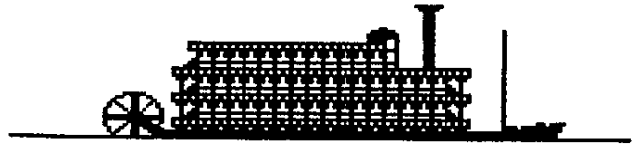


'TI DBITS

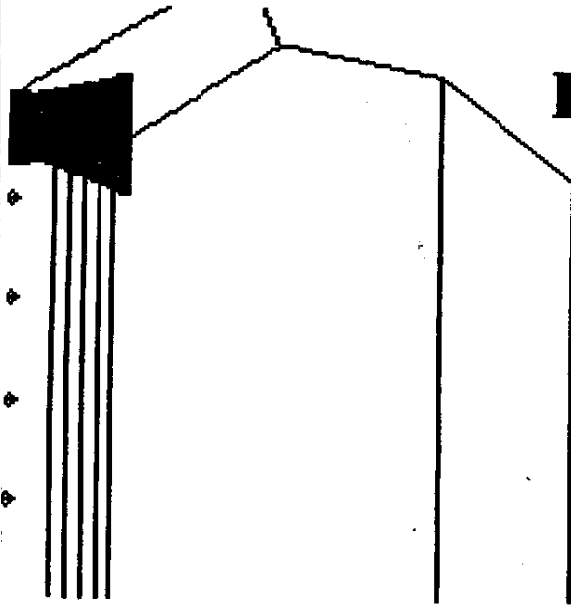
MID SOUTH 99 USERS GROUP



MEMPHIS TENNESSEE

**FATHER'S
DAY**

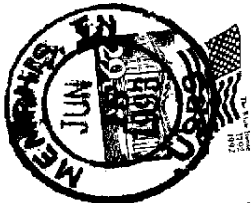
**JUNE
1993**



Mid-South 99 Users Group
P. O. Box 38822
Gerantown, TN, 38183-0822

FIRST CLASS MAIL

UG 2/86
DALLAS TI USER GROUP
P.O. BOX 29863
DALLAS, TX 75229



E Move cursor back one page
 X Move cursor ahead one page
 C Copy all files
 D Delete all files
 N Perform No Action on Any Files
 P Protect all files
 U Unprotect all files

(The CTRL key functions were first introduced in version 5.0)

The Execution of the selection commands can be initiated by pressing FCTN 6, (without having to run down the file list to the last file). Pressing ENTER when the cursor is at the last field on the last page works the same as pressing FCTN 6.

The other improvements are faster disk initialization and copying speeds in addition to these introduced in version 5.0:

Screen blanking active
 Myrac 9640 Geneve compatible
 Horizon RAM disk compatible
 Drives 1-9 and A-Z accepted (Horizon Ramdisk/Rambo)
 Defaults for Density, Sides, Verify, Tracks, and Sectors/track (for double density) easily changed

As with any new program, read the instructions and any READ-ME files that are present. To print these files, just boot up DM-1000. If you haven't made a back-up yet, write-protect your master and make the back-up before going any further. Select the file utility and drive. Move the cursor (using the arrow keys) next to the *README file and press "P". DM-1000 will print the file. Do the same for the DMDOCPT1, DMDOCPT2, and DMDOCPT3 files to print the program documentation.

This has been a quick review of DM-1000 Version 5.0 by one whose previous version was Version 3.8. Version 5.0 is quicker and simpler to use, and the documentation is straight forward and easy to follow. I think you will enjoy this latest version.

EARL RAGUSE AND

----- by Harold Hoyt

STICKY MENUS

from the pages of the St.Louis COMPUTER BRIDGE, Oct. 92

Letter to Earl Raguse in response to a nice letter recieved from him.

September 29, 1992
 Mr. Earl Raguse

Dear Earl,

Am glad you enjoyed my STICKY menu. There are only a few of us left out here that write XBasic. Actually, STICKY had a few clinkers in it. Was trying to demonstrate to new TI'ers things that our wonderful machine can do, like talk. The display of the mask was a diagnostic left in without much

justification.

Actually, the mask is a poor choice for filtering. Making the poor machine do all that floating point arithmetic, since XBasic doesn't distinguish between integer and floating point variables. Used the mask once when I was away from home, and couldn't remember the format of POS and didn't have an XBasic manual handy. You are the first to comment on it. Is anybody out there reading our stuff with a critical eye?

Since you improved my menu, I thought mutilating yours would be fair play. It was fun trying to change little of the main program, while having the changed subroutines work the same way. Came pretty close to succeeding. It was annoying that CALL KEY (3,K,S) wouldn't allow lower case in any following CALL KEY (0,K,S) or any other input. Didn't realize that CALL KEY (5,K,S) would reset the case.

In any event, it's nice to use all the keys. First things changed in your program was your SUB GKEY (0,ROW). One of the things I envy about top notch programmers is their ability to use temporary variables efficiently.

