

New Hampshire 99'ers

NOVEMBER 1985

Newsletter

YOL.4 No.11

NH99UG NEWSLETTER - POB 5991 - MANCHESTER, NH D3108

Zalb(

November's meeting was (supposed to be) devoted to PRBASE's printing routines. As those of you present may remember - it was a fiasco. Why is it that everything works at home late at night, but nothing ever works at club meetings?

There were other demo's as well, particularly involving the New Horizon RAM disk. What a work of art that thing is! If you don't have one, I recommend you put it on your gift list for this holiday season.

>NEW

Speaking of gifts, December's meeting may see someone go home with a peripheral expansion box. Several months ago, Andre' Roy was kind enough to donate a large amount of equipment to the club. Amoung other things was a PEB in excellent condition. Therefore, we will shortly hold a

RAFFLE!

This peripheral expansion box is being raffled off at \$2.00 a ticket (3 for \$5.00). Since the object of a raffle is to raise money, we are putting an additional stipulation on this prawing — the raffle will not be held until a minimum of \$100 worth of tickets has been sold.

In the past, we have sometimes raffled off items and received less from the ticket sales than the item cost us to purchase! Come on members! We all know someone with a II who needs an expansion box (or would like an extra). As to where the raffle money goes, don't forget that we still have not completed our club system - we need a monitor (monochrome or color - we're not picky!) - and the treasury is not exactly overflowing.

NOTE! YOU HAY PURCHASE TICKETS BY HAIL OR PHONE FROM:

Dick Guimby 15 Sioux Avenue Nashua, NH 03063 (603) 889-0339

BENEVE

J. Peter Hoddie of the Boston Computer Society will be visiting us at January's meeting. Peter is an excellent programmer in (at least) XBASIC and Assembly. As such, he is one of the priviledged few asked to work on MYARC's new computer - GENEVE. He will bring this marvelous machine with him and show us exactly what it can do. If you could only make one meeting a year - January is the one!

Thile I's on the subject of club equipment, please note that what we do have is available for loan between meetings. This includes not only the club hardware, but also our firmware and software. I will put together a list of what we own for the next newsletter.

Another item I would like to put in the next newsletter is a list of club members with names, addresses, and phone numbers. This list would not go to other clubs with whom we exchange - only NM99er's would get the list. If you don't want your name on the list, please mail a note to the club P.O. Box saying so.

OTHER CLUBS

I just received a call from someone named like Goldsmith. It seems that Manchester recently (last April) opened a museum (of technology?) and they would be happy to let user groups meet there on weekends. If you know of any computer groups looking for a place to meet, have them call Mike at 624-8050.

Finally, we need to think about participation in uncoming fairs. There will be several fairs in the next faw months. These fairs are not in our own backyard, but they are close enough for us to be active in them, we need to be more visual - we have an excellent club but few people know about it! If you know someone with a TI, please let them know what we're all about.

I just had a scary thought - what if we organized our on extr?

FOR BALE!

From: Edward Aho P.O. Box 145 Temple Road New Ipswich, NH 93871 (683) 878-3898

- 1. 99/4A console (black/silver)
- 2. Panasonic dual mode color monitor
- 3. Il modem (acoustic) 300 baud
- 4. GRAPHX software (Editor-Assembler)
- 5. Utilities I (From Republic)
- 6. SAMES:

TI INVADERS
PARSEC
HUSTLE
CONNECT FOUR

TOMBSTONE CITY

BLAST CAR WARS ZERO ZAP

From: Ralph King

RFD6 -Cotton Hill Road Laconia, NH \$3246 (6\$3) 528-3188 (evenings)

Complete II expnasion system including PEB, memory expansion, drive controller, drive, RS232, and impact printer.

NASHUA 5.25" DSDD DISKETTES

\$77.75

per box of 10 /w WP tabs & Envelops

GLP/MPS 803.....\$3.00 & EPSON MX/RX/FX70,80

OKIDATA / STAR MICRONICS

92 ± 93 / 60-00 10 ± 15\$2.50 e.

CENTRONICS 700 (ZIP PACK)

QUANTEL 5003 & 5004

TANDY LP L & IV\$2.00 es

EPSON LX80 & LX90

HOMEWRITTER 1055.00 &2

LABELS & WP TABS \$100 &

PKG OF 24 LABELS/29 MPT

T199/4A

SHELE CASSETTE CABLE\$3.00 e.j

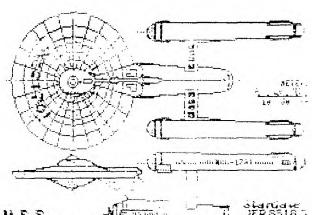
These are Cash & Carry prices !
Add \$2 per Mail Order

NH99UG/MARKETPLACE

POB 5991

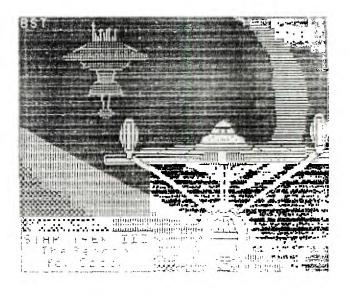
MANCHESTER, NH 03108







75266,163



RIAINIDIOIMI I RIAIMIBILILINIGIS

(ENTER) or Command: 60TO 150

[You may go directly to the TI SIG by typing (TI) at this prompt]

Progressive Connection Page 150 (Enter) for next Menu.

