In This Issue

Late News

*

Occasional thoughts to fill the space, added by the editor below the articles.... Keith.

*Thanks Cardyn.

⚜
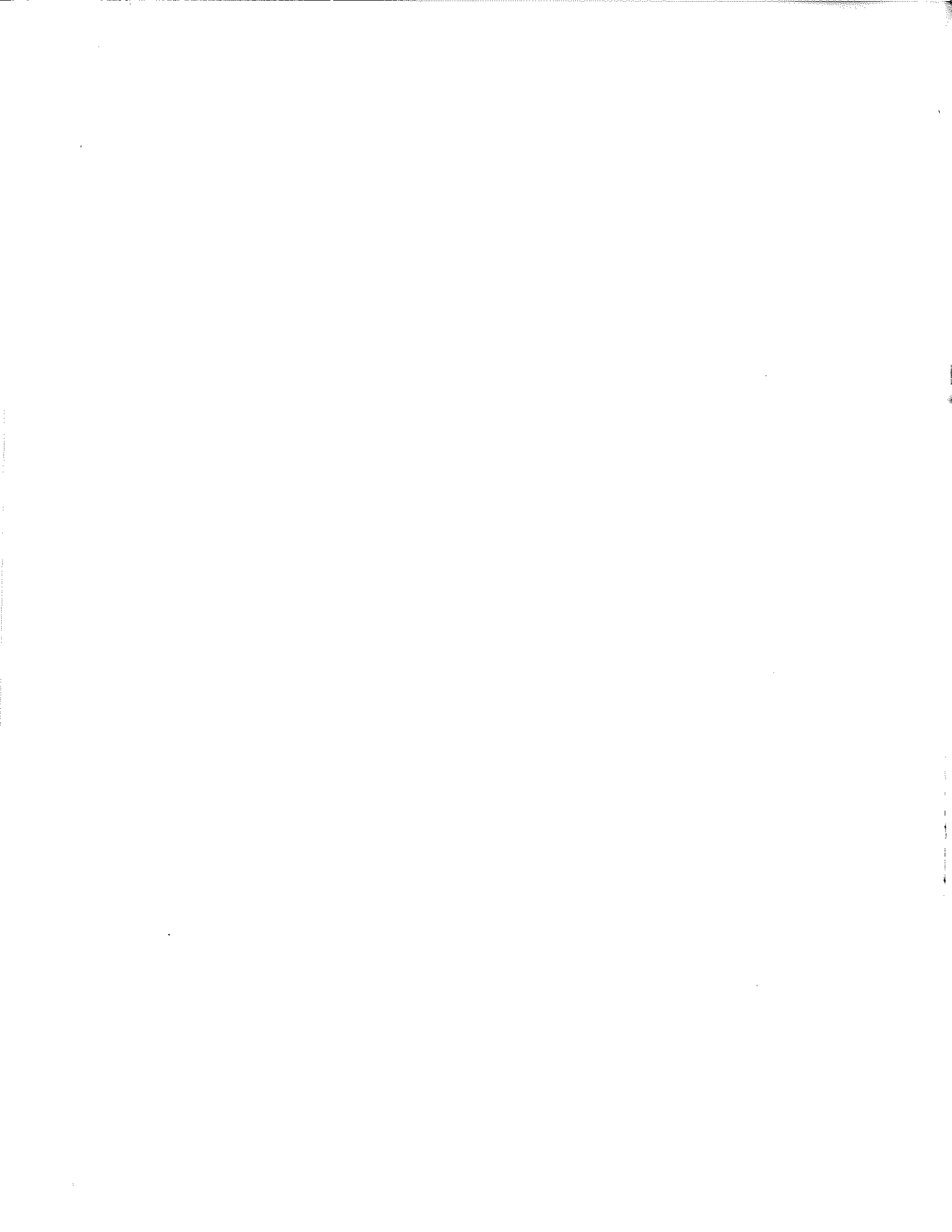
THE EDITOR WRITES...

Well, here it is three days past the deadline, and almost everything is here and ready for printing. Jim Gagne sent his stuff in on a floppy, which was a mixed blessing. It was non-trivial to sneak hardware to print the data, and his margins were too wide. So I am responsible for the funny looking quality of the stuff from the Library SIG.

I have arranged the entries in the order of their arrival, for lack of any better method to sort them by. I am impressed by the work that people have bothered to put into the entries, and angered by those of you who did nothing.

My goals for this newsletter: Wide distribution. On-going debate. New product announcement (no ads). A LOGO!! Inter-project/Inter-personal communication to prevent multiple inventions of the wheel across the world. And... whatever else comes up during my term as editor.

First things first. A LOGO. LOGO contest as follows:

1.) Send your concept of a logo to USUS News before November 1st.
2.) All entries (within reason) will be printed in USUS News 2.
3.) Cast your vote before February 1st.
4.) Winning LOGO will be used in USUS News 3.
5.) USUS will retain all logos sent for posterity, if for no better reason.

Wide distribution: tell a friend. Xerox the membership form, leaflet your company with them, use them for party favors!!

Inter-P communication: Write. Tell us what you are doing with/for/to the UCSD System Software Package.

New product announcement: Once you have gotten together with everyone that is working on the same goal you have, and have it working; Let us know!

A note on documentation: One of the articles that Jim Gagne contributed is documentation-flavored. (Separate Segments) The more of this kind of article that we can get into the USUS News is going to speed all of our work toward whatever goal we are headed for. Three cheers for writing it down so that someone else can read it.

A Challenge: University types: Lets get some class projects going to do some of the stuff that the world at large needs. A screen oriented filer, that works. An ISO standard Pascal Compiler. APL compilers, LISP compilers, or interpreters for the ambitios! A useable desk-calculator.

Another Challenge: Hobbyists: Games: A better, dynamic super-Pascal oriented ADVENTURE, a good fortune telling program (vis: CHING), GO, GOMOKU, and more!!!

Well, I've opened my keyboard a bit too far already, so I will cut the stream here. And close with...

REPLY!!!!!

Advanced Planning Committee Report:
    The first meeting of the committee
was well attended (31 attendees) many
of whom were very vocal on subjects
which are listed below. Randy Bush
of Volition Systems was elected chair-
person of the committee. It became clear
that at least initially the committee
will serve as a clearinghouse for ideas.
In the longer term the committee will
attempt to identify and focus on a
subset of the key issues. The initial
list of these issues (referred to as
the 'laundry list' during the first
meeting) are as follows:
ERROR RECOVERY
ADDRESS SPACE (need more than 64K)
FILE SYSTEM (# of files/directory,
            # of directories/device,
            sequential vs. random, etc.)
NUMBER OF SEGMENTS
METHOD OF ACCESSING CRT FUNCTIONS
ARITHMETIC PRECISION (32-BIT STANDARD?)
DEBUGGING
ACCESS TO SYSCOMREC VARIABLES
INDIRECT COMMAND FILES
AVAILABILITY OF DOCUMENTATION
also solicited: recommendations for
NEW LANGUAGES
NEW PROCESSORS

    Comments (in writing!) are welcomed
by the committee and may be addressed to
Randy Bush
Volition Systems
or
David M. Allen
Control Systems, Inc.
1317 Central Ave.
Kansas City, Kansas 66102

    The next meeting of the Adv. Planning
Committee will be at PC 80 in Philadelphia
this August, to be held shortly before the
Executive Committee meeting. Visitors are
encouraged to attend. Exact time and lo-
cation will be announced by mail to Adv.Pl.
Comm. members with addresses on file.

                              7-Jul-80
_____

YEAH!! Go to it gang!

VOLUME ONE CATALOG, USUS SOFTWARE LIBRARY
From the Datamed Research UCSD Pascal Library

COMBINE.TEXT.......a simple little thing to combine 2 or more text files.
CPM.DOC.TEXT.......documentation of 8080/Z-80 interfaces and programs.
CPMCOPY.TEXT.......an-all-Pascal CP/M file copier.
CRC16.TEXT.......assembly-language CRC generator/checker for MODEM.TEXT.
CRT.I.O.TEXT.......very powerful, crash-proof data entry UNIT for CRT menus.
DISKREAD.TEXT.......assembly-language direct track/sector disk reader.
FORMAT.DOC.TEXT.......documentation (from Pascal News) for FORMAT.
FORMAT.TEXT.......large, fancy Pascal program prettyprinter.
FORMAT1.TEXT.......part of FORMAT.TEXT (subfile).
FORMAT2.TEXT.......part of FORMAT.TEXT (subfile).
GETCPM.TEXT.......reads CP/M files --> UCSD-format disks.
GETCPM2.TEXT.......another version of GETCPM.TEXT.
GOTCHA.DOC.TEXT.......read all about UCSD's hidden gotchas for 8080/Z-80 users.
INTVAR.TEXT.......part of PRETTY.TEXT (subfile)
INOUTREADY.TEXT.......assembly-language routines: read/write to i/o port, etc.
INTRODUCTN.TEXT.......a statement of purpose--why we are here, how we work.
L.TEXT.......a short but effective text printer with several options.
MODEM.TEXT.......1st of 2 D.C. Hayes Modem drivers (S-100 version).
MODEM1.TEXT.......the second   "
PRETTY.TEXT.......the second Pascal prettyprinter, from the Pascal News.
PRETTY.DOC.TEXT.......documentation for both FORMAT and PRETTY.
RWCPM.TEXT.......assembly-language direct disk reading/writing.
SIMP.TEXT.......cute program to produce random text; sounds "professional."
TYPESET.TEXT.......takes text from editors & right-justifies it.
UNITS.DOC.TEXT.......re UNITS, SEGMENTS, & EXTERNAL routines.
VOLUME1.TEXT.......how this disk is organized (more detail).

