

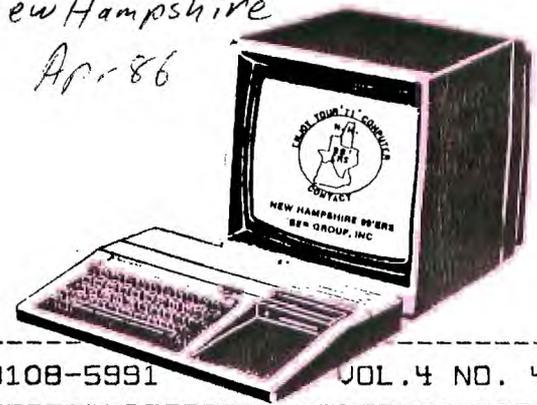
New Hampshire 99'ers

APRIL 1986

Newsletter

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NH99UG NEWSLETTER - PO BOX 5991 - MANCHESTER, NH 03108-5991

VOL. 4 NO. 4

««LAST MINUTE»»

The meeting of April 7 opened with a brief discussion of the TI Faire of April 5. Many of the club members were among the 750 who attended this event. We enjoyed contact with other groups and viewed products by companies such as Myarc, Millers Graphics, Quality 99, The Tigercub, and Asgaard. While there were both positive and negative criticisms, the overriding sentiment was the hope that the Faire will become an annual event.

Curtis had high praise for the New Horizons RAM disk, seen at the Faire. This card, by virtue of its battery backup, can be transported independently of the PE Box, and while the card doesn't hold as much as the Myarc card, it also doesn't interfere with other memory expansions, print spooler, etc. The card is available in kit form or fully assembled, and several subroutines for its use are included. Richard B. plans to construct one of these units by purchasing the bare card and buying the components separately, and will report back to us on this.

Curtis demonstrated BA Writer, a product from Italy which emulates the TI Writer cartridge. In addition, the disk contains foreign character files, and enables disk initialization from the Writer. It also provides a catalog option from the formatter and works with products such as a RAM disk or the Dragonslayer Spellchecker. This Writer runs out of Editor/Assembler or Mini-Memory, a feature which enhances its value given the current market prices of these cartridges. The disk will be available in the club library, and freeware donations should be sent to club member Paul Johnson (94 Wheeler St. Pepperell, MA 01463-0001) who will forward the money to the author in Italy. Curtis reminded everyone that we are cutting our own throats if we don't send the freeware authors the money they rightly deserve for their fine programs!

Next on the agenda was a demonstration of a Music Compiler disk (again available in the club library). This easy-to-use program facilitates the creation of background music for programs, or allows you just to have a tune going while you are in the command mode. (But does it sing?)

Disk Master I, which Mike Mannion purchased at the Faire, was demonstrated to the group. This program provides file and disk commands similar to DM-1000, plus a sector editor (like Disk-E) all for \$19.95. Mike is very pleased with the product and recommended it to the group.

The Genial TRAVELER's second volume was booted up for the perusal of those present. A speech article, a TI bibliography, an article by Jim Peterson, and XB and Assembly Language utilities were among the interesting

articles contained on this disk. (See last month's newsletter for subscription information.)

The meeting ended with the demonstration of c99, courtesy of Al ("Buzz") Wentz. This disk, which allows the TI User to program in yet another language, has also been donated to the club library.

Raffles of a GLP printer and a communications package were conducted during the club meeting, with Chris Agrafiotis being the lucky winner of (do you believe it) both prizes! Next meeting's raffle will be for a Donkey Kong cartridge, so get those joysticks warmed up! Remember, proceeds go to the equipment fund; last month's raffle paid for the disk controller card obtained at an excellent price, courtesy of Tom Sutcliffe.

File closed---

Ellen Rule, Secretary

CURING THE TI LOCKUP PROBLEM

Ellen Rule

NH 99ers User Group

Those of us who have had our 99's for a while, and even new users, may experience what has come to be known as the "TI lockup problem." In accordance with Murphy's Law, this phenomenon occurs only at critical moments and is recognized by spontaneous cessation of communication between you and your keyboard. In Extended BASIC, you may find your screen filled with lower case 'j's' or a distorted image which vaguely resembles the title screen. First, rule out a power line problem by plugging in to a different circuit or taking your computer to a friend's house. If the lockup still occurs, the problem is probably related to the cartridge slot or the side port of the console.

The side port can be a problem if your console moves around on the desk surface. Reducing excessive movement is necessary to prevent a weak connection between the console and the Peripheral Expansion Box. Double-sided tape under the feet of the console might help if you tend to lean on the console or otherwise shove it around a lot. The problem also might be relieved by a Peripheral Expansion Cable (such as the one available from Tenex Computer Express, P.O. Box 6578, South Bend, IN 46660 for \$24.95 plus \$2.75 shipping and handling.) This cable plugs into the side port of the TI 99/4A, then the other end plugs into the peripheral box cable. This allows placement of

the heavy "foot" away from the work area where the connection is less likely to be disturbed or dislodged.

The cartridge port (or GROM port) is often the culprit in a lock-up. Extensive plugging and unplugging of the cartridges causes the connections to wear out over time. One simple solution to this problem lies in a device manufactured by Navarone called the "Widget", which is available from the companies such as Texcomp (P.O.Box 3084, Granada Hills, CA 91344), Unisource (P.O.Box 64240, Lubbock, TX 79464), Triton Products (P.O.Box 8123, San Francisco, CA 94128) as well as from Tenex (address above) and Multi Video Service (P.O. Box 246, East Amherst, NY 14051.) This device plugs into the cartridge port and provides three new cartridge ports, a selector switch and a reset button. Once the Widget is in plugged in, wear and tear on the cartridge port is virtually eliminated.

