

Spirit of 99



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

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GREAT DAY FOR THE IRISH



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 and it's related pro-
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 fee of \$20 and whose
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 the purpose of comp-
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C.O.N.N.I. meetings
 are held the 3rd sat-
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 Olentangy River Road
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Please address it to:
 John L. Parkins

2215 Bayfield Drive
 Columbus, OH 43229

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MINUTES OF C.O.N.N.I. MEETING 20 Feb 1993

The meeting was conducted by president John Parkins, who thanked everyone for the donation to the funeral of his sister-in-law.

Dick Beery summarized the minutes of the previous meeting, and reported that Bud Wright's TIAB BBS is up and running again at the same phone number.

Dick Beery reported the selections of the nominating committee. John Parkins was nominated to serve again as president, Chuck Grimes as vice president, Jim Peterson and Dick Beery as co-secretaries, Bill Shepherd as treasurer and Ken Marshall as DOM librarian. There being no other nominations, the slate was elected by acclamation.

Chuck Grimes will also be cartridge librarian. Everett Wade will be membership registrar. Bob Devilbiss will continue as editor through June, assisted by Jean Hall. Thereafter Jean will become editor, assisted by Bob.

Jean Hall reported on a new auto-reinking ribbon cartridge from V-Tech. Dick Beery reported on a sale flyer from Taxaments. Jim Peterson reported on The Enterprise Rag, a new newsletter for users of Midi Master 99.

John Parkins discussed providing rides to the Lima Fair, to those who fly in to Port Columbus.

We discussed the criticism that we have received, in editorials in other newsletters, because of our decision to stop exchanging newsletters. It was agreed that the criticism was unjustified, because we had fully explained the economic necessity of our decision.

After the meeting, we viewed a promotional video for the recent Fest West.

MINUTES OF C.O.N.N.I. MEETING 24 Feb 1993.

Due to very limited attendance, business meeting was not conducted.

Respectfully submitted,

Co-Secretary Jim Peterson



Local dues are usually paid at or before the March meeting, and are \$20 per year for full membership, library and voting privileges, plus the newsletter. You may also pay your dues in two installments if desired: \$10 in March and \$10 in September. Those who join during other months of the year pay a lesser, pro-rated amount:

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NOTICE

Last month you may have noticed on the last page of the newsletter that TIABS BBS was OFF THE AIR. I am happy to report that Bud Wright is back on the air and the telephone number is still the same 851-0708.

C . O . N . N . I . CALENDAR

March 1993

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	 March 17 CONNI MEETING	18	19	20 CONNI MEETING
21	22	23	24	25	26	27
28	29	30	31			

1ST
DAY OF
SPRING

CONVERTING CALL SOUND TO MIDI SNF

By Jim Peterson

In his documentation for Midi Master 99, Mike Maksimik states that it is easy to convert CALL SOUND statements to MIDI notes - in other words, to convert TI-99/4A Basic music to MIDI SNF format. He gives a suggestion of a subprogram to use for this purpose.

Unfortunately, in actual practice it is far from easy - at least I have not found it easy, and I have ten years of experience in programming TI Basic.

Many programmers have written music for the TI, and each one tended to use his own method. Some did it the hard way, writing a CALL SOUND for each note. Others have used a single CALL SOUND, but have variously placed the frequencies in an array, or read them in from DATA, or assigned them to mnemonic variables, etc., etc. Some have used positive durations, others used negative durations with delay loops. Some have used the noise generator for bass notes and some have used all kinds of programming tricks for special effects.

Therefore, there can be no stan-

dard method of conversion.

In general, I have found that four out of five music programs contain complexities which make them impractical or impossible to convert. Most of the rest have required some modification or editing of either the program or the conversion routine. Even then, the results have not always been satisfactory.

One might ask, why bother with such conversions? The programmer had to pare down the XBasic music to only 3 voices, due to the limitations of the TI. Why not key in the SNF file from the original score, using all the voices that the writer intended? That's a good question - but, I can't resist a programming challenge, so I just had to try! And, I have had great success with some pieces that would take forever to key in, such as Bumble Boogie and Dizzy Fingers.

It is fairly easy, in most cases, if the programmer has used my favorite method, putting the frequencies into an array and numbering the durations from one up. In that case, near the beginning of the program you will find something like this -

```
170 DIM N(36):: F=110 :: FOR
```

```
J=1 TO 36 :: N(J)=INT(F*1.0
59463094^(J-1)+.5):: NEXT J
:: N(0)=40000 :: FOR R=1 TO
2
```

And the programming will look like this -

```
180 GOSUB 290 :: T=4 :: A=18
:: B=15 :: C=6 :: GOSUB 290
:: T=2 :: A=23 :: GOSUB 290
:: A=27 :: GOSUB 290
```

- where T is the duration, multiplied by a factor in the CALL SOUND, and A, B and C are the subscript numbers of the array holding the frequencies, after each note going to a single CALL SOUND something like this -

```
300 CALL SOUND(T*100,N(A),VI,
N(B),V2,N(C),V3):: RETURN
```

The following routine will convert such music, if the programmer hasn't done something unusual.

```
1 DATA OC,OC#,OD,OE#,OE,OF,0
F#,OG,OA#,OA,OB#,OB
2 DATA IC,IC#,ID,IE#,IE,IF,1
F#,IG,IA#,IA,IB#,IB
3 DATA 2C,2C#,2D,2E#,2E,2F,2
```

NEXT PAGE

```

F#,2E,2A#,2A,2B#,2B
4 DATA 3C,3C#,3D,3E#,3E,3F,3
F#,3E,3A#,3A,3B#,3B
5 DATA 4C,4C#,4D,4E#,4E,4F,4
F#,4E,4A#,4A,4B#,4B,5C,END
6 DATA 5,E,.E,0,5,.0,..0,H,9
,10,11,..H,13,..H,15,H,END
7 DIM @N$(70),@D$(16)
8 READ @# :: IF @#(">"END" TH
EN @=#+1 :: @N$(@)=@# :: GOT
O 8 ELSE @=0
9 READ @# :: IF @#(">"END" TH
EN @=#+1 :: @D$(@)=@# :: GOT
O 9
10 DISPLAY AT(3,1)ERASE ALL:
"SNF filename? DSK" :: ACCEP
T AT(3,18):@F# :: OPEN #1:"D
SK"&@F#,OUTPUT
11 DISPLAY AT(5,1):"Music na
me?" :: ACCEPT AT(6,1):@M# :
: DISPLAY AT(8,1):"Number of
voices?" :: ACCEPT AT(8,19)
:@V#
12 PRINT #1:"("&@M#&"), "&@V#
&","1" :: DISPLAY AT(10,1):"D
elay?" :: ACCEPT AT(10,8):@D
L# :: PRINT #1:"#DELAY="&@DL
#
13 !PRINT #1:"1, "&@N$(A)&","
&@D$(T):"2, "&@N$(B)&","&@D$(
T):"3, "&@N$(C)&","&@D$(T)::
RETURN
14 !PRINT #1:"4, "&@N$(A)&","
&@D$(T):"5, "&@N$(B)&","&@D$(
T):"6, "&@N$(C)&","&@D$(T)::
RETURN

```

Key that in, save it by SAVE DSK1.MERGE, MERGE. Load the XBasic music program, make sure it starts with a line number higher than 14, and merge in that routine by MERGE DSK1.MERGE. Find the line number containing the CALL SOUND. Bring line 13 to the screen, Enter it, use FCTN 8 to bring it back, replace the 13 with that line number, delete the ! and Enter.

The next step is optional, but try it. Delete the :: RETURN from the line you just moved. Then bring line 14 to the screen and use the same method to give it a line number one higher than the CALL SOUND line. The conversion will now write an SNF file for 6 voices. There will be only 3 different notes, but you could change the N\$(A) to N\$(A+12) to raise it an octave, and assign different instruments.

Of course, if the program uses variables other than T, A, B and C, you will

have to change them in those two lines.

Near the end of the program, usually, you will find a NEXT, which goes back to to play the music a set number of times; or you might find a GOTO to the beginning line, to keep playing it forever; or there might be a "play it again?" prompt, or even an END. In any case, just before that put PRINT #1:"END" :: CLOSE #1 :: STOP. If you want the music to play through more than once, it is better to duplicate the SNF file with the Funnelweb COPY function.

