	Operations Manipulator
Catherine Miya	Fastest Draw in the Gulch
Hans McClutchen	wild Game Editor
Luke Q. Brait	Assayer
Flannigan, Brannigan & Shenanigan	Solicitors

RASKIN PIPES UP ABOUT ORGANS

In developing a real-time system for the control of pipe organs, an I/O scheme called "parial" or "seralle" was devised that is usable in a wide range of microprocessor application areas where a large number of devices must be controlled at high speed. Jef Raskin will give a talk during the Computer Faire conference.

Raskin claims that his approach is also very cost effective. The same scheme is being used to implement his computer-controlled home which is currently under construction.

According to Raskin, "The main reason for using a microcomputer to control a pipe organ is to give the organist better command of the instrument. A microcomputer can also handle the complex switching necessary in a large organ console much less expensively than the traditional electrical or electro-pneumatic systems."

The limitations imposed by the usual separation of the organ into major divisions can be entirely overcome, so that any manual keyboard can be assigned any rank of pipes.

Raskin, who is a consumer advocate for *Dr. Dobb's Journal*, is also a systems designer for the peninsula firm of Bannister and Crun.

FAMILY HOME FOR THE ADULT RETARDED SEEKS COMPUTER KNOW-HOW

Family Homes for the Adult Retarded, Inc., is a non-profit organization that works with developmentally disabled adults in the San Mateo area. FHAR seeks interested computer people to help establish a computer co-op.

Their aim is to be able to support their work through profits to be made with a computer operation. One possibility is through computer games. They are looking for other ideas as well. Profits are to be divided among the co-op members, with some of the money going back into the co-op itself.

Steve Berlin, the Administrative Assistant at FHAR, asks interested and enthusiastic people to contact him at his office 593-2516, or his home 881-4759.

meet the organizers:
Jim Warren

WHAT'S A CHAIRCREATURE?

In the case of the Computer Faire, it's Jim Warren -- and an extension of the current preoccupation with asexual job titles (after all, chairperson is still sexist, since it ends in "son"). Mostly though, it's just for fun.

Jim was born at an early age. More unusually, he is a person who is living in California who was actually born there -- in Oakland. Before he was old enough to know better, he was taken to Texas, where he was raised, cranked out a couple degrees in mathematics, and taught for about seven years. He escaped in 1964, returning to the San Francisco Bay area.

There, he taught mathematics for another three years or so, including Chairing the Mathematics Department at the College of Notre Dame in Belmont. Then a friend lured him into programming, giving him a classic PDP-8 and a set of manuals to play with. He programmed for Stanford Medical Center for a year or two, then went into computer consulting, which he still does when he has the time. He also taught programming, on and off, at San Jose State, Stanford University, and De Anza College. The more he bootstrapped his way into computers; the more fascinating he found computers to be. Recognizing the chasms of ignorance that surrounded his consultant's expertise, he decided to take some graduate courses in EE and Computer Science. He entered the Computer Engineering program at Stanford; eventually finished a MSEE/CE, there; also completed a Master's in Medical Information Science at the University of California's Medical Center in San Francisco; and is currently in "dissertation mode" in a Ph.D. program in Stanford's Digital Systems Lab. He hopes to return to it and finish it off, after the Computer Faire.

While completing his work at UCSF, he came to know Dennis Allison, who later designed Tiny BASIC through People's Computer Company. In January of 1976, Dennis lured him into editing PCC's new periodical, *Dr. Dobb's Journal of Computer Calisthenics & Orthodontia*. Since then, he has become more and more deeply involved in personal and home computing, bringing him to his current activity as Chair/man/person/creature/body of the Faire. He notes, "Back when DEC first announced their 'super cheap' PDP-8/L for only \$9995, I almost bought one. But, I never got around to owning my own machine until about a year ago. Now, I have three of 'em, including an elderly PDP-8/I. The hell of it is, now, I never have the time to play with them. But, comes the end of the Faire on April 17th...."

WALL STREET JOURNAL HEADLINES HOME COMPUTERS

What the computer hobbyists have been saying all along is beginning to percolate into the minds of big business. The February 4th issue of the *Wall Street Journal* carried a major article concerning personal and home computers.

Sears and Wards are watching closely what happens in our growing hobby reports David Gumpert, a staff reporter for the *Journal*.

In a front page column, one article under the heading "The Computer Moves from the Corporation to Your Living Room", Gumpert provides a wide-ranging survey of the rapidly changing field. This includes quotes from several of the leaders, including Jim Warren, the Chairperson for the Computer Faire, who predicts that, very soon, buyers will have to know neither electronics nor systems programming to use a home computer.

Small computer kits have had entirely unexpected sales. Edward Roberts of MITS predicted the sale of 800 machines in 1975. He reported that he sold over 5000. National Semiconductor never expected to sell between 10,000 and 20,000 kits, as it did last year, reports the *Journal*.

Large scale sales have already attracted some big names in consumer electronics. The article quotes Bill Nugent, of Tandy Corporation's Radio Shack chain, as promising a \$300 to \$400 kit "before the end of the year." And while the *Wall Street Journal* didn't mention it, Heath, the well known kit manufacturer, reportedly has at least one digital computer kit in the works.

The popularity of the field is attested to by the number of magazines devoted to it. The *Journal* article states that one of them, *Byte*, has a circulation of over 73,000.

The article finds that the personal computers are changing people's minds about the nature of computers. One friend of a user is quoted as saying that his home computer is nearly "another member of the house. I don't feel intimidated at all anymore."

A FLEA MARKET AT THE COMPUTER FAIRE?

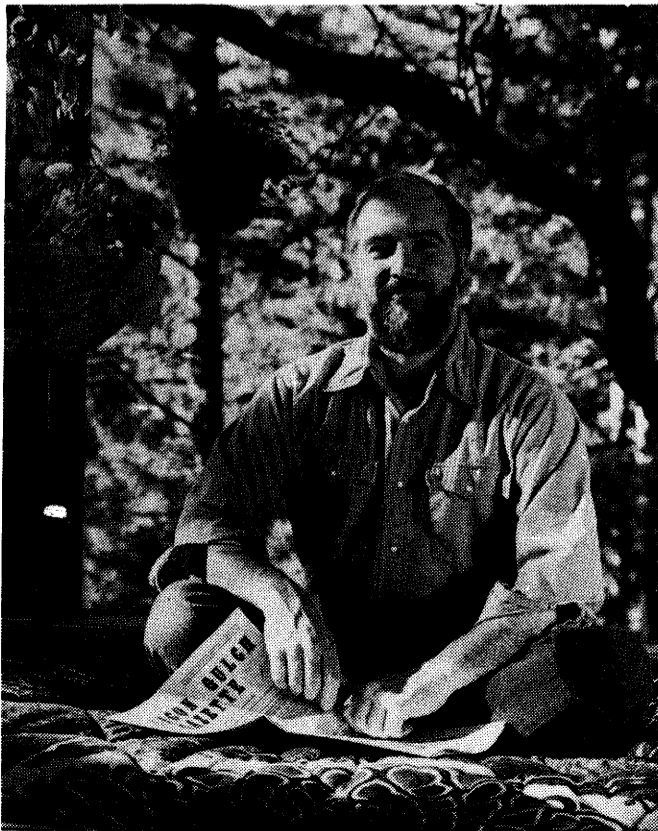
There is a bare bones, vague possibility that the Computer Faire may be able to provide space for a flea market in conjunction with the Faire. This would be limited strictly to individuals selling used equipment of their own, and would be limited to used goodies of an electronic nature. If you would like information about such a flea market (IF it can be set up), write -- don't call -- and tell us your name, mailing address, city, ZIP code, and phone number. Also, state approximately what you would be planning to sell.

MINI & MICRO CONFERENCE

The 1977 Computer Users Conference will be held March 25 at East Texas State University, Commerce, Texas. Session topics are "Large Systems," and "Mini and Micro Systems."

In addition to keynote speeches given by C. Conover, and Harvey Cragon, panel discussions will be held by industrial and educational representatives concerning needs and trends in the respective computer usage areas.

Fees: \$20; students, \$10. For further information, contact Donna Hutcheson, Computer Users Conference Coordinator, East Texas State University, Computer Science Department, Commerce TX 75428; (214) 468-2954.



MULTITASKING MICROS ARE THE WAY TO GO IN EDUCATION SAYS AHLGREN

A New Approach to Microcomputer Systems for Education combines the low cost of the microprocessor with the benefits of small-scale time sharing. This conference talk will be given by Dr. Alice Ahlgren.

Ahlgren, of Cromemco (makers of the TV Dazzler) will discuss the use of Cromemco's new Z-2 computer in an important role: teacher's helper. With the speed advantage of the Z-80 over the 8080 based systems, an eight-user time-sharing system aimed at the educational market becomes more than possible.

The system includes multiple memory banks of up to 64K each, with appropriate hardware to select each user's memory when required. The control program has access to all eight banks.

Proponents of the trend away from the cumbersome lights and switches of the past will be pleased to see that the Z-2 has a blank front panel-- which also keeps students from upsetting the system once it is in operation.

Dr. Ahlgren has a Ph.D. in communications from Stanford.

THE COMPUTER FAIRE -- HOW'D IT HAPPEN?

Why, it happened because its rising sign was Taurus in the east and the moon was two points off the starboard bow, of course. Actually, it happened as a direct result of John Dilks' PC '76 convention in Atlantic City last August, and to a lesser extent, because of the Trenton Computer Festival sponsored by the ACGNJ (Amateur Computer Group of New Jersey), last June. The people who are organizing the Faire became frustrated with the fact that all the really exciting home computing conferences were taking place 3000 miles away. Here's how it happened:

About the middle of last summer, Sol Libes, the President of ACGNJ, dropped by People's Computer Company to gossip with Jim Warren and Bob Albrecht, the editors of the two personal computing periodicals published by PCC. In the course of the meeting, held in PCC's Executive Conference Room-- the local pub -- Sol gave some of the details of the excitement and enthusiasm that surrounded his recently completed Trenton Festival. What he had originally planned to be a small weekend event had turned into a fascinating regional convention with around 1500 attendees, a number of excellent speakers, and 45 exhibitors. The PCC editors were excited by the report, and saddened by having missed it.

At that time, word had also reached the west coast of the impending Personal Computing '76 show that was to be held in Atlantic City in the end of August. The impression given by the advertising was that it was going to be simply a trade show and exhibit of commercial equipment. However, Sol knew much more about it. He said that John Dilks, its organizer, was working quite hard to organize an excellent convention -- with a number of conference sessions as well as an interesting trade exhibit. Dilks was not a professional convention organizer, he was simply another excited and very active computer amateur.

Shortly thereafter, Dilks phoned Jim Warren, and discussed the PC '76 plans, in detail, inviting PCC to become an active participant. It was at that point that PCC decided to send Warren to the PC '76 convention. Atlantic City in August was not an exciting prospect to Jim Warren, however, it was obvious that Dilks' convention was going to be exciting.

Shortly before leaving for Atlantic City, Warren was talking to Bob Reiling, the Editor of the *Homebrew Computer Club Newsletter*. They were bemoaning the fact that all these really exciting conventions were happening so far away. In the course of the conversation, Warren said (more or less) "You know, we ought to have one of these out here. This is where microprocessors all started." Reiling agreed. Within minutes, the idea of the Faire had been born. Warren -- a perennial project phreague -- volunteered to chair the convention. Reiling, who had assisted with organizing several professional conferences in past years, agreed to help with the venture. (Looking back over the 70-90 hour work weeks of the past months, Warren has been heard to comment, "Our agreeing to do this was a naive moment of questionable sanity," but he says it with a smile.)

Their initial plan was to hold the meeting at Stanford, a half hour south of San Francisco, using the classrooms for the conference activities and one of the meeting halls or enclosed sports arenas for the exhibits. Warren had just spent the last several years as a Ph.D. student at Stanford, and still had close ties with the campus. He approached Harry Garland, the Vice Chairman of the Electrical Engineering Department and also a home computing enthusiast, and suggested that the EE Department might be inter-

please continue on page 9

AMATEUR RADIO AND COMPUTER HOBBYIST LINK VIA RTTY REPEATER

Many people interested in computers and communications wonder where a good communications link is that can provide an information interchange between computer hobbyists as well as those just interested in communicating.

The answer is the growing use of the amateur radio teletype repeater WR6ACR. This repeater is utilized for the promotion of radio teletype as a means of communications for anyone who is interested. And lately, the interest has been computers!

The repeater is located on San Pedro Ridge just north of San Rafael. The frequency is 147.93/147.33 MHz. Those wishing to use the repeater should use narrow band FM transmission with a two-tone audio keying shift of 185 Hz. (2125-2290). Since the signal is FM, signals from miles around will get through perfect copy almost all the time.

A simple T.U. (terminal unit) that decodes the two tones and keys the printer loop supply is available at low cost. The unit consists of a phase lock loop tone decoder, a function generator to create the two tones when keyed and associated circuitry for autostart.

Printers are readily available and very low cost. A Teletype Model 15 or 19 is available for less than \$100 and can be used with your computer providing a conversion program is used to convert from ASCII to the Baudot code which is used exclusively on amateur radio.

Should you want more information call: Allan Bowker at (415) 453-1853, San Rafael, or if you live in the Peninsula, call Terry Conboy at (415) 364-3107, Redwood City. In addition, a demonstration system will be operating at the First West Coast Computer Faire according to Alan Bowker. Users of the repeater will be available to answer questions.

SMOKING TO BE ALLOWED IN DESIGNATED AREAS AT THE COMPUTER FAIRE

As a special convenience for those wishing to smoke without having to leave the auditorium, two large rooms have been set aside and explicitly designated as Smoking Areas.

meet the organizers:
Bob Reiling

IT STARTED AT THE COMPUTER CLUB

Bob Reiling is busy these days. He is Operations Manager of the *First West Coast Computer Faire*, active in the local computer club, editor of the *Homebrew Computer Club Newsletter*, and during the few spare moments remaining, updating his home brewed computer.

These activities result from an active, long-term interest in computer utilization and the recent evolution of the personal computer. His recent involvement started simply enough with a visit to a computer club organization meeting, March 5, 1975. On that date, the *Homebrew Computer Club* was started, and Bob became involved in the organization and direction of the club. The club has met regularly since then and developed into the second largest computer hobbyist club in the world.

Next he took on the editorship of the *Homebrew Computer Club Newsletter*, a monthly club newsletter containing information for the computer hobbyist. This too was a simple task, at first, less than 100 people receiving the newsletter. That has changed to over 1600 receiving the newsletter. It is one of the outstanding newsletters dealing with personal and hobby computers.

Why become involved with small computers when enormous computer power is available? Bob is an employee of a major aerospace firm in the San Francisco Bay Area, with a large in-house computer complex. "I felt that I wanted to try some pet ideas without the concern of making every minute count on the big system. The personal computer is the answer. A system now occupies a spot in the living room and is available at any time. A real asset when time is a premium."

background includes electronic instruction, radio disc jockey, field service engineering in the U.S., Europe, South America and Mexico. He has formed major engineering groups supporting activities of NASA during the manned space flight days when preparations were underway to put a man on the moon. Recently, he participated in the Viking Program that successfully put unmanned landers on Mars.

What next? Probably another newsletter about personal computing developments. In the planning stage, at this time, Bob believes new developments will continue at a rapid pace and a newsletter is the ideal way to get information out to industry, consumers, and educators. Look for this after *The First West Coast Computer Faire*, perhaps an announcement at the Faire.

POHL TO DISCUSS "ROBOTS YOU CAN BUILD FOR FUN & PROFIT"

Many listeners at the kick-off banquet of the Computer Faire on Friday, April 15th, will recognize the name of Frederik Pohl. He has had a distinguished career as a writer and editor of science fiction, his most recent books being *The Early Pohl*, *Man Plus*, and, to be published this year, *Gateway*.

Pohl was Session Chairman at both the First and Second General Assemblies of the World Future Society. As a speaker, he has made presentations at meetings of NASA, the New York Academy of Sciences, the American Astronautical Society, the American Documentation Association, and others.

"Robots You Can Make for Fun And Profit" is the title of Pohl's many-faceted look at the future of personal information machines. As he puts it, his night at the podium will feature "the computer as poet, playwright, and person." Pohl is a dynamic speaker, which some Fairegoers may already know, and his look at man's future will range broadly. Is it possible to increase our intelligence with pocket terminals? Are there robots among us? What about the Universal Town Meeting at large. Pohl describes it as "a computer-based system for providing the feedback and real-time decision-making capabilities" of the New England tradition, but responsive to a population of millions.

Frederik Pohl has won four Hugo awards, the top prize in the science fiction world, and is the only person to win it as both writer and editor. He has written or contributed to over 90 books and 200 magazine articles, and is now a science fiction editor at Bantam Books.

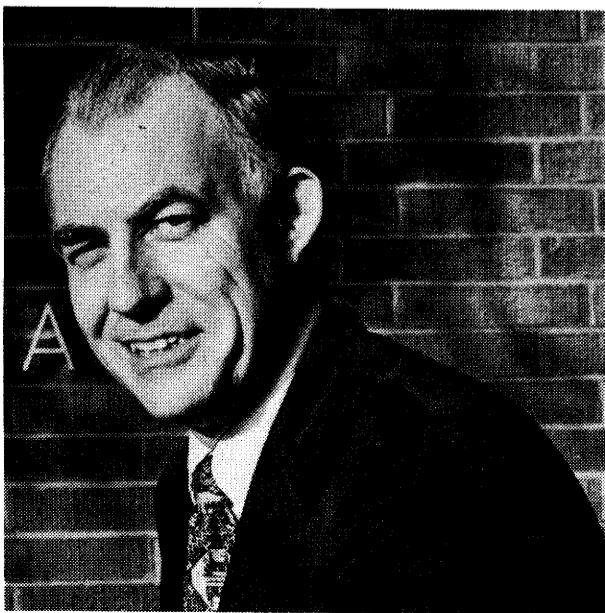
DIGITAL PYROTECHNICS: GRAPHICS PIONEER TO DISCUSS COMPUTER FILM-MAKING & SHOW LATEST WORKS

Color-and-sound films will highlight the talk of John Whitney at the kick-off banquet of the Computer Faire on Friday evening, April 15th. Whitney is internationally known as a pioneer in computer graphics and film-making. He will be one of two speakers for the evening at the St. Francis Hotel.

The talk, "Digital Pyrotechnics: The Computer in Visual Art," will focus on Whitney's ideas and examples from years of exploration into music and visual art. His theories and films have been received with fascination and excitement, especially by those who realize the possibilities open to the personal computer user.

After many years of creative research, Whitney came to believe that harmonic experience is the essence of musical drama. Composers have for centuries combined and recombined harmonic relationships, mostly relying on intuitive methods. What if, Whitney asked himself, the emotional response to musical harmony is a direct product of the mathematics of harmonic order? Are there analogous "harmonies" in visual art? If the answer to both questions is "yes," then harmony and other musical characteristics must be applicable to visual art. Whitney pursued that approach, the very creation of harmonic pattern in visual art. He has since become an innovator in the area of harmonics designed for the eye, taking clues from studies done centuries ago on the ear's harmonics.

Last year, John Whitney's film, *Arabesque*, won high honors in the United States and other countries. It was one result of what he calls an "obsession" with time and movement in visual art. His work has attracted many young artists, especially since computer graphics hardware has become accessible to personal computer experimenters. Whitney is now a Lecturer in the Art Department at UCLA. His current experimentation with computer film-making is supported by the Ford Foundation. In the past, he has received grants from the National Endowment for the Arts, IBM, and the Guggenheim Foundation.



COMPUTER HISTORIAN TO DISCUSS THE FIRST PERSONAL COMPUTING ERA

Professor Henry Tropp has an historical view of the computer with which a few of his banquet audience on April 16th may be somewhat familiar. As principal investigator of the Computer History Project, Tropp traveled the United States and Europe talking for hours or days with the pioneers who first developed computer technology. Like today's personal computer experimenters the "oldtimers" worked a lot on their own and shared their breakthroughs freely with each other.

Sponsored by the Smithsonian Institution and the American Federation of Information Processing Societies, the Computer History Project led to Professor Tropp's subject, "The 1940's: The FIRST Personal Computing Era." Those years of computing history (generations -1, 0, and 1) spanned about the twenty years between 1935 and 1955. Tropp's annals of those years will concentrate on the work of many individuals. The field was so uncrowded at the time — and each worker so unique — that Tropp remembers one of the pioneers who said he could look at the design of a new machine and tell where it came from. In many cases, he could tell who created it.

Toward the end of that era, there were 75 different computer manufacturers making only 98 models. And the manufacturers were just as much individuals as the designers and computers. Most of the computers were one-of-a-kind, coming out of universities and government agencies. Still, the designers were willing to swap plans and drawings, and talk shop openly in that first era of the "computer revolution."

Professor Tropp has been a National Science Foundation Faculty Fellow twice, and has published extensively. He is now Professor of Mathematics at Humboldt State University in Arcata, California, where he received the Outstanding Professor award for 1975-76.

NELSON TO PROGNOSTICATE IN "THOSE NEXT TWO YEARS"

Ted Nelson calls himself a "compulsive explainer." It is a quality which led him to write the well known *Computer Lib/Dream Machine*, to teach art, sociology, and computer education; and to be a speaker at the Computer Faire banquet on Saturday, April 16th. He believes the man on the street has been conned into thinking that computers are beyond comprehension.

Nelson's current work as director of the Xanadu Electronic Literary Network goes a long and practical way toward making computers work for anyone. The vision of Xanadu is a "library" of the future being created now. Nelson is a computer revolutionary, actually implementing a major personal computing application. How does Xanadu work?

The library has one copy only of many publications stored so as to be retrievable. Members of the network may hook to the "library" by phone, and request any publication, reading it as it shows on a television screen. At any point, the viewer may split the screen, with the book on one side and note-taking space on the other. When the "publication" is no longer needed, the notes can be stored locally, independent of the library's copy.

Nelson's talk, "Those Unforgettable Next Two Years," will discuss his Xanadu network as well as a multitude of other "realizable fantasies," sure to occur within the realm of personal computing in the near future.

Ted Nelson, though a "seventh-grade dropout," has a B. A. in philosophy and an M. A. in sociology. He is mostly self-taught in computers, is on the board of editors of *Computer Decisions*, and can be found in *Who's Who in Computers*. Currently he is a Lecturer at Swarthmore College.

SELECTRIC INTERFACE FOR MICROS

Ctr for the Study of the Future

Interfacing a Selectric to your microcomputer? The Center for the Study of the Future, a religious information networking organization, has just released a Selectric interface card for any of the Dura or Ite Selectric terminals with 24-volt solenoids (Dura 1021, 1040, etc.) as well as for the Tycom adaptor. Input is RS-232 seven-bit ASCII at 110 or 134 baud.

The card is available in a kit form without power supplies for only \$325, but is also available with power supplies as well as assembled. Some Dura units are also available as completed systems. Send SASE for brochure: Center for the Study of the Future, 4110 N. E. Alameda, Portland OR 97212.

USE THIS TO OBTAIN THE First West Coast Computer Faire
A REDUCED ADMISSION RATE PREREGISTRATION FORM

Must be received on or before April 11, 1977.

Send payment & completed Preregistration Form to:
The Computer Faire
Box 1579, Palo Alto CA 94302.
Do NOT send cash. Send check, or money order.

Please list me in any directory of computer hobbyists

Preregistration admission \$_____ for 1 person
() \$8 for general preregistration fee
() \$7, member of cosponsor, org. (mailing label attached)
() \$5, student (copy of student ID attached)
For \$4 student field trip rate, use Field Trip Form (p. 7)
() spouse (same fee as for main registrant)
pre-college children (\$5 per student) \$_____ for _____
Friday evening banquet () \$16.95 for dinner \$_____ for _____
() \$5, speakers, only \$_____ for _____
Saturday evening banquet () \$16.95 for dinner \$_____ for _____
() \$5, speakers, only \$_____ for _____

NAME _____
MAILING _____
ADDRESS _____
CITY _____ STATE _____ ZIP/POSTAL CODE _____

THIS QUESTIONNAIRE MUST BE COMPLETED IN ORDER TO TAKE ADVANTAGE OF THE REDUCED ADMISSION RATE

AGE RANGE IF IN SCHOOL SCHOOLING COMPLETED

10 Under 15	38 Grades 1-8	68 High School
20 15-18	39 High School	69 A.A. (Jr. College)
30 19-25	40 Technical School	70 Bachelor's
40 26-35	41 Junior College	71 Master's
50 36-45	42 Undergrad, 4-year	72 Doctorate
60 45-65	43 Graduate School	73 Ph.D.
70 Over 65	44 Pre-Master's	74 M.D.
	45 Pre-Ph.D.	75 D. Ed.
	46 Post Doctorate	76 Other

LEVEL OF INVOLVEMENT AND INTEREST

8 Total novice, newly interested in personal computers
9 Computer hobbyist, only (with or without equipment)
10 Both a computer hobbyist, and a computer professional
11 Currently only a computer professional

Equipment you own or are planning to purchase immediately.