With or without the Widget, lockup can be reduced by cleaning the card edge of any module with which the lock-up problem occurs. The metal strips on the edge of the card which extend from the module build up an oxide residue which can be removed, without disassembly, by cleaning with alcohol or by rubbing gently with a rubber eraser. As long as care is taken not to scratch the connectors, and no great pressure is exerted on the edge of the card (which could cause it to crack), the procedure is easy and involves very little risk. Daring souls can open the cartridge by removing the screw and carefully exerting sideways pressure on the tabs which indent into the bottom of the cartridge. (When opening the cartridge, make note of the spring assembly which operates the trapdoor; this easily pops loose but is just as easily reinstalled after cleaning the card.) Again, alcohol or an eraser cleans the card edge. This procedure carries slightly more risk of damage due to the exposure of the bare card, but requires more caution than technical expertise.

The last weak area in this lock-up problem is the GROM port itself. If the measures listed above don't greatly improve the performance of the cartridges, the GROM port itself may need to be replaced. The part required is called a "GROM extension assembly unit", part #1049693-1; the cost is \$5.84 plus \$3.00 shipping/handling from TI Dealer Parts Dept., PO Box 53, Lubbock, TX 79408. Fortunately, the above-discussed cleaning methods cured my problem, so I have no experience in this area. The part is supposed to be very easy to replace, but if you are unsure of the procedure, find an electronics technician or a fellow club member willing to do the job. (Perhaps someone will write up the procedure for an up-coming newsletter?)

The last resort, since no one should have to live along with a defective computer, is to exchange the unit with Texas Instruments. For a charge of around \$30, TI will replace the console.

I am not an electronics technician; a year ago the thought of opening my console or even a cartridge sent shivers up my spine. Now, I have arrived at the conviction that just as one who drives a car should be able to change a tire or fill the windshield washer reservoir, so should a TI owner be able to perform routine maintenance on his equipment. With caution and some advice or assistance from a knowledgeable source, you too can keep your TI on the go!

QUICK-COPYer II A REVIEW

Richard J. Bailey
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NH99ER USER GROUP

As librarian for the New Hampshire 99ER User Group I have to do lots of disk copying. Because of this I have tried most of the disk copiers I can get my hands on. Many have one feature that make them better suited for copying one type of disk. DM-1000 is versatile but I consider it unreliable for copying large files (especially DIS/VAR00) on a file-by-file basis. The Copy program I use most and am most satisfied with is QUICK-COPYer II from Quality 99 Software. I bought my copy from Larry Hughes at the NE TI-Faire in Lexington.

QUICK-COPYer II can initialize a disk or a whole box of disks if you like. Initialized disks have the diskname QUICK-COPY so you can identify initialized disks. This name is replaced with the directory and diskname of the disk you are copying if you make the copy with QUICK-COPYer II. You are asked if you want your disks initialized as (S)ingle or (D)ouble sided. If you only have single sided drives you have to choose (S) but if you have double sided drives you can chose either. Earlier versions of the program would initialize to the capability of the drive which could destroy information if you initialized the back side of a floppy as double sided. This was the main reason I never bought the earlier version of the program.

Enough of history. If you screw up a disk by initializing it wrong with the new version, it's your own fault. The program is virtually foolproof. If you follow the clear and concise screen prompts there is no way you can go wrong. When QUICK-COPYer II is through with initializing or copying there is a pleasant chime to signal that the command has been successful. If an error condition is encountered there is a distinctive two tone warning signal. Some of the other features are:

- 1)Automatically verifies a disk on initialization.
- 2)Manufactures files and copies in alphabetical order. This is important on a working disk that contains lots of fractured files. This will cut down on drive wear.
- 3)Allows you to selectively copy files.
- 4)Does a read after write on copying.
- 5)Displays sector & file information as it copies.

Limitations. It is important to know what the program is not capable of. These are not necessarily deficiencies.

- 1)Can't copy FORTH or any other disk that requires a sector by sector copy.
- 2)QUICK-COPYer II can't add files to disks. It wasn't designed for this and will create a new directory effectively wiping out everything else on that disk if you try.
- 3)You can initialize disks with bad sectors. DM II will "cross out" bad sectors while QUICK-COPYer II only gives warning.

Conclusion. For any copying that does not require a sector by sector copy, QUICK-COPYer II can't be beat. Unlike some other copying programs, I've never known QUICK-COPYer II to screw up and with the error checks, chimes, and warning tones it helps me from making my usual human errors. At \$19.95 you can't go wrong.

RANDOM RAMBLINGS 23

Member response to the April GLBPrinter & Telecom Pkg. raffles was UNDERwhelming! I, personally, was quite disappointed with the lack of participation. We will try again (May 5th meeting) with two new raffles... the SST Compiler Pkg generously donated by Paul Johnson of STATCO and an Atarisoft Donkey Kong Module donated by Chuck Bower of Delaware. Details further in this issue. The winner of BOTH April raffles was LTC. Chris Agrafiotis. The printer retailed for \$300 while the Telecommunications Pkg contained over \$400 worth of coupons! Chris won these for a total raffle donation of \$6! Congratulations!

+++++

I was hoping for an in-depth report from one of the many members who attended April 5ths New England TI FAIRE, but none came across my desk! Those of us who manned the booth had little (no) time to check out the display areas or attend seminars. We met with some great people and answered a lot of questions. Unofficial estimate of attendance was 750.

◀◀BULLETIN BOARD▶▶

The NH99UG joins with the rest of the TI community in mourning the passing of Thomas P. Weithofer, the author of the TI Pilot 99 programming language, who succumbed April 5 to cystic fibrosis at the age of 22. Weithofer had been a computer science student and a member of the Cin-Day UG. We hope that those of you who have enjoyed his programming abilities, memorialize him by sending contributions in his name to Christ Hospital Pulmonary Disease Fund, 2139 Auburn Ave., Cincinnati, OH 45219.

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Re: Home Computer Magazine... The following is the text from the advisory sent to HCM Subscribers by the Home Computer Journal:

"On behalf of Home Computing Journal, I would like to welcome you as a former subscriber to Home Computer Magazine. Home Computer Magazine (HCM) ceased publication with the Volume 5, Number 6 issue. We will be fulfilling the balance of your HCM subscription with Home Computing Journal. You will receive a number of issues equivalent to the value remaining on your original magazine and/or media subscriptions(s).

