#  

THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

## PUBLISHED MONTHLY IN COLUMBUS OHIO VOL 1 NO 6 MAY



The Gpirit of $\overline{\text { The is }}$ the official newsletter of the Central Ohio Ninety-Niner"S Inc. It is published monthly by and for it "s members in Columbus Ohio.

Sutoseription price is Ten (\$10.) per year to mon membersy or \$1.00 per single copy. Nembers of CONNI will reeteive the news letter at no charge. (as long as thejr clues are current.)

Spirit of 99 dopss accept commercial adverthment as well as ads from members. (which are frees).
members ads should be 2 t words or less, and subinitted on tape or type written. Commercial ad rates are as follows: 1/4 page, \$25.; 1/2 page. $\$ 45$. Full page, $\$ 75$. Business card (2x3 1/2), \$5. Flease submit all ad copy CAMEFA FEADY tos spirit of 99 c/o Advertising department. this news letter. (Address below).

We also accept newsworthy Articles, Frograms, Subroutines, Overviews, Underviews, Interviews \& Discounte.

All articles should be written with the TEX-GCRLBE: TI-FWFITERs or $9 \varnothing$ typewriter programs and documented. A copy of these furbgrams and our format will be available to those who wish to sh to participate.

We reserve the right to edit material for space, and/or content. We will not knowingly print copyright material without the permission of the author.

Central Ohio Ninety-Niners Inc. is a non-profit orgennization composed of members who own or usse a a TI994/A and its related products. And whose main main objective is the exchange of Educationel and swicntific information for the purpoese of Computer 1 iteracy.

CONN M Meetings are held 2nd Saturdey of each month at 23 West gecond Avenue (Unless otherwise noted) Side Entrancey Farking is available. Meetings Etart gam and run untill noon.
Meetirigs are open to the putlic. Membership dues are $\$ 15 . \quad$ per year and incude imeadiate members of your family.
Flease address all Duestions to this newsletter $c / 0$ Membership committee: An application has been placed on the last page of this newsletter: Should you simply wish to join our Grganjzation.

Write to: eftrit of $9 \square / \infty$

 I. $\%$ you have any Gucwitwn - Comb; Fat Getura, Eutuor;
 sec maburship list for other mumbers

## FOAD FDR YOUR TI!

EODKS: LEAFNING/FROGFAMMING/USING QUALITY EFD FAFTY SOFTWARE
FRODUCTS SFECIFICALLY FOF THE 4/A MAFKETING SEFVICES AVAILAELE SEMD FOF FFEE BFOCHUFE CFEATIVE FOFCES 54 GILSONIA DFIVE CTNCINNATI, OHIO 43205

In last months article 1 talked about illusions. This is certainly what you are trying to create in $3-\mathrm{D}$ graphics. The program below gives the screen more of a S -d effect. Since Basic runs so slowly you can get an idea of how the progran was written before you read the lines.

This is where the use of a sprite or a char cocle program saves time. See lines $170,120,220,260,320$, and 360 . The shapes are placed on the screen in the usual manner. The routine at the end is used instead of the print statement to place "g9"er" on the screen. See if you can figure out how it works.
The advantage of the routine is that you can place an Alphanumeric statement anywhere, not just at line 24.
If you can't work this out, ask me at the next meeting. You might also want to join the programing coarse I will be giving in conjunction with Comander Systems lnc. See you at the next meeting, at COSI, don't FOFGET !!! NOTE: Gee Biggies Eytes (Ed).

| 50 Rem 3-d SCREEN by roger | Wills 4/83 | 480 CALL COLOR $4,9,16)$ |
| :---: | :---: | :---: |
| 100 CALL CLER |  | 170 REM |
| 110 Call Screen(9) |  | $50060 T 0500$ |
| 120 CALL CHAR (45, ") |  | 510 FOR $I=1$ TO ! EM (ms) |
| 130 FOR $Y=2$ T0 24 |  |  |
| 140 CALL HCHAR(Y, $3,45,28)$ |  | 530 CALL HCHAR(Y, $X+1$, CODE) |
| 150 CALL COLOR (2, 16, 16) |  | 540 MEXI I |
| 160 NEXT Y |  | 550 RETURN |