NOTE: Apple users will find only certain files of interest, so this volume was combined with the relevant files of Volume 2A to form a one, dual mini-floppy volume. Earlier versions of FORMAT had a typo which is now resolved.

VOLUME 2A CATALOG --- USUS SOFTWARE LIBRARY
Machine-dependent software, 512-byte
sequential sectors, and other goodies.*

512.DOC.TEXT.......Documentation for the 512-byte sectoring routines on 2A & 2B.
ACOUSTIC.TEXT.......Use an acoustic modem with the Pascal Transfer Program (PTP).
BOOTASM.TEXT.......Assemble a file with the UCSD assembler and save it on CP/M.
BOOTCPM.TEXT.......Start up under UCSD and then boot up CP/M.
CPMIO.DOC.TEXT.......How to alter the CP/M interpreter for fancy disk action.
DCHAYES.IO.TEXT.......Use a D.C. Hayes modem w/ the Pascal Transfer Program (PTP).
DELETE.LF.TEXT.......After transferring a textfile to UCSD, dump ASCII linefeeds.
DFOCO.DOC.TEXT.......Documentation for DFOCO.ASM on Volume 2B.
H14.DRIVER.TEXT.......Print out a text file on the Heath printer at full speed.
H19.DOC.TEXT.......Notes on optimizing the Heath terminal for UCSD Pascal.
H19.GOTOXY.......Textfile to compile your own GOTOXY for the Heath H19.
H19.MISCINFO.......SYSTEM.MISCINFO for the Heath terminal.
HAZEL.MISCINFO.......All ready SETUP for the Hazeltine terminal.
HEXOUT.TEXT.......Pascal routine to print out integers in hexadecimal.
KBSTAT.TEXT.......Yet another keyboard status routine, this time for PTP.TEXT.
LINECOUNTR.TEXT.......Count the lines of a textfile.
MOVRAM.TEXT.......Assembly-language routine for BOOTASM.
NEW.GOTOXY.TEXT.......Good idea: let GOTOXY handle your CRT screen, too. Sample.
PE1100.GOTOXY.......Textfile for GOTOXY for the Perkin-Elmer 1100 (Fox) terminal.
PERUSE.PG.TEXT.......Look over a textfile on your CRT one page at a time.
PRIME1.TEXT.......Pascal routine to find prime numbers.
PRIME2.TEXT.......Another prime-number generator.
PTP.DOC.TEXT.......Documentation for the Pascal Transfer Program.
PTP.TEXT.......The Pascal Transfer Program. Requires L2 editor to edit.
PUNCH.TAPE.TEXT.......Send data from the UCSD system to the Heath paper punch.
RANDOMBYTE.TEXT.......Assembly-language routine to access Z-80's R register.
READ.TAPE.TEXT.......Compliment of PUNCH.TAPE.
SHELLMSORT.TEXT.......Sort a disk-based ASCII list.
SMARTREMOT.TEXT.......Set up your machine as a smart remote terminal.
TIMING.DOC.TEXT.......Notes on tuning your disk drives for fast 512-byte sectors.
TV1912C.GOTOXY.......Another GOTOXY text, this time for the TeleVideo 912.
VOL.2B.DOC.TEXT.......Documentation for the second disk of this volume.
VOLUME.2.TEXT.......Notes on all the programs in Volume 2.
WRITER.DOC.TEXT.......Documentation for WRITER.
WRITER.TEXT.......A quick but nifty text or source file printer.

* NOTE: All files are further documented in VOLUME.2.TEXT.

Apple users:
because the files on this disk relevant to you fit on one disk (principally WRITER and PTP), Volume 2A has been combined with Volume 1 as one, dual minifloppy volume.

VOLUME 2B CATALOG -- USUS SOFTWARE LIBRARY
From the Datamed UCSD Pascal Library

This disk is normally supplied in .P/M format, and includes my favorite CP/M utilities. For documentation see VOL.2B.DOC and DFOCO.DOC on Volume 2A.

BOOTER.ASM......Sophisticated PINIT and *fast* PBIOS for Z-80 systems (can modify easily for 8080) to run 128- & 512-byte sectored single density and 512-byte sectored double density disks transparently. Requires Z-80-compatible assembler (extended Intel mnemonics), Western Digital-based floppy disk controler (eg, 1771, 179x series), and DFOCO-like disk formatter. May require attention to disk timing.

CAT.COM.........Part of Ward Christenson's CP/M cataloging system. From the CP/M Users Group Volume 25.

CLEAN.COM.......Nifty PIP-like utility to back up disk files; easy to use.

D.COM...........Replacement for DIR that alphabetizes your directory & displays it in one screenful, along with filesize & room on disk.

DFOCO.ASM.......Double/single density fast FOrmat and COpy, for disks of 128, 256, or 512-byte sectors, single/double sided. Requires Digital Research's MAC (or equivalent) and MACRO.LIB. All disk access is in the program for speed; Western Digital chip on your floppy disk controller is a must.

DUMP.ASM........Fancy file/track/sector hex & ASCII dumps and patches for 3740-type disks. Accesses CP/M's logical groups directly.

FMAP.COM........Makes a file of CP/M directory names. Part of Ward Christenson's disk cataloging system.

MACRO.LIB.......Fancy 8080 macro library for Digital Research's macroassembler. Used by DFOCO and DUMP.

PGEN.ASM........Rewrite of UCSD's distribution PGEN to include booter and support multiple disk formats.

SAMPLEIO.ASM....Sample UCSD-compatible I/O routines for console and memory-mapped terminal. VERY fancy.

SPAT.ASM........Extensive updating of CP/M Users Group SPAT (Vol. 1), for patching disks on systems with memory-mapped terminals. Nice.

TYPEUCSD.COM....Object file of UCSD2CPM with assembler switch set to display UCSD files on the console or printer of a CP/M system.

UCAT.COM........Update the CATalog; part of CP/M disk cataloging system.

UCSD2CPM.COM....Object (Z-80 only) of program to transfer UCSD files to CP/M. Runs under CP/M.

UCSD2CPM.MAC....Source for program to transfer UCSD files to CP/M. Requires assembler that accepts Zilog memnomics (eg, Microsoft).

* NOTE: Apple users and other non-8080/8085/Z-80 users, there is nothing of interest to you on this disk.

VOLUME 3 CATALOG, USUS SOFTWARE LIBRARY
From Volume 3 of the Datamed Research UCSD Pascal Library
Prose, games, and some ideas.*

BLACKJACK.TEXT....Now you can play it in Pascal. Appropriate for 1980: allows negative money.

CHASE.TEXT........A good implementation of an old favorite. Get away from the robots, but don't get zapped by the electric fence!

DEBTS.TEXT........Home finance program, keeps track of your bills. Nicely menu driven, easy to use.

OTHELLO.TEXT......VERY nice implementation of OTHELLO, the best I've seen.
OTHELL1.TEXT
OTHELL2.TEXT
OTHELLINIT.TEXT....Subfiles of OTHELLO.

PROSE.DOC1.TEXT
PROSE.DOC2.TEXT....A subset of the documentation of Prose, copied from the Pascal News No. 15. What you really need to know to use it.

PROSE.TEXT........A copy of the fancy text-formatting program from the Pascal News, No. 15, adapted for UCSD Pascal by its author, J. P. Strait, of the University of Minnesota. Requires most of 64K of memory to compile.

PROSE.0.TEXT
PROSE.A.TEXT
PROSE.B.TEXT
PROSE.C.TEXT
PROSE.D.TEXT
PROSE.E.TEXT
PROSE.F.TEXT......Subfiles of Prose.

PROSE.I.5.CODE....Object version for those without sufficient memory to compile; will run under UCSD versions I.4 and I.5.

REQUESTS.TEXT.....Some ideas for some very needed programs and routines.

SNOOPY.TEXT.......Snoopy calendar, featuring the W.W. I flying ace.

STORE.DATA........Sample data file for DEBTS.TEXT.

UNIVERSAL.TEXT....Suggestion for a UNIT that will let us use each other's programs without having to edit in hardware-specific routines.

* All programs should be self-documenting, though you'll have to fix hardware-specific procedures in the game programs (see UNIVERSAL.TEXT for a discussion of this subject); as a rule, any code your system does not support (e.g., KeyPress or a system clock) can just be deleted. Apple volumes feature the same software.

VOLUME 4 CATALOG -**- USUS SOFTWARE LIBRARY
From the Datamed Research UCSD Pascal Library

The long-awaited Bowles Database seed, plus other utilities.

