



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

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## WE'RE 11 YEARS OLD



# COME CELEBRATE 16 OCTOBER 1993

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ty Niners Inc. is a non-profit organization comprised of ME MBERS who own or use the TI99/4A computer and it's related products and have paid a yearly membership fee of \$25 and whose main objectine is the exchange of Edu-

cational and Scientific information for the purpose of computer literacy. C.C.N.N.I. meetings are held the 3rd sat -urday of each month at Chemical 254₿ Abstract, Olentangy River Road Columbus, OH. Meeting time is 8:36 AM til 2:30PM, Meetings are open to the public. Membership dues (\$28.88) are payable yearly to C.O.N.N.I. and cover the immediate family of the member. Please send check to our membership registerar and join C.O.N.N.I. Please address it to: Everett Wade

179 Erie Road Columbus, OH 43214

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### ABOUT THE DOM

ABOUT THE DOM Sept. 1993 \$73

Note: This is the first disk prepared by Ken Marshall. Chuck is helping him find material and is advising him on production.

Contents: (Unpacks to -sectors)

- A: DSKU5^ 101 P&WDSSD 709^
- B: DM20^ 143 HFSTEPTXT^ 26 MINESW^ 147 NAUNERLS^ 309 READ-THIS^ 25

All of these files, including the READ-THIS', are archived, and must be unpacked using Archiver 3.03 or 3.036. If you don't have it, contact Ken.

All of these work on both the 4A and Geneve, except for DM26^ and HFSTEPTXT^, which are for Geneve only.

On side A, DSKU3, by the late John Birdwell, is the final version of his wonderful disk utility program. Includes many file and disk utilities. Also lets you modify assembly files. If you don't have it, you need it. Not for use on hard drive.

PAWDSSD^--requires
double-sided disk--is the
great orchestral work by
Serge Prokofiev, programmed
brillantly by Harold
Timmons of C.O.N.N.I. You
are not going to believe
the orchestral effects in
this program. Run it
through your stereo, if
possible. The original
music is voice narrated;
Harold has provided
on-screen printed narration
as a substitute. Very good.

On side B, the first two programs, for Geneve only,

are: DM28^ v. 2.8 . A new release by Clint Pulley. Directory manager for MDDS 1.58, H and F variants. Fairware. Also: HFSTEPTXT^. Seneve only. Knowledge of sector editing desirable. Allows setting of headstep speed for MDOS "h" version 1.23 or 1.58 .

Also on side B, MINESW^, a new minesweeper game written in c by Clint Pulley (released June 1993).

Completing side B are
NAUNERLS^ and READ-THIS^.
The latter is the directory
of all programs on the
disk, with explanations.
The former, released to PD
by Harrison Software, is
Nannerl's Notebook, by
Leopold Mozart, father of
Wolfgang, written for his
daughter, Wolfgang's
sister. Autoruns from
Extended Basic. Even if you
are not into Baroque music,

(I prefer the 19th century Romantics, myself), listen to and enjoy this as a wonderful job of programming the 4A with unbelievable sensitivity, making it sound like a harpsichord and various other instruments. Hats off to the programmer. She is a perfectionist who spends wonths preparing one such group.

As you can see, the tradition continues of bringing you the latest available offerings for 4A and Beneve. Write and let us know what kinds of files you prefer: music, utilities, home applications, graphics, etc., so we can watch for new releases that best fit your needs and desires. See you next month!

Great job, Ken!

### C.O.N.I. MINUTES

MINUTES Saturday 21/Aug/1993

President John Parkins opened the meeting at approximately 7:15. George Seibert donated a P-box. John will use this to bring to meetings instead of having to tear his own system down. Discussed were the Extender Card, for use during diagnosis, and the club's portable, which hopefully will be repaired soon. Chuck Brimes and Curt Borders are to work on this. Due to a relaxation of policy by Ohio Bell, we have reduced our monthly BBS phone bill from over twenty-one dollars to \$12.48. Cautions: all phone lines will soon be touch tone--rotary dial phones will be inoperable; when shopping MicroCenter for disks and/or mailer, be sure to watch the ads. Prices keep changing. Chuck discussed ways to keep disk mailing costs down--don't put in paper, try various postoffices

for better rates.

Dick Beery expressed an

interest in Internet access, as outlined in

Micropendium. Costs and methods were discussed.

A poll was taken to determine how many might go to the Chicago Faire, which is in a new location. Very few, apparently.

A possible project using TI computers with 4th and 5th graders in local schools was discussed but abandoned for lack of personnel to implement it and because of low PC costs in today's market.

Contents of the D.O.M.

were explained. Following
this, Jim Peterson

provided two demos:
Traceprint, a tracing
program with Assy.

Screendump to printer;
Showtrace; Escher Art
v.1.2; and Transliterator.
John Parkins demonstrated
the new wordprocessor by
Art Gibson, available from
Asgard—First Draft.

Respectfully submitted, Dick Beery, Co-Secretary MINUTES Saturday, 18/SEP/1993

President Parkins opened the meeting at 9:30. He announced that Jack Montag's wife is hospitalized. A collection was taken for flowers and a card. Individual cards were encouraged.

The October meeting will be C.O.N.N.I.'s eleventh anniversary. Plans for the celebration were discussed briefly. Hopefully, a committee will finalize and execute plans.

Ramdisk problems and solutions were discussed. Headstep drive problems were addressed. Suggested for diagnosis was Miller's Diagnostics, an older but capable disk-based program.

Price for MICROpendiums
has increased by fifty
cents. This will be passed
along to members

purchasing at the meetings--a motion to raise the price to \$2.5₽

passed unanimously.

A matter that had been discussed informally during the two previous meetings was discussed again and brought to a vote. The decision was made to discontinue the Wednesday C.O.N.N.I. meetings. Low attendance and apparent lack of interest were cited as reasons. Two members will be inconvenienced by this decision: Jack Montag and Harold Timmons. The motion carried with but one negative vote.

