

79  
FEST-WEST '88  
SAN DIEGO  
FEBRUARY  
18 - 19  
PLAN AHEAD!  
BE THERE



**LA 99ers**

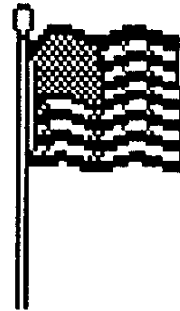
**COMPUTER GROUP**

**Newsletter**

VOL 7 NO 10 LOS ANGELES CA OCT 1988

**GEORGE STEFFEN**  
SEPTEMBER 29, 1988

REST IN PEACE OUR FRIEND



TERRIES CORNER

IT WAS THE WORST OF TIMES

Susan Steffen Lehrer called me with great thanks and hopeful enthusiasm about her father George. This was the message I delivered at the September 28th L A 99er User Group meeting. Within 8 hours George was gone. I somehow feel that we gave him his release. I have not been able until now to be very candid about George's actual condition. Both George and his granddaughter Connie Gaither receive this newsletter. I, and I am sure Jim Lohmeyer also, thank Peter Gleed from the bottom of our hearts for the opportunity to spend some time with George. Tom Freeman accompanied us and it was a pleasure to see the love in George's eyes when he saw all of us. What an incredible loss for us, his family and the 4A community at large.

I personally thank my fellow LA 99ers for their generosity in making it possible for us to unite George and Susan for one last time.

For those wishing to express their sympathy here are the addresses of George's immediate family. Mim (sister) and Richard (brother) Steffen 5935 Liebig Ave, Bronx, N.Y. 10471, Rosa (Mrs John, daughter) and Connie (granddaughter) Gaither 543 Zanark Dr. Columbia, S.C. 29210, Susan Lehrer 2585 Elwood Ave. S. Lake Tahoe, Ca. 89448.

George my friend, sure am going to miss you. I just know you will be with us in San Diego. just as you intended to be. See you then.

BBS NEWS

We held a Board Meeting September 13, there were 10 persons in attendance. One of the issues that arose was maintenance of the BBS equipment. We have allowed as an outgoing expense the initial set-up and telephone costs for 2 BBS. It became clear we had to make an adjustment to cover maintenance costs. The BBS unfortunately has very few members calling, but thanks to PC Pursuit a large number of non-member users. We have long felt the BBS down-load area cut into Library revenue. We requested the Library needs be respected, for various reasons this was not the case. We tossed around a charge for each down-load, and other fund generating ideas. The consensus of opinion of all attending the meeting was to continue full services without charge to all LA 99er members, and initiate a fee for non-members. \$10.00 per year was decided upon. This would be for maintenance and upgrade of BBS equipment. This does not seem unreasonable, and we are sure if the quality of the board is respected, the fee will not be objectionable.

If there is a LA 99er club member VERY interested in maintaining a club BBS. please contact me. It appears the BBS may be looking for a new home.

The second BBS currently inactive, is in a development stage, and if we can overcome some telephone line problems it will be an outstanding board. Emphasis will be legitimate distribution of pertinent information in addition to the previously mentioned 9640 files. More on this later.

It has been awhile since I have mentioned the status of my Parents. They are both hanging in, I would not say the quality of life is good. To quote both of them "old age is not that great". Due to the stroke brain impairment, there are times my father does not realize I am his daughter. He at times thinks my mother is his mother. When I once told him "she is not your mother, she is your wife" he answered "she can't be my wife, look at her, she is too old". So goes life in Thousand Oaks. I must be out there all weekends, and therefore am not able to participate in the GENie conference. Guess that has been a blessing in disguise lately.

If anyone wonders or cares why I have chosen not to respond to the malignant, empty-headed attacks directed at me lately. The above (George and my Parents) represent important issues. The reputation of the LA 99ers was incorrectly impugned. My affirmation of the clubs integrity was correct. The vicious personal attack against me is taken from where it comes.

## CROSSING DELANCY

by Steve Mehr, UG Member

Having just seen the above mentioned movie, I must say that there is a very interesting message relating to the title. No, I'm not going to tell you what it is but it's worth the price of admission. A lesson we all can learn from.

Soapbox time... Bill Gaskill's MICROdex99 has been an invaluable piece of software for me personally and for that reason has been spotlighted several times in past issues of this newsletter. I have come to the conclusion, similar to Bill's, that the majority of the TI community simply isn't interested in such a useful application, in which the computer is used for something that it was really designed to do, besides play games. Bill's contributions to our community parallel the efforts of Craig Miller, the useful applications of Kent Thomson, and the fortitude of Jim Peterson, to name just a few. Bill's releases include Master Menu, a custom inverse video menu system which takes advantage of the superior routines found in the Super Extended Basic Module (SEB), Personal Auditor, which is the most complete home accounting system available for the TI, and MICROdex99, which saves countless hours searching for information by indexing almost 5000 (currently) individual TI related items obtained from over 35 different sources. Two level searches and a built in editor for creating your own databases are but two of its many features.

Well, Bill doesn't quite know when to quit. While little support has been received in the past, he continues to support the TI community with new releases. His latest, Time Line 99 is a collection of dated events that have occurred in the life of the TI-99 and 9640 and the community that is supporting those computers. What a neat project! Divided by year, one simply selects the year to look back upon and the computer does the rest. Expandable through 1989, Time Line 99 offers 10 years of TI nostalgia! Time Line 99 has been distributed at a few Southern California user's groups but needs more support to help make Bill's latest project complete. For the latest update, or to offer items to include, which have general interest to the TI community, please contact:

Bill Gaskill  
Box 2642  
Grand Junction, Co. 81502

Well, whadayaknow! I was very pleased to introduce Steve Doran to the membership last month as he had a very interesting demo to show us. His presentation was called "The Space Shuttle Simulator". Although we only saw a "simulation" of the simulation (grin), it looks quite impressive. When the simulator is finished, we would like to see it in action! Steve's full simulator type program will give you total control in piloting the Space Shuttle from liftoff to landing with every possible situation thought out. Steve, thanks for a real neat demo. You've helped show the membership that we all have something to share and contribute. Thanks! Another lesson learned. Two in the same article!

Chick De Marti had his own calander type program to share, spurred by a recent demo of Rodger Merritt's Memo-It. Easily modified for the current month, Chick's program may be the next contender for Remind Me! Another example of some fine programming. Thanks Chick, your contribution to the demo was truly appreciated. During all the excitement at the meeting, I plum forgot to secure my own copy. Maybe when Chick reads this...

Well, it's only history now but Bill Harms gave us some last minute tips on the Fall 4A Share Fair. Thanks Bill for your time in coming out to keep us up to date. For those of you who missed the Fair, well, what can I say. The atmosphere was as electric as any Fair I've attended before!

Stay tuned, the next installment of The Power of And by Craig Miller should appear next month. But, for those who just can't wait, the Night Mission package, which includes The Power of And article, is available in the L.A. 99er's marketplace for only \$18.50. What a bargain! See you at the meeting.

George Steffen, it's not goodbye, just until we meet again. You will be greatly missed.

---

I return.

Mike Dodd

I had a wonderful time on my vacation. If it were not for my money (or lack thereof), I'd do stuff like that more often. But then, I suspect that everyone feels that way. Such is life.

At the request of many users, I have released MDM3 V2.2, thus violating what I said I would never do after the release of PRBASE V2.1. This version works with MDOS V1.06 and V1.08. I am not interested in any complaints, suggestions, or the like. It is available on Delphi and I don't know where else. This is not an official MYARC release -- MYARC neither requested it nor endorses it. It is solely my revision.