170 CALL CHAR (64, "80COEOFOFAFCFEFF")
$180 \operatorname{CALL} \operatorname{COLOR}(5,9,16)$
190 CALL HCHAR (2, 3,64 )
200 CALL $\operatorname{HCHAR}(3,4,64)$
210 CALL HCHAR $(4,5,64)$
220 CALL CHAR(6b, "FFFEFCF8FOEOC080")
230 CALL HCHAR $(24,3,66)$
240 CALL HCHAR $(23,4,66)$
250 CALL HCHAR $(22,5,66)$
260 CALL CHAR(128, "FFFFFFFFFFFFFFFF")
270 CALL COLOR $(13,9,9)$
280 CALL VCHAR $(3,3,128,21)$
290 CALL VCHAR $(4,4,128,19)$
300 CALL VCHAR $3,30,128,21$ )
310 CALL VCHAR $(4,29,128,19)$
320 CALL CHAR ( 80, " 0103070 FIF3F7FFF" )
330 CALL HCHAR $(2,30,80)$
340 CALL HCHAR $(3,29,80)$
350 CALL COLOR $(7,9,16)$
360 CALL CHAR (89, 'FFFF3FIFOF070301")
370 CALL VCHAR $(5,5,128,17)$
380 CALL HCHAR $(4,28,80)$
390 CALL HCHAR $(22,28,89)$
400 CALL COLOR $(8,9,16)$
410 Call VChar $(5,28,128,17)$
420 CALL HCHAR $(24,30,89)$
430 CALL HCHAR $23,29,89$ )
$440 \gamma=12$
$450 x=13$
$460: 15=" 99{ }^{\prime} R^{\prime}$
470 GuSus 510

## FFDGEAAMHMIMG COUNESE

INTRODUCTION TO FROGRAMMING IN TI EAGIC:

by Fioger Wills \& Comander Systems

Contact: Foger Wills $889-9011$, or
Faula Eratton 895-1468 for details


SOMEEODY FINALLY WFOTE A GOOD ONE!


100 Different programs for the TIgQ/4A programed in TI Basicy No Feripherels needed.
GAFES-FUZZLES-EDUCATIONAL MUSIC-D GFLAYG-UTILITYG-AII
Or-iginal. -Debugged-User-FriendlyThoroughly Self-Documented. Orily蛙. Ea!Minimum Order $\$ 12$. CALL or WFITE for Catalog (614) 235-3545, 156 Collingwood Avenue Columbus: Dhio, 432 S

## By Tim Feterson

The name of it is SMAFT FROGFAMMING GUIDE FDF GFRTTES and it was written by Craig Miller. It was advertised before it was printed and the price was misquoted, but it finally arrived and was worth waiting for. It iss sold by Millers Graphics, 1475 w. Cypress Ave., Gan Dimas, CA $9177 \%$. The price turned out te be $\boldsymbol{w}^{2} 45$ postpaid.
It is a jittle paperbound book of 74 pages full of programming tips, trieks, thimge that TI didn"t tell you. There is only one complete program, but the book is full of short routines that do amezing thinges with spmites. and -.. the purpose and logic of every program line is explained in great detail and in plain nomtechnical language! This is the only programming book I have ever seen that really showed me how to put ju all together and explained why. This boot: is not far the beginining programmerg but if you ere ready to try to make sprites turn somersaultay don't miss it.