MEMORY CPU TERMINAL

A K bytes RAM	47 8080	77 ASR 33
B K bytes ROM	48 8008	78 KSR 33
C K bytes EPROM	49 Z-80	79 Baudot TTY
D K bytes PROM	50 6800	80 Other TTY
E K bytes CORE	51 6502	81 TVT-2
12 Other:	52 SC/MP	82 Polymorphic VDM
	53 PACE	83 ADM-3
	54 2650	84 SWT CT 1024
	55 F-8	85 PT VDM-1
	56 COSMAC	86 Office Selectric
13 Philips Cassette Tape	57 6100	87 I/O Selectric
14 "Byte Standard"	59 PDP-8	88 Other:
15 Tarbell	60 PDP-11	89 Have hard-copy
16 Other:	61 BIPOLAR	90 Upper-case only
	62 TTL	91 Have soft-copy
	63 Other:	92 Upper-case only
		93 Homebrewed

MASS STORAGE

13 Philips Cassette Tape 58 LSI-11
14 "Byte Standard" 59 PDP-8
15 Tarbell 60 PDP-11
16 Other: 61 BIPOLAR 62 TTL 63 Other:

SOFTWARE & FIRMWARE YOU USE ON YOUR PERSONAL COMPUTER

25 Assembler
26 with macros
27 Editor
28 char.-oriented
29 line-oriented
30 Debbuger
31 BASIC
32 Includes float. pt
33 String processor
34 Other interpreters
35 Other compilers
36 Monitors
37 Operating systems

COMPUTER & ELECTRONICS PUBLICATIONS YOU RECEIVE

94 Byte	137 Dr. Dobbs's Journal
95 Interface Age	138 People's Computer Co.
96 SCCS Interface	139 Creative Computing
97 Personal Computing	140 (IEEE CS) Computer
98 Keyboard	141 Communications of the ACM
99 Minicomputer News	142 Popular Electronics
100 Computerworld	143 Radio-Electronics
101 Computer Design	144 QST
102 Datamation	145 Ham Radio
103 Mini-Micro Systems	146 73
104 Computer Decisions	
105 Others:	

EMPLOYMENT

106 Idle rich, full-time student, or unemployed
107 Work with computers
108 Maxi's 109 Mini's 110 Micro's
111 Management
112 Marketing
113 Programming
114 Engineer
115 Programmer
116 Technician
117 Work in non-computer digital electronics
118 Work in non-digital electronics
119 Radio 120 TV 121 Telecommunications
122 Other:
123 Work in non-electronic technical or scientific area
124 Work in education
125 CS or EE
126 Other Engineering
127 Other Science
131 Work in Medicine or Biomedical area

How long have you considered yourself a computer hobbyist?
132 Am a member of an amateur computer club
133 If so, which club?
134 Located where?
Other hobbies of current interest:
135 Amateur radio ("ham"; not C.B.) Call # _____
136 Other: _____

COMPUTER FAIRE FEES

- ADMISSION -- Admission to the First West Coast Computer Faire includes admission to all official Faire Conference Sessions, and to all commercial & homebrewed exhibits on both Saturday and Sunday, April 16th & 17th, at San Francisco's Civic Auditorium. It does not include admission to the Friday and Saturday evening banquets at the St. Francis Hotel, nor does it include admission to the pre-convention sessions of the University of California course that is associated with the "Personal Computers for Education" Faire Conference Section.
- AT-THE-DOOR ADMISSION -- per person
\$9.00 ANYONE
\$6.00 COLLEGE, UNIVERSITY, AND ELEMENTARY & SECONDARY SCHOOL STUDENTS
This requires presentation of personal student identification at the ticket sales window.
- PREREGISTRATION ADMISSION (Please use the adjacent Preregistration Form) -- per person
\$8.00 ANYONE
\$7.00 MEMBERS OF CO-SPONSORING ORGANIZATIONS (LISTED BELOW)
This requires that a mailing label from a recent mailing of one of the organizations, addressed to the individual who is preregistering, be attached to the Preregistration Form.
HOMEBREW COMPUTER CLUB
SOUTHERN CALIFORNIA COMPUTER SOCIETY
PENINSULA CHAPTER OF THE ASSOCIATION FOR COMPUTING MACHINERY
GOLDEN GATE CHAPTER OF THE ASSOCIATION FOR COMPUTING MACHINERY
SANTA CLARA VALLEY CHAPTER OF THE IEEE COMPUTER SOCIETY
CALIFORNIA MATHEMATICS COUNCIL
PROFESSIONAL AND TECHNICAL CONSULTANTS ASSOCIATION
\$5.00 COLLEGE, UNIVERSITY, AND ELEMENTARY & SECONDARY SCHOOL STUDENTS
This requires that a copy of the student's personal student identification (that includes the student's name) be attached to the Preregistration Form.
\$4.00 MEMBERS OF A SECONDARY SCHOOL, STUDENT FIELD TRIP
Please use the School Field Trip Form to be found on page 7 in this issue of the Gazette. "Members" of such a field trip include the students, the sponsoring teacher(s), and any accompanying parents. A "field trip" must include a teacher or computing advisor, and must include at least four students for each adult. Any exceptions to these rules must be cleared with the Computer Faire in advance.

CHILDREN UNDER 14 MUST BE ACCOMPANIED BY A RESPONSIBLE ADULT AT ALL TIMES.

- BANQUET RESERVATIONS -- In order to assure acceptance of your request for banquet reservations, please place your order as early as possible. BANQUET SEATING SPACE IS LIMITED. As described on pages 4 and 6 in this issue, there will be two Computer Faire banquets, each having two outstanding speakers. Each will have a pre-banquet reception (= cash bar) beginning at 6:30, with dinner served at 7:30.
Friday, April 15th: Poached Filet of Pacific Coast Salmon, \$16.95 (includes tax and gratuity).
Saturday, April 16th: Breast of Capon, \$16.95, (includes tax and gratuity).
Both banquets will be held at the St. Francis Hotel on Union Square in San Francisco.
\$16.95 EACH BANQUET (INCLUDES TAX & GRATUITY)
A limited number of perimeter seats will be available for those wishing to come for the speakers' presentations after the banquet, but preferring not to attend the reception or banquet. This seating is available on a reservation basis.
\$5.00 PERIMETER SEATING FOR SPEAKERS' PRESENTATIONS, ONLY (\$5 for Friday; \$5 for Saturday)
Banquet and seating reservations that are received after the available space is filled will be refunded by return mail.

COMPUTER FAIRE BANQUETS TO PRESENT REALWORLD AND FUTUREWORLD SPEAKERS

In addition to the displays and conferences for computer enthusiasts, the First West Coast Computer Faire will include two banquets with remarkable speakers. The theme of both banquets is explorations into the realworld and futureworld of personal computers.

The banquets, to be held on Friday and



Saturday evenings, April 15th and 16th, will each have two speakers. There will be a question-and-answer period each evening, after the talks.

Looking into the future on Friday the 15th will be Frederik Pohl, the widely acclaimed science fiction writer and editor. He will speak about "Robots You Can Make for Fun and Profit," which will cover a multitude of exciting ideas. With Mr. Pohl that evening will be John Whitney, speaking on "Digital Pyrotechnics: The Computer in Visual Art." Whitney is a pioneer in computer graphics and film-making, and his talk will be accompanied by film examples of his unusual ideas bridging music and visual art.

On Saturday evening, April 16th, investigation of the real and future worlds will continue with two more speakers. Ted Nelson, teacher, researcher, and author of *Computer Lib/Dream Machines* will talk about "Those Unforgettable Next Two Years," including discussion of his Xanadu Project. Xanadu will make an electronic library available to personal computer users with the dial of a phone.

Joining Nelson that night will be Professor Henry Tropp. He was the Principal Investigator of the Computer History Project (jointly sponsored by the Smithsonian Institution and AFIPS), and will

COMPUTER FAIRE HQ & BANQUETS LOCATED IN THE FAMOUS HOTEL ST. FRANCIS

San Franciscans still meet "under the clock" at the Hotel St. Francis, which is headquarters hotel for the First West Coast Computer Faire. It is also the site of both Faire banquets, April 15th and 16th. The tradition of meeting there first began with the great Magneta clock in the lobby when the hotel reopened after the earthquake and fire in 1906. The structure had not been damaged, but the inside was refurbished in the tradition of excellence, from Saxony, Gobelintapestries from France, and hand-carved English furnishings.

Though it had been built in 1904, the name of the fine hostelry goes back to 1849, as the "Saint" Francis. In those Gold Rush days, the hotel was considered one of the finest on the coast, as it is today. The first brochure called the hotel "a caravansary worthy of standing at the threshold of the Occident and as the representative of California hospitality." Story has it that the early hotel was the first in which women could feel safe. Perhaps they could feel clean, too, since the Saint Francis was the first hotel in the City to use bedsheets.

Since then, the new St. Francis has grown into a distinguished landmark and is internationally known. Today's hotel, still a social center of the City, has 1,200 rooms, 500 of which have been reserved for Faire participants. Its tradition of excellence has been maintained into today's modern facilities including the new, 32-story Tower. Outdoor elevators, glassed in for a view of the City, take diners to Victor's, at the top of the St. Francis, for dinner or to the Penthouse for cocktails, lunch, or nightly dancing. For lighter fare, the Dutch Kitchen has sensible prices, and the Grand Ballroom can serve 1,500 guests.

The old and the new St. Francis blend together to continue San Francisco's tradition of gracious hospitality.

speak on "The 1940's: The FIRST Personal Computing Era." Professor Tropp will share many of the stories he obtained in several years of in-depth interviews with the "oldtimers" of computer technology.

The banquets on both nights will be held at the St. Francis Hotel on Union Square in San Francisco. The historic hotel is one of the finest among the City's internationally famous accommodations. Admission to the banquets is separate from admission to the Faire.

SCIENCE WRITER FELLOWSHIP

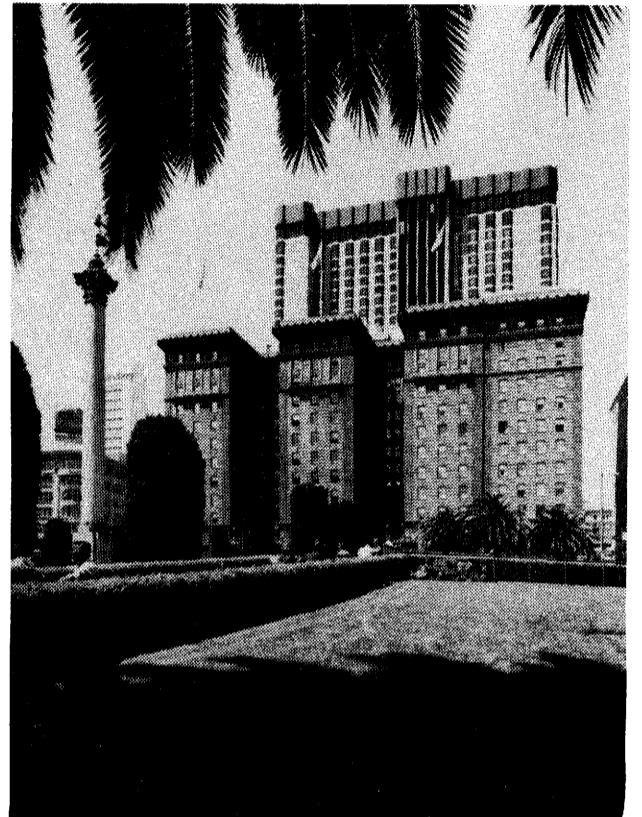
A new fellowship for a science writer is being offered at Stanford University, designed to broaden the base of public understanding of science, particularly in chemistry.

The fellowship, which begins this fall, is made possible through a grant from the Camille and Henry Dreyfus Foundation.

The winner of the nine-month fellowship will have freedom to attend classes, participate in research, and update his or her knowledge of the field.

It will be a two-way street, with the winner expected to lead two small seminars, sharing knowledge with science students, and with journalism students interested in science writing.

Deadline for receipt of applications is April 1. Information and applications are available from the Professional Journalism Fellowship Program, Cypress Hall, Stanford CA 94305; (415) 497-4937.



The St. Francis Hotel

THE FIRST WEST COAST COMPUTER FAIRE

REQUEST FOR HOTEL RESERVATIONS

April, 1977

MAIL TO:
 WCCF Housing Bureau
 S.F. Convention & Visitors' Bureau
 1390 Market St., Room 260
 San Francisco CA 94102

CANCELLATION:
 If you must cancel your reservation, notify the Housing Bureau up to 15 days prior to the reservation date. Within the last 15 days, notify the hotel, directly.

NOTE:
 Reservations will not be held after 6 p.m. unless a later arrival time has been requested, and the hotel has been notified.
 Expecting late arrival? No Yes

	SINGLE	DOUBLE <small>(double or twin beds)</small>	SUITE <small>(parlor & 1 bedrm)</small>	SUITE <small>(parlor & 2 bedrms)</small>	EXTRA PERSON <small>IN A ROOM</small>
St Francis Hotel	\$37-\$55	\$49-\$70	\$95-\$175	\$143-\$253	\$15
The Computer Faire Headquarters Hotel					
San Franciscan	\$24-\$34	\$28-\$38	\$55-\$85		\$5
Townhouse	\$26	\$29	\$58		\$5
Holiday Inn	\$26-\$33	\$33-\$40		\$87	\$7

Rates are subject to a 6 1/2% sales tax.

HOTEL

1st _____ Single _____ \$ _____ (If a requested rate is not available, the next higher rate will be assigned.)

2nd _____ Double _____ \$ _____

3rd _____ Twin _____ \$ _____

 Suite, 1-Bedrm _____ \$ _____

 Suite, 2-Bedrm _____ \$ _____

Rooms will be occupied by (Please designate those who will share same rooms. List additional names on separate sheet. Be sure to show arrivals and departures.):

NAME (please print) _____ CITY & STATE _____ ARRIVAL (hour/date) _____ DEPARTURE (hour/date) _____

FOR BUREAU USE ONLY

NAME _____ DATE _____

TITLE _____

COMPANY _____ PHONE (____) _____

ADDRESS _____

CITY _____ STATE _____ ZIP/POSTAL CODE _____

You will receive confirmations from the Housing Bureau.
 Do not send payment to the Housing Bureau.
 Instructions for deposits, when required, will be shown on your confirmation.

total fees enclosed: \$ _____ (Check payable to "Computer Faire", Box 1579
Palo Alto CA 94302)
Deadline for receipt of this form by Computer Faire is April 11, 1977.

APPLICATION FOR SCHOOL FIELD TRIP ADMISSION TO THE COMPUTER FAIRE

Name of institution _____

Institution address _____

city _____ state _____ ZIP _____

Institution phone: area code _____ phone number _____

Teacher in charge _____ \$4.00

subject area specialty _____

home telephone: area code _____ phone number _____

Other adults accompanying the group: _____ teacher? \$4.00@
yes/no

(use another sheet of paper, if necessary)

Students in the group: _____ age _____ grade _____ months of computer experience (if any) \$4.00@

(use another sheet of paper, if necessary)

Does your institution have any computers available for student use? _____
If so, please give make and model of the unit, amount of memory, type and number
of peripherals, and indicate whether it is on-site or remote.

Does your institution have computer courses? If so, please attach a description.

Does your institution have a computer professional as an advisor? _____
If so, please give his name and company address.

COMPUTERS AS EDUCATIONAL AIDS BECOMING ECONOMICALLY VIABLE

The use of computers in education has at last become economically feasible as a result of advances in miniaturization and the greater availability of hardware components, according to Pete Roberts, president of Computer Kits, Inc. of Berkeley.

Speaking at a meeting of the California Educational Data Processing Association in Fresno recently, Roberts said that educators have long been aware of the important contribution computers could make to teaching. "However, size, complexity, scarcity and cost have, until recently, precluded putting theory into practice," he added.

Roberts cautioned, though, that costs have increased for computer software -- programs, operating systems, technical manuals, etc. He related this to the relationship of people in the production of software.

"Significantly, steps are also being taken to cut software costs," Roberts said. He noted that for the first time small businesses can purchase packaged business systems programs for use with small computers.

"With respect to use of a computer as an educational aid," Roberts said, "one of its greatest attributes is that it has infinite patience. Such things as drill and practice routines, which can be very hard on both the teacher and the student, are ideal computer situations."

"Further, children do not feel emotionally threatened by the machine. Students, particularly the emotionally and mentally handicapped, can, with a computer, progress at individual rates."

Roberts said that with a computer as an educational aid, students can be exposed to more material and material of a greater complexity.

The computer, he said, also brings about interaction, in much the same way as books, television, and audio-visual aids function," he added.

Roberts said that the computer revolution, which has resulted in the proliferation of mini and micro computers, has also changed the way computers are sold and the markets to which they are sold.

"It was for this reason that Computer Kits was opened about a year ago," he said, "to provide computer hardware, software, and expertise to the non-professional computer user."

Computer Kit sells top-of-the-line computer

NAUCAL CALL FOR PRESENTERS

The National Association of Computer Applications to Learning (NAUCAL) will hold its 1977 annual convention in Dearborn, Michigan, on 2-5 November 1977. The convention will focus on educational computing, simulations in education, instructional materials, and teaching strategies. Sessions that describe and illustrate computer applications in learning will be given special consideration.

Individuals who would like to present or who would like to suggest others who could present may write to John S. Camp and Lary Smith, Conference Cochairman, Wayne County Intermediate School District, 33500 Van Born, Wayne MI 48185.

REPORT ON ELECTRONIC HAND CALCULATORS

The complete Final Report on the NSF-supported project, "Electronic Hand Calculators: The Implications for Pre-College Education" is now available from the ERIC Document Reproduction Services (EDRS), Box 190, Arlington VA 22210 for \$0.83 (microfiche) and \$20.75 (hard copy) plus postage (order number ED 127 205). The 50-page body of the report is also available from EDRS for \$0.83 (microfiche) and \$2.06 (hard copy) plus postage (order number ED 127 206).

GET THOSE TAXES DONE BEFORE THE 15TH

So you won't have to miss the kickoff banquet, Friday night, don't forget to have your computer finish off your tax return before the Ides of April.

hardware and software, in kit form or as fully assembled systems. "While there are some who would like to keep the computer kit industry within the purview of the computer hobbyist," Roberts said, "the reality is that small business and education have become very important customers for inexpensive, easy-to-assemble and easy-to-use computers."

Roberts noted that one of his associates has been with Computer-Aided Instruction since its inception some 15 years ago. "But it has taken this long until the cost of computer hardware was no longer prohibitive. CAI is now viable," he concluded.

CF DIGITAL SYSTEMS FDS-1

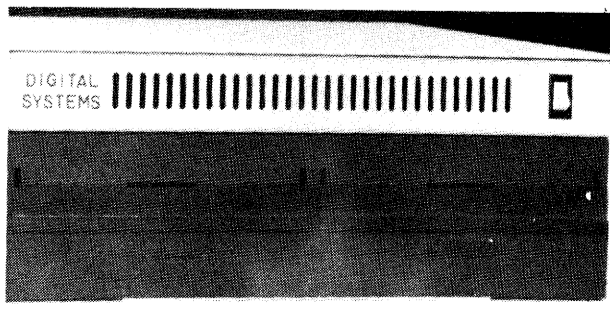
Digital Systems now has a floppy disk system available, the FDS-1 with the FDC-1 controller. The system is completely assembled and tested, and features Shugart Associates drives. Disk formatting is IBM compatible and diskette initialization capability is available. The CP/M Disk Operating System, written by Dr. Gary Kildall, the originator of Intel's PL/M compiler, has been operational in this hardware for over two years and is available for \$70. There is also an interface to the Altair/IMSAI bus for \$45. All systems carry a 90-day warranty.

The floppy disk controller, FDC-1, matches the capabilities of existing controllers at lower cost. The controller is complete on one 9 3/4" X 11 3/4" printed circuit board housing 76 standard integrated circuits. The FDC-1 incorporates control sequences and functions in microcode. Direct Memory Access eliminates buffering, and the FDC-1 can bootstrap without host processor intervention.

Error-preventing features include CRC polynomial generate and check, seek verification, transfer error notification to the host processor, and write protection.

The controller requires +5 VDC, 2.5 amps. The connectors needed are two GTE 7900-0261-3 or equivalent 86 pin edge connectors, a 3M 3425-0000 or equivalent 50 pin edge flat cable to drives, which are Shugart Model 800's or equivalent. It has a data rate of 250 Kbit/sec. The host can be any computer with compatible interface.

The complete system may be ordered with one or two Shugart drives for \$1550 or \$2125, respectively. The basic system (without power supply or cabinet) is \$1120 or \$1695, with one or two Shugart drives. The controller board, with connecting cables to the drive, is \$520. Digital Systems is at 1154 Dunsmuir Place, Livermore CA 94550. (415) 443-4078.



WANT THE NEXT GAZETTE?

IF you received this copy by mail, you may automatically receive the next issue:
 If this issue was sent by First Class mail, you will receive the next issue, also by 1st-Class mail.
 If this issue was sent, Bulk Rate, then you will receive the next issue IF the address label has a red or orange line across it.
 If none of the above holds, & you wish to receive the next issue of the *Silicon Gulch Gazette*, which will include much more information about the Computer Faire, please use the postage-paid reply card at the left.

FOR INFORMATION ABOUT THE COMPUTER FAIRE PROCEEDINGS

All of the information, above, is equally true concerning distribution of details concerning the planned publication of the *Proceedings of the First West Coast Computer Faire*, which should be available shortly after the Faire.

... AND IN THE NEXT EXCITING ISSUE

The next issue of SGG is due to go to press about March 24th, with distribution beginning the 25th. It will be the final issue preceding the Faire. That issue will carry an almost-complete schedule of the Conference activities (last-minute minor modifications appear likely, but a completely up-to-date program will be available at the door).
 It will carry a list of committed commercial exhibitors as of the press deadline. However, rumor has it that, traditionally, a whole flock of companies decide to enter a trade exhibit such as the Faire's exposition at the absolute last minute. Again, the at-the-door program will give a complete list.
 Issue 2 (the third issue, naturally), will also include state, regional, and local maps, as well as information about transportation from the S.F. Airport to the hotels.
 The latest information on charter groups, tour groups, bus charters, etc., will also be included. If you are organizing such a group, please send us all the pertinent details.

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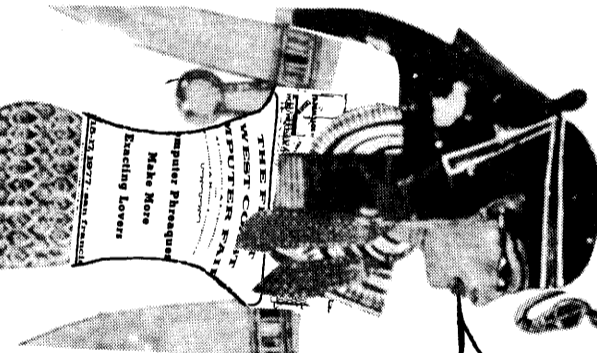
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Computer Phreque
Make More

GEE, YOU WOULDN'T BELIEVE HOW MANY PEOPLE I HAVE TO TELL TO KEEP THEIR HANDS OFF MY ASP SINCE I BEGAN WEARING THE OFFICIAL FIRST WEST COAST COMPUTER FAIRE T-SHIRT!!

SHOW what you KNOW!!

Whether you're in the barroom or the boardroom, you may rest assured that The Official First West Coast Computer Faire T-Shirt (official attire for the Computer Faire) will bring to you sartorial splendor. This tri-color T-Shirt (top-o-the-stack blue, Byte-thist violet, up-&-running orange) will amaze your friends, restore hair, and prevent bullies from kicking sand in your face--if your friends are gullible, your alopecia was temporary, and you avoid beaches.
 On the other back, who cares?
 In separate laboratory tests, Dr Seymour Squintz (who was born outside of a log cabin in the Gaza Strip) stated: "When I go down to the beach of life [in my Official First West Coast Computer Faire T-Shirt] they may still kick sand in my mind's eye, but I see it as cause for the growth of a pearl rather than for the use of Visine."
 The fact that Dr Squintz subsequently and tragically incurred major cataracts, vehemently denied he was an ardent voyeur, and accidentally committed reverse self-defenestration, is, of course, unfortunate. And we will probably stop using his testimonial.
 In the meantime, whether you're a shareholder or a sharecropper, on the board of directors or simply bored of directors, buy a gross of these discreet garments, and flout them proudly. Equally at home under a motorcycle jacket or a Brooks Brothers, the Computer Faire T-Shirt will positively make you look stunning. Or maybe stunned.
 In any case, keeping in mind that you are what you wear, and that, though this T-Shirt may be taken to the cleaners, you never will be, we think you will agree that the proposed investment of \$4 a shirt is modest--at least compared to this solicitation!
 So, order generously. For as we sew, you shall reap.

AFTER WEARING THIS T-SHIRT, THEY BANNED DATA BUSING IN BOSTON.

(Please note: Because this is a limited edition, Officials from the Franklin Mint will, at an unspecified time, uproot our cotton plants, shred our silkscreen, and set our copy writer adrift on a small raft, blindfolded, in downtown Billings, Montana.)
 If you want to Act Now!, contact the Actors' Guild. If you merely want to set the stage, then buy the Computer Faire T-Shirt.

YES!! Send to me immediately (as ordered) The Official First West Coast Computer Faire T-Shirt(s). I understand they are additionally fabulous for their unique property of both cradling the wearer, and swaddling bystanders--innocent and guilty alike--with exquisite envy. (So that Computer Faire may prepare legal defense for actionable horriblatory incitement, please indicate your first intended bystander:
 () Yves St Laurent, () EE professor who flunked me, () boss, () janitor, () janitor's tax accountant, () maitre d' at MacDonald's, () cat, () computer club executive council, () tech rep, () cheeky proctologist, () _____

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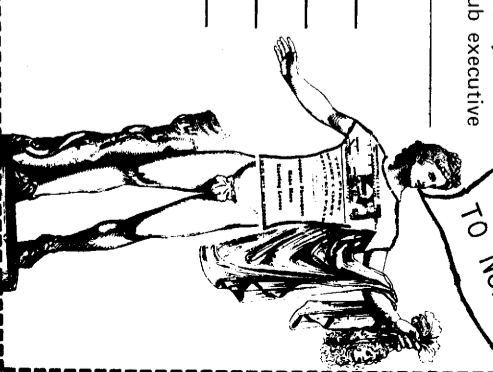
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THE FIRST WEST COAST COMPUTER FAIRE

A CONFERENCE & EXHIBITION

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I'M GLAD WE DON'T MAKE DELIVERIES TO NONE.

