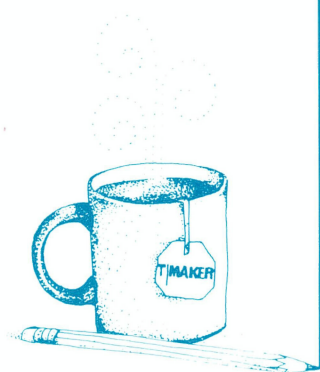


T MUG

T/MAKER USER'S GROUP NEWSLETTER
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T/Maker Users' Group Newsletter
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T/MAKER NEWSFRONT

-- Heidi Roizen

New Products for Macintosh Owners

The recent MacWorld Expo February 21 - 23 allowed us to introduce our two new products for the Mac -- ClickArt Effects and ClickOn Worksheet. ClickArt Effects was an immediate hit, with its rotation, distortion, slant and perspective tools to add to MacPaint. The Worksheet was tremendously received -- even though the spreadsheet portion is more like Lotus than T/Maker! We're sure both new products will keep us busy.

Education Version Manuals now Available

We now have a version of the T/Maker Integrated Software manual printed like a paperback, instead of the fancy box/binder and color booklets. The lower cost of this manual allows us to bid more competitively on 50-unit or more educational installations, as well as corporate installations. If your school or company might be interested in such a purchase, please contact any one of us at (415) 962-0195.

T/MUG PRICES FOR SOFTWARE:

The following are prices for various T/Maker options that we often receive requests for. Orders can be placed through us and we'll take them over the phone for COD, VISA, or MasterCard payments. California residents add 6.5% sales tax. Shipping is \$6.50 for UPS blue and \$3.13 for UPS ground. And remember, we MUST know what kind of computer and operating system you have! Our number is (415) 962-0195.

UPGRADE FROM T/MAKER III TO T/MAKER INTEGRATED SOFTWARE
MUST HAVE PROOF OF T/MAKER III SERIAL NUMBER:

FOR SAME COMPUTER TYPE: WILL RECEIVE BOUND MANUAL	\$175.00
FOR OPERATING SYSTEM OR COMPUTER OTHER THAN CURRENT LICENSE: WILL RECEIVE BOUND MANUAL	\$250.00

T/MAKER INTEGRATED SOFTWARE FOR SECOND OPERATING SYSTEM BOUND MANUAL. MUST HAVE PROOF OF T/MAKER I.S. SERIAL NUMBER.	\$225.00
--	----------

T/MAKER T/IPS

Hiding the DO Line: Many of you often place DO lines at the tops of standard files. However, those lines look unsightly when you GET the file. Solution? Slide the DO commands to the right a full screen. When you get the file, they won't be in view -- but of course issuing the command DO still brings them to the WHAT NEXT? prompt for execution.

Hiding the Database: Along the lines of the above, you might also want to make your database more appealing when it is first brought up. Since the form and record definitions do not have to be at the top, you can use the first 24 lines (those which will come up when you first GET the file) for dressing up the database. For example, you can use the space to remind you what the file is for, perhaps what dates it spans, and what to do when you have finished with it (for example, DO, SAVE, etc.)

A Handy Habit of Tally's: When using the TALLY command to summarize a list, I often make a mistake of a space or two, or simply discover I need to add more data. Since the TALLY command dumps a copy of the command used at the head of the Tally Report, I can edit that line to fix it. I then quit the Editor while on that line -- and instead of retyping the command, all I have to type is DO.

Keeping a Ruler Handy: I often need to know the column positions in a file for ARRANGE, TALLY, SUM, etc. if I use the INFO keystroke in the file, I must constantly use it as I move across the file and the screen is redrawn. Instead, I keep a file called MARKER on my T/Maker disk. It contains a set of lines similar to the lines put on the screen by INFO. Rather than going through the INFO keystroke, I simply INSERT MARKER at the top of the file. When I am through using it, the DROP command (or the CLIP BEFORE command) will get rid of it. *(submitted by Walter Lewis)*

No GROUP Dates: When using GROUP on a database, I found that the date field in the database was also being GROUPed -- that is, the dates were being added together. To solve the problem, I changed the field from right-justified to left-justified. Then, instead of looking at it as a number, T/Maker looked at it as a string, forcing the GROUP command to return the first value it found, rather than the sum of the dates.

The Benefits of ..<HERE>: The <HERE> marker is of course essential when you want information in your database file which is not contained in a record. However, it is also useful for other purposes. For example, when you want to begin a fresh database, the standard command FIND <HERE> CLIP AFTER will always leave you an empty database.

CREATING A .DIF FILE FROM A T/MAKER DATABASE

-- By Tom Moran

Here is an example of transferring data from T/Maker to a ".DIF" file suitable for input to Lotus 1-2-3, various graphing packages, and other programs as well. It would also be simple to extract data from a .DIF file using T/Maker Record Definitions.