Special Interest GROUPS

- 1. COLOR COMPUTER GROUP
- 2. APPLE GROUP
- 3. COMMODORE 64 GROUP
- 4. COMMODORE 128 GROUP
- 5. TRS MODEL 3/4 GROUP
- 6. ATARI GROUP
- 7. TEXAS INSTRUMENTS GROUP
- 8. THE SYSOP GROUP

Key in your choice or

(Enter) or Command: 7

Progressive Connection Page 148

TEXAS INSTRUMENTS MENU Curtis Provance 10121

- O. TI Exit
- 1. TI News
- 2. TI Reviews
- 3. TI Workshops
- 4. TI Events
- 5. TI Clues
- 6. II Library
- 7. II Forum
- 8. TI Visitors Log
- 9. New since last here
- 10. Write to User FORUM Key in your choice: 9 Checking file, please stand by.

..........

TI Forum

Thanks Helene!

From user 10101 on 9/24/86

I just want to thank Helene (# 10068) for the information about the software and accessory clearances in Nashua and Keene...be a good thing to check out! Thanks again, Helene, for letting us know! Recards, Rob Bahder

ITO LOG OFF THE SYSTEM TYPE (OFF) AT ANY PROMPT!!]

It's that time again... these months are surely rolling around awfully fast! I have included the preceeding "Log-on Sampler" as an adjunct to this month's feature demonstration for all of you who are unable to attend the Monday December 1st meeting. As you may have noticed, our own Curtis Provance serves as manager of the T199/4a S(pecial) I(nterest) G(roup). Curtis' user # is 10121 and mine is 10068. You need these numbers if you wish to leave us E-mail on the PROGRESSIVE CONNECTION.

RE: PRINTERS... The Fastext-80 saga, related to you a few months ago, has ended on a happy note when we found a program that was printed in the WEST JAX NEWSLETTER which helped the FASTEXT owner to understand the printer codes. This printer, as you will recall, required a special cable that included a chip which inverted the Strobe signal. There were several obstacles to hurtle in order to isolate the problems, but all have been rectified to the satisfaction of the owner. By the way, it was only due to the perseverance of the club, club members and Wayne Kay of the Delaware Valley UG that the FASTEXT wasn't trashed.

BETTER LATE THAN NEVER... A representative of Star Micronics called me last week relative to the problem which I was experiencing with my SG-15. It seemed to have a slight adjustment problem which I "sort-of" fixed myself, but wrote to Star because the printer was still under warranty. Unfortunately, the address which I had used was no longer current and it took some time to forward it to the appropriate address. The rep called a local Star Service Center in Amherst to confirm that they would assume the cost of repair. I'm dropping it off Monday (11/24) and will have a "review" next month.

I also own a Star LV1210, a budget model which my firm sells for \$189 (it was used to print this column). Enclosed with its manual was a flyer from HONEYWELL which describes their "TotalCare Third-Party Service for Star Micronics". Great, but the nearest service center was in Newton MA... Hope the firm in Amherst works out! By the way, the LV1210 is touted as IBM compatible and was tested on an IBM clone, TI994A, Tandy Color Computer, and C64/C128... there were NO interfacing problems with any of these machines.

The owner of a new Star NL-10I(BM) called recently with what seemed to be a dead printer. Newly unpacked and set up, it wouldn't even respond to the self-test... seems the cover MUST be in place to work!

HAC LABS has acquired two additional Centronics GLP (Epson MX compatible) printers for resale. For \$125 you get the GLP-3 (serial & parallel output), tractor feed attachment, and TI parallel cable shipped C.O.D. to you anywhere in the continental U.S.A. Call for further info.

******************* HELP ***************

Anyone know how to contact Buzz (Albert) Wentz of Sunapee? I need to speak with him ASAP. His PO Box in Newport has been closed and envelops mailed to Dartmouth College (where he supposedly taught) have been returned. His phone # 603/763-9302 is a working number which hasn't "worked" for the last month.

United Parcel Service has opened a branch office at 8 Roosevelt Drive in Hudson. It is located in the former Scottie Shoe Bldo and the hours are between 11:00 AM and 6:30 PM, weekdays.