PLEASE BE ADVISED, THEREFORE: THERE WILL BE NO FURTHER CONNI MEETINGS ON WEDNESDAYS.

Following a couple of brief demos, the meeting was adjourned.

Respectfully submitted, Dick Beery, Co-Secretary

### DUES ANNOUNCEMENT

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:

MAR-20.00 APR-18.33 MAY-16.67 JUN-15.00 JUL-13.33 AUG-11.67 SEP-10.00 DCT-8.33 NOV-6.67 DEC-5.00 JAN-3.33 FEB-1.67

A DEAL
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Now you can have the best of both worlds— Keep up to date on the latest news from the TI-99/4A world with a subscription to the Spirit of 99 Newsletter AND get an up-to-date collection of new public domain and shareware programs with the Disk of the Month—Both brought to you by the Central Ohio Ninety-Niners, Inc.— No newsletter published in August.— January newsletter is an index of all articles published during the previous year.— 10-SSSD "flippy" DOM's published annually.— At times, two diskettes depending on the availability of new material.—the NL is mailed 1st of the month— DOM is mailed about the middle of the month.

SUBC	RIPTION RATES
Annual members  \$  \$  \$  \$  \$  \$  Everett  Central Oh  179 Erie Road	thip including newsletter:  20 (U.S.A.)  35 (U.S.A)  40 (outside U.S.A.)  Wade, Membership  io Ninety-Niners, Inc.  Columbus, OH 43214  4) 262-6346
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Make check payable to C.O.N.N.I.	DSDD

OCT. 1993

PAGE 4

by Geoff Trott, Illawarra Regional Group, 1988

As I was thinking about the TND and the problems of what to put in the first issue of a new year, it seemed that an index of the previous year's effort would be very useful. This would add to the one produced last year by Brian Graham and provide a way of making it an ongoing affair. Done in this way, year by year, it would not be too daunting a task. That was the start of many hours of work.

I am not a data base person, but I have used Multiplan a bit, and I find that it caters for my data base needs. Personal Record Keeping always seems too inflexible to me, and my brief attempt to do something with Data Base Manager did not get too far. I have done quite a few things like student records with Multiplan, and although slow at times, it does a good job within its limitations, and is relatively easy to use. What is that I hear you say? Well at least the menu of things you can do at any time is always in front of you. I can not help it if you do not understand what all those choices are. Perhaps I can help however, if I explain how I used Multiplan to create the index for 1987, and then obtained the two indexes sorted by Title and by Author.

First, consider the problem. What I want to do is to go through each magazine in turn and type up its index. That is I want to type in the Title of an article, the Author and the volume number - page number of the article. I decided to put in a description as well, as some regular features could do with a description qualifying the title. For example, Link-it £14 is not a very complete description, or letter to the Editor, and so on. So there are 4 things to be filled in for each article. Hold on folks, sometimes there is no Author as such shown, but the magazine or organisation is given. This is catered for with a fifth entry. The nice thing about Multiplan is that all these decisions could be made after starting to enter the data as the need arises.

Multiplan is a spreadsheet program, which means it holds the data in rows and columns. It has a maximum of 255 rows and 63 columns, so used 5 columns to hold the Title. Description, Author, Page number and Source of an article. Then each article was on a row. and Multiplan allows the rows to be sorted. based on the contents of one column. All the data for each article could be entered in any order, and then sorted according to the contents of one of the columns. It is also easy--to--copy-cells-from-one-to-another,-or-togroups of cells, which can speed up the entry of numbers of similar items. In fact the index of one month can be the basis of the next month's index. Anyway enough of these drivelling generalizations, on with the actual facts of this case.

Put in the Multiplan cartridge and get its loading message on the screen. At this point you can press space twice to change the screen colours. I like black on green, so I stop but you can cycle around there. the combinations and stop at one you like. When happy, press (ENTER) and Multiplan loads from a disk called TIMP in whichever drive you have put it. After a short wait, a display of 18 rows and 4 columns appears on the screen with a selection menu beneath it. There is a reverse video bar in the top left corner of the spreadsheet and also over the first item in the menu 'alpha'. The bar on the spreadsheet can be moved about with the arrow keys, FCTN giving one cell motion, and CTRL giving screen motion.

The menu bar can be moved with the space bar or tab (CTRL(A) or CTRL(2)). Pressing (ENTER) causes the selected menu item to be active. It is quicker to press the key of the first letter of the menu item.

Example: The first thing I do after loading Multiplan is to press O for options menu. Then press N to set recalculate to no and press (ENTER). Then I press T for transfer and O for transfer options. Then I press CTRL(A) to step over the first item in that menu and type in DSK2 in the setup field as I have two disk drives and store my data on disk 2. Then I am ready to start to enter data or read in some data from a file already on disk. Let us assume I am starting the entry of data at the start of the index.

I am only going to enter text or alpha data as the page number will be of the form V6.4.16 for Volume 6 (1987) number 4 (May) page 16. A number cannot have two .'s or any other delimiter so all data will be text. Sometimes you have to be careful as Multiplan is waiting for either text or numbers and makes its decision on which it is by whether the first character is a number or not. This is another reason for using a V as the first character of the page number. First you will notice a message "enter a command" when the menu is present. To start then, press A and the menu disappears and the prompt ALPHA appears. The first thing to enter is the heading of the first column in row 1 column 1. This will be Title, but if the first character is a space then it will stay at the top of the column when the whole column is sorted. So type in ' Title'. If (ENTER) is then pressed we return to the menu and what was typed in goes into the if right arrow is pressed (FCTN(D)), the highlight box moves one cell to the right and the prompt ALPHA/VALUE appears so that it is ready for the next item of data. Type in 'Déscription' but be careful to pause after the first character to give it time to decide that it is ALPHA you want. You only have to pause after the first character when the ALPHA/VALUE prompt shows. You can avoid this by pressing (ENTER) twice to select ALPHA, but this is slower anyway. Using the arrow keys to go across and back and down the spreadsheet, slowly the data is entered. To take a break, or just for safety's sake, save the data periodically. From the menu type T followed by S for transfer save, and then type in the filename, without the DSKn which has already been setup with the transfer option The file name will be already there if it has been loaded or saved during this session. Just press (ENTER) then and wait. If the file has been already used for Multiplan then you will have to confirm that you want to destroy the existing data. However, if the file exists but is not a Multiplan data file, it will be destroyed without any confirmation.