COMPUTER ART

"The computer as a tool for the artist" will be taught this Spring quarter at De Anza College in Cupertino CA, by Gregory Yob. Greg, is known to some as the originator of 'wumpus'. The viewpoint of the class is oriented towards showing how computers of all kinds may be used to further one's esthetic process and to produce works of art. This includes not only graphics, but music, drama, and conceptual and structural art as well.

If you are either artistically or mechanically inclined, this course will suit you. Artists, programmers, and engineers will team together to synergize their skills towards creating new things.

No experience is required, and no prerequisites asked other than a lively interest. Of course, if you have a personal computer or access to one that's just fine!!

Lectures are Wednesday afternoons, 2:30 to 4:30 pm. Lab will be arranged. The course is called officially, "ART II" and is worth 3 units. The first meeting is April 6, the last June 8. Registration is \$3.00 and the Lab fee \$5.00. You may register during the week of April 4-8.

If you have any questions, contact: Gregory Yob, Box 354, Palo Alto CA 94301. Telephone: (415) 326-4039 (h) or (408) 446-6182 (w).

UNABRIDGED SOURCE CODE & DOCUMENTATION FOR 8080 BASIC PUBLISHED

Menlo Park, CA -- The complete documentation, and a complete, annotated assembler listing of a BASIC interpreter for the 8080 has been published in *Dr. Dobb's Journal of Computer Calisthenics & Orthodontia*. The assembler listing, by itself, is over 46 pages long.

This particular BASIC interpreter was developed in 1976 by the Lawrence Livermore Laboratory. Those principally responsible for its development were John Dickenson, Jerry Barber, John Teeter, and Eugene Fisher. The Laboratory operates under the direction of the University of California and the U.S. Energy Research & Development Administration.

The BASIC interpreter is designed to operate on a MCS-8080 system. It is "pure code"; that is, it may be placed in ROM or PROM. It requires five kilobytes of storage for the interpreter. The interpreter includes a complete floating point package. The documentation and listing of the floating point routines is included in the materials published in *Dr. Dobb's Journal* . . .

Dr. Dobb's Journal is a reference periodical published ten times per year by People's Computer Company. It is primarily concerned with publishing complete details of the design and implementation of systems software for small computers -- particularly personal and hobby computers. It also regularly publishes "realizable fantasies" -- home computing projects that haven't yet been done but could be done at low cost with current technology and minimal expertise. *Dr. Dobb's* also carries regular articles offering independent evaluations of products being marketed to the home and hobby computing market. The periodical carries no advertising, is subscriber-supported, and costs \$12/year. It began publication in January, 1976. All ten issues of Volume I have been reprinted in a single book, available for \$13. *Dr. Dobb's* subscriptions and reprints are available from PCC, Box E, Menlo Park CA 94025; (415) 323-3111.

meet the organizers:
Rick Bakalinsky

WHY IS THIS MAN MUZZLED?

Left on the doorstep of a gypsy in the 1600's by an itinerant orphanage director, Rudolph Sweetwater made his way to St. Paul, Minnesota by the mid-1940's, wearing castanets and a guilty look. Subsequently, while performing a difficult aortal bypass, he danced his way into the heart of his patient when the assisting anesthesiologist began whistling an old Castilian tune, and Rudolph spontaneously broke into a brisk fandango. Realizing he would probably lose his license, Rudolph also broke into a Basque filling station on the way home. When it became known that he hadn't even finished veterinary school, had shot the first patient that came in with a broken leg, and had advertised "Minor Surgery--also willing adults," Rudolph Sweetwater changed his name to Rick Bakalinsky, took up computer science, and has yet to be found out.

(Editor's Note: Rick Bakalinsky, the third in the trio responsible for the creation and organization(?) of the Computer Faire, wrote the above autobiography on the back of Abe Lincoln while both were traveling to Gettysburg. Though begetting a computer faire is trying on one's sanity, Rick has yet to try on his. In any case, he showed signs of mental incorrigibility long before becoming involved with the Faire -- he's the person who dreamed up the title of that famous research periodical, *Dr. Dobb's Journal of Computer Calisthenics & Orthodontia*: running light without overbyte.)



SAN FRANCISCO'S CIVIC AUDITORIUM

continued from page 3

ested in co-sponsoring such a convention. The EE Department quickly jumped on the bandwagon, and the event began to take shape.

Then, it hit a snag. Stanford couldn't make the desired facilities available. After coming back from Atlantic City -- which was a total turn-on, in spite of the heat and humidity -- Warren began to suspect that the Faire might be far larger than he and Reiling had initially projected. And, Stanford just couldn't furnish the space for the projected needs.

So, they began shopping around. The first possibilities investigated were the county fairgrounds (Hotels had already been ruled out as obviously being too small). The fairgrounds certainly had the space, but had inadequate facilities for the conference activities and tech talks that Warren and Reiling felt were an essential feature of such a convention, probably more important than the exhibits. After some searching about, they slowly reached the conclusion that the only appropriate facility was the massive Civic Auditorium in San Francisco -- the largest convention facility in northern California.

Somewhat traumatized by the magnitude to which their project had grown, they took a deep breath and contracted for the entire Civic Auditorium -- and the Faire was off and running.

By that time, they realized that the Faire was going to take full-time labor on the part of a number of people. For a starter, they invited Rick Bakalinsky to join the fun. Rick had been helping with production of *Dr. Dobb's Journal* at People's Computer Company, and was someone Warren and Reiling knew was competent, creative and dependable.

As soon as the plans were announced at the Homebrew Computer Club, there was enthusiastic support for the event. Next, Larry Press had been visiting PCC as Faire plans were being formulated and, carried word of the project to the Southern California Computer Society. Warren had proposed to Larry that the SCCS offer its encouragement and emotional support for the Faire. It was obviously appropriate for SCCS to support a western regional convention of this nature, and they readily voted to become co-sponsors. Similarly, BAMUG -- the Bay Area Microcomputer Users' Group -- voted to

be co-sponsors of the Faire.

Since Warren was active in the local Association for Computing Machinery's Chapters, and wanted to encourage visibility of computer professional organizations within the computer hobbyist community, he proposed that both of the Bay Area ACM Chapters support the Faire through being co-sponsors. A similar proposal was submitted to the local Chapters of the IEEE Computer Society. Both the Golden Gate ACM Chapter and the Peninsula ACM Chapter, as well as the Santa Clara Valley IEEE CS Chapter were enthusiastic about the project and voted to be co-sponsors.

Back at PCC, Bob Albrecht -- a long-time proponent of computers in education -- suggested that the Faire include a major conference program concerned with personal computers for education. Everyone liked the idea, and it was quickly included in the plans. As a result of that activity, the California Mathematics Council -- the state-wide organization of mathematics teachers -- voted to become a co-sponsor of the Faire. Additionally, since the University of California's Lawrence Hall of Science has a major interest in "public computing" and computers in education, they also joined in supporting the Faire as a co-sponsor. And, of course, such nonprofit organizations as PCC and the Community Computer Center -- both having long-time interests in personal computing -- were among the first to join in supporting the project as co-sponsors.

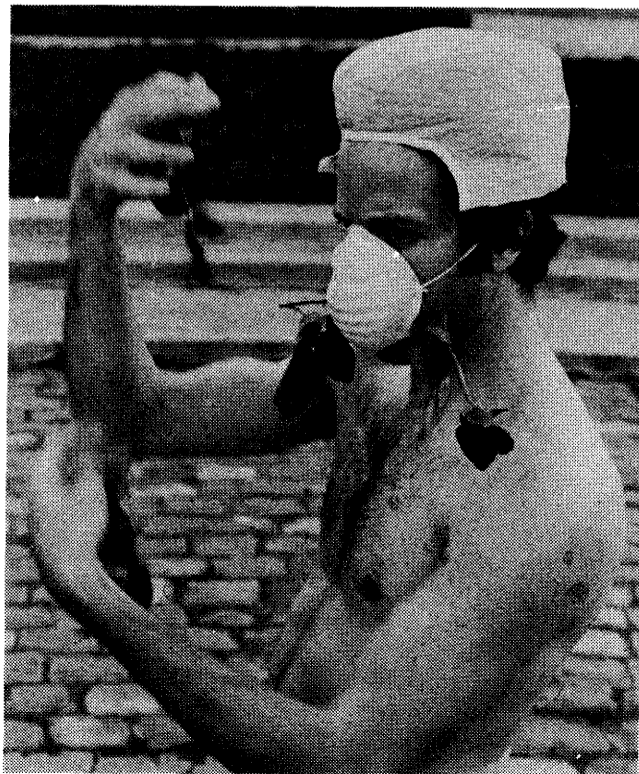
Finally, a nonprofit organization of local consultants -- the Professional and Technical Consultants Association (PATCA) -- also chose to encourage the Faire and become a part of it via being a co-sponsor.

In the meantime, the editors and publishers of all of the major computer hobbyist publications were contacted for their support. Carl Helmers and Virginia Peschke of *Byte*, and Bob Jones of *Interface Age*, immediately offered to provide extensive coverage and major advertising support of the Faire. *SCCS Interface* would, of course, be supporting the Faire as the official publication of one of the co-sponsoring organizations. *Dr. Dobb's Journal* and *People's Computer Company* newspaper were also active supporters of the Faire, from the beginning.

Shortly after the first news releases went out, Henry Sacks, the publisher of *Mini-Micro Systems*, called up and offered extensive assistance and support for the Faire. At a San Francisco conference in November, Warren and Burchie Green, Editor of *Creative Computing*, ran into each other, and Burchie offered *CC's* active support of the Faire. Similarly, other publications readily agreed to actively encourage the Computer Faire including *Microcomputer Digest*, *Computerworld*, the IEEE Computer Society's *Computer* magazine, and Bender Publication's *Northern California* and *Southern California Electronic News*.

Jim Warren notes, "In each of these cases, we agreed to exchange space at the Faire for advertising space. However, without exception, the exchange was far better than an even trade. These magazines -- particularly the hobbyist pubs and *Mini-Micro Systems* -- were as excited and enthusiastic about the Faire as we were, and really wanted to give it extensive support."

With a broad base of local and regional support via the multitude of co-sponsoring groups, and with a wide range of publicity commitments, the Faire has been racing along. As of the writing of this article, over 125 commercial exhibitors have signed up for the exposition portion of the Faire; over 55 papers or abstracts have already been received from potential speakers in the conference portion; and, a number of other papers are supposed to be imminently forthcoming (according to their authors).



CAN YOU READ COMPUTERESE?

Recording for the Blind needs volunteers who can donate 90 minutes or so a week to reading and recording requested texts on computers and related fields. No dramatic or speech-making ability is needed, just an understanding of the subject and the desire to assist a blind student achieve a profession. The time given may be daytime or evening—at the convenience of the volunteer. For further information contact the Studio Director, (415) 493-3717, Recording for the Blind, Inc., 488 West Charleston Road, Palo Alto, CA.

\$1695 - MICROCOMPUTER IS COMPATIBLE WITH PDP-8E, HAS BUILT-IN MASS STORAGE

The Data 12 is a complete, self contained 12-bit microcomputer with an integral 262,000 word random access tape drive. In addition to executing the instruction set of the Digital Equipment Corporation PDP-8E minicomputer, it also has instructions for floating point decimal arithmetic, numeric and character string input and output, block memory move and search, and push-pop instructions for recursive subroutine handling.

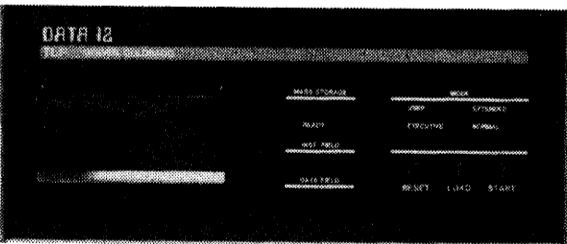
Fully assembled, the system sells for \$1695 - including 4096 words of user memory, serial terminal interface, tape controller with one drive, and a comprehensive tape operating system that includes both an unattended batch mode of operation and real time task scheduling capability.

The random access drive uses a pre-formatted digital cassette, and has an average access time of less than 25 seconds with bi-directional search speeds of over 100 inches per second.

The software supplied with the system is completely keyboard oriented. It includes an invisible system executive that handles all input/output scheduling, buffering and vectoring. It can intercept I/O from any standard peripheral device, and route it to any other device. As an example, this allows software written for a paper tape system to operate to/from the system files without any modification.

Program preparation is handled by a powerful tape operating system whose components are a named file system for storage and retrieval of user programs and data, a keyboard monitor for communicating with the user, a text editor for program preparation, a comprehensive symbolic assembler to convert source programs to binary, a disassembler to re-create a source program from binary, and two loaders.

Program execution and debugging is controlled by a virtual debug program that allows examination, search and modification of memory with up to 16 simultaneous break points, without requiring any memory for itself. Utility functions for adding, deleting or copying files and listing the user or system catalogs are also provided.



Two high level languages are included in the Data 12 - extended Basic and Phocal. The Basic used is a true compiler giving very fast execution times, and will execute a program approximately 6000 characters (about 300 lines) long in 4K of memory. It can save and recall named programs from the system tape, has a "chain" statement for linking programs from the system to an unlimited length, has multi-dimensional arrays, string handling, multiple statements per line, and allows up to 26 multi-line user defined functions.

Phocal is a versatile, Fortran-like language with an optional immediate mode of operation. It can be used as a sophisticated desk calculator, or can execute complex programs stored on the system tape.

The Data 12 is expandable to 32K of memory, and can be easily interfaced to external peripherals. Its internal architecture is oriented around a 100 line bus structure, with six free slots for system expansion. 4K and 12K memory cards, a digital and analog I/O card and general purpose interface card are also available.

Delivery is 30 to 45 days. Write to TLF, Box 2298, Littleton, Colorado 80161. (303)794-1634.

DIGITAL GROUP OFFERS SOFTWARE & SYSTEMS

An ever-growing number of software packages designed for all levels of support is being offered by the Digital Group for the company's line of microprocessor systems.

For only \$5 each, the Digital Group offers Tiny Basic Extended and a cassette full of game programs. Both are on an audio cassette that the Digital Group system can read. Programs can be displayed on the system's video screen.

The Digital Group also offers many other software programs. For example: six volumes of Tiny Basic Games, including Chomp, Checkers, 20-Questions, Chief, and others; "Galaxy," and Z-80 packages including Educator, Assembler, Dis-Assembler and Text-Editor. Prices range from \$5 to \$15.

The Digital Group, Denver, Colorado-based designer and manufacturer of video-based microprocessor systems, offers a complete line of hardware. The unique product line features interchangeable CPUs from different manufacturers which are interchangeable at the CPU card level. Digital Group systems are complete and fully featured, and specifically designed to be easy to use. With the Digital Group's video-based operation, all that is required is turning power on and loading a cassette.

All components are available with custom cabinets, and prices start as low as \$475 for a Z-80 based system.

Details on all Digital Group products - hardware and software - are available by calling or writing the Digital Group, P. O. Box 6528, Denver, Colorado 80206, telephone (303) 777-7133.

SINGLE PC CARD FOR S-100 BUS INCLUDES BOTH CASSETTE AND RS-232 INTERFACE CIRCUITS

PerCom Data Company, Inc.

PerCom recently introduced the first Imsai/ALTAIR compatible, dual Cassette/Terminal interface card.

Designated the CI-812, the dual-function card combines interfacing functions normally requiring two or three PC cards.

"The CI-812 is very likely the only interface card many owners of S-100 bus computers will ever need," according to Harold Mauch, head of product development at PerCom.

The cassette interface phase encodes (Manchester/Biphase) at the KC Standard rate of 30 bytes/second, and at 60, 120, or 240 bytes/second for rapid loading of frequently used programs. In fact, the CI-812 is the only interface on the market today which provides both KC Standard and high speed phase encoding.

The advantage of self-clocking encoding, according to Mauch, is that users can expect extremely high reliability, even at the fastest data rates, using simple, inexpensive audio cassette recorders.

The self-clocking feature virtually eliminates tape speed variation errors, he said.

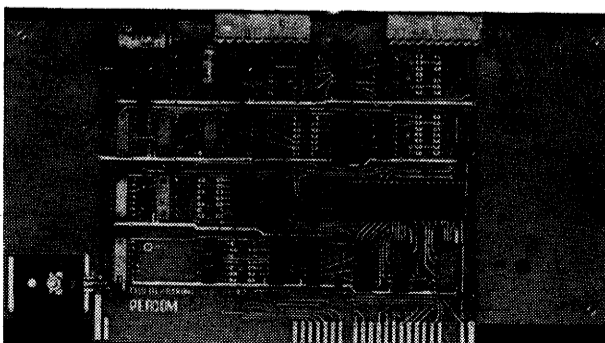
The cassette interface record and playback circuits are completely independent, and the card is patterned to include optional DIP reed relays - which may be ordered as a kit - for program control of two recorder/players. This permits operations such as cross-filing.

The CI-812 companion circuit, the RS-232 terminal interface, is full duplex and provides for data exchange at 300 to 9600 baud.

The CI-812 has been designed to operate with existing user's software with little or no modification.

The CI-812 kit price is \$89.95. Assembled, it costs \$119.95. An instruction manual is included.

Items may be ordered directly from PerCom Data Company, 4021 Windsor, Garland TX 75042. Mail orders require an additional 4% for shipping, and 10% if COD. Texas residents must also include 5% for sales tax.



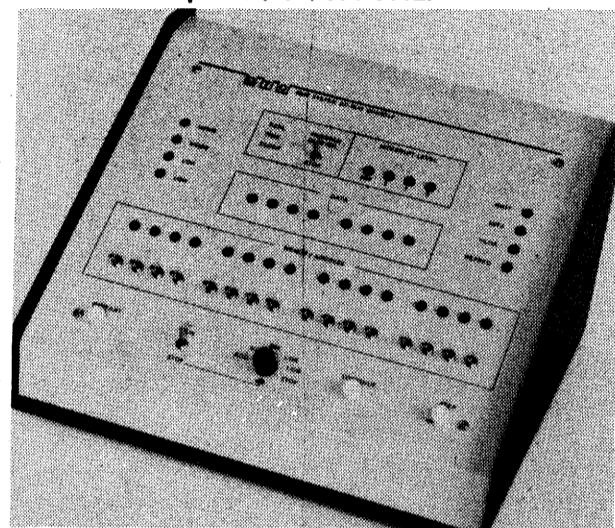
DTC MICRO FILE ADDS OPTIONS FOR THE MICRO PROCESSOR DEVELOPER

The new options are now available for the DTC Micro File computer system that greatly enhance it for both hardware and software developers. Micro File is a dual risk, micro computer system with up to 56K of RAM.

The DTC 8080 Debug Console is the first. It enables bit level software developers full control of the 8080A within the Micro File, as well as hardware diagnostic capabilities. Once plugged into Micro File's processor card, the Debug Console allows stepping through a program a byte at a time or run to a specific location or operation. Price is \$500. Delivery from stock.

The Micro File Prototyping Board fits into one of the mother board slots. It has bus drivers and approximately 75 square inches of board area available with 2320 plated through holes that allow installation of a large variety of wire wrap sockets and connectors. Power is supplied from the Micro File mother board. Thus, Micro File special hardware development time is significantly reduced. Price is \$250. Delivery from stock.

DTC is located at 1190 Dell Avenue, Campbell CA. Telephone (408) 378-1112.



300K INTERFACE KIT & FLOPPY DISC FOR \$750

PERIPHERAL VISION of Denver, Colorado has announced a full-size floppy disk for the Altair-Imsai plug-in compatible S-100 bus.

Prices start as low as \$750 for the interface card kit and assembled and tested drive. A 24-volt at 2-amp power supply is also available in kit form for \$45 or assembled for \$65; and a cabinet is offered for an additional \$85.

The peripheral Vision floppy disk interface card supports 8 drives and stores over 300,000 bytes per floppy.

A bootstrap EPROM is included to make system startup automatic.

The floppy is completely S-100 plug-in compatible, and interface cabling is included.

The Peripheral Vision floppy disk drive is from Innovex (the originator of the floppy concept) and comes assembled and tested. A disk operating system with file management system is included on the floppy.

For details, write or call PERIPHERAL VISION, P. O. Box 6267, 585 S. Jason St, Denver, Colorado 80206, telephone (303) 777-4292.

SOFTWARE-CONTROLLED VIDEO SYSTEM

Santa Clara, CA -- Dan Burgoon, vice president of Cybercom, a division of Solid State Music, recently announced the new Video Board called the VB1. The new Board is plug-in compatible with S-100 bus systems such as Altair and IMSAI computers.

According to the manufacturer, the new VB1 is the first complete software-oriented video system available offering more versatility and exceptional control to the user. The cursor, video reverse, and graphics are software-controlled with no internal hardware adjustments necessary for various operational changes.

Other features of the VB1 include on-board dip switch selection of 32 or 64 characters per line, with 16 display lines; upper and lower case, and Greek alphabet with other interchangeable fonts and, the VB1 can be addressed for any 1K block of memory.

In making the announcement, Burgoon stated that, "This is just another of our many highly versatile products offered for S-100 bus systems." Cybercom presently manufactures 4K and 8K memory boards, I/O boards, music boards, extender cards, mother boards in kit and assembled form.

The VB1 will be offered through computer hobby stores, or directly. Price in quantity of one is \$189.95 in kit form, and \$269.95 assembled and fully tested.

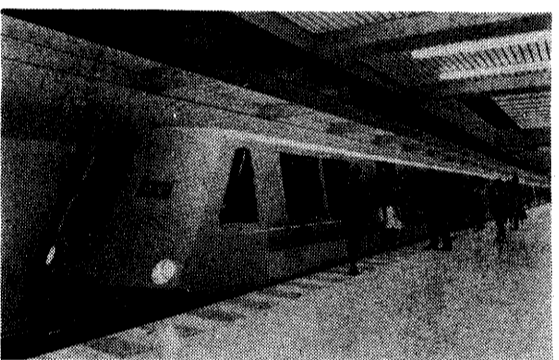
Cybercom, a division of Solid State Music, is located at 2102-A Walsh Ave., Santa Clara CA 95050; (408) 246-2707.

GETTIN' 'ROUND IN SAN FRANCISCO

Computer Fairegoers will get a chance to ride on one of the most modern transportation systems in the country. The sophisticated Bay Area Rapid Transit (BART) is one of the most forward-looking of any metropolitan transit networks, designed to be operated completely by computers. That may happen someday, but will most likely take several more years of debugging. Even now, the system is a fascinating operation (for everyone except NYers & Bostonians?) With more than 70 miles of line, BART runs from south of San Francisco, through the City, under the Bay, and into Oakland, Berkeley, and other communities.



On the other hand, another way of getting around San Francisco is the antique cable car, famous as one of the City's favorite symbols. Residents and visitors hold the century old system in great affection. Economists and efficiency experts despair the clanking old cars, but the cable cars are an excellent way to see some of the most interesting parts of the City, since the cars are open and slow. Riders can board at the Hotel St. Francis on Union Square, for instance, ride up Nob Hill, by Chinatown, through North Beach (the Italian section), and to Fisherman's Wharf for seafood or to Hyde Street for a look at the Maritime Museum.



Buses and trolleys, both gas and electric powered, cover the City's 46 square miles and fill the time gap between the cable system and the ultra-modern BART. There are taxis as well, but San Francisco cabs are expensive.

To go down the San Francisco Peninsula to Stanford and the extensive electronics industry south of San Francisco, there are two choices. Both bus and commuter train services go to San Jose and beyond. Sadly, however, there is no public transportation down the scenic coast route to the south.

North of San Francisco, there are buses into the wine country of Sonoma County, to some coastal communities, and to Sausalito. That community, once a sleepy fishing village, now features fine restaurants and shopping. It can also be reached by ferry across the Bay.

AIR CALIFORNIA OFFERS 15% DISCOUNT FOR GROUPS

Groups of computer enthusiasts coming to the Computer Faire from outside of the San Francisco Bay Area may be interested in the fact that Air Cal offers a 15% reduction on its air-fares for groups of 10 to 25 people. (Groups of more than 25 should contact the airline, directly.) For details, contact any Air California ticket agent.

PEOPLES' TRANSIT - SUPER LOW-COST NATIONAL CAR POOLING?

We recently received a call from something named Peoples' Transit. As near as we could figure out, it is a nationwide car-pooling/hitch-hiking/rider-finding, people-matcher. For more information, call their toll-free number: 800-547-0933.

DENVER GROUP IS FLYING HIGH Chartering TWO Convair 580's for Trip to Computer Faire

The Denver Amateur Computer Society (DACS) is now officially sponsoring a non-stop air charter, Denver-to-San Francisco. The charter will use two Convair 580's from Aspen Airways; one 46-seater, and one 44-seater. The flight will leave Denver at 7 p.m. on Thursday evening, April 14th, and will arrive in San Francisco approximately 10 p.m. (local time). The return flight will depart from San Francisco at 8 p.m. on Sunday, April 17th, and arrive back in Denver at 11:30 p.m. M.S.T.

The group rate will include hotel accommodations for three nights (14th through 16th), as well as the air fare. Hotel and air fare will cost \$191, which is \$3 less than the normal round-trip coach air fare, alone.

The hotel accommodations will be at either the San Franciscan or the Townhouse, two of the four hotels in which blocks of rooms are reserved for Computer Faire visitors. Both of these hotels are within a block or two of the Civic Auditorium in San Francisco.

For further information, and to place reservations, contact Stephen Patterson, Denver Tour Group Chaircreature, at (303) 573-4895, or drop by and see him at the Computer Hut, 1764 Blake Street, Denver CO 80202.

Also, aside from the 90 or so DACSpeople who will be coming via this charter flight, another 50 or so are reported to be planning on flying or driving to the Faire via other craft.

SOME PEOPLE ARE HEADING EAST TO THE WEST COAST COMPUTER FAIRE

This may be true if you live on Irving Street in San Francisco, but it is true in a big way if you're coming from Japan.

