

VOL #12 NO.09

SEPTEMBER 1993

\$2.00

### TAT TONY'S HOME J MEETING SEPT 10

### ISLAND

EDITOR: FRANCIS J. BUBENIK JR. 47

....TRBLE OF CONTENTS.

...1993-94 COMPUTOR FAIR SCHED COMPILED BY FRANK J. BUBENIK JR.

...XB MISCELLANEOUS #28. By FARI RAGUSE / UGOC U.G.

.XB LOAD & TESTER SUB PROGRAMS. PAGE 4...

**By EARL RAGUSE 4/93** 

..LITI 99 NEW MEETING LOCATION MAP. PAGE 5... Designed by FRANK BUBENIK JR.

..LITI NEWSLETTER INDEX TO AUG. 93. PAGE 6.... Compiled by FRANK BUBENIK, JR.

.MULTIPLAN EXERCISES MP2-10. By HERBERT SCHLESINGER.

.. MULTIPLAN EXERCISES MP2-11. END OF SERIES.

.WELCOME TO CHICAGO FAIR MAP. DIRECTIONS TO CHICAGO & MILWAUKEE.

.ADS FOR CHICAGO & MILWAUKEE FAIRS. LITI 99 LOGO & MAILER.

> HAVE A NICE LABOR DAY

> > ESTABLISHED APRIL-1983

### \* 93/94 FAIR SCHEDULE \*

Compiled by Frank J. Bubenik Jr. (NL Editor)

AUG 29, 1993 (SUN) HAUPPAUGE, LI NY. 98M/3PM 150 TABLES. MARRIOTT WINDWATCH HOTEL. LIE EXIT 57N/RTE#454

C SEP 6, 1993 (MON) HILTON HOTEL. MEADOWLANDS,NJ RTE 3/N.J.TPKE EXIT 16W. COST \$6.00 9AM/4PM TSCF.

DTI SEP 18, 1993 (SAT) COMPUTER FAIR. TACOMA, WA. M SAM TIL 4PM. TACOMA TISSER U.G. INFO: (206) 756-0934

SEP 18, 1993 (SAT) WAYNE,NJ. WM PATERSON COLLEGE. 400 TABLES. RTES 46/23. 10-4PM. KGP.

SEP 19, 1993 (SUN) HEMPSTEAD, NY. HOFSTRA UNIV. 500 TABLES. HEMPSTEAD TPKE. 10AM TILL 4PM. KGP.

👕 OCT 11, 1993 (MON) MARRIOTT HOTEL. TARRYTOWN, NY TSCF

OCT 30/31, 1993 (SAT/SUN) FAIRLEIGH DICKINSON UNIV. 500 TABLES.10-3PM.RTE 4 TO HACKENSACK HVE.SUUTH.KGP.

TL OCT 30, (SAT) 1993 CHICAGO (FRIZSAT) X11th ANNUAL INTERNATIONAL FAIRE. HOLIDY INN. GURNEE, IL. PHONE (708) 336-6300. INFO:DON WALDEN (414) 679-4343. FAIR CHAIRMEN: JIM DEARDS (708) 426-6301.

UL oct 31, 1993 (SUN) MILWAUKE, WI. TI99ER U.G. QUALITY INN. 9AM TIL 4PM. INFO: GENE HITZ (414) 535-0133.

NOV 13/14, 1993 (SAT/SUN) EDISON, NJ. RARITAN CENTER 1200 TABLES. 10-3PM. EXIT #10 NJ TNPK. KGP.

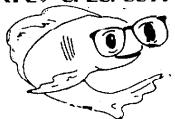
DEC 4, 1993 (SAT) WRYNE,NJ. WM. PRTERSON COLLEGE. 400 TABLES: 10-4PM. RTES. 46/23. INDOORS. KGP.

TI FEB 19-20, 1994 (SATZSUN) FEST-WEST TUCSON, AZ. SANTA RITA INN. INFO: CONTACT B.J. MATHIS: (602) 747-5046 or TOM WILS (602) 886-2460. SOUTH WEST 99ERS U.G.