Name	Blocks	Description
DBBUILDER.TEXT	38	Part of K. Bowles' database seed.
DBUNIT.TEXT	4	The major data accessing routines, allowing records of variable size and user-defined linkage & nesting.
DBUNIT.1.TEXT	18	Subfile of DBUNIT
DBUNIT.2.TEXT	32	" " "
DBUNIT.3.TEXT	34	" " "
DBUNIT.4.TEXT	30	" " "
KB.DATABASE.DOC	74	A detailed class manual to show you how to use it.
KB.DBDEMO.TEXT	4	Demo program to further document the system.
KB.SCUNIT.TEXT	16	Screen control unit with some very nice screen i/o.
KB.STARTER.TEXT	30	Help set up the data structures.
KB.TESTDB	32	A test database data file, used by DBDEMO.
COMPARE.TEXT	34	From the Pascal News No. 12; prints out textfile diff's.
COMPRESS.TEXT	8	Compress leading/strip trailing blanks; shrink files.
INDEX.TEXT	24	Expanded index to Jensen & Wirth--now you can find it.
VOLUME.4.TEXT	14	Commentary on the files on this disk.
WUMPUS.TEXT	28	The game of Wumpus, elegantly implemented.
TEACH.WUMPUS	10	Documentation on the wunders of Wumpus.
WUMP.CAVE0.TEXT	4	One of several cave configurations you can select from within the game; if you get bored with one, try another.
WUMP.CAVE1.TEXT	4	
WUMP.CAVE2.TEXT	4	
WUMP.CAVE3.TEXT	4	. . .
WUMP.CAVE4.TEXT	4	. . . This one's hard.
WUMP.CAVE5.TEXT	4	. . . This one's hard, too.

NOTE: All software on this volume is relevant to Apple users, and is available on one dual-disk minifloppy volume.

UCSD System User's Society
Business Applications
Special Interest Group

At the first meeting of the UCSD System User's Society (USUS) a special interest group was formed for people concerned with business applications.

As its first activity, this group decided to compile a list of commercially available software, and to publish the list in the USUS newsletter. The purpose of the list is to encourage the use of the UCSD system by making known the wide variety of applications that are available.

If you are currently marketing any application software packages and would like to participate, please send a brief description of each program to: USUS Business Applications SIG, C/O Dr. Michael R. Posehn, 1492 Windsor Way, Livermore, CA 94550, (415) 455-4034

If you have any ideas on the future direction of this SIG, please join us at the USUS meeting in October.

UCSD System Applications Software

Helmers & Associates, Inc., P.O. Box 41, Hancock, NH 03449, (603) 525-4038

Pascal-407, by Carl Helmers: A unit-record accounting system. A simple UCSD Pascal report generation program interpretively operates on ".TEXT" files prepared with the UCSD System Editor. The program is in source form, with illustrative examples of its use and notes on customization.

International Medical Systems Inc., 190 South King St. #1990, Honolulu, HI 96813, (808) 536-1041

SMART CHART: An integrated medical information system for small private practices. It provides billing/insurance, complete medical chart preparation, and practice analysis.

Noesis Computing Company, 615 Third Street, San Francisco, CA 94122, (415) 495-7440

DATALEX: Data entry software includes a formatted-CRT language (callable as a UNIT), batch maintenance, listings and remote communications with any asynchronous computer.

Organic Software, 1492 Windsor Way, Livermore, CA 94550, (415) 455-4034

DATEBOOK: An appointment scheduling program for physicians, dentists, attorneys, or for any situation where time management is critical to office efficiency.

SCREENIT: A screen control unit that makes applications programs totally terminal independent. Includes a selection program that lets the user pick his terminal from an extensive list of the most commonly used terminals.

PCD Systems, P.O. Box 143, Penn Yan, NY 14527, (315) 536-3734

MEDOFFICE: Program designed for small medical offices (1-5 practitioners). Handles billing and accounts receivable, insurance form preparation, appointment scheduling, collection lists, patient recall; stores diagnosis/problem lists and medication lists for each patient. List price is $2995.00, not including installation.

MAILER: Mailing list program which stores name, address, phone and any user defined category assignments on disk. Includes a sort by any field, function, and mailing label printout. Source code included with program, $79.95 each (8" single or double density).

DISASSEMBLER: A Pascal Z-80 disassembler with ASCII or hexadecimal printout.

Renaissance Systems Inc., 10639 Roselle St., San Diego, CA 92121, (714) 457-2700

PROFF & FORML: Word processing software. PROFF is a Pascal runoff program patterned after NROFF in UNIX. FORML is a form-letter generation program compatible with PROFF.

TYPE III, 3021 Germantown Pike, Norristown, PA 19403, (215) 539-0122

REPS: REPS is a record keeping and sales analysis tool for manufacturers representatives (agents). It performs comparative sales analysis by salesman, principal, or customer.

WICS: WICS is an inventory control system for a public warehouse. It records all incoming and outgoing shipments and computes monthly charges based on storage and handling rates for individual products.

31-Jul-80

APPLICATION SOFTWARE
DESCRIPTION

Vendor Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

Product Name _____

Description _____

_____

_____

Product Name _____

Description _____

_____

_____

Product Name _____

Description _____

_____

_____

Return to: USUS Business Application SIG
           C/O Dr. Michael R. Posehn
           Organic Software
           1492 Windsor Way
           Livermore, CA 94550

USUS Educational Applications of Computing SIG

What's in a name? After a recent trip to the east coast, spreading the good word about Pascal and educational applications of computing using it, I discovered that certain colleages had arranged to have me named "Chairman/Contact Person" of the USUS "Computer Aided Instruction SIG." Without discussing the appropriateness of the first piece of nomenclature, I do propose we change the latter name to "Educational Applications of Computing SIG" on the grounds that this name better describes the scope of this group. All of which brings me to the main point of this note: some ideas about the scope and activities of this group.

In "educational uses of computing" (EAC), I include the following areas:

Computing as an object of study
 (Computer Science, programming, "computer literacy", social impact, etc.);
Problem solving with computers
 (to develop problem solving skills or because the solution is important in itself or both);
Drill and practice
Tutorial programs
 (initial presentation, "guided inquiry", remediation);
Testing
 (generation, administration and direct feedback);
Simulations and "facilities"
 (e.g., plotting and statistics facilities).

This list is not complete and the taxonomy is inadequate. What I hope to suggest by it is that we should view "EAC" much more broadly than the label "CAI" is usually construed.

In a similar informal and suggestive spirit, I offer the following list (in no particular order) of some reasonable activities for this group.

Exchange information about current EAC using UCSD Pascal (tm),
 --by maintaining a list of active workers their areas of interest, addresses and phone numbers,
 --by publishing descriptions of such work in this newletter (more about this below),
 --by including in this newsletter references to articles of interest published elsewhere.

Provide SofTech Microsystems with information, from the EAC point of view, on what features of the UCSD Pascal System (tm) are useful, what features we don't like and what we changes would be useful (and, in all cases, why).

Support (through this newsletter or other mechanisms) a general bulletin board for EAC using UCSD Pascal(tm):
"Does anyone know...?", "Does anyone have...?", "Hey, guess what we discovered/are doing?"

Hold meetings/birds-of-a-feather-sessions at USUS meetings and at SOME of the various meetings where computers and education is a primary topic (e.g., NECC, AEDS, ADCIS, ACM SIGCUE, ACM SIGCSE, etc.).

Publish informative and stimulating articles. My experience indicates that one can often judge the value of a SIG by its publications. Such articles are thus hereby solicited.

Address the problems of distributing educational software ("courseware" to some). A number of different models have been proposed, each with its own advantages and shortcomings.

As a start on some of these activities, let me encourage, indeed exhort, interested readers to send me short notes describing their educational applications of UCSD Pascal (tm) and indications of what activities they would like to see USUS in general and this SIG in particular pursue. Longer communiques are even more welcome. The response to these requests should provide both a mailing list and an ample amount of material worth mailing.

Stephen D. Franklin
Computing Facility
University of California
Irvine, California 92717
714/833-5154

31-Jul-80

Some notes on machine comparisons.. No one will admit to these, so I am putting them here, with my neck under the Guillotine..

The following is information on 'speed' comparisons between the processors which run UCSD Pascal(tm). These figures are normalized comparisons against the WD microengine(tm) which is given the base figure 1. The program is Quicksort (ref. Bowles) NSort is iterative, RSort is recursive..

Hardware	NSort	RSort
Microengine	1	1
GA440	2	2
11/34	2.5	2.6
Z80(4mhz)	4.5	4.7
GA220	5	5
LSI/11(Terak)	5.1	6.6
9900(3mhz)	7.5	7.7
6502(1mhz)	9.3	9.9
8080(2mhz)	9.6	9.9
6800(1mhz)	21	22

Not official

USUS Meeting

Presentations, Demonstrations, Software Exchange, General Sessions, and Committee Meetings

In conjunction with
Mini-Micro Conference and Exposition
(Oct. 14, 15, and 16)

Thursday, Oct. 16 at 1:00 PM
to
Saturday, Oct. 18 at 1:00 PM

San Francisco Civic Auditorium (Room 408),
and San Franciscan Hotel

Schedule

Thursday	Oct. 16	13:00 - 17:00	Civic Auditorium
Thursday	Oct. 16	19:00 - 20:00+	San Franciscan (B of F)
Friday	Oct. 17	9:00 - 12:30	Civic Auditorium
Friday	Oct. 17	13:30 - 17:00	Civic Auditorium
Friday	Oct. 17	19:00 - 20:00+	San Franciscan (B of F)
Saturday	Oct. 18	9:00 - 13:00	Civic Auditorium

Fee: $25.00 for pre-registration (on first come, first serve, space available basis). Pre-registrations received prior to September 26 will receive complimentary admissions to the Mini-Micro Conference and Exposition (including Technical Sessions and the Show). In the event that there is space available, registrations for $35.00 will be accepted at the door or at the USUS booth on the Mini-Micro Show floor.