Us non-professionals are so afraid of destroying valuable information that we don't write over any old data, even if we don't need it any more. Some of the bad programming I've seen has over a hundred variables. Even prescan won't speed it up. Once K has been entered from the keyboard, and used, it's OK to write over it and change it to a pointer. LINE 4010 CALL KEY (0,K,S) :: IF S<1 THEN 4010 ELSE A\$=CHR\$(K) . . (last time we'll need the old K, will test for a new character later, continuing with LINE 4010 :: K=POS("AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSs ", A\$, 1) :: Q=K :: IF K=35 THEN A\$="Space" !101 K is the 35th char in the string, so half the reference in your program to k=32 and change them to K=35. Could have moved the space back 3 places and left the K reference alone. The new value of K at the end of the line if 35 will make A\$="Space". Note we now have the ability to use upper and lower case characters in any desired sequence. Still have the option of using CALL KEY(3,K,S) and deleting all the lower case letters in the string in 4010. Could make the most often accessed characters in a menu the numbers which are the easiest to find on the keyboard. Upper and lower case could be used to turn a function ON or OFF, sticky menu style.

One of the best programming utility for the TI is Steve Karasek's SuperBasic. SuperBasic is an interrupt driven terminate and stay resident utility that combines some of the best features of TI-Keys and many other programs. It has recieved excellent reviews, but still remains unknown. Steve has been persuaded to release SuperBasic as fairware, even though his last experience with fairware was dismal. The disk is not copy protected but for the program to run properly, you need a "key" that fits in the joystick port. Our UG hasn't been unable to persuade Steve to put the effort into reprogramming SuperBasic to remove the key. I've decided that the TI community needs SuperBasic and am going to circulate it to programmers with keys as needed. One of the neat features is the JOIN command. I was able to start with your line 130 and append all the lines 130, 140, 150, 160 into one. Just type in JOIN 130 <ENTER> followed by <FCTN REDO> <ENTER> repeatedly untill the machine says, BURP! LINE TOO LONG>. Then edit out all but the first DISPLAY AT . . Using fewer DISPLAY AT commands speeds up

the screen refresh. You commented on my use of `!SAVE DSKX.PROGNAM`. Faster typing. Don't have to delete the `!SAVE DSKX.PROGNAM`. SuperBasic allows great freedom in using line numbers. The `RENUM` command allow you to `RENUMBER` any group of lines and all references to those lines in the program. SuperBasic. Real handy, after you've put a bunch of extra after thought lines in. `RENUMBER` all subroutines to start at logical spots. 500, 600, 700 or 1000, 2000, 3000 etc. renumber all lines out of the way. Like most good programs, SuperBasic is compact and fast. Try it, you'll like it. Am including SuperBasic files on the disk enclosed. Will `AUTOLOAD` from `XBASIC`.

Keep on TI'ing

Sincerely,
Harold C. Hoyt, Jr.

Letter from Earl Raguse. (I hope that Earl doesn't mind making all this stuff public, but there has to be a benefit of seeing how programming is good for the mind. Using 100% canned programs makes your mind stop working, just like excessive TV watching stops your thinking. A dialog about how to program is very stimulating).

August 28 1992
Mr. Harold Hoyt

Dear Harold,

I have been reading your stuff ever since we, the UGOC ROM, started exchanging newsletters. I am not sure how long ago, 2-3 years I guess. Maybe even longer than that, because your articles were frequently reprinted in other newsletters.

I finally decided I just had to write to tell you how much we seem to agree on things. When it comes to programming in IB, I think you are one of the few that uses the line `!SAVE DSK1.STICKY`. That is the first line I write for any program, except I use `!100`, because I frequently `RESEQUENCE` my programs when done. I do use `!1` for subprograms though, I use a lot of those, so that each one overwrites the line `!1` of the previous one, then to get rid of that I just type `!ENTER`.

When I get other peoples disks, I run a program, and `IMMEDIATELY` decide to improve the screen presentation, if nothing else. Then after I had fixed it, I would realize that I did not know what the author had saved it under. I would then have to get out another disk, save the program as changed, then go back and find out what it was originally called, then transfer it. Now the first thing I do is find out the name, resequence the program leaving line `!100` blank, and put in the line `!100` with the name to suit, before I make any changes.

I am a fanatic about having to hit the `ENTER` key when only one key is to be input, or in fact allowed. I find it absolutely amazing that any, otherwise good programmers, use `INPUT`, `LINPUT`, and `ACCEPT` just to get a single key, when `CALL KEY` does so well.

A couple of years ago, I spent a couple of months rewriting `TIPS v1.6` to get rid of the horrible jumbled screens, and the use of `INPUT` for single inputs. I rewrote all the prompts in upper and lower case, used `CALL CLEAR` or `ERASE ALL` generously.

I hate cluttered screens. Mary Phillips, editor of the Ozarker called my `CALL KEY` inputs "Hot Keys", and the name has stuck. Even Rod Wolcott has accepted them.

Also, I have used `CALL KEY(3,K,S)` to insure `UPPERCASE` inputs. Ron Wolcott always ran all inputs through his assembly routine to convert `lc` to `UC`.