Now RUN it. You had best answer the delay? prompt with 1000 or more, because it will probably be giving you sixteenth notes that should be quarter notes. You can adjust that later.

Compile the SNF file. You may get some errors because the note length is a number instead of an acceptable symbol. See the line 6 DATA. You will have to rewrite those as two notes with the second one tied. For instance, a 10 would be replaced with an H and another of the same note with an -E.

When you have made those corrections, and adjusted the delay, if the music doesn't sound right, it is best to give up. The programmer has done something that would probably be difficult to figure out and duplicate.

If the programmer has used individual CALL SOUNDS, or used mnemonic variables, or read in the frequencies from DATA, conversion may still be possible but there are more apt to be insurmountable problems. Mike suggests converting the CALL SOUNDS to a user written subprogram named SOUND. This is not necessary, because a user-written subprogram having the same name as a built-in subprogram is recognized instead of the built-in subprogram.

However, it is essential that every CALL SOUND in the program has the same number of voices, because user-written subprograms must have a fixed number of parameters.

It is also essential that the duration values passed to the subprogram are numbered from 1 upward, or that they are divided down to those values in the subprogram.

If the programmer has used a single set of variables in his CALL SOUNDS, you can solve the problem of differing numbers of voices with this error trap -

```

11 ON ERROR 12 :: GOTO 13
12 CALL SOUND(T,A,0,40000,0,
40000,0):: ON ERROR 12 :: RE
TURN NEXT
13 REM

```

Substitute for A the variable name used for the first voice. The routine will add other voices with an inaudible frequency, which my conversion routine will recognize as a rest.

Otherwise, the following routine will rewrite a program which has been saved in merge format, adding extra voices to a total of three, with an inaudible frequency. When finished, merge the new file back in as a program. I think it is foolproof except in those rare cases where the programmer has used parentheses within the parentheses of the CALL SOUND.

```

100 DISPLAY AT(3,8)ERASE ALL
:"MUSIC REWRITER" :: DISPLAY
AT(5,1):"INPUT FILENAME?:"
DSK" :: ACCEPT AT(6,4):IF# :
: OPEN #1:"DSK"&IF#,VARIABLE
163,INPUT
110 DISPLAY AT(8,1):"OUTPUT
FILENAME?:"DSK" :: ACCEPT A
T(9,4):OF# :: OPEN #2:"DSK"&
OF#,VARIABLE 163,OUTPUT :: C
#=#CHR$(179)
120 PRINT #2:CHR$(0)&CHR$(0)
&"@&CHR$(190)&CHR$(200)&CHR
$(5)&"40000"&CHR$(0)
130 X=0 :: P=1 :: LINPUT #1:
M#
140 A=POS(M#,"SOUND",P):: IF
A=0 THEN PRINT #2:M# :: GOS
UB 250 :: GOTO 130
150 B=POS(M#,CHR$(182),A)::
M1$=SEG$(M#,1,B-1):: M2$=SEG
$(M#,B+1,255)
160 P=A
170 C=POS(M1$,CHR$(179),P)::
IF C=0 THEN 200 ELSE X=X+1
180 IF X=7 THEN F=C
190 P=C+1 :: GOTO 170
200 IF X>6 THEN M1$=SEG$(M1$
,1,F-1)&CHR$(182):: GOTO 240
210 IF X=6 THEN M1$=M1$&CHR$
(182):: GOTO 240
220 IF X=4 THEN M1$=M1$&C$&
@&C$&"@&CHR$(182):: GOTO
240
230 M1$=M1$&C$&"@&C$&"@&C$&
@&C$&"@&CHR$(182)
240 X=0 :: M#=#M1$&M2$ :: P=A

```

NEXT PAGE


```

+1 :: GOTO 140
250 IF EOF(1)<>1 THEN RETURN
ELSE CLOSE #2 :: CLOSE #1 :
: STOP

```

Now, merge in this routine, which you have keyed in and saved in merge format, into your music program. Find the end of the music and put in the line to print "END" and close the file, as described above. Also be sure you have modified the program, or this subprogram, so that duration values run from one upward. For instance, if the CALL SOUNDS have duration values of 350, 700 and 1050, add T=7/350 to line 30010. Or if the CALL SOUNDS have durations such as T, T*2, T/2 and T/4, find the line where T is defined and change it to T=4 so that T/4 will be 1.

Then run the program to, hopefully, create a workable SNF file.

```

1 DISPLAY AT(3,1)ERASE ALL:"
SNF filename? DSK" :: ACCEPT
AT(3,1B):F$ :: OPEN #1:"DSK
"&F$,OUTPUT
2 DISPLAY AT(5,1):"Music nam
e?" :: ACCEPT AT(6,1):M$ ::
DISPLAY AT(8,1):"Number of v
oices?" :: ACCEPT AT(8,19):V
$
3 PRINT #1:"("&M$&"), "&V$&,"
1" :: DISPLAY AT(10,1):"Dela
y?" :: ACCEPT AT(10,8):DL$ :
: PRINT #1:"$DELAY="&DL$
30000 SUB SOUND(T,A,e,B,@e,C
,@ee):: IF W=1 THEN 30010 EL
SE W=1
30001 DIM C$(12),N$(3000),D$
(24):: C$(1)="C" :: C$(2)="C

```

```

#" :: C$(3)="D" :: C$(4)="EE
" :: C$(5)="E" :: C$(6)="F"
:: C$(7)="F#" :: C$(8)="G" :
: C$(9)="A#"
30002 C$(10)="A" :: C$(11)="
B#" :: C$(12)="B" :: D$(1)="
S" :: D$(2)="E" :: D$(3)="E
" :: D$(4)="Q" :: D$(5)="S"
:: D$(6)="Q" :: D$(7)="..Q"
:: D$(8)="H"
30003 D$(9)="9" :: D$(10)="1
0" :: D$(11)="11" :: D$(12)=
".H" :: D$(13)="13" :: D$(14
)="..H" :: D$(15)="15" :: D$
(16)="W" :: D$(17)="17" :: D
$(18)="18"
30004 D$(19)="19" :: D$(20)=
"20" :: D$(21)="21" :: D$(22
)="22" :: D$(23)="23" :: D$(
24)="W"
30005 F=110 :: FOR J=1 TO 58
:: X=INT(F*1.059463094^(J-1
)+.5):: Y=Y-(Z=12):: Z=Z+i+(
Z=12)*12 :: N$(X)=BTR$(Y)&C$(
Z):: NEXT J :: N$(0)="R"
30010 A=-A$(A<2961):: B=-B$(
B<2961):: C=-C$(C<2961)
30011 IF N$(A)="" THEN DISPL
AY AT(24,1):A :: ACCEPT AT(2
4,8)BEEP:A
30012 IF N$(B)="" THEN DISPL
AY AT(24,1):B :: ACCEPT AT(2
4,8)BEEP:B
30013 IF N$(C)="" THEN DISPL
AY AT(24,1):C :: ACCEPT AT(2
4,8)BEEP:C
30040 PRINT #1:"1, "&N$(A)&,"
"&D$(T):"2, "&N$(B)&," "&D$(T)
:"3, "&N$(C)&," "&D$(T)
30050 PRINT "1, "&N$(A)&," "&D

```

```

$(T):"2, "&N$(B)&," "&D$(T):"3
,"&N$(C)&," "&D$(T):: SUBEND

```

In order to provide a fast lookup table, that little routine is so masterful of memory that it would even embarrass a PC programmer, so you might get a MEMORY FULL error when you merge it into an unusually large program. It is written to allow for SNF notes up to 4A, which is higher than you are likely to need, so you can change the DIM N\$(3000) in line 30001 to 2500 and the 58 in line 30006 to 36 and still have three full octaves.

The SNF file being written is also displayed on screen, so you can see if you are getting valid results.

The subprogram requires note values to be exactly correct and sometimes they are not, due to programmer's error or the result of mathematical computations in the CALL SOUND. In this case, the subprogram will display the bad value it has received and allow you to substitute the correct value from the table on page 124 of the Beginner's Basic manual.

