



NEWSLETTER OF THE DECATUR 99ER USERS GROUP

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JESSE JOLLY ... VICE PRESIDENT
STEVE THORPE ... VICE PRESIDENT
KING FORKNER ... TREASURER

JERRY ROTHWELL ... SECRETARY
CHARLES STRINGER ... LIBRARIAN
GEORGE KORNFELD ... EDITOR

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THE PRESIDENT'S KEYS...

The Decatur 99er's Users group, will be meeting at the First Congregational Church. Please be there on JANUARY 18, 1990 6:30 pm, so we may start the program early. This month's program will be on MULTIPLAN. Ray Fisher and Arbury Johnson will give some MORE input on how to set-up files and simple recording keeping.

It was bad day for the Decatur 99er's, last month. We did not have an officers meeting, we did not have a club meeting, and it snowed, blowed and just got cold. I can not remember when our club meeting was not held. As I write this; it is nice out and I am expecting the Robins to start there song, Trees to become green, and soforth, but that just is not so.

Asgard Software: You may want to get a catalog from them. It seems that Asgard is now in the mid's of make TI modules, there really has not been any new cartridges made since TI left the home computer business. Databiotics, made one TI-Planner, of which your truly has one. I only wish that it would work right. Here is the address: Asgard Software

P.O.Box 10306
Rockville, MD 20849
703/255-3085 (They do not have a toll free #)

TIP: When cleaning your screen spray the rag not the screen, that will do a better job, and you will not spray the whole T.V./Monitor.

I'm still wanting to hear from some of our members, telling us about some of their 1st experiences. If you can share with us some of your 1st experiences with the TI. Please write an article and we will get it in the news letter. COME ON YOU PEOPLE WE NEED SOMETHING THIS YEAR. You do not have to have your name on the article. Use a pen name.

Next month meeting will be on FEBURARY15,1990. See you then too.

Gotstogo,
Scottie

MINUTES FOR NOVEMBER 16, 1989 DECATUR 99ERS

KING FORKNER
JESSE JOLLY
CHRIS KORNFELD
JERRY ROTHWELL
STEVE THORPE
HARRY YOUNG

CHARLES ROTHWELL
CHARLES STRINGER
SCOTTIE WILLIFORD

SCOTTIE SAID THAT WE HAD A NEW MEMBER; KENITH LACK. WELCOME KENITH.
ALSO THAT WE HAD SOME NEW EQUIPMENT FOR SALE.

CHARLES S. REPORTED THAT THE CHICAGO TI FAIR WAS ABOUT THE SAME AS LAST YEAR, EXCEPT FOR A FEW LESS DEALERS.

HE SAID HE SEEN A PROGRAM CALLED 1ST. BASE, THAT WAS ABOUT THE SAME AS TI
BASE.

RAY FISHER DEMONSTRATED MULTIPLAN.

MEETING WAS ADJOURNED ABOUT 9:00PM
RESPECTIVELY SUBMITTED,
JERRY ROTHWELL
1-12-90

```

#####
$ Who are the Decatur 99ers?
$
$ We are an independant, nonprofit organization whose
$ primary goal is to aid our members in understanding
$ and applying the use of the TI99/4A Home Computer.
$
$ Single membership dues are $20.00 per year.
$
$
$
$
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$
$ BYTE-LINE is the newsletter of the Decatur 99er Users'
$ Group. Published in Decatur, Illinois.
$
$ The information contained in this newsletter may be
$ reprinted by a recognized Users' Group which gives
$ proper recognition to the Decatur 99ers.
$
$ Advertising will be accepted if prepaid and camera
$ ready. Advertising which in the opinion of the Decatur
$ 99ers' is unacceptable will be returned with prepayment.
$
$ ADVERTISING RATES:      Submit Advertizing to:
$
$ FULL PAGE      $10      Decatur 99er Users' Group
$ HALF PAGE      $ 5      P.O. BOX 726
$ QUARTER PAGE   $ 3      Decatur, Illinois 62525
$
$ Attn: BYTE-LINE Editor
$
#####

```

NEWS OF THE LIBRARY

Database programs like TI-BASE and PR-BASE are sometimes daunting to me. I use both--usually PR-BASE. But I usually DON'T use either one for the little jobs that everyone needs to do--an address list, or a list of software documents that needs to be alphabetized, for example. This month we'll remedy that by making available an excellent tool, CHARTBASE and a revision of it (CHARTBASE2) which is, I think, more useful for the occasional user.