THE A TO $Z$ EDOF DF COMPUTEF GAMES by Thomas C. McIntire published by TAE EOOL: 1979
Translating programs into TI Easic from other dialects of the language is usually more hassie than ju"s worth but these programs are the exteption. There are 26 ganes. some of them toosimple but some quite good. They are written in tho most basic: Basic - I don't think there is a PEEG, FOKE or FOF in the boot: You might have to change a few semi-colons, adjust some random statementey and watch out for simple and subscripted variables wi th the seme name, but that" g all. There are no graphics and rio soundy of course, sa you can add your own. And. best of all, the programlogic of each program is described in detaj. This is a book thet you c.an really learn from.

64 CHAFAACTER CODE GFFITE GENERATOF FROGFAM.. Enables you to draw a shape and comverts it to bA code XEASIC sprite shown as call magnify (3) Members \$10. Non-Members \$14.

SFEECH SYNTHESIG...Join two words together to form a new one using Yocabulary. Word Epelling game... XEBASIC \$日. Members. \$1.
Non-members.
FOLAR GFAFHJCS...Iimited to straight ines? frogram shows you how to create curved patterns and shapes, XBASIC sio. Members, $\$ 14$.
Non-Members. XBASIC, Also keyboerd Art for Children and a number of useful routines.
FEDUCED FATES for multiple purcherses, Also will trade.
Fevenues generated from sales to Nom-Members will be in part donated to CONNI. CALL Foger wills 889-9011, or write 345 Glen Meadow Ct.
Dublin 43017

## GWEFGYEMA ***DOW-4 GAZELLE FLIGHT EIMILATOF:****

Eeing a professional pilot, I had a few misqivings about this TI EASIE 1 bf figint simulator especially in view of the excellence of the IEM FC sjmulator I viewed recentiy. In fact: it is quite impressive in several respects, good in many, and downright poor in only a few mostly the result of the limitations of TI EASIC. All in all the author, John Dow has used the memory well, not Eoncerning himself with titie gcreens and the like. He "puts the power in the program" and does it wejl. Don"t make the mistake of thinking that this is a "game". In fact, it $i s$ a fairly complete instrument fligft "primer" with 4 pages of documentation covering such topics as The Basics of Flying; Instrumentation, and Navigation. He states "up frone" that due to the woncentration, it is not recommended for yourig children. I might go so far as to siay that I wouldn t recomnend it uniess you are ready to tinuctile down and study flying a little Even then you will have trouble "landing" consistently. I managed about $Z$ out of 5 after about 2 hours practice. The interactions of the flight controls, power, and instrumentation were quite good imdeed requiring a repid "rooss checking" to navigate to landing. Instruments onjy to landing iss, in fat
urirealistic, the hardest part to accomplish, and the least usefui to someone really trying to jearn flying from this program. The navigation and Eactait displays will, however, aid the fledgling pilot to better umderstand vof and positioning himseif with it! This fact alone matees it worth the money ( $\$ \mathrm{so}$ ) if you are meally gerious about learning to fly.

The weateest parts of the FUN were the tiny instrument needles - hard to read - amd the "crash and burn with siren" (I looped arround it after the $4 t h$ or Eth erash), out of plefe in a quality tutoriel. Contral smoothiness was non-exisstant, BASIC "greaphic jer-": much in evidence.

Thumbs up - Don't let your jet Iag! D. Fi. Smith


## Computer Anxiety

Jerkophobia: "fear of looking stupid". This word is not real, so far I have not found any word for it. or fear of computers.
these words themselves would not carry any importance. The feary however is Something we need to deal with.

A few years back,... (before they changed the water), you simply told the Data Frocessing people what it was you wanted. They would return little green and white print-out sheets to you. You were happy, you hardly ever had to deal directly with a computer.

Today things are a little different. Millions of people are finding they must use a computer to carry out their job routine. This is creating "fear" for many of them. What are these fears all about?

Novices are afraid they will break the machine Other users are intimidated by Computer jargon and error messages. Some are afraid of looking stupid, or perhaps hitting the wrong tey and "blowing up the machine.