Here's what's planned: general sessions, committee meetings, presentations, demonstrations, software exchange, and Birds of a Feather (B of F) meetings. The general sessions will handle business of the Society such as elections, announcements, and committee and special interest group reports. The committees and special interest groups will be allotted some time for their own meetings. The Birds of a Feather sessions (the only affairs held in the San Franciscan) are to allow new groups to form or to provide members with an after hours meeting place for informal discussions. There will be two rooms set aside for the B of F meetings.

If manufacturers and suppliers are interested in demonstrating their equipment after the Mini-Micro Show closes, a side room can be provided (contact Winsor Brown at 714-754-4114 for details). Software from the Exchange Library will be made available for duplication at reduced rates on the demonstration or user supplied machines. Presentations will include applications such as telecommunications, business, and CAI; at least one major manufacturer will talk about his wares; and information from SofTech Microsystems including a Version IV status report, a repeat of Mark Overgaard's well received NCC presentation, and an announcement of the BASIC compiler which will become part of the system. The complete program schedule for the meeting and presentations will be available at the USUS booth or at the meeting door.

In addition to the USUS Program, there will be two Pascal oriented technical sessions at the Mini-Micro, one on mini-computer applications of Pascal, and the other an Open Forum on implementation interfacing to existing systems. For newcomers to Pascal, there is also a one day tutorial being offered by Mini-Micro on Monday October 15. For more details on the Mini-Micro program or the tutorial, consult a Mini-Micro brochure or call 714-661-3301. The Association of Computer Programmers and Analysts is also holding its meeting in conjunction with Mini-Micro, but on Oct. 12, 13 & 14. For more information on the ACPA meeting call 800-556-6882.

USUS Meeting

Lodging

For out-of-town members there are several options available. If you are coming for all of Mini-Micro and the USUS meeting and want to be close by, try to book your rooms at the San Franciscan Hotel under the Mini-Micro block of rooms (and inform the reservations department that you intend to stay through October 17). If you are coming only for the USUS meeting (i.e. the nights of Oct. 16 & 17), make your reservation under the USUS block of 25 rooms (we could only get 25 set aside, so be prompt). The rates at the San Franciscan are $52 for singles and $60 for doubles, plus the standard 9.75% hotel tax. You can reach the San Franciscan at 415-626-8000; 1231 Market Street at Civic Center, S.F., CA 94103.

If you are interested in more reasonably priced rooms or can't get a reservation at the San Franciscan, the San Francisco Convention and Visitors Bureau (1390 Market Street, S.F., CA 94102) can provide a lodging guide. They suggested the following $30-$40 (for singles) hotels/motels which are within a single bus ride of the Civic Auditorium. In the Union Square/Downtown area: Beresford (800-622-0899 within CA; 800-227-4249 outside CA); Cecil (800-843-9999); Chancellor (415-362-2004); Louise (415-775-1755); Manx (415-421-7070); Yerba Buena (415-543-3130; 800-227-4673). In the Van Ness area: Carlton (415-673-0242); Castle Inn Motel (415-441-1155; 800-453-4511); Oasis Motel (415-885-6865); Van Ness (415-776-3220). The Bureau's guide provides many more details and possibilities.

To pre-register: detach or copy, fill out, and mail (today; remember, the deadline is receipt by September 26) the following coupon with $25.00 payable to

UCSD System Users' Society
John Bondy, Treasurer

Fall 1980 USUS Meeting Registration Coupon

Name _____

Company _____

Address _____

_____

Phone _____ / _____ - _____ x _____

Mail to:
UCSD System Users' Society
Chip Chapin, Secretary
c/o SofTech Microsystems, Inc.
9494 Black Mountain Road
San Diego, CA 92126

See you at the Meeting

THE USUS WORD PROCESSING COMMITTEE --
PLENARY MEETING

by Randy Clark

On Saturday, 21 June, as planned, the Word Processing Committee first met. The intention was to begin a special interest group as a resource for members of USUS. Twenty-odd conference attendees showed up; in view of the fact that the meeting was at 3:00 PM on Saturday, this must be considered a large turnout.

The first item of business was to take the traditional roll, and to circulate a handout describing a few word processing related programs which have already been made available to the USUS contributed library. Richard Kaufmann, author of the UCSD Screen Oriented Editor, volunteered for the dual post of committee chairman and contributing editor to the USUS newsletter, and was so acclaimed.

The committee moved on to informal discussion. In the course of this, it was agreed that the committee's prime function should be to evaluate and disseminate information on various word processing products, both hardware and software. In the first connection, the committee intends to work closely with an as-of-yet hypothetical committee on host systems. To disseminate software, the committee intends to work closely with the contributed library committee, on which Richard Kaufmann is serving as reviewer of word processing tools. The committee also decided to create some reviews of existing products usable with the UCSD Pascal System, and publish those reviews in the USUS newsletter.

As a secondary function, the committee intends to co-ordinate the updates of word processing software in the user library, so as to maintain a consistently supported set of tools.

It was agreed that while word processing software is not restricted to textfile post-processors, those are the most visible items currently available. None of the committee was familiar with any word processing editors compatible with the UCSD System. It was decided to search for and promote the creation and contribution of: spelling correctors, index and table-of-contents generators, text comparators, cross-reference generators, KWIC generators, and graphics tools.

The committee enrolled some volunteers for the authorship of reviews of text formatters (those reviews appear in this issue), and then dissolved into the USUS general wrapup session.

LIBRARY   A REPORT ON THE UCSD SYSTEM USERS' SOCIETY SOFTWARE

A number of interested users formed the USUS Software Library Policy Group, which has decided upon the following means of implementing a library of programs that would serve users of the UCSD system.

1. All authors donating software to the USUS library must incude with it a standard form (to be designed by the chairperson and cleared by the USUS president) releasing the software for all noncommercial use, certifying that: a) it is the original creation of the donor; b) the donor indemnifies USUS from all damages resulting from any allegations of stolen or copied copyrighted material; and c) the author releases his/her work to USUS for distribution and noncommercial use, but that the USUS cannot guarantee that unauthorized uses will not occur. A description of the software's intended application, hardware dependencies, etc., should be included. Finally, it was agreed that ONLY programs in source form would be accepted, although if certain source files were unduly lengthy or otherwise tricky to compile, they could ALSO be included in the library in object form. Only software compatible with the UCSD system (Pascal, FORTRAN-77, etc.) will be distributed. Finally, all submissions should be in machine-readable form, preferably 8-inch, UCSD "standard" disks (see below), although Apple and Northstar disks will also be welcomed.

2. Software will be collected by the library chairperson and distributed to two or more members of a panel of software reviewers, who will try it out, generalize it, tune it up, etc., as necessary. Current review categories include utilities, software tools, word processing, educational applications, health care applications, and games. It will then be collected on disk volumes and sent to regional volunteers for distribution. The volunteers will be responsible for copying the software, perhaps switching media, and accepting orders processed by the USUS secretary. The contents of software volumes will be published in the USUS newsletter as they are ready.

3. Software may be purchased only by members of USUS, although we included an escape provision that anyone willing to pay a surcharge on each order (currently $20, the annual dues) will also be able to make a purchase. Software may be then secondarily distributed by USUS members only to other USUS members, free or at cost. All primary orders will be sent to the USUS secretary, currently Chip Chapin, who will record them and send them to the nearest regional distributor who supports the format desired. Current prices are $10 per 8-inch disk and $15 per dual 5-1/4 inch floppy postpaid (plus sales tax for California addresses), all of which (except taxes) will be paid by the USUS treasurer to the regional distributor, who will be responsible for procuring disks, copying them, processing orders sent to him, freight or postage fees, and guaranteeing that the software arrives in usable condition.

4. Since the regional distributors are still being designated, it is not clear which disk formats will be available, but they almost certainly will include UCSD "standard" 8-inch and Apple and Northstar minifloppies. Please write to me and Chip Chapin if you need other formats or would be willing to translate from one of the standards to one less frequently used.

5. With the exception of Ohio Scientific disk controllers, which utilize a UART, all common 8-inch floppy disk systems can read 3740-compatible diskettes (soft sectored, 128 bytes/sector, 26 sectors/track, 77 tracks/disk, single density, single sided), although many may require special software to access data not present in the format usually used. The Policy Group chose to distribute 8-inch library volumes only in the UCSD "standard" format, and then to provide "mapper" programs on special-format disks for users of such systems as the Microengine, the 6809, etc., to translate software and data back and forth. This allows users of the UCSD system to retain a semblance of a disk standard for purposes of interprocessor communication. Certainly, all OEM's contemplating the release of UCSD systems software should consider including the provision for reading and writing to "standard" disks, although they may not be the primary format in use.

6. For your reference, here is a description of the UCSD "standard" 3740-compatible disk format, a derivative of DEC's RT-11 disk format:

Disks are soft sectored, 128 bytes/sector, 26 sectors/track, single density, and single sided. Track 0 is reserved for system-dependent booting and is not accessed by the UCSD operating system. The rest of the disk (1984 128-byte sectors) is divided into 494 logical groups of 4 128-byte sectors called "blocks." There is a distinction between the physical numbering of sectors (as imposed upon the address mark beginning each sector) and logical sectors, because sectors are not read sequentially. Access begins with the first logical sector of a track (always an odd-numbered physical sector) and continues with every other sector until the first logical sector is about to be read again, and then the even sectors are read sequentially. Thus, on track 1, the order of sector access is 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, and 26. This is a standard variation of disk mapping called "2-sector interleave," chosen because some controllers (particularly LSI-11 controllers on which UCSD Pascal was developed) cannot read sequential sectors.

