

README.DOC

\$2.00

A monthly newsletter of the
Orange Coast IBM PC User Group

This month's General Meeting :

Microsoft Corporation
demonstrates
Excel and Windows 2.0
with
OS/2 Discussion

Inside: President's Message: User Group Meeting
A Tale of the Keyboards, Part 2
Adaptec Controller Card Technology

README.DOC is published monthly by the ORANGE COAST IBM PC USER GROUP, P. O. Box 6100-211, Costa Mesa, CA 92628. The group's recorded message phone number is (714) 898-7998.

IBM™ is a registered trademark of the INTERNATIONAL BUSINESS MACHINES CORPORATION. Neither the User Group nor README.DOC is connected with IBM in any way whatsoever.

ORANGE COAST IBM PC USER GROUP, contributors, and editors of README.DOC do not assume any liability for damages arising out of the publication or non-publication of any advertisement, article, editorial, or any other item in this newsletter. All opinions expressed herein are those of the individual authors only, and do not necessarily represent the opinions of the ORANGE COAST IBM PC USER GROUP, its officers, Board of Directors, the README.DOC newsletter or its Editors.

Articles may be submitted via modem to the OCIPUG BBS or on paper or an IBM format diskette (5-1/4" 360kB format preferred). We will accept them in any of several formats, although we strongly prefer "pure ASCII" files. Other acceptable formats include DCA, Microsoft Word, Multimate, WordPerfect and Wordstar. Submissions on paper should be double-spaced and typed. All items submitted for publication are subject to editing.

DEADLINE:

Articles and advertising must be received by the twentieth (20th) of the month prior to publication.

ADVERTISING:

All advertisements must be camera ready and prepaid; rates and deadlines for commercial advertisements are available on request. Classified ads are free to members, but cannot be used for business purposes. Deadline for classified advertisements is the same as for articles.

The User Group does not intend to endorse, rate, or otherwise officially comment on products available, and readers are cautioned to rely on the opinions presented exclusively at their own risk.

README.DOC, Copyright © 1988, is a publication of the ORANGE COAST IBM PC USER GROUP. Unless otherwise noted, other nonprofit user groups may reprint without prior permission any of the articles appearing in this newsletter, provided that proper author, title and publication credits are given and a copy of the publication in which the article has been reprinted is provided at no cost to the ORANGE COAST IBM PC USER GROUP's newsletter publisher.

README.DOC Newsletter

Created by:

Publisher *Steven Dela*
 Editor *Arthur Boughey, Ph.D.*
 Associate Editors *Terry Currier*
John Goodman, Ph.D.
Linda Leydekkers
Dave Lorenzini
 Production *Steven Dela*
 Senior Technical Advisor *John M. Goodman, Ph.D.*
 Graphics *Don Taylor*
 Contributors *Bill Bonnycastle*
Reta Cagle
Dave Carroll
Gordon Lewin
Linda Leydekkers
Christine McDonald
Bobbie O'Neal
Tom Sutro

We thank Dave Lorenzini and Architectural Resources Company for image scanning and other assistance in producing this newsletter.

All camera ready art produced on a HP LaserJet II using a LaserMaster CAPCard and font software.

Printing by PrintMasters #88 in Huntington Beach.

README.DOC is published monthly and is included with all paid memberships in the Orange Coast IBM PC Users Group.

Address all inquiries, editorial copy, advertising, and address changes to: README.DOC, P. O. Box 6100-211, Costa Mesa, CA 92628
 714-898-7998

PAST EDITOR TOM SUTRO 1985-1987

ADVERTISING POLICY

Members are allowed to place an advertisement for personal items in the README.DOC newsletter at no cost. There will be a limit to the amount of advertising placed in the newsletter; all submissions will be placed on a first come, first served basis.

Commercial advertisements, from members and others, is also welcomed. For information concerning advertising rates and requirements, contact:

Steven Dela (714) 775-8373 or write to Advertising Manager, OCIPUG, P. O. Box 6100-211, Costa Mesa, CA 92628.

STATEMENT

The purpose of the ORANGE COAST IBM PC USER GROUP is to provide a forum for members to share information and experiences that will help other members obtain maximum benefit and enjoyment from the use of their IBM PC and compatible personal computers.

June General Meeting

Saturday, June 25, 1988 9A.M. to Noon

Orange Coast College, Science Building Lecture Hall

JUNE GENERAL MEETING

Tim Smith, Program Director

If there were a theme to the personal computer world for 1988, it may well be the year of the spreadsheet. At least, it's the year for assault on Lotus 123 spreadsheet. Mr. Philip Welt of Microsoft Corporation will demonstrate their products Excel and Windows. The two products linked together offer benefits today and preparation for tomorrow's world of OS/2.

The demonstration will show the analytical, presentation, and customization capabilities. The way the program looks at data, the way that data can be presented to the world, and the way that one can customize to create a program that is unique to the individual. Both products combine together to ease the transition from Lotus 123 now and also ease the transition into OS/2 Presentation Manager

Mr. Welt is Microsoft's Product Manager for Excell and Windows. I am sure that the Orange Coast IBM PC User Group will have some good input for the speaker after the presentations.

JUNE PRIZE DRAWINGS

This month's prize drawing looks like it will be another winner for our membership and those companies that support our Club.

With Microsoft Corporation visiting our General Meeting for product presentations, I'm sure that they will have some of their software or hardware products included in our raffle. The representative from Microsoft will be talking about their Excel and Windows 2.0 programs. I'm sure that these and other prizes are already committed for the raffle. You never know what will turn up, maybe even some new products just released.

I'm sure by the time the general meeting arrives, there will be additions to the list. Plan on attending. Everyone present has an equal chance. We would like to again thank those companies that continue to support our organization with their donations to our members

MAY RAFFLE PRIZES

Thanks to several generous donors we were able to give away some super prizes. Dan Likins' new raffle program did the same good job it had last month, picking winners from among the list of all our paid-up members. The countdown bar sure kept people on their toes if their name was drawn. With the quick countdown on the program, there weren't any second glances once the name was displayed. Thanks again Dan, for the super program.

The winners of major prizes at last months raffle were:

	Prize	Donated by
Edward Dalton	AST Monochrome	AST Research
Harv Haight	AST Monochrome	AST Research
Mark Lindholm	DOS HELP!	Flambeaux

Congratulations to all our winners, and a great big thank you to AST Research and Flambeaux Software.

From the Editor's Desk

in quiet moments

are you ever

stung by

the splendor

of sudden thoughts

if so read on

At our last General Meeting, as I waited for the President to bring us to order after the interval, I was mulling over all that had happened these last three years in our club. Stan had just informed us that OCIPUG had now made it onto the User Group leader board. We had viewed a presentation of the kind of futuristic PC that was already available to us. We had been handed the latest IBM "Up Date", that really did not refer to PC's any more, but rather to minicomputers. Our member spotlight for the June issue would feature one of our respected colleagues who handles "previously owned" machines.

Did all this mean that we were becoming the computer equivalent of an automobile club? Were we going to buy a new faster and even flashier machine each October, and trade in last year's model? Had our machines already become so complicated that we no longer even lifted the hood and peered in awe at the complexities inside, let alone tinkered with them? Was this the logical and inevitable consequence of "User Friendliness"?

As to our software, would we invariably employ *Excel* type packages that do it all, and rely on optical disks rather than on-line services for encyclopedic purposes? What use to us then would be all that patiently, and sometimes painfully learned expertise with 123 and dBASE, not to mention WordPerfect, or that personal assemblage of nifty little utility programs such as those that made our cursor fly across the screen, or backtrack without erasing? Would our communications packet run continuously day in and day out, beeping at us and flashing messages and information whenever it believed it had gotten our attention? Would our optical disks provide a library that would supply all the graphics that we would ever need, saving us so much time and effort that we once expended on page design?

What was going to happen to the apparent minority of us who were into computers at least partly for their recreational as well as their business values? Would we have to found new user groups, rather like the Edsel fan club, with roots in the past rather than in the future? Would clubs like OCIPUG now concentrate on multitasking networked commercial machines that having made it up to minicomputer status were heading after the mainframe trade? Would the annual presentation of the latest crop of enhanced machines find them draped in balloons, colored ribbons and suitably attired young ladies?

My thoughts were interrupted as Stan introduced the next speaker. All I am sure about presently is that we are heading somewhere at a pretty smart clip. I have no clear idea yet in what direction, what do you think?

BUSINESS SPONSORSHIP PROGRAM

We at Orange Coast IBM PC User Group, wish to thank the following compaies for their sponsorship. This will enable us to better serve our members by providing the necessary support through donations such as this.

Garden of Eden Computers

Westminster 714-841-4994

New Horizons Computer Learning Center

Irvine 714-261-9215

If you or your business would like more information on this program, please give us a call:

Steven Dela 775-8373

PRESIDENT'S MESSAGE



Your club is really on the map! In the last few weeks we have been starting to get the recognition you all deserve. Just prior to the May meeting I received a *User Group*

Packet from Microsoft. In the packet was a letter stating a strong desire to cooperate with User Groups even more than they have done in the past. Enclosed was a Special User Group edition of Van Wolverton's "RUNNING MS-DOS". It contains excerpts from the regular edition, which of course is a much larger book. The excerpts are tailored for the individual who is fairly new to MS-DOS but could be a handy help for almost anyone using DOS. They have offered to ship us a copy for each of our members, and we will be announcing a special time for everyone to get their free copy which must be picked up in person by each member. Watch for further announcements on this. Also we will be receiving some more discount coupons for special prices on *QuickBASIC 4.0*, *Quick C Compiler 1.01* and *C Optimizing Compiler 5.1* and *Ram Lord*. These forms should be available at the next meeting for those interested.

A few days later I received a call from Jerry Schneider of the Capitol PC User's Group informing me of a proposed "get-together" of leaders of the major user groups in the country. Two days later I got a Federal Express package from

LOTUS Corporation inviting me to attend LOTUS Week88 in Boston and specifically to attend a special conference with the leadership of LOTUS and leaders from 19 other user groups from all over the country. The problem was re-scheduling my Real Estate appointments for the following week without losing too much business (I only had one week notice). But I took the risk and made my reservations.

I must admit that I went with apprehension that all I would get is a lot of product "hype" and not much else. Was I wrong! Oh sure, there was the opportunity to see a lot of new products being demonstrated and that was very informative, but there was not the least bit of "selling hype". In all cases they were open and instructive. (I did have to sign some non-disclosure forms when I previewed a couple still-in-development products but it was worth it to be able to see them.) There were some people from "Competing Corporations" that attempted to get into these sessions, but they were discovered and not allowed in.

The first day started with a general session composed primarily of corporate clients, with speakers such as Jim Manzi on "Delivering the New Productivity", Dr. Frank King on "the Development of Lotus Software Applications", and then a very informative talk (all of these were accompanied by huge rear-projection visuals) by Dr. James Cash of Harvard Business School.

We then separated into different focus groups and I attended a session on *1-2-3 Release 3* presented by Scott Tucker who

has been overseeing the development of that product for two years. Obviously he was able to answer all the many questions we asked him about the new product. It was a very informative demonstration and showed us some of the many new features such as linked sheets both in one file and also linking several files. Despite the fact that the graphics in the program are fantastic you are not required to have an EGA card and EGA monitor. It will of course work with them but the program works very well with a CGA card and CGA monitor, which of course you cannot do with one of the recent competing products. Incidentally, they don't intend to get the *static* they got when they introduced Lotus 2.0 and simultaneously dropped 1a. They are going to continue to market 2.1 even after they start selling Release 3 for those who desire to remain with 2.1, which should ease the minds of some who are deeply committed to the older version.

No decision has yet been reached as to the pricing structure that will be in effect at that time. Since we are working on scheduling a demonstration at a general meeting soon of *1-2-3 Release 3* I shall not discuss this anymore now, except to say that in my opinion it is a vastly improved program.

That night we were hosted to a dinner that had been arranged by Jerry Schneider (Past President of Capitol PC User's Group in Washington, D.C.) and hosted and paid for by PC WEEK Magazine. As many of you know, Jerry has been fighting for User Groups for years, including

(continued on page 6)

GENERAL MEETING CALENDAR

General Meetings are held on the last Saturday of the month except in the months of May, November and December. In those months the meetings are held one week earlier because of the holiday falling nUe end of each of those months. These special meeting dates are marked in the list below with an asterisk.

OCIPUG General Meeting dates for 1988-89

June 25th	July 30th	August 27th
September 24th	October 29th	November 19th(*)
December 17th(*)	January 28th	February 25th
March 25th	April 29th	May 20th(*)

REPORT ON MAY 1988 OCIPUG GENERAL MEETING

Linda F. Leydekkers

The general meeting for Saturday, May 21, 1988, was held in a little different format than usual. As a result of the need to change the projector working with the speaker's slide cassette and a graphics card compatibility with our screen projection system, the meeting began with announcements rather than the main program. Stan Sabin began by bringing up a problem called to his attention by some twenty five members last month. He said conversations going on in the audience while the program is in progress make it very difficult to hear the speaker, so Stan suggested members meet before or after the meeting or during the break for these discussions.

Bonnie Ulanovsky, our club librarian, was given the opportunity to make her announcements early in the meeting. A good system that I hope continues, I might add. Bonnie brought samples of the type of print outs that can be achieved with the Imageprint program and referred members to Arthur Boughey's fine review in the May README.DOC (page 11), and Bonnie has the shareware disk \$3.00 for members, \$5.00 for non-members.