All of these urfounded fears can slow down productivity, cause them to lose their self esteem and come down with a bad case of Computer Anxiety.
To combat this fears we must
know what the basis of it amounts to. Not being able to see the immediate effect of your actions, having to "Trust a coold emotionless machine. This forced blindness can lead to problems such as supergstition and unhappiness. Computer jargon increases fear among the computer illiterate. Feference manuals are more often than not unclear. Lastly, Some Computers seem to be designed to matse the user feel stupid.

EXAMFLES: "STATMENT EFROR": "INFUT ERFROR", "FATAL ERROR/RUN ABDRTED"...

That last one scares me. more commonly seen are:
"SYNTAX ERFOR", "WHAT?"s Why not "Unmatched left Farenthesis", or "Line does not EXIST, Last line is (XXXX)"or even "Too many cornmas", which would guide the user to correct the mistake. Could they less abstract?,...I think 50.
when I write a program I try to make the user feel at ease and relaxed. Let them know that it"s not MAGIC, Help mate it clear exactly what is talking place. Mate your programs GODF FFOOF! Add subroutines that loop them out of errors like, hitting the wrong key or calling a peripheral that"s not connected

Let"s stamp out Computer Illiteracy. Here are some tips; Feople in their Mid 30 es and younger (Especially women), adapt more quickly. Those over 50 are more susceptible to Computer Anxiety, although they will work harder at learning because they don"t want to look stupid.
It's like a new culture, kids pict: it up first, and like I said their elders don't want to look stupid.
Middle Managers are the hardest nuts to crack. They got where they ere hy being experts at their function. Now that function has changged.

We as a user group can help end Computer Anxiety by putting ourselves in the users" shoes. Thinl: about it when you write your next program or try explaining something about computeres to another person.
excerpts from NY TIMES article. (ED)
CERUIMEMTEFFFWFISES

* Digcount hafidwafe \% FEFifhefals *
* 3687 MEXic口 avenue westefiville *
* OHIO 43OB1 CALL (614) 890-7725 *
* Send sase for ratalog *


## 

NEXT MEETING - COSI!!!
We will be meeting at The Center of Science and Incustry, 2eg East Eroad Street. ir Columbus. Meeting times 10:A.M. in the Lazarus Auditorium. This is an experiment, both for us, and COSI. Let"s matee it a suceessful event so that we can wort: out a permanent arrangement. We need to leave the room clean and tidy. In return for letting us use their facilities we will help cosi with some projects. We cem discuss what some of these projects might be at the next meeting.
GEE YOU AT GOSI DN SATLFDAY MAY 14 10: A.M.

Foger wid 15 Fresticfent

## TEx MESHCTME

Where is the $99 / 2 ?$
Well if you have tried to buy ones you already know they are not
in the stores. Where are they? TEXAS SAYS "The $99 / 2$ will be on the dealers
shelves in JUNE BY' After the Detroit show.... (We"Il be looking for it!!)
How about the new $\dot{59 / 8 \%}$ rumning F-CODE by default. TEXAS couldn*t tell me. NEW GIVEAWAY!!!! Want a Free F-BOX ?. Euy any 3 of thesea Memory Discdrive, Expansion Card, Multi-Flan, TIwriter: FSこE2, F-Card, Disc Controller Card.
And pict: up your free F-EON. (source is message 104-96. Computeres and Electronics, Compuserve bulletin
board. Washinton D.C. userg group, TI says it*s official. One more thing TEXASy isthere a significant. differemce in the two versions of Extended Easic? Hello? Hello? Operator?...