THE WAR BYD. Helene M. LaBonville 121 Camelot Drive RFD5 Bedford, NH 03102 603/472-3369

Have you noticed that there is an average of one article/note/letter from of our NH99UG members per month in Micropendium? The November issue features a WORDCOUNT program by our own Jim Jagielski of Sanbornville. Thanks for the reference to the club, Jim! FYI, this program is in the club library... please contact Richard Bailey for a copy (603/332-7855). Jim, as you may recall, has authored several fine FORTH articles which have appeared in the NH99UG newsletter. He has also been "drawing up a storm" with GRAPHX and his GLP.

According to a NEWSBYTE in Micropendium, TexComp, "by special arrangement with the Australian manufacturer", is selling an upgrade to GRAPHX which "greatly increases the flexibility and capability" of the product. The upgrade includes a new high speed loader and a new Flip and rotate command. Current GRAPHX owners can obtain this upgrade with docs by sending the original disk (only) and \$5 to TexComp, POB 33084, Granada Hills, CA 91344. I'd be quite nervous to send off the original without first reading more about it, or AT LEAST insuring your package for full value!

53 10/ 2/86 Not Yet Approved End of Listing. Progressive Connection Page 129

Welcome to the Bulletin Board. Please enter your choice:

- O. Exit Bulletin Board
- 1. Scan subjects
- 2. Word search
- 3. Read bulletins
- 4. Insert bulletin
- 5. New since last call

Key in your choice:

Progressive Connection Page 124 (Enter) for next Menu.

- 1. Downloading
- 2. Uploading
- 3. User's Telephone Numbers
- 4. Bulletin Board
- 5. Electronic Mail
- 6. Stock Market Section \$
- 7. Magazines Index

Means Sysop needed Key in your choice or (Enter) or Command: (11 min left)

Progressive Connection Page 122 NOTICE: The SYSOP assumes no responsibility for any files contained here.

Press (Return) to continue Progressive Connection Page 122

Download Menu

- 1. ASCII xfer mode ON
- O. Exit to previous menu
- 1. Search list by computer type
- 2. Search list by program type
- 3. Search list by both of above
- 4. View entire program list
- 5. Download entire program list
- 6. Download a specific program
- 7. What's new since last call

Your Choice: 1

#XMDDEM transfer mode is now on#

Progressive Connection Page 122

Download Menu

- *. XMODEM xfer mode DN
- O. Exit to previous menu
- 1. Search list by computer type
- 2. Search list by program type
- 3. Search list by both of above
- 4. View entire program list
- 5. Download entire program list
- 6. Download a specific program
- 7. What's new since last call

Your Choice: 1

You will now be able to search the Download area for just T I programs

Key in your choice or (Enter) or Command: (10 min left) 60T0110

Progressive Connection Page 110 (Enter) for next Menu.

- 1. Sponsor Information
- 2. Edit your user data
- 3. Edit your password
- 4. Index Pages
- 5. Command Explanation
- 6. Sponsor List
- 7. Housekeeping
- 8. Open FDRUM & Reports

Key in your choice or (Enter) or Command: 1

Progressive Connection Page 128
The Progressive Connection is
toll free from Concord to Salem
and online for your convenience
24 hours per day. Because of
the cost of the phone lines and
electricity, we ask a yearly
DONATION of \$24.00. As a Users
Group this is how we pay the
the bills, and get thing done.
Correspondence and donations
should be done through the folowing mailing address:

The Progressive Connection % Fritz Muller

Riverview Park Manchester, NH 03102

(Enter) or Command: (ENTER)

Progressive Connection Page 110 (Enter) for next Menu.

- 1. Sponsor Information
- 2. Edit vour user data
- 3. Edit your password
- 4. Index Pages
- 5. Command Explanation
- 6. Sponsor List
- 7. Housekeeping
- 8. Open FORUM & Reports
 Key in your choice or
 <Enter> or Command: 5

Progressive Connection Page 101 #+#+#+ Command Summary #+#+#+

TOP Display the first page of ProgressConnection INDEX.

BACK Display the previous page

HELP Get these pages. Note the system operator will be happy to help if called using chat command

AGAIN Resend the current page

GOTD Go directly to page (xxx)

xxx must be 3 mbrs ie:GDTD123

NEXT Go to next logical page NEXT is the default when only (Return) is received

OFF Legal and graceful exit

CHAT Call or chat with system operator (if available)

DUPLEX Change your duplex from full to half or half to full; toggles the duplex

LDGON Exit system and call back in without making the 2nd telephone call

SAMPLE "NEW USER" LOGON TO PROGRESSIVE CONNECTION

300 Baud Connect Please Stand By.

THE PROGRESSIVE CONNECTION

644-3507 434-6225 485-4334

Sysop: Fritz Muller, 10001

Riverview Park Manchester, NH 03102 Voice 603 668-3398

Oct 5, 1986 at 1:58 pm

You are caller number 5,581 If NEW USER type NEW User #: NEW

Please Stand by.