One of the most annoying things about data entry in Multiplan is to get used to making corrections with FCTN(0), FCTN(9), FCTN(4) and CTRL(4). The arrow keys are used for other things, so they cannot be used for moving the cursor through the data. It takes some getting used to and then causes uncertainty when using TI-Writer for example.

Data entry is quicker if all the cells are using the defaults, which means all the data does not appear on the screen, but we can fix that after we have everything in there. About the end of Number 6 there was only 17% memory left and 175 rows entered. Time to start another file, but how are we to sort over two files? Things are starting to get interesting at last.

So after all the data is entered there are two files each of which almost fills Multiplan's buffer, one with 175 rows and the other with 157 rows. Each file could be sorted on Titles and on Authors, although since I entered authors with first names first, they were sorted by first name. Also with the move commands of Multiplan, it is easy to change the order of the columns and rows. To get the whole index in alphabetical order of the titles the following steps are followed.

First sort the two files separately. It takes about 2 minutes to sort each column with the amount of data present. Then a halfway point must be chosen so that the first half of the two files can fit into Multiplan so they can be merged and sorted. The idea is to end up with two files containing the two halves of the sorted index of the whole year's index. Once the division point is found, say on the word Program, then all titles which start with a word before Program will be in the first file and those after and including Program will be in the second file. To get data from one file to another requires the use of external copy command. To use this, the parts you wish to move to another file have to be named. Press N on the menu selection, when you will be asked to type in a name: Enter a suitable mame and press CTRL(A) and then define the area in rows and columns which you want to access. you are in each file, define a name for both halves of the data. Then enter a new file and press X to get to the eXternal copy menu. Here you must enter the file name, CTRL(A), the area name, CTRL(A), the cell where you want the area to start, CTRL(A) and N for no to linking. This is done twice to get the first half of the titles from both of the other files. Then the data can be sorted again, but this time all columns are sorted in reverse order to that which they are going to be printed. example, for the title sort, first the page number is sorted, then the author, followed by the description and finally the title.

Frinting from Multiplan has one problem. It will only print 80 characters on each line, so all the data must be arranged to fit in there. Another constraint is that it is only possible to change the width of a column to a maximum of 32 characters, which is the maximum that can be displayed on the screen. This can be overcome with continuous format. I decided to use the following column widths; 32 columns for the title, 23 for the description, 17 for the author and 8 for the page number. These are set using the Format command, by entering F followed by W with the cursor on the column of interest.

To print, press P to get the print menu and then press O to set the options of the area to be printed. Then go to the margins setup and set the top and left margins to O, and the print width to 80. The print length and page length are set to give the output all on one 'page'. Then print file is chosen and a file name entered as the whole index will be merged and tidied up in TI-Writer. The file is produced after a wait and then the second half of the index is processed similarly.

The print files are about 54 sectors long and are both loaded into TI-Writer editor and some editing done, such as titles at page breaks, and removing the 'V7.' from all the page numbers. This all is reasonably simple and the final files are 117 sectors long. They are printed directly from the editor using 10 characters to the inch to spread the 80 characters out further. With the author index, the contents of the fifth column are moved into the first column where necessary, and multiple authors are given their own entries.

Checking the data for errors is aided by the sorting process. First the files are sorted into page number order, and the entries for each month checked with the actual magazine to locate any missed entries. Then the other columns when sorted allow the consistency of the use of capitals and spelling to be checked, and that names are consistent. After all the effort I was quite pleased with the result and so I used the same method to generate the index for the February issue as well which then will become the start of the next year's index. I started to enter-this same one issue-index into-PRBase, a data base program which came with my new AT disk controller card, and found that although quick and relatively easy to use, it had some annoying quirks too. At this stage I am still convinced that Multiplan is as good as anything for this job, but PRBase may do it just as well if I was as familiar with it as I am with Multiplan.

### GENBUG2

An update by author

Allan Cox

Allan called me to ask if there was still an interest in a good genealogy program among the CONNI members and I told him yes. Allan has spent many hours improving his original GENBUG program. GENBUG2 prints out a quality family group sheet with the data right on the form.

This fairware program comes on 3 DSSD Disks and it requires 32% to run. SENDUS2 has been programmed to print out the data on a Gemini 16% printer and is Epson compatable. It is not available for other printers.

If you are interested in receiving a printout of the family group sheet that is created with this fairware genealogy program; write to Allan at the following address:

Allan Cox 728 Jefferson Blvd Tarrant AL 35217

Please support our programmers so we can continue to get excellent programs now and in the future.

Editor Jean Hall

PAGE 6 DCT. 1993 SPIRIT OF 99

## PROJECTING RETIREMENT INCOME Using the Spreadsheet by Dave Howell

Erie 99er User Group

Some of you already know that I have been planning to retire from the school district. Well, the time has arrived. I will be entering the rapidly growing world of senior citizens - or what whatever you call those wonderfully resourcefull people on fixed incomes. Anyway, I've been planning for this day since the early 80's never realizing that I would actually be looking forward to it! That's when I seriously embarked on building a nest-egg courtesy of the IRA. Actually, I was just looking for a way to reduce my income taxes at the time. Ever since then, I took an interest in where to place the money wondering if I would ever have enough to live on in retirement and when that day would come.

Five years ago, I began receiving pension estimates from our retirement system with which to do some number crunching. I also needed to estimate what our investments would be worth and how much we would need to live on each year throughout retirement. In other words, what figure should we use as the most prudent "cost of living" factor and "percent of yield" for our investments. How much insurance should I carry, if any, to protect my beneficiary and which pension option should we select? This is a mighty tall order and one that most people of modest means must come to grips with sooner or later.