Home Computing Journal is a quarterly publication that is delivered to your door with a computer disk of valuable software. Many of the best features of the old Home Computer Magazine are now being incorporated into the Journal....

As Mentioned, a computer disk is part of your Journal subscription. This means that we need to know what type of computer you

have.... If you fail to notify us immediately, we will not be able to fulfill the remainder of your HCM subscription with Home Computing Journal."

If you are subscriber and did not receive this letter, contact HCJ at POB 70703, Eugene, OR 97401.

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Boston Area Computer Indoor FleaMarket & Sale. Saturday May 10 from 10 am to 4 pm. NorthEast Trade Center, Exit #39 of I-95 (Rte 128) in Woburn, MA (Next to Zayres). There is free parking for 1000 cars... get there early. Admission is \$6 for adults and \$4 for children (5-12).

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Radio Shacks nationwide are selling the TI RF Modulator (RS#277-1015) for \$2.88 until May 26th.

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Star Micronics has introduced yet another new "STAR"! The new generation NX-10 replaces the SG-10. The added features include a 5K buffer and improved NLQ. I've only seen one ad for it so far, from Dayton Associates in Dayton, OH. Call 1-800-251-7827 for pricing.

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From the LA Topics (Terrie Masters) and Daytona 99'ers (Rowland Halliday) comes this info:

The General (Generous!?) Electric Information Services has announced a three-month pilot program, March 1 thru May 31, for free uploading of public domain software programs on Roundtable (that's what they call their SIG's) offerings of GENIE. GENIE is a fairly new info service, and you can't beat the price... \$5 an hour (non-prime time 6P-BA) for 300 and 1200 Baud. You can sign up on line by calling 1-800-638-8369. Defaults are 1 stop-bit, 7 data bits, even parity and half-duplex. Upon connection type "HHH" and enter. You will get a "UH" prompt. Now type "SJM11999,GENIE" and enter and you'll be there. There will be an international conference on GENIE June 13. I haven't had a chance to log on. Let me know how you like it!

+++++

Tom (Prez) and Janet Knapp (Sect'y) of the St. Louis 99'ers have been working with (on?) TI into having them designate the UG's as diagnostic centers in order to avoid unnecessary shipments to Lubbock. Details are currently in the works! Thanks to Tom and Janet for this endeavor and also for participating in our GLBP fundraiser!!

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WANTED: NH99UG NEWSLETTER EDITOR. Requirements include the ability to read, write, cajole, beg, borrow, cut, paste, lick stamps, fold, and staple! Benefits include the power and the glory and the key to the P.O. Box! All applicants contact da PREZ via P.O. Box 5991, Manchester 03108-5991.



Reprinted from the San Antonio Area 99'ers Newsletter...

From the Orphan's Cot.....

"Let me admonish you, first of all, to go alone; to refuse the good models, even those sacred in the imaginations of men. Imitation cannot go above its model. The imitator dooms himself to mediocrity. The inventor did it because it was natural to him, and so in him it has a charm. In the imitator, and he bereaves himself of his own beauty to come short of another man's." - Ralph Waldo Emerson

The lemming is a rodent of the northern climes which is known for its mass migrations - in folklore, each lemming follows the other, regardless of its destination, to a resting spot, sometimes off cliffs and to doom for all. Apple computers used this graphically in their famous commercial (shown during the 1984 Super Bowl) depicting dozens of pin-striped, rose-labeled business following each other off the side of a cliff - supposedly led by Big Blue. I laughed at that commercial at the time, since I was not involved with either machine. However, those laughs are returned to haunt me. I am beginning to see what I shall call the "Lemming Phenomenon" attack my beloved TI market.

Remember when it was easy to decide about memory expansion cards? TI or Corcomp, right. Then Foundation and its 128K card, which was ill-fated due to poor software. Then, Myarc showed up - riding the crest of rumors about a new computer - with, first, a 32K card, then 128K and, now, a whopping 512K. Then, New Horizon's with their terrific ram disk card. Enough, already. Agreed? Well, now we hear of new expansion devices from Germany (Mechatronics), Databiotics, and Corcomp. All, basically, the same with nothing major new to offer. Yet, if these devices ever appear, we will, undoubtedly, hear that our market is "dead" because few of the devices were sold. Dilution of the market, combined with frank confusion over compatibility, could be fatal.

Another example? How about "GROM Cloners"? Those magic devices to copy cartridges and, possibly, modify them? First came the Gram Kracker. A marvelous device and reasonably priced. Now we have "Maximen" from Canada, a Gram-Karte from Germany, and now a "Module Emulator" from Pilgrim's Pride.

The capitalists among us will argue that competition breeds (1) product excellence, and (2) "survival of the fittest". I agree with both. But, while we can always use improved products, we have to look at the inevitable trade-off. The fallout, if you will. In the next few months, due to market dilution, we are going to lose several quality hardware (and probably software) producers. It will be blamed on the "failing TI market", etc. But the real blame falls on the producers themselves. Their lack of initiative, imagination, and "lemming mentality" is leading them all to the same products and right over the cliffs to bankruptcy. Instead

of developing products that are unique and needed by the consumers (e.g. 80 column card, IEEE interface, as two examples), they are all taking the easy path of imitation, argued against by Emerson above. Our market is unique. It is shrinking. But it will support vigorously unique, original products that are in demand. It will not support 6 producers of memory expansion cards, 4 producers of GROM devices, etc ad infinitum. I won't argue who was first to develop what. It matters not. What does matter is the lemmings will soon die off. It will be their loss and ours. Any way to stop it? Probably not. Too many prides at stake; too many unwilling to swallow their minimal research/development costs, and say "let's try something else". For once, producers, try a little systematic market research. Find out what the market needs and what it will support. Ask around. The answers are there. But the questions may come too late. End of sermonette.