This selects data from a file named "THINGS" and reformats it into "WORK.DIF." It assumes text fields in the data file named "itemname" and "location," and numeric fields named "size," "power," and "cost." In the generated .DIF file, "itemname" and "location" will be the first two columns, "size," "power," and "cost" will be the next three columns. The first 20 items will be selected.

```
delete WORK.DIF rename WORK.DIF replace rows 20 replace cols 5 do
select THINGS to rows end find TABLE clip b drop <here> save stop
<record>
-1,0
BOT
1,0
"{itemname<      }"
1,0
"{location          }"
0,{size>      }
V
0,{power      }
V
0,{cost      }
V
<end>
TABLE
0,1
"TITLE"
VECTORS
0,rows
" "
TUPLES
0,cols
" "
DATA
0,0
" "
<here>
-1,0
EOD
```

-- Creating DIF and SYLK Files, Continued

To convert a T/Maker Database into a MicroSoft Multi-tools SYLK file, the following command and Record definitions can be used to create the file "WORK.SL."

```
delete WORK.SL  rename WORK.SL  do
select THINGS end set  find ID;PTM  clip b  drop <here> save stop
<rules>
nr=number
<end>
<record>
C;Y{nr};X1;K"{itemname<          }"
C;X2;K"{location          }"
C;X3;K{size}
C;X4;K{power}
C;X5;K{cost}
<end>
ID;PTM
<here>
W;N1;B;A1 1
E
```

PERSONAL CLASSIFIEDS

Sngl Mid-20s Fmle seeks T/Maker experts for correspondence-only relationship. Must be able to provide interesting insights into operation of my favorite software package. Any and all applications considered. Data on disks preferred. Relationship can lead to your acquisition of T/Maker trinkets and exposure of the relationship in print in this publication.

Send your articles to H. R., c/o T/Maker, 2115 Landings Drive, Mt. View, CA 94043.

AN ACCUMULATIVE RECORD OF WINNINGS AND LOSINGS

-- Ray Schiewe

I use the spreadsheet capabilities of T/Maker to keep track of the winnings and losings of a group of bandits known as the Weak End Gang who play golf together two or three times a week. Such a record prevents both bragging and poor-mouthing.

The first step is to CREATE and SAVE a form which I name Game0 and which is shown here:

The File Game0

WINNINGS AND LOSINGS OF WEAK END GANG								FROM 2/1/85	TO
NAME	IN PLAY	BIG GREENIE	LITTLE GREENIE	TEAM WINS	GRAND TOTAL	NO. OF RND	AVE. PER		
	999.99	999.99	999.99	999.99	999.99	999	99.99		
	0	0	0	0	0	0	0		
	-	+	+	+	=				
					+	/	=		
Anderson, Geo	0	0	0	0	0	0	0		
Cesa, Nick	0	0	0	0	0	0	0		
Davey, Jim	0	0	0	0	0	0	0		
Davis, Bill	0	0	0	0	0	0	0		
Dickerson, Don	0	0	0	0	0	0	0		
Dingle, Mike	0	0	0	0	0	0	0		
Driskill, Ceci	0	0	0	0	0	0	0		
Favero, Bruno	0	0	0	0	0	0	0		
Fontana, Ernie	0	0	0	0	0	0	0		
Frausto, Pablo	0	0	0	0	0	0	0		
Fry, Jim	0	0	0	0	0	0	0		
Hansen, Jim	0	0	0	0	0	0	0		
Jagneaux, Al	0	0	0	0	0	0	0		
Kulmac, Leon	0	0	0	0	0	0	0		
Plaisted, Jack	0	0	0	0	0	0	0		
Rivera, Jess	0	0	0	0	0	0	0		
Robertson, Dave	0	0	0	0	0	0	0		
Schiewe, Ray	0	0	0	0	0	0	0		
Van Krakow, Dan	0	0	0	0	0	0	0		
Wallace Cliff	0	0	0	0	0	0	0		
Warren, Jack	0	0	0	0	0	0	0		
Willet, Will	0	0	0	0	0	0	0		
Guest	0	0	0	0	0	0	0		
TOTAL	0	0	0	0	0	0	0		

-- *Winning and Losing with T/Maker, Continued*

The form is reasonably self-explanatory, the in play column is the amount each player is risking, the next three columns are what can be won. A big greenie is hitting a par 3 in one (making a par) and being the closest to the hole in the entire group. A little greenie is hitting a par 3 in one (making a par) and being the closest to the hole in your foursome. We also play foursome against foursome and these count as team wins.

The grand total column may be either a plus or a minus figure depending on winning or losing. Each time a player plays, a "1" is placed in the no. of rounds column; and in the last column we determine the average winnings or losings per round by dividing the grand total by the number of rounds played.

Each column is totaled at the bottom of the form. As long as the Grand Total column equals zero you are in balance.

Next I CREATE and SAVE a file which I name *Commands*, as follows:

```
DELETE GAME0000 RENAME GAME0000 DO
COMBINE GAME0000 + += COMPUTE RESET SAVE PRINT IT
```

Now I am ready to start; I GET Game0 from the file and I enter EDIT at the WHAT NEXT? Prompt. First I enter today's date in the heading following 2/1/85 to _____. I am also going to name this new file using today's date. Say the date is 2/16/85; the file is then named Game0216. I then enter for each person who played the amount of money in play; in our case it is always \$3.00 per person. I also enter the amounts won in the respective columns and a "1" in the No. of Rounds played column.

I then leave the Editor and type COMPUTE at the WHAT NEXT? prompt. I then reenter EDIT and check my arithmetic. If the total of the Grand Total column is 0 I am in balance (the amount won must equal the amount lost). I then leave the Editor and at the WHAT NEXT? prompt I type PRINT IT. This gives me a copy of today's results (with date). You will note that I have not yet saved with file; it is still named Game0.

I now call up the WHAT NEXT? prompt, I make sure that 1/1 appears on the left hand upper edge and I type INSERT COMMANDS. The commands file will appear on the top of the Game0 file on screen. I now enter EDIT and proceed to edit the commands line as follows.
DELETE GAME0216 (to make sure that this file does not already exist) RENAME GAME0216
COMBINE GAME0215(the last game played).

At this point I go to position 1/1, leave the Editor and at the WHAT NEXT? prompt I type DO. Magically, the file named game0216 (See below) will be saved on disk and a hard copy will be printed on my printer.