The Japanese magazine *Weekly Computer* carried a full page story on the West Coast Computer Faire. What started out as a regional meeting appears to have become an international event.

Not only is a delegation coming from Japan, but letters and phone calls requesting Faire information have come from a number of countries overseas. Computerniks from England, Australia, South America, and Japan as well as, of course, nearby Canada have expressed interest in attending the Faire. It has become an international "affaire."

In *Weekly Computer* the basic facts about the Faire attracted the attention of Japanese computer enthusiasts. The article (reprinted elsewhere in this *Gazette*) mentions two computer clubs in Japan: the Japan Mi-Con Club, and the NCE Microcomputer Club sponsored by the Nippon Electric Co. NCE is a second source for the Intel 8080 microprocessor.

The West Coast Computer Faire received a letter from TWA in Tokyo mentioning that 15-20 people were expected to come to the Computer Faire from the Tokyo area. Additionally, Jim Warren, the Faire Chairbody, has stated that he has received lengthy transcontinental telephone queries from both Japan and England.

JAPANESE TOUR GROUPS FORMING

Those people in Japan who are planning to come to the Computer Faire might consider contacting one another (listed below). You might also contact the Japan Travel Bureau, Inc. in Tokyo, or Mr. T. Ninoseki with Trans World Airlines in Tokyo, 212-8876/9. Expected visitors from Japan:

- Chikara Sato, Professor
Faculty of Engineering, Keio University
832 Hiyoshi-Cho, Kohoku-Ku,
Yokohama 223
- Koji Yada, Computer Center Manager
Electrotechnical Laboratory,
Tanashi Branch
5-4-1 Mukodai-Machi, Tanashi-Shi
Tokyo
0424(61)2141
- M. Akahoshi
Electronic Materials
42-3, Tezukayama-Naka Sumiyoshi-Ku
Osaka 558
- Fumio Narazaki, President
Control Space Service Co., Ltd.
103 Sangubashi, Silk Heights
5-52-6 Yoyogi Shibuya-Ku
Tokyo 151
- T. Ninoseki, Sr. Sales Representative
Trans World Airlines, Inc.
Room 101, Hibiya Park Bldg
8-1 Yuraku-cho, 1-chome, Chiyoda-ku
Tokyo

COMPUTER FAIRE EXHIBITORS

As of the indicated date, the following is a listing of organizations that will be participating in the trade exposition portion of the First West Coast Computer Faire. The number at the left indicates how many booths they will be occupying.

- COMMITTED EXHIBITORS--- MAR. 13, 1977
- 1 6502 PROGRAM EXCHANGE HENO NV
 - 1 ACM, BAY AREA HEDWOOD CITY CA
 - 1 ACTION AUDIO ELECTRONICS DALY CITY CA
 - 1 ADVANCED MICROCOMPUTER PRODS IRVINE CA
 - 1 ALPHA MICRO TECHNOLOGY TUSTIN CA
 - 1 ANDERSON-JACOBSON, INC. SAN JOSE, CA
 - 2 APPLE COMPUTERS PALO ALTO, CA
 - 1 BELL & HOWELL SCHOOLS CHICAGO IL
 - 1 BENDER PUBLICATIONS, NCEN&SCEN LOS ANGELES CA
 - 1 BOARD BYTERS EL TOKO CA
 - 3 BYTE MAGAZINE PETERBOROUGH NH
 - 2 BYTE SHOP OF PALO ALTO PALO ALTO CA
 - 1 BYTE SHOPS OF ARIZONA TEMPE AZ
 - 2 BYTE, INC. SUNNYVALE CA
 - 1 CALIFORNIA BUSINESS MACHINES SANTA CLARA CA
 - 1 CALL COMPUTER MT. VIEW, CA
 - 1 CENTER FOR STUDY OF FUTURE PORTLAND OR
 - 1 COMPONENT SALES, INC. SAN FRANCISCO CA
 - 1 COMPTON LA CANADA CA
 - 1 COMPUCOLOR CORP. MORCROSS GA
 - 1 COMPUTALKER CONSULTANTS SANTA MONICA, CA
 - 1 COMPUTER DECISIONS MAGAZINE ROCHELLE PARK NJ
 - 2 COMPUTER KITS, INC. BERKELEY CA
 - 1 COMPUTER MAGAZINE LONG BEACH CA
 - 1 COMPUTER POWER & LIGHT CO. STUDIO CITY CA
 - 1 COMPUTER ROOM OF SAN JOSE SAN JOSE CA
 - 1 COMPUTER STORE OF SAN FRAN. SAN FRANCISCO CA
 - 1 CREATIVE COMPUTING MAGAZINE MORRISTOWN NJ
 - 3 CHROMECO MT. VIEW, CA
 - 1 DAJEN ELECTRONICS CITRUS HEIGHTS CA
 - 2 DATA TERMINALS&COMMUNICATIONS CAMPBELL, CA
 - 1 DAVIS LABORATORIES SANTA CLARA, CA
 - 1 DAYTON ASSOCIATES BURLINGAME CA
 - 1 DIGICOMM CITRUS HEIGHTS CA
 - 2 DIGITAL GROUP DENVER, CO
 - 1 DIGITAL PROJECTS, INC. SANTA BARBARA CA
 - 1 DIGITAL RESEARCH PACIFIC GROVE, CA
 - 1 DIGITAL SYSTEMS LIVERMORE, CA
 - 1 DILITHIUM PRESS FOREST GROVE OR
 - 1 E & L INSTRUMENTS MT VIEW CA
 - 2 ECD CORP. CAMBRIDGE MA
 - 1 EIDETIC DESIGNS SUNNYVALE CA
 - 1 ELECTRONIC TOOL CO. HARTHORNE, CA
 - 1 ESCON BERKELEY CA
 - 1 EXTENSYS CORP. SUNNYVALE CA
 - 1 GALAXY SYSTEMS CYPRESS CA
 - 1 GIMIX, INC. CHICAGO IL
 - 1 GOUBOUT ELECTRONICS OAKLAND AIRPORT CA
 - 2 HAL COMMUNICATIONS CORP. URBANA, IL
 - 1 HAYDEN BOOK COMPANY, INC. ROCHELLE PARK, NJ
 - 1 HEURISTICS, INC. LOS ALTOS, CA
 - 1 IASIS INC. SUNNYVALE, CA
 - 1 IBEX SUNNYVALE CA
 - 1 IC MASTER & UPDATE SUNNYVALE CA
 - 2 ICOM CANOGA PARK, CA
 - 1 IMSAI SAN LEANDRO, CA
 - 1 INTEGRAND RESEARCH CORP. VISALIA CA
 - 2 INTERFACE AGE MAGAZINE CERRITOS CA
 - 1 INTERSIL, INC. CUPERTINO, CA
 - 1 ITTY BITTY COMPUTERS SAN JOSE, CA
 - 1 JENSEN TOOLS & ALLOYS PHOENIX AZ
 - 1 JA ELECTRONICS CITRUS HEIGHTS CA
 - 1 KILOBAUD MAGAZINE PETERBOROUGH NH
 - 1 LOGIC DESIGN, INCORPORATED LAHAMIE, WY
 - 1 MECA YUCCA VALLEY CA
 - 1 MICRO DESIGNS BERKELEY CA
 - 1 MICRO-COMPUTER DEVICES MONTEBELLO CA
 - 1 MICRO-TERM INC. ST LOUIS MO
 - 2 MICROCOMPUTER ASSOCIATES CUPERTINO, CA
 - 1 MICROMATION, INC. SAN FRANCISCO CA
 - 1 MICROPOLIS CORP. NORTHridge CA
 - 1 MICROTECH COMPUTER CO. SANTA MARIA CA
 - 1 MICROFRONICS MENLO PARK CA
 - 2 MIDWEST SCIENTIFIC INSTR. OLATHE KS
 - 1 MINI-MICRO SYSTEMS MAGAZINE HUDSON MA
 - 1 MINITERM ASSOC. ARLINGTON MA
 - 1 MINNESOTA MINING & MFG CO. ST PAUL MN
 - 1 MOVONICS LOS ALTOS CA
 - 2 NATIONAL SEMICONDUCTOR SANTA CLARA CA
 - 1 NEWMAN COMPUTER EXCHANGE ANN ARBOR MI
 - 1 NORTH STAR COMPUTERS, INC. BERKELEY CA
 - 3 NOVAL, INC. SAN DIEGO CA
 - 2 OHIO SCIENTIFIC INSTRUMENTS HIRAM OH
 - 1 OK MACHINE & TOOL CORP. BRONX NY
 - 1 OLIVER AUDIO ENGINEERING N. HOLLYWOOD CA
 - 1 PACIFIC OFFICE SYSTEMS PALO ALTO CA
 - 1 PAIA ELECTRONICS, INC. OKLAHOMA CITY OK
 - 1 PARASITIC ENGINEERING ALBANY, CA
 - 1 PENINSULA MARKETING SERVICES SARATOGA, CA
 - 2 PEOPLE'S COMPUTER CO. MENLO PARK, CA
 - 1 PERIPHERAL VISION DENVER CO
 - 1 PERSCI MARINA DEL REY CA
 - 1 PERSONAL COMPUTING MAGAZINE ALBUQUERQUE NM
 - 1 PFEIFFER, E & L GRANADA HILLS CA
 - 2 POLYMORPHIC SYSTEMS GOLETA CA
 - 1 PRIME RADIX, INC. DENVER CO
 - 4 PROCESSOR TECHNOLOGY EMERYVILLE CA
 - 1 PROF. & TECH. CONSULTANTS ASSN. LOS ALTOS CA
 - 1 PSA, INC. BOUNTIFUL UT
 - 1 Q FAIRFAX CA
 - 1 REALISTIC CONTROLS CORP. CLEVELAND OH
 - 1 RIGEL FOUR CAMPBELL CA
 - 1 RO-CHE SYSTEMS VAN NUYS CA
 - 1 ROM MAGAZINE HAMPTON CT
 - 1 S. D. SALES DALLAS TX
 - 1 SCIENTIFIC RESEARCH INSTRUMENT ASHLAND VA
 - 1 SMOKE SIGNAL BROADCASTING HOLLYWOOD CA
 - 2 SOLID STATE MUSIC SANTA CLARA CA
 - 1 SOUTHERN CALIF. COMP. SOCIETY SANTA MONICA CA
 - 2 SOUTHWEST TECHNICAL PRODUCTS SAN ANTONIO TX
 - 1 SUNRISE ELECTRONICS PASADENA CA
 - 1 SUNSET TECHNOLOGIES GOLETA CA
 - 1 SYLVANHILLS LABORATORY STRAFFORD MO
 - 1 SYNETHIC DESIGNS POMONA CA
 - 1 SZERLIP ENTERPRISES HARBOR CITY CA
 - 1 TARBELL ELECTRONICS MIRALESTE CA
 - 2 TECHNICAL DESIGN LABS INC. PRINCETON NJ
 - 1 TECHNICAL SYSTEMS CONSULTANTS W. LAFAYETTE IN
 - 1 TELETYPE CORPORATION SKOKIE, IL
 - 1 TRIPLE I/PHIDECK, ECONOMY CO. OKLAHOMA CITY OK
 - 1 VECTOR GRAPHIC INC. THOUSAND OAKS CA
 - 1 VIDEO TERMINAL TECHNOLOGY SUNNYVALE CA
 - 1 WESTERN DATA SYSTEMS SANTA CLARA CA
 - 1 WIZARD ENGINEERING SAN DIEGO CA
 - 1 XIMEDIA CORP. SAN FRANCISCO CA
 - 1 XYBEK CUPERTINO CA

GPIB Problems?

M&E Associates can help! Extensive experience in implementation of the IEEE 488-1975 BUS. If you're having problems getting on the bus, call us at (408) 739-5168, or write M&E Associates, Department H, 10439 N. Stelling Road, Cupertino, California 95014.

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GULCH

GAZETTE



ALL OF THE NEWS ABOUT THE FIRST WEST COAST COMPUTER FAIRE

APRIL 15-17 in SAN FRANCISCO

Volume 0, Number 2

Computer Faire, Box 1579, Palo Alto CA 94302

April, 1977

FAIRE OFFERS ALMOST \$9,000
WORTH OF PRIZES;
VENDORS OFFER DISCOUNTS
UP TO 20%

Please see pages 2 & 3 for details.

WHEN CAN THE TAXMAN PUT THE BITE ON YOUR PERSONAL COMPUTER?

Kenneth Widelitz is an attorney, and has numerous hobbies. Besides being an active amateur radio operator with call letters WA6PPZ, he has a strong interest in personal computing. This puts him in a good position to know when your home computer system can help you to substantial tax benefits.

And it can.

But the law now makes it a close point whether an activity is a hobby or a vocation. Widelitz' talk will help you find the best course.

FREDERICK POHL, KEYNOTE BANQUET SPEAKER AT FAIRE, SCIENCE FICTION AUTHOR & EDITOR EXPLORES FUTURE

Author of 50 books, editor of 40 anthologies, winner of four Hugo awards, Frederick Pohl is a well known (and loved) figure in science fiction. He has also contributed several hundred short stories and articles to science fiction magazines, and other publications ranging from *Family Circle* through *Playboy* to *Rolling Stone*.

He has been translated into more than 40 languages, and has lectured in 200 some odd colleges, literary and professional gatherings and now at the West Coast Computer Faire.

Pohl's most recent books are *Man Plus* (Random House, 1976) and *Gateway* (Saint Martin's Press, 1977). That makes it forty years since he was first published.

One of the topics Pohl will cover includes a surprising and conclusive argument that ESP exists between human beings and the inanimate world, if not elsewhere. Another is the application of micro-computers to aiding the mentally handicapped by replacing and augmenting lost and diminished mental capabilities. Yet another fantasy Pohl shares with many people (notably Alan Kay at Xerox's Palo Alto Research Center) is for a small, booksize, personal computer.

The address will explore robots, and the analogy of a Turing machines' tape with the long sinuous strand of the messenger molecule: DNA. Frederick Pohl will also explore the morality of using computers in various roles and the very important question of personal privacy in an information-hungry world.

Whatever is on the menu, we are guaranteed a great dessert when Pohl speaks at the Faire.

FAIRE PROCEEDINGS WILL BE PUBLISHED

Now that we've seen the papers that have been submitted for the Conference program - they're outstanding! - we will definitely be publishing the *First West Coast Computer Faire Proceedings*. It will be available shortly after the Faire is over, when we have the time (gasp, wheeze) to put them together and have them printed. Cost and exact content is not yet known. If you are now receiving the *Silicon Gulch Gazette* by First Class Mail, or if you will send us your name and mailing address, we will forward all the details - price, table of contents, availability - as soon as we know them.

COMPUTER FAIRE SCHEDULE

Friday, April 15th:

University of California Short Course X402B
"Computers for Education"
pre-conference seminar for registered students
Kick-off Banquet, St. Francis Hotel
speakers: Frederik Pohl & John Whitney
banquet hall opens: 6:30pm (cash bar)
dinner: 7:30pm
speakers: 8:45pm
Move-in Day for exhibitors.
Exhibits will NOT be open to the public on Friday
NOTE: NO Conference Sessions scheduled for Friday.

Saturday, April 16th:

San Francisco Civic Auditorium doors open: 8:30am
Exhibit area opens: 9:00am
Conference Sessions begin: 9:00am
Exhibits & Conference sessions close: 6:00pm
Saturday night banquet, St. Francis Hotel
speakers: Prof. Henry Tropp & Ted Nelson
Banquet hall opens: 6:30pm (cash bar)
dinner: 7:30pm
speakers: 8:45pm

Sunday, April 17th:

San Francisco Civic Auditorium doors open: 9:30am
Exhibit area opens: 10:00am
Conference Sessions begin: 10:00am
Exhibits & Conference Sessions close: 5:00pm
5:02pm* - Faire organizers & exhibitors collapse

*NOTE: The previous issue incorrectly listed Sunday closing time as 6:00pm.

INEXPENSIVE SPEECH RECOGNITION BY HOME COMPUTERS

Recently Heuristics, Inc. announced an inexpensive (under \$250) speech recognition system. Two of the designers of the system will speak out (clearly and distinctly) about the features of speech recognition equipment.

Their paper "Speech Recognition Systems for Personal Computers" explains how an inexpensive interface board for the S-100 bus and a few programs (written in Tiny Basic) can do the work of machines that until their SPEECHLAB came along cost over \$10,000.

Their presentation covers speech recognition principles, the hardware and the software that make those principles work.

According to the designers, their kit is designed not only to be able to recognize a small vocabulary but also to teach the principles of speech recognition.

HOW ABOUT CB COMPUTER COMMUNICATIONS?

Dr. Raymond R. Panko sees the symbiosis of computer communication networks and citizen's band radio as an important force in the future in a presentation at the Faire. If, by 1980 (all of three years away), the cost of a letter doubles, and the cost of sending the same letter via a shared computer network is cut in half, then the two services would cost about the same.

The universal terminal-in-every-home could then revolutionize the way information is transferred between individuals.

This idea leads the speaker to some interesting conclusions.

EVEN BAGHDAD WANTS FAIRE INFO

Gentlemen,

Please send us a copy of your Gazette for the First West Coast Computer Faire and a list of exhibitors.

Yours very truly,
Yahya D. Jafar

Jafar Electronic Products
P.O. Box 11001
Baghdad, Iraq
Tel.95456

FAMOUS COMPUTER FILMMAKER TO BE FAIRE BANQUET SPEAKER

John Whitney's long standing reputation as a pioneer in computer aided films was augmented with the completion of his film *ARABESQUE* last year. The film has received honors here and abroad. Whitney has been one of the leaders in bringing the computer's role of art before the public.

As a keynote speaker at the Faire, Whitney will speak on "Digital Pyrotechnics: The Computer in Visual Arts." His talk will be illustrated by excerpts from some of his recent films. Adopting the vocabulary of music, Whitney explores "harmonics designed for the eye instead of the ear. It is interesting to note that the very creation of harmonic pattern had been altogether inconceivable until a very recent time when computer graphics eventually and slowly has become available to the visual artist."

"It should be of particular interest to realize that computer graphics--this 15 year old infant--is patently capable of bringing forth a totally different kind of visual experience as unique and riotously enjoyable--much cheaper--more energy/materials intensive than the Chinese pre-Christian invention of fireworks."

When computer graphics was still in its infancy, Whitney began making computer films. The earliest films used, essentially static computer images animated and colored by traditional filmmaking techniques. As computer technology has progressed, so has the degree of automation that Whitney has used.

The films he has produced have been shown at almost every major show of computer art, and no significant book on the subject omits mention of his work.

VACUUM CLEANER, CLAIM PITTMAN AND DAVIS, A MICROPROGRAMMABLE COMPUTER FOR HOBBYISTS

VACUUM stands for "A Variable Architecture Computing Machine" which is also the title of their talk for the West Coast Computer Faire. Besides being a cleaner way to implement various architectures, it is claimed that bit-sliced bi-polar components are faster, and can be assembled in any word length to increase processing power and addressing capability.

The VACUUM is a microprogrammed architecture, designed to easily emulate any existing byte-oriented computer. With only slightly more difficulty it should be able to emulate other medium to large scale computers.

The system, say the designers, may be thought of as an empty processor waiting to be filled with your favorite instruction set.

IF YOU PLAN TO STAY AT ANY OF THE 4 COMPUTER FAIRE HOTELS, BETTER MAKE YOUR RESERVATIONS NOW!

Hotel space is tight in San Francisco. If you wish to stay in any of the official Computer Faire hotels, you should make your reservations, immediately. Call or write: The WCCF Housing Bureau, San Francisco Convention & Visitors Bureau, 1390 Market St, San Francisco CA 94102; (415) 626-5500.

consumer information:

**WHAT THE BOLD PRINT GIVETH
THE SMALL PRINT CAN TAKETH AWAY**

Can you tell the difference between a full warranty and a limited warranty, an express warranty and an implied warranty? What are a manufacturer's liabilities when a product is sold?

Recent legislation has changed the old rules, and the consumer is better protected than ever before. But many will not take advantage of their rights through sheer lack of knowledge. Attendance at Kenneth S. Widelitz' session "What To Do When You Hit Return--and Nothing Happens. Warranty in the Microcomputer Industry" promises to be a sure cure.

The author, an Attorney at Law, will cover the specifics and the generalities. There is one specific wording a retailer can put on a product that renders all warranties, express or implied, null and void.

On the other hand, violations of express warranties allow the consumer to recover *treble* damages and attorney's fees. Learn how and from whom you can collect when it doesn't do what it should. There is an interesting ramification of this.

Manufacturers will have to include the potential cost of honoring their warranties in their prices. Many small industries now producing micro computers and accessories are in real danger of finding it too costly to maintain profitability.

How many manufacturer's know that even if they don't provide any written warranty there is a one year automatic warranty provided by law? It can be reduced in length, but only if the seller knows what to do. The laws are quite specific. It will benefit you to know what they say.

**KLUGEHORN MUSIC SYSTEM TO BE
PRESENTED BY EDITOR OF BYTE**

Justifiably blowing his own Klugehorn, a homebrew computer music system, Carl Helmers will describe the functional characteristics of his digitally controlled synthesizer system.

He will discuss the generation of pitch, waveform generation, envelopes, timing and display facilities. The *Proceedings* of the Faire will contain complete source listings of the programs. They are written for the 6800 CPU.

The Klugehorn functions as an interpreter, but makes extensive use of a 4800 Hz clock for timing. There is a simple keyword syntax that is used to control the synthesizer.

You'll be able to hear it all at the *Byte* booth at the Faire.

**PERSONAL COMPUTER USED FOR
ENGINEERING EDUCATION EXCITES
EXTRA ENTHUSIASM, EXCEEDS
EVERY EXPECTATION**

When the microcomputer kits first became available, Roger Broucke, of the Department of Aerospace Engineering at the University of Texas in Austin immediately saw their potential in both research and education. A kit was bought and built, and has been even better than at first thought.

His presentation, "Use of a Personal Computer in Engineering Education," describes the system that was built, and some of the software. Since a lot of the work involves the resolution of ordinary differential equations, some handy subroutines have been developed for the purpose. They will be explained at the talk, and will be available in the *Proceedings*.

Most of the work was in BASIC. The topics programmed include graphics, differential equations, orbital mechanics, non-linear mechanics and electromagnetics.

**GET THOSE TAXES DONE
BEFORE THE 15TH**

So you won't have to miss the kickoff banquet, Friday night, don't forget to have your computer finish off your tax return before the Ides of April.

MESSAGE CENTER AT THE FAIRE

Pacific Telephone will be manning a message center at the Computer Faire. Those wishing to have messages posted on Pacific Telephone's bulletin board in the Main Lobby may phone them in to (415) 864-9900.

SILICON GULCH GAZETTE

The Computer Faire
Box 1579
Palo Alto CA 94302
(415) 851-7664

Jim C. Warren, Jr.
Jef Raskin
Bob Reiling
Catherine Miya
Hans McClutchen
Flannigan, Brannigan & Shenanigan

Chaircreature
Secondary Word Monger
Operations Manipulator
Fastest Draw in the Gulch
wild Game Editor
Solicitors

**DISCOUNTS ON PRODUCTS PURCHASED AT THE FAIRE
OFFERED BY MANY MINI EXHIBITORS**

(Discounts for which the Faire has written commitments, as of April 2nd).

COMPANY	DISCOUNTS BEING OFFERED
MECA	20% discount on all products purchased at the Faire.
Q	20% discount on all products purchased at the Faire.
Parasitic Engineering & Morrow's Micro Stuff	20% discount on Deluxe Hardware kit if purchased with an EQUINOX-100 Computer Kit.
Smoke Signal Broadcasting	Clock Fix kit for Altair 8800 for \$5.00 with any other purchase.
XIMEDIA Corporation	\$25.00 discount allowed on items priced over \$150.00 ordered or purchased at the Faire. In addition, will be giving away "inflated" wooden nickels worth \$5.00 on the purchase of any item. (Limit- 1 per customer.)
Cybercom/Solid State Music	12% discount on all our products purchased at the Faire.
Realistic Controls Corporation	IMSAI I-8080 with TDL ZPU Card (instead of 8080)
Computalkers Consultants	Cooling fan, 22 slot motherboard with 22 pre-soldered Connectors, 44 card guides, \$ 999 Kit or, \$1295 assembled
Digital Research	SB-1 Synthesizer board for the S-100 bus. Retail: \$250 Faire Discount: \$220
Logical Services, Inc.	RCC Z//25 FORTRAN IV-MINIFLOPPY Kit. Retail: \$1095 Discount: \$995
Midwest Scientific Instruments Inc.	10% discount on all items purchased at the Faire.
MINITERM Associates	10% discount on all CP/M documentation purchased at the Faire.
SAC Sales Group	10% discount on all products purchased at the Faire.
Sunset Technologies	10% discount on all products purchased at the Faire.
VECTOR Graphic Inc.	10% discount on all products ordered at the Faire.
Video Terminal Technology	10% discount on all products purchased at the Faire.
Scientific Research	10% discount on all products purchased at the Faire.
EXTENSYS Corporation	10% discount on purchases of complete sets of the 5 volumes of BASIC software library.
Computer Magazine (IEEE Computer Society)	6% discount on all products purchased at the Faire.
ROM: Computer Applications For Living	Computer Society Publications offered at member discount prices.
Creative Computing	Premier issue of ROM free with subscription purchased at the Faire. This is a Faire exclusive.
	Extra issue of Creative Computing free to subscribers and renewers.
	Discounts on purchasing 3 or more Creative Computing books.

**DRAGNET? HAIRNET?
FISHNET? ARPANET?
NOW LET'S TRY... DIALNET
A PROPOSAL BY JOHN MCCARTHY
& LES EARNEST**

The authors of this paper are John McCarthy and Les Earnest, the Director and Associate Director of the Stanford Artificial Intelligence Laboratory. Their paper proposes a slower but more universal network modelled on the ARPANET in abilities but based on the telephone system for distribution.