Dave Lorenzini announced a pre-sale on the shirts with the club logo on them. A ballot was passed to vote on logo style and choice of pocket or no pocket. Davv said the quality on the shirts will be much better than anticipated. They will be manufactured locally and delivered in June. The cost is \$18.87 each plus \$1.13 sales tax (paid in cash). Shipping cost is \$2.00 for those who prefer to receive their shirts by mail instead of picking them up at the general meeting. Orders taken at the May meeting will be delivered at the June meeting; orders taken at the June meeting will be delivered at the July meeting. See page 12 of the May README.DOC for the order blank, or call Dave if you have any questions.

Random access questions were taken from the audience (see that section of the newsletter for questions and answers).

Ralph Minarich announced that Gordon Savage and Greg Cimarusti will be the new Investor SIG coordinators. There is an opportunity to receive a graphic program from Wall Street Micro. For more information refer to the SIG section of this README.DOC or give Gordon or Greg a call.

Stan Sabin announced Microsoft will provide free copies of a special edition of their book, *Running MS DOS* to the membership. Stan will be ordering them for the whole club. Those interested in *Quick C Compiler 1.01* for \$50.00, *C Optimizing Compiler 5.1* for \$225.00, and *Quick Basic* for \$50.00 should let Stan

know, as Microsoft will provide discount coupons to members interested. I assume this is for OCIPUG members only, but check with Stan to be sure.

Jerry Bower of AST Research Inc., Manager, New Markets Development and Brian Anderson also of Systems Marketing at AST Research, Inc. were introduced. They came to demonstrate the AST Premium™/386 a 20 MHz 30386-based desk top computer, a small foot print machine that functions as a work station, as well as a board you can plug into your 286 to bring it up to 386 speed.

"Right now our 386 upgrade is the Fast board 386", Jerry replied to a question from the audience about upgrading an AT. "It will be shipping in about a month. It goes into our 286 only."

"20 MHz is about state of the art on the desk top right now and 25 will be coming very soon, probably toward the end of this year," said Jerry, referring to the Comdex show this year and what was represented there. Twenty is a great leap, but when designing a new system, AST thought it best to start with the highest technology available at the time. "Our

**Be sure to take a look at the
OCIPUG T-shirts that are being
offered for sale to our members.
The final date for ordering is the
June General Meeting for a July
delivery date.**

system has an add in card that holds up to 13 MB of memory. Standard configs include up to 2 MB. We certainly need a lot of memory nowadays with the number of terminate/stay resident programs (things like Sidekick, networking and OS/2 is a whole new issue)."

Viewing the chassis of the 386 machine shows how things have been moved around within the computer. There are six expansion slots and a 1.2 MB floppy drive. A 3.5 inch floppy drive may be in the future, according to Jerry. There are four hard drive configurations available. There are three speeds available on this machine and like the AST 286 the speed can be controlled from the keyboard, 20MHz, the AT 8MHz, and XT speed so that it is compatible for any software that is sensitive to speed. There is a light on the front of the machine that tells you what speed you are running.

The software is important to get the full capability from a 386 machine. Windows/386 and Paradox are two programs designed to work very well, but for right now the software is yet to catch up with the hardware that is coming available. Generally the old software runs on a 386, however.

AST Premium/386's arbitrated bus architecture, called SMARTslot™ Architecture, enhances throughput by providing external devices with a direct path to system memory without CPU involvement. As a result, data transfer time is effectively cut in half, resulting in an increase in overall system performance. A view of the inside of the AST Premium/386 showed these slots. Of the six expansion slots, three are dual purpose, supporting AST SMARTslot and standard XT/AT expansion cards. These SMARTslots are eight pins longer than the standard slots so that a standard board will fit as well as one developed specifically for the additional eight pins. There is a licensing agreement for card developers to work with AST to assure compatibility.

There are desk top computers used for everything from figuring a spreadsheet to scientific applications. Some people are using them for applications that could previously only be done on a minicomputer or possibly a main frame. It appears as if AST Research is trying to stay up with these needs and is willing to hear from you on what your particular needs are. Jerry and Brian shared with us a lot of technical information about their new machine. Those interested should write AST Research, or maybe call Jerry Bower (714) 756-5791 for answers to specific questions. Brochures were handed out at the meeting. Retail prices range from \$4500 to \$10000, based on configuration.

The other machine AST brought to demonstrate is the work station. The AST work station is about the size of the IBM PS/2 model 30, with the capabilities of the model 50 and in some cases the model 60. With a small foot print, about sixteen inches across the front, this machine was designed not only to take up less space but to network in a host environment. It is a 286 base machine operating at 10 MHz. AST offers 1 MB standard (up to 4 MB optional) with all the advanced memory modes for expanded memory. It has, however, only two expansion slots and, therefore internal expansion seems limited. Not to worry, says AST. Many of the things that would be add-in features are built into the machine. An item like EGA graphics is a plug in module, 5.25 inch or 3.5 inch diskettes can be accommodated, and a fixed disk from 20 MB to a 40 MB high capacity fast drive is optional. Controllers for floppy or fixed disk are built in. Furthermore the station can be diskless for networking. AST's idea is to provide as much as possible on the system board to make a small and powerful machine that takes up less desk top space. Although not designed as a portable, the work station can be relocated with more ease than a larger machine.

AST is using a hard disk controller that is built into the hard disk itself. This permits it to be connected directly to the

board via cable. Jerry said this was going to be the trend of the future. The price of the work station will range from around \$2000 to \$3500 (list price) depending on configuration.

After the break an announcement was made for a new SIG group starting up. If you are interested in forming an Entrepreneur SIG please contact Dave Carroll for more information (714) 775-3130.

Tim Smith introduced our next speaker. "I believe that in the first part of the program we had kind of a peek into the future of the personal computer business or what the personal computer is going to look like, and I think the second part here is a look at what we deal with today. The world of DOS."

Dan Rollins of Flambeaux Software presented his products: DOS Help!, TECH Help!, and Help! Development Kit. Dan is the author of the book by MacMillian Publishers, **IBM PC: 8088 MACRO Assembler Programming**. Dan has also written for Computer Magazine and Peter Norton OS/2 Guide.

Dan Rollins recently returned from San Francisco Computer Fair. "The topic there was hypertext," said Dan, "and at some point along the line it occured to us that what we had been calling context sensitive cross references in a running text was hypertext." The Flambeaux Software product **DOS Help! The Electronic DOS Manual** is designed for IBM PC, XT, AT, PS/2, and all compatibles. It is on the order of Microsoft's DOS reference program, **LEARNING DOS**, but it seemed to be more intense.

According to PC Magazine, "DOS Help! supplements the standard DOS manual with explanations, warnings, and examples and throws in useful information from *DOS Technical Reference*...virtually everything you need is there."

The demonstration of this programs capabilities was quite impressive. For someone who wants online assistance instead of reaching for a DOS text, this is an ideal program. In some cases it seemed to be more in depth than the manual and had built in error assist features. It covers up to version 3.3 and retails for \$34.95 (not copy protected).

TECH Help! is a programmer's electronic version of every important reference manual used by system-level programmers compiled into one online source; available at the touch of a key (A fixed disk is recommended). The retail price is \$89.95.

Help! Development Kit retails for \$45.00. You can create popup *Help!* for any system, such as, word processors, database manager, spreadsheet, etc. It uses the same engine as **DOS Help!** so that you can have a look up reference

available for your favorite programs. Office managers can document office procedures and use the *Help!* screens to get new employees up to speed quickly.

If you were not at the meeting or were

not able to pick up order blanks and information you can contact **FLAMBEAUX SOFTWARE**, 1147 East Broadway, Suite 56, Glendale, CA 91205 (818) 500-0044.

The OCIPUG Officers and Board of Directors wishes to thank:

NEW HORIZONS COMPUTER LEARNING CENTER

17900 Von Karmen, Suite 100
Irvine, California 714-261-9215


STAN H. SABIN

REALTOR OF THE YEAR 1978
BOARD PRESIDENT 1979



20322 CAMFIELD LN.
HUNTINGTON BEACH, CA

714 968-7307



VISION™

VISION 21
S·Y·S·T·E·M·S

16945 BUSHARD STREET
FOUNTAIN VALLEY, CA 92708
(714) 963-1090 / 963-2703

IBM COMPATIBLE SYSTEMS
COMPONENTS • SERVICE

286 200ms (81 - 22)

- 386c Speed 308 Microboards
- 386 500 cooling Fans (cooling)
- Case with 230w Power Supply
- 1.2MB Floppy Disk Drive
- 40MB Random Head Disk, 28mm
- Park Controller for FDD / HDD
- SCSI Adapter (S4400C)
- 80x86 VGA monitor
- 2 Parallel / 2 Serial ports
- 101 Enhanced keyboard
- 1 Yr Parts & Labor Limited Warranty

OUR PRICE: \$3,097.00

286-16 8 wait (81 - 10, 71)

- 286-16 Microboard dual speed 8/16MHz
- 386 Fan (1600rpm)
- Case with 200w Power Supply
- 1.2MB Floppy Disk Drive
- 386c Random Head Disk, 28mm
- Park Controller for FDD / HDD
- 80x86 Microboard Monitor & Adapter
- Printer port
- 101 Enhanced keyboard
- 1 Yr Parts & Labor Limited Warranty

OUR PRICE: \$1,774.00

All Trademarks Acknowledged

Feature Articles

Linda Leydecker, who normally now handles this section of the newsletter, is suffering from the universal bugbear of all voluntary organizations, a pressure of her business work, to which she has of course to give first priority. She hopes that this pressure will clear after August, but meanwhile she is helping us to the extent that she still can. We look forward to August!

The Features Section in this June issue contains the first of a four-part article by our columnist Steve Gibson on viruses. Following on from what Steve told us in May about interpreted languages, and what Dan Likins states the DOS SIG has been examining, I have myself included a general article here after Bonnie Ulanovsky's usual Library Notes, on how to start using and manipulating BASIC files. Then as has become our custom, we include a Member Spotlight. This time it is the turn of Tim Smith, whose face will be more familiar to those of you who attend General Meetings than that of any other Club official, with the exception of the President.

The remaining space in this section this month has been allocated to the special and important President's Message. Extra space had to be found so that Stan could recount to us his most interesting experiences during his recent trip back East on behalf of the Club. His report continues on from page 3 immediately below.

(continued from page 3)

lobbying Congress, Computer manufacturers, Software Companies, etc. He also is a Contributing Editor to PC Week. Our hosts were David Churbuck, Executive Editor and Richard Stromer, Director of Research.

It was very interesting to hear of some of the future products coming from various companies, how the editors have to sift through the numerous "inside oops" to find out what is really happening

instead of taking at face value some of the purposely "leaked" information. It seems that there was a rumor that a certain major company was going to announce a new laptop computer. One of the leading publications had immediately published that the company was ready to start selling this new laptop. Mr Stromer checked in a lot deeper to the rumor and found that it was not based on fact. PC WEEK published what turned out to be the real story, there was no new laptop being planned by the named company.

I am sure that this kind of game goes on all the time and that at various times all the various writers get hornswoogled into publishing "vaporproduct" announcements. Of course PC WEEK is primarily published for the Corporate buyers, but is also designed to inform others in the industry. Since User Groups obviously influence what products will be purchased by some of their members and those members help influence some of the companies they work for, etc. PC WEEK was interested in our input and want to work with us in the future.

The real high point of the meetings was the next day when the 20 user group leaders met separately with Jim Manzi (President and CEO of Lotus), Frank Ingari (Vice President of Marketing), and Matt Suffoletto (Director of Marketing Management). Matt had just been appointed as the "Head man" to build a spirit of cooperation and communication with the User Groups of America. It was obvious he was taking his new position seriously as he had really done his homework in preparation for the meeting. It was definitely not a "canned meeting". It had been scheduled to go from working breakfast through working lunch after which we were scheduled to hear an address by Tom Wolfe (Author of "*The RIGHT STUFF*" etc).

As the meeting progressed it was obvious that what we were doing was far more important than attending this speech, so we proceeded with only a few ten minute breaks through the whole day. Everyone let Lotus know what we felt had been problems in the past and present. There were no punches pulled. Lotus was just as honest with us. They acknowledged that in their interest to secure the "corporate market" that contact with the individual users (through user groups) had really gone downhill.

Matt Suffoletto proposed that some User Group Relations/Priorities lay in Communications, Support, Product

Evaluations, Meeting/Publication Support, and Product Requirements Input. In *Communications* they proposed for each user group to have one Lotus Focal Contact Person to coordinate most of the other activities. Since this will deal with a lot more than just spreadsheets the feeling of all the group was that it should be not the Spreadsheet SIG leader, but someone who could handle all the other activities as well.

A suggestion was made that each user group independently decide who that person should be. Obviously the name of the person designated should not be changed frequently, thereby maintaining some consistency and dependability. Through this person would flow timely news, regular updates on product status, etc. and provision for periodic meetings with Lotus. The next scheduled meeting will be at Fall Comdex (however there may be some Councils on Product Requirements, etc scheduled at other times). We also have a meeting scheduled of the User Group leaders with Microsoft at Fall Comdex.

In the area of Support they are providing us with their Premium Phone Support system called "PROMPT" This is a software program that contains the 500 most asked questions that are posed regarding 1-2-3, HAL, error messages, Freelance, Lotus Manuscript, Graphwriter, Symphony, etc., together with the answers, and the opportunity to call in on a hotline and receive technical support. They also are looking into sending us some Lotus Educational Materials that are used for training seminars, etc. which could greatly enhance our training programs.

Under *Product Evaluations* they propose Coordinated shipment of New Products and Demos for evaluation. This would of course be useful for evaluations for our general meetings as well as SIGs and the newsletter.

They pledged better meeting and publication support. All of us immediately "asked for the ad" for our newsletters, but were told that as of this moment there had not been an allocation for advertising but that they were working on that. Matt did pledge much better Speaker coordination, articles for newsletters, and possibly helping to advertise our meetings when Lotus is presenting part of the program (I would suppose similarly to what WordPerfect does when they present a program).