Other authors, including me, before I got wise, have `ANDed K` with `95` to obtain the same result. I had to learn the hard way, that one needs to do `CALL KEY(5,K,S)` before doing `ACCEPT AT`, or any other input device, if one wants lowercase inputs. Incidentally, I have had a `286` for 3 years, or more, I use it every now and then when my clients insist. My main complaint is the unfreindliness of the software. I particularly hate `MS WORKS`, if you happened to hit `ENTER` with a marked file, it was `GONE`. I talked to `MS` about that, and they were insulted that I didn't like what they called the "industry standard". They don't even warn you in the docs. They never told you to hit `ENTER`, of course, but they never told not to either. The guy said there was a way of getting the file back, but he couldn't tell me exactly what it was. I found out later that `UNDO` will find it if you do it right away.

I realize that `STICKY` is only a Demo, but I would have used a single subroutine at `500`, with the `Row` as a variable `X+5`, to put the word "Picked", on the proper row. Then `300` would have just `GOSUE 500`. But this, I realize would require that you use consecutive letters in the selection menu. I can't argue with the choice of omitting `I` and `O`, or any other letters for that matter.

Line `3230` is an unusual and clever use of `AND` to detect if the key press is within a limited non-consecutive range. However, if the letters had been consecutive, then it could have been `230 IF X<1 OR X>16 THEN 210 ELSE IF X=24 THEN STOP`. I am not sure I understand why you display `MASK` when you also display `X`, without explanation.

After entering and running the `STICKY` program, I just had to diddle with it, as I always do. I am including the results of my diddling. Note that I have incorporated subprogram `PAK`, one of my most used. Also I use your `MASK` to put up a message to chide the user who tries to test the program by entering a forbidden letter. They always do. Also I let the user erase the "Picked" phrase and let him try it again, as if nothing had happened.

All this shows is that two programmers will get the job done in different ways.

Please find time to write me. I love getting letters from Tiers.

4A 4 Ever

-----Earl Raguse-----

PS: I must get busy and make some more border paper with `TIPSLABLE`. It goes fast when I write 15 - 20 letters per month. I am enclosing `TIPSLABEL v1.32`, for Epson - like printers. I have versions for `SG10` and `GS10x`, even the `MX80`, which did not understand left margin.

What Earl did to `STICKY` from last month.
`100 !SAVE DSK1.STICKY` `230 X=K-64 :: MASK=(X-1)*(X-`
`110 !By Harold Hoyt,` `2*(X-3)*(X-4)*(X-5)*(X-6)*`

```

revised by Earl Raguse
120 CALL CLEAR :: S$=RPT$( "
",) :: V$=RPT$( " ",20)
130 D1$=S$&"A PROG A"&V$&"B
PROG B"&V$&"C PROG C"&V$&"D
PROG D"&V$&"E PROG E"&V$&"F
PROG F"&V$
140 D2$=S$&"G PROG G"&V$&"H
PROG H"&V$&"I PROG I"&V$&"J
PROG J"&V$&"K PROG K"&V$&"L
PROG L"&V$&"M PROG M"&V$
150 D3$=S$&"N PROG N"&V$&"O
PROG O"&V$&"P PROG P"
200 DISPLAY AT(2,7):"STICKY
MENU DEMO":DISPLAY AT(5,1)
D1$ :: DISPLAY AT(11,1):D2$
:: DISPLAY AT(18,1):D3$
210 DISPLAY AT(24,1):"
Press X to Exit Menu-" :: DI
SPLAY AT(22,1):"
Make a Selection"
220 CALL KEY(3,K,S):: IF S=0
THEN 220
X-7)*(X-8)*(X-9)*(X-10)*(X-1
1)*(X-12)*(X-13)*(X-14)*(X-1
4)*(X-15)*(X-16)*(X-24)
240 DISPLAY AT(24,1):"
You Pressed ";CHR$(X+64)::
GOTO 210
250 IF X=24 THEN DISPLAY AT(
12,7)ERASE ALL:"You Quit, I
didn't " :: CALL PAK :: STOP
260 R$="Restrict Entries to
A - P or X"
300 GOSUB 500
400 CALL PAK :: GOSUB 550 ::
GOTO 210
500 DISPLAY AT(X+4,21):"Pick
ed" :: RETURN
550 DISPLAY AT(X+4,21):"
" :: DISPLAY AT(22,1):"":
" " :: RETURN
6100 SUB PAK
6110 DISPLAY AT(24,1)SIZE(30
):" Press Any Key to Procee
d"
6120 CALL KEY(0,K,S):: IF S<
1 THEN 6110
6130 DISPLAY AT(24,1)SIZE(30)
6140 SUBEND

```

MORE ABOUT MIDI MASTER 99

----- by Jim Peterson

Bruce Harrison advises that Service Merchandise carries the Casio Model CT-700 (catalog number CT700ECD) at \$277.94 and the Yamaha model PSR 500 (catalog number 500YMA) at \$399.97. They also carry the power adapters for these models under catalog numbers AD5ECD for the Casio and PA5YMA for the Yamaha, at \$19.97 and \$22.63 respectively. Each of these is a five octave (61-key) instrument, with MIDI interface, and each has 100 selectable instrument voices.

