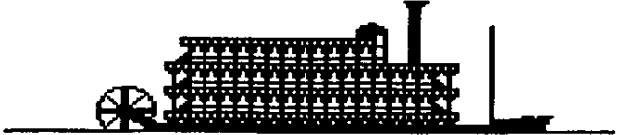
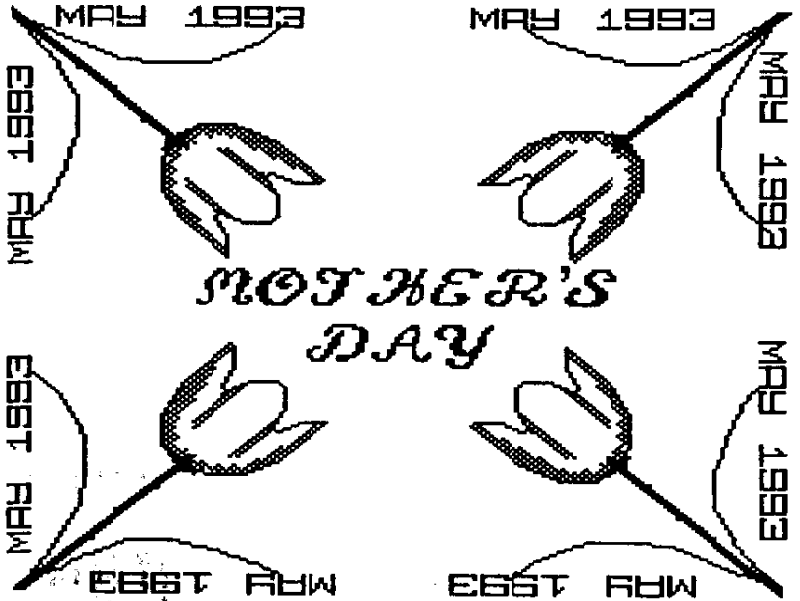


TI DBITS

MID SOUTH 99 USERS GROUP



MEMPHIS TENNESSEE



MAY 1993

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Mid-South 99 Users Group
P. O. Box 38522
Birmingham, Th. 38183-0522

FIRST CLASS MAIL

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



Am I going to retype 900+ lines, and undoubtedly make some errors while doing so? No way! Never do anything that you can make the computer do for you.

All this requires is knowing how to open one file to read from and another to write to, read a record from the one file, manipulate it a little, and write it to the other file.

The file part is extremely simple, just OPEN #1:"DSK1.OLDFILE",INPUT and OPEN #2:"DSK2.NEWFILE",OUTPUT - or whatever drives and filenames I choose. The computer takes it for granted that I'm using DV80 files, so I don't have to tell it. Even the INPUT and OUTPUT could be omitted, but it's best not to. If you don't tell it otherwise, the computer will allow you to accidentally write to the file you meant to read from, and that is disastrous!

The reading and writing is equally simple -

```
110 LINPUT #1:M$ :: PRINT #2:M$
:: IF EOF(1)<>1 THEN 110 ELS
E CLOSE #1 :: CLOSE #2
```

Always use LINPUT when reading a text file, because INPUT will only read the record up to the first comma it finds.

EOF is set to zero until the last record in the file has been read, when it is set to 1, so IF EOF(1)<>1 means "if the end of the file opened as #1 has not been reached" - in which case, go back to the same line number and read another record, but if you have read everything, close the files - and especially close the one you have written to, or you will have wasted your time.

But, I wanted to change the lengths of the fields in each record before I move it to the new file. For that, I need to know only how to use two commands - SEG\$ and &.

SEG\$ extracts a part of a string - a string, in this case, is the record I get with that LINPUT, which is one line of up to 80 characters that I keyed in with Funnelweb. SEG\$(M\$,1,4) will give me 4 characters starting with the first character of M\$; SEG\$(M\$,5,25) will give me 25 characters starting with the 5th. And & will put those two together into one string. I want to keep that first 4-character field but expand it to 5 characters, so SEG\$(M\$,1,4)&" ". The next two fields, starting at 5 and 16 and consisting of 31 and 20 characters, I want to cut to 20 and 16 characters, so - SEG\$(M\$,1,4)&" "& SEG\$(M\$,5,20)& SEG\$(M\$,36,16). And I go on to add a space to each of the next three fields, and the whole program looks like this -

```
100 OPEN #1:"DSK1.INDEX1",IN
PUT :: OPEN #2:"DSK1.NEWFILE
",OUTPUT
110 LINPUT #1:M$ :: PRINT #2
:SEG$(M$,1,4)&" "&SEG$(M$,5,
20)&SEG$(M$,36,16)&SEG$(M$,5
6,5)&" "&SEG$(M$,61,5)&" "&S
EG$(M$,66,5)&" "&SEG$(M$,71,
3)
120 IF EOF(1)<>1 THEN 110 EL
SE CLOSE #1 :: CLOSE #2
```

And in a few minutes, that program does the job, saving many hours of work!