(continued on page 9)



TIMOTHY W. SMITH

Our OCIPUG General Meetings are opened by the President, who then turns the microphone over to Tim Smith, our program coordinator to describe the presentations and introduce the speakers.

That simple statement scarcely describes the considerable effort entailed in organizing these presentations. Tim meets once a month with Dave Lorenzini and Richard Sabin to plan and coordinate them. Currently they have worked out our programs until December 1988 as well as some backup in the event of no-shows. Patience, according to Tim, is a special requirement of his job. Nerves of steel too I would think. Tim, however, seems to have become very good at learning to punt. He has done a terrific job.

To ensure that speakers have been contacted well ahead Tim generates four to five letters per month, besides making from ten to fifteen telephone contacts negotiating with sources. It is his responsibility to make sure that any equipment needed for a presentation is available and working. He is also on the long-range planning committee of our Board.

Tim and his wife Penny live in the lovely community of San Juan Capistrano. They are the proud parents of a six year old boy, and two daughters ages 3 years and 20 months. Their son loves to use mouse and paint programs and has his own Apple Computer. In kindergarten he is already taking computer classes, thereby like many of his age, getting a giant step over the rest of us in computer literacy.

After receiving a BA as an accounting major in college, Tim worked in a family owned accounting business. In 1986 at a Las Vegas Computer Conference he met the owners of a Boston based computer exchange company. He later purchased a franchise from them to operate the *West Coast PC Exchange*. You have probably noticed the ad in README.DOC.

Tim knew relatively little about computers when he attended his first OCIPUG meeting in October 1985, but was very impressed with the club, which then met in an S. & L. on Harbor Blvd. He joined in 1986 and was elected to the Board of Directors later that year. He has since become well versed in Procomm, WordStar, WordPerfect, and Lotus 1-2-3, and has acquired the knowledge needed to make his business a success.

The sharing of information Tim considers the most valuable asset of OCIPUG, combined with its superb internal resources. New members he says do not have to be shy about asking for help and can be assured they will receive assistance. Few clubs are as fortunate.

Tim attends many computer conferences to gather additional information about new developments in the computer world. It is of course a monumental task trying to stay atop such a fast moving industry. He is a member of UCLA PC UG, Pasadena UG, Saddleback UG, & the San Diego and Boston C.S.'s. These clubs, and their newsletters, provide information that Tim is always willing to share with us. He uses an IBM himself, and either owns, or has on consignment, various types of computer equipment.

Let Tim know of your program ideas. Take a minute to inform him how much you appreciate his efforts. For all contributing members it makes the job a little nicer to know you are appreciated. You might consider checking with him if you are in the market for a piece of computer equipment or would like to dispose of a piece or two. L.F.L.



The Amazing Realities of Software Viruses

by Steven M. Gibson

<Part 1 of 4>

My mother always hoped I'd become a doctor... actually a brain surgeon. Since I work with electronic "brains" every day I always thought that was as close as I would come to "doctoring" anything, but the recent flare-up of interest in software viruses, infections, cures, antidotes and inoculations might change all that.

The notion of software "hacking" is not new, having been born just five minutes later than software. But as we've grown increasingly dependent upon the expensive programs and precious data stored in our machines, the cost of a computer failure, whether accidental or deliberate, has skyrocketed. Factor in the notion of someone **DELIBERATELY** destroying your irreplaceable data and you have a hot situation indeed! Multiply this by the unwitting and infectious spread of this destruction throughout the far-reaching tendrils of an entire organization or community's computer usage, and the cost of such deliberate sabotage can be incalculable.

One of the most fascinating aspects of the entire software/medicine analogy is the amazing degree to which it holds.

Software viruses can be loosely divided into four classes. The *General Purpose Infector Virus (GPIV)*, *Special Purpose Infector Virus (SPIV)*, *Very Clever General Purpose Infector Virus (VCGPIV)*, and *Central System Infecting Virus (CSIV)*. The habitat for the first three viral strains is any unwitting application host, while the Central System Infecting Virus takes up residence at the core of the operating system.

One of the most fascinating aspects of the entire software/medicine analogy is the amazing degree to which it holds. Modern computer systems and software are now complex enough to support a crude simulation of life-cycle processes.

The *General Purpose Infector Virus* operates by tacking itself onto the front or back of any existing application program. To keep its size and complexity down it is generally specific to COM or EXE file types, and is thus unable to infect a file of the other type. COM-file infectors have a far simpler genetic design, but don't have as much future as the EXE infectors.

One of the most fascinating aspects of the entire software/medicine analogy is the amazing degree to which it holds.

Poorly designed GPIV viruses are simple to spot once you are looking for them since they alter the program's overall length and may update the file's own date. However both of these clues are also easily handled with a little added viral design. The date can be easily restored after the infecting alteration has taken place, and the clever GPIV can mask its

Poorly designed GPIV viruses are simple to spot once you are looking for them since they alter the program's overall length and may update the file's own date.

size by creating a hidden file containing the real program while it occupies the abandoned file husk of the actual program.

Only a scan of the entire computer system for hidden or system files would turn up the real programs, renamed as something innocent. Then again it might not even hide the actual program, but leave it there in plain sight, mixed in with the files in your largest sub- directory, and named something reasonable, appearing to be an overlay, help file, or who knows what.

The *Special Purpose Infector Virus* is designed to INHABIT only one version of one particular application program and consequently can be far harder to spot. It lives parasitically **WITHIN** the body of the application in a buffer region, array area, or other non-code-bearing space. Only a byte-by-byte comparison of a file against a known good copy can spot the SPIV, and you had better hope that it did not alter the system's compare command beforehand to report equality whenever its inhabited file is being tested!

The *Very Clever General Purpose Infector Virus (VCGPIV)* combines the features and capabilities of the GPIV with those of the SPIV. It is able to find

...the worst variations of VCGPIV do not begin "acting up" until sometime after EVERY LAST CANDIDATE host application program in the system has been infected!

non-code bearing regions **WITHIN** the bodies of other application programs for which it was not specifically designed, and infect those programs with its own presence. These features make the VCGPIV virus one of the nastiest and hardest to spot or control since every program in an entire computer system network could be overrun with VCGPIV before anything unusual begins happening. In fact, the worst variations of

VCGPIV do not begin "acting up" until sometime after **EVERY LAST CANDIDATE** host application program in the system has been infected!

Central System Infecting Virus (CSIV) does not infect individual application programs, but rather attacks and alters the core of the operating system itself. The carrier for this virus is usually a Trojan Horse program that appears to be doing something useful, simple, and disk intensive, like displaying a sorted directory, sorting directories, or reorganizing the hard disk. Its disk activities tend to cover up its real intention, which is to plant an infection into the operating system that alters the system's subsequent behavior.

Next month we'll look at the capabilities and intentions of these viruses, and examine anti-viral countermeasures.

Copyright © 1988 by Steven M. Gibson
Irvine, CA 92715 - ALL RIGHTS RESERVED



Ed. Note

If you are disturbed by these accounts of viruses that Steve Gibson is writing for us, take comfort in the article by John Goodman published in our February issue (page 16). To quote from this:

"I have ...talked to a number of people who have been watching the computer world, and in particular the world of networked computers, and they all seem to agree that the "virus" or "Trojan" problem is not as great a threat as the doomsayers would have us believe...It is time for prudence rather than panic."

(continued from page 6)

During the three days that I was able to attend the conferences (the first two and one half days of the main programs were for the corporate people and then, starting Wednesday through Saturday, the meetings were primarily for independent programmers and developers, etc.) There was also a demonstration area set up where, during the "breaks" and at the conclusion of each days meetings, they would demonstrate various new products or new versions for anyone who wanted to see them. Most were of products that are still in final development and also new versions that will be released in the next few months. Of course a great deal of interest was shown in 1-2-3 Release 3, but there also were several totally new products that caught my interest.

AGENDA was one of those. When I first saw a short crowded demonstration of it I was not very impressed, but later when I saw the special demonstration for the User Group leaders. I was very impressed.

It's a new concept tentatively called a "Personal Information Manager". It combines features of a database, a notebook, project manager, calendaring abilities, etc. We will be having a Demonstration by Lotus of this product soon in one of our general meetings. The current release date is projected to be between the end of June and end of July.

Another product in development, that is still known only by a code name and will have a different name when released, is a product called NOTES. While still in development it appeared to be a product of the future that could be interesting. A new release of FREELANCE PLUS is forthcoming and appeared to be quite beneficial for truly customized graphs, reports etc. Of course there were many others that I will not mention at this time, except that they have developed a very interesting product called BLUEPRINT that really does a lot of great new things in working with databases and their integration into other concepts, also allowing a lot of independent programs to work with various Lotus products.

Interestingly the demonstrations at numerous times discussed a new product called Lotus Extended Application Facility, for which they were using the acronym "LEAF" throughout their presentations. On Wednesday it was announced that another totally different product marketed by someone else (I think it was a chewing gum company) was already using the trade name "LEAF", and so they announced that they would have to rename Lotus's product and that they were having a contest that week to try and come up with the best new name, and would award three software programs to each of the three persons who came up with the best name. Since I had to leave before this renaming

contest would end I could not participate, but of course I did have some suggestions and it will be interesting to see what they finally decide on. I felt sorry about this new "bug" as far as documentation, screen images, etc. that will need to be changed before release of product.

Speaking of "bugs" it seems that the delayed release of so many programs by a lot of vendors is directly attributable to the inherent desire to reduce the memory usage of a particular program thereby causing a need to cut down the code used which then brings in new "bugs". It's almost like peeling an onion, you peel away one layer and low and behold there is another layer and another, and another. And behind each layer exist more "bugs". While I was there Ashton Tate announced a further delay in the release of dBase IV of 60 days due to "bugs". They are everywhere!

As we left that meeting most of us were exhausted from trying to work out so many problems and opportunities (there is a difference!!) but we had been invited for a tour of the Boston Computer Society so off we went. The BCS is the largest user group in the world with approximately 26,000 members. They have a semi-permanent location in the heart of Boston directly across the street from the new city hall. They are open 24 hours a day for their members to come in and work on computers and use software from the club's library. I counted approximately 50 computers that they were using. Their president, Jonathan Rotenberg (who is one of their PAID employees) told me that they had not even had to buy their office furniture as all equipment had been donated. I must point out that there was a preponderance of old Apple computers including an old Lisa! Their group has over 100 different groups, however a great many of them are for non-dos computers, i.e. Atari, Sinclair/Timex, etc. and also many of them are subgroups that meet in other cities and even some other New England states. They publish a great many special small newsletters, etc. They even have a new one for the volunteers who work more than ten hours a month in their office helping members.

After touring the BCS we were invited to a dinner sponsored by BCS, but paid for by PC WORLD Magazine which was very informative. I was able to sit at a table with Rick Landry, Editor of PC WORLD and also Jonathan Rotenberg, President of the BCS. I learned a lot about the testing of equipment and software, what is anticipated in the future, and was also able to make some suggestions for including a column about user groups in future issues (it wasn't only my idea, but three of us brought it up at the same time) and Mr. Landry seemed to be very interested. He pointed out to us though that they were currently working on the September issue. They need to

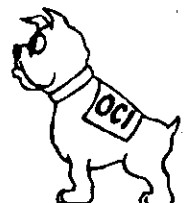
work on all the major articles with this much lead time and then insert the hot items, new releases, etc. as close to publication as possible. It was obvious that he was interested in what we wanted to see in the magazine, since we represent the individual user that buys most of his publication even though the corporate world also is well represented on his subscriber list.

I should mention that during one of the meetings we also were able to hear a very interesting presentation by John Naisbitt, the author of "Megatrends", who made some very interesting observations about the present and future of the United States, Japan and the Pacific Rim Countries and Europe. He pointed out that the United States was moving from an industrial society to an information society and at a rapid pace. Jim Manzi talked about the Mixed Computer Environment and that it was turning into an "Electronic Battlefield". He said that the Corporations themselves would spend one hundred billion dollars this year on computers, peripherals and software. He mentioned that we must not be infected with *Technological Maphobia* (a fear of tomorrow's technology).

If Lotus follows through with all their proposals it will indeed be a great improvement for all of us, including Lotus, but most especially for each of us members. I also believe that the new spirit of working together with other User Groups can only be beneficial to all. The old axiom about "standing together" is still true. We have now been recognized as a driving force by several of the major corporations and are starting to receive more benefits from them. I was proud to represent you at this meeting of the "twenty most recognized User Groups in the country". You have come a long way in less than three and a half years. I thank each and every one of you for your past, present and future help in making this club the best it can be.

STAN H. SABIN

President, OCIPUG



Library Notes

.. Bonnie Ulanovsky, Librarian

Last month's display of *IMAGEPRINT's* output seemed to be very well received. Enough so to indicate displays placed in the lobby might be of interest to members, so in future I'll endeavor to prepare a display board to show the kind of screens, menus, or output that will give you a better idea of what some shareware programs do, or at least what they look like.

The following are some of the new programs that will be available at the June General Meeting.

SPANISH FOR TRAVELERS is a very well done Spanish language tutorial. The user interface is so clean and uncluttered that there is no need whatever for a manual. Just copy *BASICA* or *GW BASIC* to a work disk, type *SPANISH* at the dos prompt and you're off. The course consists of 8 lessons, a word list which may be added to by the user, and phrase/verb segment. The phrase segment has its own sub-menu with choices of General Phrases, and specialized phrase lists for restaurant, hotel, travelling, sightseeing and shopping and a vocabulary supplement. The verb segment provides drills on verb recognition and conjugation.

Each lesson maintains a score, and will continue to display missed words or phrases at random until the lesson has been fully mastered. The program maintains a record of completed lessons, and will boot to the current or next lesson to be completed. The user has to option of working from English to Spanish or Spanish to English in some of the lessons.