A major use of the ARPANET as a communication channel between individual users grew up largely unanticipated by its designers. A similar use is anticipated for the DIALNET, as well as the original design objectives of program and data interchange.

The authors will present a scenario of how it will feel to use the DIALNET, and will examine the implications of such a system.

They are seeking NSF support for the proposal, which is aimed in part at bringing personal computer users onto a large scale network. It is proposed to have the DIALNET tie into the ARPANET.

**FLOWERS GROW FROM THE BOTTOM
SOFTWARE FROM THE TOP DOWN**

R.W. Ulrickson, President of Logical Services, Inc., gives the Faire an introduction to good programming techniques for microcomputers. More than just a buzz-word, top-down programming is a powerful tool that is accepted throughout the industry, and will be discussed in this talk.

Ulrickson observes that programmers in the personal computer area usually fall into one of two classes: The 20 year veteran who was weaned on punched cards, and the total novice who writes programs ad hoc on the back of old diapers. His presentation will help the novice -- and might even interest the hackers who program by the seats of their pants. The methodology presented, systematizes even the art of debugging, often changing a nightmare into a manageable project.

Better programming is needed to make our personal computers more effectively meet our needs. "Learning to Program Microcomputers? Here's How!" is the name of this excellent tutorial.

**A HOMEBREW FLOPPY CONTROLLER
FOR UNDER 5000 PENNIES**

Dr. Welles, with the aid of but 20 IC's, controls a floppy disk - the famous and inexpensive Shugart Mini-Floppy - directly from the S-100 bus. And while he's at it, the controller handles up to eight of these tiny drives.

The software designed for this interface requires from 300 to 600 bytes.

A lot of creativity, a bit of money, and a few hundred instructions *can* replace a lot of money. And you can learn all about it at the talk "A Simple, Low Cost, Versatile Interface for Floppy and Minifloppy Disk Drives" by Dr. Kenneth B. Welles II.

**PITTMAN SURVEYS
MICROCOMPUTER LANGUAGES**

Tom Pittman will present his views on the state of microcomputer languages and especially on the use of higher level languages.

The major microcomputer languages used by the hobbyist today, MITS BASIC, Livermore BASIC, SWTP BASIC, NIBL (a version of Tiny BASIC), PL/M, and others will be compared. The title of the talk is "Computer Languages--The Key to Processor Power".

**MULTI-TASK MICROS
MIND MANY MATTERS
SESSION SAVORS SOFTWARE SYSTEM**

Pilipovich will be speaking on the advantages of multi-tasking on 8080 based microprocessor systems. This paper describes the components and theory of his recently developed operating system.

The speaker is currently responsible for software development for MVT Microcomputer Systems, Inc.

**AMATEUR RADIO,
SLOW SCAN TV, AND MICROS**

Clay Abrams, K6AEP, will unveil his micro-computer algorithm to generate slow scan graphics and pictures. His program can easily transmit up to seven different frames in any order or repeat a specific one with just the push of a button. A small, three IC interface joins the computer to the transmitter.

**RANKIN REVEALS ARITHMETIC
ALGORITHMS IN TALK AT FAIRE
WILL DISCUSS AMBITION, DISTRACTION,
UGLIFICATION AND DERISION**

Most microcomputers have only eight bits of precision. This isn't enough to even balance your checkbook unless you never keep more than \$1.27 in it. Rankin will explain how to design programs that do multiple precision arithmetic for both fixed and floating point quantities.

Rankin observes that these routines, part of every large scale processor's library, are not generally available for personal computers. His paper covers number representations, both signed and unsigned, BCD, and excess $2^{**}(n-1)$.

The mathematical operations he will explain are addition, subtraction, multiplication and division. Sorry, Lewis Carroll.

**FAIRE TO HAVE EMPLOYMENT
BULLETIN BOARD**

Those seeking employees or employment, particularly in the computer field and digital electronics, may wish to take advantage of the Employment Bulletin Board at the Computer Faire. Those having job openings may post notices of these positions on the Board. Those seeking employment may post their names qualifications, and interests. There is no charge for this facility.

WOW! PRIZES AT THE FAIRE & BANQUETS

The following products have been donated by the indicated vendors to be awarded for the best homebrew exhibits, and to be given away as door prizes at the Faire banquets and convention, (as of April 2nd).

COMPANY	QUANTITY	PRODUCTS	RETAIL VALUE
Midwest Scientific Instruments Inc.	1	MSI FD-8 Floppy Disk System, complete with MSI Disk BASIC & FDOS Operating System	\$1500.00
Parasitic Engineering & Morrow's Micro Stuff	1	EQUINOX 100 Computer Kit	\$ 599.00
	1	Power Supply Kit (customers choice for either the Altair 8800 or an Equinox 100 power supply)	90.00
	5	Clock Fix Kits for the Altair 8800 (\$15@)	75.00
Technical Design Labs Inc.	1	Xitan Alpha I System (kit)	\$ 769.00
Cybercom/Solid State Music	1	SB-1 Synthesizer Board for the S-100 Bus	\$ 250.00
	1	VB-1A Video Interface for the S-100 Bus	189.95
	5	XB1 Kit (\$12.50@)	62.50
Southwest Technical Products	1	GT-64 Terminal with matching monitor	\$ 495.00
Computalk Consultants	1	Model CT-1 Speech Synthesizer Board	\$ 395.00
XIMEDIA Corporation	5	OAE Tape Readers (\$75@)	\$ 375.00
North Star Computers, Inc.	1	Hardware Floating Point Board Kit, including Compatible version of North Star BASIC.	\$ 359.00
GIMIX, Inc.	10	Gimix Gobblers (\$30@)	\$ 300.00
MINITERM Associates	1	MERLIN Video Interface Kit	\$ 269.00
ROM: Computer Applications For Living	2	Lifetime subscriptions to ROM: Computer Applications for Living (\$250.00@)	\$ 500.00
VECTOR Graphic, Inc.	5	Motherboards (\$49@)	\$ 245.00
Polymorphic Systems	1	Video Terminal Interface Kit	\$ 210.00
MINI-MICRO Systems Magazine	4	CORVUS Slide Rule Calculator (\$50@)	\$ 200.00
MECA	1	MECADRIVE	\$ 200.00
Godbout Electronics	1	BASIC RAM kit (use with "JOLT", etc.) 4kx8	\$ 88.00
	1	ECONORAM Kit (use with Altair/Imesai S-100)	99.95
Smoke Signal Broadcasting	1	P-38 8K EPROM Board	\$ 179.00
Hayden Book Company, Inc.	10	BASIC BASIC (\$7.95@)	\$ 79.50
	10	Microprocessor BASICS (\$9.95@)	99.50
Tarbelle Electronics	1	Tarbelle Cassette Interface Kit	\$ 120.00
	2	Tarbelle Prototype Boards (\$28@)	56.00
BYTE Publications Inc.	1	Lifetime subscription to BYTE magazine.	\$ 150.00
Component Sales, Inc.	1	Burroughs SELF-SCAN	\$ 150.00
IASIS, Inc.	1	Microcomputer Design Course (6 volumes)	\$ 99.50
	5	Microcomputer Applications Handbooks (\$7.95@)	39.75
Lade Company	2	2708 (8K E-PROM) (\$40@)	\$ 80.00
	16	2107B-4 (4k Dynamic RAM) (\$3.625@)	58.00
Scientific Research	1	Set of all 5 volumes of BASIC Software library	\$ 109.75
Technical Systems Consultants	1	TSC Text Editing System-6800	\$ 23.50
	1	TSC Micro Basic Plus-6800	15.95
	1 ea.	Package I for 1)6800, - 2)6502, - 3)8080 (\$20@)	60.00
Oliver Audio Engineering Inc.	1	OP-80A Paper Tape Reader Kit	\$ 74.50
Digital Research	1	CP/M System Diskette & Documentation	\$ 70.00
Logical Services Inc.	1	Modu-Learn Microcomputer Software Course	\$ 49.95
PAIA Electronics Inc.	1	8780 Equally tempered D/A (for music)	\$ 34.95
AMS Publishing Company	5	The Underground Buying Guide (\$5.95@)	\$ 29.75
Sunset Technologies	1	Gift Certificate	\$ 25.00
Creative Computing	1	The Best of Creative Computing, Vol. II	\$ 8.95
	1	101 BASIC Computer Games	7.50

IF ALL OUR COMPUTERS BANDED TOGETHER

What would be done, what *could* be done, if the personal computers could talk to each other? Share programs and data to be sure, and have an automated message exchange like the world has never seen. Mike Wilbur has put the dreams together with practicality in his presentation at the Faire.

"A network of Community Information Exchanges: Issues and Problems" looks at the design, problems, the user problems, the costs, and the social and legal problems. How could you keep "junk mail" from filling up the memory of your computer? Could someone sneak into your system and steal your new compiler? How about those love letters you write on your text editor?

Wilbur presents some of the ways the exchange can impact consumers, the environment, the law. Would the FCC consider it computation, which is unregulated, or communication, which is? Could an individual's home system be connected, say, to the ARPA net through such an exchange?

Some of the more technical aspects of the network, such as protocols, codes and message addressing are also covered.

TIMESHARING TITILLATES TEACHERS WHILE MULTIPROCESSING MICROPROCESSORS MULTIPLY

Joseph McCrate of Cromemco feels that the future for many micros lies in time-sharing activities. He will present the paper "A New Approach to Time-sharing with Microcomputers."

The approach includes provisions for task mapping, where slow I/O bound programs can plod long doing their thing while the processor races ahead at its own rate executing a non-I/O limited algorithm.

AHL TO PRESENT MULTI-MEDIA TALK ON 'COMPUTER POWER TO THE PEOPLE'

Computers are everywhere, says Dave Ahl, publisher of *Creative Computing*. The little markings on most packages at supermarkets are an often encountered example. A number of surveys taken over the years will be reviewed. These establish the kind of mythical existence computers have had. Ahl compares media reports with the reality of various situations. Lastly he takes up the cudgel of the future, and what challenges lie ahead. He predicts that calculators and CB will have a small impact, compared to the impact that computers will have on the population in the years to come.

PICK A PECK O'POCKET 'PUTERS

What can you do with an HP-65 that the manufacturer doesn't know about? Or the SR-52 or HP-67? Can you get one to play chess? Be a stopwatch? Do you want to know how to store data on an SR-52 programming card? Richard Nelson, in his talk on "The Shirt Pocket Computer" looks into the unsupported features of these calculators. He traces their history and how user discoveries on earlier machines influenced the design of later pocket computers.

Did you know that large displays were available for these machines for classroom use? The paper in the proceedings has a large bibliography with sources for even more information on pocket calculators.

IF "SMALL IS BEAUTIFUL," IS MICRO MARVELLOUS?

So asks Andrew Clement in his paper for the West Coast Computer Faire. He subtitles his presentation, "A look at micro-computing as if people mattered."

Using the criteria from E.F. Schumacher's well known book *Small is Beautiful*, Clement looks critically at the field of microcomputing. He examines why micro-computer technology is important and points out that McLuhan's observation: "We shape our tools, thereafter they shape us" applies strongly here.

Microcomputers are small, inexpensive, and simple. Three of the four criteria Schumacher thinks important for future technologies. Clement finds the microcomputer is also non-violent -- the last of Schumacher's desiderata. Beyond this he notes that computers are fun, and can contribute to the elimination of fear and misunderstanding.

He concludes with a challenge to computer amateurs and other pioneers in the micro-computer revolution.

A 44 PIN STANDARD BUS FOR HOME BREW SYSTEMS PROPOSED BY CASTRO AND HEABERLIN

Two home systems were built; one around the 6800 CPU and one around the 8080 CPU. A bus was designed that could be used for both. The designers will discuss the merits of their bus design and the implications of their work for all hobbyists.

Memory mapping all I/O is an essential feature of their system. Both priority and vectored interrupt is available.

The authors are electronic design engineers. The paper in the *Proceedings* gives the complete bus specifications.

PRESENTATION FEATURES PRACTICAL ADVICE ON SETTING UP MICRO-COMPUTERS IN THE SCHOOLROOM

The speaker, Peter S. Grimes, is the Curriculum Supervisor for the San Jose Unified School District. His paper "Classroom Microcomputing -- Boon or Bust" discusses how San Jose schools introduced microcomputers into its classrooms.

Recommendations on alternative systems, costs, failures and successes, kit construction, teacher in-service training and reliability will be made based on the year's experience.

Mr. Grimes will also discuss the effect on students, the problems of maintenance, and the school system's future plans.

A MARK-I MEETING (Phone Corrected)

During one of the days of the Computer Faire, how about a 'Mark I' luncheon for those of us who worked on the Mark I, ENIAC, etc? Or at least those who have been in computers more than 25 years.

John T. Blake, PE
Box 538
Yucca Valley CA 92284
(714) 364-2594

TUTORIAL ON RELOCATABLE CODE LOCATED AT FAIRE

If you have wondered exactly what relocatable code is and how it works, then the tutorial, "Modular Relocatable Code" by Dennis Burke should satisfy your curiosity. Along with the introduction to relocatable code will be a discussion of existing relocatable assemblers. The usual buzzwords associated with such assemblers will be demystified.

PILOT MAKES IT EASY TO HAVE YOUR COMPUTER TALK TO YOUR FAMILY AND FRIENDS

PILOT is a language for controlling a dialogue between a computer and a user. Invented by the speaker, John Starkweather, PILOT is widely used in Computer Assisted Instruction and other dialog-based applications. Now, PILOT is available as an interpreter that can be used with many 8080-based systems.

The new version of PILOT is built so that modification for specific hardware, port assignments, memory allocation and all that is easily accomplished.

PILOT is well known for its simplicity of design, so that even novices can easily interact with a PILOT dialog. Relatively little training is required to learn to program such a dialog, as well.

The talk, entitled: "A PILOT interpreter for a Variety of 8080 Systems" includes details on the languages' design, syntax, and usage.

Starkweather is the Director of the Computer Center at the UCSF Medical Center.

PAPER TO DISCUSS TELEMATH COMPUTER ASSISTED INSTRUCTION

Lois Noval will present the TELEMATH system. It teaches mathematics through the use of microcomputers. The students, able to work without close supervision, solve problems presented to them on a TV screen. Correct solutions, promptly given, move a team ahead as the game is played.

The microcomputer allows the system to be cost effective. A strip of film, intriguingly enough, is used to store the programs. The students are said to find program loading via the film strip easy and convenient. Answers are given via a calculator-style keyboard.

SPEECH SYNTHESIS QUALITY IMPROVED BY NEW APPROACH TO ORGANIZING PRONUNCIATION

Dr. Grundt observes that the usual linear model of speech synthesis, where phoneme selection is based on (at best) tables of format transitions result in unintelligible or highly accented attempts at computer speech. Drawing on recent work in Linguistics she finds a possible solution in a tree-structured approach where choice of phonemes is governed by more global considerations.

In her talk at the Faire, Dr. Grundt will explain the implications of her observations so that they may be directly applied to computer speech synthesis.

GETTING ON WITH THE BUS: S-100 STANDARDIZATION

"Standardization on the S-100 Bus: Timing and Signal Relationships, A Proposed Standard" is the exact title of Pietsch's paper.

His work is getting various products to exist compatibly on the S-100 bus has led to a possible "standard" for signal relationships. Fixes for products from many manufacturers are covered in particular.

BIOFEEDBACK TECHNIQUES PROPOSED FOR GIVING THE PHYSICALLY HANDICAPPED A MAGIC TOUCH

Bio-feedback equipment can detect and utilize the low level signals of the human nervous system, and teach people how to control some of those signals. Similarly these signals can be monitored, converted to computer-readable form and used to control any number of devices at the mental command of the person using the system.

This is especially useful to physically impaired persons. Electro-myographical switches - bio-feedback sensors - have been in use for some time, but the addition of an inexpensive microprocessor can greatly increase their flexibility.

This important area (with its science fiction overtones) will be discussed at the Faire in a paper "An Electro-myographic Switch for Microprocessor System Control" by L.R. Upjohn.

"A CLASSROOM SYMBOL COMMUNICATION SYSTEM FOR THE NON-VERBAL PHYSICALLY HANDICAPPED" TO BE A TOPIC AT THE FAIRE

Peter J. Nelson of the Medical Engineering Section of the National Research Council of Canada has developed a microcomputer-based system to provide several severely handicapped students with the ability to prepare responses on their own symbol selector board. Complete thoughts can be transmitted to another student's board or to the whole class via a video display.

Simultaneous audio reinforcement is provided by a speech synthesizer.

The system uses the Bliss Symbols. They are pictographically related to the concepts, and experiences they represent. They are more easily learned than an alphabetic language. But the student still has to be able to point to a choice of one symbol among a board of from two to five hundred. But a small keyboard or a paddle or joystick can be manipulated if even a single finger can be moved.

The microcomputer can open channels of communication to the severely handicapped as has never been possible -- in a cost-effective way -- before.

GAMES FOR THE FUTURE

Every baby born in American will generate almost 1,000 times the demand for global supplies of basic energy as an infant born in the African nation of Burundi.

Now it's possible for humans to learn the consequences of their choices through computer "games" using this kind of information.

Prof. Robert C. North, a Stanford political scientist, provides an overview of this process in *The World That Could Be*, a new paperback published by the Stanford Alumni Association (150 pp., \$4.45).

Based on a Stanford student class experience with the University of Illinois PLATO program and his own personal research, North emphasizes there's no simple formula to ensure global survival, let alone prosperity.

"The more carefully we examine the plight of humankind today, the less blindly partisan our attitudes are likely to be," North says.

Computers may soon enable wide segments of the public to construct their own utopias and learn to modify their daily behavior in ways that enhance the future, he adds.

"Such techniques are still in their early infancy, but they are almost certain to develop rapidly over the next few years.

"We can imagine only a few years hence special desks equipped with typewriter-like keyboards and using cassette tapes, or their equivalent, being made available not only to national leaders in public and private sectors, but also to libraries, universities, colleges, high schools.

"Each desk will be capable of ordering, analyzing, and displaying on a screen vast amounts of demographic, social, economic, and political data. Anyone who can ask questions and type them in can obtain answers about the past, present, and future.

"In a few minutes, a sixth-grade student can watch 100 years of population growth, increasing resources demands, intricate trade patterns, pollution trends, or spiraling military budgets unfold on the screen.

"If he or she wants to assume the continuation of past trends into the next 15, 30 or 50 years, it will be possible to call them up on the screen and see some of the consequences.

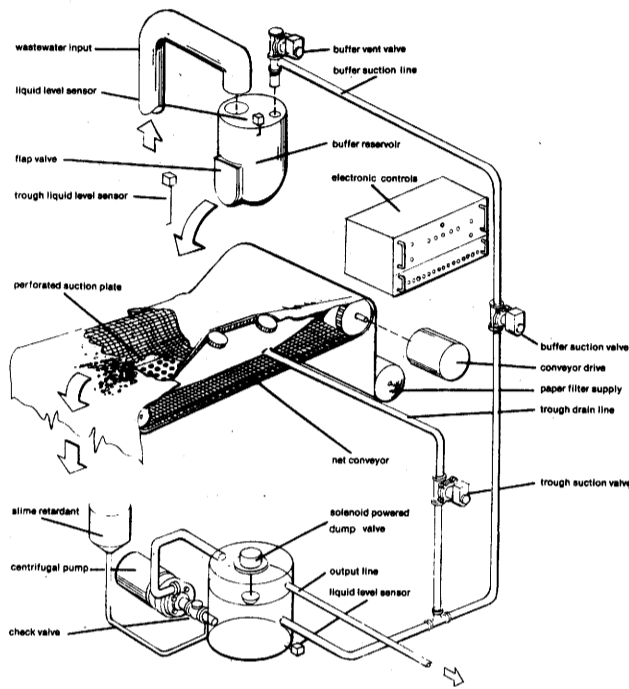
"Then the student will be able to 'reduce' population growth and observe some of those consequences -- or decrease consumption, divide the whole world product evenly among everyone, or bring the world up to the U.S. per capita level and again observe the consequences.

"The functional equivalents of our imaginary desk unit may well be a reality within the next 5 to 10 years. Such tools, made available to everyone everywhere, could vastly speed up social learning and possibly contribute over a generation or more to futures we can scarcely even imagine from today's perspective.

MICROPROCESSOR CONTROLLED HOUSEHOLD SEWAGE TREATMENT & RECLAMATION SYSTEM

In the near future, a microprocessor may supervise the treatment and reclamation of your household sewage - moments after you flush the toilet! Great Circle Associates, a Limited Partnership in Berkeley, California, has just developed the prototype of a unique, on-site processing system utilizing paper filtration and composting, and featuring major savings in water, energy and cost. The system employs a batch process which involves a minimum of mechanics and maximum use of electronic controls. The first prototype - now installed in the Farallones Institute Integral Urban Home in Berkeley - has used hand-wired TTL logic, but in the next generations of development and production models, will utilize a dedicated microprocessor. Among the advantages they cite for the microprocessor approach, are low development cost, design flexibility, process optimization potential, and in-service modification capability. Steve Mullerheim, President of Great Circle, estimated that within 2 years, a limited number of production units will be available in a 6 to 8 household capacity, at an installed cost of approximately \$800 to \$1000 per household.

PHYSICAL SYSTEM DESCRIPTION



 process and apparatus patents pending

MICROS FOR HOME ENERGY CONTROL

"Unprecedented energy savings are made possible by progressive architectural techniques and microcomputer control systems," says the author of the paper "Microcomputers: A New Era for Home Energy Management" that will be presented at the Faire.

The talk will cover structural as well as computer techniques that are used to effect efficiencies in utilization of natural resources.

"INDUSTRIALIZATION OF SPACE" CONFERENCE

A call for papers has been issued by the American Astronautical Society (AAS) for its 23rd annual meeting. General theme of the conference is "The Industrialization of Space - Planning for Profit at the High Frontier."

Set for October 18-20 at the Airport Hilton Hotel in San Francisco, the AAS meeting is being co-sponsored by the American Institute of Aeronautics and Astronautics (AIAA), Institute of Electrical Engineers (IEEE), British Interplanetary Society, International Institute of Space Law, American Society for Quality Control, Stanford Research Institute, L-5 (space colony) Society, and National Space Institute.

The conference will focus on commercial activities in space over the next decade, with papers invited on such subjects as large manned or unmanned space structures, manufacturing in space, planning space communities (including psycho-social considerations), space law, and the economic realities of industrializing and colonizing space.

Abstracts of 200 to 500 words, or requests for more information, should be sent for consideration before May 1 to Technical Program Chairman Paul Siegler, Earth/Space, Inc., 4151 Middlefield Rd, Palo Alto CA 94303; (415) 494-8339. Authors will be notified of acceptance by June 1, and final manuscripts will be due by September 1.

ACM PUBLISHES 1977 ADMINISTRATIVE DIRECTORY

The 1977 edition of the Administrative Directory of Chairmen of University and College Computer Science Departments and Directors of Computer Centers is now available from Association for Computing Machinery Headquarters. In addition to names, addresses, and telephone numbers, the Directory lists computer science and data processing degrees offered and major on-site computing equipment. As in the past, the officers and key staff members of related computer organizations are included.

The Administrative Directory, consisting of more than 2,300 names, has nearly doubled in size from the first edition published last year and now includes colleges in Canada as well as in the U.S. It may be ordered from the ACM Order Department, P.O. Box 12105, Church Street Station, New York, NY 10249 at \$7.00 for ACM members and \$9.00 for others, prepaid.

ADDRESSES OF CO-SPONSORS OF THE FAIRE

- Homebrew Computer Club
Box 626
Mountain View CA 94042
- Southern California Computer Society
Box 5429
Santa Monica CA 90405
- San Francisco Peninsula ACM* Chapter
Box 60355
Sunnyvale CA 94088
- Golden Gate ACM* Chapter
Box 26044
San Francisco CA 94126
- Santa Clara Valley IEEE-CS* Chapter
701 Welch Road No. 2210
Palo Alto CA 94304
- California Mathematics Council
3360 Tonga Lane
Alameda CA 94501
- Electrical Engineering Department
Stanford University
Stanford CA 94305
- Lawrence Hall of Science
University of California
Berkeley CA 94720
- People's Computer Company
Box E
Menlo Park CA 94025
- Community Computer Center
1919 Menalto
Menlo Park CA 94025
- Bay Area Microcomputer Users Group
1211 Santa Clara Avenue
Alameda CA 94501
- Professional & Technical Consultants Assn.
1 First Street
Los Altos CA 94022
- Amateur Research Center
Space Science Center
Foothill College
Los Altos CA 94022

*ACM: Association for Computing Machinery
IEEE-CS: Institute of Electrical & Electronics Engineers - Computer Society

NO FLEA MARKET

The last issue mentioned the possibility of having a flea market at the Faire. We received only two expressions of interest in this, so -- between the minimum interest, and the massive amount of other details available to entertain us -- the Faire will NOT include a flea market.

BLEGH! BART DOES NOT RUN ON WEEKENDS

The San Francisco Bay Area has one of the most advanced and exotic mass transit systems in the world--BART, Bay Area Rapid Transit system. It's beautiful; it's modern; it's automated; it's convenient, . . . and it doesn't run on weekends. You will be delighted to know, however, that everything you buy in San Francisco will cost you an extra 1/2 percent sales tax, which will go to support the BART system you won't be able to use. Bleg!

A NOTE OF APOLOGY FROM JIM WARREN

This is particularly directed to (1) those who have phoned or written to me and received no reply, and (2) those who are subscribers to Dr. Dobb's Journal. I must apologize for (1) my failure to answer the mass of calls and notes, and (2) the tardiness with which I have produced the last two issues of DDJ.

The Computer Faire has snowballed into something far larger and more time-consuming than any of us really expected. Just for instance, in the last 10 days, I have averaged 13.25 hours/day in work on the Faire. That's on top of teaching a Computer Science course at Stanford, editing Dr. Dobb's, and diddling with local ACM administration. Sadly, my "to write" file has grown to slightly less than 2" thickness; my phone queue is "only" 1 1/4" high; DDJ is about 3 weeks late . . . and I'm swamped!