I am now on Delphi. Delphi is one of the communications networks, similar to CIS and GENie. Delphi has attracted a number of people to it, including Peter Hoddie, Paul Charlton, Walt Howe, Jerry Coffey, Ron Walters, Al Beard, Art Byers (assistant SysOp), Jeff Guide (system manager), and many others. Delphi's rates are quite reasonable (\$7.20/hour up to 2400 baud with no minimum, or \$4.80/hour up to 2400 baud with a \$24 monthly minimum), and the system software is extremely nice. To sign on to Delphi, call 1-800-365-4636 (data) and press <ENTER> twice. At the password prompt, type TISPECIAL <ENTER>. That will let you sign on for about \$20 which gets you a large manual (always nice, especially if you actually read it) and one free hour of connect time. If you are at all interested in telecommunications, I would advise looking into Delphi.

Time for a discussion on the collective morals of the TI community. To be specific, the response to M-Copier. Those who have paid (all seven of you) may stop reading this. Those who have used it and not paid (who knows how many, but a rather large-ish number, I would think) are urged to continue reading this. M-Copier has had literally hundreds of downloads on CIS, GENie, and Delphi. It has been on numerous public BBS systems, it has been in several Users' Group libraries, and it has

been distributed by Genial TRAVeLER. Through it all, I have received a whopping five donations. Five. Doesn't that number seem just a bit low? If just 500 people have run M-Copier at least once, which seems very likely (if you were to take the time and expense of downloading a program, wouldn't you run it at least once?), then that means that just 1% of the people who have tried it have paid. Now, I doubt that everyone who has tried it is actually using it. And, after all, you're not supposed to pay unless you actually use it. Still, I find it exceedingly unlikely that a mere 1% of the people who tried this program are using it.

All that has been accomplished by this is that I'm fed up with fairware. I very much doubt I will release fairware again. It seems a financially unsound practice. I can make far more by commercial routes.

Another good Users' Group newsletter is the Boston Computer Society (BCS) newsletter. Edited by J. Peter Hoddie, this newsletter contains original material by Don Mahler on c99, Ron Williams on Pascal, Mike Wright on whatever he happens to feel like at the moment, and J. Peter Hoddie on whatever he happens to feel like at the moment (deja vu, eh?). The newsletter is always quite interesting.

Recently, an article was written in a major publication praising a certain TI dealer. Interestingly enough, there are many, many people who rather tend to disagree with that article. The article illustrates, perhaps, the point that one should always consider the possible biases of the author in any article.

I have my computer keyboard spread out over two desks and a card table. On the latter, I have the keyboard, lamp, dumb terminal, and numerous papers. Due to the combined weight of all that, the table is no longer at all straight, causing my keyboard to wobble a lot everytime I hit a key. Computers may have gotten considerably smaller since the days of ENIAC, but they still pack some weight!

Genial Computerware has just released MacFlix, the newest creation by J. Peter Hoddie. MacFlix, priced at \$15, gives the 99/4A and 9640 the ability to display MacPaint pictures. MacPaint pictures are available on numerous BBSes (look through Computer Shopper for a rather large list, many of which are Macintosh boards) and all the commercial networks. I've played with the program some, and it's really nice. On a 9640, it will display pictures in the maximum possible resolution (512 horizontal by 424 vertical). MacFlix will also convert pictures for use with TI-Artist or MY-Art. The address is Genial Computerware, P.O. Box 183, Grafton, MA 01519. You should include \$1 for shipping.

While on the subject of Genial, I should announce that PC-Transfer V1.1 is done. The update fixes some bugs that were affecting a few people and will allow PCT to read TI-Pro disks without any problem. If you want the update (if you haven't had problems, and you don't ever access TI-Pro disks, then you don't need it), send the original disk and \$3 to Genial.

BEGINNING FORTH #5 By Earl Raguse

Before we continue with loops, I must rectify an oversight from Beginning Forth #3. On Screen #60, I used the conditional words IF :: ELSE --- THEN without comment, I hope you read the TIFM and weren't thrown by these words. The manual is fairly clear on how these work, but repetition is always good, so I will do it. The word IF looks for a Flag on the stack. Any non-zero value is considered True and a zero is False. If the Flag is True, the words between IF and ELSE (or THEN if ELSE is not included) are executed, then control moves to the words following THEN. The word ENDIF may be used instead of THEN. If the Flag is False, the words between ELSE and THEN are executed, then control passes to the words following THEN. ELSE is an optional word, if not included, when IF senses a False Flag the words following THEN are executed. We will be using these words very often, so be sure to get a good handle on them.

In Beginning Forth #4, I said that the loop limit L must be larger than the index I, and that's true if you want to loop. However, if the limit L is smaller than the index I, the words between DO and LOOP will execute once, since the limit test is not made until LOOP is executed. Like BASIC, Forth has the capability to specify the increment for I. In this case Forth uses the word +LOOP instead of LOOP, and the increment(+/-) is placed just ahead of +LOOP. We can write, for example,

```
: DEMOLP CLS 0 0 AT -5 100 DO I .
  -5 +LOOP ;
```

DEMOLP will clear the CRT and print the numbers in descending order, by 5's, from 100 to 0 in a string across the top of the CRT. The CLS 0 0 AT clears the screen and places the cursor at the upper left corner of the CRT. This series of words is often defined as the word HOME, see my UFW's. Notice that that L=-5 and I=100, so my previous statement about relative sizes of L and I must be amended. The words DO I . just print the value of the index I as before. The new thing here is -5 +LOOP. The word +LOOP works just like LOOP except the instead of incrementing I by one, it increments (decrements) I by the value just preceding +LOOP, in this case -5. Control is returned to just after the DO, if the increment is positive, and the index is less than the limit; or the increment is negative, and the index is greater than the limit.

Usually we wish to execute a series of words in a definite loop a specific number of times set by the Index and the Limit, unless an event occurs to change our minds. In BASIC, we can escape a FOR NEXT loop with a GOTO statement. Forth has an escape word called LEAVE, which causes termination of the loop by setting the Limit equal to the current Index value, all words are executed normally until LOOP or +LOOP is executed. For example:

```
: JMPQUIT HOME 100 1 DO I .
  I 10 - 0= IF LEAVE THEN LOOP ;
```

The word JMPQUIT would normally print the numbers from 1 to 99, but the test conditions I 10 - 0= IF LEAVE THEN will cause the loop to be exited when I = 10. LEAVE works equally well with LOOP or +LOOP.

LOOP and +LOOP make what are termed definite loops. There are other Forth words for making indefinite loops when one has no way of knowing how many loops are required, but wishes to exit the loop whenever a certain testable condition becomes true. These other Forth loop words are BEGIN, UNTIL, WHILE, REPEAT and AGAIN. There is another looping word, MYSELF, which I will also discuss. The words AGAIN and MYSELF make infinite loops, and require a special means, other than shutting down the computer, to exit them. Screen #55 shows some fairly stupid, but illustrative, examples, for the use of these words.

I told you before, I would provide a simple way to avoid using up memory and getting the 'Not Unique' message every time you reloaded a screen. Forth provides a word for clearing memory of words no longer

wanted or required. That word is FORGET followed by the word you wish to purge from memory. This is a mixed bag of blessings however, because Forth not only purges the dictionary of the specified word but ALL words defined thereafter. This insures that no word, which used the purged word, is left in memory.

On Screen #55 you will find the words FORGET IT : IT ;, which forgets and redefines the word IT. Before loading this screen, you must have previously defined IT, thusly : IT ;, else you will get an error message IT ?. I do this as the last thing on Screen #3 when I boot Forth; this leaves IT on top of the dictionary. Forgetting IT and redefining IT does nothing unless a new set of words have been put on the dictionary on top of IT, as happens when you load a screen. This little technique insures that you do not accumulate multiple versions of a screen in memory. Only the last version of a word executes when you use it, but old versions can take up a lot of memory. Why, you say, would I load the same screen twice or oftener? Well, if you are like me, you make errors or the words don't do what you expect. Then you have to re-edit and re-load the screen.