This scheme is somewhat complicated by the fact that to compensate for head-settling time, the first logical sector on each track is six sectors later than the first logical sector on the preceding track. (Notice that if the first logical sector on track 2 were again physical sector 1, the system would not have time to move the head to track 2 before the beginning of sector 1 went by, leading to a delay of one track revolution before disk access could resume.) Thus, the first logical sector rotates

among the odd physical sectors as one steps further in on the disk, in the following order: 1, 7, 13, 19, 25, 5, 11, 17, 23, 3, 9, 15, and 21. This 6-sector delay between tracks is called "6-sector skew," and is responsible for substantial performance improvement.

Please contact me if you would like to help out; the most pressing need is for reviewers (who would, I hope, devote substantial energy to tuning up valuable software for the benefit of all of us). If you would like to be a reviewer, please write to me and indicate your area of interest. In addition, there is a need for quality programs to share with the USUS membership.

Please let me know if there is any way I may be of assistance to you.

Sincerely,

Jim Gagne, Chairman, USUS Software Library President, Datamed Research 1433 Roscomare Road Los Angeles, California 90024 213/472-8825

Here's my version of what happened at the founding meeting of the UCSD System Users' Society:

The UCSD System Users Society (USUS) is a vigorous, exciting, alive, and independent organization that right now is oriented to those who plan to make their living using the UCSD system, primarily the Pascal language. It is possible that hobbiest users may play more of a role in the future.

SofTech Microsystems organized the meeting and was extremely careful to clearly give it away to the users. The users in turn made no bones about their needs and gripes with SofTech, particularly the importance to them of SofTech's releasing Version 4.0 in the NEAR future. For months the word has been that it's been only a few weeks away from being marketed. The purpose of 4.0 is twofold; I gathered: 1) to clean up the "warts" and weird system dependencies of the UCSD system and to finally remove it from the realm of a highly advanced student project, plus 2) to restore total object-code machine independence, where programs will run unaltered on multiple machines. Most of the users agreed that even more than implementing Pascal on a micro, what they liked most about the UCSD system was its uniformity across multiple systems. TI and Boeing, for instance, chose the UCSD system for these reasons, though the man from Boeing noted that alterations were required for total machine transparency. The delays in releasing 4.0 apparently stem from the intention at SofTech that it be fully compatible with 2.1 (the Apple system) and 3.0 (the Microengine), despite less than optimal cooperation from the manufacturers involved.

or pay a $20 premium per order. Only UCSD-compatible software will be offered, and all policy is being set by a policy board of interested users. Realistically, we will not be shipping USUS software before 1 September. Because of my announcements last March of users software available from me without such restrictions, the group agreed that I should continue as before, although eventually I will continue my operations through the USUS exclusively.

Dr. Ken Bowles will be on sabbatical leave next year, and he is making no secret of his next project: to get an Ada compiler going on the UCSD system (P-machine compatible only, I imagine). Because it is no more expensive to have the more distant members of his group work at home and communicate via modem, he plans to implement a full-fledged Telenet host with a hard-disk- based microcomputer. Enough time will be left over on the system to devote to an innovative project: interested users will be invited to subscribe to a users' bulletin board and software supermarket, where users' group software can be downloaded at cost and proprietary programs purchased, all via the phone. The bulletin board would include any comments on the proprietary software users cared to leave, which should (with luck) stimulate the rapid development of reliable, quality UCSD-compatible products. Further, and more important, this concept will help overcome the insane proliferation of incompatible floppy disk formats. The only catch is that it will be somewhat expensive for casual users if currently projected charges prevail without an alternative: $10 per month just to belong, plus $5 per month any time the system is used. There will be a connect-time charge of about $3.50 per hour evenings and weekends, and roughly $12 to $15 per hour during weekdays (figured in the time local to the user). Because of the extensive local port network supported by Telenet, most users will be able to access the system via a local call. These charges will support full access to the public parts of the system. Users software will go for an additional $2 per 8 programs; proprietary products will be retailed at the usual rates. Please note that this report reflects my recall of Dr. Bowles' initial announcement; plans may well have changed.

One interesting note: the Pascal Transfer Program from Vol. 2A of the Datamed Library has turned out to be excellent, and has been selected for the "official" modem transfer routine by the group, a step approved by its author, Mark Gang. Thus we can all talk with each other. The protocol used is the PCNET "standard" (Mark indicated that not all aspects of the protocol had been formalized, and different spokespeople presented the protocol differently), so that we can talk with non-UCSD processors as well. The program lets you transfer files to another user in both directions at once, while simultaneously conversing on your terminals. The only problem is that program overhead is high and the data rate low; you can expect about 16 char/sec if your line is not too noisy. Mark promised a new version, somewhat incompatible with the old, that involves much more system handshaking to set modem speed in software (your modem allowing) and select binary vs Radix-41 (PCNET standard) transmission. We'll probably stick to the old version, since it should run on ANY UCSD system, even on personal computers.

The things that will be cleaned up include the UNITS system (allowing linkage at runtime, plus a greatly expanded number of available segments), subtle compiler bugs, and a few fixes in the editor and operating system. The minimal facilities for concurrancy present in the Microengine system will apparently be extended to all. Despite the fact that many people would like to expand the operating system beyond the present single-user development system model, these features won't be changed a great deal at present.

Just a word here: I understand from Al Pease of Independent Business Systems that there is a lot of overhead in the compiler designed to interface it with student users; I am thinking particularly of the STUDENT and SLOWTERM parts of SYSTEM.MISCINFO, as well as a user number provision. These are holdovers from UCSD teaching days and should be removed; apparently the compiler is considerably smaller and quicker if they are.

The future holds a number of tantalizing possibilities and promises. A major emphasis will be the extension of addressing beyond the present maximum of 64K, requiring (of course) more than 16-bit integer arithmetic as a standard, something I feel is a limitation of the present system anyway. No one has talked about how this will be done and yet retain compatibility with present systems. We need improved error handling that does not all to be done by the user program, so commercial applications programs do not bomb out to the operating system (although there are some tricky, kludgy ways involving a fake SYSTEM.DEBUGGER program that EXITS back to the user program; I know no more). We need a more flexible front end (GETCOMMAND, the main command processor), so writers of business systems can disguise the operating system from the user (maybe a TURNKEY_USER switch in SYSTEM.MISCINFO that will always pull in SYSTEM.STARTUP when GETCOMMAND is executed). There was considerable interest in a UNIX-like operating system with concurrancy, multi-user and multi-tasking capabilities, and shells and pipes. More than likely, this is a good way into the future; first, we've got to get an expanded system going on the new 16-bit micros. One idea very much in the works now is to include compilers for languages beyond FORTRAN and Pascal: TI has BASIC and COBOL in development.

Ideas like the ones above aroused considerable interest at the meeting, and the Advanced Planning Special Interest Group was among the best attended. For further information, contact the chairperson, Randy Bush, at 503/572- 5391. It is clear that one of the most important things we users can offer SofTech is a coherent feedback mechanism with courage and clout; this was already very much in evidence in San Diego. Al Irvin of SofTech made an impassioned plea that anyone who has developed new capabilities of the UCSD system contact him for a mutually satisfying discussion concerning SofTech's licensing the new development.

I am chairperson of the software library, which will announce offerings in the newsletter. Please see the notes on the software library elsewhere in this issue. There will be: a) multiple distribution centers; b) several software reviewers, each concentrating on a specific area, and c) the requirement that purchasers of the software either be members ($20 per year)

One note for individuals who received copies of the FORMAT program (FORMAT.TEXT, FORMAT1.TEXT, and FORMAT2.TEXT, on volume 1 of the Datamed library): there is a bug in it. As presently distributed, two key statements were left out; so when the program encountered a procedure or function declaration, it just terminated. The fix: near the end of FORMAT2.TEXT you will find PROCEDURE DoProcedures. Three lines from the end, following the statement "StartNewLineAndIndent;", add the following:
LastProgPartWasBody := false; DoBlock (ProcName, ProcNmLength);
and it will run fine. If you had difficulty compiling the program, that was because a funny byte crept into early versions of FORMAT2.TEXT, substituting a "|" for a "<". Just put it back.

FORMAT still has difficulties, primarily the inability to deal with brace- type comments (just substitute paren-and-asterisk type comments). Also, comment lines longer than 72 characters are chopped in mid-word, and it cannot deal with comments before the PROGRAM declaration. Of course, UNITS and their corresponding USES statements cause FORMAT to terminate. I have dealt with most of these problems, but others have crept in, and I feel FORMAT won't truly be useful without some form of menu-driven initialization section, to allow real-time formatting to occur. I would very much like to have a routine like FORMAT available to dress up USUS Library programs, so if you would like to play with the present version of it, please send me a disk.

I also volunteered to be chairperson of the Medical Special Interest Group, and we dreamed up a project to adapt to the UCSD System whatever we could of the expanse of public-domain clinical applications software, developed under grant. Contact Porter Melbourne, M.D., of Patient Care Data Systems, 418 North Main St., Penn Yan, NY 14527, who volunteered to head up this effort. In addition, we are looking for volunteers to transcribe the programs to UCSD-compatible floppies from 9-track tapes.

