SUPER 99 MONTHLY

```
SUPER 99 MONTHLY    PRESENTS
WORD PROCESSOR    D U M P
*****************************
NOW YOU CAN CREATE SCREEN
DUMPS AND PRINT THEM FROM
THE FORMATTER IN
TI-WRITER!
*****************************
SELECT   NORMAL OR INVERSE,
DENSITY, TABS, AND MORE!
```

All of every issue of <u>Super 99 Monthly</u>, except of course our banner logo, has been printed using TI-Writer for the master copy. As you can see from the screen dump shown above, we have now expanded our capabilities to include graphics. This entire page was printed in one pass through the FORMATTER of TI-Writer! The screen designs and characters shown above were created using Tigercub Software's "Nuts & Bolts", which, as you can see, is a very useful disk of subprograms!

So, how much are we selling the

Word Processor Dump program for, huh? The program is included in this issue!

The most commonly requested topic related to Multiplan™ has been the creation of Multiplan™ files from outside the Multiplan™ environment. This month, we offer a primer on building SYmbolic LinK (SYLK) files for Multiplan™.

We hope you enjoy this month's feature articles. The material has taken a considerable amount of time to develop. We started with the basic concepts several months ago. Projects such as this have put us a bit behind schedule. Though we are very aware of the importance of timeliness, we felt the number of requests for these topics outweighed the time factor. Special thanks go to Bill Harms, Dr. Ronald Albright, Charles Foster and Charles Robertson for their hearty encouragement on these projects!

Using Cassettes

STANDARD: 1A 9A 14A

There are still a lot of people buying new 99/4A's and many others who may benefit from a discussion of using cassettes. We'll assume you've read the manuals that came with your computer and know how to use OLD and SAVE.

First, it is important to note that cassette recorders and tapes are about the only computer items for which there is almost no relationship between quality and price. Most of the best recorders range in price from $40 to $60 and the better tapes are seldom over $1.75. Both are generally better if labeled as being specifically suited for computer usage.

Recorders are much easier to use if they have a counter. The counter tells the point on the tape at which the winding is currently situated. Recorders with a counter cost very little more than ones without one. If you already have a recorder that does not have a counter, there are some things you can do to simplify matters. One of the best ideas is to voice in the name of the next program on the tape. State the name of the program several times as you'll need to be able to locate the voice section using the recorder's fast forward (not an easy task if the section is brief). Also, if you place your most frequently used programs and files at or toward the beginning of the tape, they'll be easier to find.

The length of the tape is also important. Long tapes have thinner tape than short tapes. Thin tape is likely to stretch or tangle, which usually results in an unreadable tape and often a mess, too! Buying tapes of over 30 minutes almost guarantees problems and 12 to 15 minute tapes are generally the best. Also, try to avoid the first minute or so on a tape as it is prone to stress from rewinding and may become bad.

There are two error messages that are common in using cassettes. "No Data Found" usually indicates the volume and/or tone are too low. A "Error Detected In Data" message generally stems from the volume and/or tone being set too high. See if your recorder will both read and write at the same setting so that no adjustment is necessary. Then mark the place on the adjustment knob in case you obtain a tape from someone else and it does not work with your settings, which is a common problem.

If you want to use 2 cassettes, you may need to find one of the older 99/4A's (someone may be willing to trade if you have a newer one -- most of the newer models are beige). It seems that the price wars got so hot that TI decided to save 50 cents and allow only one cassette on the later models. Of course, 2 recorders also requires a dual cable.

If you want to make a tape permanent, there are knockout tabs at the rear edge that can be removed. Once the tabs are removed, the only way to write on the tape is to cover the notches with an adhesive tape or something similar.

And, here's a good tip for BASIC users. OLD wipes out any BASIC program you have in memory! If you intended to type SAVE and entered OLD instead, press <SHIFT> <E> <ENTER> before proceeding beyond the first prompt. You will be able to exit the cassette routine and your program will still be in memory. Also, when you are using Extended BASIC, you can combine the OLD and RUN operations by keying RUN "CS1".