-- Winning and Losing with T/Maker, Continued

The Resulting File: GAME0216

WINNINGS AND LOSINGS OF WEAK END GANG					FROM 2/1/85	TO 2/16/85		
	NAME	IN PLAY	BIG GREENIE	LITTLE GREENIE	TEAM WINS	GRAND TOTAL	NO. OF RNDs	AVE. PER
ex		999.99	999.99	999.99	999.99	999.99	999	99.99
zv		0	0	0	0	0	0	0
	ac1		-	+	+	+	=	
uc2						+	/	=
+	Anderson, Geo	3.00	0	2.00	0	-1.00	1	-1.00
+	Cesa, Nick	12.00	0	2.00	2.00	-8.00	4	-2.00
+	Davey, Jim	3.00	0	0	1.00	-2.00	1	-2.00
+	Davis, Bill	6.00	0	0	0	-6.00	2	-3.00
+	Dickerson, Don	9.00	3.00	3.00	1.00	-2.00	3	-0.67
+	Dingle, Mike	0	0	0	0	0	0	0
+	Driskill, Cecil	9.00	3.00	2.50	5.00	1.50	3	0.50
+	Favero, Bruno	15.00	10.50	5.75	10.00	11.25	5	2.25
+	Fontana, Ernie	0	0	0	0	0	0	0
+	Frausto, Pablo	9.00	3.00	1.00	4.00	-1.00	3	-0.33
+	Fry, Jim	6.00	1.50	1.50	2.00	-1.00	2	-0.50
+	Hansen, Jim	9.00	0	2.25	2.00	-4.75	3	-1.58
+	Jagneaux, Al	3.00	0	0	0	-3.00	1	-3.00
+	Kulmac, Leon	15.00	5.50	4.50	2.00	-3.00	5	-0.60
+	Plaisted, Jack	15.00	1.50	5.75	10.00	2.25	5	0.45
+	Rivera, Jess	9.00	0	0	2.00	-7.00	3	-2.33
+	Robertson, Dave	9.00	0	5.00	1.00	-3.00	3	-1.00
+	Schiewe, Ray	18.00	0	5.50	5.00	-7.50	6	-1.25
+	Van Krakow, Dan	6.00	7.50	6.00	4.00	11.50	2	5.75
+	Wallace Cliff	3.00	6.00	2.25	0	5.25	1	5.25
+	Warren, Jack	3.00	0	0	2.00	-1.00	1	-1.00
+	Willett, Will	15.00	18.50	11.00	7.00	21.50	5	4.30
+	Guest	3.00	0	0	0	-3.00	1	-3.00
=	TOTAL	180.00	60.00	60.00	60.00	0	60	-4.77

PRINT.UTL FOR THE ANADEx WP-6000

-- David Morgenstern

The following is my table for controlling the WP-6000. After many problems with Anadex's code structure I found that by having all commands available in the print.utl file it was then possible to experiment with the combinations that would work together. For example, you cannot have all available pitches in all fonts. Certain fonts will accept only one print speed. Scientific will only be active in Proportional. 16.7 CPI can only be used in the Correspondence mode.

As my needs for the various styles increase, I can incorporate them with a single command by combining them under the present command.

I have found, same as in Wordstar, that issuing resets at the start of each report removes any leftover commands and starts my file reports in the proper print modes.

Here is the file:

PRINT.UTL

242	27 91 78 48 53 27 55 48 56 53	128	RESET TERMS ;C/8in.	114-r
			RESETS THE PRINTER TO CORRESPONDENCE.10CPI,8 IN. PAPER	
210	27 91 78 48 53 27 55 49 51 50	128	RESET TERMS ;C/13.2	82-R
			RESETS THE PRINTER TO CORRESPONDENCE,10CP8,13 IN. PAPER	
229	27 78	128	ENHANCED PRINT	101-e
238	27 79	128	NORMAL SIZE	110-n
225	27 74 55	128	16 CPI;alternative	97-a
237	27 74 50	128	12 CPI;mid pitch	109-m
240	27 74 48	128	10 CPI;normal pitch	112-p
245	27 73 51	128	SUPERSCRIPT	117-u
228	27 73 52	128	SUBSCRIPT	100-d
186	27 58	128	START UNDERLINE	58 -:
187	27 59	128	STOP UNDERLINE	59 -;
216	27 88	128	START ITALICS	88 -X
217	27 89	128	STOP ITALICS	89 -Y
208	27 74 80	128	PROPORTIONAL	80 -P
206	27 91 78 48 48	128	LETTER QUALITY	78 -N
196	27 91 68 48 48	128	DRAFT QUALITY	68 -D
243	27 73 48	128	STOP/ ESC O	115-s
227	27 73 53	128	CORRESPONDENCE	99 -c
247	27 55 48 56 53	128	LINE WIDTH 80.5	119-w
215	27 55 49 51 48	128	LINE WIDTH 13.0	87 -W
211	27 73 50	128	SCIENTIFIC	83 -S

T/Maker and Large, Multiple-File Databases

-- Robert Simon

As we all know, the size of a single T/Maker database is limited to the size of the workfile. However, with a little maneuvering, one can use T/Maker with very large databases by splitting them up into separate files. These files can still be used in concert to create ordered reports, labels, etc.

This is an example of how we use T/Maker to manager our ClickArt customer registration database (our database actually contains over 2,000 names and addresses.) For reasons of necessity and convenience, we must break up this database across several files. As our primary contact with these customers is through mailings, the customers are allocated to a particular file by ZIP. We have a number of files, called ZIP files, which are identical and ultimately will hold our customer data.