I just ordered and received the new "XBII plus" from Mechatronics (from Douglas Morgan Associates, 7655 Chermoya Ct., Fontana, California; \$83.45 which includes postage). It is great! Exactly the same as TI Extended Basic (i.e. runs EVERY program I have in XB as is) plus more than 20 new XB commands and over 40 (that is right, FORTY) incredible graphics commands. If you ever saw the disk-based "APESOFT" demo, which appeared mysteriously from Europe, this is it. Same folks, same software. I am terribly impressed. Unlike the Myarc version of XB, which requires at least their 128K card AND a disk of software, the Mechatronics XB runs on 32K. No disk, so sending for special EPROMs which take months to arrive AFTER you have bought your Myarc XB (and you can't run it without the EPROM plugged into your 128K card!). This German beauty runs right out of the shoot. If you are buying the Myarc version, you are the beta testers for that product. It is bug ridden. That is fact not fiction.

Speaking of Myarc, the NJ Fair (T.I.C.O.F.F.="Texas Instruments Computer Owners Fun Fest"), like the LA Fest West, went down as another "no show" for the much fabled Myarc computer. But it did find the bossman singing a new song. Seems the "whole new computer" fable has ended. Now, we are told a new story. Myarc will produce a computer on a PBox card. Plug in a new keyboard, etc etc. Lemmings as well as story time. Lemming because Millers Graphics already announced the same interface, and a story because... Well, do I have to justify my skepticism? How does that saying go? "Fool me once, same on you; fool me twice, shame on me". I refuse to be taken as a pure idiot. (Be that as it may!) On the fairs, the LA Fest and T.I.C.O.F.F. were both raging successes. Congratulations to all organizers, sponsors, and attendees.

A word for the unwise and a little venom from the old Orphan's Cot this month. I won't make it a habit. Back to my nap....



Ron Albright

TIPS FROM THE TIGERCUB

#30

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TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

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Over 130 original programs in Basic and Extended Basic, available on cassette or disk, only \$3.00 each plus \$1.50 per order for PPM. Entertainment, education, programmer's utilities. Descriptive catalog \$1.00, deductible from your first order.

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postpaid, or both Nuts Bolts disks for \$37 postpaid. Tigercub Full Disk Collections, just \$12 postpaid! Each of these contains either 5 or 6 of my regular \$3 catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - my own programs on these disks are greatly discounted from their usual price, and the public domain is a FREE bonus!

- TIGERCUB'S BEST PROGRAMMING TUTOR
- PROGRAMMER'S UTILITIES
- BRAIN GAMES
- BRAIN TEASERS
- BRAIN BUSTERS!
- MANEUVERING GAMES
- ACTION GAMES
- REFLEX AND CONCENTRATION
- TWO-PLAYER GAMES
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- MORE GAMES
- WORD GAMES
- ELEMENTARY MATH
- MIDDLE/HIGH SCHOOL MATH
- VOCABULARY AND READING
- MUSICAL EDUCATION
- KALEIDOSCOPES AND DISPLAYS

For descriptions of these send a dollar for my catalog!

I goofed again! if you tried the Quickloader in Tips #29 with a disk containing more than 20 programs, you may have already noticed that line 140 should go to 160, not 155.

Here's another Tigercub Challenge - can you run this and get these results?

```
>LIST
100 PRINT PI
110 PRINT MAX
120 PRINT PI
130 PRINT MAX
>RUN
0
0
3.141592654
* SYNTAX ERROR IN 130
```

Some of you sharp-eyed newsletter editors may have noticed that this text is being hyphenated to avoid some of those gaping blanks that occur when only a few long words will fit on a right-justified line. The only way that I have found to accomplish this is to set the TI-Writer right tab for the actual column width to be printed and then, whenever a word is hyphenated, backspace and replace the blanks on that line with carets, adding enough extra carets to justify the line - like this -

whenever^a^word^^is^^hyphen-

It helps to go into fixed mode with CTRL # when you are inserting extra carets.

When using this method, it is also necessary to set the paragraph indentation with IN # on the command line; if indentations are desired, they can be filled with caret signs, like this:

^^When using this method,

I am told that my old 3D Sprite Routine made it to the Golden Quickies section of CompuServe, so here is an updated version. I have found that sprites can be controlled much more easily (although not moved as rapidly) with CALL LOCATE, rather than turning them loose with CALL MOTION and then trying to catch up with them!

```
100 CALL CLEAR :: CALL SCREE
N(5):: FOR SET=2 TO 8 :: CAL
L COLOR(SET,8,5):: NEXT SET
:: DISPLAY AT(3,12):"3-D SPR
ITE DEMO"
110 DISPLAY AT(22,1):"BY TIG
ERCUB" :: CALL CHAR(40,"FF01
01010101FF010101010101FF
FF0101010101FF0101010101
01FF")
120 CALL CHAR(36,RPT$( "F",64
)):: CALL MAGNIFY(4):: FOR X
```

```
=2 TO 22 STEP 2 :: CALL SPR1
TE(#X,36,X/2+1-(X>7)-(X>13),
32*X+6,40*X+6):: NEXT X
130 S=1 :: CALL SPRITE(#S,40
,16,46,7):: FOR C=6 TO 42 ST
EP 2 :: CALL LOCATE(#S,46,C)
:: NEXT C :: FC=44 :: FR=46
:: V=0
140 FOR C=FC TO FC+44 STEP 2
:: CALL LOCATE(#S,FR,C):: N
EXT C :: FC=FC+44 :: CALL SP
RITE(#S+2,40,16,FR,FC):: CAL
L DELSPRITE(#S):: TC=FC-32
150 FOR C=FC TO TC STEP -2 :
: CALL LOCATE(#S+2,FR,C):: N
EXT C :: TR=FR+34 :: FOR R=F
R TO TR STEP 2 :: CALL LOCAT
E(#S+2,R,TC):: NEXT R
160 CALL SPRITE(#S,40,16,TR,
TC):: CALL DELSPRITE(#S+2)::
FR=TR :: TR=FR-72 :: FOR R=F
R TO TR STEP -2 :: CALL LOC
ATE(#S,R,TC):: NEXT R
170 CALL SPRITE(#S+2,40,16,T
R,TC):: CALL DELSPRITE(#S)::
FR=TR :: TR=FR+50 :: FOR R=F
R TO TR STEP 2 :: CALL LOCA
TE(#S+2,R,TC):: NEXT R
180 Y=Y+1 :: IF Y=11 THEN CA
LL DELSPRITE(#S+2):: GOTO 13
0 ELSE S=S+2 :: FC=TC :: FR=
TR :: GOTO 140
```