Last May's MICROPENDIUM carried an article that described this quick-use database written by Jerry Stern. He asks:

"When should we NOT invest the time and energy in a new data file, but instead simplify our activities? Is it really worthwhile to define structures, field lengths and data types for just 60 records? Eighty? Where does one draw the line?...It would not be worthwhile to define a new data file if we had an ideal 'small file data processor.'..." He goes on to define his own wish list:

- Easy data input with a full screen editor;
- Search and replace capability;
- Excellent report generation;
- Ability to merge data files;
- Sort capability in any field;
- Selective record retrieval.

Except for the last two, all these features are already available to us as TI-Writer and its clones FNLWEB and RAG-WRITER. All that has been missing is a means to do sorts efficiently in DV/80 files.

Mr Stern has provided a remedy in the utility program CHARTBASE, which has the unique capability of reading the 22-character control line stored by the 'save file' at the end of every TI-Writer data file. This line is decoded to give the location of the tab-stops and the widths of the intervals between them. This information requires no overt action by the user. There are just three simple requirements that must be followed in creating the data file:

"First, there must be no column headings in the file, only data. Any headings must be in a separate file, which could then use the .IF command to 'include' the data file.

"Second, all columns of data must be marked in the Tab line...

"Finally, leave the left margin setting at the default of zero; that is, start the first data column at the left edge of the screen..."

As an example, I have created this dummy file. The top line of colons has been added to mark the position of the tab-stops:

:	:	:	:	:	:	:	:
Fish	Tim	1603	Shelburne	Bloom	KS	67833	
Eggs	Hammond	637	Bremer	Oriole	IA	47563	
Baker	Willy	1234	Bristol	Arley	AL	35541	
Jorge	Lloyd	997	Dartmoor	Teague	TX	75860	
Boyy	Jim	813	Walsall	Tarzan	TX	79783	
Easy	Joe	5034	Bradford	Tarlton	TX	76401	
Foxx	Red	987	Dartford	Teague	TX	75860	
Twain	Mark	56	Aberdeen	Chugiak	AK	99567	
Dog	Harry	6182	Velpen	Walton	IN	46994	
Able	Mike	808	Devon	Morris	NY	13808	

When CHARTBASE reads this file, it displays the number of records (lines) in the file and then shows for each data field its starting position in the file and the contents of that field in the first line of the file. It then asks which field is to be sorted.

FILE "DSK2.F10" HAS
10 LINES OF 8 ITEMS/LINE

FLD COLS CONTENTS OF
NO FIRST LINE

1	1	9	FISH
2	1	9	TIM
3	1	9	1603
4	1	9	SHELburne
5	1	9	BLOOM
6	1	9	KS
7	1	9	67833

FIELD TO SORT? (0 TO STOP)

When the number is entered (there could be as many as 16 fields) the display is rapidly replaced by a display of the first 28 characters of each of the first 10 lines of the file as it exists before sorting begins. When sorting has been completed, a similar display is made of the first ten lines of the sorted file. A 'pause' subroutine permits examination of the display until a key is pushed.

```

PRE-SORT
NAME      ADDRESS      CITY      STATE      ZIP
-----
BOB      HAMMOND      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
JOHN      ILLINOIS      60000
PRESS ANY KEY TO CONTINUE

```

The display is now replaced by a menu that offers the options of sorting again on any column, saving the sorted file to disk, loading a new file, or quitting. A saved file can be examined in detail by reloading TI-Writer Editor and then loading the new file.

The sorting routine is said to be rapid. I cannot vouch for it, as all my test files were fewer than 20 lines in length. The sorting operation begins at the first character of the selected field and extends across all the succeeding fields in the line. For example, if one sorts an address file by state, the ZIP codes within each state are found to be in numerical order.