The word @ is defined as a variable for later use.

FCTN 4 is not active in Forth unless one makes it so, and because there is some danger of locking up the computer in an endless loop if an error is made, I have provided the word STOP?. STOP? calls the resident word ?TERMINAL which checks the input stream for a keyboard press of FCTN 4, if found, it leaves a true flag on the stack, else a false flag. You must provide the IF ... THEN to test for this and provide the appropriate instructions, if FCTN 4 is executed. In this case I have just executed ABORT, which restores Forth to the immediate mode with an empty stack.

DEMOLP is the loop word we have already mentioned. UNTLP (UNTil Loop) calls HOME, a UFW, then makes an an indefinite loop created by BEGIN ... UNTIL. BEGIN, more or less, just marks a place to return to. UNTIL checks for a True Flag on the stack. If found, it passes control to the word following UNTIL, if the flag is False, UNTIL returns execution to the word following the place marked by BEGIN. In between BEGIN and UNTIL, you may have any legal Forth words which will be executed each pass through the loop. These words should leave a flag on the stack for UNTIL.

In this case the value on the the stack, initially zero, is incremented by (1+), (DUP)licated and printed (.), then (DUP)ed again and compared (=) with 25, if equal a True Flag is left for UNTIL, which is followed by three carriage returns (CR) and a message to be printed. If not equal to 25 (False Flag) the loop is executed again.

The word AGNLP (AGainLoop) uses the words BEGIN ... AGAIN. BEGIN works just like before, but AGAIN mindlessly returns execution to the place marked by BEGIN forever. I'm not sure I know a good use for this word. The Forth INTERPRETER is an infinite loop, but I don't know if it uses AGAIN, more probably it uses MYSELF discussed below. The only ways out of AGNLP are explained in the loop. This loop includes another UFW, WAIT, which is a waiting loop that was discussed in Beginning Forth #4.

The next loop is RPTLP (RepeatLoop) formed by BEGIN ... WHILE ... REPEAT. WHILE looks for a Flag on the stack, left by the words between BEGIN and WHILE, as long as the Flag is True the words between WHILE and REPEAT are executed, else execution passes to the words following REPEAT. REPEAT is similar to AGAIN in that it simply causes execution to return to the place marked by BEGIN. I have been told by experts that more than one WHILE may be used in the sequence. I don't know, I never have found a need to try it. Usually BEGIN ... UNTIL is sufficient for my work. Notice that RPTLP accomplishes essentially the same thing as UNTLP except that it counts down. I can't think of a simple example requiring the full capability of WHILE.

The word RECUR? fetches (@) the value from the variable @ and checks for a zero value (0=), and if so leaves a True Flag for IF which calls ABORT. RECUR? is in turn called by MYSLP (MYSelfLoop), which uses the

Forth recursive word MYSELF, a very convenient word that permits a word to re-execute itself. A Forth word may not call a word which is not yet completely defined, (its SMUDGE bit is not set --- later alligator!) as would be the case if one tried to include the name of a word in its own definition. MYSELF overcomes this limitation. There is however, no decisions made by MYSELF to exit the loop, a branching decision must be made by IF ... THEN. In this case that is done by RECUR?. One possible use of a MYSELF loop is my DIRECTORY word which will be presented next time. MYSLP is in turn called by MYLP which stores (!) the number 250 in the variable Q and executes HOME before calling MYSLP, which fetches (@) the value in Q, prints it, then decrements the value in Q by one before executing RECUR? and STOP?.

Till next time, may the FORTH be with you.

SCR #55

```

0 \ LOOP TESTING EGR 8/20/88
1   FORGET IT : IT ;   0 VARIABLE Q
2   : STOP? ?TERMINAL IF ABORT THEN ;
3   : DEMO CLS 0 0 AT -5 100 DO I . -5 +LOOP ;
4   : UNTLP HOME 0 BEGIN 1+ DUP . DUP 25 =
5     UNTIL CR CR CR ." I DID IT ALL BY MYSELF" ;
6   : AGNLP HOME BEGIN ." THE ONLY WAY OUT OF "
7     ." THIS LOOP IS TO HOLD " ." 'FCT 4' "
8     ." OR TURN OFF THE POWER OR " CR ." HIT THE "
9     ." RESET BUTTON IF YOU HAVE ONE. " CR CR CR
10    2 WAIT STOP? AGAIN ;
11   : RPTLP HOME 25 Q ! BEGIN Q @ DUP . 0 > WHILE
12     -1 Q +! REPEAT 18 12 AT ." DONE!" CR ;
13   : RECUR? Q @ 0= IF ABORT THEN ;
14   : MYSLP Q @ . -1 Q +! RECUR? STOP? MYSELF ;
15   : MYLP 250 Q ! HOME MYSLP ;

```

#### A JOYOUS HAPPENING

Barry Traver has been appointed co-author of the TI-FORUM section of Computer Shopper.

Finally there will be a more balanced and honest bent to this column. I am proud to have known this was coming, but waited for the "official" announcement.

Congratulations to Barry, and commendations to "JZ". I regret this action did not occur earlier. We would have all been spared the fairy tale Albrights Follies in the September issue. Ron Albright could have taken a lesson from Nancy Reagan "JUST SAY NO!!!"

Barry will certainly bring his inquisitive, informative, objective nature into this arena. His honesty and integrity are beyond reproach. I know neither JZ or Barry will bow to intimidation. There is hope.

Now, I can once again renew my subscription to Computer Shopper and feel good about it.



# Did you know that...?

by Chick De Marti

Oct. 1988



## OOOPS Dept.

Last month I did a review of a fine program by Steve Karasek called "SUPERBASIC". I neglected to advice you how to get in touch with him. As for price and availability, write:

ST. LOUIS 99ERS  
Atten. Steve Karasek  
P.O. Box 260326  
Crestwood, MO 63126-8326

In the Crestwood area call 961-2052

\*\*\*\*\*

## THINGS YOU CAN DO with your computer.

- \* Trace Family Roots
- \* Write resumes
- \* Teach Yourself  
(learn to READ, TYPE, or learn a Foreign Language).
- \* Improve Educational Skills  
(practice Math, Geomitry, spelling)
- \* Health and Fitness Aides
- \* Improve your memory.
- \* Design a homefull of rooms,  
(learn Interior Decorating).
- \* Practice creating music, composing.
- \* Ctsreate Title screens,  
(for MOvies, Tapes, etc.).
- \* Baby Sit (entertain the kids!).

## WHAT SOME PEOPLE HAVE DONE with thior "Home Computers".

\* Word Processing and small business accounting are two obvious applications. This observation by Norman Goode, publisher of "Micro Moonlighter Newsletter".

\* A Consulting Service is the second-most popular. One service is Information Brokering. For a fee, people will search on-line data bases for specific information, (charting various stocks is one example). Though the on-line fees for CompuServe and The Source are costly, with proper choice of clients, it has become a profitable business. (NOTE: Smart Modems have been programed to not only dial the on-line number, but also set your way through the various menus to the desired information center!).

\* TYPE-SETTING. One woman uses her Word Processor for setting up text (adding type-setting codes, etc.), and then sends it via a modem to a type-setting company. This she does for many companies in the area (it's possible they think she owns a \$60,000 type-setting machine!).