Please answer the following questions, they are only asked the first time you sign onto The Progressive Connection What type of terminal/computer are you using? T199/4A Where did you hear about this BBS? Helene LaBonville Can your terminal accept upper and lower case characters? Y Do you need nulls? N Are you seeing 2 of each character you type? (Is your terminal half duplex)? Do you need a linefeed sent after a carriage return? N Here is a linefeed check-Line number 1 being sent. Line number 2 being sent. Line number 3 being sent. Line number 4 being sent. Was this check OK?

Do you know the decimal values for the sequence of characters required by your terminal which will clear its screen? N Which of the following would be the best terminal or software description of your system:

- 1. Color Computer
- 2. Apple/Tex.Instr./Commodore
- 3. Model I or III
- 4. 80 column Video Terminal
- 5. 80 column hardcopy terminal
- 6. Model II or IV

7. Atari

- B. Adam
- 9. Osborne
- 10. Xerox

Which one? 2

This information is STRICTLY confidential, and is not available to any other system user, except where you specifically indicate which information can be publicly accessed.

(Return)

First Name: BILL Last Name: XXXXX

Your name is Bill XXXXX, correct? Y

Street: 5 XXXXXX STREET

Street address is 5 XXXXXX Street, correct? Y

City: AMHERST

Your city is Amherst, correct? Y

State: NH

Your state is NH, correct? Y

Zip: 03031

Your zip code is 03031, correct? Y

iYou are: Bill XXXXX 5 XXXXXX Street

Amherst , NH 03031

Is this all correct? Y

Please enter your phone area code and number:

603-673-XXXX

Your phone is (603) 673-XXXX, correct? Y

Would you like your user number name, and city to appear on the user list? Y

Would you like your phone number to be given to those specifically asking for YOUR

phone number?

Would you like to automatically enter EMAIL if you

have mail waiting? Y

If you are using terminal software with automatic buffer opening and closing ability, would you like your mail placed

in your buffer?

Enter the password you will use to gain access to this system using up to 8 alphanumeric characters. The characters you type in will not be seen at your end.

(Enter it AFTER I stop sending

characters to you!)

###################MMMMMMZZZZZZZZ

Enter it again to be sure.

If you are not sure of what to do while on line, the "HELP" command may explain your guestions. Good luck and hope you enjoy the time spent on the Progressive Connection. Thank you!

Please indicate your preference by selecting ONLY ONE item from each of the two lists which follow.

SIA LIST

<1> AMATEUR RADID <2> THE FUNNY FARM

(3) SCIENCE FICT. (4) MENTALHEALTH

(5) DATING

(6) HOROSCOPE

(7) ASTRONOMY

(8) GAMES (10) MUSIC

(9)

(11)

(12) MAGAZINE INDEX

GROUPS LIST

(1) ATARI

(2) COCO

(3) APPLE

(4) TRS-80-1

(5) TRS-80-3/4 (6) BUSINESS

(7) OSBORNE

(8) TEX. INSTR.

(9) SINCLAIR

(10) C-64

(11) C-128

(12) MS-DOS

Writing your user info to disk. (Return)

Progressive Connection using the following user number:

10111

Please remember your user number and password! (Return)

New Users may logon to the System a maximum of ten times. Each New User Iogon will be limited to 15 minutes duration.

We hope you enjoy these logons. If you are looking for a source of Computer information where you can be part of a

Comprehensive Group, and more,

you have found it!

You may address EMAIL to the SYSOP, user 10001 if you have comments or questions.

(Return)

From 10001, Fritz Muller, The System Operator.

We would like to take this opportunity to welcome you to THE PROGRESSIVE CONNECTION. We hope your visits here will be pleasurable.

As a New User you may visit these areas:

Bulletin Board (BB) Classified Ads (CA) Upload (UL) Download (DL) and E-Mail(EM)

Happy Trails.....

Press (ENTER) to continue...

Progressive Connection Page 110 (Enter) for next Menu.

- 1. Sponsor Information
- 2. Edit your user data
- 3. Edit your password
- 4. Index Pages
- 5. Command Explanation
- 6. Sponsor List
- 7. Housekeeping
- B. Open FORUM & Reports Key in your choice or <Enter> or Command: (14 min left)

CA

PC-EXTRA!

Welcome to the Classified Ads.

Please enter your choice:

- O. Exit Classified Ad Section
- 1. Scan Ad Subjects
- 2. Search for Keyword
- 3. Read Ads
- 4. Insert an Ad
- 5. What's new since last call

Key in your choice: 3

This choice allows reading of the ads. You may leave any time by typing anything except a carriage return.

Ads 1 thru 13 in file.

