



BUSS-LINE

March

1984

BUSSLINE is published each month by the Central Florida Computer Society, Inc. (Non-Profit) for the purpose of keeping members and others informed of computer-related news and activities of the Society. CFCS meets on the 3rd Sunday of each month, at 2 p.m., in the Orlando Utilities Commission building at 500 So. Orange Avenue in Orlando, and guests and the general public are invited to attend. For information regarding CFCS activities, membership, or advertizing, contact one of the following people:

Bill Wellman, President (305)352-0542
Bob Gardner, V. President 855-2586
Joe Ryals, Secretary 831-7619
John Neel, Treasurer 862-1329
Peter Chesebrough, BUSSLINE 298-9038
Sysop, CFCS Bulletin Bd. (MODEM) 644-8327

SPECIAL INTEREST GROUPS

TRS-80 SIG

Contact: Charlie Finnigan 677-4186
Meets: Kane Furniture, 2601 E. Hwy 50
2nd Sundays of month, 2 p.m.

Heath Users Group (HUG)

Contact: Joe Walker @ 644-6847
Meets: Florida Federal, 919 W. Hwy 436
Last Wednesdays/month, 7:30 p.m.

6800 SIG

Contact: Don Anglin @ 277-2457

Osborne-1 SIG

Contact: Russ Hoffman @ 898-5290

CP/M SIG

Contact: Tom White @ 851-3243
Meets: Florida Federal, 919 W. Hwy 436
3rd Wednesdays/month, 7:30 p.m.

S-100 SIG

Contact: Ray Zimmerman @ 298-0226

PDS (Public Domain Software-CP/M) SIG

Contact: Bob Tate @ 830-7319

CoCo SIG

Contact: John Young @ 841-8928
Meets: Pineloch Lake Condo. Clubroom
2883 "B", So. Osceola Ave.
1st Sat. after main meeting, 7:30

IBM/PC SIG

Contact: Bill Vermillion @ 647-1677

AT RANDOM

by Bill Wellman

Meeting Notice

The next meeting of the CFCS will take place on March 18th at the Expo Center, third floor, Lake Dot room, where we met in February. Joe Lang will demonstrate the OS-9 Unix-like operating system for the 6809 microprocessor. By April we should be back to our old meeting room at the Orlando Utilities Commission Building. I have conferred with a senior person at the OUC and believe that we have satisfactorily resolved some of their unspoken reservations (like "What the heck are we doing meeting there and who said we could?"). However, they could not promise that the room would be ready by March 18th and thus Expo Center one more time.

Orange County Computer Contest

Once again our society has been given the opportunity to serve our community. On March 3rd the Third Annual Orange County Computer Contest was held at the John Young Science Center. It was co-sponsored by the Orange County Council of Teachers of Mathematics, Orange County Schools, JYSC, and CFCS. Our society provided the problems and the judging. Ben Goldfarb was our chairman for this project and since the affair was an unqualified success (at least to the winners) Ben must be awarded the credit. He was ably and enthusiastically aided in the judging by the following society members: Don Anglin, Henry Arnett, Pete Chesebrough, Rodney Hamilton, Randy Hendry, Bob Nadeau, Joe Ryals, and Bob Tate.

The problems (30 of them) were developed by Ben, Randy, Jeff Glover, and volunteer graduate student Mike Eisley. This year the problems were left uncensored with the result that the contest was greatly upgraded in interest and challenge. How challenging were the problems? Well, last year one team

solved all of the problems in the allocated two hours. This year the winning team, Oak Ridge High School, scored with 18 solved out of 30. Second place Winter Park with 14 solved. Third place Edgewater, who narrowly edged out West Orange, with 12 solved.

Bulletin Board Bulletin

The CFCS Bulletin Board, under the able aegis of Hyper-Sysop Bill Vermillion, has made a slight but significant improvement in operating rules which should increase its availability to our members. The new rules allow more limited access to new callers with more restrictions including no ability to leave messages until duly registered. All society members are automatically registered for full access once you contact Bill and receive a password. In discussing these changes with me Bill said, and I quote verbatim, "I am tired of those kids with their bleep-bleep and bleep-bleep computers leaving long and obnoxious messages upon which I must spend long hours to read and delete." (The bleeps are substituted for brand names to avoid offending society members who might just happen to own a bleep-bleep computer.) I agree with Bill's changes and, in fact, would give new users less than twenty minutes - but Bill is such a softy towards newcomers to the modem world.