\*\*\*\*\*

## QUICKIES

1 .. What's under that sprite? Use:  
CALL GCHAR(SPRITEY/.5,STRITEX/.5,var)

2 .. BELLS (thank Bill Berendts)

```
100 FOR X=1 TO 4
110 FOR C=0 TO 7
120 CALL SOUND(-500,6000,C,4
000.C,2000.C)
130 NEXT C :: NEXT X :: END
```

(also try 2000,C,1000,C,500,C)

3 .. NO MISSUNDERSTANDING

```
In XBasic:
IF (X=10)+(Y=10) THEN 2000
means the same as:
IF X=10 OR Y=10 THEN 2000
```

Because of it's clarity, you should use it

The same goes for:

```
IF (X=0)*(Y=0) THEN means the same as:
IF X=0 AND Y=0 THEN
```

4 .. When LISTing a program, if you see a line similar to:

```
510 GOTO 32767...this indicates that you
resequenced the program while you had
line 510 with a GOTO to a non-existing line!
```

5 .. HERE'S ONE I DIDN'T KNOW!

From Mike Write of Boston Comp. Soc.

"Many times you come accross tips or ways to save a byte here and there ...(but) I tend to stick with what I know. However, I recently came accross the following piece of elegance.

```
In a game program you will often want
to compare the final score to a Hi-score
and keep whichever is higher. The usual
way is:
280 IF FINAL SCORE>HIGH SCOR
E THE HIGH_SCORE=FINAL_SCORE
```

```
But a better way is:
280 HIGH SCORE=MAX(HIGH_SCOR
E,FINAL SCORE)
```

(W O W !!! Chick)



(Did You Know ... cont.)

APPLE TO IBM (additional info)

After an item I wrote regarding an Apple to IBM converter being now available, I recieved a call from Robert Hartwick (a member) who has an Apple and clarified a few things...

a .. when converting to Apple, you may find it to be 85 to 90 % Apple compatable. It will not run some of the newer programs such as "APPLE WORKS". Cost is \$500 to \$600.

b .. to convert from Apple to IBM, Applied Engineer sells aPC TRANSPORTER card with 384K memory for about \$489 + \$39 installation. Also you may need to add an IBM drive.

Thank Robert for the call and update!

~~~~~

A suggestion to programmers

(Read the entire article before copying!)

```

100 FOR L=1 TO 55
110 READ A :: ING$=ING$&CHR$(A)
120 NEXT L
130 CALL SPGET("REWIND",W$)
140 TR=LEN(W$)-32-3
150 NW$=SEG$(W$,1,2)&CHR$(TR)
160 NEWWORD$=NW$&ING$
170 CALL SAY("I AM",NEWWORD$,"THE CASSETTE.")
180 STOP
190 DATA 96,0,52,174,30,65,2
1,186,90,247,122,214,179,95,
77,13,202,50,153,120,117,57,
40,248
200 DATA 133,173,209,25,39,8
5,255,54,75,167,29,77,105,91
,44,157,118,180
210 DATA 169,97,161,117,218,
23,117,194,227,222,249,238,1
    
```

While typing in the DATA in this program, I realized how simple it would be to type in the wrong numbers. The programmer can make life a lot simpler with this simple CHECKSUM routine.

- 1 .. add the individual items of DATA.
- 2 .. name the total FLAG and place it somewhere at the beginning.
- 3 .. add a line to ADD each piece of DATA. If the ck-sum is not equal to the FLAG then stop the program and inform us!

Add these lines:

```

90 FLAG=6671
115 CK=CK+A
125 IF CK<>FLAG THEN PRINT "
You have an error in DATA in
lines 190 to 210" :: STOP
    
```

~~~~~

AND SPEAKING OF DATA

(I'm sorry...I don't know where this comes from, but I'll enter it exactly as written).

"EXAMPLE PROGRAM

The following is a short example giving a practical usage. It allows you to write DATA statements having only to type the DATA.

```

100 ON WARNING NEXT
110 DISPLAY AT(10,1)ERASE AL
L:"ENTER FIRST LINE NUMBER:"
:: ACCEPT AT(10,25)BEEP VALI
DATE(DIGIT)SIZE(4):LN
120 DISPLAY AT(12,1):"ENTER
INCREMENT:" :: ACCEPT AT(12,
17)BEEP SIZE(3)VALIDATE(DIGI
T):I
130 DISPLAY AT(14,1):"ENTER
FILENAME:" :: ACCEPT AT(14,1
6)BEEP VALIDATE(UALPHA,DIGIT
)SIZE(10):FN$
140 OPEN #1:"DSK1."&FN$,VARI
ABLE 163
150 DISPLAY AT(2,6)ERASE ALL
:"PRESS ENTER TO END" :: DIS
PLAY AT(22,1):"ENTER A LINE
DATA" :: LINPUT "":D$
160 IF D$="" THEN 190
170 PRINT #1:CHR$(INT(LN/256
))&CHR$(LN-256*INT(LN/256))&
CHR$(147)&D$&CHR$(0)
180 LN=LN+1 :: GOTO 150
190 PRINT #1:CHR$(255)&CHR$(
255)
200 CLOSE #1 :: END
    
```

FOR YOUR NOTEBOOK

For REAL BASS notes use:

```
CALL SOUND(2000,F,30,F,30,F,30,-4,1)
```

where for low G F=1475  
F F=1293  
E F=1227  
D F=1105  
C F=999

~~~~~

Well, I'm out of coffee.  
next month)

See you  
Chick

DID YOU KNOW - BONAS PAGE

Because of the wealth of material I dug up out of old COMPUTE!, BYTE and FAMILY COMPUTER magazines (plus Newsletters) I thought I type an extra page...I may be sorry NEXT month!

FINDING THE START WORD E/A  
By Herbert Schlesinger  
Source unknown

When the name of an E/A program isn't known one way to find the START word is as follows.

Using the E/A environment, load the PROGRAM into the memory. Go back to the title screen (the color bar screen) and enter E/A BASIC. Then type in and run the following program:

```
10 FOR I=16128 TO 16383
20 CALL PEEK(I,A)
30 PRINT CHR$(A);
40 NEXT I
RUN
```

Among the words, symbols and garbage you should find the word which will start the E/A program.

SO OLD IT MIGHT BE NEW

This has been around a long time, but just a reminder. To print more than 80 characters on a line, open the printer as "RS232.CR" instead of "RS232" and "PIO.CR" instead of "PIO". Remember, however, you must end a line with a CHR\$(13);CHR\$(10), the carriage return and line feed respectively.

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(P.S. This was not meant as a commercial, just the sharing of information. Chick)

\*\*\*\*\*  
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(thanx MUG LINES of EUGEN 99/4A UG...)

BYTES to SECTORS to XMODEM RECORDS

=====  
By: Andi Wise, Eugene, Oregon  
"TILT" 99'ers

The following formulas are to be used for estimates only, as they are NOT exact. It was originally made to give me an idea of how much room i'd need on a disk when downloading files from GENIE.

- 1 .. To figure the number of BYTES:  
# of SECTORS X 252 = # of BYTES
- 2 .. To figure the number of SECTORS:  
# of BYTES / 252 = # of SECTORS  
(NOTE: / = divided by)
- 3 .. To figure the number of XMODEM RECORDS:  
# of SECTORS X 2 = # of XMODEM RECORDS

EXAMPLES:

- 1) 50 X 252 = 12600  
sectors (factor) bytes
- 2) 15120 / 252 = 60  
bytes (factor) sectors
- 3) 42 X 2 = 84  
sectors (factor) xmodem record

-----+  
! Now I'm really out of !  
! C O F F E E !  
! See you next month !  
-----+

KIDS \*\*\*\*\*

X  
O  
R  
Z  
M  
J  
\*  
\*  
\*  
\*