TI NEWS AND VIEWS

----- by Jim Peterson

Mike Wright's "The Cyc" is now available. It is an encyclopedia of knowledge regarding the TI-99/4A and its accessories.

The alphabetical list of material has been drawn from the TI-99/4A Software Directory, 99/4 International Users Group catalog, 99'er Magazine, Texas Instruments Home Computer News, Computer Shopper, Enthusiast 99 Magazine, and various other sources. Mike thinks this is about 40% complete, and plans to add material from the Smart programmer, MICROpendium, Mini Mag 99, Ryte Data Newsletter, and User Group publications.

In other words, it consists of material from sources that went out of existence several years ago. Since it does not yet include MICROpendium, or the vast amount of material published in user group newsletters during the past 9 years, I doubt that it is even 10% complete.

The appendices consist of indexes to some of the above (including MICROpendium up to Vol. 2 No. 8), etc. and apparently list only a small fraction of the software that has been written for the TI.

The Cyc requires an IBM PC or compatible capable of running WordPerfect 5.1 for DOS or Windows. It is available from CaDD Electronics, 81 Prescott Road, Raymond NH 03077, for \$70 including 3&H, on your choice of 5.25 360k, 5.25 1.2Mb, 3.5" 720K or 3.5" 1.44Mb diskettes. The price includes one upgrade as more material is added.

Stage 0 of PC99 is now available from the same source for \$49, or for \$40 to the 130 people who responded to the MICROpendium article. Stages 1 through 4 will each be the same price, if they are ever developed.

PC99 is software which allows TI-99/4A programs to be run on an IBM PC. Stage 0 doesn't do much, and does that too slowly to be practical. The developers are making no promises that any further stages will be completed; they want 1000 TI'ers to show an interest in buying it, and so far have only 130. They also admit that it will only run TI programs on the PC slower than they run on the TI, until a new faster generation of PCs becomes available.

Although PC99 uses software rather than hardware to emulate the TI-99/4A, it will require the Soundblaster card to emulate the TI's speech and music, and will presumably require some specialized hardware to emulate the TI's sprites, if that is ever accomplished.

Seems to me that TI programs with 28-column or 40-column text are going to look strange on a PC's 80-column screen, unless there is a way for a programmer to go in and modify them.

Wouldn't it be more practical to write software that could translate TI XBasic programs into PC Quick Basic? Or even translate TI machine language programs into PC machine language?

An encyclopedia of TI information, that requires a PC running WordPerfect; and software to run TI programs on a PC - is this really the beginning of the end?

In the meantime, Bud Mills is selling his new SCSI ("Scuzzy") hard and floppy disk controller card, although the DSR needed to use it has not been finished. And Asgard Software is selling their new Memory Card, which supports from 128K to 512K of RAM when running programs designed to make use of the card, if any such are ever written. And Barry Boone has completed the buyout of MSDOS, so Geneve owners may finally have an operating system for their computer-on-a-card in an out-of-production P-box, if a programmer can be found to finish it.

All of which has caused me to decide to give the TI world an opportunity to invest in my Mongolian gold mining venture. I haven't actually bought the mine yet, but I will as soon as I get a thousand investors. After that, we will start digging for gold as soon as the mining equipment is designed and built. I want to be totally honest, however, so I warn you that I may drop the project at any moment and leave you high and dry. In the meantime, don't expect me to answer phone calls or letters or keep you posted on the status of your investment.

Now, what devoted TI'er could resist an offer like that?

Gary Fowser of OPA has released an open letter to the TI world to refute rumors that OPA has never made any of the products they offer, have never shipped anything by mail, etc. Actually, the only rumor I had heard was that OPA was apparently out of business because they never answered mail or phone calls.

Gary makes the point that the TI world is such a close-knit community that having one dissatisfied customer reduces the total amount of orders, and that he needs a steady and increasing amount of orders in order to support himself and support future development. That is all very true - but the rumors would never have started, and the customers would never have been dissatisfied, if he would just spend a few pennies and a few minutes of his time to answer every inquiry promptly, to notify customers of any delays and offer refunds if they are unwilling to wait. And he might get some orders if he would take out some ads in MICROpendium to let the TI world know what he has to offer. Messages posted on GENIE are not an effective method of advertising, and not an acceptable method of replying to customers.

While on that subject, TI'ers are quick to complain about poor service from vendors, but have you ever heard one praise a vendor for good service?

Bruce Harrison of Harrison Software will spend hours and hours making his software compatible with a customer's system, but you'll never know about it unless you are that customer. Jerry Price has sometimes been accused of poor business ethics, but have you ever heard a complaint about the speed and quality of Tex-Comp's service, in all their years of doing business? There are other long-established vendors whom no one ever complains about, and no one ever praises. If I may blow my own horn just a bit, in the past 9 years 99% of Tiger-cub orders have been shipped the day they were received or the next mailing day, and complaints have been handled just as promptly

But... time to get off the soapbox.