The names are stored in the following scheme:

People living in Zip Code	Are Stored in File
00000 - 19999	Z00000.ZIP
20000 - 39999	Z20000.ZIP
40000 - 59999	Z40000.ZIP
60000 - 79999	Z60000.ZIP
80000 - 99999	Z80000.ZIP

We will use a weekly work file, WEEK, to enter the new clients to our mailing list. At the end of the week, or when we want to update our main files, T/Maker takes the names from the WEEK file and sorts them into their respective ZIP files.

Think of the WEEK file as a deck of cards that you deal out and sort into piles (files) according to some criterion. In the case of the cards, it could be the suit (spades, hearts, diamonds.) In our client list, it is the zip code.

At the end of T/Maker's dealing procedure, you end up with each new client stored in the appropriate ZIP file. From then you can sort or select those clients using the other database commands.

The Set-up

Create a file WEEK, which looks like your basic name and address file. Then make five more copies of it named Z00000.ZIP, Z20000.ZIP, Z40000.ZIP, Z60000.ZIP and Z80000.ZIP.

The WEEK file:

```
<form>
WEEKly entry form for Client Database:

Name:      First:  {first          <}      Last:  {last          <}

Address:    Street: {street          <}
             City:  {city            <}
             State: {state           <}
             Zip:   {zip}

Comments:

{c1          <}
{c2          <}
{c3          <}

<end>

<record>
a {first      <}      {last      <}
b {street     <}
c {city       <}
d {state      <}
e {zip}
f {c1         <}    }}
g {c2         <}    }}
h {c3         <}    }}
<end>
```

When making the ZIP files, it is important to link them together by adding a <continue> statement to the end. The statement at the end of the file Z00000.ZIP would automatically link it to the file Z20000.ZIP (and so on) for use with the SELECT command.

-- Large Databases, Continued

The file Z00000.ZIP

```
<form>
Client Database for Zips 00000 through 19999

Name:      First: {first          <}      Last: {last          <}

Address:    Street: {street        <}
            City: {city            <}
            State: {state          <}
            Zip: {zip}

Comments:

{c1                      <}
{c2                      <}
{c3                      <}

<end>

<record>
a {first          <}      {last          <}
b {street        <}
c {city          <}
d {state         <}
e {zip}
f {c1            <}    }}
g {c2            <}    }}
h {c3            <}    }}
<end>
<continue> Z20000.ZIP
```

The Input

Fill your WEEK file with clients. At the end of the week, or when you have filled your current work file, begin the procedure to deal out your records.

The Deal

Get the first ZIP file, Z00000.ZIP. Give the following commands to extract the names from the WEEK file that belong in this ZIP file:

```
GET Z00000.ZIP SELECT WEEK WHEN (zip >= 00000) AND (zip < 20000) END
```

-- Large Databases, Continued

Repeat this step for the remaining ZIP files:

```
GET Z20000.ZIP SELECT WEEK WHEN (zip >= 20000) AND (zip < 40000) END
GET Z40000.ZIP SELECT WEEK WHEN (zip >= 40000) AND (zip < 60000) END
GET Z60000.ZIP SELECT WEEK WHEN (zip >= 60000) AND (zip < 80000) END
GET Z80000.ZIP SELECT WEEK WHEN (zip >= 80000) AND (zip < 99999) END
```

Automating the Process

To automate the whole procedure, create a file called ZIP.DO. This file will consecutively go through each of the ZIP files extracting the names from the WEEK file that belong in that particular ZIP file. In addition, it will sort the names within each file according to last name.

```
GET Z00000.ZIP SELECT WEEK WHEN (zip > 00000) AND (zip <= 20000) END ORDER LAST SAVE GET ZIP.DO 2 DO
GET Z20000.ZIP SELECT WEEK WHEN (zip > 20000) AND (zip <= 40000) END ORDER LAST SAVE GET ZIP.DO 3 DO
GET Z40000.ZIP SELECT WEEK WHEN (zip > 40000) AND (zip <= 60000) END ORDER LAST SAVE GET ZIP.DO 4 DO
GET Z60000.ZIP SELECT WEEK WHEN (zip > 60000) AND (zip <= 80000) END ORDER LAST SAVE GET ZIP.DO 5 DO
GET Z80000.ZIP SELECT WEEK WHEN (zip > 80000) AND (zip <= 99999) END ORDER LAST SAVE
```

Generating Labels

To generate labels or letters using the entire database, start with the first ZIP file, and all the others will automatically follow because of the <continue> statement at the end of each file.

The following command (placed at the top of a workfile containing a label record definition like the one shown below) would select every record in the database in turn going through each ZIP file, creating mailing labels.

```
SELECT Z00000.ZIP END
```

Unfortunately, if your databases are that big, chances are all the mailing labels themselves will not fit into one resulting workfile

The solution is to select some records, print some labels, select some more records, and then print some more labels, etc. Here's a file that, when the DO command is issued, will do exactly what we just described:

The file Label.PRT

```
SELECT Z00000.ZIP from 1 to 200 END 10/1 Find ..st Print it Get Label.PRT 2 DO
SELECT Z00000.ZIP from 201 to 400 END 10/1 Find ..st Print it Get Label.PRT 3 DO
SELECT Z00000.ZIP from 401 to 600 END 10/1 Find ..st Print it Get Label.PRT 4 DO
SELECT Z00000.ZIP from 601 to 800 END 10/1 Find ..st Print it Get Label.PRT 5 DO
SELECT Z00000.ZIP from 801 to 1000 END 10/1 Find ..st Print it

<record>
{first          !} {last          <}
{street          <}
{city           !}, {state       !} {zip}
.new
<end>
..start printing here
.ind 5
.pag 9
..<here>
.end
```

UNEMPLOYMENT COMPENSATION

-- Walter Lewis

here is a model I have used quarterly to prepare State and Federal Unemployment Compensation forms, and at the end of the year, form 940. The annual Federal Unemployment Tax Return is no big deal, but try to determine the the sum of payments for services of less than \$7,000 within the current quarter. The model presented, featuring the PLY function, does the calculation automatically, and with no sweat.