I've received all kinds of advice from insurance and stock brokers, from financial planners and tax accountants, from friends, business associates, retirees, and family members. When word gets out, there's no stopping the flood of "well-wishers" hoping to benefit in some way.

Many things have been learned:

- (1) Everyone's situation is different and doesn't necessarily fit a standard financial mold.
- (2) Realize that most of those professionals who seem eager to give you free advice have something to gain in doing so.

- (3) Seek as many alternatives and quotes you need to feel confident in arriving at the most appropriate arrangement you can live with.
- (4) Determine the parameters of just what you expect from your retirement years; what do you expect to accomplish, what kinds of activities do you wish to get into, and, are those expectations realistic in terms of your financial resources?

There are no hard, fast, air-tight guidelines to determine the solution for everyone. One must laboriously go through the process to discover the best course of action. To help facilitate the process, I turned to the computer. Gosh. what did people do before the personal computer?

But try to find suitable software to project all of the variables of retirement financing over a period of say - 20 or 30 years! Some "financial planners" and insurance outfits have "in house" computer programs that are able to project your resources against need but because they were in someone else's hands. I didn't feel confident with the results. I needed a process I was familiar with. I found a few programs which accept some of the basic data that determines if there is enough to retire on but they didn't paint the picture for each year down the road. Nor could the variables be changed to observe the "what if" on your standard of living at any point in time. I even tried to find an MS-DOS program with which to convert for use on the TI. I found nothing suitable.

So, I decided to use the spreadsheet format as a number-crunching tool. And a mighty fine decision at that. It's the spreadsheet that can take all the required variables, calculate and display the results over a period of time.

Since the bulk of my experience with computers involved the TI-99/4A, I decided to use the TI MULTIPLAN. As a novice to MULTIPLAN, I had to learn to use it first. It was well worth the effort! The resulting spreadsheets were indeed very crude but promising. Over the next few months I succeeded in refining the design to the point of impressing several investment counselors. In preparing for this article, I decided to streamline the spreadsheet to

permit changing the outcomes instantly simply by changing one or more variables.

The spreadsheet displayed herein shows the results of a hypothetical situation over a period of 20 years. The display is divided into two sections: The first five columns gives projections for a retired couple. The second four columns attempts to display the spouse's finances beginning with the year of the retiree's death.

there are six variables to which I've assigned appropriate values:

40,000-Beginning joint income.
30,000-Beginning income for surviving spouse.

1.050 -(5%) Cost of living factor. 150,000-Initial investment.

0.080 -(8%) Investment yield factor.

100.000-Life insurance proceeds on

100,000-Life insurance proceeds on retiree for spouse.

1	1	2 FWMXJTSE	3 - RETIR	4 EMENT INC	5 COME PROJE	6 CTION (JO	7 DINT/SPOUS	8 Œ)	9	10
2345678		SPOUSE I COST OF INITIAL INVESTME	COME NEE INCOME NE LIVING F INVESTME INVESTME SURANCE P	EDED - ACTOR - NT - FACTOR -		(SINC) (COL) (INV)		ONS FOR		
10		JOINT	PLANNED	INVESTMT	EXCESS/	INVESTMT	SPOUSE	PLANNED	INVESTMT	INVESTMT
11		INCOME	INCOME	YIELD	SHORTFAL	BALANCE	INCOME	INCOME	YIELD	BALANCE
12		NEEDED	Pension+			150000	NEEDED	AVAILBLE	<b>.</b> !	C6-C7+C8
	YR	· — •	35+0the:		C3+C4 C2	æ::€6	SINCYCOL	55+Cther	C6xIYF	+CS+LINS*
14								•		
15	1	40000	- 47335	12000	19335	169335	30000	12107	12000	244107
16	2	42000	37150	13547	8697	178032	315Ó0	13066	13547	264448
17	3	44100		14243	12243	165789	33075	13024	14243	272223
18	4	46305	40050	13263	7008	172797	34729	13385	13263	257709
19	5	48620	40432	13824	5636	178433	36465	13756	13824	263912
20	6	51051	40825	14275	4048	182481	38288	14139	14275	268558
21	7	53604	41224	14599	2219	184700	40203	13533	14599	270410
22	8	56284	41646	14776	138	184838	42213	13939	14776	271202
23	9	59098	42076	14787	-2235	182603	44324	14357	14787	269658
24	10	62053	42518	14608	-4927	177676	46540	14788	14608	265459
	11	65156	42971	14214	-7971	169705	48867	15232	14214	258255
26	12	68414	43443	13576	-11394	158311	51310	15689	13576	247660
	13		43927	12665	-15242	143069	53876	16159	12665	
28	14	75426	44425	11445	-19555	123513	56569	16644	11445	
29	15	79197	44937	9881	-24379	99134	59398	17143	9881	191139
30	16	83157	45466	7931	-29760	69374	62368	17658	7931	
31	17	87315	46010	5550	-35755	33618	65486	18187	5550	
32	18	91681	46570	2689	-42421	-8803	68761	18733	2689	
33	19	96265	47147	-704	-49822	-58625	72199	19295	-704	1 37589
34	20		47742	<b>-4</b> 690	-58026	-116651	75809	19874	-4690	<b>-19249</b>
35 36		Includes	100000	life ins	turance on	retiree	for spous	se		

Now that you've had a look at the sample spreadsheet and you are still interested, let's examine the variables in greater detail. Then we will take a look at the column structure and their implications.

Joint Income Needed (INC). The initial amount needed for both the retiree and spouse to live on for the first year of retirement. Much care must be taken in determining a realistic figure. The popular rule of thumb that you could live on approximately 80% of your current income is, for all intents and purposes, about as reliable as your "arthritic thumb." You should gather all of your receipts and records for the past 12 months (a very convenient proposition this time of the year!) and deal with each line item separately. Try to determine if the specific expense will exist or change in retirement. Take into consideration what kinds of activities you hope to be pursuing in retirement - beyond loafing and goofing off! Don't forget medical and/or long-term nursing care insurance. Also remember that a good portion of your monthly pension payments and possibly social security payments and any earned income you may have will be subject to income taxes.