GLEMUSI
10.30

FFESIDENTS OFENING FEMARKS MINUTES TFEASUFEFG FEFFOFT OLD EUSIVESS MEMEEFSHIF

CAFiDS NEWSLETTEF COFIER
NEWEUSSINESS
DISCUSS COSI OCLC VISJT OFEN FOFUN

"Another day, another dollar!"
CDMHMMDEFG SYSTEMS
Comander Systems, Inc. is an authorized full service dealer for Texas Instruments, offering a complete line of Frofessional Computers and Eusiness systems. Just recently authorized to carry the TI994/A, Commander Gystems offers a large
assortment of software as well as consultation.
Commander Systems new retail outlet is in the F.L.A.G. Center, located at the cormer of
Clevel and Avente and Schroot: Foad in Westerville. Telephone us at 988-99日7 for further information.

FUTTING IT ALL TOGETHER

## by Jim Feterson

In the March Newsletter，Biggie gave you my little routine to generate random symmetrical redefined characters．So，sombody asked me．．．but what is it good for？Well，Eiggie only gives you the potatoes．．．your＂e supposed to peel them and make your own stew．But，if you haven＇t learned to cook yet，try this．
change line 111 to read 111 DEF $\mathrm{S}=(\mathrm{CH}-24) / \mathrm{g}$ ．DELETE LINE 13O．ADD A LINE $195 \mathrm{FOF} \mathrm{CH}=1 \mathrm{~S}, \mathrm{TO} 152$ STEFG．DELETE LINES
260，270，280，AND 290．CHANGE LINE 320 TO READ $Y=I N T(15 * F N D+2)$ ． CHANGE LINE 330 TO IF $Y=S$ THEN 320．Now，ADD these lines．．． 340 CALL COLOF（S，$s, Y$ ．SEO NEXT CH． $360 \mathrm{CH}=136 . \quad 370 \mathrm{TX}=0.380 \mathrm{FOF} \quad X=1$ TO ङ． 390 CALL
HCHAF $(X, 1+X, C H, 29-X-T X) .400$ CALL HCHAF（ $25-X, 1+X, C H, 29-X-T X)$ ． 410 CALL VCHAF：$(X, 1+X, C H, 25-X-T X) .420$ CALL VCHAR $(X, \Xi 1-X, C H, 25-X-T X)$ ． $430 \mathrm{CH}=\mathrm{CH}+8.440 \quad \mathrm{TX}=\mathrm{TX}+1 . \quad 450$
NEXT X． 460 GOTO 195．Naw FUNit．
If you did everything right，your screen should have a triple borcter constantly changing in design and color．You take it from there．
Why don＂t you try changing the figure 136 in lines 195 and 360 to 40 ，and change LIME 300 to FOF $x=1$ To 12 ．
Sombody else said it was a great routine but they couldn＂t figure out how it worked．The two books that came with your Computer tell you WHAT all the different statements do，but they don＇t say much about How to put it．all together
Let．g take a look at the
original routine．The real key is in the DATA statement in LINE 160．if you look at the chart on page 109 of Eeginners Basic （fig\＃1．）you will see that 1 represents a DOT turned ON in the $4 T H$ FOSITION，and $B$
represents a DOT turned ON in the 1 GT FOSITION．．．In other words，they are MIFROF IMAGES of each other．

| BLOCKS | $\begin{aligned} \text { EINARY } \\ \text { DOT } \\ \text { CODE } \end{aligned}$ | HEX <br> CODE | You will |
| :---: | :---: | :---: | :---: |
| $1 T$ | 0000 | 0 | find that |
| －薙 | 0001 | 1 | each pair |
| \％ | 0010 | 2 | in the DA |
| Wers | 0011 | 3 | －－TA statm |
|  | 0100 | 4 | －ment is a |
|  | 0101 | 5 | M1FROE |
|  | 0110 | 6 | IMAEE．So |
|  | 0111 | 7 | if we Fied |
|  | 1000 | 8 | －efine a |
| 碞 T | 1001 | 9 | Character |
|  | 1010 | A | usirig on－ |
|  | 1011 | B | ly those |
|  | 1100 | C | pairs， |
|  | 1101 | D | it will |
|  | 1110 | E | be sym－ |
|  | 1111 | F | metrical |
|  | fig 相1． |  | \％1eft |