Service Merchandise has 365 stores in the U.S., 14 in Ohio, including one on South Hamilton Road in Columbus. To find the closest store, or to place an order by VISA, DISCOVER or MASTER CARD, call toll free 1-800-251-1212.

I had been rather dissatisfied with the results I was getting with Midi Master 99, and didn't know whether to blame Midi Master 99 or my Casio MT-240 keyboard. After listening to the two disks of "pop classics et al" written by Dolores Werths and released by Harrison Software (5705 40th Place, Hyattsville MD 20781, \$10 each ppd), I realize that I should have been blaming my own lack of skill in writing SNF files.

Dolores has been doing some wonderful things with MIDI, and I hope that she will write some articles to teach the rest of us. She has learned all kinds of neat tricks, such as beginning with a short rest to avoid "clipping" the first note of the music.

Dolores tells me that I was wrong in saying that the organ is almost inaudible in the lowest octave - when heard through a

good sound system, rather than through the keyboard's speaker, it is indeed audible and effective.

Maksimik's documentation mentions that Midi Master 99 can be run from any drive, but he takes it for granted that you will know how to do so - the disk-name must be MIDI. If you want to run it from your ramdisk, the ramdisk must be named MIDI - and if your ramdisk also contains another program that only runs from a specific disk name, you will have to do some renaming back and forth. If you want to avoid that, Bruce Harrison told me how. Use DSKU to edit the file MASEXB. Change DSK.MIDI.CHARAL to DSK4. CHARAL - presuming that your ramdisk is drive 4. Change DSK.MIDI.OPTIONS to DSK4.OPTIONS and then, in hex mode, change 0F44534B to 0B44534B and 1044534B to 0C44534B. Then change the LOAD program to run DSK4.MASEXB.

If the disk that Mike sold you is like mine, it also contained some sample pieces of music and some work files and odds and ends. The necessary files that you must transfer to the ramdisk or whatever are LOAD, MASEXB, CHARAL and OPTIONS.

The copy of Midi Master 99 that Maksimik sent to me had the percussion patched into three of the other instruments. You might want to check to make sure that yours has not been tampered with. To do this, select 6.Program Patch Librarian from the main menu. It will ask you for a program number from 0 to 127 - what it wants is an instrument number. These are normally numbered from 0 upwards, from left to right, on your keyboard panel. Enter 0. It will show you the current value; if that is other than 0, it has been patched. Anyway, enter 0 for the new patch value, then continue with 1 and so on for as many instrument voices as your keyboard has. Then use FCTN 9 to escape back to the main menu.

If you corrected any patches, you must now select 5.Program Setup to make them permanent. It will ask you for a foreground color and then a background color, from 0 to 15. These are the assembly color codes, which may confuse an XBasic programmer and will confuse a non-programmer even more, resulting in some strange color combinations or even a blank screen. Use 15 for foreground and 5 for background, to keep the usual white on dark blue.

You are then asked for an RS232 port number. If you use a Y-cable to connect your modem and Midi Master 99 to the serial port of the RS232, you can select 2 and keep both hooked up permanently.

Finally you are asked for the duration value, which is usually 400. Then you have the option to make these changes permanent.

If you also purchased Midi Album 99, you may have to fix another of Mike's mistakes. On my disk, although the README file says the MALDOCS documentation file is a DV80 file, it is actually a DV254 file which cannot be printed through Funnelweb etc. However, it is in 80-character format, so can be converted by this little program -

```

1 OPEN #1:"DSK1.MALDOCS",VAR
TABLE 254,INPUT :: OPEN #2:"
DSK1.DOC80",OUTPUT
2 LINPUT #1:M$ :: PRINT #2:M
$ :: IF EOF(1)<>1 THEN 2 ELS
E CLOSE #1 :: CLOSE #2

```

LINE NOISE and the problems

by Harold C. Hoyt, Jr.
Mar. 1993

it can cause with file transfers

Hoosier 99er

Many people have left messages on my bulletin board asking me why there are so many 'garbage' characters on their screens and why file transfers are riddled with errors. These garbage characters are really line noise and can be introduced in many different places. One of the more common and familiar introduction points of line noise is in the telephone company's system and even here there are several ways noise is introduced. A signal is routed through multiple stations before it eventually makes it to the other end and some of these stations aren't exactly new. Older areas may have older, less sophisticated equipment that is more apt to be affected by ambient noise. This is one reason some people continue to have noise problems even after hanging up and calling back multiple times. Also, a given physical connection at one of these locations may not be up to snuff. If your particular bout of line noise is solved by hanging up and calling back, then it's probable that you were previously connected through an intermittent or 'dirty' connection. Some of these trunk lines (large, multi-caller 'pipes') may pass through an area that has a lot of ambient RFI (Radio-Frequency Interference) present although this is not usually the case.