Upstairs - Downstairs

While we were holding our February meeting at Expo Center (nice facilities at a fair price, really, John) downstairs the last of Computer Expo '84 was in progress. In all fairness it must be difficult to organize and finance a local exposition in face of similar affairs backed by regional and national organizations. Several local stores showed their wares to good advantage. To pick only one - the printer display fronting the entrance was impressive. It was my first sight of the OKIDATA 2410, a 350 CPS "Correspondence" quality dot matrix. Nice demonstration. In addition to normal, expanded and condensed, it offered true elite spacing - in my experience rather rare. Rather pricey though at \$2645. Odd touches: Spiderman; leather goods; life (not computer) insurance.

Who's Watching

This really happened at OC Convention Center

While sitting calmly watching the ducks
Three came to the window to watch me
Since then I have wondered---
When I morosely study a monitor screen
Is it in turn studying me?

FEBRUARY MINUTES

President **Bill Wellman** called the meeting to order at 2:00 P.M., welcoming all members and guests.

All persons present introduced themselves and told what equipment they owned or used.

Joe Ryals, Secretary, read the Treasurer's report for the Treasurer who was unable to attend the meeting.

Reading of the minutes of the last meeting was waived as they are published in the monthly newsletter.

Bill Wellman reported that it was necessary to hold the meeting at the Expo Center because the regular meeting room at OUC was being remodeled into a hearing room. It was not completed in time for the February meeting but there is hope that it will be complete for the next meeting on Sunday, 18 March. (Look elsewhere in this Newsletter for the latest information.) Bill stated that if it is necessary to continue having to pay rental on a meeting place it will be necessary to increase the dues. He asks that anyone knowing of a place we can meet for free or cheap to contact him.

Bill Wellman announced that the annual computer programing contest for local high schools students is rapidly approaching. It is to be held on Saturday March 3, 1984 at the John Young Science Center. **Ben Goldfarb** has volunteered to run the contest portion and **Tom White** will head up the open house and demonstrations in the afternoon. Some additional judges are needed as well as more equipment for the displays. Anyone willing to assist in either capacity should contact these gentlemen. **Ben Goldfarb** commented that the affair is not a commercial enterprise and that there should be no effort to try to sell equipment. **Scott Bishop** and **Danny Goldman** volunteered to provide equipment. **Tom White** gave a briefing on what was expected during the afternoon display and demonstration.

Bob Gardner introduced **Steve Gorney**, Systems Sales Representative with Atlantic Business Computers, Inc., who displayed and demonstrated the Apple Macintosh computer. Steve did a splendid job of demonstrating the capabilities of the Macintosh, which works very much like the Lisa. It is a very compact unit weighing less than 23 pounds. It comes with 128K bytes of RAM and 64K bytes of ROM, a Sony 3 1/2-inch disk drive which holds 400K bytes and uses a disk in a rigid plastic housing. It has a monochrome 9-inch monitor, non-interlaced 60.15-Hz image, 512 by 342 pixel resolution. A mouse is used as a pointing device which is used to manipulate the files. It has a detached 58-key keyboard. It comes with two programs; Mac Paint, a drawing program and Mac Write, a simple word processor. It is possible to select various type fonts in different type sizes. These can be varied at will throughout a document. A mating printer will print whatever is presented on the screen. Many other programs are in the preparation stage and should be released in the near future.

The meeting broke at this point for a coffee break and reconvened in about 45 minutes.

Bill Wellman spoke of a new line printer that he saw at a recent show which would do just about anything in the way of formatting. He had samples of the printouts which were passed around for all to see.

Bill Wellman mentioned two new books on dBASE II programing which he just bought. They are available at Fashion Square.

The SIG chairmen who were present gave a report on the happenings in their SIGs.

Bill Wellman brought up the subject of a new RCPM terminal for the Society which has already been approved by the Board. **Bob Gardner** gave a report on the latest happenings. **Mike Ballard** has volunteered space for the system and several pieces of equipment have been volunteered for use of the Society. The 8 inch drives are in need of repair and a modem is needed. A private telephone line is needed to provide acceptable access time. The committee which is working on the system planning will make a list of their needs and submit it to the Board for action.