One last piece of advice regarding cassette -- with the steady drops in price of disk systems, you may want to consider adding disk for a much more versatile and faster system. There are some unbelievable bargains sometimes. One user recently reported that a Sears store recently sold 6 Peripheral Expansion Boxes for only
-->

$19.95 each! With so many people switching to the new brands of disk controller cards, there have to be some really good deals floating around for the TI cards that were formerly used. And prices for top brands of disk drives (new) are now down to $90 to $150! Certainly, these prices may still be out of the range of many of you, but if you thought that it still costs $1500 for a disk system, you'd best take another look! If disk is out of the question, consider the Mini Memory Module, which will give you more RAM (memory), access to fast Assembly language routines, the capability of simulating disk files in the Mini Memory RAM and the capability of accessing Video Display Processor memory directly, which is surprisingly powerful. Mini Memory prices have now fallen to below $40 (formerly $99.95) through some vendors. By the way, while the Mini Memory is being advertised new for $40, TI wants $35 for an exchange if your battery runs down in the module (the battery will retain a program in the RAM memory of the module) or you need a replacement for whatever reason. We've been asking around trying to find somebody who knows how to change the battery, but since we haven't yet located anyone, our advice is that if your battery is down, buy a new module and sooner or later somebody will pop up with the answer and you'll have a backup for the next time it goes out (which is supposed to be about 5 years, but some folks are already having this problem and couldn't have had the module for five years).

Thanks go to Bayou 99 User Group, Central Iowa 99/4A UG and Jim Peterson of Tigercub Software for supplying some of these tips and/or reminding us of them.

EXTENDED BASIC

Base Conversion Subprograms

STANDARD: 1A 2XB 9A

When Barry Traver recently posted a message on the TI FORUM on Compuserve™ with some really great base conversion subprograms, we knew right away many of our readers would appreciate receiving the routines. Many thanks go to Mr. Traver for giving us permission to print the routines and for posting the message!

While many programs take up many lines to convert bases, Mr. Traver has condensed the required code to only 10 lines for 6 programs! You can save them on disk in MERGE format and MERGE them in as you need them. Here is an example of converting decimal 32 to hex (answer is 20):

```
100 CALL DEC_HEX(32,H$):: PR
INT H$
```

Here are the 6 (can you believe it?) subprograms:

```
30000 SUB DEC_BIN(D,B$):: T=
D :: B$=""
30010 Q=INT(T/2):: R=T-2*Q :
: B$=SEG$("01",R+1,1)&B$ ::
IF Q<>0 THEN T=Q :: GOTO 300
10
30020 SUBEND
30030 SUB BIN_DEC(B$,D):: D=
0 :: L=LEN(B$):: FOR I=1 TO
L :: P=POS("01",SEG$(B$,I,1)
,1)-1 :: D=D+P*2^(L-I):: NEX
T I :: SUBEND
30040 SUB DEC_HEX(D,H$):: T=
D :: H$=""
30050 Q=INT(T/16):: R=T-16*Q
 :: H$=SEG$("0123456789ABCDE
F",R+1,1)&H$ :: IF Q<>0 THEN
 T=Q :: GOTO 30050
30060 SUBEND
30070 SUB HEX_DEC(H$,D):: D=
0 :: L=LEN(H$):: FOR I=1 TO
L :: P=POS("0123456789ABCDEF
",SEG$(H$,I,1),1)-1 :: D=D+P
*16^(L-I):: NEXT I :: SUBEND
30080 SUB BIN_HEX(B$,H$):: C
ALL BIN_DEC(B$,D):: CALL DEC
_HEX(D,H$):: SUBEND
30090 SUB HEX_BIN(H$,B$):: C
ALL HEX_DEC(H$,D):: CALL DEC
_BIN(D,B$):: SUBEND
```

Well, we didn't have to wait for someone to try to top Barry's routines! A couple of days later he
-->

posted a message to our Editor with this incredibly condensed amalgamation of the short programs above:

```
100 INPUT "NUMBER? ";N$ :: I
NPUT "FROM BASE? ";F :: INPU
T "TO BASE? ";T :: CALL NUMC
ON(N$,F,T):: PRINT "THE ANSW
ER IS ";N$: : :: GOTO 100
30000 SUB NUMCON(N$,F,T):: D
=0 :: L=LEN(N$):: FOR I=1 TO
 L :: D=D+(POS("0123456789AB
CDEF",SEG$(N$,I,1),1)-1)*F^(
L-I):: NEXT I :: N$=""
30010 Q=INT(D/T):: N$=SEG$("
0123456789ABCDEF",D-T*Q+1,1)
&N$ :: IF Q<>0 THEN D=Q :: G
OTO 30010
30020 SUBEND
```

If that isn't a lean program, there aren't any cows in Texas!

TI—WRITER

Bit-Image Printer Graphics!