And if we redefine the top half of a character using 4 of those pairs，from the TOF down，and use the GAME 4 pairs from the BOTTOM up．get it？So，we use that J LDOF in LINEG 170－190 to read thse pairs into 16 subscripts of At；and since there are more then 10 subscripts，we had to tell the Computer beforehand to save space for them，in LINE 120 The first time through the Loof： $J=1$ so $A$（ 1 ）＝18，the first item to be read in the DATA statement． The next time around， $\mathrm{J}=2 \mathrm{so}$ As （2）$=24 .$. etc．，through $A(16)=F F$ ． Why do this？So that we can use these items of DATA as we need them in The newt step．Now，the J LOOF in $120-240$ FUNS 4 times to build the HEXadecimal code for our medefined character．Each time around．$x$ becomes a FANDDM VALUE between 1 and 16．．．We told it to FANDOMIZE in LINE 150．The first time around，the Computer has never been given a value for Es \％C ，so they equal nothing． Suppose that 16 is picked as the VALUE of $X$ ．Therefore，Ew equals Es and As（16）；日蛣 was zilch and
 Cb：FF．Next time around，let＂s Eay that $x=2 . \quad A$（2）$=24$, right？ Et already equals FF，so E\＄\＆At（2）＝FF24．But，note the different format in LINE 23O．C 0 first becomes 24 and then it＇s
previous value of FFis tacked on, to become 24FF - we are building the bottom half of the character from the EOTTOM up. Suppase that on the finas two rounds, $X=1$ and $X=3$. $A$ s $(1)=18$ and $A(3)=3 C$, so E क becomes FF24183C and $C \$$ becomes SC1824FF. Finally, in LINE 250 we define ASCII character 3E (from LINE 130) as being HEX code B B plus Cक, or FF2418SCSC1824FF. LINES $250-270$ FFINT, DISFLAY \& SFACE our new character. LINE 290 says that NEXT time around we will redefine ASCII character 34 -- But before we ga back: around in Liness 30-330, we have an important bit of house cleaning to do. When variables are added onto
 $T=T+1$, They must be cancelled out before they are used again from seratch. Bs still equals FF241bSC and we want it to start out equalling nothing again. So, LINES $300-310$ say that $\mathrm{B}=\mathrm{Q}$ \% $\mathrm{C}=$ Nuta. Since we never tell the
Compurer what Nul.t is it equal: nothing.
In our modified version, we have deleted the instructions to print the new Character. Instead of redefining character 3 s , we nest the whole routine within the CH-LOOF 195-350, which run 3 times in stepsof 8 to redefine characters 136,144 and 152. Each time around, $Y$ in LINE 320 becomes a RANDOM color code number between 2 and is (we don"t want the transparent color \#1). We also don't want the foreground and backround colors to be the same. If they are LINE 350 goes back for another choice. Then, LINE 340 says that character set $S$ will be foreground color 5 , backround color Y. Where did the G come from? To keep things simple in LINES 3SO- 340 , we predeffined 5 back in LINE 111. as being the character set number of the character we are redefining on each round. 136 minus 24 divided by 8 equals character set 14, right? Now, the rest of the routine prints out. those concentric decreasing

IVI leave it to you to figure out how to eliminatte the need for LINES 370 and 440 .

EIUU1ES E ITTS
50 KEA CDLOR DEAO BY JIM PETERSON
100 CALL CLEAR
110 DIM A⒃
120 DEF $S=(\mathrm{CH}-24) / 8$
130 DATA $18,24,3 C, 42,5 A, 86,7 E, 81,99,00, A 5, B D, C 3, D B, E 7, F F$
140 FOR $J=1$ TO 16
150 READ A! (J)
160 NEXT J
170 RANDOMIZE
180 FOR CH=40 TO 152 STEP B
190 FOR L=1 TO 4
$200 x=1 N T 116 t R N D+11$