If space permits in this newsletter, I will include a suggested list of expense items that I used to project our living expenses in retirement. If not this month, you will see it in one of the succeeding issues.

Spouse Income Needed(SINC). As with Joint Income Needed, this is the amount estimated for the spouse in the specific year he/she is widowed. Again, each expense category must be examined carefully in terms of anticipated lifestyle changes while living alone.

Cost of Living Factor(COL).

Obviously, the expense of living will increase somewhat each year if you wish to maintain your standard of living. The figures shown in both joint and spouse income columns are multiplied by the COL each year. As can be seen, the effects of COL down the road are rather brutal to say the least! The COL is a formidable threat to any and all retirement plans for those on fixed incomes.

Initial Investment(INV). This is the amount of your current nest-egg or the nest-egg you expect to have upon retirement. If you are of modest means, as we are, you will undoubtedly needed the income from this investment to supplement your fixed income from pensions, social security, etc. I found that initially, our income from pension and social security sources accounts for only 60% of our total income needed when I retire! Less for each of the years thereafter. That's why this nest-egg is mandatory.

Hopefully, the yield from this investment will be enough to see you through the rest of your life in spite of COL and your lofty retirement dreams. Some say you must try to preserve, or even increase, your nest-egg at all costs AFTER retirement. Others say that there is nothing wrong with gradually depleting your principal investment as the years pass, unless, of course, you want to leave it for your heirs. You should, however, keep in mind that the older you get, the less time you will be around to need it — according to life expectancy projections.

when estimating what your initial investment is going to be, you should be aware of the tax bites on any funds or roll-overs when implementing your retirement plans. There are new rules in effect January 1st of this year which may govern the taxes you pay on funds "rolled over" from 401(K) and similar plans.

Investment Yield Factor(IYF). Just as elusive as estimating the COL or your life expectancy is the guess of how well you think your investments will do during your retirement. In addition to a volatile stock market, you must consider the type of investor you are. Are you conservative — unwilling to take sizeable risks? Or can you sleep well at night knowing that the bulk of your funds are in higher risk investments?

Obviously, the conservative investor, at this point in time, is playing footsie with the COL. That's fine if the size of the nest-egg is large enough to see you through the rest of your life - or at least until the yield returns to a level significantly higher than the COL. I have a recently widowed 82-year old neighbor

whose investments are in CD's and money markets. I was very concerned about her future until I realized that at her age she could easily live well on what she has left without earning much of a return on her money.

At the other end of the scale are those who invest aggressively in an effort to stay well ahead of the COL AND current living expenses before cutting back to safer territory. If the bottom falls out of the economy, well.....

Then there are those who seek a balanced portfolio so that no matter which way te market goes, the impact is minimized - in either direction.

More and more investors, these days, are finding it desirable to invest in the rapidly expanding world of mutual funds. A mutual fund, depending on your goals, spreads your money among many markets thus cushioning the effects of a rapidly swinging market and avoiding the "sudden death" syndrome of investing in individual stocks or bonds.

Life Insurance Proceeds (LINS). Don't forget to include any insurance you might have on your life in the "Investment Balance" for your spouse upon your demise. I've taken this factor into account in the last column of the spreadsheet to arrive at the estimate your spouse will have on hand at any specific year of death. I used this column to help determine how much, if any, life insurance proceeds your spouse will need at any point down the road.

Since I was "insurance-poor," I used this information to shop around for insurance. This is a bewildering task made more difficult by aggressive salespersons promoting a plethora of insurance products. They ranged from term life insurance to the more elaborate cash value annuities and insurance trusts. You have to decide whether you want to use insurance as a savings vehicle that could provide a significant monthly payout at some point later in your retirement, or simply for a basic face value payout to your beneficiary. It has been my experience that insurance brokers will try to move you into the more expensive cash value policies. These policies including

tax-deferred annuities are more expensive (much of which goes to sales commissions, at least for the first year).

Since I couldn't "hack" spending from \$5,000 to \$9,000 of my retirement income EVERY YEAR during retirement for a cash value \$200,000 policy. I popted for a universal life policy at less than half of the above premiums. In the process of looking for suitable policies. I found \$100,000 term life iinsurance policies whose annual \$800 premiums were very inviting indeed! But the term is only 10 or 15 years. After that, you will pay close to triple that amount to renew the policy IF you pass the required physical! I decided not to base my spouse's financial well-being on my health.

The key to finding the right insurance program AT AN AFFORDABLE PRICE is to shop around. I first went to "big name" companies for estimates. Then checked out identical policies with lesser known but equally rated companies whose rates were much more reasonable. When I say "identical policies," I'm referring to things like the same rate of return (cash value) over the identical number of years. One almost has to be an actuarial expert to avoid the pitfalls in buying insurance even if you trust your insurance agent.

### THE SPREADSHEET FORMAT

As I mentioned earlier, the spreadsheet is divided into two exhibits. The first five columns show the utilization of current (fixed) income and investment income in financing the needed income for two people. If you are single, there is probably no need to consider the information in the last four columns including the life insurance.

The challenge is set by the "Needed Income" increased each year by the COL. Adjusting the initial amount up or down for the first year will, of course, proportionately affect the amounts for subsequent years.

The second column should show the totals of the regular income you expect from pensions, social security, and, perhaps, earned income from a part-time job, rental unit, or some avocational

endeavor. This should include your spouse as well. Don't include income distributions or payouts from investments. Those funds should be included in the "Investment Balance" column.

YOU MAY CHANGE THESE AMOUNTS FOR ANY YEAR AT ANY TIME in order to adjust your financial plan as experience dictates. That is the beauty of spreadsheets. If your income rises or your expenses decrease during any specific year, you can make the required adjustment to see how it affects the years to come.

The "Investment Yield" is simply the Investment Balance times the Investment Yield Factor (IYF). the Investment Balance for the first year is the original amount prior to retirement (in this case \$150,000). For each of the succeeding years, the Investment Yield is calculated on the previous year's Investment Balance.