But, I can't begin to tell you about all the modifications you may have to make to a program or in order to overcome its particular problems. If you do not have some programming skill, I recommend you don't even try. Sorry, Mike, it is NOT easy!

END

FROM THE EDITOR

Well, it looks like we of CONNI opened up a can of worms when we rearranged our exchange newsletter distribution. We did not want to CUT any group off, but it came down to plain facts, MONEY!! The whole mess came about when our printer hit us with a whopping price increase. We could not cut down on the number of copies because we had to mail at least 200 copies if we were to maintain bulk rates. Like many user groups, our membership has decreased thus making our cash flow smaller, and we didn't want to raise the dues any more than it is and still hope to hold members or attract new members which is a problem like all user groups have.

We want to support the TI world and want to be able to provide a monthly newsletter to user groups. Well do we know the importance of supplying the user groups with all the information that is available, and yes the newsletters are very important to groups who no longer have the membership to produce a newsletter. Our orphan support is dwindling and we of CONNI want to do all we can to preserve and support the friendship by sharing information and help in any way we can among ALL user groups.

It was far from our intention to create any hard feelings from other groups.

Author's Note: This series of articles dealing with personal finance is based solely upon my own opinions and my experiences. I am not a financial advisor nor am I an investment counsellor. You are cautioned to always seek the advise of a financial professional before making any decisions or taking any action that would involve what to you is a significant amount of money.

Lastly, this series of articles is not a rehash of material published some two to three years ago that I wrote. It is instead an update that contains the new things that I have learned about personal finance management since then. I wish to thank all the 99ers who sent me the \$15 Shareware fee for my CHECK+ program. They are the ones who really provide the initiative for me to release this series. Thanks, folks I hope you enjoy the articles.

WHY MANAGE YOUR MONEY?

The most obvious answer to this question is because no one else is going to do it for you, that's why! Taking control of your finances doesn't guarantee that you will become rich, nor does it guarantee an early retirement. What it does guarantee, if you stay with it, is that you'll be able to make more informed decisions about what to do with the money you have today, so that you can ensure a better, more secure life tomorrow.

But managing your money also means that you will need to make time for it in your routine, it means that you will need to expend the effort to get the job done each week or month and it means that you'll need to make a commitment to stay with it. If you're not willing to accept any of these requisites, then don't even start, because you'll be wasting your time.

WHY USE A COMPUTER?

You don't have to manage your personal financial affairs with a TI-99 or any other computer. We've all done

the job for ourselves, at least in a rudimentary manner, long before the 99/4A or any other computer was born, and in most cases we got along just fine. Many 4A owners still don't use their computers for the job. But computers do make the job a little easier by making the information more centralized and thus more accessible. Generally, this tends to encourage more attention to financial affairs.

With the proper software and an accurate idea of what the finance management is all about, one can use the 99/4A or any other computer quite effectively for personal financial purposes. Why I have discovered though, and what you may also discover, is that it is necessary to learn that which is really important and that which is not so important to effective finance management.

While it may be informative to save data on how much money you spend for groceries, gasoline and other commodities during the year, and it's nice to be able to verify the accuracy of the balance in your checking account(s), these functions by themselves fail to reach the real purpose of personal finance management and they fail to yield the more productive results that may be realized. I believe that too many 99ers lack the exposure to what finance management is all about, so they fail to see the real benefits to be derived from their efforts. It does no good to manage a budget if you don't really understand "why" you are managing it.

From my perspective, personal finance management involves several things, the most important being to raise your awareness level in the areas of;

1. Budgets and budget management,
2. Tax planning and
3. Savings/investment management.

Personal Finance management efforts should give you a better idea of what your spending habits are and where your money goes each month, so that you can make an accurate determination of your personal net worth. You should also be

able to recognize the need for tax planning strategies when you see the impact upon your income, investments and savings if you don't plan for taxes. Lastly, you should have a clearer understanding of what "investing" is all about and how to begin looking for alternatives to that passbook savings account or Christmas Club account you may have been using in the past.

BUDGETS:

By creating and adhering to a budget you will be able to identify trends in spending that help you determine where your money is going. This knowledge is an important first step in financial management efforts. If you don't know where your earnings are being spent, then you probably also don't know whether or not you are spending more than you need to for the products and services you are purchasing. Hence, you could not know whether or not you are getting the biggest "bang for the buck". Getting the best deal that you can, whether it is in the purchases that you make or the investments that you decide to venture into, should always be a priority. It's your money. You should learn to optimize its use. An effectively managed budget can help you do that.

To me a budget is a road map to the successful attainment of the financial goals I set for myself at the beginning of each year. In creating a budget I have given myself a direction to follow towards attainment of those goals. By using the budget to guide me, I am able to determine whether or not I am still on course later on in the year. The reason I want to be on course is because my goals include the freeing up of a certain portion of my earnings for savings and investments. If I don't have the funds available to make the investments or savings account deposits that I planned on, then I will not be able to achieve my goals. The ultimate goal of course is to maximize my returns, so that I can provide increased financial security for my family and myself.

This does not mean that one must become a slave to a budget and that every penny must be accounted for. That

NEXT PAGE

is not the purpose of a personal budget. A budget should be used for direction and control. The direction comes by deciding how much money will be allotted for each expense area, how much money will be saved etcetera. Deviations from those amounts tell you the current direction you are heading in if things remain constant. If the direction is not in line with the goals you have set, then a corrected course is required. The course correction (the control) is accomplished by;

1. Reducing the amount of money spent in one area in order to provide more money for another area.

2. Increasing your income by getting another job, reducing your taxes, making better investments etc.

Reassessing the goal to a more realistic level; one that is more in line with your current financial capabilities.

Budgets are planning devices. When their real purpose is understood and when they are adhered to, they will provide you with a reliable means of assessing your current financial direction and a fairly accurate means of predicting your financial future. A budget is the building block for all of your personal financial management efforts.

TAXES:

Tax Planning is more important than you may realize, unless you don't mind giving away dollars that you don't need to. Everything you do "financial" in nature has a tax aspect to it. The simple truth is, Uncle Sam wants a piece of your action. You must give him some of it, but why give him more than he is legally entitled to?

Income tax laws and rules are probably the least understood aspect of personal finance. I don't claim to be a tax expert, but I know enough about it to protect myself and to maximize my earnings. You should too. Your goal need not be to become a tax expert. Leave that to the tax attorneys, accountants and other professionals in the field. Your goal should be to learn what is

important to your financial management efforts.

Paraphrasing tax consultant Dennis Kamensky;

"....an income tax return is much like a financial statement in that when filing one, you are balancing your tax book for the year. On one side is the income from whatever source you have, and on the other side are the deductions that you may "claim". The difference between the two is the amount of your taxable income. Your tax liability is then computed based upon your taxable income. Then depending upon your individual situation, you may have to add in certain other taxes (state, local etc.) or you may be able to subtract from your taxable income any tax credits you are entitled to. The difference between the amount accumulated from paying the government all year long (if you work for someone else) and your tax liability, will determine what you get, or what you owe at the end of the year."

The bottom line is, you want to be able to reduce your tax liability as low as possible, so that you don't pay anything to the IRS at tax time. This allows you to meet your tax obligations while keeping as much of your money as you can throughout the year for your own use. If you are armed with a reasonable knowledge of what is and what is not a deductible expense, and what is and what is not taxable income, and you maintain accurate records of your income and expenses throughout the year, you can better determine where you stand in the income tax picture.

SAVING MONEY:

No matter how you look at it, the most practical way to attain your financial goals is to save money (don't keep hoping that you will win the lottery). Saving money means both getting the best deal on things that you buy as well as building a "nest egg" against the uncertain future.

One way to begin saving money is to always "pay yourself first". This requires always taking something out of your income and giving it to yourself (actually your savings account) before

you worry about your creditors. Yes, you have bills to pay and other financial obligations to meet. But if you get into the habit of having your credit union, bank or payroll savings plan deduct just a few dollars a payday, before you even see it, that money will never be missed. Yet it is the beginning of something for you instead of those that you owe. This doesn't mean that you should delay paying your creditors so long that you are penalized for late payment. That defeats the whole idea and ultimately cost you money and possibly your credit rating. It does mean that any start on your savings goal(s) is better than no start at all, no matter how small that start might be.