The revised version, CHARTBASE2, has some additional features:

1. A selective cataloger for DV/80 files is useful if you don't remember the file names you've used.
2. An entire file can be printed, so that it is not necessary to go to TIW to see the rightmost columns of a sorted file if it contains more than 28 characters in the line.
3. Printed output is labeled with the filename and columns on which it has been sorted. File-save operations are logged on the printer as to disk number and file-name of the new file, the name of the file from which it has been derived, and the sortings which were made. (The use of a printer is REQUIRED for CHARTBASE2, but not for CHARTBASE.)

It is anticipated that another revision, CHARTBASE3, will soon be available. This will use an 'insertion' sort routine that retains as much as possible of any order that exists in the file by previous sortings. It would, for example, permit the creation of an address list where names are in alphabetical order within each town and state. To do so with the present sort routine ('QUICK3') requires that the file be created with the fields in the reverse of the usual order of 'name, town, state.' By using sortings limited to the contents of a single column (and by preserving the 'before-after' relationship of data lines that have the same datum value in the field being sorted) the location of fields in the record is unimportant.

**TI-BASE - From INSCEBOT
TUTORIAL 12.1.1 By Martin Smoley
NorthCoast 99'ers - Sept. 5, 1989
Copyright 1989 By Martin A. Smoley**

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At this time, work (the way I make money to support my TI) is taking up most of my time. I will try and write a couple example programs (CFs) to keep you going until I can get back to my TI on a regular basis. I'm sorry if the articles are a little skimpy, but it's the best I can do right now.

```
*
SET TALK OFF
CLEAR
SET RECNUM OFF
SET HEADING OFF
LOCAL TEMP C 19
LOCAL TIME C 11
SELECT 5
CLOSE
USE DSK2.DT'TM
WRITE 12,10,"TURN YOUR PRINTER ON"
WRITE 20,10,"ENTER THE TIME"
WRITE 22,4,"TIME EXAMPLE >12:49 P.M.<"
WRITE 23,4,">"
READSTRING 23,18,TIME
IF TIME <> "
TOP
DELETE RECORD
PACK
APPEND BLANK
REPLACE 5.DT WITH .DATE.
REPLACE 5.TM WITH TIME
ENDIF
BOTTOM
MOVE -1
SET RECNUM OFF
SET HEADING OFF
REPLACE TEMP WITH " SYSTEM LAST RUN "
PRINT (Drft), (E),TEMP,DT,TM
MOVE
REPLACE TEMP WITH "SYSTEM CURRENT RUN "
PRINT TEMP, DT,TM,(LF)
PRINT (Drft)
SET TALK ON
SET HEADING ON
SET RECNUM ON
CLOSE
SELECT 1
CLEAR
RETURN Copyright Martin A. Smoley 1989
*
* Save current TIME DATE to DT'TM 3
```