RIBBONS AND INK

----- by Jim Peterson

In a recent article regarding the NX1020 printer, I mentioned that Midwest Micro was selling ribbons for that printer at \$3.98 each in lots of six. I ordered six of them.

When I put in the first one and tried to print something, the chatter clutch on the printer made a terrible racket. The spindle of the cartridge was stuck tight, would not budge.

I put in another one, and tried again. It printed beautifully for several pages, then I noticed that it had stopped putting anything on the paper. The spindle was turning but the ribbon was not moving.

I called Midwest Micro and they, a bit reluctantly, gave me a return authorization for all six ribbons.

In the meantime, I had called V-Tech Inc. and talked to a very knowledgeable man about reinking ribbons. He sent me a 2 oz. bottle of V17R roller ink, which he recommended, for \$2.90 plus \$1.80 shipping. That should be enough to last longer than my printer.

He also sent an instruction sheet which states that original ribbons and good quality replacement ribbons have a woven seamless ribbon loop, but that replacement cartridges from MEI, Full-mark and Midwest Micro have a poor spliced loop (Midwest Micro calls it "electronically welded") and are not worth reinking.

V-Tech also sells a very wide variety of ribbon cartridges at very reasonable prices, as well as reinking machines, etc. They also have replacement ribbons; a woven loop ribbon for the Star NX-1020 is only \$1.50, a 42 ft. welded loop 4 color ribbon for the NX-1020R is only \$3.50.

I found it very easy to re-ink an NX-1020 cartridge; just use a knife blade to pry it open, and apply ink to the foam roller. However, there is a strip of tia in there which can fall out, so keep the cartridge flat on the table as you are opening it.

You must saturate the foam roller with ink - it soaks in very slowly - and you must run several pages of printing through before the ribbon will be inked and printing evenly.

The address of V-Tech Inc. is 2223 Rebecca, Hatfield PA 19440. The phone number is (215) 822-2989.

JUST A NOTE

----- by Alan Cohen

"Sow a thought reap a word"

"Sow a word reap a deed"

"Sow a deed reap a habit"

"Sow a habit reap a character"

"Sow a character reap a destiny"

MY GENEALOGY PROGRAM

by Jim Peterson

Some 20 years ago, my late brother researched our family ancestry and gave me a copy of his work. I was not too much interested. It consisted of charts branching backwards in time, showing parents, grandparents, etc., much like a Biblical recitation of "and Jonah begat Abraham and Abraham begat Noah", etc., etc., except that in modern genealogy the mother who actually bears the child is at least given second billing.

But last year a gift of some old family photos and a visit to some graveyards kindled my interest. However, I wanted to do more than just trace that forking family tree backwards. I wanted to know who my grandfather's cousins were, and who their children and grandchildren were.

I was told that there was no really good genealogy program for the TI-99/A. I obtained a sample of a family group sheet, one of the standard tools used by genealogists, and began recording data on it. I soon filled a disk with D-V80 files of those, which printed out to a very thick file of pages with a lot of wasted space.

I thought of trying to write a genealogy program, but wasn't sure what I wanted. About that time, I had an amazing piece of good luck - I was put in contact with a distant relative in Sweden who had researched the family history back into the 1700s and beyond!

He sent me a 3.5 disk containing his genealogy program for the PC, and his files on 1400 family members. Since I do not own a PC and never intend to, I ran to Chuck Grimes for help. He accessed the program's options and printed out for me a list of all 1400 names, a cross-reference list of all children, and two cross-reference lists of marriages, plus several of those family tree charts.

About 1000 of those 1400 names were of the Swedish researcher's father's relatives and his wife's relatives, which were of no interest to me, so I went to work to extract the 400 who were actually my blood relatives. After about a week of checking one list against another, back and forth, I was not too impressed with the program.

So, again I thought about writing a genealogy program. I was not interested in being able to sort data seventeen ways from Sunday, and I did not care about printing out those bare-bones family trees, but I wanted to be able to easily find a person by name, and find a complete record of parents, spouse, children, biographical data, and sources of data.

Such a program would be difficult to write - and unnecessary. I realized that the best program for my purpose would be no program at all. The magic of Funn elweb and the efficiency of the TI disk controller was all that I needed.

I booted up Funnelweb, went into the Editor, set the tab at 39, and typed -

[1] JAMES WARREN PETERSON is the son of [2] NORTH EDWIN PETERSON and [3] LINNIE LEONA STEVENS. He was born 20/8 1923 in Pelican Rapids, Otter Tail County, Minnesota. He was married 7/7 1956 in Tokyo, Japan to [4] MIDORI IMAI. Their children are [5] MARIANN MIEKO and [6] ALAN EDWIN.