```

10 ! ***TRICKS OR TREAT***
20 !   by Chick De Marti
30 !   from a TinyGram by
40 !   Margaret of
50 !   Aloha 99ers, Honolulu
60 !   *****
70 CALL CLEAR :: CALL SCREEN
(2):: CALL COLOR(10,15,2,4,1
6,2)
80 CALL CHAR(108,"003C7E7E7E
7E7E7E"):: CALL CHAR(56,"003
C5A7E5A66562A")
90 CALL HCHAR(24,3,108,7)::
CALL HCHAR(24,15,108,5)
100 FOR I=1 TO 10
110 R=INT(RND*21)+2 :: C=INT
(RND*26)+2 :: CALL HCHAR(R,C
,56)
120 RANDOMIZE
130 FREQ=INT(RND*4)*350+1
140 FOR ME2=1 TO 30
150 CALL SOUND(-1,ME2+150+FR
EQ,ME2):: NEXT ME2
160 CALL HCHAR(R,C,32)
170 NEXT I
180 FOR SET=3 TO 9 :: CALL C
OLOR(SET,11,2):: NEXT SET
190 DISPLAY AT(7,11):"HAPPY"
:: DISPLAY AT(10,9):"HOLLOW
EEN"
200 CALL KEY(0,K,S):: IF S=0
THEN 200

```

```

100 CALL CLEAR
110 PRINT "   ALPHABET SONG
"
120 FOR J=1 TO 15
130 PRINT
140 NEXT J

```

```

150 PRINT "           by Jim
Peterson": "Wait, please":
160 OPEN #2:"SPEECH",OUTPUT
170 DIM T$(26,2)
180 DATA 12,12,4,4,1,1,4,7,7
,8,8,10,10,10,10,12,4,4,7,8,
8,10,4,7,8,10
190 FOR J=1 TO 26
200 READ X
210 T$(J,1)="//"&STR$(X)&" "
&STR$(X/10*32)
220 T$(J,2)=CHR$(J+64)
230 NEXT J
240 T$(23,2)="DOUBLE"&"!"&"U
"
250 CALL CLEAR
260 PRINT " READY - TYPE THE
ALPHABET"
270 T=0
280 K2=64
290 CALL KEY(3,K,ST)
300 IF (ST<1)+(K<65)+(K>90)T
HEN 290
310 IF K<>K2+1 THEN 330
320 T=T+1
330 PRINT #2:T$(L-64,1):T$(K
/64,2)
340 CALL HCHAR(12,17,K)
350 K2=K
360 IF K<>90 THEN 290
370 IF T=26 THEN 390
380 GOTO 270
390 FOR K=65 TO 90
400 CALL HCHAR(12,17,K)
410 PRINT #2:T$(K-64,1):T$(K
-62,2)
420 NEXT K
430 PRINT #2:T$(1,1):"NOW I'
VE":T$(3,1):"SAID MY":T$(5,1
):"A B":T$(3,1):"SEEZ"
440 PRINT #2:T$(8,1):"WON'T
YOU":T$(10,1):"COME AND":T$(
12,1):"PLAY WITH":T$(1,1):"M
E"
450 GOTO 270

```

## MUTUAL FUND RETURN

By Bill Gaskill

While there seems to be any number of 99/4A programs around for checkbook management, loan amortizations, mortgage projections or savings goals, few seem to be available for use in managing investment type information. I have seen a couple of nice programs for the stock market investor, but a more timely program today is one that deals with mutual funds. Kent Thompson has authored the best one that I have seen yet, called Mutual fund Manager. It is a complete package that allows the user to store a data base of information on particular funds. It is available for about \$15 I believe from

Real Estate Projections  
409 Elberon Ave. #2  
San Pedro, Ca. 90731

If you are serious about mutual funds than this is the program to buy.

Mutual funds are perhaps the fastest growing investment vehicle today. The reason for their popularity is the fact that they allow individual investors to put relatively small amounts of money into a pool of funds that is professionally managed, with little or no fees or commissions, compared to the alternative of investing through individual investment advisors or brokers. While I am not going to go into the intricacies and strategies of mutual fund investing, I will explain how one can get started with this comparatively new investment vehicle, and how one who owns shares or units in a fund can determine the rate of return on their investment. The Mutual Fund Performance program that follows this article can be keyed in and run with only 16K and Extended Basic.

There are actually several hundred mutual funds to choose from today and they come in various "shapes and sizes", meaning their ranks span the risk scale from low-risk conservatively managed funds, to high-risk, very aggressive funds, and the investment goals scale from Money Market Funds to the quicker yield sector funds. Which one(s) you decide to put your money into is usually based upon the level of risk you are willing to accept, your investment goals and the "track record" of the fund(s) you are considering.

### RISK LEVEL:

The amount of risk you are willing to take is something you should determine before diving into mutual funds or any other investment vehicle. To determine your risk level you should consider;

1. How long you are willing (or able) to leave the investment tied up.
2. How devastating the total loss of your investment would be to your personal finances and to you and your family?
3. Whether you are investing for long-term growth or whether you need the investment return(s) for income?

4. How much money you have to invest.

5. How much time (or willingness) you have to devote to managing your portfolio.

#### INVESTMENT GOALS:

Your investment goals play a big part in how much money you will gain or lose on your investments and most often how quickly the gains or losses will occur. The theory being, if you are willing to take big risks (at losing your money) then you should realize big returns for taking that risk. Thus, if you are a risk taker, your investment portfolio would be heavily weighted towards Growth and Income type mutual funds. This is because these funds are geared towards maximum profit in minimum time. Your investment goals are what you hope to accomplish by seeking investing your money with a mutual fund rather than sticking with that passbook savings or Christmas Club account you may have used in the past.

#### CHOOSING A FUND(S):

If you have the resources and the patience, you can track a particular funds' performance by reading the Stock Market pages in your Sunday newspaper. Sunday papers are used because they usually have the most complete and accurate quotes for the previous week. Since the Market closes at 5pm on Friday, there is a whole day for the newspaper folks to get the information.

Tracking performance is a demanding task, but one that many investors use. It also has the disadvantage of not being able to tell you now, what the fund has done in the past. Past performance information can be had from the Fund's prospectus (if you want to trust it) or one of the "money" type magazines. Another method, which is a little more costly, but probably less risky, and certainly less demanding, is to subscribe to a "reputable" Mutual Fund Investment Newsletter. How you determine what "reputable" is, I will leave to you.

These newsletters are usually written by an "expert" or group of "experts" in the field of Mutual Fund Investing. Most often they employ a forecasting model that uses virtually the same method for determining Fund recommendations that you would use if you read the Sunday newspapers for a consecutive time period, past history (performance). However, they also consider many other variables that you and I might overlook or do not have access to, such as economic indicators, political climate, world prices etc.

Most newsletters create model portfolios that you may follow (emulate) in your investments. The models are based upon high, moderate and conservative investment risks. The higher the risk the higher the return. In investment jargon, high risk funds would be called "aggressive funds". That means that the fund manager(s) usually look for common stock investments in "un-favored" companies that they believe are going to blossom. So the fund buys low and then sells high when the stock goes up.

The newsletter is also a good place to begin your adventure into Mutual Funds since they list the names and often the descriptions of various funds that you might consider. Many newsletters also list the

toll-free telephone numbers of the funds so that you may call and order a prospectus.

#### STARTING OUT:

Assuming that you have some method of determining which funds to invest in, the first thing to do is find out how to get in contact with the fund administrator(s). Virtually all mutual funds have toll-free numbers for use in requesting a Prospectus. The obvious place to look for these numbers is NOT in the yellow pages as one might think, but rather in the trade publications or in the newsletter of a friend who is already involved with Mutual Fund investing. Once you have the telephone number and are ready to make the call, be prepared to request information on specific funds (by the Fund's name). Most Mutual Funds are "Families" of funds. This means that there are several different funds under one administrator. This is necessary to meet the varying demands of the investing public and to optimize the use of investor dollars by having a broad range of investment types. Not everyone has the same investment goals, nor is everyone willing or able to assume the same level of investment risk.

If you don't know the name of the fund you are interested in, since newspapers only provide cryptic abbreviations for them when they are published, ask for help from the person you talk to on the toll-free line. Don't be afraid to be a little humble and admit your novice status. A good Mutual Fund employee will ask you what your investment goals are or perhaps ask whether you would categorize yourself as a conservative, moderate or aggressive investor. Either way, they are trying to determine what type of fund you might be interested in, based upon your investment goals.

Once you receive the Fund's Prospectus in the mail (it's free), you can try to read it from cover-to-cover if you want to. Some are quite easy to read, some are like an accountant's nightmare and others are in-between the two extremes. No matter which type you receive, all will contain certain information that you should look for, since it directly affects you and the money you will be investing. The list that I am going to give you is based upon my concerns. Yours may be different or more demanding, so don't feel that I have listed ALL the questions you should be asking. However, at a minimum, I think you should look for the answers to the following questions:

1. How much (if anything) does the fund charge to join (the entry fee) and do they charge you to buy shares or units? In other words, is it a LOAD or NO-LOAD fund?
2. Is there an minimum time you must keep your money in the fund without paying a withdrawal penalty (an exit fee)?
3. What are the administrative costs? No fund operates for free. You pay someone to manage your money for you.
4. What are the redemption procedures and what kind of a hassle is it to sell out?
5. Do they require a minimum dollar amount investment?
6. Do they offer telephone redemption and/or telephone switching

between funds in the same family? How many times per year?

7. What kind of reporting procedure do they have for shareholders and how often is it provided?

While all funds assess a management fee, many today do not require a sign-up fee. In other words, they are NO-LOAD funds. Some funds however have a "hidden" load, one that is assessed when you try to sell your shares. This is an END-LOAD fund, as opposed to a FRONT-LOAD fund. Front-Load funds charges you to get in. End-Load funds charge you to get out, especially if you do so in the first 1-5 years. Read the Prospectus carefully to determine which type you are considering investing with.

A very important consideration in your decision-making process is the amount or percentage of the fund's administrative fees. Most funds today, whether they are load or no-load types, assess a "hidden" cost to you, in addition to regular administrative costs, that the fund uses to pay for things like their advertising and marketing. YOU pay for this because the law, under Securities and Exchange Commission regulation 12b-1 allows it. There isn't much you can do about it, but you can mitigate it by choosing the fund that has the lowest administrative costs otherwise.

An important part of the investment game is knowing when to dump your shares, when to sell out. Because you don't want to lose money, timing is critical. Thus, the fund that you are investigating should have telephone switching or roll-over privileges. This means that it should offer (and support) the ability to sell your shares in one fund, and either redeem them or roll them over into another fund, by placing a telephone call. If the fund provides for this only by mail, you must realize that you will still be on a sinking ship for the number of days it takes your letter to get to the Fund Administrator's office. Normally, you should be able to make a phone call, communicate your "sell or roll-over" order and then you are usually required to follow that up with a letter confirming the order. The important thing is for you to realize the impact on your money because of the difference in procedures. Time is truly money in these cases.

#### CALCULATING YOUR RETURN:

Assuming that you do take the plunge and invest in one or more mutual funds, you will want to monitor the performance of the fund so that you can determine whether or not the fund manager is making you any money.

The Mutual Fund Return program is aimed at doing that for you.

At the first prompt you will be asked for the;

#### Analysis Length In Months:

Enter a number from 1 to 24. This figure is used to determine the number of months involved in the analysis and to calculate an annualized return. If the current month is January 1987 and you bought into the fund in December 1985, you would enter the number 14, which is the number of months between December 1985 and January 1987 inclusive. You would count January 1987 as one of the months, even if the date you perform the analysis on is only the first day of the month.



The next prompt asks for "Beginning Shares". This is the number of shares that were credited to your account on the month that this analysis begins. If you are measuring performance from the first month you bought into the fund, make sure that the figure entered here is the one provided on your statement after any entry fees are deducted. This (and all remaining) information should be included on the statements that you receive from the manager(s) of the fund. Also, note that some funds use the term "units" instead of shares. They are the same thing.

The next prompt, "Share Price Then", asks for the price per share paid, on the month that the analysis begins. This amount should also be on your statement. It is the actual dollar figure cost of each share purchased.

The next two prompts, "Ending Shares" and "Share Price Now", ask for the ending figures of the same type of information asked for above. Only these amounts pertain to the ending month of the analysis rather than the beginning month.

In the "Cash Dividends..." block, enter the dollar amount of any dividends or capital-gains distributions that were paid to you during the analysis period. Do not include any money that was re-invested. Enter a zero if no distributions were paid.

The next two prompts ask for;

Investments In \$ and  
Redemptions Out \$

In the "Investments In" block, enter the dollar amount of any additional monies pumped into the fund since the beginning month of the analysis. Then, enter the dollar amount of any monies taken out in the form of redemptions. Enter zeros in both blocks if neither apply to the period of the analysis.

Once these figures are entered the program calculates an annualized return that is displayed as a percentage gain or loss.