In this issue I have 3 CFs that do almost the same thing, but not quite. Their difference is what makes them interesting. All three of the CFs ask you for the time. They then print out the last time and date the CF was run and the current time and date which you just entered. I created it because I was printing out several copies of the same report in one evening and I couldn't tell the updates from the first printout. Having the time at the top of each printout solved my problem. This CF could be used for the last time you balanced your checkbook or paid your bills, etc. Create a very simple database named DT'TM or DT'TM2 depending on the DB you find in the USE statement in the CF you wish to use. The DB contains 2 fields. The first is named DT, type = D, with a width of 8. The second is named TM, type = C, with a width of 12. The CFs will use this DB to store the time and date for retrieval the next time the CF is run. The first CF (DOTM) is the one I use. It will allow you to set the length of the DT'TM Db by appending as many records as you wish. In other words, you could keep the last two times and dates the Db was run or the last ten if you wish. The CF will eliminate the oldest record in the file and append the newest record to the end of the file. The interesting part of this CF is the use of TOP, BOTTOM, DELETE RECORD and PACK to hold the DB at a pre-determined size. MOVE -1 and MOVE are used to locate the records to be printed.

```
*
SET TALK OFF
CLEAR
LOCAL TEMP C 19
LOCAL TIME C 11
SET RECNUM OFF
SET HEADING OFF
SELECT 5
CLOSE
USE DSK2.DT'TM2
BOTTOM
WRITE 12,10,"TURN YOUR PRINTER ON"
WRITE 20,10,"ENTER THE TIME"
WRITE 22,4,"TIME EXAMPLE >12:49 P.M.<"
WRITE 23,4,">"
READSTRING 23,18,TIME
IF TIME <> "
APPEND BLANK
REPLACE 5.DT WITH .DATE.
REPLACE 5.TM WITH TIME
ENDIF
MOVE -1
REPLACE TEMP WITH " SYSTEM LAST RUN "
PRINT (Drft), (E),TEMP,DT,TM
MOVE
REPLACE TEMP WITH "SYSTEM CURRENT RUN "
PRINT TEMP, DT,TM,(LF)
PRINT (Drft)
SET TALK ON
SET HEADING ON
SET RECNUM ON
CLOSE
CLEAR
SELECT 1
RETURN
*
* DOTM2 Copyright Martin A. Smoley 1989
*
* Save current TIME DATE to DT'TM2
Continued Next Page.
```

**TI-BASE - From INSCEBOT
TUTORIAL 12.1.2 By Martin Smoley
NorthCoast 99'ers - Sept. 7, 1989
Copyright 1989 By Martin A. Smoley**

Another CF would be needed to print out any extra times and dates in the DB. The CFs in this article will only print out the last record and the current time and date. The next CF (DOTM2), works almost the same as the first except for the records kept. DOTM2 works with your last two entries, but it keeps all of the previous entries. This CF would be great if you wanted to keep a complete record of the time and date a certain set of CFs was used, but you must remember that you have a self generating DB in the system. This means that each time you use the system DT'TM2 will get larger and therefore you will have less and less disk space for other types of TI-Base use.

```
*
      SET TALK OFF
      CLEAR
LOCAL TEMP C 19
LOCAL TIME C 11
LOCAL TMTMP C 12
LOCAL DTTMP D 8
      SET RECNUM OFF
      SET HEADING OFF
SELECT 5
CLOSE
USE DSK2.DT'TM
      BOTTOM
WRITE 12,10,"TURN YOUR PRINTER ON"
WRITE 20,10,"ENTER THE TIME"
WRITE 22,4,"TIME EXAMPLE >12:49 P.M.<"
WRITE 23,4,"          >          <"
READSTRING 23,18,TIME
IF TIME <> "
      REPLACE DTTMP WITH 5.DT
      REPLACE TMTMP WITH 5.TM
      TOP
      REPLACE 5.DT WITH DTTMP
      REPLACE 5.TM WITH TMTMP
      BOTTOM
      REPLACE 5.DT WITH .DATE.
      REPLACE 5.TM WITH TIME
ENDIF
MOVE -1
REPLACE TEMP WITH "      SYSTEM LAST RUN "
PRINT (Drft),(E),TEMP,DT,TM
MOVE
REPLACE TEMP WITH "SYSTEM CURRENT RUN "
PRINT TEMP,DT,TM,(LF)
PRINT (Drft)
      SET TALK ON
      SET HEADING ON
      SET RECNUM ON
CLOSE
CLEAR
      SELECT 1
RETURN Copyright Martin A. Smoley 1989
*
```