INVESTMENTS:

Doing something with those "extra" dollars that you have pulled out from your monthly income is an important way to not only optimize the use of your money, it is also the most effective way to achieve the long-term financial goals you have set for yourself. The days of passively sitting back and letting a bank or other lending institution pay you minimum interest on your savings are gone. If you are still doing that, then you are depriving yourself of a much better return on your dollars and instead, giving it away to the banks. By investing even a few dollars you will realize the benefits of increased personal knowledge about the world of finance and you will be making more efficient use of the money you work so hard for.

While I am no "financial guru", I have learned alot about how money is handled, how it can be better managed and how one can pursue a better return on their investments with any degree of risk desired. You can and should learn too. For many years I believed that the only investment opportunities open to me involved dabbling in the confusing and competitive world of the stock market. If I wanted to pay some "expert" an exorbitant fee or if I wanted to chance "playing the boards" myself, I could make some money or lose some money in a big way. A few years back money market funds became quite popular because they offered a short-term alternative to the passbook savings

NEXT PAGE

account that delivered a better return with little or no more risk. Today, Mutual Funds seem to be the investment vehicle of choice. Mutual Funds allow you to invest your dollars in virtually any kind of investment area, at virtually any risk level. They also offer the advantage of professional management (usually) without the exorbitant fee. In short, they allow a person to get into the world of "high finance" without having to devote a

great deal of time worrying about how the market is doing, whether or not you should be moving your money in an effort to "time the market" etcetera. Mutual Funds provide the novice and expert investor alike with a wide variety of alternatives, without much of the expertise direct involvement in the world of investing requires

route for investment of your dollars; Certificate of Deposit, Money Market Funds, Cash Equivalency Funds, Mutual Funds and others. Do yourself a favor and investigate some of them. If for no other reason than to better educate yourself, the investment in time will yield a worthwhile return.

END

Today there are several alternatives to the traditional passbook savings account

EDITORIAL
from MID-SOUTH
99-FEB

(the following edited from the April 1984 Texas Monthly)

almost immediately, people at Texas Instruments were calling it black Friday. Early in the afternoon of October 28, 1983, the rumors began to fly, and at the company's Lubbock-based consumer products group, the rest of the day was chaotic. Middle managers called employees in, a few at a time, to tell them yes, it was true and there was nothing that could be done, and then everyone in Lubbock was on the phone to

friends at all the other TI facilities, and by four o'clock, when the official corporate announcement was released to the press, there wasn't a soul at the company who hadn't heard the bad news. Texas Instruments, the company that had put more computers into American homes than anyone else, was pulling out of the home computer business.

(looking back)

Just before Christmas in 1982, one of the men in charge of producing the TI home computer had to have emergency surgery, and as he was being wheeled into the operating room, the doctor walking beside him found out where he worked. "Do you have anything to do with the ninety-nine four s?" asked the

doctor. Yes, the man replied. "I've been looking for that computer everywhere," said the doctor. "Do you think you could get me one?" When they got into the operating room, the doctor told the anesthesiologist that the patient worked for TI and could get a 99/4A - and the anesthesiologist asked for one too. Right there in the operating room! That's what it was like, back then, to be a part of the team that produced the 99/4A.

END

A NEW NEWSLETTER

THE ENTERPRISE RAG

by Jim Peterson

A new newsletter has appeared, to support the users of Midi Master 99. Funding for the first issue was generously donated by Richard Bulmer of Oshesee, Ontario, and the newsletter was edited by Dolores Werthe, the well known music programmer of Harrison Software.

For the benefit of those who have not been listening, Midi Master 99 is a cable, with accompanying software, which makes it possible to create music files on the TI-99/4A and play them on any electronic keyboard which has a MIDI interface.

Volume 1 Number 1 contains an article by Dolores Werthe on "Making the Most of Your Casio", overcoming the limitations of the budget-priced keyboard being commonly used. She also wrote the introductory editorial.

Bruce Harrison contributed an article describing the public domain Toolbox utilities he has written in assembly to rapidly combine SNF files, to split SNF files into smaller segments for editing, and to adjust the DELAY factor. He also discussed the different models of Casio keyboards with MIDI interface, and their shortcomings.

Jim Peterson contributed a general discussion of Midi Master 99, an article on fixing some bugs, and an article on converting TI XBasic music programs into

SNF files for Midi Master.

The first issue of this newsletter was mailed to everyone who had shown any interest in joining a MIDI 816. A few copies are still available. Cost of future issues will be determined by the cost of printing and postage, and will probably vary from issue to issue. Articles are solicited, and a Geneva contributor is needed.

Dolores announced that a list of music files in the 816 library is available for a SASE, and members are welcome to anything there.

Contact Dolores at:

5705 40th apt.

Hyattsville, MD 20781

Phone (301)277-3467

CARDCAT REVISION
 compliments of
 B.C. 99ers USERS'S GROUP

In the July issue of MICROpendium was a program called Cardcat, which is what we wanted for our disk library catalog. After running this program we found a few bugs that needed to be fixed before we could use this program properly.

The bugs were as follows; the date didn't print out, the disk size label seems to be backwards (probably ok if using SSDD disks), once the 3x5 label was printed the next label would be right under the first and if you had more than 100 files on the disk you would end up with a label about 5x5.

Well after a few hours of "fixing" we came up with the program listed below which fixes the bugs and adds a few enhancements.

We have fancied up the title screen (Thanks to Tigercub), set the printer to print 3 inch labels only and will print 2 labels for large disks. The second label will also print disk name and page 2 for reference. Also we expanded the type names to 7 letters so "program" prints completely. We also made the program read up to 9 drives for more access and a file counter was added.

We have used this program to print Avery #4169 tractor feed 3x5 labels for our library file catalog.

We hope these enhancements may help others who may use this program.

Ron Warfield
 Dean Hancock

```

100 ! *****
110 ! * 3 X 5 CARD CATALOG *
120 ! *****
130 ! Original: Ed York, Rev
amped: Rick Kellogg, Revisio
n: Ed York, Enhanced: Ron Wa
rfield, Dean Hancock
140 ! Subprograms: Thanks to
Tigercub
150 CALL CLEAR :: CALL SCREE
N(5):: FOR X=0 TO 12 :: CALL
COLOR(X,16,5):: NEXT X :: C

```

```

ALL BLACKCHAR
155 DISPLAY AT(10,7):"TURN O
N PRINTER" :: DISPLAY AT(24,
5):"then press any key" :: C
ALL KEY(0,K,S):: IF S=0 THEN
155
160 OPEN #1:"PIO" :: PRINT #
1:CHR$(27);"C";CHR$(18):: CL
OSE #1
170 DIM A$(12):: FOR A=1 TO
12 :: READ A$(A):: NEXT A ::
CALL CLEAR
180 DATA JAN,FEB,MAR,APR,MAY
,JUN,JUL,AUG,SEP,OCT,NOV,DEC
190 CALL FLY(" 3x5 DISK LABE
LER",4):: DISPLAY AT(7,6):"E
nter today's date:" :TAB(1
1);"MM/DD/YY" : : :TAB(11);"_
_/_/9_"
200 ACCEPT AT(12,11)BEEP SIZ
E(-2)VALIDATE(DIGIT):B$
210 IF B$="_" THEN 210 ELSE
IF (VAL(B$)>12)+(VAL(B$)<1)
THEN 190
220 ACCEPT AT(12,14)SIZE(-2)
VALIDATE(DIGIT)BEEP:C$ :: IF
C$=" " THEN 220 ELSE IF (V
AL(C$)>31)+(VAL(C$)<1)THEN 2
20
230 ACCEPT AT(12,18)SIZE(-1)
VALIDATE(DIGIT)BEEP:D$ :: D$
="9"&D$ :: GOSUB 520
240 E$=A$(VAL(B$))&" "&C$&"
19"&D$ :: F$(1)="D/F " :: F
$(2)="D/V " :: F$(3)="I/F "
:: F$(4)="I/V " :: F$(5)="PR
OGRAM"
250 IMAGE "DISKNAME: #######
### FREE:#### USED:####"
260 IMAGE "##### SIDED/####
## DENSITY #####"
270 IMAGE "##### ##
##### # #####
##### # #####
##### # "
280 OPEN #1:"PIO",VARIABLE 1
00 :: PRINT #1:CHR$(15);CHR$
(27);"S";CHR$(0);CHR$(27);"A
";CHR$(5)
290 OPEN #2:"DSK"&STR$(B)&"
",INPUT ,RELATIVE,INTERNAL :
: INPUT #2:G$,C,C,D :: E=0
300 IF C>720 AND C<1441 THEN
H$="DOUBLE" :: I$="DOUBLE"
310 IF C>360 AND C<721 THEN
H$="DOUBLE" :: I$="SINGLE"
320 IF C<361 THEN H$="SINGLE
" :: I$="SINGLE"
330 GOSUB 550
340 DISPLAY AT(24,8):"File c