Other special interest groups include the Newsletter (direct all articles to Keith Shillington, c/o SofTech Microsystems), European, Computer Aided Instruction, Standards, Word Processing, Real-Time Applications, Industrial, Apple users, and Compatibility and Communications.

Jim Gagne, President DATAMED RESEARCH, Los Angeles.

A WORD ABOUT SEPARATE PROCEDURES AND SEPARATE UNITS

One of the deliberately undocumented features of UCSD Pascal is the existence of "separate procedures", or procedures that are compiled separately from the program that uses them.

They are undocumented because they were implemented for internal use only (i.e., born of the necessity to put certain routines required by the compiler into the system library), and they are picky and at times lead to mysterious program crashes, including the possibility of crashing one's disk. I bring them up because they work well in certain systems, and if you are appropriately paranoid when trying them out, you may find them extremely useful. Apple users, alas, will find separate procedures documented in their manuals, but they do not work well on Apple Pascal systems, documentation to the contrary.

They allow one to separately compile frequently used procedures and functions without the necessity for using up segments or pulling in the code of an entire unit. Only the code actually declared within a program is linked, unlike the standard UCSD Pascal unit system, where the entire unit's code is linked into the host program's codefile, want it or not. Further, where conform much more closely to the new ISO Pascal standard, there the ability of procedures and functions to be declared FORWARD is explicitly extended to other, implementation-dependent declarations, principally EXTERNAL.

If you have used the UCSD system for a while, you may have run into separate procedures and functions under another name: assembly language routines, which are assembled separately, stuck into the SYSTEM.LIBRARY, and brought into the calling program by the declaration EXTERNAL following the procedure/function header line.

Here is how they work:

Get together a bunch of procedures and functions that do NOT call any other procedures or functions (except those standard to the UCSD implementation). Put them together in a text file, and preceed the source code by the declaration "SEPARATE UNIT <xyz>", where "<xyz>" is any name you wish. Note that unlike regular units, the name of a SEPARATE UNIT is NOT referred to in the host program; basically, the separate unit name is ignored. Finish up the source file with an "END." after all the procedure/function blocks. (Apple users MAY require a BEGIN-END. pair instead of just an END.) Note that there are no INTERFACE/IMPLEMENTATION declarations or global variables that will be compiled into your host program; these are features of conventional UNITS. Just a bunch of procedures and functions that do NOT call other procedures or functions.

To access these routines, compile the SEPARATE UNIT and stick the object code into your SYSTEM.LIBRARY with the LIBRARY utility. (Other codefiles may be used instead; just inform the

host program with a (*$U <filename>*) compiler directive, where "<filename>" is the name of the library file.) Then refer to the separate procedures and functions by a full procedure/function heading, including the parameter list in parentheses and the data type of the function, then the usual semicolon, then the declaration "EXTERNAL;".

Here's an example:

```
SEPARATE UNIT XYZ;

PROCEDURE ClearScreen; BEGIN Write (CHR (12)) END;

FUNCTION Sum (a, b: real): real; BEGIN Sum := a + b END;

END.
```

After you compile the preceeding textfile and stick it into your library, you can refer to the routines therein by including one or both of the following declarations in your calling program:

```
FUNCTION Sum (a, b: real): real; EXTERNAL;

PROCEDURE ClearScreen; EXTERNAL;
```

Then just use the procedure/function identifiers in the usual manner.

CAVEATS

Some systems have a linker bug, wherein it tells you it is linking in a separate procedure, but doesn't actually transfer code. The result is random code, which has a habit of writing randomly to disks. The linker bug occurs only when more than one separate procedure/function in a given separate unit is called by the host program, and may be indicated by an abnormal order of procedure/function name callouts (with respect to the SEPARATE UNIT) by the linker while it is doing its thing.

HARDBITS REVIEW

System: The ibs Multi-User Pascal System

Supplier/Manufacturer: Independent Business Systems, Inc.
5476 Cleo Court
Livermore, CA 94550

Contact: Alfred A. Pease, President

Features:
*UCSD Pascal
*Up to 8 Users
*IEEE S-100 BUS
*5¼" or 8" Disks
*10 Mbyte Harddisk
*Back-up System
*Multi-User Interlocks
*"RAM Disk"
*Pseudo-Terminal Set-up
*30 Amp, 12 Slot Board
*4MHz Z-80 CPU

This is the first in a series of ibs Systems capable of multi-user operation which offer UCSD Pascal as the standard language. The next generation will be of the multi-processor variety, i.e. one CPU (Z-80) per user. A single user system, actually the first system produced by ibs, is also available with UCSD Pascal.

At the present time, there are at least a half dozen micro-processor based systems, either available or nearly so, that offer multi-user capability. However, micro-based systems are not readily amenable to multi-user conversion, and this fact has been a considerable obstacle in their development. ibs overcomes the memory access problem by utilization of a concept known as "bank switching." This means simply that "banks" of memory are switched in and out of the computer's memory space with simple I/O instructions. The P-code interpreter, the "kernel" of the system, is not switched; memory above 16K is allocated to users by "banks," and the "banks" are switched in and out of operative status on an alternation basis. Each user's "bank" contains his programs, data spaces, peripheral tables, Z-80 machine registers, interpreter, and I/O temporaries. Each user appears to have at least 64K of memory at all times, as if he were on a single user system. There is, of course, some degradation in operational speed as more users are added to the system. Thus, depending on the application, from four to eight users are recommended.

An interesting secondary gain of the "bank switching" method of memory allocation is found in the creation of "ex-tended" or "RAM disk" memory. The assignment of memory "banks" to users is a software function and, consequently, unassigned memory, i.e. excess memory, may be treated as a "RAM disk" - that is, the excess memory banks can be configured so as to appear to the system as a disk, albeit a very fast disk, accessible by normal I/O routines.

In addition to the normal UCSD Pascal operating system and language facilities, ibs has extended the operating system to provide interlocks and multi-user operation without sacri-ficing UCSD compatibility. The interlock system effectively and selectively acts as a "traffic director" for I/O access. Further, the system provides selective control over the degree of access exercised by the individual user; i.e. users may be denied either access and/or modification rights to a file.

Augmenting the UCSD Pascal utilities package is the ibs proprietary utility called CONFIG (system configuration) which expands the functions of the UCSD set-up utility; it allows one to:

a) set the number of users in the system,
b) configure the special function characters of all terminals,
c) reassign the hardware port numbers of the terminal and printer drivers,
d) construct the mapping between user volumes and peripheral units,
e) select which users may BREAK their programs,
f) select which users may interactively reassign their terminals to other users,
g) select which operating system program is loaded for each user,
h) select which peripheral unit each user is initial-ized from.

Specifically, this system is designated the ibs Beta-system II and comes complete with a 12 slot mainframe, a Z-80 processor, 64 Kbyte dynamic RAM, 4 serial, 4 parallel I/O ports, 2 5¼" floppy disks, and complete UCSD Pascal multi-user bank switching/operating system for $4,795.00 list. Options include: 3-4 floppy disks, (quad density), 8" floppy disks, 10 Mbyte Winchester drive, 110 Mbyte video tape back-up, 16 or 64K bank switching memory boards, multi-user I/O card, 17 Mbyte 3M tape cartridges, VTR, video terminals, printers, modems, etc.

Dr. Dennis Nicholson, chairman of the Users Group Stan-dards Committee, has one of the first of these systems. He re-ports that it is alive and well and functioning properly at Type

III, 3021 Germantown Pk., Morristown, PA 19409 (215-539-0122). He is willing to answer questions regarding the system, but more appropriately, we recommend contacting Al Pease, ibs's president for initial information and pricing.

Future Previews:

*ibs Multi-processor/Multi-User System
*Digicomp S-100 Microengine
*ACI UCSD Computer System
*ACD UCSD Computer System
*ONYX (multi-user, Z 8000, Unix) System with Pascal
*Ramtek UCSD Pascal Colographic Com-puter

Crompton Smith
Biotechnical Section Chief
Dep't of Neuroaugmentive Surgery
2727 Chicago Ave.
Minneapolis, MN 55407
(612) 874-4471

SECRETARY'S REPORT

August 1, 1980

What's In a Name?

I have been asked several times this month, by folks who didn't make it to the first meeting, what the purpose of USUS is and what sorts of things we are going to do. Now I can't blame people who want to know what they're getting for their twenty bucks, so I will try to lay it out. The UCSD System Users' Society is not an organ of SofTech Microsystems' marketing staff (despite the fact that your Secretary used to be half of said staff). We are a completely independent organization: unlike DECUS, Microsystems doesn't even own our name. We are grateful for their assistance in getting us started, because without that recognition and initial push we wouldn't be here; nonetheless, we are a <u>Users'</u> Society: our role is to represent the users of UCSD Pascal. One way in which we will effective is in coalescing the requests of users for enhancements to the UCSD software, presenting those requests to Microsystems in a structured fashion and following through until some action is taken. Another vital function is to serve as the chief information and software exchange body for the UCSD [Pascal] System community. Have you ever wondered how you could get hold of one of those text post-formatters you just <u>know</u> are out there in UCSD Pascal? As USUS, we hope to collect that sort of information. As the <u>Users' Society</u> we will respond to the needs of the users.