The Excess/Shortfall column contains the amount that both the Planned Income and Investment Yield combined exceeds or falls short of the Income Needed (first column). A plus figure (numbers with no sign in front - I don't know how to put a + sign in MULTIPLAN) indicates the excess that is added to the Investment Balance. negative sum indicates that the combined Planned Income and Investment Yield did not meet the Joint Income Needed and the resulting shorage was subtracted from the Investment Balance column. In other words, your nest-egg is being raided! That's alright if you still have enough to last the rest of your life! Why not extend the spreadsheet another 10 or 20 years to make sure? I dare ya!

The Investment Balance column (6) indicates that I would run out of funds by the 18th year of retirement assuming, of course, that all of the variables remained the same throughout. Had this been my projection, I probably would hold off retirement until the Initial Investment increases substantially up to perhaps \$200,000. Or perhaps I should find ways to cut our living expenses somewhat below \$40,000 (\$30,000 for the spouse). In any event, using a spreadshet like this alerts us to what's involved and how those factors affect our future.

The last four columns under "Projections for the Widowed Spouse" are designed to reflect outcomes similar to those seen for "Joint Income." The "Planned Income Available" column (8) would include the re-calculated Social Security benefits for the "surviving spouse" and any monthly pension payments if any joint survivor option was selected at the time of retirement. In this sample, I chose to withdraw all of my contributions plus interest and selected the maximum option leaving my spouse with no residual benefits. Was that callous of me? No, not really. I found that we could do much better re-investing my contributions than we could receive had we left my contributions in the pension system for my spouse. The premiums spent for life insurance were more than covered by the increase in benefit under the "maximum" option for me. That, of course, is one situation. Obviously, it is not necessarily applicable to every situation.

proceeds from life lump-sum Any insurance or annuities occasioned by the death of the retiree should be added to the Investment Balance column (10). In the sample spreadsheet, the Life Insurance (LIMS) proceeds (\$100,000) was added to the "Investment Balance" column (10) for each year as if death occurred during that year. Accordingly, the "Investment Balance" in column 10 begins with the Investment Balance for the previous year in column 6 minus the "Spouse Income Needed" in column 7 plus both the "Planned Income" (8) and the "Investment Yield" (9) plus the Life Insurance proceeds (LINS), which in this case is \$100,000. It is NOT a continuous balance from one year to the next. That is the balance that should become the "Initial Investment" for the surviving spouse's new projection for the rest of his or her life.







\*\*\*\*\* TI-181 \*\*\*\*\*

**OUR 4/A UNIVERSITY** 

by Jack Sughrue
Box 459
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#4 ROOTS

Originally appeared Bits, Bytes and Pixels Lima US Newsletter

Last session, Class, we had a couple questions from Mr. Shakespeare over there by the window. He said he had a nephew in junior high and two elementary school grandchildren.

Okay. Okay, Mr. Shakespeare. Just put your grandchildren's pictures away. So long as we know one's 8 and one's 4 and that your nephew in junior high is having trouble reading.

Got that, Class.

He wants to know what the TI can do for him. Or, more specifically, for the significant kiddles in his life.

There are so many directions one can go here that I'm not sure where to begin. Because I'm so text oriented, I think I'll begin with some sources that may not be dried up yet. There are real books like Fred D'Ignazio's TI PLAYSROUND, which I'll discuss during another class. But, first, I want to discuss Newsletter Childrenware.

Iounds, Mr. Shakespeare! Just be patient. I'm sure I'll answer your questions before you even have to ask them.

Now.

Er, oh, yes; the newsletters.

There were so many great newsletters over the years that provided good, solid, educational material in so many enterprising ways — ways that let the adults learn along by typing in the programs. It would be impossible to even list them all on the blackboard here.

Let me just take a super example and hope that her materials are still on disk in the club's library for new massive circulation.

Sue Harper (the present librarian of the Pittsburgh User Group, P.O.^Box 8843, Pittsburgh PA 15216) for years wrote a wonderful column called "Kiddie Corner" (note she didn't succumb to the temptation to misspell "Corner" with a "K") and reviewed material for young (and old) learners. Sometimes the older learners could type the programs for the younger learners.

Although I never met Sue, I have been an admirer of her creativity and writing talent for years.

Anyway, Class, while I was preparing some notes I uncovered some of the old "PUG Peripheral" newsletters and want to share a bit of a Fall '89 issue (when her son was 9 and daughter 11):

"This month, since we are all getting back into the swing of things with school, I thought I would give you a little quiz. Yes, indeed, you can tell I used to be a school teacher! Really, it's not a hard quiz; it's a take-home (for sure) and you have a sonth to do it! Just five questions, and then a little program to amuse you until next sonth, when I will give you the answers!

- 1. Write a program that will make the screen blink the colors of fall.
- 2. Write a program that will play 'Mary Had a Little Lamb.' I'll help you on that one the notes are A,B,A,5,F,S,A.
- 3. Write a program that will make your name blink on and off until you use FCTN 4 to stop it.
- 4. Write a program that will turn your name red and make the screen blue.
- 5. Take all the programs 1 through 4 and make one long program that blinks fall colors, plays the little song, and blink a red name on a blue screen.

6000 LUCK!

18 CALL CLEAR

26 FOR H=1 TO 16

38 RANDOMIZE

46 LET R=INT(RND\$32)+32

50 LET S=INT(RND\$14)+3

60 CALL SCREEN(S)

70 CALL HCHAR(12,12,R)

B# CALL KEY(#,K,S)

90 IF S=0 THEN 100 ELSE 80

166 NEXT H

110 PRINT "PEACHY-KEEN!!!!" : : :

: : :

120 STOP

"This little program ... well, what will it do? Try it and see!

"See you next wonth!"