```

```

ount = ":E
350 IF E=126 THEN 530 :: IF
E=78 THEN GOSUB 540 :: GOSUB
590
360 FOR F=1 TO 3 :: INPUT #2
:J$(F),G(F),H(F),I(F):: NEXT
F :: IF LEN(J$(1))=0 THEN 4
10 ELSE IF LEN(J$(2))=0 THEN
GOSUB 460 ELSE 380
370 PRINT #1,USING 270:J$(1)
,H(1),K$(1),L$(1):: E=E+1 ::
GOTO 340
380 IF LEN(J$(3))=0 THEN GOS
UB 460 :: GOSUB 480 :: PRINT
#1,USING 270:J$(1),H(1),K$(
1),L$(1),J$(1),H(2),K$(2),L$
(2):: E=E+2 :: GOTO 340
390 GOSUB 460 :: GOSUB 480 :
: GOSUB 500
400 PRINT #1,USING 270:J$(1)
,H(1),K$(1),L$(1),J$(2),H(2)
,K$(2),L$(2),J$(3),H(3),K$(3)
,L$(3):: E=E+3 :: GOTO 340
410 PRINT #1:CHR$(12):: PRIN
T #1:CHR$(18);CHR$(27);CHR$(
50):: CLOSE #2 :: CLOSE #1 :
: DISPLAY AT(20,1):"Want ano
ther copy or disk? Y": :""
420 ACCEPT AT(20,28)SIZE(-1)
VALIDATE("YN")BEEP:M$ :: DIS
PLAY AT(24,21):" " :: IF M$
="Y" THEN GOSUB 520 :: GOTO
440 ELSE CALL CLEAR
430 OPEN #1:"PIO" :: PRINT #
1:CHR$(27);"T" :: CLOSE #1 :
: CALL INIT :: CALL LOAD(-31
962,100,130):: END
440 DISPLAY AT(14,1)BEEP:"
Insert disk into drive "&STR
$(B): : " Press any key to b
egin "
450 CALL KEY(0,J,K):: IF K<1
THEN 450 ELSE 280
460 IF G(1)>0 THEN L$(1)="N"
ELSE L$(1)="Y"
470 IF ABS(G(1))=5 THEN K$(1)
)=F$(5):: RETURN ELSE K$(1)=
F$(ABS(G(1)))&STR$(I(1)): R
ETURN
480 IF G(2)>0 THEN L$(2)="N"
ELSE L$(2)="Y"
490 IF ABS(G(2))=5 THEN K$(2)
)=F$(5):: RETURN ELSE K$(2)=
F$(ABS(G(2)))&STR$(I(2)): R
ETURN
500 IF G(3)>0 THEN L$(3)="N"
ELSE L$(3)="Y"
510 IF ABS(G(3))=5 THEN K$(3)
)=F$(5):: RETURN ELSE K$(3)=
F$(ABS(G(3)))&STR$(I(3)): R

```

NEXT PAGE

by Jim Peterson

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 CHARAL 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 MLO download fonts, but the instructions for coding MLO 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 MLO 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 MLO 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 MLO 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 FLXCHAR 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, fickle 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 MLO 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 MLO 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.

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TOWER CASE
Hardware SIG
by Michael Maksimik
origin: S&T Software BBS

As some of you know, I moved my peripheral cards, geneve, disk drives, hard disks, and cables into a "tower" style case. Presently, there are some alternatives to the TI power supply problem, but the problem is one that most people are aware of. 1) the TI power supply feeds high voltages to the cards, and the regulators on each card convert this high voltage to regulated voltage, plus waste heat. 2) this heat will slowly damage components. This is beyond a doubt. 3) The P.E. box will not house more than two half height disk drives, and will probably have difficulty with hard drives. 4) The cards and cables stick out the back (especially the geneve and HFDC) and can be subject to damage from overextension due to cable weight. 5) Exposed data cables are subject to interference, and that will make your system's disk performance less than it should be. 6) all those cases, cables, power supply boxes, etc. are a bear to lug around if you travel and demonstrate with your system. 7) most, if not all these problems are reasons for going to a PC (clone) based system, simply for the convenience of having the computer in a single case.

The other cases we presently have (Panda Expansion and Rave PE/2) are fine projects, but costly. Upgrading to one of them will cost you over \$250.00 if you don't already have an expansion box, or don't want to give up one. And, those cases do not address the issue of cards sticking out the back. The disk drive, serial port, parallel port, and especially the connectors on the geneve are not meant for constant tugging and pressure due to cable weight...the answer is a full tower case...no butchering of your P.E. box beyond recognition. All cards are completely enclosed with room for small extension cables, connected to the back of the case. Room for 4 hard drives and 4 floppy drives. One single power supply, for all components, and cards that no longer generate stove-top heat! Best of all, the tower can be a user project, costing about \$150.00 for all parts and case, and power supply, and about 4 hours of work.

Jim Schroeder has already built a tower case, and I finished mine just before the faire. The project is easy (it can be done at a users group meeting, with the proper tools) and best of all, it solves all the major problems involved with the P.E. box. Here are a few plusses:

- o The parts involved are replaceable (tower and power supply) and are, for the most part, user repairable.
- o Tower cases are popular and can be ordered through computer shopper or from a local faire vendor, like mine.
- o The power is clean and reliable. No residual voltage festers on the cards after the power is turned off. And plenty of power for 4 hard disks, 4 floppies, AND all of your expansion cards (will even power more cards, of more slots are available. The tower has room for 12 P.E. box

cards)

- o It is sturdy, tip-proof, and attractive. Plus, the full shielding of all critical components prevents escape of RF noise
- o It is easily portable (though heavy) and all cards are secure for transport. since they are completely covered (with about 5 inches to spare!) you can wire extension cables for 4 RS232 ports, a parallel port (I wired my TI parallel port as a PC compatible port, allowing me to use store-bought shielded printer cable), mouse, joystick, AND video(I wired my 8 pin DIN video to a 9-pin D plug, in a VGA standard wiring)
- o Since all cards run cool, my problems due to thermal shutdown have ceased, and even the disk drives run cool. One circulating fan cools the 250 watt switching power supply. Don't be fooled..250watt is the maximum power. The supply only supplies what the load required. 250 watt is suitable for all your TI peripherals.
- o There is even room inside for the TI console and flex cable! Yes, with a RAVE keyboard adaptor, and a cartridge-emulator like a p-gram you don't have to use cartridges again, and even the TI can be on the tower's power supply.
- o With all disk drives mounted in one unit, there is very little chance of dropping them from an otherwise separate, smaller external case, and the desk space is cleared from cases and cable and clutter.
- o No more disk drive cables running everywhere. All are self-contained inside.
- o Picture this: Tower case with TI/geneve, HFDC with 2 hard drives, SCSI board with 2 hard drives. CD ROM (internal mount), a 3 1/2 floppy, a 5 1/4 floppy, and a tape drive (either SCSI or HFDC based) All on one power supply. Loaded expansion system, including 1 meg of expansion RAM, 1 meg ramdisk, 2RS232 cards for Modem, mouse, MIDI and printer/digi-port. This isn't hard to put together and manage with a tower case.
- o I am NOT selling these (although this is good sales talk!). I am putting one together for D.J., and mine is a success. I have talked to at least 5 other people who are doing the same. It would seem that there is at last a logical, economical, and easy alternative to the P.E. box problem list.