Ian Swales in Belgium can write some of the most intricate routines, and pull them into the tightest knot. I had searched everywhere for a sorting routine for 2-dimensional arrays, and invented some ridiculous ones, before Ian sent me this jewel.

```
100 !DEMO of two-dimensional
sorting routine
110 !Set up array to be sort
ed
120 CALL CLEAR :: DIM A$(20,
4):: RANDOMIZE :: DEF X%=CHR
$(26*RND+65)
130 FOR J=1 TO 20 :: A$(J,1)
=X%&X%&X% :: A$(J,2)=STR$(IN
T(100*RND+1)):: A$(J,3)=X%&ST
R$(INT(10*RND)):: A$(J,4)=IN
T(10*RND))&X% :: NEXT J
140 INPUT "SORT BY?(1-4)":X
150 J=20 !2-dimensional arra
y sorting routine by Ian Swa
les
```

```

160 DIM Q(20):: FOR X=1 TO 2
0 :: Q(X)=X :: NEXT X
170 M=0
180 FOR X=1 TO J-1 :: IF A$(
Q(X),K)<=A$(Q(X+1),K)THEN 21
0
190 M=-1
200 T=Q(X):: Q(X)=Q(X+1):: Q
(X+1)=T
210 NEXT X
220 IF M THEN 170
230 FOR X=1 TO 20 :: FOR L=1
TO 4 :: PRINT A$(Q(X),L);"
";:: NEXT L :: PRINT :: NEXT
X :: GOTO 140

```

Did you ever need a routine that would accept either a string or a numeric value? Try this -

```

100 N=0 :: ON ERROR 110 :: A
CCEPT M$ :: N=VAL(M$):: GOTO
120
110 ON ERROR STOP :: RETURN
120
120 ON (N=0)+2 GOTO 130,140
130 PRINT M$ :: GOTO 100
140 PRINT N :: GOTO 100

```

A useful tip from Stephen Shaw in England - if you have a long program which will run only in Basic, and which will load from disk with CALL FILES(1) but runs out of memory when you try to run it; and if you have the MiniMemory module -

Insert MiniMemory module, select Basic, enter CALL FILES(1), Enter NEW, enter OLD DSK1.(filename). When loaded, enter SAVE EXPMEM2. When SAVED, enter CALL LOAD(-31888,63,255), enter NEW, enter OLD EXPMEM2, and enter RUN. That is still a lot faster than loading a long program from tape!

Another reason for never using the default mode of so-called UPDATE when opening a file (without specifying INPUT or OUTPUT) is that you will get an I/O ERROR #1 if the file is write-protected.

Has anyone found a way to go from Extended Basic to Basic without losing the program in memory, or at least fouling it up? CALL LOAD(-32116,4) has been published in many newsletters as a way to do this, but has anyone actually made it work?

If you are printing out of TI-Writer Editor, finish your letter with CTRL U, SHIFT L, CTRL U and when it is printed the paper will automatically feed to the top of the next sheet.

To make a note to yourself while programming, just type ! and whatever you want to make note of, then LIST "PIO":1, and then type 1 and enter to delete the line.

TI-Writer puts an extra space after every period that is followed by a space. If you don't want this extra space after abbreviations such as "Mr." or "St.", use a caret sign ^ instead of a space after the period, Mr.^Jones. But TI-Writer puts only one space after ? or ! so if you want two, put a caret after the symbol !^

One of the very best tips for this month comes from Paul A. Meadows, in the September 85 newsletter of T.I.N.S. (Nova Scotia, Canada) -

How to print up to 132 characters in a line (condensed print, of course) out of TI-Writer! Just prepare your file as usual but in line 0001 put formatter commands such as .LM 10;RM 132; IN +S;FI;AD . The Fill and Adjust are necessary, the Indent is up to you, as are the left and right margins - but notice that right margin set way over at 132? Now, instead of saving the

file with SF, type PF and then C DSK1.(filename) to print to the disk. This not only strips out the control C characters, it also erases the TI-Writer tab line that was applied to the last line of the file.

So now, with your printer opened and initialized for condensed print, go into the TI-Writer formatter mode and print your file!

I have made the following changes to my working copy of the Tigercub Menuloader. This sets up my Gemini printer to skip over the perforations and print full page width in elite print with a wide left margin for ring-binder punching. Other printers may need changes in these codes.

```

620 DISPLAY AT(12,1)ERASE AL
L:"PRINTER? PIO" :: ACCEPT A
T(12,10)SIZE(-18):P$ :: GOSU
B 895 :: PP=3
840 DISPLAY AT(24,1):"PRINTE
R NAME? PIO" :: ACCEPT AT(24
,15)SIZE(-14):PP$ :: GOSUB B
95 :: PRINT #2;SEG$(D$,1,4)&
" - Diskname="&N$
895 OPEN #3:P$,VARIABLE 132
:: PRINT #3;CHR$(27);"B";CHR
$(2);CHR$(27);"M";CHR$(10);C
HR$(27);"N";CHR$(6):: RETURN