Please accept my sincere apologies. I am not ignoring you. DDJ has not died. I will write or call, hopefully soon after the Faire is over. DDJ will catch up, and will probably be back on schedule by the May issue. I hope that you will agree with me that the Faire is worth having happen--for its benefit to the entire personal and hobby computing community--and will accept my turtle-like responses.

JIM WARREN

P.S. Incidentally, the March and April issues of DDJ are being copy-edited and laid out under the direction of Dennis Allison (the originator of Tiny Basic), who has come to our rescue. So, with luck, DDJ production might even be back on schedule by the end of this month.

ADMISSION COMPLAINT

Computer Faire
Eight dollars!!? For a Prereg ticket! You gotta be kidding . . . just slammed the door on my foot. I'll check you next year.

R.H.-San Francisco

Sorry 'bout that. We think our prices are rather in line with - or better - than other activities that offered much less. For instance, the Star Trek convention was \$12/3 days or \$8/1 day. The recently completed Personal Computer show in the Hyatt House Motel in L.A. charged \$10 for their 2-day admission, had less than 40 exhibitors, and had only two conference rooms.

USE THIS & OBTAIN THE First West Coast Computer Faire A REDUCED ADMISSION RATE PREREGISTRATION FORM

Must be received on or before April 11, 1977. Send payment & completed Preregistration Form to: The Computer Faire Box 1579, Palo Alto CA 94302. Do NOT send cash. Send check, or money order.

NAME _____

MAILING ADDRESS _____

CITY _____ STATE _____ ZIP/POSTAL CODE _____

THIS QUESTIONNAIRE MUST BE COMPLETED IN ORDER TO TAKE ADVANTAGE OF THE REDUCED ADMISSION RATE

AGE RANGE IF IN SCHOOL SCHOOLING COMPLETED

LEVEL OF INVOLVEMENT AND INTEREST

MEMORY CPU TERMINAL

MASS STORAGE

SOFTWARE & FIRMWARE YOU USE ON YOUR PERSONAL COMPUTER

25 Assembly 26 Editor 27 char-oriented 28 line-oriented 29 BASIC 30 includes float. pt 31 String Processor 32 Other interpreters 33 Other compilers 34 Monitors 35 Operating systems

EMPLOYMENT

COMPUTER & ELECTRONICS PUBLICATIONS YOU RECEIVE

106 Idle rich, full-time student, or unemployed 107 Work with computers 108 Max's 109 Mini's 110 Micro's 111 Management 112 Marketing 113 Programming 114 Engineer 115 Programmer 116 Technician

122 Other: 123 Work in non-electronic technical or scientific area 124 Work in education 125 CS or EE 126 Other Engineering 127 Other Science 131 Work in Medicine or Biomedical area

132 Am a member of an amateur computer club 133 If so, which club? 134 Located where? Other hobbies of current interest: 135 Amateur radio ('ham', not C.B.) Call # 136 Other:

COMPUTER FAIRE FEES

ADMISSION

Admission to the First West Coast Computer Faire includes admission to all official Faire Conference Sessions, and to all commercial & homebrewed exhibits on both Saturday and Sunday, April 16th & 17th, at San Francisco's Civic Auditorium. It does not include admission to the Friday and Saturday evening banquets at the St. Francis Hotel, nor does it include admission to the pre-convention sessions of the University of California course that is associated with the "Personal Computers for Education" Faire Conference Section.

AT-THE-DOOR ADMISSION

per person \$9.00 ANYONE \$6.00 COLLEGE, UNIVERSITY, AND ELEMENTARY & SECONDARY SCHOOL STUDENTS This requires presentation of personal student identification at the ticket sales window.

PREREGISTRATION ADMISSION (Please use the adjacent Preregistration Form)

per person \$8.00 ANYONE \$7.00 MEMBERS OF CO-SPONSORING ORGANIZATIONS (LISTED BELOW) This requires that a mailing label from a recent mailing of one of the organizations, addressed to the individual who is preregistering, be attached to the Preregistration Form. HOME BREW COMPUTER CLUB SOUTHERN CALIFORNIA COMPUTER SOCIETY PENINSULA CHAPTER OF THE ASSOCIATION FOR COMPUTING MACHINERY GOLDEN GATE CHAPTER OF THE ASSOCIATION FOR COMPUTING MACHINERY SANTA CLARA VALLEY CHAPTER OF THE IEEE COMPUTER SOCIETY CALIFORNIA MATHEMATICS COUNCIL PROFESSIONAL AND TECHNICAL CONSULTANTS ASSOCIATION \$5.00 COLLEGE, UNIVERSITY, AND ELEMENTARY & SECONDARY SCHOOL STUDENTS This requires that a copy of the student's personal student identification (that includes the student's name) be attached to the Preregistration Form. \$4.00 MEMBERS OF A SECONDARY SCHOOL, STUDENT FIELD TRIP Please use the School Field Trip Form to be found on page 7 in this issue of the Gazette. "Members" of such a field trip include the students, the sponsoring teacher(s), and any accompanying parents. A "field trip" must include a teacher or computing advisor, and must include at least four students for each adult. Any exceptions to these rules must be cleared with the Computer Faire in advance.

CHILDREN UNDER 14 MUST BE ACCOMPANIED BY A RESPONSIBLE ADULT AT ALL TIMES.

BANQUET RESERVATIONS

In order to assure acceptance of your request for banquet reservations, please place your order as early as possible. BANQUET SEATING SPACE IS LIMITED. As described on pages 4 and 6 in this issue, there will be two Computer Faire banquets, each having two outstanding speakers. Each will have a pre-banquet reception (= cash bar) beginning at 6:30, with dinner served at 7:30. Friday, April 15th: Poached Filet of Pacific Coast Salmon, \$16.95 (includes tax and gratuity). Saturday, April 16th: Breast of Capon, \$16.95, (includes tax and gratuity). Both banquets will be held at the St. Francis Hotel on Union Square in San Francisco. \$16.95 EACH BANQUET (INCLUDES TAX & GRATUITY)

A limited number of perimeter seats will be available for those wishing to come for the speakers' presentations after the banquet, but preferring not to attend the reception or banquet. This seating is available on a reservation basis. \$5.00 PERIMETER SEATING FOR SPEAKERS' PRESENTATIONS, ONLY (\$5 for Friday; \$5 for Saturday) Banquet and seating reservations that are received after the available space is filled will be refunded by return mail.

A Tutorial for the Absolute Novice:

WHAT YOU NEED TO KNOW TO APPEAR AS THOUGH YOU KNOW WHAT YOU NEED TO KNOW AT THE FAIRE

James White will be speaking on "An Introduction to Computing to Allow You to Appear Intelligent at the Faire". Here's a quick way to pick up on the basic concepts and buzz-words of home computing.

The purpose of his discussion is "to provide the novice enough basic knowledge so he or she can learn from, and enjoy, other Faire activities."

White is currently working on an introductory book, also targeted for personal computing novices.

Most of the talk will be on what goes into computers. The rest of it will discuss what computers go into. If you want to know where the microcomputer will be appearing in education, industry, and the home, and you think it's all over your head, drop in on this "Introduction".

the computer as a humanizing force is thrust of Felenstein presentation

"SOFT" TECHNOLOGY INFORMATION EXCHANGE SEEN AS FACILITATING COMMUNICATION

The noted personal computing hardware (Pennywhistle, SOL) designer, Lee Felenstein, will present an unusual thesis at the Faire. Entitled "Community Memory--A 'Soft' Computer System" he will discuss an information utility that violates many of the usual design criteria of industrial information systems.

Societal efficiency replaces corporate or financial efficiency as the prime goal. There would be no more check, for example, on the accuracy of information available on the system than there is concern the accuracy of cards on a local bulletin board. Rather than blind belief in the output of a computer, people -- who would have access to put in any item they desired--would learn to judge the quality of what the computer's search turns up. It would be an unmysterious system.

With a network of Community Memory facilities, a certain sense of "community" could extend across a city, a nation, and (it may be hoped) worldwide. The presentation will discuss some of the practical details of such a system, and how it could be run.

TOPICAL TALK BUILDS PICTURE OF STRUCTURED PROGRAMMING

Ed Keith will present Structured Programming from the ground up. The recent formalization of the concept of what is loosely called "GOTO-less" programming has been gaining in popularity. More than a fad, studies have shown that better code is written more quickly using these techniques.

Using microcomputers with their limited memory and slow speeds (especially in BASIC) makes the advantages of structured programming very attractive.

The session is titled "Structured Programming for the Computer Hobbyist" and will be illustrated.

A COMPUTERIZED CW STATION

Tired of hand copying and sending Morse code? Learn about the CW ("continuous wave" - Morse Code) man's Utopia -- a microprocessor controlled automatic CW station. In the receive mode, the processor monitors the receiver audio output and displays the decoded CW as a written character on a TV screen or teleprinter. The program even adapts to different speeds automatically. On transmit, the operator types the desired message on a keyboard and it is output in Morse characters to key the transmitter. Transmit speed is controlled by a single constant in the program. A demonstration will follow the talk. Try to fool the computer by sending too fast for it!

PARKING IS NO PROBLEM AT THE CIVIC AUDITORIUM

Parking is normally an expensive horror around San Francisco's Civic Center. However, please note that, since the Computer Faire is taking place on a weekend, parking will be no problem at all. (Sadly, we cannot report a similar circumstance concerning parking around the St. Francis Hotel where the banquets will be held. Carpool, anyone?).

SMOKING TO BE ALLOWED IN DESIGNATED AREAS AT THE COMPUTER FAIRE

As a special convenience for those wishing to smoke without having to leave the auditorium, two large rooms have been set aside and explicitly designated as Smoking Areas.

PRELIMINARY (PARTIAL) COMPUT-

The following is an incomplete listing of the speakers and titles of presentations that will be given in the Conference activity at The First West Coast Computer Faire (as of March 27th). More papers are arriving daily. Additionally, several panels are in the final stages of being organized. A complete program will be given to each Faire attendee as they enter the San Francisco Civic Auditorium on April 16th or 17th. Note: that program will include mailing addresses for all speakers.

TUTORIALS FOR THE COMPUTER NOVICE (Saturday)

- James S. White
An Introduction to Computing to Allow You to Appear Intelligent at the Faire
- Fred Waters
A Tyro Looks Back
- Lowell Smilen, PhD, Alamac/Stroom Electronics
The Sidelobes of Industrial Distribution are Focused on the Home Microcomputer Hobbyist
- Richard J. Nelson
The Shirt Pocket Computer

PEOPLE AND COMPUTING (Saturday)

- Andrew Clement
If "Small is Beautiful", is Micro Marvellous? A Look at Micro-Computing as if People Mattered
- Dennie L. Van Tassel, University of California, Santa Cruz
The Computer in Science Fiction
- David H. Ahl, Publisher, Creative Computing
Computer Power to the People: The Myth, The Reality & the Challenge
- Kenneth Berkun
Psychology and the Personal Computer

MUSIC AND COMPUTERS (Sunday)

- John Chowning and James A. Moorers
The Stanford Computer Music Project: A Tutorial with Musical Examples
- David D. Sherertz, University of California Medical Center
An Implementation Technique for MUMPS
- Carl Helmers, Editor in Chief, Byte Publications, Inc.
The Kludgehorn: An Experiment in Homebrew Computer Music
- Jef Raskin*
A Pipe Organ/Micro Computer System
- Thomas E. Olsen
A Computer Controlled Audio Generator

COMPUTER ART SYSTEMS (Saturday)

- Rona Gurkewitz, Western Connecticut State University
ARTSPEAK and Computer Art with BASIC and a Teletype
- Ronald Pellegrino
Composing Dynamic Laser Light Sculptures via a Hybrid Electronic Wave System

COMPUTER-CONTROLLED VIDEO ART (Saturday)

- Larry Forman, Conference Section Leader
Dick Shoup, Xerox Palo Alto Research Center
Digital Video Painting
- Stephen Beck, Beck Videographics
Video Synthesis: Expanding Electronic Vision
- Jo Ann Gillerman*
Video Synthesis & Performance with an Analog Computer

SPEECH INPUT & OUTPUT BY COMPUTERS (Sunday)

- John Reykjalin & Horace Enea, Heuristics, Inc.
Speech Recognition Systems
- D. Lloyd Rice, Computalker
The Computer Should Speak Your Language
- Alice Wyland Grundt, PhD, Linguistics Dept., California State University at Fresno
Structured Programming in Speech Synthesis

PERSONAL COMPUTERS FOR THE PHYSICALLY DISABLED (Saturday)

- Peter J. Nelson, Medical Engineering Section, National Research Council of Canada
A Classroom Symbol Communication System for the Non-Verbal Physically Handicapped
- Laurence R. Upjohn, Pharm.D.
An Electro-Myographic Switch for Microprocessor System Control

EDUCATION AND PERSONAL COMPUTERS (Saturday)

- Liza Loop, Lo*op Center
Sharing Your Computer Hobby with the Kids
- Peter S. Grimes, San Jose Unified School District
Classroom Microcomputing: How One School District Learned to Live with the State of the Art
- Lois Noval, Noval, Inc.
TELEMATH
- Bob Kahn & Lee Berman, Lawrence Hall of Science, University of California, Berkeley
Computer Education at the Lawrence Hall of Science
- Robert Broucke, University of Texas
Use of a Personal Computer in Engineering Education
- Milos Konopasek & Mike Kazmierczak, Georgia Institute of Technology
A Question-Answering System on Mathematical Models in Microcomputer Environments

RESIDENTIAL ENERGY & COMPUTERS (Sunday)

- Mark Miller*
Microcomputers: A New Era for Home Energy Management

LEGAL ASPECTS OF PERSONAL COMPUTING (Saturday)

- Kenneth S. Widelitz, Attorney at Law, WA6PPZ
What to Do After You Hit Return.....And Nothing Happens: Warranty in the Microcomputer Industry

ENTREPRENEURS IN HOME & HOBBY COMPUTING (Sunday)

- Kenneth S. Widelitz, Attorney at Law, WA6PPZ
Tax Aspects of Lemonade Stand Computing: When is a Hobby Not a Hobby?
- Walter Smith, Director of Marketing, Quantum Science Corp.*
[Marketing Survey in Progress]
- Carl Helmers, Editor in Chief, Byte Publications, Inc.
The Software Dilemma

PANEL ON COMPUTER RETAILING: JOYS & ULCERS (Sunday)

- Ray Borrill, Data Domain, Conference Panel Leader
[organization in progress at press deadline]

COMPUTERS FOR VERY SMALL BUSINESSES (Sunday)

- Michael Levy*
Some Practical Uses for Personal Computers in Very Small Businesses

ER FAIRE CONFERENCE PROGRAM

SOFTWARE SYSTEMS DESIGN TUTORIALS (Saturday)

- R. W. Ulrickson, President, Logical Services Incorporated
Learning to Program Microcomputers? Here's How!
- Larry Tesler, Xerox Palo Alto Research Center
Home Text Editing
- Ed Keith
Structured Programming for the Computer Hobbyist
- James Joyce, Department of EE&CS, University of California, Berkeley*
Human Factors in Software Engineering

IMPLEMENTATION OF SOFTWARE SYSTEMS & MODULES (Saturday)

- Dennis Allison, Consultant*
An Interpretive Approach to Implementing Programming Languages
- Dennis Burke
Modular Relocatable Code
- Roy Rankin
Numerical Calculations in Microcomputers

HIGH-LEVEL LANGUAGES FOR HOME COMPUTERS (Sunday)

- Tom Pittman
Computer Languages: The Key to Processor Power
- Martin Buchanan
Design and Implementation of HI
- John A. Starkweather, PhD, Director, Computer Center, University of California Medical Center
A PILOT Interpreter for a Variety of 8080-Based Systems
- Bob Wallace
EMUL-8: An Extensible Microcomputer User's Language
- Jef Raskin*
New Languages for Micros

MULTI-TASKING ON PERSONAL COMPUTERS (Sunday)

- Bob Wallace
EMOS-8: An Extensible Microcomputer Operating System
- George Pilipovich, MVT Microcomputer Systems, Inc.
Microcomputers and Multi-Tasking: A New Dimension in Personal Computing
- Joseph G. McCrate, Cromemco, Inc.
A New Approach to Time-Sharing with Microcomputers

ELECTRONIC MAIL (Saturday)

- John McCarthy and Les Earnest, Dir. and Assoc. Dir., Artificial Intelligence Lab., Stanford University
DIALNET and Home Computers
- Raymond R. Panko, PhD, Stanford Research Institute
CB Computer Mail?

COMPUTER NETWORKING FOR EVERYONE (Saturday)

- Lee Felsenstein
Community Memory: A "Soft" Computer System
- David Caulkins, Cable Data
Design Considerations for a Hobbyist Computer Network
- Mike Wilbur
A Network of Community Information Exchanges: Issues and Problems

AMATEUR RADIO AND COMPUTERS (Saturday)

- Richard Sherman, PhD, Conference Section Leader
[organization in progress at press deadline]

HERETICAL PROPOSALS (Saturday)

- Klaus Holtz
Here Comes the Brain-like, Self-Learning, No-Programming Computer of the Future

MICROPROGRAMMABLE MICROPROCESSORS FOR HOBBYISTS (Sunday)

- Tom Pittman & Bob Davis
VACuum: A Variable Architecture Computing Machine
- David C. Wyland, Raytheon Semiconductor
Large Scale Computers for the Hobbyist
- John Birkener, Monolithic Memories
Microprogramming for the Hobbyist

BUS AND INTERFACE STANDARDS (Saturday)

- Tony Pietsch, Proteus Engineering
Standardization of the S-100 Bus: Timing and Signal Relationships - a Proposed Standard
- Cesar Castro & Allen Heaberlin
A Microprocessor-Independent Bus

HOMEBREW HARDWARE (Sunday)

- Kenneth B. Welles II, PhD
A Floppy Disc Controller for Under \$50
- Carl Townsend, Center for the Study of the Future
Interfacing a Selectric to Your Computer
- William J. Schenker, MD
Solenoids Provide Software Control of a Home Cassette Recorder

COMMERCIAL HARDWARE (Sunday)

- Alice E. Ahlgren, PhD, Cromemco, Inc.
A New Approach to Microcomputer Systems for Education
- Phil Roybal, National Semiconductor
The New Microprocessor Low-Cost Development Systems
- Richard Erickson, President, Sunrise Electronics
A Computerized PROM Programmer, PROM Emulator and Cross Assembler System

WORKING SESSION FOR COMPUTER CLUB NEWSLETTER EDITORS (Sunday)

- John Marshall, Editor, *Northwest Computer Club Newsletter*, Conference Section Leader
[organization in progress at press deadline]

A TUTORIAL: HOW TO DESIGN (VS. KLUDGE) A TEXT EDITOR

Whatever language you write programs in, whether it be assembler or BASIC or your own brew, the facility you use most is the editor. You invoke the editor everytime you add or delete a line, make any change in the program or even just LIST it.

Larry Tesler's talk, "Home Text Editing" is an excellent survey, based on his experience designing and using a number of text editors. For the past four years he has been a member of a research staff specializing in text processing. Prior to that, he was responsible for one of the more sophisticated document editors in existence, PUB, designed and implemented at Stanford's Artificial Intelligence Laboratory.

This will range over the whole topic of text processing from editors designed for TTY's, to highly interactive screens where you can point to a word or phrase to be edited.

EDITOR OF BYTE TO DISCOURSE ON SOFTWARE DILEMMA

Carl Helmers, the Editor in Chief of *BYTE*, will be making two presentations at the Faire. One of them will address the problem of how to both make software cheap and accessible at the same time compensating designers adequately for their work.

This difficult problem has been especially acute in the personal computing field. The cost of a good software system can far exceed the price of the entire collection of hardware required to run it. Software prices do not follow the falling trend of hardware prices. Thus the problem promises to get worse.

Helmers also considers the methods by which software can be transmitted from one personal computer to another. Each candidate has its advantages and drawbacks.

The solutions he presents are ingenious, and sure to be controversial.

PROGNOSTICATION IN THE DIDACTIC ENCLAVE THEMATIC REFERENT OF ORATOR'S RHETORIC

What we mean is that a paper entitled "The Microcomputer Education Process: Where We've Been and Some Guesses as to Where We're Going" by Merl K. Miller will be presented at the West Coast Computer Faire. One of the nice things about the personal computer movement is that it has been carried forward mostly by informal means, and hasn't had a chance to get stuffy. In this paper, Miller, of Matrix Publishers, discusses course outlines for teaching programming. Some of the topics are Modular and Top Down design, Documentation, and I/O.

Miller will explain what items should and should not be in a computer course and why. The syllabus of a number of existing courses will also be presented.

COMPUTER LANGUAGES REACH A NEW HI

HI is a procedural language designed to run in 16K on a microcomputer. The author, Martin Buchanan, claims that HI is simple and elegant, while powerful enough for general use. HI is intended to be suitable as a first programming language, especially for children, and as a language for personal computing.

The talk "The Design and Implementation of HI" will cover the criteria that Buchanan used in designing the language, as well as the fundamental decisions about the interpreter.

The essence of HI's design is to make the code easy to write and improve productivity, easy to read to improve clarity, and to enhance the reliability of programs. Good programming style, says Buchanan, so hard to achieve in BASIC will be quite natural in HI.

HI is semicompiled, the resulting code relying on many system subroutines for execution. Thus the language is somewhere between an interpreted and a compiled language. HI is in the public domain. Tiny HI, a subset of HI especially suitable for microcomputers will be discussed.

SELECTING AND INTERFACING TO SELECTRICS

The IBM Selectric is a relatively inexpensive choice for a microcomputer I/O device, having high print quality. However, the interface details can be tricky. Carl Townsend, of the Center for the Study of the Future, will discuss the nitty-gritty's in his presentation "Interfacing a Selectric to your Computer."

Beginning with the details of which Selectrics are best suited for personal computing use, and ending up with nuts-and-bolts interface information, the Faire-goer will find this talk of immediate practical value.

The speaker has considerable experience with Selectrics.

"It is," he says, "probably the best of slow-speed hard-copy devices for a home or small business computer system."