My brother, Chris (the other half of crystal software) is considering making the tower cases, custom, for \$150-\$200 depending on hardware configuration. Would require ordering, and two parts from a p.e. box. I am going to try to convince Bud Mills to make PCB connectors, for the new tower case, giving 12 expansion slots, instead of 8. Also would require fabrication of new 12-slot card cages. We could use the 8 card cage as a model. This would give more expandibility than any other PC on the market...12 expansion slots!

END

"Quiet people aren't the only ones who don't say much..."

ABOUT THE DOM - - -

Well, hello out there! Hope that your holidays were good ones and that you are now looking forward to spring.

This month we are catching up: I will be reviewing both the December 1992 and January 1993 D.O.M.s. Starting with December, Chuck is using a new format in the Read--me files. Next to each file listing he has placed a box: For TI and 9640, For 9640 only, etc. Should be a big help to all. I certainly appreciate it!

The December issue is awash with Christmas music: XMASMUSIC^ on side A, TXMAS^, XMUSIC/S1^ AND XMUSIC/S2^ on side B. All are archived. Print the Readme file and follow the suggestions. The first has 19 programs for a total of 353 sectors, and the disk must be named XMAS. The second has 7 carols and the last two each fill one SSSD disk. It is suggested that you put those last two on opposite sides of a floppy disk. All of these load from Extended Basic.

The Christmas theme continues on side A with Karl Roastedt's XMASTILE^, a sliding block puzzle with a Christmas theme. 68 sectors. Archived. Assembly language, so use Show Directory from your Horizon ramdisk or BootMenu disk, the program loader from Funnelweb, or the Program load from the Editor Assembler cartridge. Fun! Also on side A is XMASSCARD^, a Canadian contest winner that combines Christmas music with graphics. Variable quality but an overall pleasing effect. Free. Why not write the authors to say thanks?

On side A is DSCAN11^, a DSR scanner for you techies who want to examine the computer's electronic innards, and maybe fix some problems. 6 files, archived. Unpacks to 52 sectors total.

On side B are AUTO-LOAD (put it on a disk of XB programs and rename it LOAD). Use your joystick to select the programs to be run! Sort of gives you an experience similar to that of using a mouse. This file is not archived. Just copy it to a favorite disk and GO!

Also (same side) is FILELISTER from Ray Kazner. Not archived. Use it to list any D/V, D/F, I/F or I/V file format. A very handy tool to have.

That's it for December. If you didn't get this, why not do so and put it away till next November.

BTW, don't forget, if you are reading a friend's newsletter (and why not--we hope you share them) and want your own copies, a year's subscription is only \$20. If you want to subscribe to the D.O.M. the cost is \$35. (slightly higher outside the U.S.) More details elsewhere in this issue.

JANUARY 1993.

An interesting and productive mixture of utilities, games, music, miscellaneous programs, and an art viewer for the 9640 only.

Side A: DM1K61^, a Dec. 1992 upgrade to the recently released DM1K60. Primarily it fixes the bugs in the latter. Archived. Unpacks to 292 sectors. The working portions are 33 and 27 in length.

Next is JUMPPE6^, a game from Micropendium by Barry Traver. Unpacks to 251 sectors. A classic. Archived.

A collection of various Pegs and Puzzles from several issues of Micropendium. The only program you need is JUMPAPE62, a long XB (1V254) file. To load, type RUN "DSK1.JUMPAPE62" from the Extended Basic prompt. 15 game variations.

MICRO^ is once again a collection of programs typed in from Micropendium by our Harley Ryan, Jr. Archived. Unpacks to 114 sectors. 8 files: CHEMICAL, SKI/UTAH, SPRITES and XBCOMPARER, and their four docs files. Haven't tried these. The docs should tell you how to load!

(9640 only) MYARTVIE^ is a Myart picture viewer. Must use ABasic. Not archived. 8 sectors.

Side B: BOSSA^, a wonderful collection of Bossa Nova music (Brazilian) by our prolific music programmer Harold Timmons. Archived. Unpack to a SSSD disk. Includes: Girl from Ipanema, Quiet Nights (Corcovado), One Note Samba, Meditation, How Insensitive, Waters of March. XB loader.

Next is JUMBLE^, a word jumble game from Ray Francies. I myself especially enjoy unravelling mixed-up words. Hope you like this one! It's the new version and unpacks to 41 files (422 sectors). Needs a DSSD disk or try to selectively unpack. XB load.

PC<>TI-TXT, a set of two files by our Bud Wright to convert DF128 files to DV80 and vice versa. Archived. 2 files at 15 sectors each. XB load.

QLIST43A, a disk cataloguer that lets you print up to 4 disk catalogs side by side. Great for our 2-disk D.O.M.s and other uses. Runs from XB. Archived. 11 files, 159 sectors. Print drivers, docs. XB load. Program itself is only 36 sectors.

And then there's READ--THIS, the doc file for this DOM. Not archived.

=====
Hope you enjoyed this session. There is no February DOM, so my next column will reflect the March 1993 issue. See you then!

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MORE TI-BASE
By Rick Lilley

I don't know how many of you T.I.ers out there use those little pocket diaries, but I hope it is enough to make this TI-BASE article worthwhile.

I have used them for years, and I always kind of dreaded having to transfer all of my phone numbers and addresses from last year's diary into the new one. WE GET TOO SOON OLD, AND TOO LATE SMART! It occurred to me one day that if I could make TI-BASE print that tiny little copy that all our disk labelling programs use I might be able to automate this chore.

I wrote this little TI-BASE program to handle the problem, called "DIARY". I use the same name for the database too! The database some of you may recognize, it is my old faithful "ADDRESS" database, renamed. I use this database for the club newsletter, my own home address file, the employee name and address file for my employer, which I keep track of for them. (Their computer can't do it as well.) Having this universal format for all my address databases allows me to merge as many of them together as I wish, as I did for my "DIARY" database. I just typed in the addresses that were penciled into my pocket diary, and let the computer dump the clubs, my employer's, and my home file, all into "DIARY". NIFTY! Hope someone can use this idea. The printout is easily cut up into diary sized pages and "glue/sticked" in.

I set up two locals, "CNT", and "TTL", to keep track of records printed, and switched page size to 000 to give me absolute control of my printout length. (No surprises.) There is a "LAST UPDATE" printout at the beginning to remind you of when that was. A word about the PRINT lines. The code "TTS" stands for ten 24th's of an inch, a code I set up in the "PRINTER" file on the TI-BASE program disk. "SPS" stands for superscript, "CM" stands for condensed mode, "HT" stands for horizontal tabs, "NM" stands for normal. This program runs from vers.3 of TI-BASE, if you are using an older version you won't be able to get away with "print (40-)", for the lines between the records. You will have to set up a local, LINE, and literally REPLACE it with forty "-"s, to make this work. (Vers.3 lets you take a lot

of shortcuts about printing literals.) Most of the locals are self explanatory. The CNT local renews itself at the end of every page, and the TTL local keeps on heaping on, so that it can print out a total for you at the end of the printout. The reason I used this system instead of letting the page function determine when to eject is because, my printer, a Star MX10, will reverse itself, and I am going to teach it to put three columns on a page! So I don't want it to eject! (I couldn't put this feature in an article for publication because, I am told, not all printers can do this. KISS! Keep it simple stupid). "DO RES" is a call to a command file RES that I wrote to reset everything back to normal, without having to type all that stuff at the end of all my command files.

I have included a printout of the file structure for those of you who want it, (you could make up your own, all I am really using for this diary printout is LAST, FIRST, and HOMEPHONE.) With this new version of TI-BASE you can now change the structure of your database without losing your data anyway, so I could, I suppose, revise the structure of this database to only four or so fields so that it would sort faster, but as yet there isn't a great problem with the speed. I also am including a copy of the RES C/F so you can see what I mean about resetting your parameters automatically. There is another file I use called MIS, for all those things I like to keep a record of with me, like the size of my furnace belts and filters, lawn trimmer refills, tap washers, bank card numbers etc. This is again the same database structure renamed to suit. I sort everything by LAST, FIRST and print it out once a year. As I add numbers to my book annually all year, all I have to do now at the end of the year is to type in the new ones. That's all, DYNAMIC MEMORY FULL! Bye for now.