Now this short "Kiddie Corner" article is filled with the stuff of learning. First, Class, it made me go back and dig out a couple manuals to solve those five small problems of hers. Very enticing, very educational little problems. Suffice it to say that previous columns of hers led up to skills levels that could achieve these creative extensions. These are real, relevant logic problems for any age. They also include things that younger children must know for a solution even if parents, grandparents, or older siblings are typing some things in (i.e., What ARE the colors of fall? How does the song go?).

And then that tiny program you have to type in to see what it is supposed to do. I modified it slightly upon the suggestion of Harold Hoyt of the St.Louis TI user group. But is that program a motivator or what?

And the safety net of all the answers next month. But could anyone wait a full month. Nope! This is a true leaning situation for everyone, including those who DO wait the month and type in all the answer programs. However, if you don't wait the month your correct answers are guaranteed to be different from hers. Thus, Lesson Uno: there are many ways to

skin a cat.

Although why one would actually WANT to skin a cat has always been beyond me. What does one DO with a skinned cat? Do you use the skinless cat part or the skin itself? Or both?

Anyway, Class, the point does not have anything to do with cats; the point has to do with the great learning tool called the 99/4A.

Sue Harper is only one of many people throughout the whole TI World who wrote excellent early-learner articles.

If every newsletter editor and every librarian in the country looked back in the old issues and disks and tapes and dug out the old programs and articles written by club members about education or for young people and transferred them all to disk for an educational clearinghouse, there would be piles of materials which would constitute a marvelous resource for all clubs, particularly as the new generation of grandchildren, nephews and nieces are arriving at the right ages for using these services. Remember, Mr. Shakespeare, and all the rest of you who have questions similar to his, that what may be old stuff for oldtimers is new stuff for newtimers.

You may quote me.

But let's get back to Sue Harper. I hope she has all her stuff on disk.

Anyway, she always began her column with a nice graphic (teddy bear in the case mentioned). This was at a time when not too many newsletters used graphics for their local columns.

Sue also did program reviews, as I said, that dealt with learning. These were all excellent, too. For example, in this same '89 issue she reviewed Jim Peterson's "KINDERTIMES," which I have had the good fortune to use with some younger children with much success.

Here's Sue:

"This program, listed as TCX-1062 on the disk ... is a very nice little program which uses only 12 sectors, and yet has quite a bit to offer.

"The main audience for this program would be third graders learning their multiplication tables, or for a review for the next few grades. The program will accept parameters higher than one digit numbers, but working these problems in your head becomes difficult.

"At the beginning, the program asks the user for the highest number desired and the lowest number desired. These two answers set the parameters for the multiplicands. The format of the program is:

7 X 6 =

and waits for the answer. The answer aust be typed in with the highest digit first, which is why I say this program is not suited for 'hard' questions like 167 X 639. In the 7 X 6 example, the user types in 42 and presses ENTER. The user is rewarded with a graphics display for correct answers."

And so on.

Actually, Jim (TIGERCUB) has upgraded this program. He even has a nice, new program that prints out simple worksheets (with answers on a separate sheet). Ideal for any adult who spends time helping children with math. Refer to your notes from previous classes to learn more about this extraordinary (and extraordinarily inexpensive) resource called TIGERCUB.

These rich resources of newsletter and disk and tape libraries of clubs throughout the country are some of the very best sources all of you can use for learners even in today's "high-tech wizardry" marketplace. The TI STILL does what it was made to do better than anybody else.

No, Mr. Shakespeare, I am not going to give you or Ms. Bronte or anyone else in the class the answers to Sue's five problems. That is homework for next class.

Please, please, Class! Sive me your attention! Stop that moaning and groaning back there! These five questions will be on the mid-term, so I would definitely have them ready for the next class.

Yes, yes. There were many other people who did such articles for newsletters and magazines. I remember Chick De Marti of the Los Angeles Group often had similar fascinating items in his "Did You Know That...?" column. I wonder if he has all those great columns on disk?

And fred D'Ignazio ran a regular children's column in COMPUTE, I think. Anyway, TI PLAYGROUND is one of his tested for-and-by-kids program books.

Maybe next class I'll do nothing but educational books, like my favorite, THE ACADEMIC TI.

Meanwhile, do your homework and maybe you can reach Sue or Chick for extra-credit material.

The software, Mr. Bell? We'll get to the tapes and cartridges during another session, right after we finish discussing the rest of the textware. What? The SYLLABUS, Mr.^Bell. Must follow the syllabus.

No, Mr. Shakespeare, a syllabus is not like a hexbus. Perhaps if you'd care to walk out with me to my car, I'll explain the differences on my way.









A few months ago we looked at system upgrading and touched lightly upon the P-GRAM card during the course of that discussion. Fortunately for me, said discussion did not call for an elaborate explanation of the P-GRAM, as I do not own one. Making matters worse is the fact that the DNLY information I have seen concerning this particular device, is contained within the Documentation for John Johnson's "BOOT" program. (He thought it was the greatest invention since Peanut Butter, by the way).

At any rate, what follows is a much better picture of the P-6RAM card than anything I could have offered. While it is perhaps regrettable that this information comes from the manufacturer rather than as a review, I trust that at least some of you will agree that information is information no matter what the source.

### F-GRAM and P-GRAM+ GROM Emulator and Real Time Clock

### What is a P-5RAM and what is a P-6RAM+?

The P-GRAM is a card for the Peripheral Expansion System that adds 72K of Battery-backed memory to the TI-99/4A (40K GRAM, 16K bank switched RAM and 16K bank switched DSR RAM). This memory is added in place of the ROM memory used for module software. The P-GRAM allows you to save modules to disk and then load them into the P-GRAM's memory to be used. Once a module has been saved to disk and loaded into the P-GRAM, it won't be needed again. The computer cannot tell the difference between a module loaded into the P-GRAM and one inserted into the computer. Since the P-GRAMGs memory is maintained by battery, the contents of the P-GRAM will remain even if the computer is turned off. The P-GRAM+ adds 120K of GRAM to the P-GRAM to enable the VOLUME MODULE LIBRARY and ADDS three pages of TI Title Screens.