And that was followed with some bio graphical data. I saved it to disk, with SF to preserve the tab setting, as filename 001.

The > after an index number means that a file exists under that number, with information about the person. So, I typed up a similar file about my father and saved it as 002; and so on. Padding the number with 0's causes the disk controller to catalog filenames from 001 to 999 in numerical sequence.

Now, if I need to add to a file, I just load it into Funnelweb and go to work. Since it is in 40-column format, it is easy to edit on-screen.

The TI disk controller can only handle 127 files on a disk, but many of my 400 names are those of children listed in their parents's file without enough data to require a file of their own. When I do run over the 127 limit, it is easy to use an additional disk. If I get more information about such a child, I will just add a > after his number, and set up a new record for him.

What about a printout? I could easily create an .IF file listing all those filenames in numeric sequence, and print them all through the Formatter, using dot commands to change them to 80-column width. I enclosed the index numbers in brackets so I could easily .TL to double strike, emphasize or underline them.

However, I like 40-character 2-column text, so I wrote a little program to catalog drives 1 and 2 and print all the files in sequence in two columns.

Now, how about finding records? I booted up Funnelweb again, set the tabs at 5, 35, 50, 55, 60 and 65 and began entering names in index number sequence by index number, first name, last name, file number, father's index number, mother's index number and spouse's index number.

The resulting file was too big for a simple sorting routine to handle, so I tried using Peter Hoddle's fairware program SORT EXPERIMENT, sorting on the last name field with a secondary sort on the first name. I thought that it did a perfect job, until I found that many names were missing. The documentation for SORT EXPERIMENT says it will handle up to 1000 records or 24k, whichever comes first. It fails to mention that after reading in 24k of data it will begin to sort, without warning you that it did not read the complete file!

So I went to Dennis Faherty's TI-SORT, sold by Inscobct. The documentation for that program is very neatly printed but difficult for me to understand. I finally figured it out, and produced an index in alphabetic sequence. I plan to update it with Funnelweb, inserting lines in the proper place, so I will not have to sort it again.

I now have a text-format genealogy which I can easily and quickly update. I can print copies of the index and text to send to relatives who do not have a computer, and the printouts will be very easy for them to understand. If any of them do have a computer and a genealogy program, it will be very easy for them to copy the data.

So once again, the best program is the simplest program that will do the job, and the simplest of all programs is no program at all.

TI-SORT review

----- by Jim Peterson

This program has been around since 1989, but hasn't received much attention. I've had it for a couple of years, but only recently had a need to use it. I was MUCH impressed - but also much disappointed by one serious flaw.

Sorting is a job for a computer, but it is not an easy job for a computer. Let me explain.

You can quite easily and quickly sort a dozen playing cards into sequence in your hand, by pulling them out and shoving them back in where they belong. But suppose those cards were spread out face down on the table. You are allowed to hold one card in your hand. You can peek at the others, find the lowest one, swap it for the one in your hand, pick up the first card in the row and replace it with the lowest card, and then start peeking for the next one. That is roughly how the computer performs a sort. It takes a lot of moves. For twice as many cards, it doesn't take twice as many, but several times as many. I once wrote a program called SORTWATCHER (it is in Tips From The Tigercub #33, with a correction in #34) which lets you watch different kinds of sorts actually taking place on the screen.

Now, the TI-99/4A is handicapped as a sorting machine, not only by its slowness but by the fact that in XEasic it can only store strings in that puny 16k of memory in the console - and not even all of that. That would limit it to about 150 80-character records.

J. Peter Hoddie wrote an assembly program called Sort Experiment which very greatly speeds up the operation and allows use of the 24k of expansion memory, or about 300 80-character records. His program has one very dangerous bug - when it has read in as many records as memory can hold, it starts sorting - without warning you that it does not have the complete file!

But suppose you need to sort a file that is larger than 24k? Dennis Faherty came up with the ingenious solution. His TI-SORT uses a single FIXED file as a batch file. Records are read into memory, sorted, and then written to the scratch file in consecutive blocks, keeping track of where each block begins. Then the first record is pulled from each block, sorted, the lowest record written to the sorted file and another record pulled from the block it was taken from, etc.

The size of the file you can sort is limited only by the capacity of the disk that holds the scratch file. Since it is a FIXED file, it usually becomes considerably larger than the file being sorted - a 40-character record in a D/V80 file takes only 40 bytes, but it takes 80 bytes in a D/F80 file. A DS/DD disk could handle 4300 records, a ramdisk even more, and a hard drive would be limited only by the 32767 record limit of the program itself.