STANDARD: 1A 2TW XB 3B 4B 5A 6B 7A
           9A 10A

Are you tired of having to write dull letters, while your friends zip out fancy letterheads on other brands of computers? Well, after reading this article, you'll have the lead again in the race for the most versatile computer system! You will be able to produce a letterhead directly from your TI-Writer word processor! Let those other folks fumble through their disks to find the various programs they need!

Not only will you be able to produce letterheads, but our utility program will dump any Extended BASIC (regular VDP Graphics mode) screen in a variety of ways! If you can put it on the screen, you can dump it to a file for printing from TI-Writer!

The program (actually it is a subprogram) is written for use with the Epson/Gemini compatible printers, which would include the Impact Printer from TI. Later in this article is an explanation of all of the printer commands used in case your printer is not completely compatible with the one we tested on.

There are several options available. You may choose either single-density or double-density graphics (the double-density yields darker and generally better print). Another option is to print in normal or inverse. Normal uses the pixel information from the screen to produce a printout that matches the screen. Selecting inverse toggles the bits, so that the shading is opposite of the screen -- if a pixel was on, then the corresponding print bit is off and vice versa. A third option is to dump consecutive rows, any or all rows from 1 to 24! Finally, you may tab the dump to place it in whatever area of the page you desire. A dump occupies a little over a half page horizontally. While our program does not build a wider printout, with added effort it would be possible to create a pattern across the entire page! Let your imagination run wild!

Once you have keyed in the subprogram, it should be saved to disk as a MERGE format file for MERGE'ing into your programs that create screens. To access the subprogram, simply use CALL DUMP_TIW(BR,ER,F$,DE,I$,T). Here is an explanation of how the variables in the parameter list are used:

BR = the beginning screen row you want to dump, 1 to 24.

ER = the ending screen row to dump, 1 to 24.

F$ = the file name you want to use, such as "DSK1.FLOWERDUMP".

DE = the density to use, either 1 or 2.

I$ = the inverse option. Use "I" to select inverse, any other valid string to select normal.

T = the tab value. The first position available on the
-->

printout is 0. Using a value of 20 will center the printout on most printers on standard-sized paper.

Here is an example that selects the last five rows of the screen, a file called "MYFILE" in disk drive 2, double-density, inverse and a centered tab position (the line number could be any valid line number before all subprograms):

```
100 CALL DUMP_TIW(20,24,"DSK
2.MYFILE",2,"I",20)
```

To use the subprogram, either write a program that builds a screen or use OLD to bring in a program that builds a screen that you want to dump. MERGE in the subprogram. Insert a CALL as described above at whatever point necessary in your program to dump a screen. If you just want to test it out, MERGE in the subprogram and key in line 100 above as it is (or change the drive reference if you do not have a second drive). Key RUN and a dump of the immediate mode display will be created.

As there could be many modifications that you might need or want to make, here is an explanation of what all the lines in the routine do:

25000 Passes the variables from your CALL parameter list.
25010 Traps errors, such as an invalid output device name. If one of the error traps detect an error, the message "BAD PARAMETER" will appear on the screen and no file will be created.
25020 Traps out unacceptable tab and beginning and ending row values.
25030 Sets the density to a default of single-density unless 2 was specified.
25040 Opens the file, uses D$ as the valid characters for hexadecimal notation and uses C$ to identify characters that will not be transliterated due to possible conflicts with the requirements of FORMATTER. Re-sets D$ in case you dump more than one screen.

Be sure to change the file # if you already have an OPEN #1 !!!!!
25050-25060 Establishes that all characters whose ASCII value is between 2 and 122 will be used for transliterations, provided the character is not found in C$.
25070 Establishes a print command sequence to be used with every row of print. The escape sequences have the following meanings on our printer:
27,65,8 Sets vertical spacing to 8/72 inch. Actually, our printer uses 23/216, but most use 8/72.
10,13 sends a carriage return and line feed.
27,108,T Sets the left margin, so that a horizontal tab of T will be performed.
27,75,0,256 Sets bit-image graphics for single-density. (not used if 27,76,0,512 is used).
27,76,0,512 (If 27,75,0,256 is not used) Sets bit-image graphics for double-density.
25080-25110 Converts the screen graphics to printer graphics.
25120 Toggles all bits if inverse is selected.
25130-25150 Writes a transliteration for all possible screen characters, 32 to 143.
25160-25170 Dumps the screen.
25180-25200 Re-sets all transliterates to their normal value, so that text can be inserted below the dump.
25210 Initializes printer with the 27,64 instruction and sets the page length to 1, to prevent form feeds. To add text, change or remove the page length. Exits the subprogram and closes the disk file.
25220 Prints the error message and halts execution of the program. The only way to get to this line is from an error trap.
25230 Required to end the subprogram.