* Save current TIME DATE to DT'TM

DOTM3

DOTM3 is almost identical to DOTM. It only saves two records and reads and prints in the same manner. The real difference is that it holds data in its own variable space while it moves through the DB DT'TM to replace old data with current data. It created this CF to get away from the PACK command. In certain instances this algorithm will be faster. More important it does not place any system messages on your screen. This allows you to hold messages or menu selections in place on the screen without having those annoying system messages that scroll the screen up and throw away the top line on the screen. I'm sure that most of you will find this problem minute, but the idea may help you somewhere else in your programming endeavor. Another idea which you may need from time to time is the selection of a unique number. Neither human selection or the random generation of a computer should be trusted with this task. Unique code numbers are the truest when you have the computer extract pieces of the date, the time and at least two letters of a persons name. Some companies use time,date,zipcode and names. Take a look at some of your junk mail for numbers that might follow this pattern. I mentioned the unique number uses because parts of these time, date CFs could be used to generate a unique number that you could then relate to a person or companies name in a mailing list. This number could then be used to relate two or more DBs together to gather mathematical data, as I have shown in the past. It could also be used as an access code or for other information. In other words, any of these three CFs could be converted to ask you for the time and your access code. It could then save a record of who used the system, with the time and date. There are many many uses for any one idea. You may need to slightly modify a particular CF for a new job, but its easier than writing a new one.

TI Sort

I must put in a couple of plugs for Inscebot. They have created some great software for the TI and I think that TI Sort will be close behind TI Artist and TI Base. I use it more and more as time passes. It is fast, accurate, and very versatile. If you work with any amount of data, I think you should pick up a copy of TI Sort for your collection of utilities.

TI-Base Ver. 2.03

I previously received version 2.02 for testing. I hadn't had much time to play with it when version 2.03 arrived at my door. Version 2.02 corrected a bunch of minor problems and version 2.03 corrects several more. With the latest versions of TI-Base you also have the ability to load from a hard drive and use a PATH function to find the TI-Base main program files. You may never notice some of the problems that are constantly being corrected, but they are being corrected anyway. I bring this up because I feel that the TI community is getting more support from people like Dennis Faherty than you can comprehend, at a very small cost. Please try to support the efforts of our last major software suppliers.

Continued Next Month.

4

Did you know that...?

by Chick De Marti

Nov. 1989



PROGFAMMING HINTS

This month I thought I would start of the column with some Programming hints? This first one is called CHIMES.

```
1 ! SAVE DSK1.CHIMES
100 GOSUB 5000
110 END ! this END temporary
120 !
5000 RESTORE 5010
5010 DATA 2000,2200,2420,200
    0,99
5020 READ TONE
5030 IF TONE=99 THEN 5090
5040 FOR NOTE=5 TO 30 STEP 5
5050 VOL=ABS(NOTE)
5060 CALL SOUND(-99,TONE,VOL
    ,TONE*2,VOL,TONE*3,VOL)
5070 NEXT NOTE
5080 GOTO 5020
5090 RETURN
```

~~~~~

### SOUNDS OF THE DEEP

This next one is courtesy of the Australian newsletter, TISHUG. It is interesting.

```
10 FOR R=1 to 5
20 FOR X=1 TO 30
30 CALL SOUND(-1000,262,X)
40 CALL SOUND(-1000,197,X)
50 CALL SOUND(-1000,111,X)
60 NEXT X
70 NEXT R
```

~~~~~

WINDOW/A

```
110 ! LINDSAY PREECE, TIUP
120 ! from TI USERS GROUP
    Melbourne, Australia
130 CALL VCHAR(1,1,31,768)
140 CALL SCREEN(2)
```

```
150 C1=33
160 R1=25
170 CH=31
180 COUNT=0
190 R=R+1
200 C=C+1
210 C1=C1-1
220 R1=R1-1
230 R2=R1-COUNT
240 C2=C1-COUNT
250 CH=CH+8
260 CALL VCHAR(R,C,CH,R2)
270 CALL VCHAR(R,C1,CH,R2)
280 CALL HCHAR(R,C,CH,C2)
290 CALL HCHAR(R1,C,CH,C2)
300 IF CH=127 THEN 330
310 COUNT=COUNT+1
320 GOTO 190
330 ! COLOR + CHARACTER
340 A=A+1
350 B=B+1
360 IF A>13 THEN 380
370 A=1
380 IF B>17 THEN 400
390 B=1
400 CALL COLOR(A,B,B)
410 GOTO 340
```

~~~~~

ONE LINER by John Martin  
TRI-Valley via SPIRIT of 99

1WAVE (A version of John Willforth's  
----- WAVE POWER program.)