In order to gain some additional interactive practice, I would like to recommend looking at two other programs in the library in conjunction with *SPANISH FOR TRAVELERS*. They are: **LANGUAGE TEACHER**, which provides drills in *Spanish*, as well as, *French*, *German*, *Italian*, and *Hebrew*; the other one is called **VERB CONJUGATOR**, a program that drills on the 200 most common verbs in *Spanish* and *French*.

Another excellent language program now available is **HEBREW QUIZ** by David Rapier. The program is based on Thomas O. Lambdin's *INTRODUCTION TO BIBLICAL HEBREW*, Macmillan). It is menu driven with choices of:

- Order of Hebrew Alphabet, Lambdin Vocabulary (by chapter, word type);

- Lambdin Grammar (by chapter, paradigm type)
- Landes Vocabulary (by frequency of root / word, word type), and
- a tutorial program using the above options.

In addition, the student is given the option of review prior to taking a quiz. The program will run on color or mono.

I had some problem initializing *HEBREW QUIZ*, since I tried it first with my monographics board and *assumed* (there's that word that causes all the trouble) that when the program asked if I was using a graphics board that the answer should be *Y. Wrong*. Maybe its just my particular board, but the correct answer for me was *N*. After starting over it worked fine in mono, however, it is really nice in color! The program can be re-initialized just by choosing option 7 on the main menu.

With this program, recovery after the error was easy, but it is not always so. Just a word of advice for anyone who hasn't found out yet . . . Do make a work copy using the diskcopy command for this and any other disks you get from the library. A backup copy just makes it a lot easier if, for whatever reason, you need to re-install a program, or you mess up the original disk.

HOME MANAGEMENT SYSTEM (*TEMPLATE FOR LOTUS 1-2-3, Version 2.0+*) done by Bob Ainsbury and Betty Brooks is a system of menu driven spreadsheets and macros for tracking home accounting tasks. Included are templates for check-book maintenance, name and address file, inventory and insurance, loans and mortgages, and utility payments. Screen presentation is very sharp making it a pleasure to work through these not always exciting tasks.

The inventory module and utility expense module are especially well done. The inventory entry form presents an attractive screen for entering relevant data, such as date of acquisition, notes, original and replacement costs, with codes to indicate room location and insurance category so typing is kept to an absolute minimum. The utility expense option allows entry of budgeted and actual cost for current and past year and then will

graph the results for a real "uptown" view of your data.

SCHEDULE MAGIC is a vehicle scheduling software system that automatically calculates and optimizes daily vehicle schedules for a wide variety of industrial scheduling applications, such as wholesale deliveries, courier service, or school buses. *SCHEDULE MAGIC's* purpose is to calculate new vehicle routes that minimize the number of vehicles needed, or that reduce the total fleet miles of the schedule. Use with *LOTUS 1-2-3* or the shareware program, *AS EASY AS*, to set up your schedules. Four different scheduling applications are illustrated in four different tutorial problems included on the disk.

GT POWER, Version 14.00 is a communications system, is a set of programs and files that provide complete capabilities for your system. It supports a wide variety of modems including all Hayes compatibles, USRobotics, and IBM. *GT* is one of the most powerful communications packages available.

A comprehensive Help Menu is available at any time while the program is active. Use the system to call other computer systems and engage in 'telex-like' conversations with the person (or computer) called. Transfer files (programs and data) between computers. Establish an unattended host mode environment that other computer users can call and interact with, for example, to send files to your system or to leave messages for later review.

Besides these three broad functions *GT POWER* provides a great deal more. A few examples include:

- A shell to DOS; c
- apture to disk all the text exchanged in the 'telex-like' terminal mode;
- auto dialing;
- maintains a complete log of all telephone activity;
- provides a secure enviroment that protects your system from unwanted invasion by outside callers;

P & M Software Co.

See you June 25th at the General meeting.

Support your Shareware Authors.

JULY 1988

SUN MON TUE WED THU FRI SAT

						1	2
3	4th OF JULY 	5 7pm Spreadsheets New Horizons	6 7 pm Desk/Pub WEH Computers	7 7 pm Modem OCC, Admin. & Counsel, Bldg, #106	8	9 9 am to Noon New Users New Horizons	
10	11 7pm BBS Sup- port @ 19651 Sanderson lane, H.B.	12 7pm Dbase New Horizons	13 7 pm DOS @ 1560 Placentia Newport Bch.	14 7pm CAD New Horizons	15	16	
17	18 7 pm Accounting 7372 Prince Dr. Huntington Bch. <hr/> 6:30 Board Meeting UAC	19 7pm C Lan- guage New Horizons	20 7pm Investor New Horizons	21 7 pm Network- ing @ Meas Verde Center, C.M.	22	23	
24	25	26 8am Real Estate NH-CM Board	27	28 7pm Hardware New Horizons	29	30 9 am OCIPUG General Meeting, OCC Science Hall 12:15 WordPerfect	
31							

JUNE 1988

S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

AUGUST 1988

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

INVESTORS

Coordinator: Ralph Minarich (714) 494-2209
 Contact Person: Gordon Savage (714) 533-3986

This group explores the world of software designed especially to help investors of stocks, bonds, and commodities. This month will be a continuation of our May workshop. We may have a guest speaker on equalizer programs or "long term" bonds. **Wednesday 20 July 1988, 7-10 pm**, at New Horizons Learning Ctr. [Inset Map 2].

MODEM

Coordinator: Terry Currier (714) 774-2018
 Designated Guru: Richard Sabin (714) 968-3539

Reach out and access the whole world of information through telecommunications. Our focus this month will be a demonstration of a communication program between a PC and a MAC! **DON'T MISS IT.**

Thursday 7 July, 7-10 pm, Orange Coast College [Inset Map 1].

NETWORKING

Coordinator: Jim Mansfield (714) 751-2243
 Coordinator: Andy McGill (714) 731-2951

Come to this SIG and see a new networking system demonstrated each month. The actual type will be announced the week before, so stay tuned to the Hot Line and the BBS.

Thursday 21 July 1988, 7-9 pm, at the Costa Mesa Center, Room 7, Coastline Community College, 2990 Mesa Verde Drive East (corner Baker Street), Costa Mesa.

NEW USER / NEW MEMBER

Coordinator: John Lundsford (714) 995-0947

This is the best SIG to attend first. The meetings run on a 3-month cycle, presenting an orientation to OCIPUG the first month followed by an introduction to DOS and the IBM family of personal computers (and "clones"). This month is number THREE in the cycle. **NOTE EARLIER START TIME**

Saturday 9 July 1988, 9 - 12 am, at New Horizons Learning Center [Inset Map 2].

REAL ESTATE

Contact Person: Stan Sabin (714) 968-7307

Contact Person: Tom Sutro (714) 650-1121

Jointly sponsored by OCIPUG and several local Boards of Realtors, this is one of our most popular SIGs. June's topic will be announced on the Hot Line one week prior to the meeting. Public domain & user supported software will be available for purchase before and after the meeting.

Tuesday 28 June 1988, 8 am (in the morning!), at Newport Harbor-Costa Mesa Board of Realtors, Boardatorium, 401 North Newport Boulevard, Newport Beach. (Coffee and software at 7:30am).

SPREADSHEET

Coordinator: John Alesi (714) 770-1130

Designated Guru: Neil Carman (714) 964-1901

This group covers Lotus 1-2-3 and other popular spreadsheet programs, including shareware products for both beginners and advanced users. This month's 2-part format will feature Cell Formats for beginners and String Functions for advanced users. Tune in to the Hot Line for a description of the product demo to be presented.

Tuesday 5 July 1988, 7-10 pm, at New Horizons Learning Ctr [Inset Map 2].

WORDPERFECT

Coordinator: Jim Pieratt (714) 969-4782

Contact Person: Taoward Lee (714) 646-5557

Wordperfect is both suitable for both beginners and advanced users. June's 3-part format includes Macros for beginners, Macro Editor for advanced users, and a Question & Answer session with a representative of WordPerfect Corporation.

Saturday 25 June 1988, 12:15 to 3 pm, at OCC Science Hall (after the general meeting). **SEE YOU THERE.**

ACCOUNTING

Coordinator: Ed Halsted (714) 840-7027

Coordinator: Karen Swanson (714) 846-2059

Come to this SIG if you want to know more about how to use your PC in a small business or home accounting application.

Monday 20 June 1988, 7-10 pm, [Location to be announced. WATCH FOR IT.]

BBS SUPPORT

Contact Person: Richard Sabin (714) 968-3539

The system operators (SYSOPs) always need help sorting through the uploaded files we get. Bring blank disks and take home copies without needing to download them! Monday 11 July 1988, 7-10 pm, at 19651 Sanderson Lane, Huntington Beach.

C LANGUAGE

Coordinator: Joel Charbonnet (714) 856-1591

We will be conducting the SIXTH session of our C tutorial and finalizing our discussion of pointers and structures. We will also try to demo Window Boss, a shareware program found on the BBS. MAGNA CARTA-C and Windows Tool Kit will be discussed also. Each session will include material for beginners.

Tuesday 21 June 1988, 7-10 pm, at New Horizons Learning Center [Inset Map 2].

CAD/GRAPHICS

Coordinator: Richard Moser (714) 541-6801

Designated Guru: Dave Lorenzini (714) 852-8663

This group covers all graphics programs, as well as specialized hardware of interest to our members. During the next few months we will be looking at various CAD programs on the market. Check the Hot Line for June's presentation.

Thursday 9 June 1988, 7-10 pm, at New Horizons Learning Ctr. [Inset Map 2].

DATABASE

Coordinator: Bob Schmiedeke (714) 536-1178

Come to this group to learn more about dBASE III+ and other popular database programs. Both beginning and advanced topics will be covered.

Tuesday 12 July 1988, 7-10 pm, at New Horizons Learning Center. Inset Map 2].

DESKTOP PUBLISHING

Coordinator: Richard Villa (213) 439-8110

Preparing attractive documents is the primary purpose of Desktop Publishing. At this SIG we will demonstrate and answer questions on Pagemaker, Ventura Publisher, Fontware, and other desktop publishing software.

Wednesday 6 July 1988, 7-10 pm, held at WEH Computers [Inset Map 3].

DOS

Coordinator: Steven Pierce (714) 631-2120

Designated Guru: John Goodman (714) 895-3195

Come to this group to learn more about how your PC works and how to get it to do what you want. We will continue our presentation of .BAT files. Kim Betterly will speak on Paths and Subdirectories.

Wednesday 13 July 1988, 7-10 pm, at Unit A-6, 1560 Placentia Avenue, (near corner of 16th Street), Newport Beach. [Inset Map 4].

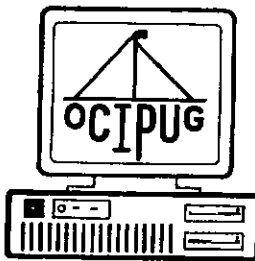
HARDWARE

Coordinator: Dan Likens (714) 953-5663

[New Coordinator needed. Call Dave Carroll at (714)775-3130 to volunteer.]

This SIG includes explanations of every aspect from trouble-shooting a sick PC to designing your own home automation system. You are welcome even if you have never tried to read a schematic diagram or solder a circuit board. We are trying to schedule Roger Andelin of AST Research, who will speak on video boards.

Thursday 23 June 1988, 7-10 pm, at New Horizons Learning Ctr. [Inset Map 2].



The Orange Coast IBM PC User Group SIG/GUIDE

A Calendar of Meetings & Events edited by Dave Lorenzini and Robert Siegenthaler
For more information on membership, write to OCIPUG at P.O. Box 6100-211, Costa Mesa, CA 92628. Call Voice Line (714) 898-7998 or BBS (714) 964-2034.

GENERAL MEETING

MICROSOFT CORPORATION

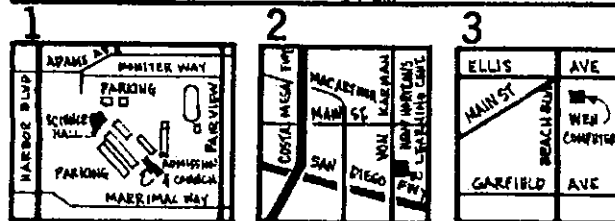
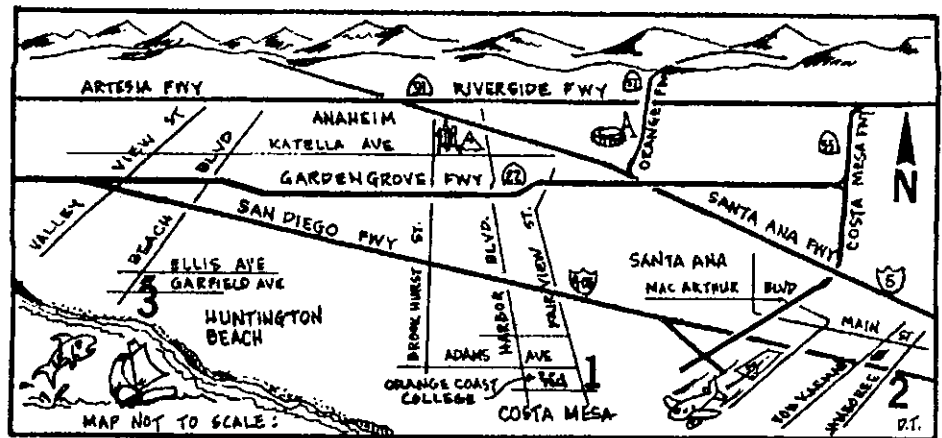
Mr. Philip Welt of Microsoft Corporation will be here to demonstrate two of their newest products--Excel and Windows 2.0. These products preview the inevitable transition from DOS to OS/2 as a multi-window multi-tasking environment. An analytical presentation will show how both programs can be customized to fit the users needs in perceiving, presenting, and displaying data.