"My RX02 Followed Me Home"

Things have been pretty busy for your USUS Secretary! In order to keep tabs on all those who attended the June meeting as well those who have written and called asking for information, I have installed a DBMS on my LSI-11. So far I have 241 names on file and have already received the twenty bucks from thirty people. That's pretty good considering the first membership coupons were mailed only a couple of weeks ago. To those of you who may be hesitating I say "Remember, membership is for an academic year (ending July 1, 1981), so you might as well join now instead of putting it off!" Incidentally, I am planning at some point to issue special "plaques" to the early birds -- as soon as I can get my Printronix to jump through the requisite hoops. Request for assistance is hereby made to anyone who knows how to make a nice plaque on a Printronix.

LMR Pitches In
The accounting firm of LaChance, Mack & Rosa of San
Diego, finds a large portion of their clients in the
computer business. Many of these are actively involved
with Pascal in some way. Therefore, Mr. Rick Rosa of
LMR has kindly offered to handle our incorporation
proceedings gratis (except for state fees of course).
With all the other expenses we are facing at this time
that has been welcome news. Rick's company has also
offered to serve as our permanent mailing address, thus
sparing us the expense of renting a P.O. box. I don't
mind receiving USUS mail at my own address, but it will
be best in the long run to have and use this permanent
address. So...address your USUS correspondence to
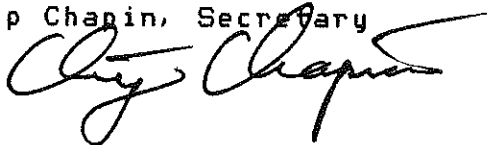
            Chip Chapin, Secretary
            UCSD System Users' Society
            c/o LaChance, Mack & Rosa (or just "LMR")
            4805 Mercury, Suite A
            San Diego, CA 92111

Thanks Rick!

October Meeting
The October meeting will be the first "official" meeting
for UCSD System Users' Society, Inc. At that time,
the members will elect a board of directors which will
itself elect our officers. They may be one and the
same. Our June meeting went extremely well and has
served to push us along a certain course. The October
meeting will confirm and formalize the directions that
have been established and because so many details of how
we are going to go about being USUS have yet to be
determined, it is vital that as many of the members and
potential members be there as possible. Suggestions for
interest groups and for discussion topics are
solicited.

            Chip Chapin, Secretary

Remember...

        October 16, 17 & 18 in San Francisco!

OFFICERS

(interim)

President	Jim Bandy Texas Instruments 12860 Hillcrest M/S 370 Dallas, TX 75230
Vice President	A. Winsor Brown Point 4 Data Corp. 2569 McCabe Way Irvine, CA 92714
Secretary	Chip Chapin University Pascal Consulting Service 3960 La Jolla Village Dr. La Jolla, CA 92037
Treasurer	Jon Bondy Type III 1275 Drummer Lane Wayne, PA 19087

COMMITTEES and GROUPS

Committee	Chairman/Contact Person
Advanced Planning Committee	Randy Bush P. O. Box F North Bend, OR 97459
Apple Users' SIG	Arley Dealey (Interim) 3000 Hood St. Dallas, TX 75219
Commercial & Vendors	Michael Posehn Organic Software 1492 Windsor Way Livermore, CA 94550
Compatibility & Communications	Bob Peterson Texas Instruments P. O. Box 1686 Plano, TX 75074

Computer Aided Instruction SIG

Steve Franklin
Computing Facility
University of
    California, Irvine
Irvine, CA 92717

European Group

John Ash
Dicoll Data Systems
Kingsland Estate
Bond Close
Basingstoke, Herts
UNITED KINGDOM

Industrial SIG

Joe DeVita
Western Digital Corp.
Box 2180
Newport Beach, CA 92663

Newsletter

Pat Horton
ACI
17751 Sky Park East
Irvine, CA 92714

Editor: Keith A. Shillington
SofTech Microsystems
    and ICS
5153 Via Cinta
San Diego, CA 92122

Real Time SIG

John R. Van Roekel
Xycom
750 N. Maple Road
Saline, MI 48176

Software Exchange Library

Jim Gagne, MD
Datamed Research
1433 Roscomare Road
Los Angeles, CA 90024

Standards

Dennis Nicholson
Type III
3021 Germantown Pk.
Norristown, PA 19409

Word Processing SIG

Richard S. Kaufmann
9308-30 Regents Road
San Diego, CA 92122

MINUTES OF THE MEETING

June 20 & 21, 1980

These are the official minutes of the organizational
meeting of the UCSD System Users' Society. Those of you
who have received the so-called "Newsletter #0" (the
brief notice that we have been sending in response to
enquiries) will recognize them from that publication.
Please don't ignore them if you read that earlier
version, however, as they have been elaborated upon
since then.

The meeting took place at the Stardust Hotel in San
Diego, June 20 and 21, 1980, convened by SofTech
Microsystems in response to many long-standing requests
for such a group by users of the UCSD software. Over
100 people attended.

The first day was spent largely in presentations by
various individuals and by SofTech Microsystems staff on
the future of the UCSD System and the potential role of
a users' group. It was clear that we had on hand a
group of people who were willing to make strong
commitments to an official body that could influence the
future growth of this particular software. Nearly all of
the attendees were involved with UCSD Pascal in some
professional capacity, a fact to which we can attribute
the seriousness with which we all took our task. Aside
from informal politicking, the only activity of the
users' group per se on this first day was the
"election" of the nominating committee. All those who
expressed a willingness to serve on the nominating
committee were allowed to be on it. The names of
nominees for the offices of President, Vice President,
Secretary and Treasurer were gathered from the meeting
as a whole.

The real work of the group began in earnest early on the
second day. Prior to the meeting, a set of committees

and Special Interest Groups (SIGs) had been proposed by
SofTech in response to requests from many users. These
groups began to meet at 7 AM and continued at various
times during the second day. The reports which these
groups submitted to the plenary session are summarized
below. Prior to the election of officers, the
nominating committee proposed the name "UCSD System
Users' Society" (USUS) for the new organization and it
was agreed upon by the attendees. The name may be
pronounced "USe US":

The election of officers began at 11 AM with the office
of President and continued through to Treasurer. New
nominations were accepted if offered. A tie required a
second vote for the office of Secretary. The voting
was carried out by the raising of hands and the results
are summarized below.

Office	Nominees	Votes		Winner
President	Jim Bandy	24		*
	Jon Bondy	20		
	Chip Chapin	20		
V. President	Jon Bondy	17		
	A. Winsor Brown	"a lot"		*
	Chip Chapin	13		
Secretary	Jon Bondy	21	26	
	Chip Chapin	21	37	*
	J. Greg Davidson	10		
	Bob Peterson	6		
Treasurer	Jon Bondy	unanimous		*

After the voting, and again at 4 PM, plenary sessions
were held at which a variety of issues were discussed
pertaining to membership in USUS. It was agreed that we
try setting the annual dues at $20.00. There is, at
present, only one category of membership -- individual.
Although there was considerable interest in group
rates and corporate rates, there was no agreement on how
they could or should be handled. It was suggested from
the floor that the officers look into the
possibilities. Special student rates were rejected by
vote. The Society's treasury was given a potential
boost by SofTech's offer to donate to the Society

whatever money was left over from the registration fees
of the meeting after all expenses were paid [Note: To
date, the accounting has not yet been completed, but the
subsidy promises to be a substantial amount].

The various Special Interest Groups and Committees
reported to the plenary session at 4 PM.   Here are their
reports:

European Group -- Did not formally meet, but they
continue to hold "discussions"

Standards Committee -- (Dennis Nicholson) They see
their role as being to observe and report upon current
standardization efforts.

Newsletter Committee -- (Keith Shillington) The
chairman will take care of budgeting matters and getting
the Newsletter printed.   The Editor will provide camera-
ready copy to the Chair.   The Newsletter will appear
quarterly for now.   Anybody can make submissions to the
newsletter; they should be addressed to the Editor or
to the USUS Secretary.   Text should be a maximum of 7
1/2 inches wide and 10 inches high, clean and printed in
"normal" type.   Each SIG or Committee should have a
contributing editor, default being the chairman.

Industrial SIG -- (Michael Hadjiannou) Their
immediate objective is a wishlist to be presented to the
Advanced Planning Committee.

CAI SIG -- (Tim Shimeall) Their main objective will be
to establish a system of communicating between "the
various groups" [I believe he meant CAI groups].

Software Exchange Library -- (Jim Gagne) They
established the following policies: Catalogs of
available software will be published in the newsletter.
Disks will be available primarily to members.   Non-
members must pay a $20 surcharge per order.   Only UCSD-
compatible files will be offered.   Software will be
available by several different media, (1) Apple and
Northstar minidisks (2 disks per volume), (2) Telemail,
(3) IBM 3740 format 8" disks using the DEC RT-11
interleave scheme (so-called "UCSD standard"
interleaving).   Other media will be added as it becomes
feasible.   Disk contents are donated by interested
users, who must sign a release form.   All programs will
be distributed in source form; object code will be
included only if the program is too big to compile

easily. Documentation will be included on the disk. It
was suggested that there be standard naming conventions
to facilitate review and documentation. There will be
three categories of software release by authors: (1)
Public Domain, (2) Non- commercial use only (with
copyright protection) by USUS members, (3) Any use
(also with copyright protection) by USUS members.
Chairman Jim Gagne will work with USUS President Jim
Bandy on a suitable legal release form. The cost to
members will be $10 for an eight inch volume or $15 for
a minidisk volume (2 disks). Probably all funds will go
to the software distributor.