The program is very well written. The main menu screen offers you a choice of sorting a TI-BASE file, a delimited file, a fixed record file, or a file created by Basic. The program was actually written because of the poor sorting capability of TI-BASE, and will sort any size record that TI-BASE will support, according to the documentation. Other types of files are limited to 255 bytes, but can be fixed or variable, display or internal.

A delimited file is one which has fields of variable length, separated by a character such as an asterisk. A fixed field file is one in tabular format. I'm not sure what a "file created by Basic" is, because almost any kind of file can be created by Basic, but they seem to be handled in the same way as a fixed field sort.

The main menu also offers the option of sorting in descending order (from the highest down), or cataloging the disk (thanks for that!), or quitting.

If you elected a delimited sort, you are asked for the delimiting character. Then you are required to set up a structure file, unless you already have one, even if you just want to do a simple sort on the first character. If you asked for a TI-BASE sort, the program expects to find a structure file created by TI-BASE.

You are taken step by step through the creation of the structure file, for as many fields as you want, up to 17. For a fixed field file you must know the length of each field, and you are also asked for this information for other types of files. You are also asked whether the field is character or numeric and, if numeric, how many decimal places you want to sort to.

The documentation tells you, although the screen prompts do not, that you exit this part with FCTN 8. You have the option of saving the structure file for future use.

Then you select the field or fields that you want to sort on, in the sequence that you want - the program can perform nested sorts up to 8 levels.

Then the sorting begins. You are shown on screen just what is going on, and it is fast! Reading from disk is very fast, sorting is extremely fast, writing to the scratch file a bit slower, the final merge and writing somewhat slower yet but, just for instance, 500 80-character records can be sorted in 90 seconds on a Horizon RAM disk, in 8 minutes and 11 seconds on a SS/SD drive.

But now for the bad news. I was unable to perform a numeric sort on any field of my fixed field files. I sent them to Dennis Faherty and he soon identified the problem, which no one had told him about in the years this program has been on the market. It was written for TI-BASE, which right-justifies its numerical fields. The fixed field files created by tabbing in Pannelweb, or by most any other means, are left-justified, and those in a delimited file are not justified at all!

The documentation also states that TI-SORT will not correctly sort display data which have strings with imbedded blanks. This could be a serious deficiency, but I have sorted such files with no problems.

I do not have TI-BASE, so did not test it with TI-BASE files. With delimited files, it seems to expect fields of fixed lengths, which defeats the whole purpose of a delimited file.

But, if you need to sort ASCII fields in large files, this program will really do the job. The documentation is thorough and well written. You can get it from Insebot Inc., P.O. Box 291510, Pt. Orange FL 32029, for \$14.95 plus \$2.50 S&H.

MIDI MASTER 99

by Jin Peterson

and CASIO MT-240

In my opinion, Midi Master 99 is one of the most interesting accessories ever developed for the TI-99/4A. It is very reasonably priced and, unlike many hardware developments, it offers no compatibility difficulties.

There are only two problems - obtaining it, and finding a low-priced MIDI-compatible keyboard to use it with.

Of all the TI suppliers with a poor reputation for filling orders, Crystal Software seems to have been the worst. Perhaps that has now changed, but the surest way to obtain the product would be to catch Mike Maksimik at a computer fair and walk away from his table with it firmly clutched in your hand.

Midi Master 99 was developed using the Casio MT-240 keyboard, which sold for about \$80, and I was lucky enough to be able to find one for that price. Unfortunately, it is no longer on the market. The only MIDI-compatible keyboards in the 1992 Casio catalog are the CT-700 at \$399, the CT-670 at \$499 and the CT-770 at \$599.

A local music store told me that Yamaha keyboards with the MIDI interface started at about \$200, but I do not know the model numbers. A few people have been able to find them in discount stores for about \$190, but those stores usually only stock them for the Christmas sales. The music stores only carry the professional keyboards in the \$400 - \$600 dollar range; they would probably order a cheaper model for you, but would certainly charge you full manufacturer's suggested retail price or more.

Many people are waiting to buy Midi Master 99, or to write any music for it, until Version 3 is released. I learned long ago not to hold my breath while waiting for a new version of any TI product.

Version 3 is supposed to allow you to play music on the keyboard, which will be converted into a MIDI file that the computer can play back, through MIDI, on the keyboard. Since I can only play a keyboard with even fewer fingers than the three I use for typing, that doesn't interest me.

Come to think of it, if you can play the keyboard, why would you want to convert your music to a MIDI file? Why not just tape it to a cassette, if you want to save it?

To me, the great thing about Midi Master 99 is that it allows me to create music even though I cannot play an instrument - just as I used to do in Extended Basic, using the three tone generators of the TI-99/4A. Also, it allows me to do things that no musician could do from the keyboard, such as playing two or more instruments simultaneously, or playing chords that no human hand could reach, or creating musical effects that would require two very nimble-fingered musicians.