```

I always keep a backup of everything, on the flipped side of another disk, and I often want to verify that the backup has everything that is on the master, and vice versa.

```

100 DISPLAY AT(3,6)ERASE ALL
:"TIGERCUB DOUBLECAT": " To
compare the contents of":
"a disk with a backup." !by
Jim Peterson
110 DISPLAY AT(12,1):"INSERT
MASTER DISK": "PRESS ENTER
"
120 CALL KEY(0,K,S):: IF S=0
THEN 120
130 DATA DF,DV,IF,IV,P
140 RESTORE :: FOR I=1 TO 5
:: READ T$(I):: NEXT I
150 DIM F$(127):: OPEN #1:"D

```

```

SK1.",INPUT ,RELATIVE,INTERN
AL :: INPUT #1:A$,J,J,K :: F
$(0)=A$&" "&STR$(K)
160 X=X+1 :: INPUT #1:F$(X),
I,J,K :: IF F$(X)="" THEN 17
0 :: F$(X)=F$(X)&" "&T$(ABS(
I)):: GOTO 160

```

```

170 X=X-1 :: CLOSE #1 :: DIS
PLAY AT(12,1)ERASE ALL:"REMO
VE MASTER DISK": "INSERT BA
CKUP DISK": "PRESS ENTER"
180 CALL KEY(0,K,S):: IF S=0
THEN 180

```

```

190 OPEN #1:"DSK1.",INPUT ,R
ELATIVE,INTERNAL :: INPUT #1
:A$,J,J,K :: DISPLAY AT(1,1)
ERASE ALL:F$(0):: DISPLAY A
T(1,15):A$&" "&STR$(K);
200 Y=Y+1 :: R=R+1 :: GOSUB
290 :: INPUT #1:A$,I,J,K ::
IF A$="" THEN 260 :: K=A$&
"&T$(ABS(I))

```

```

210 IF K=F$(Y)THEN DISPLAY
AT(R+1,1):F$(Y):: DISPLAY A
T(R+1,15):K$:: GOTO 250

```

```

220 IF K<F$(Y)THEN DISPLAY
AT(R+1,15):K$:: Y=Y-1 :: GO
TO 250

```

```

230 DISPLAY AT(R+1,1):F$(Y);
:: R=R+1 :: GOSUB 290 :: Y=Y
+1

```

```

240 IF K=F$(Y)THEN 210 ELSE
IF K<F$(Y)THEN 220 ELSE IF
Y<X THEN 230 ELSE DISPLAY A
T(R,15):K$;

```

```

250 GOTO 200
260 IF Y>X THEN 280
270 R=R+1 :: GOSUB 290 :: FO
R J=Y TO X :: DISPLAY AT(R,1
):F$(J); R=R+1 :: GOSUB 290

```

```

:: NEXT J
280 DISPLAY AT(24,1):" P
RESS ANY KEY" :: CALL KEY(0,
K,S):: IF S=0 THEN 280 ELSE
CLOSE #1 :: END

```

```

290 IF R<23 THEN RETURN
300 DISPLAY AT(24,1):"PRESS
ANY KEY" :: DISPLAY AT(24,1)
:" " :: CALL KEY(0,K,S):: IF
S=0 THEN 300

```

```

310 CALL CLEAR :: R=1 :: RET
URN

```

```

And that is just about
MEMORY FULL!
Jim Peterson

```

****NOTE:** FREEMWARE means you are **expected** to pay the author of the disk what you feel the disk is worth, usually <\$10. We only charge for the blank disk and copying. Make FREEMWARE work! **PAY!**