Start at: 13 End at: 13

Number Dated Subject 13 9/27/86 FOR SALE From user 10097

FOR SALE: OSCILLOSCOPE (VERY GOOD CONDITION LOTS OF EXTRA'S ALSO MODEL 1 COMPUTER W/VS100 VOICE SYNTHESIZER. BEST OFFER EXCEPTED FOR EITHER ONE. GEORGE PROULX

Press return to continue. (RETURN)

PC-EXTRA!

New User #10097

Welcome to the Classified Ads.

Please enter your choice:

- O. Exit Classified Ad Section
- 1. Scan Ad Subjects
- 2. Search for Keyword
- 3. Read Ads
- 4. Insert an Ad
- 5. What's new since last call

Key in your choice: 0
Progressive Connection Page 110
<Enter> for next Menu.

- 1. Sponsor Information
- 2. Edit your user data
- 3. Edit your password
- 4. Index Pages
- 5. Command Explanation
- 6. Sponsor List
- 7. Housekeeping
- 8. Open FORUM & Reports
 Key in your choice or
 <Enter> or Command:
 (13 min left)

(12 MIII 161

88

Progressive Connection Page 129

Welcome to the Bulletin Board. Please enter your choice:

- O. Exit Bulletin Board
- 1. Scan subjects

- 2. Word search
- 3. Read bulletins
- 4. Insert bulletin
- 5. New since last call

Key in your choice:

Progressive Connection Page 129
This choice allows reading of bulletins. After each prompt you may type "A" to abort, the number of the next notice to read, EDIT to change a bulletin or type KILL to kill a bulletin Bulletins 1 thru 53 on file.
Start at: 49

End at: 53

Number Dated Subject 49 9/27/86 CoCo POKES DSK

From user 10097 at 19:33

POKE 111,254 GIVES DIR TO PRNTR COMMAND A=2000:EXEC 44609:DSKI\$ 0,0,1,A\$,B\$ RESTORES HEAD TO TRACK 0 ON DRIVE 0 COMMAND: A=2000:EXEC 44609: DSKI\$ 1,0,1,A\$,B\$: RESTORES HEAD TO TRACK 0 ON DRIVE 1

Press return to continue. (Press A to Abort) (14 min left)

Number Dated Subject 50 9/27/86 Christian BBS

From user 10001 at 22:12

The Narrow Way has decided to revert back to their old version Software out of personal preferance. They will soon have all the message bases back onlineso drop in and say hello.

Be Nice! 644-2255

Press return to continue.
(Press A to Abort)
(14 ain left)

Number Dated Subject
51 9/28/86 Not Yet Approved
Number Dated Subject
52 10/ 1/86 Not Yet Approved
Number Dated Subject

#39

Copyright 1986

TIGERCUB SOFTWARE 156 Collingwood Ave. Columbus, OH 43213

Distributed by Tigercub Software to TI-99/4A Users Groups for promotional purposes and in exchange for their newsletters. May be reprinted by non-profit users groups, with credit to Tigercub Software.

Over 13% original programs in Basic and Extended Basic, available on casette or disk, only \$3.8% each plus \$1.5% per order for PPM. Entertainment, education, programmer's utilities.

Descriptive catalog \$1.8%, deductable from your first order.

Tips from The Tigercub, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 5% original programs and files, just \$15 postpaid. Tips from the Tigercub Vol. 2, another diskfull, complete contents of Nos. 15 through 24, over 6% files and programs, also just \$15 postpaid.

Nuts & Bolts (No. 1), a full disk of 198 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms.

and 5 pages of documentation with an example of the use of each subprogram. All for just \$19.95 postpaid.

Nuts & Bolts No. 2, another

Nuts & Bolts No. 2, another full disk of 188 utility subprograms in merge format, all new and fully compatible with the last, and with 19 pages of documentation and examples. Also \$19.95 postpaid, or both Nuts Bolts disks for \$37 postpaid.
Tigercub Full Disk Collec-

tions, 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, PROGRAM-TUTOR, PROGRAMMER'S UTILI-TIES. BRAIN SAMES, BRAIN TEASERS, BRAIN BUSTERS!. MANEUVERING GAMES. ACTION REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID'S GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MID-DLE/HIGH SCHOOL MATH, VOCAB-ULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPES AND DISPLAYS

For descriptions of these send a dollar for my catalog!