Another common noise introduction point is in your home. Most residential homes have televisions, radios, microwave ovens, VCR's, and if you are reading this, a micro-computer. All these devices radiate radio waves that can (and often do) get into the phone lines and cause noise. Electrical motors and mechanical dimmer controls can introduce noise into the electrical wiring in your house and cause problems. If your line noise problems do not go away after repeated hanging up and calling back, then you may be suffering from one of these household problems. First of all, turn off EVERYTHING except the fridge (if it is the fridge, then you're SOL. Can't live life with your ice box unplugged) and see if the noise persists. If it goes away, then start turning things back on, checking the computer each time until you see the noise start up again. It may be that a single device is not bugging you but several devices plotting together to annoy you. This elimination tournament may take a while.

Another area to check is your wiring at the computer. Use noise suppressors on your power connections to both the PC and the modem (if external). Use shielded RS-232 cable to connect your modem to the PC. Ribbon cables (especially long runs of it) are great antennas and will cause problems. Re-route the RS-232 cable so it does not run next to the PC power supply or any other transformer. Many 'clone' monitors do not have internal metal shielding and can radiate lots of noise. Make sure the cable does not run near the monitor. If you are particularly adventuresome, you can line the interior of the

monitor with foil and ground it with a ribbon grounding strap. Be VERY CAREFUL if you attempt this. Monitors generate THOUSANDS of volts of electricity and can knock you clear into next week. You'd best NOT attempt this unless you are experienced in electronics. If you live near a freeway or highway, then interference from CB radio can present a problem. Many interstate truckers have 100+ watts of power (illegally) in their CB rigs and frequently have sloppy amplifiers that can emit spurious radiation all over the radio spectrum.

And now a little discussion about the modem itself. First of all, I'd like to clarify a commonly misused term - BAUD. The term "Baud" is actually a man's name - J. M. E. Baudot (pronounced: Baw-doe) a French Telegraphy expert. 1,200 and 2,400 Baud is not the same as 1,200 and 2,400 BPS (Bits Per Second). The usage of "Baud" to describe line speed in terms of data throughput is incorrect. 1,200 and 2,400 BPS modems both operate at 600 Baud. Basically without getting too technical, a Baud is a "blip" of information. 1,200 BPS modems use four states per blip (or Baud) and 2,400 BPS modems use sixteen states per blip. If you want more information on what Baud and BPS mean and full explanation of how data is actually represented and transferred by the modem, please refer to PC Magazine Volume 6, Number 9 (May 12, 1987).

Modems operating at 2,400 BPS are much more intolerant of line noise than are modems operating at 1,200 BPS. Conversely, modems capable of 2,400 BPS operate better at 1,200 BPS than do 1,200 BPS only modems. If you are being hopelessly attacked by noise at 2,400 BPS, try calling back at 1,200 BPS. It's very possible that the noise will be greatly reduced or disappear altogether. I know, you didn't buy a 2,400 BPS modem just to retard it to 1,200 BPS. The brand of modem plays a part in the immunity to line noise. Some modems can digest more noise (lower signal-to-noise ratio) than others. PC Magazine (same issue mentioned above) ran a test on 87 different modems. You might check the results to see how your modem ranks. Most 2,400 BPS modems operating at 1,200 BPS have approximately -8 to -10 db error threshold while the same modem has about -16 to -20 db threshold operating at 2,400 BPS. For this reason, line quality is much more critical at 2,400 BPS operation.

Additionally, a friend of mine who runs a bulletin board from their office has been plagued with line noise problems at 2,400 BPS but very little noise at 1,200 BPS. The culprit is the office's centralized telephone system. Many office buildings have a given number of trunks that actually enter the building while there may be many, many more extensions within the building. These type of telephone systems have their own controllers and line assignment devices and are frequently not as high in quality as a hard-wired Mabell line. The acceptable signal-to-noise ratio in some of these inter-office phone controllers are lower than necessary for reliable 2,400 BPS operation but not too low for 1,200 BPS.

If you get transmission errors while downloading or uploading a file, don't fret. The Xmodem (or what ever protocol) incorporates an error checking/correction mechanism that automatically detects and corrects any errors that may occur during transmission. The vary fact that Xmodem reported the error in the first place means that he caught it and

corrected it. The only errors you have to worry about are the ones that Xmodem does NOT report. Any reported error has already been corrected. Xmodem, especially the CRC flavored one, is a very reliable file transfer protocol. Even if you got 100 errors during transmission, chances are still pretty slim that the file got corrupted. Occasionally, a file will be corrupted after transfer, but many times this may be due to a bad ARCing of the file or perhaps a disk error that may have occurred sometime during the file's past.

I hope this text helped explain some facts about modems, line noise, and file transfers. If you have other, more specific questions, concerning modems or communications in general, leave a Comment to the SYSOP on the PC Consultant. I'll try to answer them.

the PC Consultant
 SYSOP: Robert K. Ricketts
 P. O. Box 42086
 Houston, Tx 77242-2086

Node 1 (713)270-7408 - free and open to all.
 Node 2 (713)270-8129 - contributors only.

HARRISON SOFTWARE'S

----- by Jim Peterson

FONT DUMPER

A few years ago, I wrote a few little routines to modify the hex codes of the screen character sets. Then I found the source code of a simple assembly program by Barry Traver, to instantly restore the lower case characters which are not restored by CALL CHARSET. I don't know anything about assembly, but I figured out how to substitute my altered hex codes for the DATA in his source code, to produce instant screen font changes.