Advanced Planning Committee -- (Randy Bush) They
perceived three main areas of work for their group: (1)
a technical wishlist to present to SofTech Microsystems,
(2) Some marketing gee-whiz, e.g. what new languages,
what new processors are people looking for, (3)
Politics, i.e. "Information Exchange" and encouraging
SofTech to provide a technical description (user level)
of the forthcoming IV.0 release. John Ash of Dicoll
will serve liaison with folks in Europe and Dave Allen of
Control Systems will feed information to the Newsletter.

Medical Applications SIG -- This group saw its charter
as being the distribution of medical and health-care
programs. In particular, they would like to see if
something useful can be done with the large volume of
public domain software available on 9-Track tape, and
requested SofTech's assistance in transferring these
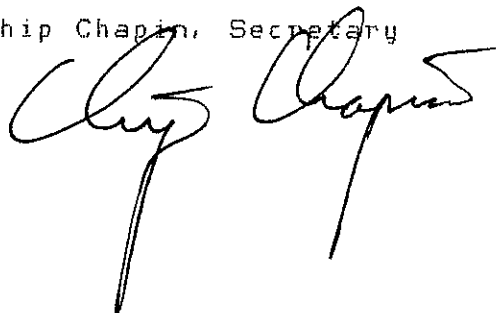programs to floppies.

Word Processing SIG -- (Richard Kaufman) Their goals
are to publish a list of available post-formatters with
reviews. In the longer term, they wish to place
interesting text formatting software into the Library.
They see lots of coordination with the Advanced Planning
Committee and the Library Committee. They are even
considering evaluating terminals and printers.

Compatibility and Communications SIG -- (Bob Peterson)
They wish to encourage compatibility between different
implementations of the UCSD System, as well as
communications between hosts running UCSD software. For
the present, they would like to see an ability to
access SYSCOM in a [presumably clean] machine-
independent manner, and are soliciting comments on
incompatibilities between, say, PDP-11 and Z80 versions
of the UCSD System. Contact Chairman Bob Peterson.

The door is open to new SIGs. Please contact the
Secretary if you would like to see one formed around
your particular pet project/peeve. You will be the
temporary Chairman.

Carolyn Chase has been appointed by SofTech as their
contact with the Users' Society.

Chip Chapin, Secretary

Following you will find some Product descriptions which
I squoze out of people over the past few weeks -
I would like to create a section full of approximately
half-page descriptions of what people are doing!

SEND
'EM
IN !

Renaissance Systems Inc.

COMPUTER APPLICATIONS

Thank you for your interest in our Pascal Development Software for the Motorola MC68000 microprocessor. Enclosed for your review is a description of each program and a copy of our capabilities brochure. Please note that we are supplying stand-alone systems which utilize the MC68000 microprocessor as the CPU. The software that comes with these systems includes the Pascal Development Software, as well as ROS, the Renaissance Operating System. The Pascal Development Software for the MC68000 has the following characteristics:

* Provides for the generation of MC68000 native code from Pascal source statements.

* Runs under either UCSD Pascal or ROS.

* Semaphore and asynchronous process primatives have been added to RSI PASCAL.

* Supports large memory capacities.

* Allows for assembly language routines to be called from Pascal programs.

* Allows for separate compilation of Pascal modules.

Because we are also a consulting organization, we welcome requests for customization. If we can be of any further assistance to you, or if you have any questions, please do not hesitate to call upon us at anytime.

Sincerely,

C. Max Kemp
Vice President,
Marketing

enclosures

10639 ROSELLE ST., SAN DIEGO, CA. 92121 (714) 457-2700

Renaissance Systems Inc.

Thank you for your order of the documentation on the RSI word processing packages. Enclosed please find the documentation of the packages, an order form and a software licensing agreement.

To place an order just complete the order form, configuration check list, and licensing agreement and send them along with the correct payment amount less the amount already paid for the documentation to the address indicated on the order form.
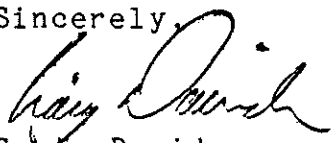
Please note the following:

1) The MICROENGINE, TERAK and APPLE II computers are now supported.
2) The Qume and NEC Spinwriter printers are supported in addition to the Diablo Hytype II.
3) Purchase of the system entitles the user to one year of updates and support.

Source code is available for large volume accounts with dealer agreements. Renaissance could assist in the installation of software on your system if requested.

If you have any questions or would like additional information, please feel free to contact me at any time.

Sincerely,

Craig Davidson
Software Products Manager

Encl.

UCSD SYSTEM USERS' SOCIETY SOFTWARE LIBRARY
SOFTWARE ORDER FORM

Name _____

(Company) _____

Street _____

City, State _____

ZIP or country _____

Computer system(s) in use _____

Format desired _____
(Please use one order form for each disk format desired.)

Please list the numbers of the volume(s) you wish to order: _____

_____

$15 each: $ _____

$10 each: $ _____   OR   OR

Sales tax (6% if California address):   _____

Surcharge if NOT a UCSD System Users Society member, $20:   _____

TOTAL FOR ORDER: $ _____

I agree that the software I receive from the Library will be utilized for noncommercial purposes only. Except with the express written approval of the softwares' authors, I will not sell it for profit to anyone, incorporate it within any product for sale for profit, nor give copies to anyone other than members of the UCSD System Users Society. I fully understand that USUS makes no warranty of any kind regarding this software, including but not limited to warranty of fitness for any purpose, and that it is quite possible that the programs I am ordering will require extensive alteration by a person expert in programming before they will fit my needs.

(Signed)_____ Date _____

UCSD SYSTEM USERS' SOCIETY SOFTWARE LIBRARY
SOFTWARE DONATION STATEMENT (August 5, 1980)

In donating the enclosed program(s) or other software or information (the "Programs" listed on the back of this page) to the UCSD System Users' Society library, the undersigned hereby certify that I/we understand and agree with all of the following provisions:

1.   If the material has been written by more than one individual, the following statements shall apply to each individual author, except as otherwise noted.

2.   The Programs will be reviewed by one or more reviewers and may or may not be included in a volume of the Software Library. As a rule, anyone whose donation is not accepted will, upon request, be shown a copy of a signed review, although this is not guaranteed. Programs that violates Library policy (e.g., are not original or are not in source form), are not in accessable machine-readable form, or duplicates a function already amply served by existing Library Programs will not be reviewed. Further, Programs that are accepted will frequently be altered by reviewers to improve their utility for the USUS membership.

3.   Once included in the Library, all Programs may be distributed to any interested USUS member, as well as others, according to Library policy, as detailed on the USUS Software Order Form. I have reviewed a current copy of the Software Order Form, and agree with its provisions. I agree that USUS will have no liability for the failure of any person who obtains the Programs to comply with any provisions of the Software Order Form or any other use of the Programs.

4.   I certify that I have taken portions of the Programs from the USUS Library or public-domain sources listed below and on the back of this page (if none, write "none"; if from the Library, identify volume and file name; if you are listing public-domain material, state its source and why you believe it is in the public domain):

_____
and that no other software materials have been utilized. Thus, except for these sources I am the original and sole author of the Programs.

5.   I agree to assume full responsibility and indemnify and hold USUS harmless against and in respect of all claims and liabilities resulting from my copying, utilizing or plagerizing an parts of the Programs.

6.   I agree that no remuneration or other consideration is expected from the USUS Library in return for my donation, and that my disks or other material will probably not be returned.

On a separate sheet of paper (or, preferably, in a documentation file on the disk with each program) please write a brief description of:
  a) the purpose of each program,
  b) to whom it would be useful, e.g., "people with one-drive systems",
  c) hardware and software dependencies,
  d) implementation notes (what one must do to get it running),
  e) unusual compilation requirements, e.g., assembly-language files,
     a certain UNIT, an Apple-style linker, etc., and
  f) bugs, if any are known to you.

Please sign and date this form below, and PRINT legibly or TYPE your name(s) and address(es) in the space below the signature or on the back:

(x)_____ Date_____ (x)_____ Date_____

MEMBERSHIP COUPON

Please enter me as a member for the year ending June 30, 1981.
I enclose a check for $20.00, payable to

UCSD System Users' Society
Jon Bondy, Treasurer.

Name   _____

Company   _____

Address   _____

          _____

          _____

Phone   _____/____-_____x_____ OK to print phone # __Y __N

Computer System   Memory size _____ K Bytes

   Processor __Z80 __8080 __PDP/LSI-11 __6502 __6800 __9900

      Manufacturer/Description _____

      _____

   Disk Drives __8 inch __5 1/4 inch Floppies

      Format/Description _____

      _____

   Terminal(s) _____

   _____

Interested in following committees/groups (see enclosed list):

   Adv.Plng   ____   CAI SIG   ____   R.T. SIG   ____
   Apple SIG   ____   Euro Grp ____   Xchng Lib ____
   Cmrcl&Vndrs ____   Ind. SIG ____   Standards ____
   Cmpat&Comm ____   Newsltr   ____   W.P. SIG   ____

      Mail to: UCSD System Users' Society
                 Chip Chapin, Secretary
                 c/o LMR
                 4805 Mercury, Suite A
                 San Diego, CA 92111

Next Meeting
October 16 .. 18
San Francisco

Please Come