```

100 @=1 :: CALL CHAR(95,"OFF"):: DISPLAY AT(2,@)ERASE ALL:RPT$("_",28):: DISPLA
Y AT(22,@):RPT$("_",28)
110 IMAGE ##.##%
120 ON WARNING NEXT :: DISPLAY AT(@,6):"MUTUAL FUND RETURN"
130 FOR G=0 TO 14 :: CALL COLOR(G,16,5):: NEXT G
140 DISPLAY AT(3,@):"Analysis Length In Months:" :: ACCEPT AT(3,27):AL :: IF AL<
1 OR AL>24 THEN 140
150 DISPLAY AT(5,@):"Beginning Shares ::"Share Price Then $" :: ACCEPT AT(5,20)
:BS :: ACCEPT AT(6,20):SP :: BI=BS*SP
160 DISPLAY AT(8,@):"Ending Shares ::"Share Price Now $" :: ACCEPT AT(8,20)
SIZE(7):ES :: ACCEPT AT(9,20):SPN :: CI=ES*SPN
170 DISPLAY AT(11,@):"Cash Dividends":"Received Since":"Beginning Month $" :: A
CCEPT AT(13,20):CD
180 DISPLAY AT(15,@):"Investments In $"::"Redemptions Out $" :: ACCEPT AT(15,2
0):II :: ACCEPT AT(16,20):RO :: RI=II-RO :: RI=RI*.50
190 SA=BI+RI :: SB=(CI+CD)-RI :: SC=SB/SA :: SD=(SC-1)*100
200 SE=I2/AL :: SF=(SE*SD)*100 ::
210 DISPLAY AT(18,@):"Rate of Return Is:"
220 DISPLAY AT(18,20):USING 110:SF/100
230 DISPLAY AT(23,@):"Press F9 to exit, or other key to compute another one" :
: CALL KEY(3,E,F):: IF F=0 THEN 230
240 IF E=15 THEN 250 ELSE RUN
250 CALL CLEAR :: PRINT "Precise rate is;";SF/100 :: STOP
260 DISPLAY AT(18,20):USING 110:SF/100
    
```

RELATIVE FILE SORTS PROGRAM

by Bill Gaskill

Yes this is indeed the program promised in the last issue. Sorry it was inadvertently left out.