DISKNAME	LANGUAGE	COMMENTS	COMMENTS	COMMENTS
ADRSMASTER	XBASIC	JHB database program. LINKMASTER and DVECTOR needed		
ADVENTURE1	BASIC	text and graphic adventure games		
ASGARD/PD1	XBASIC	Public domain music software from Asgard.		
ASGARD/PD2	XBASIC	Public domain music software from Asgard.		
ASGARD/PD3	XBASIC	Public domain music software from Asgard.		
ASGARD/PD4	XBASIC	Public domain music software from Asgard.		
ASGARD/PD5	XBASIC	Public domain music software from Asgard.		
ASSY_GAMES	XBASIC	arcade quality games. 32K/speech synth. required		
S_TRAVER#1	XBASIC	good demos and utilities on this FREEMWARE disk.		
BA-WRITER	XBASIC	Best FREEMWARE TI-WRITER package! A must!		
SASIC81-9	BASIC	T.I.'s basic lessons on disk.		
BB8	XBASIC	John Clulow's bulletin board software FREEMWARE disk.		
BEST/BONG8	XBASIC	Bill Knecht's tunes with graphics.		
BEST/HYMNS	XBASIC	Bill Knecht's hymns with graphics.		
BLUEY	XBASIC	create and animate your sprites with this utility.		
C99REL1	E/A	Curt Pulley's FREEMWARE "C" language.		
C99UPDATE	E/A	Modifications to the C99REL1 disk.		
C-TUTORIAL	E/A	Demo programs and info for "C".		
CALENDAR	XBASIC	FREEMWARE disk of calendar programs w/documentation.		
CALENDAR2	XBASIC	makes a calendar with notation.		
CARTBUSTER	E/A-BK	save rom/prom cartridges to disk. SUPERCARTRIDGE required		
CASHFLOW	XBASIC	financial programs.		
CONGOBONGO	E/A	arcade quality game.		
COPY/CATXB	XBASIC	John Clulow's disk copier program.		
CUBIT	XBASIC	arcade quality game.		
DAS88#V1/3	E/A	disassemble your assembly programs.		
DAYTONA99	XBASIC	collection of demos/utilities from Daytona User Group.		
DAVISDISK	XBASIC	programs from Davis' book.		
DEBUGGER	E/A	debug your assembly language programs.		
DIAGNOSTIC	XBASIC	T.I.'s test disk for the 99/4A.		
DISKE	E/A	Sector access program. inspect and/or modify sectors.		
DM-1000	-----	DM II replacement. Loads from E/A, TI-WRITER, XBASIC.		
-DIRECTOR-	XBASIC	Gives good, fast, sorted directory for your library.		
DVECTOR	XBASIC	JHB database program. ADRSMASTER and LINKMASTER needed.		
EE-LIBRARY	BASIC	T.I.'s idea of electrical engineering programs.		
FAST-TERM	E/A	Terminal emulator program that supports TE II and XMODEM.		
FINANCE	XBASIC	Financial programs.		
FUNLWRITER	XBASIC	Good XBASIC loader version of TI-WRITER.		
GAMES_01	XBASIC	4 games. CHINACHESS is interesting.		
GEMINI	XBASIC	A disk full of 10-X demos.		
GLPDEMO	XBASIC	Printer demos for the Centronics GLP printer.		
GRADEBOOK	XBASIC	Gradebook and flashspelling programs w/documentation.		
GRAPH-PACK	BASIC	T.I.'s idea of graphing programs.		
GRAPHX	GRAPHX	6 pictures to be used with the GRAPHX package.		
HBMPRINT	HBM	Dump HBM files to printers.		
INCOME_TAX	MP	1984 income tax template for multiplan.		
ISAM	XBASIC	ISAM files as described in MICROpendium 12/84 page 35.		
ISS	XBASIC	Arcade games.		
ISS/MUSIC	XBASIC	Music programs.		
JET-DSK01A	XBASIC	Good FREEMWARE disk from John Taylor.		
JET-DSK01B	XBASIC	More of the above.		
JET-DSK02A	XBASIC	John Taylor FREEMWARE sprite building program.		
JET-DSK02B	XBASIC	127 sprites for the above FREEMWARE disk.		
KNIGHTDISK	XBASIC	FREEMWARE disk of utilities from Knight (TK-WRITER).		
LINKMASTER	XBASIC	JHB database program. DVECTOR and ADRSMASTER needed.		
LOGO_DISK	LOGOII	Good demo of LOGOs power.		
M88SCOPY	XBASIC	Latest version of this FREEMWARE disk copier.		
MASTERDISK	XBASIC	Directory program.		
MEGABUCK8	XBASIC	Megabucks number selection program.		
MTXT/DISK	MINIMEM	Minimemory utilities for 40 column.		
MUSIC	XBASIC	Moore music programs for the T.I.		
MUSIC2	XBASIC	Moore music programs for the T.I.		
MUSICOMPLR	E/A	BASIC loader allows music playing as other program runs.		
MUSIC_MAKR	MUSIC	Music for the MUSICMAKER cartridge.		
NEATLIST	XBASIC	FREEMWARE programming aid disk from Danny Michael.		
NH99ERS#1	XBASIC	Games, music, word processor, speech, and graphics.		
NH99ERS#2	XBASIC	Games for the T.I.		
NH99ERS#3	XBASIC	Graphics, games, and utilities.		
ON_DISKJ/A	-----	Programs from HCM in various languages.		
ON_DISK4_1	-----	Programs from HCM in several languages.		
ON_DISK4_4	-----	Programs from HCM in several languages.		
ON_DISK4_5	-----	Programs from HCM in several languages.		
ON_DISK4_5	-----	Programs from HCM in several languages.		
ON_DISK5_1	-----	Programs from HCM in several languages.		
ON_DISK5_2	-----	Programs from HCM in several languages.		
ON_DISK5_3	-----	Programs from HCM in several languages.		
ON_DISK5_4	-----	Programs from HCM in several languages.		
ON_DISK5_6	-----	Programs from HCM in several languages.		
OSCARJ	BASIC	Programs from the OSCAR reader.		
OSCAR2	BASIC	Programs from the OSCAR reader.		
PILOT	E/A	The PILOT language.		
PILOT_DOC	XBASIC	PILOT documentation w/print function. (1.5hrs !)		
POTPOURRI	XBASIC	Games and utilities. Includes diskjacket/disk labeler.		
PRBASE	XBASIC	Database.		
PRBASE/DOC	XBASIC	Instructions for above.		
PROG1D123	BASIC	T.I.'s programming aids in both basic and xbasic.		
RAM/BOFT	XBASIC	Craps game.		
RDSK200	XBASIC	Gamma match antenna design for hams.		
SAMUSIC/1	XBASIC	Moore songs.		
SAME/DIFF	XBASIC	Kids matching games. Speech required.		
SAMSGAMES1	XBASIC	Programs from the SAMS book.		
SAMSGAMES2	XBASIC	Continuation of above.		
SCREENDUMP	XBASIC	Or basic. A must FREEMWARE disk from Danny Michael.		
SILVERWOLF	E/A	Assembly language utilities.		
>>SPACE!<<	XBASIC	Space games with graphics. not as flashy as some.		
SPECITRADE	XBASIC	See and hear Lincoln speak! Speech synthesizer required.		
SUPERBUGII	E/A	Debugger. Including one for the E/A-BK SUPERCARTRIDGE.		
TI/DEMO	BASIC	Several demos T.I. gave to their dealers.		
TI-SINGS	TE II	Hear your computer sing! Speech synth. required.		
TI-SINGSXB	XBASIC	Xbasic version of above. NH99ER exclusive.		
TI-TIPS_01	TIWTR	DIS/VAR80 TI-WRITER files with useful tips. GOOD reading.		
TI-TIPS_02	TIWTR	More of the above.		
TI-TIPS_03	TIWTR	More of the above.		
TI-TIPS_04	TIWTR	More of the above.		
TI-SORT	E/A BK	Assembly language sort routines for E/A-BK SUPERCARTRIDGE		
TIMPWTIWR	WTR MP	Updates for TI-WRITER and MULTIPLAN.		
TIWRITER'S	TI-WTR	Reference material for FUNLWRITER and others.		
TIWTRPIOUP	TIWTR	PIO version of TI-WRITER.		

```

TK*B*DUP      XBASIC  Disk copier program.
TRIVIA99ER    XBASIC  Trivia database.
TRIVIABASE    XBASIC  Another trivia database.
VIDEODEMOS   XBASIC  A must have graphics demo.
WORKHORSE     XBASIC  Good collection of utilities. Don't miss this one!
XB-GAMES      XBASIC  Arcade quality games.
XB-GAMING01   XBASIC  More arcade quality games.
XB-LESSONS0   XBASIC  T.I.'s xbasic lessons on disk.
XB-WRITER1    XBASIC  One of the best TI-WRITER disks available.
XBASIC-UT1    XBASIC  Great utility disk from Travers.
XBASIC-UT2    XBASIC  More of the above.
X_D           E/A     Assembly language utility and demos.