When using FORMATTER, you must give your printer a CR designation, such as "PIO.CR". This is often not a convenient way to use TI-Writer for
-->

text. If you know how to use the CR designator in FORMATTER or don't want to do anything fancy, your added lines can end with a linefeed, created by using the Special Character mode. Key <CTRL> <0> to turn word wrap off. In the 80th character position on the line, key <CTRL> <U> <SHIFT> <J>. Change the page length command that follows the dump. Your text can now be entered in the same format as it will appear on the printed page. If you want to make use of the LF format, you can print the file as it is, re-enter the FORMATTER and add your document below the dump. Of course, there are many possibilities that are too numerous to list when working from the CR option.

You should be aware that because the program does a lot of manipulations that are slow in Extended BASIC, the program will take about 8 to 9 minutes to run. The dump file prints from FORMATTER in under one minute (about 52 seconds). Maybe we'll get around to some Assembly routines in a future issue, but we wanted to make this program accessible to as many people as possible and many readers prefer to not wade through Assembly code, especially for a program such as this one that could require a number of modifications.

Here is the subprogram listing (no, this is not continued next month, the entire listing is only 24 lines!):

```
25000 SUB DUMP_TIW(BR,ER,F$,
DE,I$,T)
25010 ON ERROR 25220
25020 IF (T<0)+(T>40)+(BR>ER
)+(BR<1)+(BR>24)+(ER<1)+(ER>
24)THEN GOSUB 25220
25030 IF DE<>2 THEN DE=1
25040 OPEN #1:F$,DISPLAY ,VA
RIABLE 80,OUTPUT :: B$="0123
456789ABCDEF" :: C$=" *.^&@"
&CHR$(27)&CHR$(10)&CHR$(13):
: D$=""
25050 FOR I=2 TO 122 :: IF P
OS(C$,CHR$(I),1)=0 THEN D$=D
$&CHR$(I)
25060 NEXT I
```

```
25070 PRINT #1:".TL 1:27,65,
8,10,13,27,108,"&STR$(T)&",2
7,"&SEG$("7576",DE*2-1,2)&",
0,"&STR$(DE)
25080 FOR I=32 TO 143 :: CAL
L CHARPAT(I,H$)
25090 C1,C2,C3,C4,C5,C6,C7,C
8=0 :: FOR P=1 TO 15 STEP 2
:: X=POS(B$,SEG$(H$,P,1),1)-
1 :: Y=POS(B$,SEG$(H$,P+1,1)
,1)-1 :: Z=2^((15-P)/2)
25100 C1=C1+Z*SGN(X AND 8)::
 C2=C2+Z*SGN(X AND 4):: C3=C
3+Z*SGN(X AND 2):: C4=C4+Z*S
GN(X AND 1)
25110 C5=C5+Z*SGN(Y AND 8)::
 C6=C6+Z*SGN(Y AND 4):: C7=C
7+Z*SGN(Y AND 2):: C8=C8+Z*S
GN(Y AND 1):: NEXT P
25120 IF I$="I" THEN C1=255-
C1 :: C2=255-C2 :: C3=255-C3
 :: C4=255-C4 :: C5=255-C5 :
: C6=255-C6 :: C7=255-C7 ::
C8=255-C8
25130 A$=".TL "&STR$(ASC(SEG
$(D$,I-31,1)))&":"&RPT$(STR$
(C1)&",",DE)&RPT$(STR$(C2)&"
,",DE)&RPT$(STR$(C3)&",",DE)
&RPT$(STR$(C4)&",",DE)
25140 A$=A$&RPT$(STR$(C5)&",
",DE)&RPT$(STR$(C6)&",",DE)&
RPT$(STR$(C7)&",",DE)&RPT$(S
TR$(C8)&",",DE):: A$=SEG$(A$
,1,LEN(A$)-1):: PRINT #1:A$
25150 NEXT I
25160 FOR I=BR TO ER :: A$=C
HR$(1):: FOR J=1 TO 32
25170 CALL GCHAR(I,J,C):: C=
MIN(MAX(C,32),143):: A$=A$&S
EG$(D$,C-31,1):: NEXT J :: P
RINT #1:A$ :: NEXT I
25180 PRINT #1:".TL 1:1"
25190 FOR I=2 TO 122 :: IF P
OS(CHR$(I),C$,1)=0 THEN PRIN
T #1:".TL "&STR$(I)&":"&STR$
(I)
25200 NEXT I
25210 PRINT #1:CHR$(27)&CHR$
(64):".PL 1" :: CLOSE #1 ::
SUBEXIT
25220 PRINT "BAD PARAMETER"
:: END :: RETURN
25230 SUBEND
```