LITI 99ERS NEWSLETTER IS NOT RESPONCIBLE FOR CANCEL-ATIONS. CALL TO VERIFY TIME AND DATES BEFORE GOING. X Ken Gordon Productions (KGP) SHOWS COST \$8.00— \$1.00 discount cords are sent to those people on there mailing lists. Call (800)631-0062 UR (908)297-2526 for info. (rev 8/14/93).

 X Tri-State Computer Fairs (TSCF) SHOWS COST 96.00-\$1.00 discount cords available by muil. Cull Robert Barlow (201) 533-1991 for info. (rev 8/20/93).





### XB MISCELLANEOUS #28 Earl Raguse

### PASSING NUMBERS PROGRAM TO PROGRAM

SOUND THAT MANAGES SOUTH

One thing that XB does not do well, or at least not easily, is to pass infomation between programs. Oh! sure, that is what files are for, you say. True, true, but it seems a lot of work for a couple of numbers. One could use CALL LOAD and PEEK to a certain address, if you knew what address to use. Also it is possible to use the screen for storage, an entirely different approach to the subject, but all that is less easy than storing information in character definitions.

RUN does not restore altered character sets, sometimes that is a pain, when an author changes characters for graphics, and does not restore them. CALL CHARSET only restores the upper case characters, it does not restore the lower case character set. This fouls things up when you try to run a menu program after one of those, without returning to the TI title screen, which does cause restoration. This is the reason I wrote subprograms LCSAV and LCSET to save and restore the lowercase character set.

We can capitalize on this weakness, we can use CALL CHAR to store info in a character definition, and extract it with CALL CHARPAT. We can mutliplex several numbers, up to 16 digits, in one definition string using string concatenation (&), and use SEG\$ to separate them again.

The numbers must be converted to strings using STR\$. The length of the number is found with LEN, if unknown. Additional numbers may be concatenated using (&) up to 16 digits max. Use the above LEN to keep track and separate them again.

I have written a couple single digit programs TESTER and NUMBER to illustrate the point. They are listed on the next page. The entire crux of the matter is in line 220 of TESTER which stores the number, and line 130 - 140 of NUMBER, which reads and displays the number. All the rest of the lines are window dressing to make a friendly program. LOAD is just there to autoload TESTER. These programs are not too long, I

suggest you enter them and play with them a bit, till you understand what is going on. Remember to MERGE the subprograms.

Lines 100-210 of [ESTER just provide prompts and a different way of selecting a number to pass. I could easily have shortened it all to one INPUT statement, but that would not be as much fun. Lines 150 - 170 just find out if you want to change the default display, if Yes, then 180 displays a new prompt and has an ACCEPT AT statement, to get your input.

Lines 190 - 210 are a scanning loop operation to examine the default string X\$ Tooking for the first non-zero number. All the while displaying where it is looking by using the underline symbol. Line 220 announces the results, stores the string value and of Y\$=STR\$(X) in character 143. Line 230 CALLs PAK to wait for your input after you study the displayed result. Line 240 just runs NUMBER to display the found number.

When NUMBER runs, it simply announces its purpose, gives you a message, and finally in line 130 does a CALL CHARPAT(143,Y\$), to get the stored value in Y\$, then it uses Y\$= SEG\$(Y\$,1,1) to first number(byte), then get the Y=VAL(Y\$) to get a displayable number Y. Since in this case, we only had one number, this was a kind of "round the barn" approach, but this is the kind of thing one would do if we had multiplexed several numbers into Y\$. Line 140 displays the number Y, then CALLS PAK, as a delay before RUNning TESTER again.



100 ! SAVE DSK1.LOAD 105 ! By Earl Raguse 4/93 110 DISPLAY AT(12,1)ERASE ALL: "Patience, I'm Loading TESTER" 120 RUN "DSK1.TESTER"