```

F O R T H D I S K S

***NOTE: Many 4TH disks have program information on screen 2 and screen 3. Use LIST or -PRINT to see these screens. Many of the "programs" on these disks are well documented.

DISKNAME	LANGUAGE	COMMENTS	COMMENTS	COMMENTS
4TH/BACKUP	XBASIC	Disk copier program in FORTH. Donation requested.		
4TH_CLONER	E/A	Another disk copier program in FORTH.		
4thDOODLES	E/A	Good bitmap graphics demo.		
DATADISK02	E/A	Demos, utilities, and games. read SCRs 1, 2, and 3.		
DATADISK03	E/A	More of the above.		
DATADISK04	E/A	More of the above. Includes the game COSMIC CONQUEST.		
SOURCE-A	E/A	The source code for T.I. FORTH.		
SOURCE-B	E/A	Part 2 of the source code for T.I. FORTH.		
898 DISK02	E/A	Modified 4TH disk with autorepeat, etc..		
TE4TH	E/A	Terminal emulator program in FORTH.		
TI-FORTH	E/A	T.I.'s original FORTH disk.		
UTILITY4TH	E/A	Many utilities plus HELP and instruction screens.		
UTILSOURCE	E/A	Source code for UTILITY4TH.		
VOLKFORTH1	E/A	More 4TH goodies. Check line 0 of all SCRs for clues.		
VOLKFORTH2	E/A	More of the above.		
XB-FORTH	XBASIC	4TH version that loads from XBASIC.		
FORTHXLD1	XBASIC	Two disk modified 4TH disk set.		
FORTHXLD2	XBASIC	continuation of above.		



Let the Buyer Beware
C.P.U., Haverhill

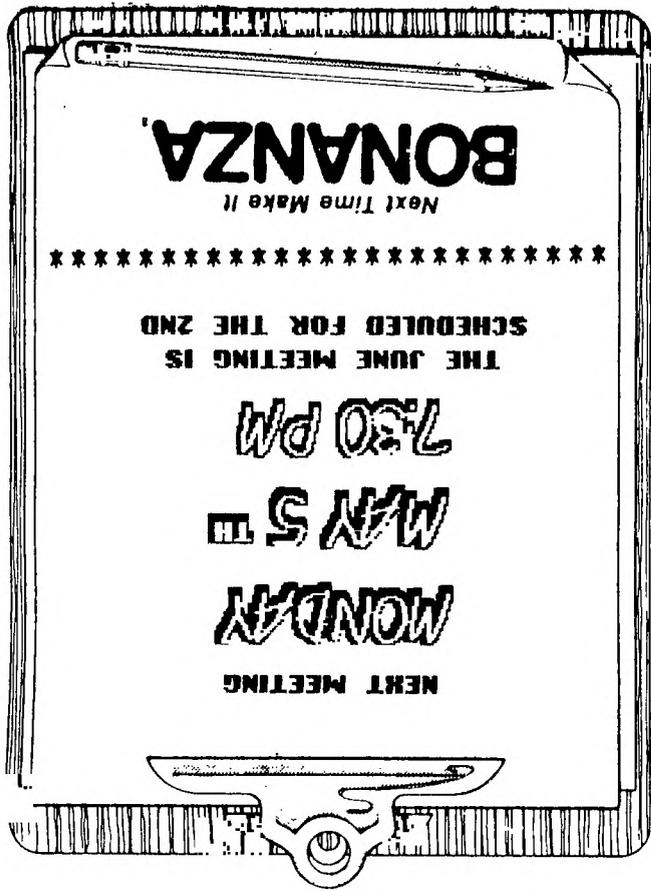
Richard J. Bailey
68A Church Street
Gonic, N.H. 03867
NH99ER USER GROUP

The Computer Shopper is filled with all sorts of ads for all sorts of computer related devices but how reliable are some of the companies that advertise? I'd like to pass on my experiences with C.P.U., Haverhill, Mass. (see ads in any Computer Shopper). On Wednesday, December 17 I called C.P.U. to see if they had the new MPI 52S drives they had advertised for \$89. I was specific in asking if they had new drives with the Shugart type flip door and door locks. I was told that they did have some in stock and some of those had door locks.

The next day I drove 50 miles to Haverhill to buy one of these drives only to find that they didn't have any new MPI drives and, depending on which of the stories I was told; 1) sold all 350 MPI drives they had to one customer several days ago or 2) planned on buying some but the price was too high so they passed.

What they tried to do was sell me one of their used (read as junk) drives that were stacked like cordwood and in various states of decomposition for \$49. I explained that I only wanted a new, working drive and I wouldn't have wasted all that time and money driving down there to buy scrap drives. Well, they made me an offer I could refuse! For \$99 they would sell me one of the drives out of the pile and give me unlimited return privileges to keep testing their drives for them until I got a working unit!! So for \$10 more than they were asking for the non-existent new drives, they would sell me one of their \$49 scrap drives!!

The bottom line is C.P.U. never had the advertised stock that I specifically asked for. I consider their sales ploy to be, at best, deceptive and recommend that you avoid them like the plague.



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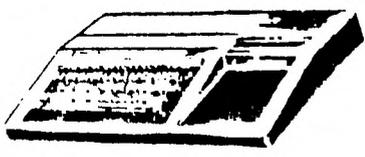
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