Midi Master 99 consists of a cable, to connect your RS232 card to the keyboard, and a disk containing the necessary software, the documentation, and some sample music files. The documentation is adequate. It contains a good deal of technical material that is way over my head, but which is not necessary in

order to use the program.

Music files are created by keying in an SNF file, from sheet music, using TI-Writer or Funnelweb or Editor/Assembler. If you use TI-Writer or Funnelweb, select the open cursor mode or else save the file by PF with the C option, because carriage returns will result in an error message.

If you have an elementary knowledge of reading music, keying in a selection is quite simple, although it does take time. The only thing I had to learn is that octaves start from C, not from A. The lowest note available, in octave 0, is the C which is 3 notes above Hertz 110 A, the lowest note available from the TI tone generators (other than the noise generator). This means that you may have to fudge on some notes in the bass clef.

You can key in all voices simultaneously or separately. That is, you can key in a melody note and its harmony notes, and then go on to the next, or you can key in the entire melody, and then the entire first note of the harmony, etc. Dolores Werths of Harrison Software, who knows more about this than I ever will, recommends the second method, but I am stubbornly sticking to the first way.

One serious flaw is the lack of looping - a directive to repeat the melody over again as many times as you wish, which is so easily done in XBasic programming. You can only use the Copy function of Funnelweb to copy the file after itself, which doubles the time required to load and compile it before playing. However, I understand that looping in this case is far more difficult than it would seem, and has only recently been implemented for MIDI on the PC.

According to the documentation, existing T: Basic music can be easily converted to the MIDI SNF format. In actual practice, it depends on how the music was originally programmed. That had best be the subject of another article.

The completed file can be saved in DV80 format, in which case it is loaded and compiled each time it is played, or in compiled image format which will load and play directly. The trouble is that the image file is stored in a very wasteful PC-style format of three 33-sector files. I have not done any comparative timing, but it seems that the additional loading time wipes out the time saved by not compiling - unless, of course, you have the file on a ramdisk or hard drive. Also, image files cannot be modified.

As a bonus for waiting so long for my Midi Master 99, Maksimik sent me a free copy of his Midi Album program. This requires the Mini Memory module or other device to provide extra memory, as Midi Master 99 itself uses all that is available. It will catalog a disk, allow you to select the files you want to play randomly or in sequence, and load and play them. It works very well. I did find that you must be sure to specify duration and instrumentation in the SNF file, if it is to be played through Midi Album; otherwise, it will carry through the values from the previous selection rather than using the program defaults.

For some reason, the documentation on my Midi Album disk was a DV254 file rather than a DV80 file, so it could not be printed with Funnelweb!

Different models of keyboards have different instruments available, and different numbers assigned to these instruments.

Maksimik has provided a patch program, so that you can use your keyboard to play music written for a different keyboard. On the copy of Midi Master 99 he sent me, he had patched the percussion instrumentation into a couple of the other voices, which caused me great puzzlement for awhile.

If the music is in SNF format, it is probably more practical to just edit the file. I do hope that those who write MIDI music will include remarks in the SNF file, or separately with image files, to indicate what keyboard they programmed for and what instruments they assigned.

Regarding the Casio MT-240, it is a budget model which lacks some desirable features. For one thing, it does not allow MIDI to control the volume. It perhaps uses the same tone generators as a larger model because I found several instruments, numbered 21 through 29, beyond the 20 on the panel. There are also some additional percussion effects in the octave above the keyboard range.

I have found several problems which may be the fault of the keyboard, of Midi Master 99, or of Midi in general. Without having other keyboards to try out, I cannot tell.

Some instruments such as bells, are not practical to use because they continue to reverberate and create a dissonance. Others, such as chorus, drag out until they seem to affect the rhythm. Some, such as organ, are almost silent in the lowest octave, probably because they also sound in an octave lower. Some instruments sound harsh when programmed in all three voices although not when played from the keyboard. I have found it difficult to find pleasing combinations of two or more instruments. The best effects are generally obtained by giving all voices the default instrumentation of piano, and most existing TI MIDI music has been written for that instrument.

Dolores Werths, the renowned music programmer of Harrison Software, is trying to organize a by-mail users group for those making music with Midi Master. If you are interested, write to her at 5705 40th Place, Hyattsville MD 20781.

STICKY MENU DEMO PROGRAM (1)

----- by Harold C. Hoyt, Jr.
from the pages of the St. Louis COMPUTER BRIDGE, Aug, 1992

This month, I am determined to get back to TI programming. There isn't enough time to do all the things that I want to do and have to do. I have a hard time relating to people that get bored. The world is just too interesting a place for that.

While trying to learn about the PC world, I've run into some neat software that the TI doesn't have, and may never have. This isn't a problem about the TI being old or memory size or anything else about obsolescence. There just isn't enough financial incentive for people to do high level programming on the TI.