100 ! SAVE DSK1.TESTER 110 ! By Earl Raguse 4/93 120 CALL SCREEN(8):: CALL CL EAR 130 CALL CHAR(143, "001742356 "):: CALL CHARPAT(143,X\$) 140 DISPLAY AT(3,7) ERASE ALL : " This Is TESTER": : : " Will Look For The First Nonzero Number In Default" 150 DISPLAY AT(10,5): "ACCEPT THE DEFAULT Y/N" 160 DISPLAY AT(12,6): "LOCATI ON 123456789" :: DISPLAY AT( 14,6): "DEFAULT "; SEG\$(X \$,1,9) 170 CALL GKEY(K,24):: IF K=A SC("Y")THEN 190 ELSE IF K=AS C("N")THEN 180 ELSE IF S <1 THEN 170 180 DISPLAY AT(10,1): "Edit T he Default, Hit ENTER" :: AC CEPT AT(14,15)SIZE(-9)VA LIDATE("1234567890")BEEP:X\$ 190 FOR R=1 TO 10 200 X-VAL(SEG\$(X\$,R,1)):: DI SPLAY AT(16,1): "Looking DISPLAY AT(16,14+R): "\_ :: IF X<>0 THEN 220 210 NEXT R 220 DISPLAY AT(20,1):" und";X;"At Location";R :: Y\$ =STR\$(X):: CALL CHAR(143 ,Y\$) 230 CALL PAK 240 DISPLAY AT(12,4) ERASE AL L:"Wait, Loading NUMBER"::RU

N "DSK1.NUMBER" 250 END

T.

3900 ! 3910 ! SUBPROGRAM AREA 3920 ! For PAK & GKEY



100 ! SAVE DSK1.NUMBER
105 ! By Earl Raguse 4/93
110 DISPLAY AT(1,8)ERASE ALL
:"This Is NUMBER": :"The Pr
ogram That DisplaysThe Num
ber Found In the LastProgram
.": : :" How Does This Hap
pen?"



120 DISPLAY AT(10,1):"Read The UGOC ROM Regularly and Find Out."



130 CALL CHARPAT(143, Y\$):: -Y \$=SEG\$(Y\$,1,1):: Y=VAL(Y\$) 140 DISPLAY AT(14,7): "The Nu mber was ";Y :: CALL PAK 150 RUN "DSK1.TESTER" 3900 !



3910 ! SUBPROGRAM AREA 3920 ! For PAK



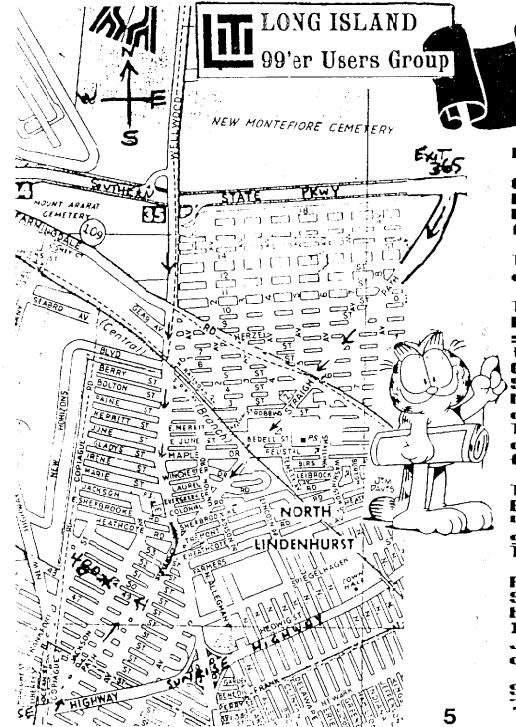
4000 SUB GKEY(Q,ROW)
4010 CALL KEY(3,K,S):: IF S<
1 THEN 4010 ELSE Q=K :: IF Q
=32 THEN A\$="Space" ELSE A\$=
CHR\$(Q)
4020 DISPLAY AT(ROW.1)SIZE(3



4020 DISPLAY AT(ROW,1)SIZE(3 0): "You Selected ";A\$ :: SU BEND 6100



SUB PAK
6110 DISPLAY AT(24,1)SIZE(30)
:" Press Any Key to Proceed"
6120 CALL KEY(0,K,S):: IF S<1
THEN 6110
6130 DISPLAY AT(24,1)SIZE(30)
:: SUBEND



# NEW LOCATION Meeting phone after 6 PM (516) 226-2529

NEW MEETING LOCATION (9/93)

Our GENERAL Meetings will be held at Tony's home in Morth Lindenhurst, NY. On the second friday of the month.