Then I wrote an Extended Basic program to write that assembly source code, using the existing screen character hex codes. I may be the first one to have come up with the idea of using Basic to write assembly (Bud Wright has also used it effectively) and certainly the first one to do it without knowing anything about assembly!

Using this, and my routines to manipulate hex codes, I created assembly routines of all kinds of screen fonts. They looked fine on my old TV set, but when I saw them on a monitor I realized that they had lost too many pixels in the conversion process. So I added a screen character editor to the source code writer, and cleaned up the fonts before saving them. I added several existing CHARAI fonts, some other fancy fonts that others had designed, and some special ones from my Nuts & Bolts disks, and ended up with a diskfull called 127 Screen Fonts.

I used some of those in my music programs on the Tigercub Country and Tigercub Gospel disks, but otherwise they haven't seen much use, because there are not many XBasic programmers left. Some folks have converted them to TI-Artist fonts, and I think they have also been converted to TML fonts.

I tried using some of them as download fonts for my printer, but was not satisfied with the results. I thought they might look better as NLQ download fonts, but the instructions for coding NLQ fonts in my NX-1020R were complex and confusing, and I never got around to trying it.

However, I did mention the idea during one of my many phone conversations with Bruce Harrison - and he is not one to ignore a challenge. He had soon produced a fast assembly NLQ downloader for his NX-1000. He sent it to me to try out on my NX-1020. It put my printer off-line so thoroughly that the on-line command wouldn't even work - had to turn the printer off and on again.

I sent Bruce my printer manual. It turned out that the NLQ download codes are somewhat different for the NX-1020 in IBM mode, and entirely different in standard mode. He soon produced a version that would work for me in IBM mode, and then a version that would work in standard mode.

Bruce is now offering this program, called Font Dumper, in versions for the NX-1000 and the NX-1020, and will try to make the program compatible with any other printer which supports NLQ downloads - and will refund your money if he can't do so. Anyone who has dealt with Harrison Software will tell you that no one tries harder to make their software compatible with any user's equipment.

As usual, Bruce has done a thorough job. He sends a set of two disks. The one disk contains 32 of the best of my screen fonts - all he could get on a SS/SD disk. The other disk contains the object code and source code for the dump program, and a fontfiler with this assembly built in, to load a font into the printer in perhaps 30 seconds. If that is too slow for you, he provides a means of creating fast loaders for your favorite fonts, which load in a second or two. As another alternative, the download codes can be sent to disk, and then downloaded with another fast routine. There are six pages of clear instructions, a program to print them, and a couple of demo programs.

The disk also contains a FIXCHAR program, based on my screen editor and saver, which you can use to modify the existing character sets or to create new ones. For instance, you could design little graphics characters to replace those never-used keyboard symbols, and use them to dress up your correspondence with hearts and flowers, smiley faces, ficle fingers, or whatever. Just in case you don't have the Editor/Assembler module to assemble the source code, Bruce has provided Art Green's Assembler with Barry Boone's loader, and Todd Kaplan's ALSAVE.

I really think that this is one of the greatest printing utilities available for the TI. The fonts are neat and crisp in NLQ mode, and extremely easy to use. They can be printed in pica, elite or condensed, expanded or double height or both, even quadrupled, underlined, in italics, just about anything your printer is capable of. They print at normal NLQ printer

speed, except that the printer buffer must be turned off, so the computer cannot get ahead of the printer.

If you want variety in your printing, these are a great alternative to the oversized and crowded, slow-printing bit-image fonts of Page Pro. I hope to see these showing up on the pages of a lot of newsletters.

Font Dumper is available for \$10, postpaid, from Harrison Software, 5705 40th Place, Hyattsville MD 20781.

As I mentioned above, Bruce provides 32 different fonts along with his program. If you want even more, I have gone through my 127 Screen Fonts and selected 101 which are suitable for printer output, and made some modifications for that purpose - the transliterated characters which were useful for screen display are not desirable for printer use. Only so much can be done within an 8x8 dot matrix, so some of these were quite similar as screen fonts, and even more so in the much reduced size of a printed character, but there is a wide variety here - extra tall, extra short, long-legged, squat, fuzzy, extra-heavy, leaning, spooky, hollow, boxed, upside down, sideways, etc., etc., as well as Greek, Russian and Hebrew. These are available as a DS/DD disk, or a SS/SD archived disk, from Tigercub Software, 156 Collingwood Ave., Columbus OH 43213, for \$1.50 plus \$1.50 S&H.

THE STAR NX-1020

----- by Jim Peterson

RAINBOW PRINTER

After several years of heavy use, my sturdy old Gemini 10X printer decided to ignore the RS232 card, although it still performed in the test mode. So, it seemed to be time to catch up with the advances in technology by buying a new printer.

When a car gives me several years of trouble-free service, I usually trade it in for another car from the same manufacturer. It seemed sensible to do the same when shopping for a new printer.