We have our Archiver v3.03. While it is a great program, it is a case of arrested development. Unlike Funnelweb, you can't do a directory and then tag the files for further action. You have to remember file names and then type them in. Most of the time, when you use Archiver, you are copying file names down

on a piece of paper and then retyping them in.

Guess no one is going to make an Archiver v3.04. Too bad. Support utilities written by other authors would be a great help. ARC-COM is an example. A major help in preserving DISK UTILITIES comments.

Compare that to PKUNZIP and PKZIP for the PC. A large manual explains in detail how the files work. By adding single character commands to the program you can do all sorts of neat stuff. Make a single archived file that extracts itself, or have the self-extracting file display a catalog of files that are internally archived with the option of selecting files for extraction.

Isn't that neat? The ZIP files are fairware, and an industry standard, and are even available for several machines. The FIDO PUPPY has a limited UNZIP for the TI, allowing you to UNZIP some files from the PC world. The full blown version will cost you a fairware donation of \$15.

I can't say enough, SUPPORT THE TI. It is a lot better machine than you may think. The software prices in the PC world are horrible. The fairware stuff really doesn't cut it for power users, and the top of the line programs have prices designed for businesses that get to write off all their taxes anyway. Gene just got a whole disk of PC Magazine utilities, and much of it is junk. One HEX-DECIMAL-OCTAL-BINARY conversion utility on the disk isn't as good as one Craig Miller wrote 10 years ago. I've written a more useful one, myself.

But I digress. Marc Levine gave me another PC fairware Archive program to look at called ARJ. The program looks for any program that end in .ARJ for UNARCHIVING. This program has features to compare with ZIP. One feature the author is proud of is his "STICKY MENUS." Most of the MENU's I use invoke CALL KEY to avoid the dumb old TI programs that require you to make a selection and then type <ENTER>. Been rewriting all of the BASIC / XBasic stuff that can be executed with a single keystroke to do so. If you need to INPUT more than one character (sometimes?) from the keyboard, then you need some way of telling the computer when you are finished. Hitting <ENTER> is as good a way as any for that situation.

Anyway, in STICKY MENUS, you use the arrow keys to make your selection(s) using <ENTER> to mark you choice(s) which are then highlighted. When you are done, select exit from the bottom of the menu to finalize your choices.

The TI has many programs that work this way. Versions of MENU and BOOT allow you to catalog a disk to screen and then mark each one with various commands, R for run, X for XBasic run, V for view. Mark a group of text files for viewing and they will all be dumped to screen or printer, one at a time, batch style. Funnelweb Disk Review catalogs a disk and then each file may be tagged (selected) for further action, file delete, protect-unprotect, copy, rename etc. DM1000 also marks cataloged files for action.

I'm tempted to write another printer setup routine with sticky menu, but the last time I wrote a printer routine, no one used it, not even me. Let me think it over for a while.

For now, let's try a demo of how a sticky menu might work. I still think it is worthwhile for people to type programs into the computer (but not to the extent that Regena does). Don't be a passive user of other peoples programs all the time.

The program listing on the next page is in 28 column format just as you would see it on the screen when you are typing it in. Do not type in the numbers at the end of the line. These are checksum numbers, which will be a help if you use Tom Freeman's program CHECK as a typing aid. With CHECK running, each line displays a number after it is entered. If you haven't made a typing error, other than swapping two characters, your typed lines will display the same number. A really great help for programs with much data meaningless to a human, such as character definitions, etc.

1 !SAVE DSK6.STICKY 1239 I always have line #1 as a REMark (!) in the form above. By typing 1, down arrow, <ENTER>, <FCTN>, <REDO>, <FCTN><DELETE>, <DELETE>, <DELETE>, <ENTER> SAVE DSK6.STICKY is commanded each time the above is performed. This encourages frequent updating of your program file as well as keeping the program name and where it is stored as part of the program name.

Lines 130-210 write a made up menu with dummy subroutines to the screen. Line 220 accepts a keystroke (uppercase) from the screen. Line 230 is a test to see if the key is one of the menu keys. If not, line 240 returns you to checking for keys at line 220. Line 300 sends you to the subroutine selected. All routines except X return you to line 220 in line 230.

This program lets you write "picked" next to each menu selection. As an exercise, could you add a few lines (and more subroutines) to the program to allow you to change your mind and deselect menu items? Also, this is a useless demonstration program. Could you use the program technique to do something useful? It has been a while since we were able to support programming classes. It would be nice if we could do it again.