There being no further business, the meeting was adjourned at 4:30 P.M.

Respectfully submitted,
Julius W. (Joe) Ryals, Secretary

EVENTS CALENDAR

Mar 9-11 : Orlando Hamcation and computer show, sponsored by the Orlando Amateur Radio Club, held at the Expo Center. For more information, write to Orlando Hamcation, P.O. Box 15142, Orlando, FL 32858.

Mar 18 : General meeting.

Mar 26-28 : Seventh International Conference on Software Engineering. Its theme is "Fifteen Years of Software Engineering: Results and Futures." A software tools fair will be held concurrently. Contact the IEEE Computer Society, P.O. Box 639, Silver Spring, MD 20901. Will be held in Orlando.

Mar 30 - Apr 1 : New York Personal Computer Show, held at the Madison Square Garden. For more information, contact Kengore Corp., (201) 297-2526.

Apr 15 : General meeting

May 20 : General meeting

TAX EXEMPT STATUS

BY VIRTURE OF OUR SOCIETY'S FEDERAL-TAX EXEMPT STATUS, ALL DONORS MAY DEDUCT CONTRIBUTIONS TO THE SOCIETY, INCLUDING MEMBERSHIP DUES, ON THEIR ANNUAL TAX RETURN, AS PROVIDED IN SECTION 170 OF THE INTERNAL REVENUE CODE. BEQUESTS, LEGACIES, DIVISES, TRANSFERS OR GIFTS TO CFCS OR FOR THE SOCIETY'S USE ARE DEDUCTIBLE FOR FEDERAL ESTATE AND GIFT TAX PURPOSES IF THEY MEET THE APPLICABLE PROVISIONS OF SECTIONS 2025, 2106 AND 2522 OF THE CODE. THE SOCIETY WILL ACKNOWLEDGE RECEIPT OF ALL DONATIONS. THE DONOR IS RESPONSIBLE FOR ESTABLISHING THE VALUE OF THE DONATION AND HENCE THE CLAIMED DEDUCTION.