The address is: 480 Jackson Ave at 49th street.

Take SOUTHERN STATE:
Exit 35 South- WELLWOOD AVE. Go
south on Wellwood. Make a right
turn on Straight Path (Wellwood
Commons Shopping Center). Go
5 blocks south to 49th street.
Make a right turn on 49th, go
one block to Jackson Ave.
The house is on the corner with
a fence, lantern post in the
front yard.

Take SOUTHERN STATE: Exit 36 South- STRAIGHT PATH to 49th street. Make a right turn, go one block to Jackson Ave. The house is or the NE corner.

From SUNRISE HIGHWAY: STRAIGHT PATH NORTH for about 9 blocks to 49th street. Make a left turn, go one block to Jackson Ave. House is on NE corner.

See you at the meeting. 7:30 PM SHARP....

92 CHICAGO FAIR RPT 01/93/9 93 FAIRS FB 01/93/2 93 FAIRS FB 03/93/2 93 FAIRS FB 05/93/2 93 FAIRS FB 07/93/2 AD 1ST DRAFT 2.0 ASGARD 07/93/8 AD 93 BOSTON FAIR 03/93/10 AD 93 COMPRODINE 07/93/9

AD 93 FEST WEST NORTH 01/93/10

AD 93 FEST WEST NORTH 02/93/10

AD 93 LIMA CONFERENCE 04/93/9

AD 93 LIMA CONFERENCE 04/93/9

AD HARRISON SOFTWARE 07/93/10

AD MICROPENDIUM 07/93/10

AD NOTUNG SOFTWARE 02/93/8 AD WHAT IS AMS? ASGARD 03/93/5 CECURE ELECTRONICS 06/93/8 CONGRATULATION 10TH YR 04/93/1 CRYSTAL SOFTWARE NOTICE 05/93/6 IDT CORCOMP REPAIR 06/92/8 INCOME TAX HELPER PROG 01/93/6 KEYBOARD READER PROG 01/93/7 LITI LIBRARY U/D #9 03/93/9 LITI LOGO/MAILER 02/93/10 LITI LOGO/MAILER 04/93/10 LITI LOGO/MAILER 06/93/10 MYARC REPAIR FACILITY 06/93/8 NEW CORCOMP REPAIR 06/93/8 PRINTER HEAD CLEAN CR 05/93/3 PROGRAMS/WRITE PGM#6 06/93/7 RL=ROBERT LAWSON T OF C 02/93/1 T OF C 04/93/9 T OF C 06/93/1 T OF C 08/93/1 TI EDUCATIONAL SOFTWARE 03/93/7 TIGERCUB TIPS#69 08/93/7 TIGERCUB TIPS#71 06/93/5 XB LISTMAN/TEST RAGUSE 02/93/5 XB MISC #19 RAGUSE 01/93/4 XB MISC #21 RAGUSE 02/93/4 XB MISC #23 RAGUSE 04/93/3 XB MISC #25 RAGUSE 07/93/3 XB MISC #27 RAGUSE 08/93/5 XB TEST PGM LIST RAGUSE 08/93/4 XFER ADAMS ADV CASS/DISK 04/93/6

93 ELECT RULE-SCOTT 04/93/5 93 FAIRS FB 02/93/2 93 FAIRS FB 04/93/2 93 FAIRS FB 06/93/2 93/94 FAIRS FB 08/93/2 AD 93 BOSTON FAIR 02/93/9 AD 93 BOSTON FAIR 04/93/10 BUD MILLS ROS-B/C 05/93/8 COMPHTER OPERATOR PIC 05/93/4 CR=CHUCK REINHARD CaDD ELECTRONICS HOWR 02/93/7 IMPROVED VIDEO RL 05/93/7 JOHN C.
LITI LIBRARY U.
LITI LOGO/MAILER 01/93/10
LITI LOGO/MAILER 03/93/10
LITI LOGO/MAILER 05/93/10
LITI LOGO/MAILER 07/93/10
"TYBOARD 06/93/10 JOHN JOHNSON'S BACK 04/93/6 LITI LIBRARY U/D #8 03/93/8 Mikey Keyboard 06/93/10 Panda P BOX 02/93/6 PROGRAMS/WRITE PGM#5 06/93/8 REVIEW DM1000 VER6.1 05/93/5 T OF C 01/93/1 T OF C 03/93/1 T OF C 05/93/1 T OF C 07/93/1 TEXAMENTS HOT STUFF 01/93/5 TIGERCUB TIPS#68 07/93/5 TIGERCUB TIPS#70 04/93/7 TRANSFER FILES TIVE 00.