**Saturday, June 25, 1988 at 9:00 am
OCC Science Hall.**

LATE BREAKING NEWS

Before attending a SIG meeting or other event, check with the OCIPUG Bulletin Board or the 24-hour Voice Hotline for last-minute changes in time or location.

LOCATIONS



Inset Map 1: Orange Coast College -

General Meeting & WordPerfect SIG: Science Hall (next to Chemistry Bldg).
Other SIGs: Room 106, Admissions and Counseling Center (next to Fine Arts).

Inset Map 2: New Horizons Learning Center, 17900 Von Karman, Suite 100, Irvine (near Main, north of San Diego Freeway).

Inset Map 3: WEH Computers, 18682 Beach Boulevard, Suite 150, Huntington

BASIC UTILITIES

A Commentary

by Arthur Boughey

The majority of our new club members have entered into the world of computing through "user-friendly" programs. To start these they switch on their machine and wait for the prompt, usually `C>`, to appear. Then they type a short sequence of characters to bring up the application with which they wish to work. From there the program is generally "menu-driven".

Even two or three years ago things were often not that simple. Indeed many of the programs still available in disk libraries and on BBS systems are substantially more difficult to start. Such programs are commonly pejoratively called "older" programs. Most frequently they are written in a programming language known as BASIC, an acronym for "Beginner's All-Purpose Symbolic Instruction Code".

I reflected on this as I read Steve Gibson's article last month, and wondered how many members would know before then that BASIC was an *interpreted language*, and that it could be compiled to produce faster running programs. My thoughts were further stimulated when I read in Kevin Moser's report that Dan Likins had presented BASIC to the DOS Sig.

Many of us older hands took BASIC in our stride in the late 1960's as we continued to work with such programming languages as PL/1, Fortran, and Cobol on a time-share basis on mainframe computers. BASIC did not explode into use beyond the educational field until with the advent of micro-computers in the 1970's it came to be selected as the universal programming language for this new genre of

The distribution disk of FONTMENU will run on most menu items, but it is designed so that its actual code can be neither viewed nor modified.

computer. Every microcomputer came with its built-in BASIC interpreter, which was very much taken for granted. Unfortunately the several rival manufacturers of microcomputers introduced variations into BASIC to suit "their" machines, so IBM, Tandy, Apple and other BASICs were all somewhat different from one another. It is only now that we are being offered programs that will run on the machines of different manufacturers, and these are certainly not written in BASIC.

As a result of this early universality of the use of BASIC in some form or another in desk-top computers, most beginning classes in micro-computer use in the 1980's have started with a course in

BASIC programming. There are still even today more beginning classes in BASIC than in any other computer language. In these classes it is explained among other things how "true blue" computers have *cassette BASIC* built into their ROM BIOS so that it is automatically loaded on booting, how *GW BASIC* came in with the production of compatibles, how *disk BASIC* and *disk BASICA* differ, and how other initially puzzling features of this language may be explained. If you wonder about such things, try the DOS Sig group.

Steve Gibson in his article pinpoints the advantages of using an interpretative language such as BASIC. More especially it is the ease with which the coding may be viewed, amended and run in sections for debugging purposes. These points are very well illustrated in a BASIC program that I wrote a number of years ago for my own convenience, and was later persuaded to issue as a Shareware product — FONTMENU. I still use it virtually every time I use my printer.

FONTMENU permits the transmission of 64 different instructions to *Epson* and similar dot matrix printers. Many programs now exist that will transmit *some* of these instructions. You can also send all of them individually yourself if you look up the correct "escape code" in your printer manual. Most of the more recent word-processing programs enable you to enter many of these instructions as embedded commands in your text. There are nevertheless still certain occasions when you need the services of a program like FONTMENU. These are :

- when using the "type" or DOS background "print" commands to print a long text file such as an on-line manual, documentary or telephone log.
- when using your computer "typewriter mode" while you test entries of limited length.
- when you wish to combine two escape codes to produce intermediate font sizes.
- when you wish to print the code of a BASIC file using the *LIST* command.

I would emphasize here that I am not attempting to promote FONTMENU, a few casual bucks from it here and there will hardly cover my material expenses. Nor is this a very complete review. Rather I am attempting to illustrate how some of the so-called "older" BASIC utility programs can still perform a useful service, even in today's world of high speed user-friendly compiled programs. You will find a legion of these smaller utility programs on Bonnie's disks and on Richard's and other BBSs.

The distribution disk of FONTMENU will run on most menu items, *but it is designed so that its actual code can be neither viewed nor modified*. To do this you must obtain the program supplied to

registered users. With either version you must, as with all BASIC programs, put your computer into its BASIC mode, as will be indicated by the appearance of an OK prompt. When you get this prompt, you will also have a line-menu displayed at the bottom of your screen. This menu informs you that your ten function keys have now been converted to "macros". So for example, instead of typing and entering *RUN*, you can simply hit F2.

To start FONTMENU, you hit F3, which displays *LOAD* on your screen. You then type in *FMCLONES* or *FM*, as the case may be, and press enter. That will load your program. Hitting F2 will run it: the program is menu-driven, just follow the menu instructions.

If you want to look at the code rather than run the program hit F1, and it will scroll across your screen. You can stop the scroll at any point by hitting [Ctrl][Num Lock], then any key to continue. You will see that the code of FONTMENU has been carefully structured and fully

If you have a little time to experiment with BASIC utilities, you too can be imaginative and inventive, and help yourself in the process

annotated. This makes it much easier both to understand and to alter. Please remember *before you start fiddling with any code make a back-up of your original disk*.

How to change the code is fully explained in the on-line manual. You may wish to do so more especially to obtain a specific left-hand margin or form length (should you wish to depart from the standard 66 line form, or set a left margin other than the default 7-character one,) or make a change in the number of lines skipped over at paper perforations.

You do not even need to know BASIC programming to adjust FONTMENU. If you follow what is written in the manual about changes, you can edit specific lines of code and make the program issue the modified printer instructions that you intend. If you know a little BASIC programming, you can use the algorithms and structures of this program to create a menu-driven program of your own to execute some particular operation that you cannot perform satisfactorily with your existing power programs. Do not be intimidated by guys like Phillippe Kahn and Peter Norton, with all their commitment to speed and memory. If you have a little time to experiment with BASIC utilities, you too can be imaginative and inventive, and help yourself in the process as well. Go to it and Have Fun !

LETTERS to the EDITOR

Daisy Wheel Printers

As a recent member of OCIPUG this is my first letter. Your publication is excellent, the topics and subjects covered are broad and very useful to a "New User".

A few months ago I bought my first IBM-XT clone. My interest is word-processing and I am using WordPerfect with a Citizen Premiere 35 daisy wheel and a Citizen 120-D dot matrix printers. The SIG groups I have attended, New Users, DOS and WordPerfect, have been most helpful. It's no wonder the membership has grown.

The main reason for writing is to encourage the Printer SIG that was proposed in a previous newsletter. There is a lot to learn about features and operation, I would do what I could to help. I believe I have a place to meet in Costa Mesa.

My documents cannot be submitted in dot matrix output. One question I would like to ask is how to access on a daisy wheel the many characters that do not fall under any of the keyboard labels. I have a font, Diablo BOLD PS. that has the © and the ™ symbols on the print wheel, but no keyboard support. I have been able to print the symbols, using other keys, but only in "Print Screen". Using the same keys in formatted text produces either another symbol or a blank space.

Most Sincerely,

Carl C. Yost

Thank you for your kind words. As you note there has been a previous mention of a PRINTER'S SIG, and there have been references to a possible WRITER'S SIG. Hard copy production has to be of much concern to writers. Our first issue of 1988 described SIG organization (page 10), and I have passed your letter on to Dave Carroll who as described there is the Coordinator for all our SIGs.

Regarding the problem of producing symbols on a Daisy Wheel Printer, you do indeed have quite limited options. I have passed your query on to Dr. John Goodman, who make want to answer it at a Random Access session where he can solicit further information, including the reason why you must have daisy wheel rather than dot matrix output.

Editor

ANNOUNCEMENTS

On the front inside cover of README.DOC we publish a disclaimer that is intended to emphasize that OCIPUG, its newsletter and its individual officers or members in no way can be thought to be sponsoring a product or policy of any kind whatsoever unless they specifically say so. In the latter case readers of README.DOC must make their own personal assessments.

From time to time news items appear in these columns. There are two such on this page, one from a

smallish software house, a second from one of the biggest. It is made clear in such items that the information extracted has been supplied by the company. It should also be clear that inclusion of such news snippets in no way implies sponsorship by README.DOC, OCIPUG, or any club officer. The same goes for example in the case of presentations at our General Meeting. Our purpose in this newsletter should be clear - to bring to your attention statements from vendors of which you might wish to keep informed. A.B.

PC-Write

A statement in *Quick Notes* claims that recent independent polls rank PC-Write as number four or number five in order of popularity among word-processing programs. It is said to place immediately after the big three, WordPerfect, Microsoft's Word and WordStar, or it is separated from these by Multimate. This latest issue of *Quick Notes* announces the imminent B testing of an enhanced version of PC-Write. This will be version 3.0. Among many improvements *Qicksoft Inc.* who issue *Quick Notes* has promised are:

- * use of all available RAM for edit file
- * status line that includes current line number
- * multiple column support
- * full support for the extended keyboard
- * friendly full-screen main menu

Current users of PC-Write have generally found it awkward to deal with edit files exceeding 60k, and to discover just how many lines there are in an edit document. Afficionados of this program will be looking forward with great interest to the release of PC-Write version 3.0. AB

DRAW APPLAUSE

Draw Applause according to a recent Ashton-Tate release is a sophisticated new presentation graphics program. It is advertised in this to be designed as a single, powerful stand-alone graphics tool for every level of graphics user and virtually all graphics requirements. The release states that *Draw Applause* will take advantage of IBM's System/2 family and other 286/386 based systems.

Draw Applause is said by Ashton-Tate to offer superior quality output on printers, plotters and image recorders, with input from keyboard, mouse or tablet. It is claimed to be compatible with dBASE III Plus, Framework, the MASTER GRAPHICS series, PRESENTATION PACK, and the yet to be released dBASE IV, software.

For more information, or a demonstration of *Draw Applause* call Ashton-Tates' Customer Service at (203) 222-1974.

A.B.

On Line - BBS

by Terry Currier

One of the things that often comes up in questions in the MODEM-SIG and elsewhere is how to deal with your telephone call waiting feature when using your modem on the same line.

If you have call waiting and you are using your modem, an incoming call will knock you off line. To stop this from happening you have to shut the call waiting feature off by doing a *70 before you place the call. Doing that will cancel the call waiting feature for the period of one call.

I have been told that this will only work in the Pacific Telephone area and not for the area covered by General Telephone. An alternative and easy way to handle this problem is simply to configure your dialing directory so that it first shuts off the call waiting before dialing the number.

To do this with **PROCOMM PLUS**, go into the directory (ALT D), press the letter P and up will pop the dialing codes. Highlight a letter such as A (you have 10 choices) to use, and press R, type *70 and press enter, then ESC.

Now add the letter to the number on your

dialing directory. The Club's BBS members number for example will be A964-2034. **Procomm Plus** will then proceed to do the *70, shutting off the call waiting before dialing the OCIPUG BBS.

Follow this procedure with each of your directory numbers, and you will not have to worry about being knocked off line again. You can also do this with **PROCOMM** and with **GT POWERCOMM**. For how to do it for other programs, check the documentation. By the way it also works for inputting your long distant codes such as MCI - allowing up to 40 numbers to be input.

GETTING CONNECTED

What to do when you first call the OCIPUG BBS:

Set your communications program to dial our BBS number, with the speed set to either 1200 or 2400, parity set to NONE, data bits to 8 and stop bits to 1.

The numbers to call are listed in the back of this newsletter. At first, call *only* the OCIPUG public line. Once we upgrade you to a "security level" of 7 you can use the private line. You also cannot download any files before then. When you connect successfully you will get a short message and then the BBS will ask you for your first, then your last name. Give your real names, please. Next you must give a password. You may use anything you like (up to 14 characters long) and it may contain any combination of numbers or letters. Capital or lower-case letters are all treated the same.

A piece of advice: Don't use anything for a password that someone else who knows you might plausibly guess. If you think someone has learned your password, change it. (If you don't know how, just ask us.)

REMEMBER your password. (So don't make it *too* obscure!)

You will be given a chance to read our bulletins. Please do so. They tell you some of the things we think you need to know.

Next come the messages. Read a few.

Leave a message to SYSOP. Tell us you are there and that you are an OCIPUG member. Once we verify that fact with our membership chairman we will upgrade your security level so you can use both phone lines, download files and enter most of our conferences.

Explore and enjoy.

As many you have noticed during late May and early June, the OCIPUG Bulletin Board has experienced some problems. Talking with Richard Sabin, the SYSOP, most of these problems have been in the hardware. In order to provide our members with access to Private line, it has been necessary to disconnect the Public line temporarily.

We hope that this has not been an inconvenience to anyone, and the system should be restored to full operation shortly.

Century
21



INLAND PACIFIC
2214 Newport Boulevard
Costa Mesa, California 92627
Business (714) 646-7434
Residence (714) 241-0608

STEVE RIDDLE
Multi Million Dollar Producer
Notary Public / Insurance Agent



Each Office Is Independently Owned And Operated

West Coast  Exchange



Used Personal Computer Exchange

TIMOTHY W. SMITH

VOICE 1-800-852-2251

P.O. BOX 127

VOICE (714) 248-0924

SAN JUAN CAPISTRANO, CA

BBS (714) 248-0842

92693

SIG Corner

DOS & Languages SIG Report

Kevin Moser

Twenty five members attended the DOS Special Interest Group meeting at 7:00 p.m., May 11th, 1988, in the Ebb Tide Community Room, 1560 Placentia Ave., Costa Mesa. Steve Pierce, the SIG Coordinator, introduced John Goodman and Dan Likens who shared a presentation on Batch Files and Programming in BASIC.