The World's Most Expensive Syntax Error

by Bob Gardner

No, I didn't make the World's most expensive syntax error, but I learned what it was recently when I attended the Air Force conference on Technology in Training and Education at Sheppard AFB in beautiful downtown Wichita Falls, Texas. (Its near Lawton, Oklahoma, in case you didn't know where it was). During a tutorial session on ADA (ADApability, reADAbility) given by Major Richard Bolz, formerly of the Air Force Academy, we who claimed to have programmed FORTRAN were asked to explain how the following code fragment would work:

```
DO 10 I=1.3
```

```
~~~~~
~~~~~
~~~~~
```

10 CONTINUE

We said it would execute the code body three times. But noooooo... thats 1,3 not 1.3! So somebody said it might truncate 1.3 to 1 and execute the code body once, but thats not it either.

It assigns 1.3 to a weird variable called DO10I (FORTRAN ignores spaces), executes the code body once, ignores the spurious continue statement, and continues merrily on. Maj. Bolz said he had been accused of inventing this example to reinforce the case for strongly typed languages like Ada, but he said that this example was the syntax error that lost one of the Venus probes a few years back!

He also mentioned that one of his students at the academy had been John Mauchly's grandson, (J. Prespert Ekert and John Mauchly: inventors of the flip-flop circuit, a fairly important component in computers), who had been programming since age 7 and had written huge assembly programs before entering the academy, but had to be unlearned from all his bad (unstructured) programming practices at the start of the course. Maj. Bolz recommends teaching children to program in Logo, but not in BASIC, because once kids get used to thinking in BASIC, its hard to get them to change to something like Ada or Pascal. I think this view is the view espoused by Edsgar Dijkstra. So lets all run right out and learn Ada, cause our future as programmers might depend on it. Its here now and coming on strong.



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	4 for \$18.95	
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Line Printer 6 or 8	3 for \$13.95	
DMP 200	3 for \$13.95	
DMP 500	3 for \$15.95	
Epson		
MX-80 & MX-80 F/T	3 for \$16.95	2 for \$19.95
MX-100	3 for \$16.95	1 for \$21.95
MX-80 & 80 F/T	(Red/Brown/Blue/Green)	2 for \$19.95
OKIDATA		
80 - 82A - 83A	4 for \$13.95	4 for \$13.95
92 - 93	4 for \$13.95	4 for \$13.95
84	2 for \$13.95	2 for \$13.95
IBM		
Same as Epson 80		
NEC		
PC 8023	3 for \$15.95	
C. ITOH		
Prowriter or 8510	3 for \$13.95	
Prowriter 2	3 for \$13.95	

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Radio Shack		
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(stops printer at end of ribbon)		Not reloadable
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		Reloadable
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CP/M SIG

By

Tom White

Gordon Finley

The CP/M Group holds its regular meeting on the 3rd Wednesday of each month at the Florida Federal Savings and Loan, 916 West Highway 436 in Altamonte Springs at 7:30 PM. The meeting provides a forum for the discussion and exchange of information concerning CP/M and related topics. The format is a combination of formal presentation and informal participation by all attendees in discussing new developments which have come to their attention, breakthroughs which they have made in their applications of CP/M, and/or problems which they are currently working on or encountering in the use of CP/M. Meetings are open to CFCS members and their guests having an interest in CP/M.

Scheduled meetings are as follows:

- 2/15/84 Advanced CP/M -- BIOS Customization. See Highlights below.
- 3/21/84 Introductory CP/M -- Basic Commands
- 4/18/84 Advanced CP/M -- BIOS System Generation

The formal portion of the meeting is from 7:30 PM to 9:00 PM. From 9:00 PM to 10:00 PM, the meeting is opened for informal discussion groups and equipment demonstrations of CP/M. Every third month the meeting content is structured primarily for those who are new to CP/M.

HIGHLIGHTS OF THE FEBRUARY 15 MEETING

As previously announced, this Feb. 15 meeting was targeted for the more advanced users of CP/M, the main topic being BIOS CUSTOMIZATION. D.E. Cortesi's book INSIDE CP/M, pp244-265 was used as the springboard for discussion.

A review was made of the three basic BIOS functions which are alterable by the user for adapting CP/M to specific hardware and user applications. They are the BIOS Start Functions, the BIOS Disk Functions and the BIOS Serial I/O Functions. Bob Hines, Larry Snyder, Ray Zimmerman, Bob Tate, Bob Thrush, Hal Osborne, Jim Smith, Bob Gardner and Gordon Finley all explained BIOS changes which they had undertaken at one time or another to accomplish specific objectives.

Bob Tate advised that the progression for those doing work with the BIOS usually begins with the I/O functions and then advances up to the Disk functions. Bob has been doing extensive customization of the Disk functions in making his I-Omega drives operational.

Bob Thrush presented a chalk talk explaining how Lanier's MAKECMD program allows 8 bit programs to run under CP/M86 on Compupro's 816 computer with the dual 8085/8088 CPUs. While normal 8 bit code is executed by the 8085, all BDOS calls are done by the 8088; the 8085 sees a pseudo BDOS/BIOS and jumps to the 8088. Further comparison was made between the Lanier system and CP/M 8-16. Many thanks Bob for your efforts and fine presentation.

News and Current Events items were reported. Bob Hines highly recommended Gordon Finley's PCON and screen dump programs as excellent utilities. Bob's dBase II general ledger is now complete. Larry Snyder expects to have a dBase II tax program soon on his Bulletin Board. He stated that very attractive pricing is being made available for Z-100 systems. Bob Tate briefly reviewed four books covering CP/M and announced more PDS disks will be available soon.