XB MISC #18 RAGUSE 01/93/3

XB MISC #20 RAGUSE 02/93/3 TRANSFER FILES TI/PC 06/93/9 XB MISC #22 RAGUSE 03/93/3 XB MISC #24 RAGUSE 06/93/3 XB MISC #26 RAGUSE 08/93/3 XB MISC #26 RAGUSE 08/93/3 XB MISC ENTRY MODULE 03/93/4 XB-LOAD MODULE RAGUSE 04/93/4

PAGE 16, INDEX '93

DATE AND PAGE NO. ARE LISTED TOGETHER. JAN 93 P.16 BECOMES 1/93/16.

2.7.-END

#### HULTIPLAN EXERCISES by Herbert Schlesinger

MP2-10

Now put some figures in column 2. The cell named "Principal" should have 1000 entered into it. Place 0.1 in the cell named "Interest" and 12 in the cell named "Term" (R3C2). Thus to calculate the payment on the loan place the pointer in cell (RSC2) which is labeled payment and press the \* key. Enter this for mula:

Principal+Interest/([-(i+Interest)\*-Term) Press (ENTER) and the result, the payment, appears in R5C2. As always on a properly constructed spreadsheet, change a figure in one cell and the others respond with a new result.

GROUPS OF CELLS: !!!! Load the file " CHECKING ".

A name can refer to a single cell, to a row, a column or even a range (group of cells). Let's set up a sheet for the

keeping of a bank balance:
1. The "Beginning Balance" is typed into RIC2. (Format the cell wider if it is necessary).

2. Deposits are entered into column 1 below the label. "Deposits"
3. Checks are entered into column 2 below the "Check" label.

4. Ending Balance is shown at RIC4 beside its label.

The Formula we are going to use is this one: Beg\_BaI+SUM(Deposits)-SUM(Checks)

Since Multiplan does not allow blank spaces in cell names we must insert an underline character between Beg and Bal. Now we must name the cells and ranges we are going to use:

1. Place the pointer over the label "Deposits" (R3C1).

2. Select the Name command and we see:

NAME: define name: Deposits to refer to: R3C1
3. Press the Tab key (CTL 2) to move the pointer to "refer to".
4. Press the down arrow key so that the submenu refers to row 4 of column 1, like this:

to refer to: <u>R4C</u> MAME: define name: Deposits 5. Press the colon key a to begin a range and then the down arrow key ten times, or as many as you wish, so that we have:

NAME: define name: Deposits to refer to: R4C1:R15C1

6. Press (ENTER).

Now the cells below the "Deposits" label are, collectively named "Deposits". To name the cells under the "Checks" label, place the pointer to R3C2 and follow the steps above. You may need more spaces for checks than for the deposits.

The single cell RIC2 needs to be named by placing the pointer in it's "label" cell RIC1, except type in the name

MULTIPLAN EXERCISES by Herbert Schlesinger Page 28

"Beg Bal" as that is the name we want to use in our formula.

To calculate the ending balance, place the pointer in RIC4, press the = key and enter our formula:

Beg Bal+SUM(Deposits)-SUM(Checks)

Press (ENIER). Any data put into the Deposit column or the check column will be calculated into the Ending Balance at RIC4. You will notice that after each entry there is a lapse of time while the sheet is being refigured. As mentioned on page 8, using the flotions option to Paralr(Mo) will smend thing up had when you Options option to Recalc(No) will speed things up, but when you want the final result you must use the Recalc key (FCTN 8).