This meeting did not follow a strictly predetermined format. While the computer and overhead projector were being set up, a number of questions were entertained and discussed. These ranged from "What is on each DOS Disk" to the various types of DOS to the meaning of the copyright assigned to the publishers of DOS and BASIC.

Dr. Goodman then continued last meeting's topic, Programming in BASIC, with a quick review of the differences between IBM BASIC and GWBASIC, and compiled versus interpreted BASIC. Using the overhead projector he then displayed the BASIC screen, and together with Dan, explained the use of the Function keys. A short program was written, edited and renumbered to illustrate SCREEN, WIDTH, LOCATE, WHILE, WEND and INKEY\$ statements. The result: a message printed at a specified location on the screen followed by the OK prompt at a specified location below; this repeated when any key was pressed.

After the break Dan Likens introduced Batch Files with a quick review of subdirectories and how to make and remove them and how to change from one to another one. He also reviewed the proper contents of a root directory, the TREE command, the meaning of the single and double dot files in a subdirectory and the commands PATH, SHELL and SET.

In response to a question, John Goodman briefly compared the use of the filter MORE with the batch subcommand PAUSE. He displayed some of the uses of PROMPT and then began to build and test an extensive batch file. As a screen editor he used PC-WRITE (available on the Club BBS or from the Librarian). He variously used ECHO and PROMPT commands to demonstrate screen control. The batch file was repeatedly changed to illustrate the effects on the screen of different prompt commands, and execution of commands to copy or change directory. The remaining

time was used for a brief overview of replaceable parameters and piping commands.

While the batch files illustrated were largely devoted to control of the screen (as were the BASIC examples), the message that came through to attendees was that a batch file will execute in turn any legitimate series of DOS commands from simple ones such as clearing the screen or displaying a message, to more complicated ones such as changing subdirectories or invoking an applications program.

If you use a batch file to invoke (run) an application, upon exiting the application program DOS will pick up the batch file right where it left off and continue to its end.

Steve Pierce closed the meeting with a request that those who desire treatment of a particular topic at future meetings leave a message for him on the Club Bulletin Board or drop him a line. Next meeting: more on batch files.

LATE BREAKING NEWS: At the July DOS SIG we will have a guest speaker. A Technical representative of Borland International's Languages Group will demonstrate one of their products (a new one?) and indicate the direction that future Borland products may take. Come and get the latest scoop. We may even have a raffle!

Hardware SIG Report

Kevin Moser

The Hardware Special Interest Group met at the New Horizons Computer Learning Center on April 28th, at 7:00 p.m. Seventeen members attended.

Dan Likens opened the meeting by displaying a variable voltage bench power supply built by Dave Carroll.

Before beginning the planned presentation on power supplies he opened the floor to random access questions. The first question was, "How can the Escape key be software reassigned to a different location on the keyboard?" Answer: Not believed to be possible at this time.

[Actually it can be done if you have installed the ANSI.SYS device driver in your CONFIG.SYS file. The details are something we can cover at the DOS SIG. -J.G.]

One member was experiencing difficulty matching up Tandy printer pinouts to a Hyundai computer. This problem brought on a discussion of the matching of flat cable DB25 pin assignments to the Centronics connector. This discussion then broadened to cover generally the logic signals sent between computer and printer, and the physical hardware addresses of printer ports.

The next problem was with an RGB monitor driven by an ATI EGA adapter card. It would not operate in Microsoft Word Graphics mode although it worked properly in Text mode. No fix was offered for this incompatibility problem, however it brought on a technical discussion of video presentation, H & V sweep rates, and the distinctions between various types of monitors: TV, monographic, colorgraphic, EGA, and multisync.

There were several questions about hard disks. The response ranged over the low level formatting of the drive, physical drives, the DOS imposed 32 Mega byte size limitation, partitioning, and logical drives. Briefly mentioned were intelligent interconnections between drive and controller: SASI and SCSI (the so-called scuzzy buss).

One member was interested in the pros and cons of increasing AT mother board memory above currently installed 512K to 1MB. The correct answer is, "It depends." Mainly it depends on what software you wish to run. The general benefits of the most common pattern, filling up the board to 640K conventional and 384K extended memory were outlined.

After the break Dan gave a chalk talk on the announced topic for the evening: Power Supplies. He drew out schematic diagrams to illustrate each step of his talk. Starting with a very basic step-down transformer and rectifier he added components and modified the diagram to improve the output characteristics of the power supply. The effects on voltage and current as each component was added were graphed out and explained. The end product was a regulated switching power supply of the type found in our computers.

LATE-BREAKING NEWS: At the July Hardware SIG we will have two guest speakers. Richard Evins from Adaptec (makers of disk controller cards) and Louis Columbus from Toshiba (makers of disk drives) will discuss present and future hard disk sub-systems

INVESTORS SIG REPORT

Ralph Minarich

All attendees at the May 18th Sig at New Horizons were treated to Free Software programs from "Wall Street Micro". Last Inv/Sig report, I mentioned members could pick-up a \$7.00 PROGRAM. Well, through some error, it appeared as \$7.00 NEWSLETTER. I'll try it again, it should read "PROGRAM" as in software.

Greg Cimarucci did a lot of leg-work with this company. All to the benefit of OCIPUG members. They agreed to allow us to COPY this \$7.00 disk as a freebie. All they ask in return is the name & address of those members who receive the program. So any member at the JUNE General Meeting or June Investor SIG, can obtain this GRAPHIC PROGRAM in exchange for a good blank disk.

Oh Yes, the August Newsletter was titled "CRASH"...that's AUGUST/87. This company has 'Technicians' designing software, not 'Visionaries'. So, if you have an active interest in investment 'what-if-studies', see Ralph or Greg or Gordon Savage and you will be surprised at what all it can do.

Thanks Again Greg for the demonstration of the \$40.00 package at the May/Sig. Super features like the illustration of the optimum points (high & lows) and the efficiency of your system to attain mamimum proximity to them. Program provides corrections too. Bring your system closer to those points.

The June 15th Sig has a special guest confirmed. Mr. Mike McDonald of Channel 22 has agreed to speak on his Moving Average Study & Elliot Wave Theory, along with assistance to your Portfolio & Estate Planning strategies.

Its really great watching this SIG become self-supporting. Through the efforts of members with a genuine interest in software and hosting interesting guests. We'll be one year old in July. Several members have offered to go the extra distance. Please contact GREG CIMARUCCI at 559-8939 or Gordon Savage at 533-3986, and they will make it happen.

Remember our motto: "You'll never go to the Poor House...Taking a Profit."

All of us in OCIPUG want to thank Dave Carroll for the fine job done with the SIGS. Without his help, OCIPUG could not have been as successful as it has been. THANKS DAVE!

HAPPY BIRTHDAY TOO.

Modem SIG

Terry Currier

At the July 88 MODEM SIG meeting we will be covering utilities for ARCing and unARCing files. The meeting will be on July 7th at 7PM in room 106 of the Administration building at Orange Coast College.

If you know of anywhere else we could meet, let Richard Sabin or I know. We both would like someplace that has a little more room.

One of the things that comes up in questions often is how to deal with the call waiting feature with modem use. If you have call waiting and you are using your modem, an incoming call will knock you off line. To stop this from happening, you have to shut the call waiting feature off by doing a *70 before you place the call. Doing that will cancel the call waiting feature for the period off one call. Also I have been told that this will only work in the Pacific Telephone area and not for General Telephone's.

A easy way to handle this problem is to simply put it into your dialing directory to first shut off the call waiting before dialing the number. To do that with Procomm Plus go into the directory (ALT D) and press the letter P and up will pop the dialing codes - highlight a letter such as A (you have 10 choices) to use and press R type *70 - press enter, the ESC. Then add the letter to the number on your dialing such as the OCIPUG number will be A964-2034 - Procomm Plus will then proceed to do the *70 shutting off the call waiting before dialing the OCIPUG BBS.

Do that to each of your numbers and you won't have to worry about being knocked off line again. You can also do this for Procomm and GT POWERCOMM. For how to do this for other programs check the documentation. By the way it also works for inputing you long distant codes such as MCI - allowing up to 40 numbers to be input.

C SIG

Joel A. Charbonnet Jr.

Hi! My name is Joel A. Charbonnet Jr. and I am the new coordinator of the C SIG. I am looking forward to helping you form the best C SIG in southern California. You always read about large famous users groups like the Boston Users Group, well let's make a name for the OCIPUG C SIG. Before you know it we will be hosting international C conferences! Or giving C seminars! Or better

yet, we will read in one of the industry trade journals: "OCIPUG's C SIG has been selected as the main beta test site for most of the major C compiler vendors, such as, Microsoft, Borland, Lattice and the list goes on!"

Well, okay! Maybe we will never be that big and famous! But, it's nice to dream! However, as large as OCIPUG is, I know there are at least 100 of you who were born C programmers, (if you are not sure you are one, then come to the C SIG meeting and find out). If you are reading this column you must be curious about C. Let's take that curiosity a step further, come to the next C SIG meeting and "C" what you, or we, are made of! Let's "C" what we can become!

Enough of the sales hype, if the C SIG is to be a success we need YOU to come to our next meeting. I will be passing out a survey to find out what you want from the C SIG and how I can best serve you as coordinator. I am willing to volunteer my time to coordinate, if you are willing to come and be apart of the fun. This is YOUR CHANCE to mold the C SIG into your "dream" SIG. So, don't pass it up!

Who knows, maybe some day we will be publishing: *The C SIG Journal*.

By the way, at our next meeting, we will be continuing the discussion of Pointers, Every C Programmer's Friend and Nightmare!

See you at the next C SIG meeting!

*We would like to welcome the following
New Members who joined OCIPUG
during the month of May.*

Dan Ala
Grant Burris
Wendy Clifford
Fred Davis
Hugh Dunn
Joseph Dworkin
LaVeme Harris
Tracy Melendez
Dick Mercer
Steven Monkarsk
Herbert Moss
Ginger Nickerson
Richard Parrish
Thomas Randolph
Arlene Solomon
Leonard Slein
Larry Strong
Herbert Tellefsen
Karl von Hoffman
Skip Williams
Ling Chi Yeh
Ning Yeh

Technical Corner

In this month's Technical Corner you will find the next (and final, I think) episode in my Keyboard Tale. Also here is an article you won't want to miss if you have hanker to add more than two communications (serial) ports or more than two (parallel) printer ports to your PC. Finally I have included a fairly detailed description of my saga installing a new hard disk controller and disk drive.

Next month we will be presenting a formal review of the HELP! programs from Flambeaux Software (see General Meeting Report for more information about them). Also coming next month will be a review of *Word For Word* (including an explanation of what we mean when we say "a pure ASCII text file"). If I get some questions to answer there will be another Random Access

column and, if space permits, some other program reviews as well.

Till then, enjoy your computers, problems and all.

Or as the famous Chinese curse says it, "May you live in interesting times."

John M. Goodman, Ph.D.

Every Keyboard Has A Tale – Part Two

John M. Goodman, Ph.D.

In last month's article I told you a number of things about computer keyboards. I think they are the most neglected, and often most important parts of our computers. After all, nearly all our input to our computers goes through them.

I told you about how the switches in computer keyboards operate, about how they are different from light switches, and what that means for us who use them.

In particular I focused on the three kinds of feedback we get from our computers to tell us that we have typed a particular key. First is the snap feeling or the feeling of hitting bottom that lets you know something has happened. Second is the noise of a click (on some keyboards). Last is the actual reaction of the computer that really lets you know it "heard" you.

In an ideal world all three will happen at the exact same moment in the key's motion. In our real world that does not always happen.

Getting down to cases

Now let me get specific.

With my actual IBM brand keyboards (which are of a pretty early PC vintage) I have never detected any discrepancy between the timing of the three kinds of feedback. I understand that the construction they use has changed over the years and I cannot be sure that the ills I shall describe below may not beset you if you use a more recent vintage IBM keyboard.

With progress in PC design, the keyboard layout has changed a couple of times.

This has been a mixture of good and evil for us. For those of us who must often switch from one computer to another, the different keyboard layouts are an annoyance or worse.

On the other hand, the new layouts did solve some problems (while, unfortunately, bringing in other, new ones).

The original IBM PC keyboard had altogether too tiny an Enter key. It made the cursor pad keys do double duty as the numeric key pad. It did not have quite all the keys that would later be needed, especially for mainframe terminal emulation.

The next version, the original IBM AT keyboard, corrected the Enter key size problem, but left the other things as they were. Unfortunately it also moved the Escape key to a new, very much non-standard

I have not yet told you of the worst thing that happened in the evolution of these keyboards. When I think of it I think of the change from "old" Coca Cola to "New Coke" to "Classic Coke."

location. That is perhaps the worst thing about that design, as it allows one to hit the Escape key all too easily. It is a bit of a reach to hit it without moving one's hands from "home" position and once you do that you (or at least I) have much lower accuracy in knowing just where your (my) fingers are.

They also moved the key with the tilde and backwards single quote symbols, plus the key with the vertical bar and backwards slash character. Just a few more annoying new things to teach one's fingers!

IBM's latest entry (which they have promised us will be the last one), attempted to solve even more problems. It moved the Escape key back to the "correct" corner of the keyboard, isolated it from the other keys a good safe amount, added a separate cursor pad and two new function keys, among other changes. The tilde and backslash did not move again, but the Ctrl key did. Ugh!