MULTIPLAN™

An Introduction to SYLK Files: Converting DISPLAY 80 Files to Multiplan™ Files

STANDARD: 1A 2XB MP 3B 4B 5A 6B 7A
            9A

One of the most apparent problems in using Multiplan™ is the slowness of entering cell information. The way to improve the speed is obviously to enter the information from another module that allows a link to the Multiplan™ module. While a system for linking has existed, almost nobody has known how to properly construct a file for the link. The linking files are known as SYmbolic LinK, or SYLK, files.

We were able to locate only two reference sources for SYLK information, both from TI. The Multiplan™ manual devotes 4 pages to SYLK commands, but gives no instructions on how to actually build the files, which is surely a prerequisite to making serious usage of the command list! The second reference was a program listing from TI that builds a single cell SYLK file from console BASIC. As it turns out, the program is forced to work and has almost no relationship whatsoever to building a spreadsheet with more than one cell. We would like to believe that this was a cruelty joke on the part of one person and not the attitude of TI! The mailbag will be full on this one!

So, what is the big secret? Actually there are two:

1. Contrary to what you might assume, there is no relationship between a cell and a record. The cell information is continuous, wrapping from record to record. Usually there are several cells in one record and information for the last cell in the record often continues into the next cell. This is not particularly surprising, but check out the

second secret!

2. The SYLK file is a hybrid! You can save a spreadsheet you have previously built in SYLK format directly from Multiplan™. When you catalog the disk, you see that the SYLK file is in INTERNAL/FIXED 128 format. However, if you use a disk sector editor, it becomes obvious that the file records appear exactly as if the file were in DISPLAY format rather than INTERNAL format. So, the file is actually a hybrid!!!!!!!!!

The steps required to build a SYLK file are now clear. To convert a DISPLAY/FIXED 80 text file to a SYLK file, simply run our utility as listed below and then use a sector editor to toggle the proper bit in byte 12 of the File Descriptor Record of the disk. What follows is a complete set of instructions that will make it very simple for even a person who has never used a sector editor to build a SYLK file. Those of you who are advanced users will likely quickly come up with your own method and may even incorporate an Assembly routine in our utility to automatically change the File Descriptor Record. We recommend using the "Advanced Diagnostics", or "Diags" as it is often called, utility disk from Millers Graphics as the sector editor. We assume the use of "Diags" in our instructions. Our most recent information is that the Myarc disk controller does not yet support the "Diags" software, so if you have a Myarc controller you will need a different sector editor. It is our understanding that Craig Miller may be working on a Myarc version. The basic concept will still be the same -- edit byte 12 of the File Descriptor Record.

IMPORTANT: Read all of the instructions before proceeding!

STEP 1: Key in the program listing below in Extended BASIC.

STEP 2: Your file will be limited to 255 records (255 lines) because Multiplan™ is limited to 255 rows. The program does not check this, so

-->

if you are not certain, use the EDITOR in either Editor/Assembler or TI-Writer to check the number of lines (E/A preferred).

STEP 3: If your file is in FIXED format, skip this step. If your file is in VARIABLE format, you must convert it to FIXED. As covered in previous issues, this is easily done from either Editor/Assembler (E/A) or TI-Writer. This is a case where the E/A is preferred because it will strip control characters from your text, which may be required for use in Multiplan™ (we did not check this out -- it is an assumption). Just use SAVE with the N option.

STEP 4: Be sure there is adequate space on your disk for the file you are about to build. For the first few times you convert, you will probably want to include on your disk only the program, the source (DIS 80) file and the destination (SYLK) file to be sure there is adequate space on the disk.

STEP 5: RUN the program. It will prompt for the name of your DIS/FIX 80 file and the name you want to assign to the SYLK file. The program will then do all of the work in building the file.

STEP 6: To make it easy for users who are not familiar with sector editors, move the SYLK file to a newly initialized diskette using a disk manager.