The real-time clock option may be purchased at an extra cost and provides the computer with time, date and day-of-the week information. The optional clock is compatable with software written for EITHER the MBP clock card or CorComps Triple Tech and 9900 Stand Alone clocks, thus providing compatability with a wide range of existing clock-based software.

### What can the P-GRAM do for me?

The P-6RAM may be used to emulate almost any module (including Extended Basic, Editor/Assembler, Multiplan, TI-Writer and hundreds of others). This not only provides a backup of each module you currently own, but puts an end to frustrating problems caused by "flaky" modules and worn module ports.

The software required to save and load modules is part of the P-GRAM's operating system and is loaded when the card is installed. A few keystrokes are all that are needed to call up a menu-driven program that allows you to use any P-GRAM feature.

The files created when saving modules to disk for use with the P-6RAM are compatable with files saved by the Gram Kracker and Cart Saver programs. Thus, modified modules used with other devices can be used on the P-6RAM.

The P-6RAM+ has three additional pages of 6RAM (five 8K banks per page) that allows you to store many 6ROM based modules in addition to the 72K P-6RAM capacity. You can also use J.P. Hoddie's "GRAM PACKER" to convert many of your favorite programs into 6PL format and "stack" them into the P-6RAM+ for "instant access" from the TI Title screen. John Johnson's BOOT ver 12 will run from the P-6RAM+ as well as from any other device.

Since the P-GRAM uses RAM and GRAM memory to store modules, it can also be used to modify them using an advanced memory editor that is part of the P-GRAM's operating system. This allows bugs to be fixed (such as printer and RAMdisk incompatabilities) and new features can be added or software can be customized to fit your specific needs. You no longer have to be satisfied with whatever was programmed into the original module. The P-GRAM allows you to change and improve things that you never could before.

The P-GRAM can be used just like a "Super Cart" module (an Editor/Assembler module with BK of RAM). This allows the user to run the growing number of programs requiring this type of module. However, The P-GRAM's memory is not limited to running modules. The memory can be used for an application requiring RAM or GRAM memory. A full 56K of memory is available for use in the module memory space.

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The built-in memory editor allows you to inspect or modify any memory accessible by the computer. Although the memory editor is designed primarily for making changes to modules, it can be used to access memory in any part of the system. The memory editor allows you to view, alter, move, fill, print, search or dump to disk any memory you wish and also provides control over the CPU interface. The memory editor is simple to use, even for people who have no experience with such programs. Each function is documented and easily accessed using function keys.

The optional real-time clock allows your computer to easily access time and date information for use by a variety of programs. Since the P-GRAM's clock is compatable with both the MBP and CorComp clock devices you can use any existing programs requiring a clock device as well as create new ones. The P-GRAM clock is easy to access through any programming language and has built-in software to set the clock.

### Do I have to be an "Expert" to use the P-6RAM?

The P-6RAM is designed to be easy for anyone to use, regardless of prior computing experience. All software is menu-driven and user-friendly. Since the P-6RAM is completely software-controlled and uses no switches, the user only needs to follow the simple prompts to use any P-6RAM feature. The detailed operating manual describes step-by-step proceedures for installing and using the P-6RAM and explains how to use every function of the P-6RAM card.

Of course, the P-6RAM is not limited by it's ease of use. The operating manual includes an extensive technical data section with complete information on accessing the P-6RAM's features through Basic or Assembly languages and includes sample source listings. The method of operation and control of the card is discussed in detail along with helpful advice for writing custom utilities. Additionally, complete source code for the operating system and it's loader (including the memory editor) are provided on disk with the P-6RAM.

### How can I get a P-5RAM?

The P-GRAM is available with or without the real-time clock and may be purchased in kit form or fully assembled. The kit comes complete with circuit board, all parts and an illustrated instruction guide. Assembled cards are fully tested and include a 6-month warranty. Kits and completed cards may be ordered from:

Bud Mills Services, 166 Dartmouth Dr., Toledo, OH 43614

Complete P-6RAM (72K) kit = \$150.00 Complete P-6RAM+ 192K kit = \$200.00 ADD \$30.00 for fully assembled and/or ADD \$20.00 for the CLOCK option.

U.S. and Canada shipping is included and credit card orders may be called in to Bud Mills Services at (419) 385-5946.

(There is a 10% surcharge for cc orders).

The P-GRAM requires a TI-99/4A, Peripheral Expansion System (P-Box), 32K, Disk Drive and Editor/Assembler (used for loading the operating system).

IMPORTANT: The P-GRAM does not currently function with QI consoles. If you have a tan-colored console, look into the I/O port on the right side of the computer. If the connector is surrounded by silver "fingers", the console is a QI unit and will not function properly with the P-GRAM. If the connector is surrounded by gold "fingers", it is not a QI unit and is compatable. All Black and Silver consoles are compatable with the P-GRAM.

### CLUB LIBRARY by Ron Warfield

Well, in the last three months I have put 59 disks into the club library. If you haven't caught up yet there are some oldies and lots of new programs for you. The meeting are from 7:00pm to ??? so there is lots of time to get your copies.

If you have problems or can't understand programs please ask for assistance. The club will do all in its power to help with everything related to the T.I. 99/4A and also the Geneve computer. We can also help a small amount with the TI PRO computer, if you have one of those.

### MEETING DATES FOR 1993

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3RD	SATURDAY	Pres John Parkins	614/891-4965
		Vice Pres Chuck Grimes	614/268-8821
16	OCT 1993	Treas - Bill Sheppard	614/881-5742
2Ø	NOV 1993	Sec/Sat - Jim Peterson	614/235-3545
18	DEC 1993	Sec/Wed - Dick Beery	614/459-3597
15	JAN 1994	Membership - Everett Wade	614/262-6346
19	FEB 1994		614/876-1670
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		Dick Beerry	614/459-3597
		Co-Editors/Spirit of 99 NL	
		Jean Hall	614/885-4223
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WED EVE TI MEETINGS WERE DISCONTINUED AS OF 22 SEPT 1993

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