CREATED 04/19/89 CHANGED 04/09/91
FIELD DESCRIPTOR TYPE WIDTH DEC

- 1 CODE C 004
- 2 PICKUP C 003
- 3 LAST C 015
- 4 FIRST C 015
- 5 MIDDLE C 001
- 6 ADDRESS C 030
- 7 CITY C 018
- 8 PROVSTATE C 004
- 9 COUNTRY C 004

- 10 POSTCODE C 010
 - 11 HOMEPHONE C 008
 - 12 BUSPHONE C 008
 - 13 AREA C 003
 - 14 STATUS C 008
 - 15 SPOUSE C 015
 - 16 BIRTHDATE D 008
 - 17 MEMO C 090
- .SNAP

000 1 DIARY 00145/00148

*****RES" (RESET)*****

SET PAGE=56
SET RECNUM=ON
SET TALK=ON
SET HEADING=ON
SET SPACES=1
SET PRINTER=PIO.CR.LF
RETURN

APRIL 9TH, 1991
***** "DIARY" PRINTER*****

SET PAGE=000
SET RECNUM=OFF
SET TALK=OFF
SET HEADING=OFF
SET SPACES=0
USE DIARY
TOP
LOCAL NAM C 31
LOCAL CNT N 4 0
LOCAL DT C 20
LOCAL TTL N 4 0
REPLACE DT WITH "LAST UPDATE ";.DATE.
PRINT (TTS) (SPS) (CM) (12) DT
WHILE (.NOT.(EOF))
REPLACE CNT WITH CNT+1
REPLACE TTL WITH TTL+1
REPLACE NAM WITH TRIM(LAST); " ";FIRST
PRINT (TTS),(SPS),(CM),NAM,;
(HT HOMEPHONE
PRINT (40-)
DISPLAY "COUNT " TTL
MOVE
IF CNT=60
REPLACE CNT WITH 0
EJECT
ENDIF
ENDWHILE
PRINT (TTS) (SPS) (CM) "TOTAL ",TTL
DO RES
RETURN

END

CONVERTING MIDI MASTER 99 SNF FILES

by Jim Peterson

A correspondent, who likes to practice by playing his instruments along with computer music, remarked that he wished MIDI music could be converted to Basic music, because it is so easy to change key in Basic but so difficult with an SNF file. I understand that some of the more expensive keyboards allow you to change key from the panel, but users of the Casio MT-240 do not have that option. Even those who have the better keyboards might like to permanently change some music. Anyway, I wrote this little TRANSPOSER utility.

```

100 DISPLAY AT(3,8)ERASE ALL
:"TRANSPOSER":"":
WITH MIDI MASTER":"":
SNF FILES":"":
by Jim
Peterson"
110 DISPLAY AT(16,5):"Initia
lizing...."
120 DATA 0C,0C#,0D,0E#,0E,0F
,0F#,0G,0A#,0A,0B#,0B
130 DATA 1C,1C#,1D,1E#,1E,1F
,1F#,1G,1A#,1A,1B#,1B
140 DATA 2C,2C#,2D,2E#,2E,2F
,2F#,2G,2A#,2A,2B#,2B
150 DATA 3C,3C#,3D,3E#,3E,3F
,3F#,3G,3A#,3A,3B#,3B
160 DATA 4C,4C#,4D,4E#,4E,4F
,4F#,4G,4A#,4A,4B#,4B,5C
170 DATA 0C,0D#,0D,0E#,0E,0E
#,0G#,0G,0A#,0A,0A#,0B
180 DATA 1C,1D#,1D,1E#,1E,1E
#,1G#,1G,1A#,1A,1A#,1B
190 DATA 2C,2D#,2D,2E#,2E,2E
#,2G#,2G,2A#,2A,2A#,2B
200 DATA 3C,3D#,3D,3E#,3E,3E
#,3G#,3G,3A#,3A,3A#,3B
210 DATA 4C,4D#,4D,4E#,4E,4E
#,4G#,4G,4A#,4A,4A#,4B,4C,5C
220 DIM C$(61):: FOR J=1 TO
61 :: READ A$ :: DISPLAY AT(
18,12):A$ :: L=LEN(A$):: C$(
J)=A$ :: V$=V$&C$(J)&RPT$("
",3-L):: NEXT J
230 FOR J=1 TO 61 :: READ A$
:: DISPLAY AT(18,12):A$ ::
L=LEN(A$):: V2$=V2$&A$&RPT$("
",3-L):: NEXT J
240 DISPLAY AT(10,1)ERASE AL
L:"Input filename?":"DBK" ::
ACCEPT AT(11,4)BEEP:IN$ ::
OPEN #1:"DBK"&IN$,INPUT
250 DISPLAY AT(13,1):"Output

```

```

filename?":"DBK" :: ACCEPT
AT(14,4)BEEP:OUT$ :: OPEN #2
:"DBK"&OUT$,OUTPUT
260 DISPLAY AT(16,1):"Transp
ose by how many keys?":"(plu
s or minus)" :: ACCEPT AT(17
,17)VALIDATE(NUMERIC)BEEP:TR
270 IF EOF(1)=1 THEN CLOSE #
1 :: CLOSE #2 :: STOP ELSE L
INPUT #1:M$
280 IF SEG$(M$,1,2)="17" OR
ASC(M$)<49 OR ASC(M$)>57 THE
N PRINT #2:M$ :: GOTO 270
290 P=POS(M$,"",1):: A$=SEG
$(M$,1,P):: B$=SEG$(M$,P+1,2
55):: P=POS(B$,"",1):: X$=B
EG$(B$,1,P-1):: Z$=SEG$(B$,P
,255)
300 IF X$="R" THEN PRINT #2:
M$ :: GOTO 270
310 X=POS(V$,X$,1)/3 :: IF X
<>0 THEN 330
320 X=POS(V2$,X$,1)/3 :: IF
X=0 THEN PRINT #2:"!"&M$&" I
NVALID!" :: PRINT M$&" INVAL
ID!" :: GOTO 270
330 IF X+TR>0 AND X+TR<62 TH
EN TR=C$(X+TR):: GOTO 360
340 DISPLAY AT(19,1):M$: " tr
ansposes out of range." : "Wan
t to substitute? (Y/N)" :: A
CCEPT AT(21,27)VALIDATE("YN"
)SIZE(1)BEEP:Q$ :: IF Q$="N"
THEN TR$=" " :: GOTO 360
350 DISPLAY AT(24,1):"Substi
tute?" :: ACCEPT AT(24,13)BE
EP:TR$ :: DISPLAY AT(19,1):"
": "" : "" : "" : "" : ""
360 PRINT #2:A$&TR$&Z$ :: GO
TO 270

```

I have wished that my keyboard had a "silent instrument" that I could temporarily assign voices to, in order to listen to the harmony or bass line by itself. Since it doesn't, I wrote this SPLITTER utility to take an SNF file apart into a separate file for each track. It writes in a dummy 1,R,S because I find that, for some reason, some single-track files above track 1 will not run otherwise.

```

100 DISPLAY AT(3,1)ERASE ALL
:"SNF FILE SPLITTER" :: DIS
PLAY AT(8,1):"How many voices
to separate?" :: ACCEPT AT(
9,1)VALIDATE(DIGIT)SIZE(1)BE
EP:V
110 IF V>8 THEN DISPLAY AT(1