Answer to last month's

challenge - for the longest possible one-liner, run the following "program to write a program" - 196 OPEN #1: "DSK1.LONG", VARI ABLE 163, OUTPUT 119 FOR J=1 TO 79 :: M\$=M\$&C HR\$(149)&CHR\$(138):: NEXT J

HR\$(149)&CHR\$(138):: NEXT J
:: M\$=CHR\$(254)&CHR\$(254)&M\$
&CHR\$(149)&CHR\$(8):: PRINT #
1:M\$:: PRINT #1:CHR\$(255)&C
HR\$(255):: CLOSE #1

Then enter NEW, then MERGE DSKI.LONG, then LIST - over

34 lines long! But that one doesn't do anything, so try this -

190 OPEN #1: "DSK1.LONG", VARI ABLE 163, DUTPUT

119 FOR J=1 TO 52 :: M\$=M\$&C HR\$(162)&"X"&CHR\$(138):: NEX T J :: M\$=CHR\$(254)&CHR\$(254) }&M\$&CHR\$(162)&"X"&CHR\$(8):: PRINT #1:M\$:: PRINT #1:CHR \$(255)&CHR\$(255):: CLOSE #1

Again enter NEW, and MERGE DSK1.LONG, then RUN. You'll get a message BREAKPOINT IN 32518 (don't ask me why! Can anyone tell me?) but just enter RUN again. Then LIST it - over 24 lines long!

Explanation? Programs are saved in token code similar to MERGE format code. The maximum length of a record is 163 bytes - which is why MERGE files are D/V 163. The token for RANDOMIZE is ASCII 149, for the double colon is 139. Repeating that 79 times takes only 158 bytes, plus one more RANDOMIZE, the two-byte tokenized line number and the mandatory ASCII 9 to end the record, totals 162.

Here's a spooky one for Hallowe'en
188 CALL CLEAR :: CALL MAGNI FY(4):: CALL SCREEN(2) ! The Blob by Jim Peterson

118 CALL CHAR(96, RPT\$("3C7EF FFFFFFFF7E3C", 4)):: J=-1

128 FOR L=1 TO 28 :: CALL SP RITE(\$L,96,16,L\pm4+28,18,8,L\pm4):: NEXT L

138 FOR L=1 TO 28 :: CALL MO TION(\$L,\$,L\pmj):: NEXT L

148 J=J\pm-1 :: 60TO 138

unusual sprite 2-liner in the Charleston Area 99ers newsletter. It is based on a CALL LDAD which freezes all sprite motion until they are turned loose by another CALL LOAD - 188 R=PI±2/28 :: CALL CLEAR :: CALL SCREEN(2):: CALL INJ

Wes Johnston published an

:: CALL SCREEN(2):: CALL INJ T :: CALL LOAD(-31886,96):: FOR I=1 TO 28 :: CALL SPRITE (#I,46,16,96,12B,COS(I*R)*18 ,SIN(I*R)*19):: NEXT I 118 CALL LOAD(-31896,9):: 60 TO 119

You might like to try adding my "jewels" to that 188 FOR CH=33 TO 68 :: FOR A
#1 TO 4 :: X=INT(8#RND+1)::
T\$=\$E6\$("18243C425A667E81", X
#2-1,2):: A\$=A\$&T\$:: B\$=T\$&
B\$:: NEXT A :: CALL CHAR(CH
,A\$&B\$):: A\$,B\$="" :: NEXT C

ii# R=PI*2/28 :: CALL CLEAR
:: CALL SCREEN(2):: CALL INI
T :: CALL LOAD(-318#6,96)::
FOR I=1 TO 28 :: CALL SPRITE
(#I,32+I,INT(14*RND+3),96,12
8,COS(I*R)*I#,SIN(I*R)*I#)::
NEXT I

12# CALL LOAD(-318#6,#):: 60 TO 12# Also try CALL MAGNIFY(2)

And, here is a companion program to the TAKE AWAY in Tips #35 -188 CALL CLEAR :: CALL TITLE

(5, "ADD & CARRY")!by Jim Pet erson

119 DISPLAY AT(3,10): "COPYRI GHT": TAB(10); "TIGERCUB SOFTW ARE": TAB(10): "FOR FREE": TAB(10); "DISTRIBUTION": TAB(11); " SALE PROHIBITED"

128 CALL PEEK(-28672, A@):: I F A@=# THEN 16#

13# DATA FINE, NO, GOOD, UHOH, R IGHT, TRY AGAIN, YES, THAT IS N OT RIGHT 14# FOR J=1 TO 4 :: READ RIG

HT\$(J), WRONG\$(J):: NEXT J
158 FOR D=1 TO 1988 :: NEXT D
:: CALL DELSPRITE(ALL)
168 CALL CLEAR :: CALL CHAR(
95, "FFFF"):: CALL MAGNIFY(2)
:: RANDOMIZE :: CALL SCREEN(
14):: FOR SET=5 TO 8 :: CALL
COLOR(SET, 16, 1):: NEXT SET
178 CALL CHAR(128, "E78842881
8887E8888E788428899423CE7884

188 CALL CHAR(124, "\$E8884818 88788887888288888881888") 198 DISPLAY AT(3,8): "ADD AND CARRY" :: CALL CHAMELEON 288 CALL COLOR(14,2,2):: CAL L HCHAR(4,4,143,2):: CALL HC HAR(5,4,143,2):: CALL SPRITE (#25,128,11,25,25)