For the most part I like this newest keyboard layout. My one serious quibble is

with the location of the function keys. A lot of program designers took advantage of the ease with which one could tap a shift key (Shift, Ctrl or Alt) and one of the ten function keys at the left end of the keyboard. Only basketball players and piano players have a reasonable chance of doing so now with the function keys arrayed across the top.

I think that somebody stands to make a fortune by creating a small add-on keypad that just has the function keys (just F1 to F10 would be fine, thank you) and sits to the left of a newest style PC keyboard. It would be best if it hooked into the system in some way that made it impossible for programs to tell if you had struck the function keys on the main keyboard or on this new add-on contraption.

Anybody listening out there? Let me know, please, right away if you create such a product.

I have not yet told you of the worst thing that happened in the evolution of these keyboards. When I think of it I think of the change from "old" Coca Cola to "New Coke" to "Classic Coke." There, hidden under the alteration of formula away from a standard and then, supposedly, back again the Coca Cola company managed to hide pretty well a change from sugar to corn syrup sweeteners.

Here, in the large hue and cry about the placement of the keys, most people have not noticed some very important changes in key action.

As I said, in the original IBM PC keyboard, the key switches evidently worked much as a light switch does. When you depress the key, up to some point, a spring is flexed. At a critical point it snaps to a new position and you must release the key above that critical point an appreciable distance before it will snap back. In the very motion of the spring over and back the switch contact is closed and opened again.

The resistance to your finger motion also changes abruptly as the spring falls away at the snap action point. The moving metal

piece is substantial enough to make that nice strong click. (Well, I love it, although I know many other people think both the snap feel and click sound are at least a little too strong.)

In those "good old days" the only keyboards available for clone computers were what I have called mush-boards. They gave one hardly any tactile or auditory feedback at all.

Now we have a number of manufacturers of tactile feedback keyboards for our personal computers. Between them they offer nearly every key-layout you might wish (well, I have yet to see one with function keys both along the top and down the left side). Many can switch their electronic personalities to allow them to be used with either an XT or an AT. Some can even move the special keys (at least the tilde and Ctrl keys) around at the flip of a small switch.

This is all lovely. One big, bad problem is lurking here, however.

As I mentioned at the start of this article last month, I recently bought a Chicony keyboard. I had an original IBM PC keyboard which I mostly liked, but it would not work with my new AT. I had a clicky clone keyboard in the original AT key layout which would work with both XTs and ATs, but I wanted to get a clicky keyboard with the newest AT keyboard layout (remember my problems with the Escape key?).

Chicony offered me three models. All had the same key layout (they also have other models with different key layouts). The only difference between the models was the feel and sound of the keys.

One is what they call "silent tactile." It snaps, but the click it makes is nearly inaudible. Another one feels the same, but adds an audible click. The last one is the same except its snap action is just a bit firmer.

I was surprised to find all these variations. Upon asking I learned that the silent tactile is their best selling model. The softer of the two "click-tactile" keyboards is the second most popular. The reason for the third, firmer one, I found amusing. They simply cannot get enough of the keyswitches used in the other two keyboards to meet their demand. To solve this problem they contracted with another switch manufacturer to make key switches just like the ones they had been buying. That manufacturer *almost* did that, but not quite.

At first I selected the firm click-tactile model. I liked how it felt and sounded and at last I had the layout I wanted in a keyboard that would work with my new AT clone.

Ah, but what could I expect? Life is seldom so easy.

I type quickly. I have some bad typing habits too. For one, I often rest my fingers on the keys every so softly. On my new keyboard, as I soon found out, my ever so softly was not always softly enough.

Sometimes when I was not typing anything at all keystrokes would start to gush forth. But I knew I had not pressed any keys down, at least not far enough to make them

I type quickly. I have some bad typing habits too. For one, I often rest my fingers on the keys every so softly. On my new keyboard, as I soon found out, my ever so softly was not always softly enough.

click. No matter, I had made the switches inside make contact.

Back to the manufacturer went that keyboard.

This time I selected the softer click-tactile. Now I have mostly solved the problem of keystrokes happening when I have not yet pushed the key far enough to make it click. Sometimes, however, I have the opposite problem. I press the key enough to hear and feel the click and snap, but no keystroke is registered by the computer. For me, this mostly happens when I press down a shift key. That takes some of the weight of my hand off the keyboard and then the next key press turns out to be not quite hard enough to make the switch close.

Actually, I don't imagine I will find a perfect solution to this with modern keyboards. As long as the manufacturers find it cheaper to build switches that make contact with no significant snap action and then have to add snappers and clickers, they cannot guarantee that snap, click and contact will all occur together.

Summary

I still like my new keyboard. I do make too many mistakes on it, mainly by leaving out characters in my text that I thought I had typed but which the computer failed to hear about.

I want function keys along the left edge in addition to or instead of across the top and I wish the Ctrl key, tilde and backslash had not migrated, but I will adjust to these things I am sure.

For now I have found my keyboard. I don't like going back even to the original PC keyboard (mainly because I all too often hit the tilde instead of the Enter key).

Still, when I have to use my Selectric I always dream a little of the perfect computer keyboard....

Addendum

Since I first wrote this article I saw an add from Northgate Computer Systems for a new keyboard with yet another layout. This one has all the keys placed just like IBM's newest, 101 key layout except that the function keys are at the left end of the keyboard, just like the earlier keyboards (only there are 12 of them instead of the original 10), and they added an extra copy of the equals key on the numeric keypad, in the process halving the size of the grey plus sign key. It looks interesting.

Maybe they have found the ideal key layout, finally. Maybe.

Before I buy one of these new keyboards, though, I would like to know if it is subject to all the same problems I have experienced with my Chicony keyboard. I have looked at one of the keyswitches in my Chicony keyboard and at a switch in one of the Intelligent brand keyboards which is, I am told, essentially the same as earlier Northgate keyboards. The two switches look the same. They feel the same. I think they are the same, although I have not done extensive tests on them yet.

Still, I am intrigued. Maybe *this* is my perfect computer keyboard?

Will there be a third part to this article? I don't know yet, but if I find more and better (or radically worse) news, I'll let you know.

This article is Copyright © 1988 by John M. Goodman, Ph.D. It may not be reprinted without his advance written permission. You may write to him at P.O. Box 746, Westminster, CA 92684-0746.

Adding More Ports to Your PC

John M. Goodman

Like closets in a home, there never seem to be enough ports on a PC. Especially serial ones (asynchronous communication ports).

I have a mouse that uses a serial one plus a modem and a direct wire connection to an old CP/M computer, both of which also use a serial port.

Until recently I have limped along with a one serial and one parallel port. That is, I think, the minimum that makes much sense these days. When I added a monographics card along with my EGA card I ended up with two printer ports, but still no more serial ones. I also have a game port, though I find little use for that.

At first I did a lot of cable switching. Then, with Dan Likins' help I made up a switch box for my serial port.

Finally I decided enough was enough. I bought an inexpensive card called the "Big I/O-3 Plus Card." This card added to my system two serial ports plus an additional printer port. It also can add a game port, but as I said, I don't need that.

Getting and installing the hardware was a snap, as it should be. Getting DOS to recognize the existence of all these ports turned out to be quite a different matter, however.

It used to be that DOS only knew how to recognize a maximum of two communications ports (COM1 and COM2) and up to three parallel ports (LPT1, LPT2 and LPT3). The books all point out that DOS can *support* up to four of each kind of port, but that it can only recognize two serial and three parallel during its power on self test (POST).

Recently I heard, however, that with DOS 3.3 serial ports up to COM4 would be automatically recognized. I am using MS-DOS, version 3.30, so I had high hopes that I would have nothing special to do. Actually I didn't get even as far as the books suggest I should have gotten with an earlier version of DOS.

After I installed my new hardware I rebooted my PC. I ran a diagnostic program and it told me I had only two COM and two LPT ports. I looked in the DOS data area and found that, sure enough, during the POST,

DOS had only found these four devices and initialized the data table to show their locations.

This did not seem right. How, I wondered, could I get DOS to recognize the rest of my ports?

For you to understand what I have just said, and even more if you are to understand how I solved the problem, I need to give you a few more details about DOS. It creates

Getting and installing the hardware was a snap, as it should be. Getting DOS to recognize the existence of all these ports turned out to be quite a different matter, however.

several tables of information in system RAM during the boot process. The first one of these, located at the lowest RAM addresses, is the interrupt table. Immediately following it is the "BIOS data area." The first 8 bytes (four pairs) in this table are used to point to COM ports 1 to 4. The next 8 bytes point to LPT ports 1 to 4. The next two bytes, called the "equipment word" stores a variety of information including how many COM and LPT ports you have installed.

Even if you install serial or parallel port hardware and it is working perfectly, if this table doesn't show the presence and location of that hardware it might as well not exist, so

far as DOS is concerned. (It is possible to access hardware without using DOS services. This is how you *must* proceed if you have more than four COM or LPT ports.)

I checked all my new hardware with a simple BASIC program (not using DOS). It was working just fine.

I tried using PROCOMM and then PROCOMM-Plus to test the communications ports. What I learned about them was, I thought, positively weird. They seem to know how to talk to more than two communications ports all on their own, but they need help knowing how to listen to them! (I am still running down some of the details on this, so I must defer the details to another time.)

Next I tried putting the correct numbers into the DOS data area manually, using a utility called @LAST. When I did that everything worked exactly as it should. Such a little step, but it made all the difference. The final step was to create a small program that would automatically put the right numbers into the DOS data area for me each time I boot my computer. Now, with that in place I am all set.

(Well I am mostly all set. I am still having some problems with PROCOMM, but I don't know if that means I have not gotten the communications ports working right, or if there is some subtle bug in PROCOMM that I need to run down.)

Better is Not Easier

Confusing Times with the Adaptec 2372 Hard Disk Controller

John M. Goodman

Many of us have heard Steve Gibson extol the virtues of the disk controller and drive combination he uses in his "dream machine." Truly it is a lovely combination with many features to recommend it. This particular controller is designed for AT class machines and it can control up to four drives, two floppies and two hard drives. It is fast and, by using the RLL recording technique, it gets about half again as much data on a drive as an MFM controller.

Recently I decided to try it for myself. What I learned in the next week or two may be instructive for the brave among you. I hope it will be informative and interesting to the rest of you as well.

At first this job seemed like "a piece of cake." I have put in many new controllers and hard disks in several quite different com-

puters, all without notable incident. I was overconfident.

In a rather complicated flow chart diagram Adaptec shows *all* the steps anyone might need to go through for installing their controller in *any* system. My system was one of the simpler ones, so most of the steps did not apply to me. Unfortunately I missed one that did.

As with any hard disk with a new controller you must first do a "low level format" of the disk. Adaptec makes this easy using DEBUG and their special menu driven disk preparation program located in the controller's BIOS ROM.

Next, and this is the step I had overlooked, you must use a second entry on their menu to create what they call a logical volume. With other controllers I had used you only needed some such step if you were going to end up with more than 32 Megabytes on your drive. Since I was first using a Seagate 238 drive (30 MB with RLL) I skipped this step. Wrong. With this controller you must do this *always*.

The reason the Adaptec 2372 needs this

step is that it does not rely on the table of drive types stored in the AT BIOS. It cannot, in fact, for by using RLL it creates drives with more sectors per track than any listed in the standard AT drive table. When you "create a volume" in Adaptec's terms what

In a rather complicated flow chart diagram Adaptec shows *all* the steps anyone might need to go through for installing their controller in *any* system.

you are really doing is recording the logical dimensions of your drive (numbers of heads, cylinders and sectors) onto the drive in a special place only the Adaptec controller can look.

After these two steps come the the familiar final two, using FDISK to create a DOS partition and then FORMAT to do the "high level formatting" of the drive.

But my story does not end there.

I went on to add a Miniscribe 3650 drive to my system. This time I did everything ac-

ording to the book. When I finished I had two physical drives, the Miniscribe and the Seagate, divided into three logical partitions, with each partition nearly at the maximum DOS size.

They all seemed to work just fine, but several different diagnostic programs all agreed that there was a problem. These programs each came up with some nonsense values for the logical dimensions of the second physical drive. I tried swapping the drives. The problem was always with the D: drive. (In either case DOS assigned the letter E: to the second logical partition on the Miniscribe.)

A puzzlement! I really *had* done everything the book said I had to do. Exactly.

Eventually, with an assist from Richard Ewins who is a new OCIPUG member and a very knowledgeable person on the local Adaptec marketing staff, I got the matter resolved. An obscure item on the Adaptec menu offers to create an "Autoconfiguration device driver." The manual doesn't mention this. Nothing I have in print says what it does nor does Adaptec suggest you use it. They'll just create it for you if you like.

If you do create it (using the last choice on their menu driven ROM BIOS program) you get a cryptic message saying it will

prevent conflicts with other hardware and software. What conflicts? Which software? Why? It is silent on these crucial points.

Once I learned the details I found them interesting, and a bit disconcerting.

During the POST (power on self test) your PC goes through a number of steps. If you have any special BIOS ROM chips, for example on your hard disk controller, they may have a program to do something special to check out or start up their special hardware.

The Adaptec controller reads the logical dimensions of any attached hard disk drives and then stores those numbers in system RAM for ready access. The place they chose to store them is the problem. They put these numbers into the DOS interrupt table in the place reserved for pointers to interrupt handlers for interrupt numbers 60Hex to 67Hex. It is true that Microsoft did define these as the user available interrupts, but that simply means that all manner of vendors have picked one or more of these locations to communicate with their special hardware. A popular example, and the one I happened to have, is an expanded memory card (EMS card).