STEP 7: Load the "Diags" software per the "Diags" instructions. Place the disk created in STEP 6 in drive 1. Key "ES 2", which stands for Edit Sector 2. Press <FCTN> <=> to switch from HEX to ASCII. You should now see the filename of your SYLK file in the first 10 bytes of the sector (bytes 0 to 9). Press <FCTN> <D>, the right arrow, to move the cursor to the next to last position on the first line. At the top of the screen, you should see that you are at byte 12 (again, the bytes are numbered from 0, this is the 13th byte). Press <FCTN> <=> to toggle back to HEX. The last four characters on the first line,

beginning at the position of the cursor, should read "0002". Change this to "0202". Press <FCTN> <9>. Key "WS 2" to write the revised sector to disk. You have just changed the catalog from DISPLAY to INTERNAL, without affecting the actual file!

STEP 8: SYLK is not very efficient, so we suggest loading the file and saving it back out in NORMAL format. It will take much longer to load the SYLK file than it does to load a NORMAL file. From Multiplan™, press <T> for Transfer, <O> for Options, <S> for SYmbolic, <T> for Transfer, <L> for Load. Insert the disk that includes your SYLK file. Enter the name of your SYLK file. Press <T> for Transfer, <O> for Options, <N> for Normal, <T> for Transfer, <S> for Save. Insert the disk you want the file saved onto. Enter the filename.

STEP 9: Gloat! You eliminated typographical errors and probably saved a lot of time and keystrokes!

Here is the program listing:

```
100 DISPLAY AT(1,5)ERASE ALL
:"DIS/FIX 80 TO SYLK"
110 DISPLAY AT(3,1):"ENTER D
IS/FIX 80 FILE NAME";"DSK ."
120 ACCEPT AT(4,4)BEEP SIZE(
-18):F1$
130 OPEN #1:"DSK"&F1$,DISPLA
Y ,FIXED 80,INPUT ,RELATIVE
140 C=0
150 LINPUT #1:A$
160 C=C+1
170 IF EOF(1)=0 THEN 150
190 DISPLAY AT(6,1):"ENTER D
ESIRED SYLK FILE NAME";"DSK
."
200 ACCEPT AT(7,4)BEEP SIZE(
-18):F2$
210 OPEN #2:"DSK"&F2$,DISPLA
Y ,FIXED 128,OUTPUT
220 R$=CHR$(13)&CHR$(10)
230 T$="ID;PMP"&R$&"F;W1 5 1
6"&R$&"F;DGOG8"&R$&"B;Y"&STR
$(C+1)&";X5"&R$
250 FOR I=0 TO C-1
260 LINPUT #1,REC I:A$ :: T$
=T$&"C;Y"&STR$(I+1)
270 FOR J=1 TO 5
280 IF LEN(T$)>128 THEN CALL
```

                                    -->

```
WRITE(T$,T1$):: T$=T1$
290 IF J>1 THEN T$=T$&"C"
300 T$=T$&";X"&STR$(J)&";K"&
CHR$(34)&SEG$(A$,16*J-15,16)
&CHR$(34)&R$
310 NEXT J
320 NEXT I
330 IF LEN(T$)>128 THEN CALL
   WRITE(T$,T1$):: T$=T1$
350 T$=T$&"W;N1;A1 1"&R$&"E"
&R$
360 IF LEN(T$)>128 THEN CALL
   WRITE(T$,T1$):: T$=T1$
370 PRINT #2:T$&RPT$(CHR$(0)
,128-LEN(T$))
999 END
20000 SUB WRITE(T$,T1$)
20010 PRINT #2:SEG$(T$,1,128
)
20020 T1$=SEG$(T$,129,LEN(T$
)-128)
20030 SUBEND
```

This article has been merely an introduction to the possibilities of using SYLK files. In future issues, we will cover other uses for SYLK files.

COMMUNICATIONS

Dialing Around

STANDARD: 1A 2TE 3A 5A (o) 9A 13A

Bayou 99 UG TIBBS™ has moved to a new number with a new SYSOP. Roger Hickerson is now at the helm with a 24 hour system. The new number is (318) 474-6144 (ed. note: I check in on this BBS daily, as Bayou 99 UG is my "home port"). During a recent transition period, you may have been unable to reach this BBS, but it is now expected to be up 7 days a week.

An upgrade was recently installed on the TI FORUM on Compuserve™. The message base was expanded from 300 to 500 messages, so that users who are unable to log in frequently will now be able to keep up with more of the messages. Also, software error checks are now in place to ensure that users are not easily "bombed" off the system due to brief "glitches" that commonly occur in telecommunications. There are no significant changes that affect the actions of users, so the great services that were in place before are still there on the TI FORUM!