Horizontal Calculation Line (HCL) UC1 inserts the \$7,000.00 limit into each row calculation. Line UC2 sums the quarterly payments to date. UC3 determines total wages in excess of the limit; and UC4 determines what wages within the current quarter are subject to U/C taxes. JC10 enters the sum of taxable wages into register B for final determination of the amount of U/C tax payable for the current quarter.

As each quarter passes, current quarterly earnings are entered into the appropriate column, and HCL line UC5 is edited, moving the "+" to the column for the appropriate quarter.

A similar model can be prepared for State U/C tax, with appropriate limits and rates entered as required by the laws and regulations of the respective state.

(The two pages following present the full model.)

2ND QUARTER 1984 (SEE PRIOR PAGE FOR DETAILS)

99,999.99 99,999.99 999,999.99 , , , , 99,999.99 999,999.99

-0-

7000

+

+

=

+

-

PLY

-

PLY

NET FICA
WAGES
3RD Q

NET FICA
WAGES
4TH Q

NET YEAR
TO DATE

LIMIT

EXEMPT
WAGES
YTD

SUBJECT
WAGES
THIS Q

-0-

9,100.00

2,100.00

2,800.00

-0-

9,100.00

2,100.00

2,800.00

-0-

5,385.25

2,899.75

-0-

3,570.00

2,100.00

-0-

75.60

75.60

-0-

1,133.54

857.93

-0-

2,895.45

986.90

-0-

1,450.53

1,450.53

-0-

2,508.56

1,489.16

-0-

402.22

263.68

-0-

38.21

19.78

-0-

480.47

285.22

-0-

1,153.39

717.37

-0-

956.49

631.59

-0-

136.54

82.84

-0-

4,609.94

2,399.42

-0-

2,629.22

1,604.42

-0-

85.63

85.63

-0-

2,572.92

1,804.66

-0-

7,479.42

479.42

3,547.96

-0-

3,002.01

1,837.31

-0-

3,003.65

1,868.24

-0-

1,470.59

1,184.54

-0-

5,294.29

2,888.26

-0-

68,533.92

4,679.42

STB

34,680.79

99,999.99

#

AMOUNT

277.45

FEDERAL UNEMPLOYMENT COMPENSATION (FORM 940):

EX	999		99,999.99	99,999.99
ZV			-0-	-0-
UC1=				
UC2			+	+
UC3				
UC4				+
UC5				
UC6	FTA			
UC7+	1			
UC9	STA			

	SSN	NAME	NET FICA WAGES 1ST Q 3/27/84	NET FICA WAGES 2ND Q 6/30/84
+	1 233-32-8983	EMPLOYEE 1	4,200.00	4,900.00
+	2 378-16-6268	EMPLOYEE 2	4,200.00	4,900.00
+	3 233-70-3099	EMPLOYEE 3	2,485.50	2,899.75
+	4 236-24-7843	EMPLOYEE 4	1,470.00	2,100.00
+	5 232-11-6301	EMPLOYEE 5	-0-	75.60
+	6 297-54-9807	EMPLOYEE 6	275.61	857.93
+	7 234-0205306	EMPLOYEE 7	1,908.55	986.90
+	8 236-80-3394	EMPLOYEE 8	-0-	1,450.53
+	9 235-96-1836	EMPLOYEE 9	1,019.40	1,489.16
+	10 232-92-7660	EMPLOYEE 18	138.54	263.68
+	11 234-02-5306	EMPLOYEE 19	18.43	19.78
+	12 235-96-7994	EMPLOYEE 20	195.25	285.22
+	13 234-80-9438	EMPLOYEE 21	436.02	717.37
+	14 236-96-0231	EMPLOYEE 22	324.90	631.59
+	15 003-36-8195	EMPLOYEE 23	53.70	82.84
+	16 235-92-0366	EMPLOYEE 24	2,210.52	2,399.42
+	17 234-90-8989	EMPLOYEE 25	1,024.80	1,604.42
+	18 234-90-0805	EMPLOYEE 26	-0-	85.63
+	19 232-84-8500	EMPLOYEE 27	768.26	1,804.66
+	20 236-26-7639	EMPLOYEE 28	3,452.04	4,027.38
+	21 235-78-2773	EMPLOYEE 29	1,164.70	1,837.31
+	22 233-78-7476	EMPLOYEE 30	1,135.41	1,868.24
+	23 236-22-3411	EMPLOYEE 31	286.05	1,184.54
+	24 234-62-2365	EMPLOYEE 32	2,406.03	2,888.26

JC10				
=+	300		29,173.71	39,360.21
CC				
EX			99,999.99	9,999.99
JC11			FTB	
UC2=				.8
UC3			+	*
			SUBJECT	RATE
+	FED U/C THIS QUARTER		34,680.79	0.80

MORE VISICALC TO T/MAKER... (Part III)

-- Royal Farros

Welcome back to the VisiCalc to T/Maker transition. Last time, we watched how easy it was to STORE & FETCH table values when using the JC Row Code. We also discussed the Order of Calculation T/Maker uses in computing spreadsheet tables, as well as how T/Maker moves values from the bottom to the tops of columns. Finally, we learned that T/Maker will allow us to represent zero values in a table in many different ways.