THE FOLLOWING ARE THE COMMITTED EXHIBITORS
AT THE FIRST WEST COAST COMPUTER FAIRE, AS OF 77APR2

6502 PROGRAM EXCHANGE	RENO NV	JADE CO.	LAWDALE CA
ACM, BAY AREA	REDWOOD CITY CA	JENSEN TOOLS & ALLOYS	PHOENIX AZ
ACTION AUDIO ELECTRONICS	DALY CITY CA	JK ELECTRONICS	CITRUS HEIGHTS CA
ADVANCED MICROCOMPUTER PRODS	IRVINE CA	KANEMATSU-GOSHO (USA), INC.	SAN FRANCISCO CA
ADVANCED TECHNOLOGY RES. ASSOC	MINNEAPOLIS MN	KILOBAUD MAGAZINE	PETERBOROUGH NH
ALPHA MICRO TECHNOLOGY	TUSTIN CA	LOGIC DESIGN, INCORPORATED	LARAMIE, WY
AMERICAN RADIO RELAY LEAGUE	NEWINGTON CT	LOGICAL SERVICES, INC.	MT.VIEW, CA
ANDERSON-JACOBSON, INC.	SAN JOSE, CA	LOGISTICS SPEECH	MARINA DEL REY, CA
APPLE COMPUTERS	PALO ALTO, CA	MECA	YUCCA VALLEY CA
APPLIED DATA COMMUNICATIONS	SANTA ANA CA	MICRO DESIGNS	BERKELEY CA
ASSOCIATED ELECTRONICS CO.	FULLERTON CA	MICRO-COMPUTER DEVICES	MONTEBELLO CA
BELL & HOWELL SCHOOLS	CHICAGO IL	MICRO-TERM INC.	ST LOUIS MO
BENDER PUBLICATIONS, NCEN&SCEN	LOS ANGELES CA	MICROCOMPUTER ASSOCIATES	CUPERTINO, CA
BERG PUBLICATIONS	ALOHA OR	MICROMATION, INC.	SAN FRANCISCO CA
BILLINGS COMPUTER CORP.	PROVO UT	MICROPOLIS CORP.	NORTHRIDGE CA
BLASTMASTERS, INC.	HAYWARD CA	MICROTRONICS	MENLO PARK CA
BOARD BYTERS	EL TORO CA	MIDWEST SCIENTIFIC INSTR.	OLATHE KS
BOOTSTRAP COMPUTER STORE	SAN FRANCISCO CA	MINI-MICRO SYSTEMS MAGAZINE	HUDSON MA
BYTE MAGAZINE	PETERBOROUGH NH	MINITERM ASSOC.	ARLINGTON MA
BYTE SHOP OF PALO ALTO	PALO ALTO CA	MINNESOTA MINING & MFG CO.	ST PAUL MN
BYTE SHOPS OF ARIZONA	TEMPE AZ	MOTOROLA	SAN JOSE CA
BYTE, INC.	SUNNYVALE CA	MOUNTAIN HARDWARE	BEN LOMOND, CA
CALIFORNIA BUSINESS MACHINES	SANTA CLARA CA	MOVONICS	LOS ALTOS CA
CALL COMPUTER	MT. VIEW, CA	MR CALCULATOR	PALO ALTO CA
CENTER FOR STUDY OF FUTURE	PORTLAND OR	NATIONAL SEMICONDUCTOR	SANTA CLARA CA
COMPONENT SALES, INC.	SAN FRANCISCO CA	NEWMAN COMPUTER EXCHANGE	ANN ARBOR MI
COMPTEK	LA CANADA CA	NORTH STAR COMPUTERS, INC.	BERKELEY CA
COMPUCOLOR CORP.	ATLANTA GA	OHIO SCIENTIFIC INSTRUMENTS	HIRAM OH
COMPUTALKER CONSULTANTS	SANTA MONICA, CA	OK MACHINE & TOOL CORP.	BRONX NY
COMPUTER CONVERSIONS COMPANY	BERKELEY, CA	OLIVER AUDIO ENGINEERING	N. HOLLYWOOD CA
COMPUTER DECISIONS MAGAZINE	ROCHELLE PARK NJ	PACIFIC OFFICE SYSTEMS	PALO ALTO CA
COMPUTER KITS, INC.	BERKELEY CA	PAIA ELECTRONICS, INC.	OKLAHOMA CITY OK
COMPUTER MAGAZINE	LONG BEACH CA	PARASITIC ENGINEERING	ALBANY, CA
COMPUTER POWER & LIGHT CO.	STUDIO CITY CA	PARSEC ELECTRONICS	SAN DIEGO CA
COMPUTER ROOM OF SAN JOSE	SAN JOSE CA	PENINSULA MARKETING SERVICES	SARATOGA, CA
COMPUTER STORE OF SAN FRAN.	SAN FRANCISCO CA	PEOPLE'S COMPUTER CO.	MENLO PARK, CA
COMPUTER T-SHIRTS	NEW YORK NY	PERIPHERAL VISION	DENVER CO
CREATIVE COMPUTING MAGAZINE	MORRISTOWN NJ	PERSONI	MARINA DEL REY CA
CROMEMCO	MT. VIEW, CA	PERSONAL COMPUTING MAGAZINE	ALBUQUERQUE NM
CUSTOM COMPUTER SYSTEMS	IRVINE CA	PFEIFFER, E & L	GRANADA HILLS CA
DAJEN ELECTRONICS	CITRUS HEIGHTS CA	POLYHEDRAL SYSTEMS	SANTA CLARA CA
DATA TERMINALS&COMMUNICATIONS	CAMPBELL, CA	POLYMORPHIC SYSTEMS	GOLETA CA
DATAMATION	MT VIEW CA	PRIME RADIX, INC.	DENVER CO
DAVIS LABORATORIES	SANTA CLARA, CA	PROCESSOR TECHNOLOGY	EMERYVILLE CA
DAYTON ASSOCIATES	BURLINGAME CA	PSA, INC.	BOUNTFUL UT
DIGICOMM	CITRUS HEIGHTS CA	Q	FAIRFAX CA
DIGITAL ELECTRONICS CORP.	OAKLAND CA	R.D.C. ENTERPRISES	HUNTINGTON BEACH CA
DIGITAL GROUP	DENVER, CO	REALISTIC CONTROLS CORP.	CLEVELAND OH
DIGITAL PROJECTS, INC.	SANTA BARBARA CA	RIGEL FOUR	CAMPBELL CA
DIGITAL RESEARCH	PACIFIC GROVE, CA	RO-CHE SYSTEMS	VAN NUYS CA
DIGITAL SYSTEMS	LIVERMORE, CA	ROM MAGAZINE	HAMPTON CT
DILITHIUM PRESS	FOREST GROVE OR	S. D. SALES	DALLAS TX
DYMAX	MENLO PARK CA	SCIENTIFIC PROGRAMMING	BERKELEY CA
E & L INSTRUMENTS	MT VIEW CA	SCIENTIFIC RESEARCH INSTRUMENT	ASHLAND VA
E, S & L INDUSTRIES	SOUTH GATE CA	SINAI-JOHNSON, INC.	REDWOOD CITY CA
ECD CORP.	CAMBRIDGE MA	SMOKE SIGNAL BROADCASTING	HOLLYWOOD CA
EIDETIC DESIGNS	SUNNYVALE CA	SOLID STATE MUSIC	SANTA CLARA CA
ELECTRONIC CONTROL TECHNOLOGY	UNION NJ	SOUTHERN CALIF. COMP. SOCIETY	SANTA MONICA CA
ELECTRONIC TOOL CO.	HAWTHORNE, CA	SOUTHWEST TECHNICAL PRODUCTS	SAN ANTONIO TX
ESCON	BERKELEY CA	STANFORD ELECTRICAL ENGR DEPT	STANFORD CA
EXECUTIVE DEVICES	SAN MATEO CA	SUNRISE ELECTRONICS	PASADENA CA
EXTENSYS CORP.	SUNNYVALE CA	SUNSET TECHNOLOGIES	GOLETA CA
FLOOD & ASSOC.	SAN DIEGO CA	SYLVANHILLS LABORATORY	STRAFFORD MO
GALAXY SYSTEMS	CYPRESS CA	SYMBIOTIC SYSTEMS	WOODLAND CA
GIMIX, INC.	CHICAGO IL	SYNETIC DESIGNS	POMONA CA
GNOMON ASSOCIATES, INC.	PLEASANT HILL CA	SZERLIP ENTERPRISES	HARBOR CITY CA
GODBOUT ELECTRONICS	OAKLAND AIRPORT CA	TARBELL ELECTRONICS	MIRALESTE CA
HAL COMMUNICATIONS CORP.	URBANA, IL	TECHNICAL DESIGN LABS INC.	PRINCETON NJ
HAYDEN BOOK COMPANY, INC.	ROCHELLE PARK, NJ	TECHNICAL SYSTEMS CONSULTANTS	W. LAFAYETTE IN
HEURISTICS, INC.	LOS ALTOS, CA	TECHNICO	COLUMBIA MD
HOBBY DATA	MALMO SWEDEN	TELETYPE CORPORATION	SKOKIE, IL
IASIS INC.	SUNNYVALE, CA	TELPAR, INC.	ADDISON TX
IBEX	SUNNYVALE CA	TRIPLE I/PHIDECK, ECONOMY CO.	OKLAHOMA CITY OK
IC MASTER & UPDATE	SUNNYVALE CA	VANDENBERG DATA PRODUCTS	SANTA MARIA CA
ICOM	CANOGA PARK, CA	VECTOR ELECTRONIC CO., INC.	SYLMAR CA
IMSAI	SAN LEANDRO, CA	VECTOR GRAPHIC INC.	THOUSAND OAKS CA
INFORMATION TERMINALS	SUNNYVALE CA	VIDEO TERMINAL TECHNOLOGY	SUNNYVALE CA
INTEGRAND RESEARCH CORP.	VISALIA CA	VITEK	VISTA CA
INTEGRATED COMPUTER SYSTEMS	CULVER CITY CA	WAVE MATE	GARDENA CA
INTELLIGENT COMPUTER SYSTEMS	MT VIEW CA	WESTERN DATA SYSTEMS	SANTA CLARA CA
INTERFACE AGE MAGAZINE	CERRITOS CA	WIZARD ENGINEERING	SAN DIEGO CA
INTERSIL, INC.	CUPERTINO, CA	XIMEDIA CORP.	SAN FRANCISCO CA
ITTY BITTY COMPUTERS	SAN JOSE, CA	XYBEK	CUPERTINO CA

OPERATING SYSTEM TALK EMPHASIZES FLEXIBILITY

One of Bob Wallace's presentations at the Faire is an "Extensible Microcomputer Operating System." Developed in the school of experience, it grew from a few simple commands to an elaborate structure. It permits a wide variety of programs to run in a variety of hardware configurations.

Wallace's system is said to aid program development as well.

SOLENOIDS

A controller for the cassette drives we use is a truly useful accessory, argues Dr. Schenkar, and one that can be easily and cheaply built for our personal computers.

His proposed system consists of a simple interface driving a number of solenoids that operate inexpensive cassette drives. He will demonstrate it during his presentation.

A PUBLIC SERVICE SATELLITE CONSORTIUM

A worldwide network of computer-to-computer personal communication would be possible under the plans of the Public Service Satellite Consortium. The PSSC was organized to see that the technology of communications by satellite can and will be used, effectively and economically, by the large public body of communicators.

The Consortium is organized around the requirements of the members - to define those requirements; to analyze them technically, organizationally, and economically; and to assure the availability of a practical service that responds to them. The technical facilities of the Consortium are in Denver, Colorado, where there is a network control center, an earth station, and scattered small terminals capable of supporting a variety of experiments. An engineering staff is available to coordinate and provide technical support.

Since the mid-Sixties, satellite technology has mushroomed. Satellites have been developed and placed in space to observe the earth's weather, land use, and planning. Some satellites are used to communicate by voice, music, television, telegraph, telephone, and data signals between points on the surface of the earth. They now carry about two-thirds of all transoceanic communications. The sophisticated hardware now available means it is economically feasible to deliver the service to the user rather than delivering the user to the service in large facilities.

Most important to the personal computer user is the portability of existing equipment and the future plans for the network. Someday it will be possible to receive television or radio transmissions directly from space through a small parabolic antenna mounted on a rooftop or vehicle, perhaps only one meter in diameter. The possibilities for medical uses, public safety, and information access are almost limitless. The Public Service Satellite Consortium wants to make sure that individuals and small companies - not just large corporations and governments - may take advantage of the satellite network. The main office of the PSSC is at 4040 Sorrento Valley Boulevard, San Diego, CA 92121.

ACM PUBLISHES 1977 ROSTER OF MEMBERS

The 1977 Association for Computing Machinery Roster of Members, an alphabetic and geographical cross-listing of the names and addresses of more than 35,000 ACM members as of January 1, 1977 is now available.

The Roster may be ordered from the ACM Order Department, P.O. Box 12105, Church Street Station, New York, N.Y. 10249. Prices are \$7.00 to members and \$25.00 to non-members, prepaid.

CRT-BASED RTTY FOR THE RADIO AMATEUR

Tired of all the racket of your teletype printer as you operate amateur RTTY? Bob Brehm, WB6QFA, will describe the evolution of RTTY from thundering machine to noiseless CRT display and microprocessor decoding. Included will be a demonstration by David Altekruze, W6RAW, of his modern, silent RTTY equipment.

THE DISTRIBUTED MIDDLE: THE HOBBYIST AND THE INDUSTRIAL DISTRIBUTOR TOPIC OF TALK AT THE FAIRE

Dr. Lowell Smilen is highly reputed in the Northwest as a dynamic speaker. Dr. Smilen's talk will explore "The Sidelobes of the Industrial Distributor" which are "Focussed on the Home Microcomputer Hobbyist." His talk will examine the role of the industrial distributor in servicing the hobbyist. A number of specific systems and components will be described.

He points out that the leading semiconductor manufacturers have developed a number of products ranging from chip sets, kits, and tutorial systems to large development systems. How these can be used by the home hobbyist, whether he is a beginner or a pro, will be covered in Smilen's talk.

8080 FORTRAN TOPIC FOR TALK

Dr. K.B. Welles will speak on "Fortran for the 8080.....BASICally Better". He will discuss the advantages and disadvantages of a Fortran IV compiler for the 8080.

A major impact of the availability of FORTRAN will be the sudden access (more or less) for the personal computerist to a vast collection of programs. FORTRAN has been in use for about 20 years.

Of the three main methods of implementing a high level language on a computer, interpreting, incremental compiling and compiling, the latter usually comes closest to hand-coding in machine language for speed of execution.

COMPAL-80 MICROCOMPUTER SYSTEM

The COMPAL-80 computer is a microprocessor based machine which may be used as a high performance desk-top computer; as an "intelligent terminal" within a large, time-sharing system; or as the basis of an expanded system for business data processing, word processing, or microcomputer software development. The basic machine includes: power supply and S100 motherboard, 8080A mP, real-time clock, vectored interrupt decoder, ROM system monitor, 16K static RAM, RS-232 and current loop serial I/O interface, 300/2400 baud cassette interface, 16 lines X 64 character video display (full ASCII plus 48 X 128 graphics mode), capacitance switch keyboard, 9" video monitor, and beautiful matching cabinets. Total price, assembled and tested, is \$2300.

A powerful extended BASIC, featuring full string capability, TIME function (using the clock), PLOT command (using the graphics), user-defined functions, machine language subroutine calls, and direct 8080 I/O is included with every system at no extra charge. Available at low cost are a word processor, a powerful 8080 assembler and a variety of applications programs in BASIC. Peripherals offered by Computer Power and Light for the COMPAL-80 include printers, Novation acoustic modems, the iCOM dual floppy disk drive, the new Shugart minifloppy with disk BASIC, and large, high-resolution video monitors.

Computer Power & Light, 12321 Ventura Blvd., Studio City CA 91604. Telephone (213) 760-0405.

THE UTAH COMPUTER ASSOC. ANNOUNCES

THE UTAH COMPUTER FAIRE

TO BE HELD SATURDAY APRIL 30, 1977 FROM 1 TO 5 PM AT FASHION PLACE MALL

Purpose: To inform the community of the place and value of personal (hobby) computers in our world. Many of our members will be bringing their computers, both home-built and professional systems, demonstrating many different applications. We will also have some manufacturer representatives and local distributors present.

This is an informational gathering, there will be no selling!

We are a non-profit club and ask your assistance in helping us advertise this event.

For further information, contact myself at home (6-9PM) at 801-467-9100 or at work (8:30 to 4PM) at 801-486-7481.

ERNIE DIXON
FAIR CHAIRMAN

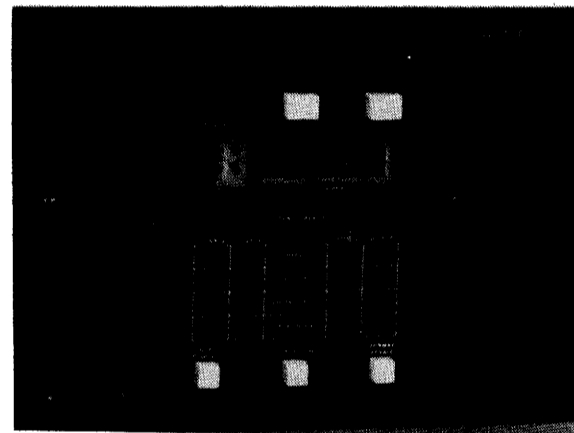
MICRO FILE DOCUMENT PROCESSOR

A new Document Processor software package for the DTC Micro File has been announced. Micro File is a desk top microcomputer based system utilizing 2 or 4 floppy disks for on-line storage and boasts data communications capability.

DOC, as the package is called, provides facilities for the generation and printing of large documents such as manuals, contracts, brochures, and reports. The following is a partial list of the features available:

- * Vertical Layout
 - Margins - top, bottom, headings, footings
 - Page length
- * Horizontal layout
 - Left and Right margins & line length
 - Indenting left and right
- * Page Control
 - Auto pagination
 - Page number format left and right
- * Text formatting
 - Justify text
 - Concatenate text
 - Center Text
- * Spacing
 - Single, 1½, double space text
 - Space insert - graphs figures etc.
- * Controls
 - Change bars
 - Alternate Files
 - Imbedding 'canned' paragraphs

Proportional spaced printing control is available for the soon to be announced DTC 'Daisy Wheel' Word Processing terminal.



The Computer Faire has obtained the use of a DTC MicroFile for storage and processing of all of the data and records necessary to the efficient operation of a convention of the Faire's magnitude. It is featured, here, as a statement of appreciation to DTC for their active cooperation and assistance, and because it was the only lowest cost unit that was available in January, 1977, - as a well-integrated hardware and software system, including a file-oriented BASIC - that the Computer Faire operations group felt had the reliability and ease-of-use necessary for Faire data.

Watch Dr. Dobb's Journal of Computer Calisthenics & Orthodontia, sometime after April, for an evaluation of the MicroFile's joys and sorrows.

IT WAS NOT A FREUDIAN SLIP!

In the previous issue we inadvertently mentioned that the DTC Micro File was a "dual risk" system. Honest, folks - we meant to say it was a "Dual Disc" system . . . and a dandy one, at that.

PROVINCIAL NOTES FOR US PROVINCIAL FOLKS TO THE SOUTH

Dear Silicon Gulch People:

I am looking forward to your complete listing of computer stores, as I would like to locate Canadian sources for some of my needs. Unfortunately, the Canadian section of your listing [in Vol. 0, No. 0] is turning out to be quite useless, as it lists only the store name, and then, Canada. Canada covers ten provinces, and two territories, within which are many cities. Please be more specific.

Our postal codes are machine read, if they are on the last line; or if they are double-spaced before appearing as the last word on the last line (BURNABY BC V5E 2B9). Do not use three-letter abbreviations for provinces, as these are frequently misread by the op scan as part of the code. Use the following abbreviations after the name of the city: BC (British Columbia), AB (Alberta), SK (Saskatchewan), MB (Manitoba), ON (Ontario), PQ (Province de Quebec), NF (Newfoundland), PE (Prince Edward Island), NB (New Brunswick), NS (Nova Scotia), YK (Yukon), NT (Northwest Territories). Note there is no conflict with American abbreviations.

Thanks for the GAZETTE. Best wishes with your Faire preparations.

Bill Starkey
Colorific Photo Labs, Inc.
Box 9550
Vancouver BC V6B 4G3
CANADA
(604) 879-1511

[EDITOR'S NOTE: I apologize for listing the locations of northlands' stores as simply "Canada." That list was cranked out in a panic rush just prior to press time, and inserted unproofed. (We KNOW the output from a computer is correct, don't we?)



The Midwest Affiliation of Computer Clubs invites you to attend the Second Annual Midwest Regional Computer Convention and Exposition....

JUNE 10, 11, 12

COMPUTERFEST '77

BOND COURT HOTEL 777 St. Clair, Cleveland, Ohio

- > Manufacturers' Reprs & Exhibits
- > Roofed Flea Market
- > Seminars & Tech Sessions
- > Club Congress
- > And Prizes, Games, Media Duping, and more....

Still only

2.00

per ticket

The M.A.C.C. Convention is Where It's At in the Midwestern region. See you there! And if you plan to attend NCC, why not fly with us? Ask for information about the charter flight to Dallas. Drop a line to:

M A C C

MIDWEST AFFILIATION OF COMPUTER CLUBS

P.O. BOX 83, CLEVELAND, OHIO, 44141

VHF REPEATER CONTROL WITH A 6800

Ever wonder just what kind and how many bells and whistles could be added to a VHF radio repeater under microprocessor control? Hear Lou Dorren, WB6TXD, describe how he controls WR6ABM with a 6800 microprocessor system. Lou will follow his description with a live demonstration.

ACM REGIONAL CONFERENCE TO DISCUSS MINIS & MICROS

Small computers - from programmable handhelds through mini and micro networks - are the subject of technical papers sought for this year's ACM PACIFIC 77 conference of the Association for Computing's Pacific Region Chapters. Draft submission deadline is early April for the San Francisco Bay Area meeting to be held at San Jose's LeBaron Hotel July 28-29, 1977.

"Exploring the Small Computer" is the theme of the conference which is expected to range in coverage from personal computing through small business applications and from computer parts and peripherals through bullet proof software. Papers are invited on new developments in software and hardware in these areas and on mini language processors, mini performance predictions, micro operating systems, multi microprocessor systems, packaging of software for sale, portable microsoftware, and software engineering "in the small". Papers on trends in software and current applications, on the future of minis, and on related small computer topics are also invited.

A typed draft of each proposed paper, 2500 words or less, must be sent to Dr. Robert M. McClure, Program Chairman, 14332 Maclay Court, Saratoga CA 95070. Acceptance notices will be issued April 18. Camera-ready copy will be due June 1.

Peter Szego, Ampex Corporation, is General Chairman of this year's regional conference, which is jointly cosponsored by the Association's Pacific Region, Peninsula and Golden Gate Chapters. Informal symposia, workshops and invited papers are expected to be scheduled for the meeting in addition to the technical paper sessions. Special conference feature will be an evening "hobby computer" session, to be arranged by Jim Warren, editor of the home computer users magazine, *Dr. Dobb's Journal of Computer Calisthenics & Orthodotia*.

OLSEN SOUNDS OFF ABOUT COMPUTER CONTROLLED AUDIO GENERATORS

This presentation tells us that a general purpose function generator can be controlled through its AM and FM inputs via a pair of digital to analog converters. The FM is used for frequency and the AM for amplitude control. Only two parallel ports need to be used if only eight bit resolution is required. It all seems simple enough when Olsen fills in the details in his presentation "Computer Controlled Audio Generator" at the Faire.

INSTITUTE IN COMPUTER SCIENCE AT SANTA CRUZ

This summer, 5 intensive short courses will be presented at the University of California's Santa Cruz campus under the technical coordination of Dr William McKeeman, Professor of Information Sciences.

"Principles of Data Base Management Systems," July 11-22, Drs. Michael Stonebraker and Eugene Wong, \$525.

"Structured Programming," July 11-22, Dr Niklaus Wirth, \$525.

"Operating Systems," July 18-29, Dr Philip Bernstein, \$525.

"Compiler Construction," August 1-12, Dr Franklin DeRemer, \$525.

"Computer Graphics," August 1-12, Drs. James Clark and Frank Crow, \$525.

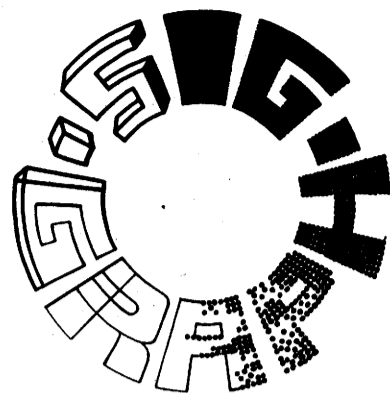
Campus housing and meals are available to participants and their families. For a complete brochure, phone or write Joleen Kelsey, University of California Extension, Carriage House, Santa Cruz CA 95064; (408) 429-2761.

NATIONAL'S SC/MP SYSTEM FROM THE INSIDE

National Semiconductor's Phil Roybal will discuss the need for low cost hardware development systems for industrial applications. Such a product has been designed by NS around their SC/MP microprocessor and Roybal will be describing its features.

This will also be an opportunity to find out about some enhancements that are planned just a bit down the pike.

SIGGRAPH '77: COMPUTER GRAPHICS CONFERENCE TO BE HELD IN SAN JOSE



Have a fancy to view instances of flowing lines and shapely curves as they dance, turn, expand and contract across a phosphorescent screen? Today's choreographers have found ways to smooth over the hardware bumps and software grinds that made the recognition and generation of computer graphics a once-upon-a-time tedious chore. The latest developments in the research, education and application areas of computer graphics will be presented at SIGGRAPH '77, the fourth annual international conference on computer graphics and interactive techniques sponsored by SIGGRAPH, ACM's special interest group on computer graphics.

The conference will be held July 20-22, 1977 at the Hyatt House in San Jose, California. It will be preceded by a special two-day workshop, featuring an introductory tutorial on computer graphics and a session on raster scan graphics. In addition to the paper presentations, the conference will highlight a fashion show of humanoid clothes made of fabric with creative computer-generated patterns, a session on low-cost graphics, films, slides, and displays. Also featured is a vendor exposition, one of the largest specialized exhibits of graphics hardware.

The General Conference Chairperson is Stephen Levine, Lawrence Livermore Laboratory, Box 808 MS L-73, Livermore CA 94550. He can be reached for further information at (415) 447-1100 x3360.

- Please cut out, and post or circulate. Thank you. -



GEE, YOU WOULDN'T BELIEVE HOW MANY PEOPLE I HAVE TO TELL TO KEEP THEIR HANDS OFF MY ASP SINCE I BEGAN WEARING THE OFFICIAL FIRST WEST COAST COMPUTER FAIRE T-SHIRT!!

SHOW what you KNOW!!

Whether you're in the barroom or the boardroom, you may rest assured that The Official First West Coast Computer Faire T-Shirt (official attire for the Computer Faire) will bring to you sartorial splendor. This tri-color T-Shirt (top-o'-the-stack blue, Byte-this! violet, up-&-running orange) will amaze your friends, restore hair, and prevent bullies from kicking sand in your face-if your friends are gullible, your alopecia was temporary, and you avoid beaches.

On the other back, who cares?

In separate laboratory tests, Dr Seymour Squintz (who was born outside of a log cabin in the Gaza Strip) stated: "When I go down to the beach of life [in my Official First West Coast Computer Faire T-Shirt] they may still kick sand in my mind's eye, but I see it as cause for the growth of a pearl rather than for the use of Visine."

The fact that Dr Squintz subsequently and tragically incurred major cataracts, vehemently denied he was an ardent voyeur, and accidentally committed reverse self-defenestration, is, of course, unfortunate. And we will probably stop using his testimonial.

In the meantime, whether you're a shareholder or a sharecropper, on the board of directors or simply bored of directors, buy a gross of these discreet garments, and flout them proudly. Equally at home under a motorcycle jacket or a Brooks Brothers, the Computer Faire T-Shirt will positively make you look stunning. Or maybe stunned.

In any case, keeping in mind that you are what you wear, and that, though this T-Shirt may be taken to the cleaners, you never will be, we think you will agree that the proposed investment of \$4 a shirt is modest-at least compared to this solicitation!

So, order generously. For as we sew, you shall reap.

AFTER WEARING THIS T-SHIRT, THEY BANNED DATA BUSING IN BOSTON.

(Please note: Because this is a limited edition, Officials from the Franklin Mint will, at an unspecified time, uproot our cotton plants, shred our silkscreen, and set our copy writer adrift on a small raft, blindfolded, in downtown Billings, Montana.)

If you want to Act Now!, contact the Actors' Guild. If you merely want to set the stage, then buy the Computer Faire T-Shirt.

YES!! Send to me immediately (as ordered) The Official First West Coast Computer Faire T-Shirt(s). I understand they are additionally fabulous for their unique property of both cradling the wearer, and swaddling bystanders-innocent and guilty alike-with exquisite envy. (So that Computer Faire may prepare legal defense for actionable horripilatory incitement, please indicate your first intended bystander:

() Yves St Laurent, () EE professor who flunked me, () boss, () janitor, () janitor's tax accountant, () maitre d' at MacDonald's, () cat, () computer club executive council, () tech rep, () cheeky proctologist, ()

I'M GLAD WE DON'T MAKE DELIVERIES TO NOME.