Any EMS card *must* use Interrupt 67Hex. That is a part of the Lotus-Intel-Microsoft

standard. For Adaptec to have grabbed *all* of the table locations from 60H to 67H is, in my opinion, inexcusable.

Most people who have this Adaptec card don't get to see the problem, fortunately. Either they have only one hard disk drive (in which case Adaptec only needs the first half of the locations) or they don't have an EMS card. You have to have both to get into the trouble I found.

Lucky me!

Still I have to hand it to Adaptec, they did have the solution to my tribulations ready to hand. They merely forgot to tell me about it.

Their "Autoconfiguration device driver" essentially just copies those crucial disk dimensions from the interrupt table into another, safer location in system RAM. As long as you create the device driver and then include a line invoking it in your CONFIG.SYS file *before* any other device driver that may refer to that part of the interrupt table there will be no conflict.

They are absolutely right. It works just fine. I only wish they had told me this in the first place, though, or even better that they had not decided to be so "clever" in their placement of the disk dimensions in RAM in the first place.

GARDEN of EDEN

GARDEN of EDEN

Educational Software Specialists since 1982

Educational & Corporate P.O.'s Welcome

GARDEN of EDEN

PRINTER RIBBONS — ALL COLORS — AT THE LOWEST PRICES! 6/11

List & Mail (Apple/IBM).....	\$ 44.95
Lotus 1-2-3.....	\$309.95
Computer S.A.T. (Apple/IBM).....	\$ 39.95
Math/Reader Rabbit (Apple/IBM).....	* \$ 24.95
Logitech Mouse (Ser or Bus).....	\$ 84.95
Sidekick Plus (Desktop Manager) IBM.....	\$124.95
Practical Peripherals 1200B Modem w/Software....	\$ 79.95
64K Extended 80 Col Card Apple IIe.....	\$ 39.95
Publish It (Apple) (3 Font Packs - \$32.95 ea.)....	\$ 72.95

FREE: Tilt & Swivel Monitor Stand to EVERY Customer w/Any Purchase 6/11 - 6/30

*After \$5.00 Rebate All Learning Co. Software

LASER 128X COMPUTER

Runs ALL Apple IIe, IIc Software **\$479⁹⁵**

More features than Apple at 1/2 the Price

SAVE \$200

OKIDATA's NEWEST & BEST 24 PIN PRINTER

IBM/Epson Compatible—Text & Graphics, 270 CPS (90 CPS LQ), Paper Parking & Push Tractor, Front Panel Control—Model 390

LIST \$699 **SALE PRICE \$499⁹⁵**

PARASOHC 1091 / II (192 CPS)....**209⁹⁵**

BROTHER 1509 (180 CPS — WIDE)....**359⁹⁵**

NEC P2200 (180 CPS)

BEST VALUE 24 PIN PRINTER...349⁹⁵

GARDEN of EDEN: "The EGG Beater"

COMPARE → You Choose

	GARDEN of EDEN	or	EGGHEAD
Refund/Exchange Software.....	Up to 30 Days		Only 14 Days
Springboard Publisher 5¼"-3¼".....	99.95		109.99
Word Perfect 5.0 (IBM).....	239.95		259.99
DSDD 5¼"-3¼" (10 Pack).....	3.95		10.95

Other Items Available at GARDEN of EDEN at Similar Savings. Survey 6/8/88

SPECIAL ORDERS & Hard to Find Items

WE GET 'EM FAST!

16485 Magnolia, Westminster, CA

(1/2 Blk. N. of the 405 Frwy) MON-FRI 8:30-7/SAT 10-5

GARDEN of EDEN

714-841-4994

If you can find a lower price in any Orange County retail store, GARDEN OF EDEN will match or beat that price. *Details at store.

Apple and Egghead are registered trademarks

Prices subject to Change

The following members have June expirations of their memberships:

Vilma Aarons
 Gary Amundson
 Michael Banyacki
 Stan Bell
 Joan Bingenhei
 Jim Brock
 Mark Burrell
 William Cadiz
 Walter Coles
 Joe Cudzik
 Robert Elder
 Kay Evans
 Roy Evans
 Greg Ewing
 Maura Ewing
 Paul Franklin
 Glen Frers
 Fred Friedman
 Iler Ganz
 Russ Garside
 David Gorham
 Marilyn Grimbly
 Peter Grodin
 Larry Hamilton
 Holmes Harwell
 G Marie Heil
 Darlene Hughes
 Roland Ivy

Ron Knaus
 Roy Knutson
 Richard Lambert
 George Leeper
 David Lloyd
 Chris Malm
 Alan Marcus
 Tom Millard
 David Nasby
 Ron Palmer
 Jim Petit
 James Petrie
 Herbert Rabe
 Mary Rabe
 Jerry Raskin
 Sam Reidelber
 Don Reis
 Robert Render
 Steve Riddle
 Chuch Ryntz
 Robin Sabin
 Dale Schreihar
 Annemarie Simonesi
 Frederick Solomon
 Thomas Stolp
 William Thomas
 Oli Thordarso
 James Tull
 Harold Vejakaja
 Christine Wark
 Larry Wasserman
 Laura Welsch
 Stanley Wise

The following members have July expirations of their memberships:

David Allen
 Jim Allen
 Hal Balmer
 Gordon Belt
 William Bonneycastle
 Roy Burke
 Mark Carranza
 Ron Collins
 Robert Croft
 Robert Cronk
 Jerry De Ainza
 Jack DeCamp
 Bennett Dy
 William Edmondson
 Jack Ellis
 Gordon Emerson
 Anne Fawcett
 Thomas Fischer
 Allan Foodym
 John Foster
 Tom Fredette
 Lyle Frevert
 Will Galusha

Gene Gores
 Fred Haney
 Roger Hartman
 Robert Hirsch
 Jack Holliday
 Randy Hom
 William Hughes
 John Humberston
 Paul Ichino
 Alan Jacobs
 Richard Jahnke
 Usha Jain
 Winston Jewson
 Mike Larkin
 James Lee
 William Levan
 Linda Leydekkers
 Max Lockie
 Sunny Lockie
 Ronald Martin
 Janice Masse
 Christine Mc Donald
 Brian McEvoy
 Tom Medanich
 Richard Montano
 Robert Moore
 Mike Morrissey
 KC Mouli
 Larry Nelson
 Lien Nguyen
 Martin Ogle
 Ric Olsson

Jason Paat
 Charles Pease
 Warren Preston
 Bill Procter
 Al Rasmussen
 Gregory Reid
 Craig Reynolds
 Richard Ribble
 John Saxby
 Harold Schaeffen
 Robert Shapiro
 Michael Siino
 George Sinclair
 Louis Stan
 Mary Stapleton
 Donald Stewart
 Don Taylor
 Dianne Turner
 Hal Weston
 Vernon Williams
 Richard Woo
 Tony Zannini

OCIPUG FINANCIAL REPORT

Cash Balance March 31, 1988		\$5695.48
April-May 1988 Changes in Cash		
Cash Receipts		
Membership Dues	\$2390.00	
Library Fees	291.67	
Interest	23.52	
Advertising	213.62	
TOTAL	\$2918.81	
Cash Disbursements		
Printing	\$1850.00	
Postage	529.62	
Meeting Expense	414.30	
Telephone	176.94	
Supplies	10.00	
Equipment	1658.90	
TOTAL	\$4639.76	
Cash Balance, May 31, 1988		\$3974.53

Prepared by Walt Drew, Treasurer

IMPORTANT ANNOUNCEMENT

The Officers and Board of Directors of OCIPUG have elected to increase the basic membership dues to \$36 per year effective September 1, 1988. This is the first increase initiated since the club was founded over three years ago. In order to continue to provide the current level of services and provide for future growth, this action is necessary.

As part of this plan, it was also voted to allow current members the opportunity to extend their memberships for up to one year at the old rate of \$20. To take advantage of this plan, you must renew by September 1st. Renewal forms will be available at the General Meeting and all SIG meetings.

Additional information will be provided at the June, July, and August General Meetings. Thank you for making OCIPUG one of the best computer user groups in the country.

1987-88 OCIPUG OFFICE HOLDERS

President	Stan Sabin	968-7307
Vice President	John Goodman	895-3195
Secretary	Steve Riddle	646-7434
Treasurer	Walt Drew	634-3700

DIRECTORS

Richard Sabin	1988	968-3539
Tim Smith	1988	493-2138
Tom Sutro	1988	850-0474
David Carroll	1989	775-3130
Steve Dela	1989	775-8373
Dave Lorenzini	1989	852-8663
Bud Hughes	Past President	751-2530

PEOPLE TO KNOW

Programs	Tim Smith	493-2138
Membership	Tom Sutro	850-0474
SIG Coordinator	Dave Carroll	775-3130
Librarian	Bonnie Ulanovsky	646-5230
Bulletin Board	Richard Sabin	968-3539
OCIPUG Information & Message Line		898-7998

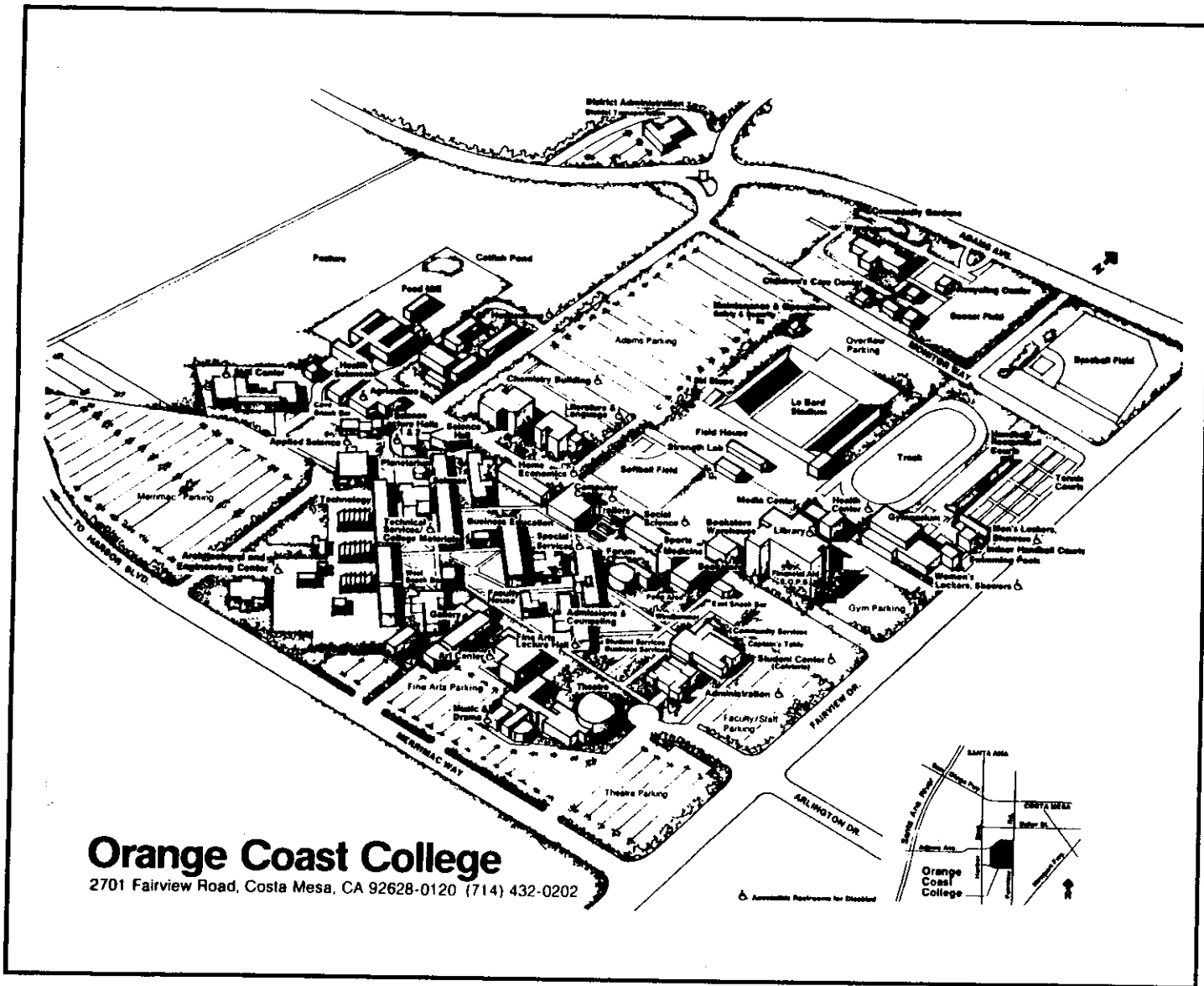
NEWSLETTER STAFF

Steven Dela	Publisher	775-8373
Arthur Boughey	Editor	951-6888
John Goodman	Technical Editor	895-3195
Linda Leydekkers	Features Editor	963-8444
Dave Lorenzini	Associate Editor	852-8663

REMOTE BULLETIN BOARDS

ORANGE COAST IBM PC USER GROUP

OCIPUG BBS Public Line (1200/2400)	964-2034
OCIPUG BBS Members only (1200/2400)	962-6216
STANTON BBS (300/1200/2400)	894-2246
SOFTWARE EXCHANGE (300/1200/2400)	552-3515
THE END OF THE LINE (300/1200/2400)	645-6581



Orange Coast College

2701 Fairview Road, Costa Mesa, CA 92628-0120 (714) 432-0202

♿ Accessible Restrooms for Disabled

Orange Coast IBM PC User Group
Post Office Box 6100-211
Costa Mesa, California 92628

Postmaster: Form 3547 Requested
Return and Forwarding Postage Guaranteed

BULK RATE
U.S. Postage Paid
Costa Mesa, CA
92628
Permit No. 292

R 6-18-88

DATED MATERIAL: DO NOT DELAY