BORDERING T/MAKER

Everyone who has ever used a VisiCalc or cell-based spreadsheet gets used to the perpendicular border surrounding the spreadsheet grid. Believe it or not, you can get such a border in T/Maker by using the FRAME MODE. T/Maker's FRAME MODE will "frame" a portion of the screen, while freezing another. Your frame now becomes a smaller window in your current file.

FRAME MODE will not work in the 1/1 cursor position (a frame as large as the screen isn't really doing anything). However, if you move your cursor down a few rows, and over a few columns, and press <ESC><F> you should see that familiar VisiCalc-type border surround your spreadsheet table (like below).

Example		aaaaa	ggggg	hhhhh	iiiiii	jjjjj
		JAN	AUG	SEPT	OCT	NOV
+	Revenues:	100	250	265	275	450
-	Expenses:	25	55	65	75	100
		-----	-----	-----	-----	-----
=	PROFITS: \$	75	\$ 195	\$ 200	\$ 200	\$ 350

FRAME MODE can also be used for split screen-viewing, especially useful in word processing activities. You can *horizontally* split the screen by pressing ESC F when the cursor is in the first column, or *vertically* split the screen by pressing ESC F when the cursor is in the first row.

SHORTCUTS TO JC ROW CODE EQUATIONS

Hopefully, you've been taking my advice and using just the JC Row Code when computing horizontal row equations. If you have, you should have felt much more in control of T/Maker's non-VisiCalc-type spreadsheet. It makes concrete sense that a visible spreadsheet should have the row equation directly above the row of numbers the equation is to operate on.

You should also be getting tired of having to enter in the same row equation for every row using the same formula. Never fear, T/Maker has three different shortcut methods. Once you understand how the JC Row Equation works, T/Maker's other types of row equations become a cinch to use.

RESULT ROWS AND DATA ROWS

Before we discuss shortcuts, we need to get a few definitions straight.

A DATA ROW has input numbers which you supply. It will always begin with a "+", "-" or other *operator*. In the table below, rows A, B and D are Data Rows.

A RESULT ROW is a row that T/Maker figures the numbers for. It will always begin with an "=" or other *result* sign. In the table below, the C and E rows are Result Rows.

Example			a,aaa	b,bbb
+	Data Row	A	10	10
-	Data Row	B	5	10
= +	Result Row	C	5	0
+	Data Row	D	5	5
=	Result Row	E	10	5

Example

RC ROW EQUATIONS (Rarely Compute)

The strangest name for a row equation short-cut (sorry, Peter) is the RC - or Rarely Compute. While the JC Row Equation operates only on the very next row (Data or Result Rows), the RC Row Equation will ONLY operate on all RESULT Rows. Notice in the table below that the row equation (a * b = c) works only on the Result Row D.

Example			a,aaa	b,bbb	c,ccc
rcl			+	*	=
+	Data Row	A	1	1	0
+	Data Row	B	2	2	0
+	Data Row	C	3	3	0
=	Result Row	D	6	6	36

Example

UC ROW EQUATIONS (Usually Compute)

Following this logic, the UC - Usually Compute - Row Equation will work ONLY on DATA ROWS. Notice in the table below that the row equation ($a * b = c$) only operates on Data Rows.

Example			a,aaa	b,bbb	c,ccc
ucl			+	*	=
+	Data Row	A	1	1	1
+	Data Row	B	2	2	4
+	Data Row	C	3	3	9
=	Result Row	D	6	6	14

Example

AC ROW EQUATIONS (Always Compute)

The final shortcut is the AC - Always Compute - Row Equation. The AC Row Equation works on *EVERY* row of numbers in a table.

Notice the Order of Calculation on the last row. T/Maker *first* computes each column equation, then computes the appropriate row equation.

Example			a,aaa	b,bbb	c,ccc
acl			+	*	=
+	Data Row	A	1	1	1
+	Data Row	B	2	2	4
+	Data Row	C	3	3	9
=	Result Row	D	6	6	36

Example

To give you an idea of how much time using these short-cut row codes, here's one more example of using Always Compute vs. using Just Compute.

Using JC:

Example		aaa Food	bbb Gas	ccc Total
jcl		+	+	=
+	1981:	10	10	20
jcl		+	+	=
+	1982:	20	20	40
jcl		+	+	=
+	1983:	30	30	60
jcl		+	+	=
+	1984:	40	40	80

Using AC:

Example		aaa Food	bbb Gas	ccc Total
acl		+	+	=
+	1981:	10	10	20
+	1982:	20	20	40
+	1983:	30	30	60
+	1984:	40	40	80

T/Maker row equation shortcuts should make your (spreadsheet) life much easier. And guess what - we don't even have to worry about replicating column or row equations!

So much for this issue's lessons. Hopefully, T/Maker's spreadsheet makes a bit more sense now than it did ten minutes ago. Next issue, I'll concentrate on dispelling the myths that some applications are "easier" in VisiCalc than in T/Maker!

T/MAKER STRIKES OUT

-- Bert Zitek

I work for a trade association of over 4,000 owners of bowling centers. One of my responsibilities is coordinating bowling tournaments that begin at the local level, with advancement to a state finals and then a national finals for the state champions of the participating states.

I recently purchased a portable computer and T/Maker Integrated, which I use to record information about the contestants. I then perform mathematical computation and manipulation of the scores to determine the champions.

I'd like to share with you the system that T/Maker has allowed me to develop that automates the entire process.