REVIEWING CELL NAMES:

When you have many cells named or even when you just forget the names you have used, the names can be reviewed by using the Mame command. Select the Name option and a cell name will appear with the cell or cells it refers to. Use the right arrow key to "scroll" through the names on the sheet. When you have found the one you are looking for, or seen all of them press (ENTER) to return to the main menu. You may also JUMP to named cells by using the Goto command. Its submenu offers Name as the first option. If you select Name, (ENTER) you are offered a name which will respond to "scrolling" as above by using the right-arrow when the desired areas appared. key. When the desired name appears, press (ERTER) and the pointer will jump to the named cell or the upper left cell in a range. If you wish you may type in the name of the cell you want and press RENTER) without scrolling through a list of NAMES.

RULES FOR MANING CELLS

1. Maximum name length is 31 characters. Names must always begin with a letter, A-Z.

3. After the first character there may be digits, periods or the underline character.

4. No other punctuation is permitted.

Do not include combinations of characters resembling cell addresses (such as R2C5).

Defaults are offered in the displays as proposed entries, but if what is there is not what you want, either type in the proper response or point to it.

To eliminate cell names, select the name command; put the name to be removed in the "define name" slot; Tab over to the "refer to" position and remove the reference. If, when you press (EMTER), the " refer to " is blank, the name is no longer active. ----------

### PRINTING:

It's a good idea to save copies of your worksheet on paper, especially those printed out with the formulas. In case of the loss of the disk you would have a record to reconstruct your

### MRETIPLAN EXERCISES by Herbert Schlesinger — Page 29

work. Multiplan allows you to place a copy of the worksheet into a wordprocessing environment for editing or for inclusion in another document.

 Bring up the sheet to be printed on the screen. (See page 5). 2. Align he paper so a perferation is just above the print head and TURN DN the printer.

3. Select the Print command (press "P" or space over and press (ENTER). We now have:

PRIMT: Printer File Margins Options Select Printer. If the sheet is too wide for the carriage of th printer, the work will be printed in sections for later assembly

If what is printed out is not to your liking (apparent double spacing or some other flaw ) you will have to change some of the defaults in this section of Multiplan. After making such changes, if the sheet is <u>Iransfer Saved</u>, these new designations will be the <u>new defaults</u> for that file.

Select Print, then Margin to get:

PRINT MARSIRS: left: 5 top: 5 print width:

print length: 54 page length:

print width:70 page length:66

If you are printing on wider paper, or using <u>Condensed</u> type, change the "print width" accordingly (Condensed used 132 for the 10% printer). Press (ENTER) when you have finished your changes and then the Printer command as above.

The "Left" option lets you set a wider left margin if desired. "Frint width" is the maximum characters on a single line. The "print length" is the maximum number of lines on a single page and the "page length" determines when the program moves to a new page.

Print Options allow modification of other characteristics of the printed worksheet. When you select Print Options, this: PRINT OPTIONS: area: setup:

formulas: Yes(No) row-col numbers: Yes(No) "Area" option allows you to print a portion of the work sheet. Just show a range in the space provided; if more room is needed, Multiplan automatically provides the extra space. The "formulas" option, if YES, prints out the formulas for any cell rather than the result of the calculation. The columns will be widened out to 20 spaces and all text appears in quotation marks "Row-col numbers" is just that. If Yes is selected the row numbers and the column numbers are printed out with your worksheet. Notice that both of these last two are defaulted to

"Setup" allows special codes to be inserted so that signals to the printer may be placed here. The printer manual will provide the code for, say, condensed print ( for the 10% it is "Esc B 3" or CHR\$(15)). Entered here, along with P10 if you have a parallel printer will do the job .

MULTIPLAN EXERCISES by Herbert Schlesinger Page 30

To use the PRINT on file command, merely enter a drive and then the filename you wish use to preserve the sheet. This saves a D/V 80 file, allows editing and also permits the file to be incorporated into a word processor document.

LINKING SPREADSHEETS:
!!!! Bring " MEN'S " to the screen, and when you have dealt with that, then " WOWEN'S " and after that, " CHILDREN'S"

CHILDREN'S"

Spreadsheets can be of two classes: "supporting spreadsheets" and "dependant spreadsheets". Supporting sheets are independant spreadsheets which are complete in themselves for the information they contain, such as a department, accounts payable, accounts receivable, or whatever. But these sheets can be Linked to a dependant sheet which takes figures or information from the supporting sheet(s) and co-relates the information. As an example we will set up four sheets linked together: "HERB'STORE for Herb's Store; "HENS"; "WOMEN'S"; and "CHILDREMS" as departments of the store. These departmental sheets will be the supporting sheets and HERB'STORE is the dependant sheet which brings data from each department together for analysis. together for analysis.