So, I wanted a Star Micronics printer, I wanted a color printer, and the latest model I knew of was the NX-1020R, so I started calling around town for prices. I didn't even bother calling the places whose ads suggested they dealt only in the high-priced heavy duty business equipment, but even the discount computer stores didn't have much to offer. They are more interested in pushing 24-pin printers. As I understand it, the TI-99/4A cannot drive a 24-pin printer unless it has a 9-pin mode, in which case you would only be using 9 of the 24 pins.

One store did offer to sell me an NX-1020R for \$239. I believe in supporting local vendors, but only when their prices are somewhere this side of the moon. I don't like to buy from those big discount mail order firms, but B.C.S. Megasource was offering the same printer in a Computer Shopper ad for \$169. It turned out there was also a \$20.99 shipping charge, which was a ripoff, but \$189.99 is a lot less than \$239 plus sales tax, and

they did ship promptly.

The first thing I did was to run over to MicroCenter to buy a black ribbon, rather than use up the black portion of the color ribbon that came with the printer. To my great disgust, I found that generic ribbons were not yet available - MicroCenter could not even find the NX1020 in their cross-reference manual. I searched their shelves, and found the correct ribbon, marked ZX9, made by Star Micronics, "for Star 9-pin printers." The price was \$12.95, which is HIGHWAY ROBBERY!

I tried one of the \$4 generic ribbons for the NX1000, and found that Star Micronics had changed the design just enough so that it would not fit. This was very obviously done in order to force their customers to buy their OUTRAGEOUSLY OVERPRICED ribbons. This is equivalent to selling a car which would only run on a special gas that was only available from the car manufacturer, at \$10 a gallon. Any company that will treat their customers like that deserves to be BOYCOTTED! I will never again buy a Star Micronics product, and I urge everyone else - DON'T BUY FROM THEM!

Well, that is the part of this review that I'm going to send to Consumer Relations at Star Micronics. I have since found a source for generic ribbons at \$8, which is still a ripoff. I know that the other manufacturers pull the same stunt, and it was stupid of me not to check on ribbon availability before I bought the printer. I was perfectly happy with the \$.79 typewriter-spool ribbons of the old Gemini 10X, even if I did get a bit of ink on my fingers.

So, how do I like my new printer? I can only compare it to my old Gemini 10X. That is about like comparing a Model-T Ford to a Ferrari. The Model-T and the Gemini 10X had more metal and less plastic, and probably lasted a lot longer than the new cars and printers will, but printer technology has made a vast leap forward in the past several years.

Those microscopic inaccessible idiotic dip switches have been replaced by a front panel which accesses the electronic dip switch mode if you press three buttons simultaneously. According to the manual, the Font button will then select the Bank Number and the Pitch button will select the Switch Number. The remainder of the instructions make no mention of Banks or Switches, but I figured out that by pressing the Font button to the 2nd light and the Pitch button to the 3rd light, and then pressing the Park button, I could turn off Switch B-3 and thereby enable the Tear-off function. Pressing the on-line button causes the printer to remember this setting each time the printer is turned on. Most of the other 15 switches are probably of little use unless you are working with IBM software, multi-part forms, non-standard page lengths, etc.

However, the five buttons on the panel have many other uses which I will use more frequently. Holding down the Font and/or Pitch buttons while turning on the printer allows me to override printer commands in the software and select the font (high speed draft, draft, or one of the NLQ fonts - Sanserif, Courier, Orator or Script) and pitch (pica, elite, condensed pica,

condensed elite, or proportional). This takes a bit of learning because some options are indicated by a combination of lights; for instance, Sanserif is selected when the Draft and Courier lights are both on!

I do wish that emphasized and double e-struck print could be selected from the front panel - would come in very handy when your ribbon starts getting old and weak.

Which reminds me of a peculiarity of this printer. Apparently it is mechanically impossible for a 9-pin printer to print emphasized condensed print. The Gemini 10X manual warned me of this but the NX1020R manual did not. If you attempt to do so, the Gemini 10X and the NX1000 and probably other printers will give you condensed print which is not emphasized - the NX1020R gives emphasized print which is not condensed!

The printer has too many other features to describe here. There is a 16kB printer buffer - but if you download a character set, this is reduced to one line. The four NLQ fonts print very sharply. In addition to the usual double e-width printing, double-height and quadruple size are also available. If you have one of the expensive color ribbons installed, you can print in 7 colors - although yellow is almost invisible. A number of special character sets are available, but I do miss the many graphics symbols that were so readily available on my old Gemini 10X.

Buttons on the front panel make it very easy to advance a sheet far enough to tear it off, and then reset the next page to top of form. There is also a button combination to advance or retract the paper in very small increments. This is extremely useful for getting strip labels aligned properly - and also very dangerous. Pressing the wrong combination can cause the strip of labels to go careening backwards - which is very likely to cause a label to peel off and get jammed under the platen, especially if you are using the better quality strip labels which are attached rather loosely to the backing. I have made this mistake three times, and have been very lucky that I was able to dig out the jammed labels without disassembling the printer. From now on I make microadjustments forward only.