```

100 CALL INIT :: CALL LOAD(-31806,16):: CALL CLEAR :: GOSUB 510 :: DISPLAY AT(2,
1): " File Sort Utility":RPT$(1,28)
110 OPTION BASE 0 :: DIM N$(8),A$(1100),A(1100):: ON WARNING NEXT
120 DISPLAY AT(22,1):"Enter the DSK#. and the name of the file to be sorted" :: C
=1
130 DISPLAY AT(5,1):"File to sort:" :: ACCEPT AT(5,14)BEEP:H$ :: IF H$="" THEN 4
40 ELSE IF H$="/" THEN 440
140 GOSUB 500 :: DISPLAY AT(7,1):"Correct? (Y/N):" :: ACCEPT AT(7,16)SIZE(1)VALI
DATE("YN"):YN$
150 IF YN$="/" THEN 440 ELSE IF YN$="Y" THEN 160 ELSE 120
160 DISPLAY AT(17,1):"Choose Sort Field:1" :: ACCEPT AT(17,19)SIZE(-1):SF :: IF
SF<1 OR SF>8 THEN 160
170 DISPLAY AT(19,1):"Depth of sort:" :: ACCEPT AT(19,15):SL
180 DISPLAY AT(17,1):" ":" ":" ":" ":" " :: ON ERROR 480
190 GOSUB 540 :: OPEN #1:H$,RELATIVE,INPUT ,INTERNAL,FIXED 80 :: INPUT #1,REC 0:
FS
200 FOR Z=0 TO FS :: INPUT #1,REC R:N$(1),N$(2),N$(3),N$(4),N$(5),N$(6),N$(7),N$
(8):: A(R)=R :: A$(R)=SEG$(N$(SF),1,SL)
210 DISPLAY AT(7,23):R :: R=R+1 :: NEXT Z
220 CLOSE #1 :: AB=R :: U=1
230 DISPLAY AT(11,2):" ***** SORTING DATA *****" :: DISPLAY AT(12,7):"do not int
errupt"
240 U=2*U :: IF U<AB THEN 240
250 U=INT((U-1)/2):: IF U=0 THEN 320
260 FOR H=0 TO AB-U :: F=H
270 Q=F+U :: IF A$(Q)<A$(F)THEN 300 ELSE 290
280 F=F-U :: IF F>0 THEN 270
290 NEXT H :: GOTO 250
300 DISPLAY AT(22,1):"Working..."
310 G=A$(F) :: A$(F)=A$(Q) :: A$(Q)=G :: G=A(F) :: A(F)=A(Q) :: A(Q)=G :: DISPLAY
AT(22,1):" " :: GOTO 280
320 DISPLAY AT(11,2):" ***** SORTING DONE ***** " :: DISPLAY AT(22,1):"Outp
ut filename can't be the same as the input filename"
330 DISPLAY AT(17,1):"Save File:" :: ACCEPT AT(17,11):I$ :: IF I$="" THEN 440 EL
SE IF I$=H$ THEN 330
340 GOSUB 500 :: DISPLAY AT(19,1):"Correct? (Y/N):" :: ACCEPT AT(19,16)SIZE(
1)VALIDATE("YN"):YN$
350 IF YN$<>"Y" THEN 320 ELSE CALL HCHAR(10,1,32,10)
360 GOSUB 540 :: OPEN #2:H$,RELATIVE,INPUT ,INTERNAL,FIXED 80 :: INPUT #2,REC 0:
FS
370 L$=SEG$(I$,6,LEN(I$))
380 OPEN #3:I$,RELATIVE,UPDATE,INTERNAL,FIXED 80 :: PRINT #3,REC 0:FS
390 FOR G=0 TO FS :: D=A(G)
400 INPUT #2,REC D:N$(1),N$(2),N$(3),N$(4),N$(5),N$(6),N$(7),N$(8):: ON ERROR 49
0
410 IF D=0 THEN 430
420 PRINT #3,REC 0:N$(1),N$(2),N$(3),N$(4),N$(5),N$(6),N$(7),N$(8):: DISPLAY AT(
22,10):D;" / " : C :: C=C+1
430 NEXT G :: CLOSE #2 :: CLOSE #3
440 DISPLAY AT(17,1):" ":" ":" F6-Sort another F9-Exit" :: CALL KEY(0,KK,SS):: IF
SS=0 THEN 440
450 IF KK=15 THEN 470 ELSE IF KK=12 THEN 460 ELSE 440
460 DISPLAY AT(19,1):"Initializing memory..." :: CALL LOAD(-31962,160,4)
470 CALL CLEAR :: CALL LOAD(-31952,255,0,255,0)
480 DISPLAY AT(22,1):"Can't find that file..." :: CALL LOAD(-31962,160,4)
490 DISPLAY AT(22,1):"Insufficient disk space" :: GOTO 440
500 DISPLAY AT(22,1):"Enter an upper case Y if the name is correct, an N if not"
:: RETURN
510 CALL CHAR(126,"00FF",129,"FF00FF0000000000001010101010101000000000FF00FF80
000000000000")
520 CALL HCHAR(1,1,129,31):: CALL VCHAR(1,1,130,4):: CALL HCHAR(4,2,131,30):: CA
LL VCHAR(1,32,132,4)
530 CALL HCHAR(21,1,129,31):: CALL VCHAR(21,1,130,4):: CALL HCHAR(24,2,131,30)::
CALL VCHAR(21,32,132,4):: RETURN
540 DISPLAY AT(22,1):" ":" " :: RETURN

```

"C" ROUTINES by Don Mahler via Stephen Shaw

Some short c routines to get you used to using c99 and maybe show how some things are done / some things are used.

These routines are by Donald L Mahler and come from the BOSTON COMPUTER SOCIETY. They have been printed from tested source code.

Remember:

\*s means "pointer to s" while  
s means "the address of s"

File prf is as follows:

```
/* file dsk1.prf */
/* PRINTF REFS */
#asm
    REF PRINTF
#endasm
```

Save it to disk!

```
/* 1:C */
#include dsk1.prf
int table[]={3,5,2,9,6};
/* sets up an array */

main()
{
    int i; i=0;
    /* first term of array is "0th" */
    while (i<5)
    {
        printf("The address of the %dth \n",i);
        printf("element of table is %u.\n",table[i]);
        /* "table[i]" = */
        /* "address of ith term of array" */
        /* */
        /* addresses are unsigned integers */
        /* that is why we use 'u' */
        /* */
        printf(".. and the value stored there\n");
        printf("is %d\n",*(table+i));
        /* */
        ++i;
        /* */
        /* increment i */
        /* */
        putchar('\n');
    }
}
```

Type this in using the Assembler editor, save it and then compile it, assemble the result, to say l/OB. Do NOT select any assembly OPTIONS!

To run using LOAD AND RUN load:

```
DSK1.l/OB
DSK1.PRINTF
DSK1.CSUP
```

then start with program name START.

CSUP and PRINTF are supplied with the c99 package. This second routine uses strings- and also requires the file prf defined above!

```
/* 2:c */
#include dsk1.prf
main()
{
    char *ptr1, *ptr2 ;
    /* two character pointers */
    ptr1="Boston/Computer/Society";
    /* */
    /* the address of a string is */
    /* the address of first letter */
    /* */
    ptr2=ptr1 ;
```

```

while (*ptr2)
/*
/*  *ptr2 !=0" */
/*
{
    putchar(*ptr2++);
}
/*
/* spell out the string letter */
/* by letter */
/*
puts("\n \n Now let's reverse it! \n\n");
/*
/* ptr2 is now address of last */
/* letter of string!!! */
/*
while (--ptr2 >= ptr1)
/*
/* decrease address until back */
/* at original starting address */
/*
{
    putchar (*ptr2);
}
putchar ('\n');
}

```

And here is another short example of c99 in action. Try it out now!