I start by CREATING an 'entry' record which I then duplicate with the RENAME command to produce three files, one for each of the divisions in this particular tournament, which are: Prep, Junior and Major. I input the 2-letter abbreviation for each of the state names into the 'entry' record before the RENAME command so I can easily check the files to see which states have not submitted the names of their champions.

<form>

1984 National Family Tournament - Prep Division

State: {sta} Division: {div }

```

Youth Bowler:  First Name - {yfirst      }  Last - {ylast      }
                Address   - {yaddress    }
                City - {ycity      }  State - {ys}  Zip - {yzi#p}
                Average - {y#av}

```

```
Adult Bowler:  First Name - {afirst      }  Last - {alast      }
                Address   - {aaddress   }
                City - {acity      }  State - {as}  Zip - {azi#p}
                Average - {a#av}
```

Team Handicaps: One Game: {o#ne} Three Games: {t#hr}

<end>

```
<rules>
```

```
one    999 = ((400-(yav+aav))* .8) - .5
thr    999 = ((400-(yav+aav))* .8*3) - .5
```

<end>

--T/Maker Strikes Out, Continued

Once the three files have been created I only need to GET each of the records and EDIT to add the division name to the top line of each (so each is personalized) and then SAVE.

As the contestants' names arrive at the office, they are entered into the division record using the 'Search for String' command and the 2-letter state abbreviation while in the UPDATE mode.

When daily inputting is finished I complete the files by invoking the SET command to compute the handicaps according to the RULES, and of course SAVE.

```
<record>
1 {sta}{div } {yfirst      } {ylast      } Average - {y#av}
2 {yaddress                }
3 {ycity      } {ys} {yzi#p}
4 {afirst      } {alast      } Average - {a#av}
5 {aaddress                } }}
6 {acity      } }} {as} }} {azi#p} }}
7 Team Handicaps:      One Game: {o#ne} Three Games: {t#hr}
<end>
1 AZ   Prep   Jennifer      Buckner      Average - 97
2 2175 N. Trekell, Sp. B-11
3 Casa Grande      AZ      85222
4 Diane      Buckner      Average - 115
7 Team Handicaps:      One Game: 150 Three Games: 451
```

The RULES for determining handicap deserve an explanation. Fractions of a pin are always truncated following the final computation. In this tournament the handicap was 80% of the difference between the sum of the bowlers averages and a base score of 400. In a singles tournament the base score, par if you're a golfer, would have been 200. It's an arbitrary number.

Because the fraction is not dropped until after the final computation, a three-game handicap is not always three times a one-game handicap. (3.8 one-game hdcp. X 3-games = 11 for three games, not 11.4.)

The minus .5 in the formula was a trick given to me by the friendly T/Maker staff as a way to fool T/Maker because it sometimes wants to round up to the next whole number rather than truncate. By subtracting .5 T/Maker is happy and so am I because I always get the right answer. (24.9 - .5 = 24.4 which becomes 24 and 19.4 - .5 = 18.9 which becomes 19.)

I use a label-making file to produce labels for mailings and registration kits:

```
SELECT (file name ) END PRINT IT
```

```
<record>
.new
{!yfirst      } {ylast      }
{!afirst      } {alast      }
{yaddress
{!ycity        }, {ys} {yzip  } }
<end>
.pagesize 6
.indent 38
..<here>
```

I use the recap form to complete pre-printed recap sheets that the bowlers will use to record their scores.

```
<record>
.new
.double

      {sta}      {div      }      -2-
{yfirst      } {ylast      }      {yav}
{afirst      } {alast      }      {aav}
{ycity        }      {ys}      {thr}

      * * * *      * * * *      * * * *
      * * * *      * * * *      * * * *

<end>
.pagesize 30
..<here>
.new
.double
```

Now we are ready to travel to the tournament site, and for a change it will be T/Maker doing most of the work rather than me.

The Prep division starts and while they are bowling, I GET 'prepl' and use the DO command to execute the first line of the file which SELECTs 'prep' and loads the contestants' names, averages and handicaps and goes into the UPDATE mode, ready for score input. (A copy of 'prepl' is on the next page.)

```

select prep end update
s set order d n cfw clip b 28 print it
<form>

      1984 National Family Tournament
      Prep Division - Round 1

Youth Games:  #1: {y#g1>}  #2: {y#g2>}  #3: {y#g3>}

Adult Games:  #1: {a#g1>}  #2: {a#g2>}  #3: {a#g3>}

{sta} {yfirst< } {ylast< } {y#t1>}
      {afirst< } {alast< } {a#t1>}
      3-Game Total {qt#1>}
      3-Game Handicap {t#hr>}

      Grand Total {cf#w>}

<end>
<rules>
yt1 999 = ygl+yg2+yg3
at1 999 = agl+ag2+ag3
gt1 9999 = yt1+at1
cfw 9999 = thr+gt1
<end>
<record>
1 {sta}{yfirst< } {ylast< } {y#g1>+{y#g2>+{y#g3>}={y#t1>}
2 {afirst< } {alast< } {a#g1>+{a#g2>+{a#g3>}={a#t1>} {gt#1>}+{t#hr>} = {cf#w>}
<end>

```

--T/Maker Strikes Out, Continued

As the recap sheets are brought into the office I use 'Search for String' and the 2-letter state abbreviation to bring up the record I need.

The screen fields are an exact duplicate of the recap sheet, and each field is three positions, the same as most scores, so that the cursor advances automatically as the scores are entered.