In the meantime, Harley Ryan took my old Gemini 10X home and got it working with the aid of a 10-cent chip. I wonder what Star Micronics would have charged for that?! It pays to have friends in a user group - the manufacturers are NOT our friends.

P.S. - I have just learned that Midwest Micro sells NX1020R black ribbons for just \$3.98 each if you order six. Their 800 number is 972-8844. P.S. again - those ribbons turned out to be of very poor quality!

CRAZY LANGUAGE "ENGLISH"

author unknown

from the Lehigh 99'ers User Group

We begin with BOX, the plural is BOXES,
 then the plural of OX is OXEN not OXES.
 Then one is a GOOSE and two are called GEESE,
 Yet the plural of MOOSE is never MEECE.
 You may find a lone MOUSE or a nest of MICE,
 yet the plural of HOUSE is HOUSES not HICE.
 If I spoke of my FOOT and show you me FEET,
 and gave you a BOOT would a pair be BEET?
 Then one may be THAT and two may be THOSE,
 yet HAT in plural would never be HOSE.
 We speak of a BROTHER and also of BROTHEREN,
 but though we say MOTHER, never say MOTHERN.
 The masculine pronouns are HE, HIS, and HIM,
 imagine the feminine SHE, SHIS, SHIM.
 So ENGLISH, I fancy that you will agree,
 is the vraftiest language that you ever did see.

PROGRAMS REPRINTED

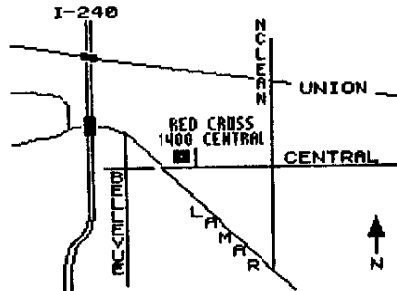
FROM VAST NEWS

Do you yearn for the sounds of GRANDFATHER'S CLOCK ... but don't have one??? Try this program.

```
1 REM * by Chick DeMartini, LA99'ers, from an idea by W.
  Brendts in the CIN-DAY NEWS 1989
100 FOR X=1 TO 6 110 FOR C=0 TO 30 STEP 2
120 CALL SOUND(-500, 100, C/4, 500, C, 1250, C)
130 NEXT C
140 NEXT X
150 FOR C=0 TO 30
160 CALL SOUND(-500, 110, C/4, 500, C, 1250, C)
170 NEXT C
```

Try this for sounds of "THE DEEP"!

```
1 REM * Courtesy of Australian Newsletter TISHUG, from LA
99'ers. 1989
10 FOR X=1 TO 5
20 FOR X=1 TO 30
30 CALL SOUND(-1000, 262, X)
40 CALL SOUND(-1000, 197, X)
50 CALL SOUND(-1000, 111, X)
60 NEXT X
70 NEXT X
```

LOCATION MAP

WORKSHOP : to be announced.

PROGRAM BIT - third Thursday

JUN 17th , 1993

MEETING: 7:00pm - Red Cross Building - 1400. Central.

6:45pm - Doors Open

7:00pm - Meeting begins, general discussion.

7:30pm - Demonstration to be announced.

9:00pm - Meeting ends.

9:15pm - Late dinner at location to be announced at meeting.

NOTICE

Information contained in Tidbits is accurate and true to the best of our knowledge. Viewpoints and opinions expressed in Tidbits are not necessarily that of the Mid-South 99'ers. We welcome any opinions/corrections from our readers. Articles may be reprinted elsewhere as long as credit is given to the author and newsletter.

GROUP INFO

Visitors and potential members may receive 2 free issues of Tidbits while they decide if they wish to join (no obligation) On the top of your label is a code. A Y means you are a member, N means 2 free list, UG means user group and S means a business. Beside the Y is a date, one year from that date your dues are due. A dollar sign (\$) on the label will indicate that your dues are due. The library is open only to members. Library list is \$1. Mail order disk library access is \$2 for the first disk and \$1 for each additional disk - max of 5 disks per month. Order by disk number only. At meetings, library access is FREE if you exchange your disk for ours or \$1 per disk for our disks. Send all mail order library requests to librarian's address! Send dues and correspondence to group address.

CALENDAR

MEETINGS: JUN. 17, (3rd Thursday!)
WORKSHOPS: TO BE ANNOUNCED

24HR TI BULLETIN BOARD

The 9640 NEWS BBS 3000/1200/2400/4800/7200/9600/12000/11400
Hayes. 901-368-0112

GROUP MAILING ADDRESS

Mid-South 99 Users Group
P.O. Box 38522
Germantown, Tn. 38183-0522

LIBRARY ADDRESS

Jim Saemenes
46 Higgins Road
Brighton, Tn., 38011

MEMBERSHIP APPLICATION

NAME _____ \$11.00 FAMILY
ADDRESS _____
CITY _____ ST _____ ZIP _____
PHONE(____) _____ :INTERESTS _____
EQUIPMENT, ETC. _____

Detach and mail with check payable to: Mid-South 99 Users Group,
P.O. Box 38522, Germantown, Tn, 38183-0522.