Your communications gear and your entire computer system are subject to damage from power surges! A local user recently had a modem and printer go out at the same time. Though it was not proven, the only explanation seemed to be that a thunderstorm had sent a power surge through both units, causing substantial damage. The cost? A board on the printer had to be replaced at a cost of $80 and the tab for the modem is not yet in. The damage could easily have been even more severe. Chances are, the user had never been fully apprised of the potential for damage. Computer dealers often do not mention the need for surge protectors for a variety of reasons -- they aren't aware of the dangers, they fear losing a sale due to the system cost exceeding the budget of the potential buyer, they forget, etc. Users in our area have now become very aware of the potential hazards and power surges are a common topic of conversation. You can build your own protector for $20 to $40 or buy a commercial unit for $40 to $120. In either case, do get one! And, when you notice a storm, unplug your phone line from your modem and disconnect the power to your system to be extra safe! You may also want your printer on a filtered line. After taking these precautions, the next time a storm subsides, breathe a sigh of relief that your system was safe!

Looking for some good BBS numbers? You might try giving a call to some of the TIBBS™ numbers. Try the one in Clawson, MI, Craig Barton, Sysop, at (313) 751-1119. Or, give a call to H.U.G. TIBBS™ in Houston, TX, at (713) 699-2073. The number for Philly TIBBS™, Philadelphia, PA, is (215) 927-6432. "The Original" in Atlanta, Georgia is at (404) 425-5254, at 300 and 1200 baud. All 24 hours, numbers and times subject to change.

-->

FORTH

A Loader Program

STANDARD: 1A 2EA 4B 5A 6B 7A 9A

As we have discussed before, keeping track of what is on your FORTH disk can get to be a problem. In previous articles, we discussed setting up a directory and simulating the Extended BASIC statement ACCEPT. Now, we will combine the two ideas to allow you to see what screens are available and then select a screen without having to key the word LOAD.

Screen 113 (the screen number was arbitrarily selected, any will do), will accomplish our task. As is standard, we begin and end the screen by storing and retrieving the base on the return stack. Next, we load the dash options that are required.

On line 1, we defined a word whose sole use is to later clear the words used from memory ("MYWORD"). Then, we initialize the variable "GET". We are then ready to begin the actual process of building and using the loader.

Lines 2 through 10 are print statements that indicate the contents of the disk. The screen number range is on the left and a brief description of the usage of the screen is on the right.

At line 11 we define our ACCEPT type statement. At increment 1 beyond the PAD position to input a string, then convert the string to a number with VAL, which is automatically entered into FAC. Then we move FAC to the regular stack and store the number in the variable GET. Note that the word allows you to key three characters and then it moves on -- you only press enter for less than the three characters expected, which makes the routine very fast!

Line 12 defines a word, "DOIT", which retrieves the variable "GET" and places it on the stack, then uses "GET" with LOAD to load the screen selected. It probably wasn't necessary for us to store "GET", but in case you want to modify the routine, you will need a variable if you place anything on the stack between "SELECT" and "DOIT". Also, we just wanted to give an example of the use of a variable.

At line 13, we print a prompt and at line 14 we execute the words defined, then forget everything back to "MYWORD".

To make this routine especially easy to use, you can define a word on your boot screen, screen 3, called "DIR" (short for "DIRECTORY"), as follows:

: DIR   113 LOAD ;

Then, when you want to select a screen, just key "DIR", wait for the directory to appear, and key the screen number. If it is a 3 digit screen number, you won't even have to key <ENTER>! For 1 SS/SD drive, change 3 to 2 on line 11.

SCREEN 113

```
 0 BASE->R DECIMAL -FLOAT -SYNONYMS -EDITOR
 1 : MYWORD ;       0 VARIABLE GET
 2 CR ." 113        DIRECTORY          "
 3 CR ." 114        FAVORITE PROGRAM "
 4 CR ." 115        PHONE LIST "
 5 CR ." 116 - 117 UTILITY PROGRAM "
 6 CR ." 118 - 119 GRAPHICS DEMO 1 "
 7 CR ." 120        GRAPHICS DEMO 2 "
 8 CR ." 121        FAVORITE WORDS   "
 9 CR ." 122 - 124 S99M GAME "
10 CR ." 125        NEXT DIRECTORY "
11 : SELECT PAD 1+ 3 EXPECT VAL FAC->S GET ! ;
12 : DOIT CR GET @ LOAD ;
13 CR ." MAKE YOUR SELECTION: "
14 CR SELECT DOIT FORGET MYWORD
15 R->BASE
```