25599423C55E7554218553C4265*

```
219 T=T+1 :: IF T=6 THEN T=9
 :: 60TO 25#
229 Z=INT(8=RND+2):: IF Z=Z2
 THEN 228 ELSE 12=1
23# Y=INT(Z=RND):: IF Y=Y2 T
HEN 239 ELSE Y2=Y :: X=Z-Y
249 N=1 11 GOSUB 479 12 GOTO
 219
259 T=T+1 :: IF T=11 THEN T=
# :: 50TO 29#
269 X=INT(19=RND):: IF X=X2
THEN 268 ELSE X2=X
27$ Y=INT(19 = RND):: IF Y=Y2
OR X+Y<18 THEN 265 ELSE Y2=Y
 :: Z=X+Y
28# N=1 :: 60SUB 47# :: 60TO
298 T=T+1 :: IF T=11 THEN T=
$ :: 60TO 33$
399 X=INT(99±RND+19):: IF X=
X2 THEN 388 ELSE X2=X
318 Y=INT(98*RND+18):: IF Y=
Y2 THEN 318 ELSE Y2=Y :: Z=X
329 N=2 :: 60SUB 479 :: 60TO
339 X=INT(998#RND+189):: IF
X=X2 THEN 330 ELSE X2=X
34# Y=INT(9###RND+1##):: IF
Y=Y2 THEN 348 ELSE Y2=Y :: Z
=X+Y
35# N≃3 :: 60SU2 47# :: 60TO
331
368 R=96 :: CC=96 :: FOR J=1
TO N :: CALL SPRITE(#J.48+A
(J), 11, R, CC):: CC=CC+16 :: N
371 R=116 :: CC=96 :: FOR J=
1 TO N :: CALL SPRITE(#4+J,4
8+8(J),11,R,CC):: CC=CC+16:
: NEXT J
38# CALL HCHAR(18,12,95,N±3)
:: CC=CC-16 :: CALL SPRITE(#
22,43,16,R,8#):: RETURN
398 R=148 :: FOR J=LEN(STR$(
Z))TO 1 STEP -1 :: CALL SPRI
TE(#20,63,11,R,CC)
488 CALL KEY(3,K.ST):: IF ST
<1 OR K<48 OR K>57 THEN CALL
 PATTERN(#20,32):: CALL PATT
ERN(#28,63):: 50TO 498
419 CALL DELSPRITE (#28):: CA
LL SPRITE(#12+J,K,11,R,CC)
428 IF X-48<>C(J)THEN GOSUB
489 :: CALL DELSPRITE(#12+J)
:: CALL SPRITE(#28,63,11,R.C
C):: 50TO 499
43# IF 4(J-W)+B(J-W)>9 THEN
CALL SPRITE(#28, 49, 16,89, CC-
                               669 FOR J=1 TO L :: CALL SPR
16)
                               ITE(#J,ASC(SEG$(T$,J,1)),J+1
```

```
441 CC=CC-16 :: NEXT J :: 60
SUB 518 :: RETURN
45# FOR J=1 TO LEN(STR$(X)):
 : :: A(J)=VAL(SE6$(STR$(X),J
 ,1)):: NEXT J :: FOR J=1 TO
LEN(STR$(Y)):: B(J)=VAL(SE6$
 (STR$(Y),J,1)):: NEXT J
 46# FOR J=1 TO LEN(STR$(Z)):
: C(J)=VAL(SE6$(STR$(Z),J,1)
):: NEXT J :: W=LEN(STR$(Z))
-LEN(STR$(X)):: RETURN
478 60SUB 458 :: 60SUB 368 :
: 60SU8 39# :: FOR D=1 TD 2#
# :: NEXT D :: CALL DELSPRIT
E(ALL):: DISPLAY AT(18.1)::
CALL CHAMELEON :: CALL SPRIT
E($25,120,11,25,25):: RETURN
48# DATA 123,124,125,123,124
,125,123,128
490 IF A@=0 THEN 500 :: CALL
 SAY (WRONG$ (INT (4 ERND+1)))
500 RESTORE 480 :: FOR JJ=1
TO 8 :: READ P :: CALL PATTE
RN(#25,P):: XX=2^25# :: NEXT
 JJ :: RETURN
518 DATA 121,122,121,122,121
,122
528 IF A@=8 THEN 538 :: CALL
 SAY (RIGHT$ (INT (4 = RND+1)))
539 RESTORE 518 :: FOR JJ=1
TO 6 :: READ P :: CALL PATTE
RN(#25,P):: XX=2^25# :: NEXT
 JJ :: RETURN
540 SUB CHAMELEON
559 M$="1899665AC342DB667E18
81##995AC3A5E78142BD24DB66##
81429924997E5AC3A53C241899FF
DB5AFF7EFF##991881##66##18"
560 RANDOMIZE :: CALL CHAR(1
28, SEG$ (M$, INT (43 #RND+1) #2-1
,16)):: X=INT(14±RND+3)
578 Y=INT(14#RND+3):: IF Y=X
 THEN 579 :: CALL COLOR(13, X
, Y)
58# CALL HCHAR(1,2,128,3#)::
 CALL HCHAR(24,2,128,38):: C
ALL VCHAR(1,31,128,96):: SUB
END
59# SUB CHAMNIPE
699 T=T+1+(T=2) =2 :: ON T 60
TO 618,629
61# CALL VCHAR(1,3,128,768);
: 6010 639
62# CALL HCHAR(1,1,128,768)
639 CALL CLEAR :: SUBEND
64# SUB TITLE(S,T$)
650 CALL SCREEN(S):: L=LEN(T