Within less than a minute of entering the final score, T/Maker has added the game score and the handicap using the RULES, ORDERed the file in descending, numerical order according to the grand total field and is ready to print the results. All I need to do is remember to turn on the printer.

```
.pagesize 90
.length 84
.indent 5
.clean
```

1984 National Family Tournament
Bowling Proprietors Association of America
Prep Division - Round 1

<here>

1	IA	Dale	Weber	169+138+210=517	
2		Randall	Weber	178+222+210=610	1127+201 = 1328
1	OR	Eddie	Merrifield	180+188+203=571	
2		Ralph	Miller	201+191+176=568	1139+160 = 1299
1	IL	Louis	Filskov	172+168+174=514	
2		Earl	Filskov	144+151+155=450	964+326 = 1290

This job used to take two people, with adding machines to verify score totals, then a manual shuffling of the recap sheets to order them, and a quick run to the P.A. to announce the top three teams and finally the standings sheet had to be typed for reproduction. We would barely finish the Prep division and the recap sheets for the Junior division would start coming in. Now we have plenty of time to take a breather.

When the Preps are up to bowl their second round, I GET prep2 and ust eh DO command to execute the first line of the file which SELECTS prepl and loads the contestants' names, their averages, handicaps, and the total score from their first round. The first round total is relabeled as carry forward and will be added to the second three game total for a true grand total. (A copy of prep2 is on the next page.)

```

select prepl end update
s set order d n rt2 clip b 29 print it
<form>

      1984 National Family Tournament
      Prep Division - Round 2

Youth Games:   #4: {y#g4>}   #5: {y#g5>}   #6: {y#g6>}

Adult Games:   #4: {a#g4>}   #5: {a#g5>}   #6: {a#g6>}

{sta} {yfirst< } {ylast< } {y#t2>}
{afirst< } {alast< } {a#t2>}
      3-Game Total {gt#2>}
      3-Game Handicap {t#hr>}
      Carry Forward {cf#w>}

      Grand Total {rt#2>}

<end>
<rules>
yt2 999 = yg4+yg5+yg6
at2 999 = ag4+ag5+ag6
gt2 9999 = yt2+at2
rt2 9999 = thr+gt2+cfw
<end>
<record>
1 {sta}{yfirst< } {ylast< } {y#g4>}+{y#g5>}+{y#g6>}={y#t2>}
2 {afirst< } {alast< } {a#g4>}+{a#g5>}+{a#g6>}={a#t2>}
{gt#2>}+{t#hr>}+{cf#w>} = {rt#2>}
<end>

```

--T/Maker Strikes Out, Continued

The final standing sheet then looks like this:

```
.pagesize 90
.length 84
.clean

      1984 National Family Tournament
Bowling Proprietors Association of America
      Prep Division - Round 2

<here>
1      IL      Louis      Filskov      150+156+174=480
2      Earl      Filskov      144+176+148=468      948+326+1290 = 256
1      MT      Shawn      Sprague      123+100+116=339
2      Ronny      Sprague      132+158+157=447      786+475+1246 = 2507
1      CA      Bryon      Smith      165+162+179=506
2      Lupe      Smith      148+109+131=388      894+379+1219 = 2492
```

The work is not over yet. Everybody wants to know who had the highest one-game and three-game scores, in each division and overall. By the way, the awards banquet is in two hours and the boss wants to announce those high scores. There were times in the past when I just barely completed this chore in time for his announcements, but now I can hand him a list before he leaves the bowling center using the hgame file:

```
SELECT PREP1 END COMPLETE PREP2 STA SET ORDER D N YHG
<form>

      1984 National Family Tournament
      Youth High Game

{<sta>      {yfirst<      } {ylast<      } {y#g1>} {y#g2>} {y#g3>} {yhgl>}
      {yhg>}}      {y#g4>} {y#g5>} {y#g6>} {yhg2>}

<end>
<rules>
yhgl      999 = yg1 when yg1 >= yg2 and yg1 >= yg3
yhgl      999 = yg2 when yg2 >= yg1 and yg2 >= yg3
yhgl      999 = yg3 when yg3 >= yg1 and yg3 >= yg2
yhg2      999 = yg4 when yg1 >= yg5 and yg4 >= yg6
yhg2      999 = yg5 when yg1 >= yg4 and yg5 >= yg6
yhg2      999 = yg6 when yg1 >= yg4 and yg6 >= yg5
yhg      999 = yhgl when yhgl >= yhg2
yhg      999 = yhgl when yhgl >= yhg2
<end>
<record>
1      {<sta>      {yfirst<      } {ylast<      } {y#g1>} {y#g2>} {y#g3>} {yhgl>}
2      {yhg>}}      {y#g4>} {y#g5>} {y#g6>} {yhg2>}
<end>
```

--T/Maker Strikes Out, Continued

No, the work is still not over. Now the tournament committee wants to know "what if" and T/Maker likes that game. Fortunately, these answers can wait until I get back home to change a handicap percentage or a base number and replay the tournament and compare the results.

I have tried two other major database and spreadsheet programs and have found that T/Maker is easier to work with and has more capabilities. I also enjoy starting a DO command and having T/Maker perform it's duties flawlessly, especially when I, or maybe it's T/Maker, have spectators to show off for.

My next project will be to set files for my amateur radio contacts with the 300+ countries so I can determine which ones I have and on what band (there are six) the contact was made, who I talked to, if I sent a QSL card and if I got one back. I know T/Maker can do it, it's me that I question. If there are any amateur radio operators out there that would like to share their ideas I'll be glad to correspond. My call is N5ELM and I'm good in the call book.

T/Maker Consultants

To be registered as a consultant and listed in T/MUG, send us a copy of your system complete with explanation and documentation. If it is consistent in quality and degree of completeness with the systems we have previously accepted, we will register you as a consultant.

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