-->

99 POTPOURRI
News, Corrections, Updates, Editorials, Kudos, and Come-what-may

CORRECTIONS:

March: We omitted the proper number of diskettes to send for the "SPRITE BUILDER" FREEWARE. You should send two SS/SD disks or one DS/SD disk to John E. Taylor, 2170 Estaline Drive, Florence, AL 35630. The program is an Extended BASIC / Assembly language hybrid. The program has 22 active single-keystroke functions and five sprite storage spaces on the screen. "SPRITE BUILDER" comes with a cassette version (without MERGEable code), disk version, fully commented Assembly language source code, documentation, a sprite slide show and over 115 pre-defined sprite patterns on disk. If you do not want to send a disk, you can send $7.50 for the two SS/SD disks or $5.00 for the DS/SD disk.

We recently had an opportunity to more thoroughly test "Advanced Diagnostics", the disk and system test disk from Millers Graphics, 1475 W. Cypress Ave., San Dimas, CA 91773. The package, which is $17.95 plus $1.50 S and H, properly picked up on tracking problems on 3 TEAC 55B disk drives. Then, we got in a TEAC 55B from Derric Electronics, P.O. Box 594, Northford, CT 06472. The new drive tested properly and ran quietly. The price from Derric was about average, but we didn't have to work on it or pay somebody $40 to fix it! Our hat is off to both Craig Miller and Derric Electronics for jobs well done! Nice goin'!

If you are looking for a really nice program for creating fancy characters and pictures for printing, try "Character Sets and Graphics Design". It comes on 3 diskettes and is available in either Epson or Prowriter compatible versions for only $17.95 from Dave Rose, 2781 Resor Road, Fairfield, OH 45014-5053.

Since we switched to bulk mail a few months ago, we have received several complaints of issues being unusually late. To date, every issue has been mailed in the month on the cover. However, the mail is taking 3 days to 2 weeks and longer. We are sorry that the slow mail deliveries to some areas are beyond our control.

We had originally planned to include an article on the Navarone "Database Management" package in this issue. However, at the beginning of May, Navarone announced that the long-awaited improved documentation for the package was completed and being mailed. Though we know of users who have received their new manual, we have not yet received one and have postponed our article until such time as we are able to produce an article that we are sure does not cover the same material as is covered in the new manual.

Central Iowa 99/4A Users Group is offering a really good booklet called "99 (4/A) Tips". The 99 tips range from simple tips for beginners to some useful advanced material. The book is quite useful. It aided us in writing our Word Processor Dump program. The booklet is $4 from the group at Box 3043, Des Moines, IA 50316. We thank group President John Hamilton for sending a copy to us.

[]
[] Compuserve is a registered trademark of Compuserve Information Services. []
[] Multiplan is a registered trademark of Microsoft Corp. []
[] TIBBS is a register trademark of Ralph Fowler. []
[]
-->

SUBSCRIPTIONS (PER YEAR):
   USA AND POSSESSIONS $12.00
   OTHER COUNTRIES $16.00
   FOREIGN AIR MAIL $26.50
INDIVIDUAL COPIES:
   U.S. SUBSCRIBERS $ 1.00
   CANADA SUBSCRIBERS $ 1.35
   OTHER $ 1.50
Subscriptions may be back dated at no
  premium fee (pro-rates to same as
  subscription price).

STANDARD KEY

1	Computer	A	TI-99/4A
2	Cartridge	XB	Extended BASIC
		EA	Editor/Assembler
		TW	TI-Writer
		MP	Multiplan (TM)
		TE	Terminal Emulator II
3	RS-232	B	TI
4	Disk Drive	B	TEAC 55B
5	Expansion Box	A	TI
6	Disk Controller	B	CorComp
7	32K Card	A	TI
9	Monitor or TV	A	TV & RF Modulator
10	Printer	A	Gemini 15-X PC
13	Modem	A	Volksmodem (TM)
14	Cassette	A	Any

Volksmodem is a registered trademark
of Anchor Automation, Inc.

SUPER 99 MONTHLY
Richard Mitchell, Editor

M
08/85

POSTMASTER: ADDRESS CORRECTION REQUESTED.

MAY
SUPER 99 MONTHLY