```
1 IF X=7 THEN PRINT SEG$(A$,
N+1,28):: N=(N+ABS(N<23))*AB
50(N<23):: GOTO 1 ELSE CALL C
HAR(X+96,RPT$("0",14-(X)*2)&
"FFFF"):: A$=RPT$("1abcdefed
cba",5):: X=X+1 :: GOTO 1
```

Exit the program with Fctn-4



( Did you know...cont.)

## [[[ THE BLOB ]]]

```
100 CALL CLEAR :: CALL MAGNIFY(4):: CALL SCREEN(2):: !
```

```
    The BLOB by Jim Peterson
110 CALL CHAR(96,RPT$("3C7EFFFFFFFF7E3C",4)):: J=-1
120 FOR L=1 TO 38 :: CALL SPRITE(#L,96,16,L*4+20,10,0,L+9):: NEXT L
130 FOR L=1 TO 29 :: CALL MOTION(#L,0,L*J):: NEXT L
140 J=J*-1 :: GOTO 130
```

( A great example of animation using sprites! CD )

~~~~~

This next one is a sound demo, found in the CIN-DAY NEWS. It's by W. Berendts. Stimulated by his idea, I played around with it for a while and came up with...well.. (see the three minor changes at end. CD)

```
100 FOR X=1 TO 4
110 FOR C=0 TO 7
120 CALL SOUND(-500,1000,C,500,C,250,C)
130 NEXT C
140 NEXT X
150 END
```

(My changes....)

```
100 FOR X=1 TO 3
110 FOR C=0 TO 30 STEP 2
120 CALL SOUND(-500,110,C/4,500,C,1250,C)
130 NEXT C
140 NEXT X
150 FOR C=0 TO 30
160 CALL SOUND(-500,110,C/4,500,C,1250,C)
170 NEXT C
```

(Not meant to be an improvement, only a continuation of the idea)

Thank to "RANDOM RAMBLINGS"
by J. P. Hoddle

This is credited to Don West. If you want to clear the screen in XBas instead of CALL CLEAR, use DISPLAY ERASE ALL. It will use 6 fewer bytes and run a bit faster. Along the same lines, if you need a quick tone in your program, don't use a CALL SOUND statement, try a DISPLAY BEEP. This only takes up 2 bytes and doesn't effect the program. However, the program could effect the sound! Try this:

```
100 PRINT "LISTEN TO THESE T
0 BEEPS": : :
110 CALL KEY(0,K,S):: IF S=0
    THEN 110
120 DISPLAY BEEP
130 PRINT : : : : : : : :
    : : :
140 DISPLAY BEEP
150 END
```

~~~~~

For REAL BASS notes use:

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

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

## ODE TO A COMPUTER

Little Miss Odem  
Purchased a modem  
Sending out words every day.  
Alas, her computer  
Didn't quite suit her,  
Now her keyboard she's given away.

I'm out of coffee,  
See you next month

\*- - C H I C K - -\*





NEXT MEETING DATE:  
 THURSDAY, JANUARY 18, 1990  
 ALL MEETING DATES:  
 6:30 PM TO 7:30 PM  
 FIRST CONGREGATIONAL CHURCH  
 3465 NORTH MACARTHUR RD.  
 >>>>JANUARY MEETING DATE<<<<  
 S M T W T F S  
 1 2 3 4 5 6  
 7 8 9 10 11 12 13  
 14 15 16 17>>18<<19 20  
 21 22 23 24 25 26 27  
 28 29 30 31

```

#####
:
:
: STUDENT $15
:
: DUES: MEMBERSHIP $20
:
: WORK PHONE
:
: PHONE
:
: CITY
: ZIP
: ADDRESS
:
: NAME
:
: DATE __/__/90
:
: APPLICATION FOR MEMBERSHIP
: DECATUR 99er HOME COMPUTER USERS GROUP
:
#####
  
```

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 P.O. BOX 726  
 DECATUR, IL 62525

TIME DATED MATERIAL