These sheets have been set up under those names on the disk and in this case they should be printed out using the Printer options mentioned previously so that they are at hand for reference; since only one of them can be on the screen at a time,

reference; since only one of them can be on the screen at a time the others in hard copy will be handy.

Any data which will be transferred to the dependant sheet must be named (use the Mame option from the main menu) so that the dependant sheet can easily call for that information.

Understand that when the dependant sheet is "loaded" the supporting sheets are also checked to be available for the depenant sheet even though you can not reference them in that way. In this case the Items which must be named are "Gross Profit on Sales and "Total Expense". To do this place the pointer in cell R7C2 (on MEN'S dept sheet) and, using the Mame command, type in Sales as the name for this cell. Move the pointer to R1SC2 and name that cell Expenses. Do the same for the other two department sheets.

!!!! Now bring up the dependant sheet HERB'STORE and this is what you have:

HERB'S STORE Department Summary

> Hens Nonens Children. Coatined

Sales Expenses

MULTIPLAN EXERCISES by Herbert Schlesinger

9 Profit 10 il Percent

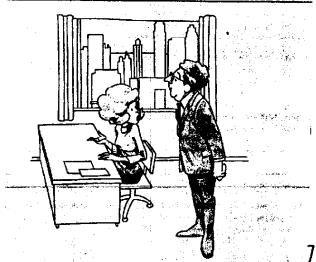
Format the sheet so that the numbers: R6C2:R9C5 are set for currency (\$), and R11C2:R11C4 are formatted for percent (%) display. Labels in R4 should be centered, and RIC3:R2C4 are formatted as continuous (Cont).

Row 9 will have the formula RI-31C-RI-21C copied into columns 2,3,4 and 5. Row 11 will calculate the percentage of the entire profit by dividing the departments profit by the combined profit in R9C5. Use RI-21C/R9C5. The "combined column" uses the formula SUM(RCI-31RCI-11 for each of the two cells involved. The profit cell in C5 was figured as the others. When all of this is done, the totals show \$0.00 and the percent shows an error (#DIV/0!). This is because we have divided by zero (R9C5), BUT as soon as some figures are entered in the cells, this will correct

That should get anyone started with MULTIPLAN. There are so many uses for a spreadsheet: Mailing lists; Checking accounts; Tax forms; Investment records — the list is endless. If you have questions you could send me a letter, but your best bet is to ask someone in your Group. Usually there is at least one person who will know. As a last resort, READ THE MANUAL. Its a lot to plough through, but most of the answers are there. Good luck! Herb. MULTIPLAN EXERCISES by Herbert Schlesinger Page 32

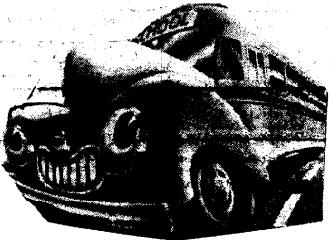
## LAUG

BY BUNNY HOEST AND JOHN REINER



"I hit 'delete,' and the computer disappeared?"









LONG ISLAND SOUND

The Newsletter LONG ISLAND 99er's

JERRY STOCKLER.VICE

FRIDAY EACH MONTH AT TONY'S HOME

> 93 MYERS HUE HICKSUILLE, NY 11801-2424

JACKSON AUE.

ADDRESS

MILES ACROES THE STREET EFING THE FAMER GURNEE COMPUTER OPERATORS, USERS METCOME Gurnee, Illinois 6161 West Grand Avenue HOLIDAY ING SAGA Oct.30 1993. 9:00 AM At the

Invites all to the FAIRE on THE CHICAGO T.I. USERS GROUP

£66I

DALLAS TI GROUP LISA SHAFFER P.O. BOX 29863 DALLAS TX 75229 USA 9308 <-LAST NL RECEIVED