-STICKY MENU DEMO PROGRAM-

by Harold C. Hoyt Jr.

```

1 !SAVE DSK6.STICKY 1239      30,540,550,560,570,570,580,5
100 !Sticky Menu Demo 1084    90,600,610,620,620,630,630,6
110 !Harold C. Hoyt Jr. 8-6-  40,640,640,640,640,640,650!
92 !143                        033
120 CALL CLEAR :: S$=RPT$( "  310 GOTO 220 1043
",13) !159                    320 END !139
130 S$=RPT$( " ",13) :: D1$="  500 DISPLAY AT(5,23):"Picked
    "&"A SUBROUTINE A"&S$    " :: RETURN !187
&"B SUBROUTINE B"&S$&"C 3U  510 DISPLAY AT(6,23):"Picked
BROUTINE C"&S$&"D SUBROUTIN  " :: RETURN !188
E D"&S$&"E SUBROUTINE E"1035  520 DISPLAY AT(7,23):"Picked
140 D2$="    "&"F SUBROU    " :: RETURN !189
TINE F"&S$&"G SUBROUTINE G"  530 DISPLAY AT(8,23):"Picked
&S$&"H SUBROUTINE H"&S$&"J  " :: RETURN !190
SUBROUTINE J"&S$&"K SUBROU  540 DISPLAY AT(9,23):"Picked
TINE K" !140                " :: RETURN !191
150 D3$="    "&"L SUBROU    550 DISPLAY AT(10,23):"Picke
TINE L"&S$&"M SUBROUTINE H"  d" :: RETURN !232
    
```

```

&S$&"N SUBROUTINE N"&S$&"P  560 DISPLAY AT(11,23):"Picke
SUBROUTINE P"&S$&"R SUBROU  d" :: RETURN !233
TINE R" 1203                570 DISPLAY AT(12,23):"Picke
200 DISPLAY AT(2,7):"STICKY  d" :: RETURN !234
MENU DEMO" :: DISPLAY AT(5,1  580 DISPLAY AT(13,23):"Picke
):D1$ :: DISPLAY AT(10,1):D2  d" :: RETURN !235
$ :: DISPLAY AT(15,1):D3$!122  590 DISPLAY AT(14,23):"Picke
210 DISPLAY AT(20,8):"X EXI  d" :: RETURN !236
T ?" :: DISPLAY AT(22,3):"-P  600 DISPLAY AT(15,23):"Picke
RESS X TO EXIT MENU-" 1086    d" :: RETURN !237
220 CALL KEY(3,K,S) :: IF S=0  610 DISPLAY AT(16,23):"Picke
    THEN 220 1035            d" :: RETURN !238
230 X=K-64 :: MASK=(X-1)*(X-  620 DISPLAY AT(17,23):"Picke
2)*(X-3)*(X-4)*(X-5)*(X-6)*  d" :: RETURN !239
(X-7)*(X-8)*(X-10)*(X-11)*(X-  630 DISPLAY AT(18,23):"Picke
12)*(X-13)*(X-14)*(X-16)*(X-  d" :: RETURN !240
18)*(X-24) 1001             640 DISPLAY AT(19,23):"Picke
240 DISPLAY AT(24,1):X;MASK    d" :: RETURN !241
:: IF MASK<>0 THEN 220 1200    650 DISPLAY AT(20,23):"Picke
300 ON X GOSUB 500,510,520,5  d" :: GOTO 650 1070
660 END !139
    
```

Know more miss steaks

from the Great Lakes newsletter, February, 1993

It's a good idea not to become too dependant on the spell check feature on your computer. Even though you may have spelled a word correctly, most spell checks will not catch when you've used the wrong form of a word. For example, if you used "too", but meant to use "to", a spell check will not red flag this as an error. To find out what we mean, take a look at the poem below taken from the November 1992 issue of Communications Briefings.

Letter Perfect

I have a spelling checker.

It came with my PC.

It plainly marks for my revue

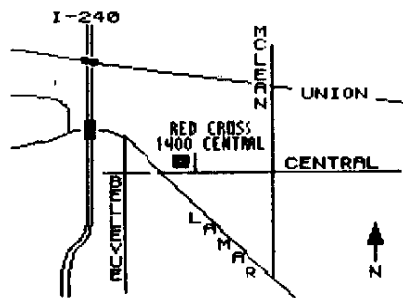
Mistakes I cannot sea.

I've run this poen threw it,

I'm sure your please to no.

It's letter perfect in its weigh;

My checker told me sew.



LOCATION MAP

WORKSHOP : to be announced.

PROGRAM BIT - third Thursday

MAY 20th , 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: MAY 20, (3rd Thursday)
WORKSHOPS: TO BE ANNOUNCED

24HR TI BULLETIN BOARD

The 9640 NEWS BBS 300/1200/2400/4800/7200/9600/12000/14400
Hayes. 901-361-0112

GROUP MAILING ADDRESS

Mid-South 99 Users Group
P.O. Box 38522
Germantown, Tn. 38103-0522

LIBRARY ADDRESS

Jim Saemenes
46 Higgins Road
Brighton, Tn., 38011

MEMBERSHIP APPLICATION

NAME _____ \$18.00 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, 38103-0522.