____ S, ____ M,
 ____ L, ____ XL SHIRT(S) @ \$4
 CALIFORNIA RESIDENTS ADD 6% TAX
 1ST-CLASS POSTAGE & HANDLING (\$1/SHIRT)
 TOTAL AMOUNT ENCLOSED _____
 Please send your order & payment (check or money order), to:
 Computer Faire
 Box 1579, Palo Alto CA 94302
 (415) 851-7664
 Thank you.

NAME _____
 STREET _____
 CITY _____
 STATE _____ ZIP _____

2nd TRENTON COMPUTER FESTIVAL

April 30-May 1, 1977
 Trenton State College
 Trenton NJ 08625
 Jaci Di Paolo (609) 771-2487

SPEAKER'S PROGRAM (Tentative as of 2-11-77)

KEYNOTE SPEAKERS

Dr. John W. Mauchly
 Mrs. J.W. Mauchly

(Dr. Mauchly is the co-inventor and builder of ENIAC, the first digital computer. Mrs. Mauchly is the world's first woman digital computer programmer.)
 topic: "Circumstances Surrounding the Invention of the First Digital Computer".

TUTORIAL SESSIONS

1. How to get Started in Personal Computing
2. Introduction to the BASIC Computer Language
3. Introduction to Assembler Language Programming
4. Introduction to 8080/Z80 Programming
5. Introduction to 6800/6502 Programming

APPLICATION SESSIONS

1. Computer Games on Microcomputers
Dave Ahl, Creative Computing
2. Business Applications on Microcomputers
Larry Stein, Computer Mart of NJ, Howard Benrot
3. Computers in High School
Marilyn Spenser, Coordinator, High School Computer Clubs of New Jersey
4. Microcomputers for the Experienced Programmer/Analyst
5. Microcomputer Controlled Robots
Tod Loofbourrow
6. LSI-11 Systems for the Hobbyist
William Kreupers
7. Testing IC's with your Microcomputer
Jack Grant
8. Microcomputer Music
Carl Helmers, BYTE
9. The S-100 Bus, How Does it Operate?
Bill Goble
10. Using Microcomputers in Astronomy
Mike Simmons, T.D.L.
11. A Microcomputer Controlled Moon Tracking System
K3PGP
12. Using Microcomputers in Amateur Radio
chairman: Pat Deitman
13. Interfacing A Selectric to a Microcomputer
Charles Yates
14. 8080 Multiprocessing
15. Inexpensive Peripheral Devices for Microcomputer Systems
16. Microprocessor Control Applications
17. Microprocessor Home Applications
18. The Front Panel Controversy (a debate)
19. Communication Protocols & Standards
Gordon French, P.T. Co.
Marty Nichols
Claude Kagan
20. Computer Aided Family Decision Making
Dr. Murray Turoff, New Jersey Institute of Technology

WEATHER IN SAN FRANCISCO

San Francisco's weather surprises many visitors. Summers are never very warm, and foggy nights and mornings are the rule. Winters are seldom cold but in normal years (1977 is not one of those, at least for rainfall), the rains come then. The most sun and the warmest months are in the fall. But April, the month of the Computer Faire, is hard to put in a category. It can be warm or cool, wet or dry. At least, such are the generalities of the City weather.

To dress for the climate, it is best to prepare for cool weather during the day, when the average maximum reading is 63 degrees in April. With a minimum of 49 degrees, expect cooler evenings. April is thus not the month for resort-wear, and there is no need for beach-wear. The ocean and bay waters hover around 50 degrees all year long.

For men, light-to-medium jackets or suits are best, with some kind of all-weather coat against the evening chill, the possible fogs and rains. Women will find the most comfortable clothes are knits, light wools, and worsteds, not cottons or silks. A scarf,

SAN FRANCISCO TODO'S IN ADDITION TO THE COMPUTER FAIRE

During your stay in San Francisco for the Computer Faire, there are endless choices for things to do and see in moments away from the booths and banquets. And your family will not be at a loss if some of them do not want to catch every motherboard on display.

The weekend of the Faire, April 15th to 17th, features some seasonal events in San Francisco, as well as the never-ending ones. At the Japan Center and throughout Japantown, the Cherry Blossom Festival begins that weekend, with dances, ceremonies, and displays. On the other side of town at Candlestick Park, the San Francisco Giants open their home baseball season on the 15th. And those who would like some light opera can find it at the Spring Opera Theater, which opens on April 14th at the Curran Theater.

Children who are not surveying the video games can enjoy the Maritime Museum at the Hyde Street Pier. In addition to the museum itself, five restored old ships float nearby at the wharves; included are the three-masted schooner *Balclutha*, and a replica of Sir Francis Drake's *Golden Hinde*. The Exploratorium in the Palace of Fine Arts is a place where children of all ages can delve into science and technology, working many of the displays themselves. Out near Ocean Beach, Storyland at the Zoo is fascination for young children, where there are animals to be touched and fed and entertained. In Golden Gate Park's thousand-plus acres, visitors can browse through Steinhart Aquarium or watch the stars in Morrison Planetarium.

For a city small in area, San Francisco is a shopper's dream. There are cookware stores specializing in French, Italian, and Chinese gastronomic tools; places to get fresh-roasted coffee; and ship-chandler stores with every boating accessory. Department stores abound, from the elegant Gumps to the chic Magnins. For bargain hunters and seekers of the unusual, visitors look to Cost Plus, the warehouse full of the world's imports; the shops in the Cannery, which once was a cannery; and the stores of Ghirardelli Square, once a chocolate factory. Chinatown, along Grant Avenue, brims with food, clothing, novelties, artist supplies, and windows full of puzzling wares, and is readily accessible by foot or cable car from the St. Francis - the convention's headquarters hotel.

San Francisco's restaurants, always internationally known, now are rated as the top attraction in the City. Here you can find Lebanese, Vietnamese, Peruvian, Indian, and Russian restaurants in addition to the French, Chinese, Japanese, Italian, and German fare. Night life, in the city where topless began, is just as rich in choices. Some of it even includes clothed entertainers.

Outside the City but nearby, Grayline and other sight-seeing services offer tours by bus. North of the City is Wine Country, home of the justly famed California wines, where you can taste and enjoy the environment of excellent wines. On San Francisco Bay, there are ferries and tour boats and helicopters. One ferry can take you to Angel Island in the Bay for a walk and picnic, or there is a cruise boat with dinner on the Bay. Hikers can walk the Golden Gate Bridge or climb Mt. Tamalpais in Marin County.

Outside the Faire but related to the hobby or personal computer industry is the birthplace of the microprocessor, Santa Clara County, just south of San Francisco on "the Peninsula." The massive semiconductor industry there has earned the area the nickname of "Silicon Valley," and trips to some of the companies can be arranged. There are also a number of retail computer stores in the Bay Area, as well as the universities at Berkeley and Stanford. So at the Faire or away from it, two days is just a beginning.

UC EXTENSION COURSE ADDRESS

For details about the University of California short-course, X402B, "Computers for Education," associated with the Faire, contact: Bonnie Stiles, University Extension, University of California, Berkeley, CA 94720, (415) 642-1061.

umbrella, or raincoat will come in handy. For everyone, good walking shoes are important. San Francisco is small in area and has hilly streets, so it is a walker's place if the shoes for it are in the suitcase.

San Francisco is a very open city for clothes. Some restaurants do require coat and tie for men, but formality is not a must, and just about any dress is tolerated, from Levi to Cardin. Some local computer phreaks are betting that Jim Warren, Chairperson of the Faire, will not change his blue-jean style even for the banquets at the St. Francis.

A few miles away, things change. Being a coastal site with a large bay and many hills, there are a number of microclimates around the Bay Area. North, east, and south of San Francisco away from the coast, all areas tend to be warmer than the City in spring and summer. Down along the Peninsula's bayside, temperatures may be in the 80's when it is 65 degrees in San Francisco. Fairegoers planning a visit to the Palo Alto or San Jose area - Silicon Valley - will find warmer weather. The same is true of visits to Oakland and Berkeley in the East Bay, as well as excursions into Marin and Sonoma Counties - the wine country - to the north.

A SUMMER CAMP FOR COMPUTER KIDS

Four one-week programs in computer programming will be offered this summer at Rose-Hulman Institute of Technology, Terre Haute, Indiana. The program, known as Camp Retupmoc, is for boys about to enter their junior or senior years in high school; it consists of lectures on BASIC programming, films on computing, and talks by computer scientists in business and industry who are making novel applications of the computer.

Dates for the Camps are June 19-24, June 26-July 1, July 10-15, July 17-22. The fee, including tuition, room and board, is \$125.

For further information contact Dr. John Kinney, Rose-Hulman Institute of Technology, 5500 Wabash Ave., Terre Haute, Indiana, 47803.

GOOD CONNECTION IN SAN FRANCISCO

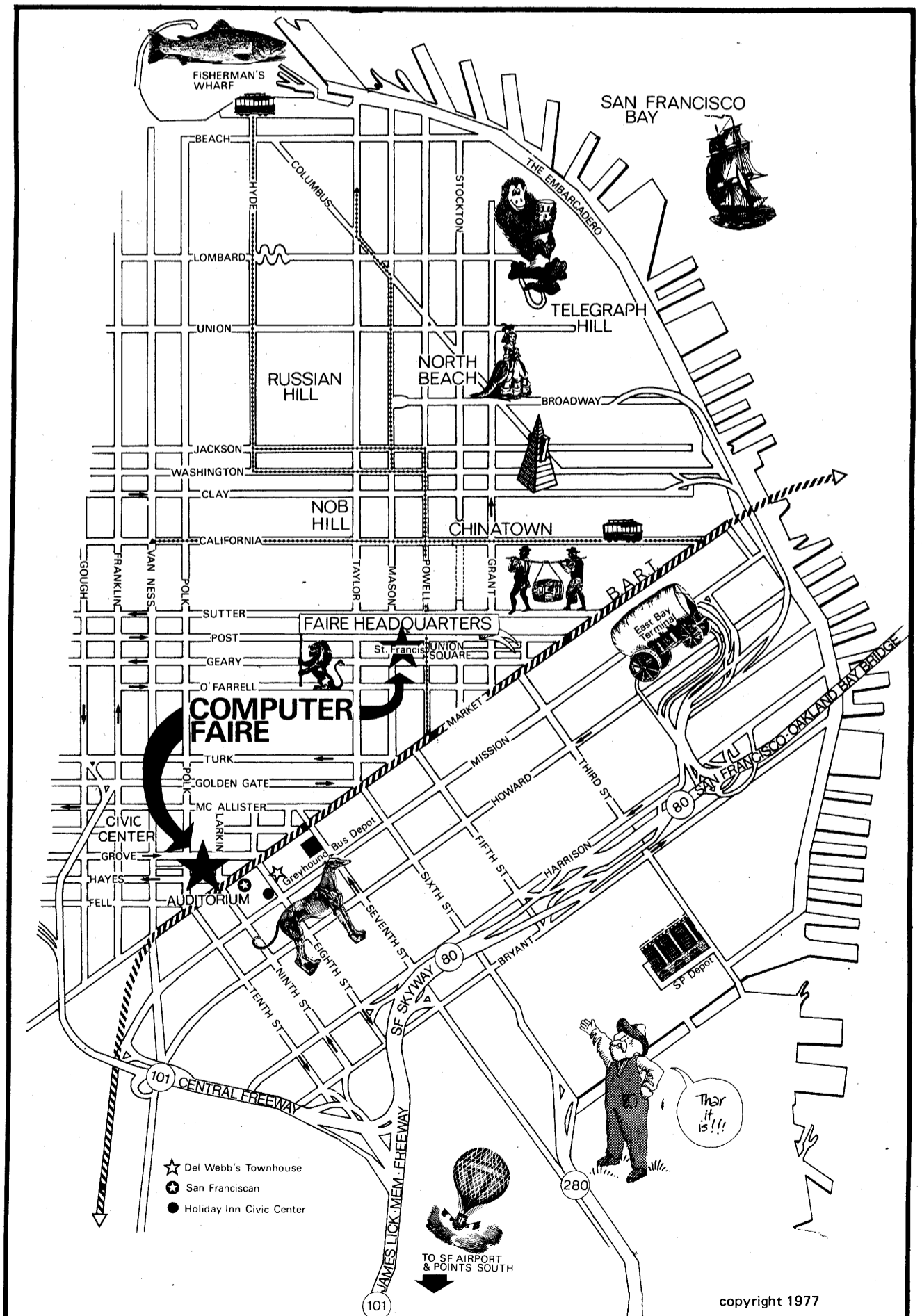
If you're heading for San Francisco, you should jot this down: (415)391-2000.

Last year, 168,100 people dialed it for a daily rundown on local doings.

The voice at the other end provides a two-minute summary of special events, cultural happenings, sports highlights, and sightseeing tips -- 'round-the-clock.

HOTEL PARKING

Hotel	Cost	Inside/Outside	Security	Parking Spaces
St. Francis	\$6/24 hours	Inside	Yes	Lots 65
San Franciscan	Free	Inside & Outside	Partial	400
Towne House	Free	Outside	Partial	400
Holiday Inn	Free	Inside	Yes	225



HOBBYIST NETWORKS TO BE SUBJECT OF PAPER

Caulkins will speak on "Design Considerations for a Hobbyist Computer Network". Some of the desired attributes of such a network are that it be geographically distributed and be able to transfer files and messages from one site to another.

For hobbyist use, Caulkins finds that low-cost communications are a must, and that the nodes be able to survive on their own without a single central store or co-ordinator. Reliability is less of a concern than with "professional" networks, but is still important.

The talk will deal with some reasons why such a network might prove attractive to hobbyists. Design, regulatory and communications issues will be discussed.

COMPUTER SCIENCE SPECIAL LECTURE SERIES

UNIVERSITY OF SAN FRANCISCO DEPARTMENT OF COMPUTER SCIENCE

Each Talk Held on the Indicated Thursday at 11:10 AM in Harney 242

- April 14 Armin Haken (Mathematics Dept., University of California, Berkeley)
"The Computer-Aided Proof of the Four-Color Conjecture"
- April 21 Michael A. Harrison (Comp. Sci. Div., University of California, Berkeley)
"Theoretical Models of Protection in Operating Systems"
- April 28 USF Computer Fair and Open House (at the University Center)
- May 5 John C. Hoff (Timeware, Inc., Palo Alto (On leave from USF)
"Modern Techniques of Forecasting"
- May 12 Derrick H. Lehmer (Mathematics Dept., University of California, Berkeley)
"The History of Parallelism in Computer Science"

Everyone is welcome,

Visitors are encouraged to phone 415-666-6530 to secure parking arrangements and to obtain detailed directions to the USF campus.

Regular 1977-78 Special Lecture Series will consist of 24 events to be held from September 8, 1977, to May 11, 1978. If interested in a complete program, contact the Coordinator.

HARNEY SCIENCE CENTER
SAN FRANCISCO, CALIFORNIA 94117
415/666-6530

CHERRY BLOSSOM FESTIVAL

The culture and customs of Japan will be in full bloom this spring at San Francisco's 10th Annual Cherry Blossom Festival, April 15-17, and 21-24.

The event-packed, two-weekend celebration - widely considered to be one of the West's most colorful festivals - takes place at the City's landmark Japan Center, Post and Buchanan Streets, and in adjacent blocks of Japantown (Nihomachi), a unique area, just 1.1 miles from Union Square, where Japanese-style architecture and ambiance predominate.

More than 1,000 performers from Japan are making the 5,000-mile trip across the Pacific to participate in the Festival which has gained a reputation as the foremost showcase of traditional Japanese culture in the United States. Koto players from Tokyo, shamisen players from Toyama, and folk singing and dancing groups from Kawasaki, Odawara, and Tokyo will be joining in the festivities. Also coming from Tokyo will be the parade musicians of Riusho Kosei Kai. Northern Japan will be represented by the Akita Kanto whose members are famous for balancing tall, lantern-laden poles in parade processions, and from Kagoshima in Southern Japan will come the Oharabushi singers and dancers.

These performers will join thousands of Northern California Japanese Americans in presenting more than 35 types of events during the seven-day celebration. (No other festival we know of in the United States attracts such extensive participation by citizens of another country.)

Festival-goers will see Japanese dancing, hear the exciting taiko drummers, attend koto and shamisen concerts, watch flower arranging (ikebana) demonstrations, take part in the tea ceremony, see one of the largest and finest exhibitions of bonsai (dwarfed trees) in the United States, and watch experts demonstrate the martial arts, including judo, kendo, kempo, aikudo, and karate.

Art exhibits, a Queen contest and coronation ball, films on Japan, a food bazaar, an Akita Dog contest, calligraphy, brush painting (sumi-e), an exhibit of handmade Japanese dolls, and a Tiny Tot contest also are on the wide-ranging agenda.

A Japanese-style parade with more than 1,800 colorfully costumed participants will climax the Festival on Sunday afternoon, April 24, beginning at 1 p.m. Hundreds of dancers, musicians, the 1977 Cherry Blossom Festival Queen and her court, Oriental floats and shrines, bands, clowns, Akita Dogs, and beautifully kimonoed ladies will take part in this spectacular 2½ hour procession.

The parade begins at City Hall, moves north on Polk to Post Street, then west on Post to the Japan Center.

The public is invited to join in all the festivities. Admission is free except for the Queen contest and coronation ball, and several of the evening programs where a nominal donation will be requested.

A complete schedule of events will be available in mid-March and may be obtained by calling or writing the Cherry Blossom Festival, Japan Center, 1730 Geary Blvd, San Francisco CA 94115; (415) 346-3242.

VANCOUVER-SEATTLE CHARTER FLIGHT TO COMPUTER FAIRE BEING ORGANIZED

A charter flight from the northwest to the Computer Faire is now being organized. Those living in the Vancouver-Seattle area interested in such a charter and its associated lower costs should contact Bill Blake, Pacific Computer Store, 4509 Ruptert St., Vancouver, BC, (604)438-3282.

WASHINGTON STATORS ORGANIZING TOUR GROUP TO ATTEND COMPUTER FAIRE

Bob Wallace of Seattle's Retail Computer Store and the Northwest Computer Club is the prime mover behind organizing a tour group from the Northwest to attend the First West Coast Computer Faire in San Francisco, April 15th-17th. Such a group should offer significant savings in transportation costs for those attending the Faire from that area of the country.

For further information, contact: Bob Wallace, (206) 524-6359.

NORTHERN ORANGE COUNTY GROUP ORGANIZING TO ATTEND COMPUTER FAIRE

Those planning to attend the West Coast Computer Faire from the Orange County (California) and LA County areas might wish to get in touch with Gary Covington III, 1714 Larkspur Drive, Placentia, CA 92670, (714)528-4438 (evenings). Gary is organizing a travel group from that area to go to the Computer Faire in San Francisco, April 15-17. This is sure to include a number of members from the North Orange County Computer Club, but will also be open to non-member fellow computer fanatics.

Depending on the number of people interested, the group might ride up in Gary's large motor home, or might charter a bus. . . "and leave the driving to us."

A POSSIBLE TOUR GROUP FROM THE DEEP SOUTHEAST TO THE COMPUTER FAIRE

Those interested in the possibility of joining a tour group going to the West Coast Computer Faire from Florida or the surrounding states should get in touch with Paul Zimmerman, Department of Mathematics, Florida Atlantic University, Boca Raton, FL 33432. He can be reached by phone at (305)395-2907 or (305)395-5100 ext. 2775. Paul is interested in coordinating the formation of some sort of low cost air or bus charter group to attend the Computer Faire in the middle of April in San Francisco.

JAPANESE SPOKEN HERE - COMPUTER FAIRE TO PROVIDE ASSISTANCE FOR JAPANESE VISITORS

What was originally planned as a West Coast/regional show has rapidly grown into an international convention. It was noted in earlier editions of the *Gazette* that many inquiries have been received from as far away as Europe and the Far East. Several tour groups have been organized in Japan and a large number of Japanese computer enthusiasts are expected to be in attendance at the Faire.

In order to assist those Japanese visitors who might have some difficulty with English, the Computer Faire has arranged for the services of Bill Hiatt, a computer hobbyist from the San Jose area. Bill spent several years in Japan and speaks fluent Japanese.

Bill will provide personal service for any of the tour groups or individuals from Japan who need assistance while here in San Francisco. He plans to meet the visitors at the airport (if flight arrival times and group size are sent to him ahead of time), assist in getting everyone and their luggage to the proper hotels, and provide full information about the Faire, the activities, and the seminars. "Knowing how bewildering it can be to arrive in a large city and not be able to speak the language," Hiatt comments, "I thought it might be helpful to have someone whom the Japanese visitors could call upon for assistance in getting directions, answers to questions about the Faire and San Francisco, or any other help which I may be able to provide to make their visit go more smoothly."

Those groups or individuals who are interested in using this service (free of charge, of course) should contact Bill direct. He may be reached by telephone at (408) 241-3844 (work) or (408) 262-4206 (home) or by mail at PO Box 682, Santa Clara, California, 95052.

Bill has been involved on the fringes of the computer industry for several years and recently developed the system which California First Bank (formerly the Bank of Tokyo of California) now uses for its equipment leasing portfolio. At present he is the general manager of American Leasing in Santa Clara. Although still a novice in micros, he hopes to have his own system up and running in the very near future. Bill has also been active in ham radio (WA6CAF), particularly in mobile 2 meter FM. Bill spent his several years in Japan serving as a missionary for The Church of Jesus Christ of Latter-Day Saints (Mormon).

DENVER GROUP IS FLYING HIGH

Chartering TWO Convair 580's for Trip to Computer Faire

The Denver Amateur Computer Society (DACS) is now officially sponsoring a non-stop air charter, Denver-to-San Francisco. The charter will use two Convair 580's from Aspen Airways; one 46-seater, and one 44-seater. The flight will leave Denver at 7 p.m. on Thursday evening, April 14th, and will arrive in San Francisco approximately 10 p.m. (local time). The return flight will depart from San Francisco at 8 p.m. on Sunday, April 17th, and arrive back in Denver at 11:30 p.m. M.S.T.

The group rate will include hotel accommodations for three nights (14th through 16th), as well as the air fare. Hotel and air fare will cost \$191, which is \$3 less than the normal round-trip coach air fare, alone.

The hotel accommodations will be at either the San Franciscian or the Townhouse, two of the four hotels in which blocks of rooms are reserved for Computer Faire visitors. Both of these hotels are within a block or two of the Civic Auditorium in San Francisco.

For further information, and to place reservations, contact Stephen Patterson, Denver Tour Group Chaircreature, at (303) 573-4895, or drop by and see him at the Computer Hut, 1764 Blake Street, Denver CO 80202.

Also, aside from the 90 or so DACSpeople who will be coming via this charter flight, another 50 or so are reported to be planning on flying or driving to the Faire via other craft.

PEOPLES' TRANSIT - SUPER LOW-COST NATIONAL CAR POOLING?

We recently received a call from something named Peoples' Transit. As near as we could figure out, it is a nationwide car-pooling/hitch-hiking/rider-finding, people-matcher. For more information, call their toll-free number: 800-547-0933.

GROUP FROM CHICAGO-MADISON AREA

Dear People:

Noticed the notice in Vol. 0, No.1 of the *Silicon Gulch Gazette* regarding Peoples' Transit. Upon calling, I found that for \$10 they will put you on their list of drivers/riders. Interesting, since most any radio station will do this for free. I'm looking for riders (but unwilling to part with the price of 5 2102's or 20 Budweisers) from Mowakee, or other nearby burghs such as Chicago or Madison. Can take about 9 or so in my Dodge Maxi-Van camper. It is surprisingly comfortable if a little tight. The last time I tried this was to New York-cost 9 of us, \$7.00 each. Cheap.

Vehicle is equipped with the usual stove, sink, refrig., 110AC (if someone wants to bring a small system), music, and low and high frequency ham radio equipment. Sorry, no Children's Band radio.

If you hear of anyone too poor to fly from this area, you might want to list my phone. Call during the morning, please.

Thanks. See you at the Faire.

Bruce Herrick K1TMM/WB9BSO
PHONE: 414-964-6536
3282 N. Bartlett
Milwaukee, WI 53211

Alternate Phone: 414-963-4622 (ask for Karen and leave message with her.)

AIRPORT TRANSPORTATION

Airport buses operate non-stop service between the San Francisco airport and the downtown airlines terminal every 10-15 minutes until midnight; after midnight departures are every 30-45 minutes. Departures are from the airport lower level, at the TWA and United terminals. The downtown airlines terminal is located at the corner of Taylor and O'Farrell. Buses depart from the terminal every 10-15 minutes from 6 AM to 10 PM, from 10 PM until midnight they depart every 30 minutes, after midnight the departures are 1 AM, 2AM, 3:15 AM, 4:10 AM, 5:25 AM, 5:45 AM, and again at 6 AM. Running time to the San Francisco airport is approximately 30 minutes. Passengers should board an Airporter bus at least 1½ to 2 hours before their flight. Fare on the Airporter bus is \$1.40 for adults, \$.70 for children 5 thru 11 and children under 5 ride free. There are baggage lockers at the downtown airlines terminal. There are no check-in facilities or ticketing facilities. For further information, telephone 673-2434.

Limousine service is available from Airport Limousine Service at \$22 per limousine. Five or six passengers can be accommodated. Advance reservations are suggested and it is recommended that they be made at least 24 hours before service is required. Telephone (415) 732-6660, Sunnyvale, CA.

AKONTEH International Corporation plans to offer ground transportation from the San Francisco Airport to Computer Faire Hotels at a rate of \$10 per ride. Advance reservations are required and may be made by calling (415) 327-8661.

AIR CALIFORNIA OFFERS 15% DISCOUNT FOR GROUPS

Groups of computer enthusiasts coming to the Computer Faire from outside of the San Francisco Bay Area may be interested in the fact that Air Cal offers a 15% reduction on its air fares for groups of 10 to 25 people. (Groups of more than 25 should contact the airline, directly.) For details, contact any Air California ticket agent.