$220 \mathrm{C}=\mathrm{A} \mid$ (X) C C $\$$
230 NEXT L
240 CALL CHAR (CH, ESLC $\$$
$250 \mathrm{BS}=\mathrm{KUL} \mathrm{s}$

$270 \gamma=1 N T(15$ IRND +2$)$
280 IF $Y=5$ THEN 270
200 CAL Colorls, $s, y$
30 GLD
$301 \quad i=1+1$
302 IF THI THEN 180
$310 \mathrm{CH}=40$
320 TX=0
330 FOR $X=1$ TO 12
340 CALL HCHAR $(X, 1+X, C H, 29-X,-T X)$
350 CALL HCHAR $(25-x, 1+x$, CH, $29-x-$ TX)
360 CALL VCHAR $(X, 1+X, C H, 25-X-T X)$
370 CALL VCIAR (X, 31-X, CH, 25-X-TX)
$380 \mathrm{CH}=\mathrm{CH}+8$
$390 T x=T X+1$
400 NEXT X
$\$ 106070180$

50 call clear
100 rem put a kessage ary herere on the screen with OUT SCROLLING.
$110 x=1$
$120 Y=10$
130 MIF $=$ PPRINT THIS KESSAGE,"
140 GOSUB 1500
150 REM NEXT MESSAGE
$160 x=5$
$170 \gamma=23$
150 M\$ 5 "PRESS ANY KEY TO CONIINUE"
190 GOSUB 1500
200 REM ERASE MESSAGE
$210 x=5$
$220 \mathrm{Y}=23$




```
990 SEM CALL CLEAR
1000 PRINT ::"RED RIDING HOOD: HAIT AMILE (J)'::
1010 L=3
1020 60T0 580
1030 V=3
1040 60T0 590
1050 V=2
1060 6070 590
1070 x=1NT(X)
108060T0 620
1090 CALL CLEAR
1100 FRINT : :AAN ELDERLY HOMAN COMES DUT": " TO CHASE
    YOU AGAIH::
111060T0 140
1120 CALL CLEAR
IIJO PRINT ::"THE HOLF ARRIVES AND SHOKS"::"YOU THE
    WAY HDEE"::
1140 60T0 710
1150 ENO
```


## L＿ETTEFTS

Dearest Timong
A computer by any other name jmight worl：as well．．．To buy or not to buy．．．What is the question？whether tis better to procure a FCC now or wait玉i \％months hence．．．（tio buy now would mean to use now to wait could mean a better FC or 1 ower price．What say your I know not：．．．The new FCs are upon mes in numbers of one bach day．If be you a game player．．．．it matters mot．．．．But were it a busj．－ Miess venture a triennial would have been too 1 ong Wait．．Ee you a keeper of records price would tie a trifling when measured agianst the experience to be gained．．．The knowledge of the Micro；so lomg hidden from those of us not privy
 to the electronic elete．

## フHのNばS

CONNI WISHES TO THANK COMMANDEF SYSTEMS FOF THEIF GENEFOSITY IN FFOVIDEING A LUNCH
AND CONFEFENCE FOOM
FOF OUF GFFTL GUSINESS MEETING．

## IS THEFE A MEETING SCHEDULED FOR OCLC？

We know what they ares but Fnow not what they may be． The chioce be your ownsyour frnowledge need be only that of it＂s speed of execution
－and the language spoken to it．．Yet all is not lost if you know not of these things Dnay the very seilled will Ever note the difference． For the wordsmith；the sim－ ple eight bit FO is more than adequater But the keeper of recorrds may require 1 arger memory （usualy a jobit）．How use cioth breed a habit in man． The design of the hardware \％software remajn what $i \in$ jmportant in the end．

You must remember in vour quest for your dream machine newer \＆better FC＂$=$ will come \＆go：You will then realize．．．this is the way it will ben It is only then that it will matter no lon… ger＊The one that suits best your meedsy is what you need．．．．