```

```

2,1):"Sorry - 8 is the limit
!" :: STOP
120 IF V>2 THEN DISPLAY AT(1
2,1):"Did you do a CALL FILE
S("&STR$(V+1)&")":"before lo
ading this program?" :: ACCE
PT AT(14,1)VALIDATE("YN")SIZ
E(1):Q$
130 IF Q$="N" THEN DISPLAY A
T(12,1):"Enter CALL FILES("&
STR$(V+1)&")":"Then enter NE
W":"Then load and run progra
m again." :: STOP
140 DISPLAY AT(8,1)ERASE ALL
:"Input file?":"DBK" :: ACCE
PT AT(9,4):IN$ :: OPEN #1:"D
BK"&IN$,INPUT :: LINPUT #1:M
$
150 DISPLAY AT(10,1):"Output
drive #?" :: ACCEPT AT(10,1
7)VALIDATE(DIGIT):D
160 DISPLAY AT(12,1):"Output
root filename?" :: ACCEPT A
T(13,1):R$ :: IF LEN(R$)>9 T
HEN DISPLAY AT(15,1):"Limit
9 characters, please" :: GOT
O 160
170 FOR J=1 TO V :: OPEN #J+
1:"DBK"&STR$(D)&","&R$&STR$(
J),OUTPUT :: PRINT #J+1:M$:
"1,R,S" :: NEXT J
180 IF EOF(1)<>1 THEN 200
190 CLOSE #1 :: FOR J=1 TO V
:: CLOSE #J+1 :: NEXT J ::
STOP
200 LINPUT #1:M$ :: IF SEG$(
M$,1,2)="17" THEN 220
210 X=ASC(M$):: IF X>48 AND
X<49+V THEN PRINT #X-47:M$ :
: GOTO 180
220 FOR J=1 TO V :: PRINT #J
+1:M$ :: NEXT J :: GOTO 180

```

And finally, someone asked about converting MIDI SNF files to Extended Basic music! I don't think that is a very worthwhile project, but I had to see if it could be done. This routine expects the tracks to be in 1-2-3 sequence and ignores any tracks above 3. In XBasic all voices must have the same duration, so I have used the duration in track 1. You can adjust the speed by changing the value of D in line 1 of the completed program, and you can adjust the volume of each voice in line 2 - something you can't do in MIDI! The program is not very efficient and perhaps not fool-proof, but it doesn't seem worthwhile spending too much time on.

```

100 DISPLAY AT(12,1)ERASE AL
L:"SNF filename?": "DSK" :: A
CCEPT AT(13,4):IN$ :: OPEN #
1:"DSK"&IN$,INPUT
110 DISPLAY AT(15,1):"Output
filename?": "DSK" :: ACCEPT
AT(16,4):OUT$ :: OPEN #2:"DS
K"&OUT$,VARIABLE 163 :: X=1
120 PRINT #2:CHR$(0)&CHR$(X)
&"D"&CHR$(190)&CHR$(200)&CHR
$(3)&"200"&CHR$(0):: X=X+1
130 PRINT #2:CHR$(0)&CHR$(X)
&"V1"&CHR$(190)&CHR$(200)&CH
R$(1)&"1"&CHR$(130)&"V2"&CHR
$(190)&CHR$(200)&CHR$(1)&"5"
&CHR$(130)&"V3"&CHR$(190)&CH
R$(200)&CHR$(1)&"9"&CHR$(0):
: X=X+1
140 IF EOF(1)<>1 THEN LINPUT
#1:M$ :: GOTO 160
150 PRINT #2:CHR$(255)&CHR$(
255):: CLOSE #1 :: CLOSE #2
:: DISPLAY AT(12,1)ERASE ALL
:"Enter NEW":": "Then enter
MERGE DSK"&OUT$ :: STOP
160 IF ASC(M$)<49 OR ASC(M$)
>51 OR SEG$(M$,1,2)="17" THE
N 140
170 IF ASC(M$)<>49 THEN 140
180 GOSUB 250 :: GOSUB 410 :
: C$=CHR$(0)&CHR$(X)&CHR$(15
7)&CHR$(200)&CHR$(5)&"SOUND"

```

```

&CHR$(183)
190 DU$=STR$(D):: C$=C$&"D"&
CHR$(195)&CHR$(200)&CHR$(LEN
(DU$))&DU$&CHR$(179)
200 NU$=STR$(N):: C$=C$&CHR$
(200)&CHR$(LEN(NU$))&NU$&CHR
$(179)&"V1"
210 LINPUT #1:M$ :: IF ASC(M
$)<>50 THEN PRINT #2:C$&CHR$
(182)&C$&CHR$(0):: C$="" ::
X=X+1 :: GOTO 140
220 GOSUB 250 :: NU$=STR$(N)
:: C$=C$&CHR$(179)&CHR$(200)
&CHR$(LEN(NU$))&NU$&CHR$(17
9)&"V2"
230 LINPUT #1:M$ :: IF ASC(M
$)<>51 THEN PRINT #2:C$&CHR$
(182)&C$&CHR$(0):: C$="" ::
X=X+1 :: GOTO 140
240 GOSUB 250 :: NU$=STR$(N)
:: PRINT #2:C$&CHR$(179)&CHR
$(200)&CHR$(LEN(NU$))&NU$&CH
R$(179)&"V3"&CHR$(182)&CHR$(
0):: C$="" :: X=X+1 :: GOTO
140
250 T=ASC(SEG$(M$,3,1))-48 :
: P=POS(M$,"",3):: N$=SEG$(
M$,4,P-4):: D$=SEG$(M$,P+1,2
55)
260 IF N$="A" THEN N=110
270 IF N$="A@" OR N$="B@" TH
EN N=117
280 IF N$="B" THEN N=123

```

```

290 IF N$="C" THEN N=131
300 IF N$="C@" OR N$="D@" TH
EN N=139
310 IF N$="D" THEN N=147
320 IF N$="D@" OR N$="E@" TH
EN N=156
330 IF N$="E" THEN N=165
340 IF N$="F" THEN N=175
350 IF N$="F@" OR N$="G@" TH
EN N=185
360 IF N$="G" THEN N=196
370 IF N$="G@" OR N$="A@" TH
EN N=208
380 IF N$="A" THEN N=220
390 FOR J=1 TO T :: N=N+N ::
NEXT J
400 RETURN
410 IF D$="S" THEN D=1
420 IF D$="E" THEN D=2
430 IF D$="."E" THEN D=3
440 IF D$="."G" THEN D=4
450 IF D$="."Q" THEN D=6
460 IF D$="."R" THEN D=7
470 IF D$="."H" THEN D=8
480 IF D$="."H" THEN D=12
490 IF D$="."H" THEN D=14
500 IF D$="."W" THEN D=16
510 IF D$="."W" THEN D=24
520 RETURN

```

END

THE LIMA MULTI USER GROUP CONFERENCE WILL BE HELD FRIDAY AND SATURDAY MAY 14/15 1993 AT THE LIMA BRANCH OF THE O.S.U. FRIDAY EVENING IS DEVOTED TO THOSE INDIVIDUALS WHO WOULD LIKE TO COPY ITEMS FROM THE LIMA LIBRARY. BRING A GOOD SUPPLY OF FORMATTED DISKETTES. LET'S HAVE A GOOD REPRESENTATION FROM OUR GROUP MAKE YOUR PLANS NOW. DO WE WANT TO HAVE A TABLE THIS YEAR? IF SO WE SHOULD BE THINKING ABOUT IT NOW. EXPRESS YOUR IDEAS AT THE MARCH MEETINGS...

POTPOURRI

Program Tips:

To bring up a number you may have noticed an error, type the line number and hit FCTN X o E

To change a line number, enter the line number then FCTN X and ENTER, then FCTN B. The cursor will now be on the line number. Change it and hit ENTER. You now have 2 lines with the same information. Delete the line and number not wanted by FCTN J

MODULATOR

If you want to change the chip in your TI Modulator, look for a chip MC1374P.

**MEETING DATES
FOR
1992 - 1993**

C.O.N.N.I. BOARD MEMBERS

3RD SATURDAY

20 MAR 1993
17 APR 1993
15 MAY 1993
19 JUN 1993
17 JUL 1993
21 AUG 1993
18 SEP 1993
16 OCT 1993
20 NOV 1993
18 DEC 1993

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Treas - Everett Wade 614/262-6346
Sec/Sat - Jim Peterson 614/235-3545
Sec/Wed - Dick Beery 614/459-3597
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4TH WEDNESDAY

24 MAR 1993
28 APR 1993
26 MAY 1993
23 JUN 1993

Co-Editors/Spirit
of 99 Newsletter
Jean Hall 614/885-4223
Bob DeVilbiss 614/891-0566

C.O.N.N.I.
181 HEISCHMAN AVE
WORTHINGTON, OH 43085