```

/* 3.c */
#include dsk1.prf
main()
{
    char x;
    puts("Enter any letter : \n\n");
    x=getchar();
    putchar('\n');
    printf("The upper case form of %c is",x);
    caps(x);
    putchar(x);
    putchar('\n');
}
caps(ptr)
char *ptr;
{
    if (*ptr <= 'z' *ptr >= 'a')
        *ptr = *ptr + 'A' - 'a';
}
/*
/* if letter is lower case then */
/* decrease ascii value by the */
/* difference between 'A' (65) */
/* and 'a' (97) */

```

Now compile,  
assemble (remember, NO options!)  
and load and run:  
DSK1.3/O  
DSK1.PRINTF  
DSK1.CSUP  
and program start name is START.

If however you wish to transform your program to memory image format, to use with RUN PROGRAM FILE, then load these files, using LOAD AND RUN:  
DSK1.C99PFI  
DSK1.2/O  
DSK1.PRINTF  
DSK1.CSUP  
DSK1.C99PFF  
DSK1.FWSAVE  
and now choose the program named SAVE.

Now you will have a single "PROGRAM" file which you can load in one piece, instead of having to load lots of other files.

## LA99 LIBRARY CORNER

TWO copies Of all program disks will be made available to the members at the regular meetings. If you plan to obtain any disks from the library at the meeting it is best to phone or write the LIBRARIAN in advance to be sure they will be on hand. I will put your name on them.

Disks are \$2.00 each not programs. Many programs takes more than one SSSD disk. If you have a SSSD drive be sure you get all the disks needed to run the program usally both A and B disk if the program is over 360 sectors (if available). That comes to \$2.00 each other wise get the DSSD disk. It pays to have a DSSD drive. And dont't forget to include postage if you want it mailed. \$0.50 for the first disk and \$0.25 for each additional.

0000 LA99 DISKS LIBRARY CATALOG OCT. 88 : \$1.00 either DSSD(699) or 0000A(343) and 0000B(349) Special offering.

### NEW ADDS FOR OCTOBER LA99 LIBRARY

The Library Committee wish to give thanks to those who donated disks to our Library this month :Northwest 99er, Danny Nelson, Kawartha 99'ers, Nutmeg 99ers Users Group, Deanna Sheridan.

2235 99 FORTRAN By Christ Bobbett 6700 Belcrest Rd. #723 Hyattsville, MD 20782 : A disk on lessons in Full Screen Editor in Fortran 99. Don't let Fortran scare you. SSSD(121)

2645 TI-TOOLS-2 From Kawartha 99'ers Users Group. P.O.Box 373 Peterborough Ont. Canada K9J 6Z3. A utility package that automatic loads From menu : 1=CATALOG/LABEL MAKER, 2=DV/80 FILE, 3=DM1000, 4=TURBO COPY, 5=PRINT CODES, 6=QUADLISTER, 7=DESK CALENDAR, 8=INSTAPRINT, 9=TICKET MAKER, 10=WORDSEARCH MAKER, 11=MORTGAGE PRINTER, 12=OVERLAY MAKER, 13=MICRO MECHANIC, 14=ARCHIVER C2.3, 15=SCREEN SCROOL. DSSD(486).

2652 TELCO 2.21 User-support software by Charles Earl 34 McLead St.Ottawa,Ontario Candana, K2P 025. An update of an excellent Terminal Emulator. Auto dial, redial, stores numbers, conference mode, X-Modem, compress B, Y-Modem, ASSII transfer, marcos, spooling, P.C.Pursuit dialing, clock, VT 52 and HP 2392, option select, plus many more. DSSD(637) 2652A(260) and 2652B(279) for SSSD drives.

2670 BOOT V4.0 By John Johnson 2981A Vermont Ave. Homestead AFB, FL 22039: A disk full of boots. Show directory, view a file, run a program, blanks the screen, print a disk directory or file, runs an Assembly or X/B program, runs installed cartridge, configure user options, toggles thru 48 color combinations, runs CorCorp disk manger, switch from GROM to ROM and more. Runs in X/B SSSD(92)

7061 FORTH MUSIC Nursery Rhymes by Earl Raguse :JACK and GILL, HUMPTY DUMPTY, LITTLE MS MUFFET, LITTLE JACK HORNER, MARY QUITE CONTRARY, SONG OF SIXPENSE, THREE BLIND MICE, HEY DIDDLE DIDDLE, GOOSEY GOOSEY GANDER. A sing along with words. Run E/A #3, DSK1.FORTH Press FCTN/4 to start. SSSD(360)

## NEW ADDS OCTOBER LA99 LIBRARY

7062 FORTH MUSIC By Earl Raguse :BALLERINA, GRANDFATHER CLOCK, AMAZING GRACE, BRAHMS LULLABY, BILL BAILEY, COOL WATER, AMERICA, AMERICA BEAUTIFUL, GOOD NIGHT LADIES. A sing along with words. Run E/A #3 DSK1.FORTH SSSD(260)

8098 TEXT PAINT Fairware by Dan Gazsy 22 6th St. Sayreville, NJ 08872-1313. Text Paint is a utility type program, designed to aid the programmer who wants to create 40 column graphics type screens or use VDP windows in their programs. Has Catalog disk, Draw Edit Load print reset or Gave screen, Font loader, Insert text, View or design Characters, Windows, Demo, plus more. DSSD(433), 8098A(247) and 8098B(184) for SSSD drives.

8108 CHRISTMAS Fairware by Deanna Sheridan 20311 Lake Road Rocky River, OH 44116 : A disk to make your Christmas a little brighter and easier to do some special graphics. 32 CSGD graphic, 3 Fonts, 26 pictures, 14 CSGD pictures, 24 TI-Writer transliterates, Letter head (bells), Crossword Puzzle, Santa RLE. SSSD(356)

8110 GRAPHIC #15 From Nutmeg TI-99ers U.G.The same one that gave you ZODIAC: 6 art pictures CONSOLE1, DISKGIRL, DISKGUY, I LOVE MY TI, MY TI LOVES ME and TURTLE1. USE TI-ARTIST TO VIEW. SSSD(324)

8111 GRAPHIC #16 A very unusual graphic demo disk from Holland. 8 color pictures with great graphic. KNIGHT LORE, CAPEMAN, MAGIC LAND, RAID OVER MOSCOW, JETPAR, PSSST, HULK, FIST. X/B SSSD(281)

LIBRARIAN FRED MOORE 7730 EMERSON AVE. LOS ANGELES, CA 90045 213-670-4293

## NEW ADDS FOR LA99 GENEVE LIBRARY

The Library Committee would like to thank those that donated a disk to our GENEVE Library this month : Danny Nelson, Hal Kam.

c99g is FAIRWARE by Clint Pulley, 38 Townsend Ave. Burlington, ON Canada L7T 1Y6. This is v4.0g and operates from MDOS. The support libraries from the first release(4/14/88) and the compiler from the next release(6/24/88) are on this disk. Also a routine by Dave Ramsey to make MDOS calls from c. DSSD(513)

NOTMYCOPY is FAIRWARE by James Schoeder, 2856 N Holton St. Milwaukee WI 53212. This is a standard SSSD, SSDD, DSSD, DSDD disk copier. There is three versions on the disk(CC,MYARC,TI). Use the version for the disk controller that you have. Load from E/A #5 in TIMODE. SSSD(42)

GIF#1 is a set of picture files that can be viewed from GIF2. BUTTERFLY, MIAMIMICE, MTV, PORSHE, RAISONS, TANK, TUT-G, YOGI. SSSD(334)

GIF#2 MONROE, MOONLT, ROBO-2, TINA, TREK. SSSD(347)

MY-Art#1 These files can be viewed with MY-Art. You can also view MY-Art files with GIF2, but you may have to reconfigure the resolution(refer to

GENEVE LIBRARIAN JOHN BOHLIER 18222 TOWNE AVE CARSON, CA 90746 324-6534