The meeting was adjourned at 9:00PM with the announcements:

Informal discussions will continue until 10:00PM.

Tom White has set up his Apple clone to demonstrate an example of a non-permanent change to the BIOS.

The next meeting, March 21, is targeted for newcomers to CP/M and will cover basic commands (Murtha and Waite's CP/M PRIMER, Chapters 2 & 3). Herb Ford will have his KPRO for demo operating under CP/M 2.2

The April 18 meeting will again revert to Advanced CP/M with discussion centering around Cortesi's Inside CP/M, BIOS Generation, pp265-271.

'Til then HAPPY HACKING AND COMPUTING

by Bob Gardner

I want all my computer buddies to know how happy I am with my solar hot water heater. Here's how to compute how much you are paying for hot water now:

First, compute the number of gallons of hot water used in your house per day. I use 15 gal for a load of laundry, 20 gal for a shower, 20 gal for a dishwasher load etc.

Next, multiply this by 6.6 lbs. per gallon to get the number of pounds of water used.

Now figure the number of degrees the water has to be heated. I assume the cold water input is 70 deg F. and you know where you have your thermostat set: probably about 130 deg F., so now you can figure the BTUs needed to heat those gallons: pounds x delta T. (Ex: 100 gal per day x 6.6 lb/gal = 660 lb/day x 60 deg temp rise = 39,600 BTU/day needed.) Divide BTU/day by 3412 to get the number of KWHr needed (11.6 in our example).

Multiply this by the cost per KWHr (about \$.07) to get cost per day and mult this by 30 to get monthly cost. (About \$24 in our example.) This is the amount per month you can deduct from the bill you are paying now when you install your solar hot water heater. The size of your storage tank determines how many BTUs can be stored, and the collector area determines the rate of heating. My system is one 3' x 6' collector and my regular old 40 gal hot water heater tank, and its ok for a family of three. You need 2 collectors and/or an 80 gal tank for bigger families than this.

A system like this goes for upwards of \$2000 but remember that you get 40% back from Uncle Sam the year you install it, so figure about a 60 month pay back period (\$1200 at \$20 a month) before its really free, but if you can afford the lump at the beginning, its nice to see the bill drop right away. This makes sense if you have a southern exposure and plan to stay in your house for nother 10 years or so. By then you can imagine what OUC will be getting per KWHr.

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A PAGE OF
HISTORY

CENTRAL FLORIDA COMPUTER CLUB

NEWSLETTER

December 1, 1977

As of this month we are one year old!! Our first meeting was held at my home early in December, and it is a real satisfaction to know that most of the attendees of that meeting are still attending on a regular basis. Our growth has been steady with the total paid membership approaching fifty and new members joining every month.

In the opinion of those that I talked to, last meeting was one of the best attended that we have had so far, and the program and equipment on hand was also the finest up to date. Dave Trimble's presentation on the workings and comparisons of the 8080 and the 6800 was outstanding and very helpful to all of us. Ron Willoby's second session on BASIC was equally good and was very greatly appreciated by the members. An outstanding collection of equipment brought in by a lot of the members rounded out a really worth while meeting.

The membership voted to move the date of our next meeting up to DECEMBER 11, 1977 so as to provide a little more cushion between the meeting and Christmas, so mark your calendar so you wont miss the meeting. January's meeting will go back to our regular third Sunday which falls on January 15th.

Next meeting, Ron Willoby is going to give us a full session on more BASIC programming. This should be of almost universal interest as it appears that the BASIC language has become almost the standard for the personal computer community.

The fact that most of our programs have been put on by people within our own organization is a very encouraging and healthy thing for the club. Most of us possess some kind of unique knowledge that would be of help to the other members so lets all work closely with Don Anglin, our Program Chairman, to help him put together more interesting programs for the up coming new year.

John Neel, our treasurer, is bringing some additional membership registration cards over to me that have his name and address on the reverse side. If he gets them to me in time for the mailing of this letter, I will inclose a couple in each envelope so that when you find a new member, you will have John's address handy so that you can send the card and the \$10.00 annual dues in to him.

Since this will be the last letter that I will be sending out as the Club's President, I want to thank all of you for your efforts in getting the organization up and running, and especially I want to thank our incoming new President, Tom Oram, for making the meeting room at Orlando Utilities Commission available to us.

As usual as a final note, I want to again urge any and all of you to bring in your equipment projects, computers or what ever for the rest of us to see. It really adds a lot to the meetings to see the other fellow's accomplishments. This invitation goes double for our Computer Store proprietors. Economy Computing has been showing their wares regularly, but Jim Walton, we haven't seen enough of your offerings, but worst of all Byte Shop over there on Cocoa Beach, you haven't put in an appearance yet. How about it John and Jerry ??

To those of you that wont be able to make the meeting, Happy Holidays, to the rest, See you on the 11th.

Bill Kerns



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