3):: CALL MAGNIFY(2)
```

```
3,J*(178/L),1$+J*(2$8/L))::
                                  CHAR (R, 1, CH, 64):: R=R+2*ABS(
 NEXT J
                                  R(23)
 678 SUBEND
                                  148 NEXT CH :: R=8 :: FJR SE
                                  T=2 TO 14 :: X=INT(14#RND+2)
   A mathematical curiosity -
                                  15# Y=INT(14#RND+2):: IF Y=X
 188 !MAGIC NINES by Jim Pete
                                   THEN 159
 rson
                                  16# CALL COLOR(SET, X, Y)
 119 CALL CLEAR
                                  179 NEXT SET :: CALL CLEAR :
 128 INPUT "TYPE ANY 3-DIGIT
                                  : CALL COLOR(1,5,5):: CALL V
 NUMBER OF 3 DIFFERENT DIGITS
                                  CHAR(1,29,1,192):: CALL SCRE
  "iN :: IF N<>INT(N)OR N>999
                                  EN(16):: F=262 :: FOR N=# TO
  OR NO THEN 125
                                   23 :: S(N)=INT(F±1.#59463#9
138 N$=STR$(N):: IF N<188 TH
                                  4^N):: CALL SOUND (-999, S(N),
EN NS="8"&NS
148 IF SE6$(N$,1,1)=SE6$(N$,
                                  188 NEXT N
                                  19# DATA 2,1,1,1,6,1,1,1,6,2
2,1) OR SE6$(N$,1,1)=SE6$(N$,
3,1) DR SE6$(N$,2,1)=SE6$(N$,
                                  ,6,1,1,1,6,1,8,8,1,19,19,1,1
3,1) THEN PRINT *>>> THREE DIF
                                  1, 11, 1, 15, 6, 3, 13, 6, 2, 13, 11
FERENT DIGITS << . :: 60TO 12
                                  288 DATA 1,18,18,1,17,17,4,1
                                  5, 11, 1, 11, 15, 1, 13, 13, 1, 15, 11
15# PRINT :: N2$="" :: FOR J
                                  ,1,13,13,1,10,10,3,13,10
=1 TO 3 :: N2$=SE6$(N$,J,1)&
                                 219 DATA 2,13,13,2,13,19,1,1
N2$ :: NEXT J :: N2=VAL(N2$)
                                  5, 18, 1, 18, 15, 2, 15, 15, 1, 15, 18
:: D=ABS(N-N2)
                                  ,1,15,15,1,13,13,1,15,15
168 PRINT NS; " BACKWARDS IS
                                 22# DATA 1,8,3,3,6,3,2,6,6,2
":N2$: :
                                  , 8, 8, 4, 19, 1, 1, 1, 1, 6, 1, 6, 6, 1, 1
17# N3=ABS(N-N2):: N3#=STR$(
                                 9, 19, 1, 15, 15
N3):: IF N3<198 THEN N3$="8"
                                 23# DATA 2,13,1,2,13,5,2,13,
&N3$
18# IF N>N2 THEN PRINT NS:"
                                 249 DATA 1,6,6,1,8,8,6,10,6,
MINUS "; N2$;" EQUALS "; N3$:
                                 2, 3, 3, 2, 8, 5, 1, 8, 1, 3, 6, 1, 7, 6,
:ELSE PRINT N2$; " MINUS ";N$
; " EQUALS "; N3$: :
                                 258 A=1 :: B=1 :: E=5
198 FOR J=1 TO 3 :: N4$=SE6$
                                 26# FOR J=1 TO 144 STEP 3 ::
(N3$,J,1)&N4$ :: NEXT J
                                  CALL HCHAR (A, E, 32, T#4):: CA
200 PRINT N3$: " BACKWARDS IS
                                 LL HCHAR (A+1, E, 32, T #4):: CAL
 ":N4$: :N3$; PLUS ":N4$; "
                                 L HCHAR(B, E, 32, T # 4):: CALL H
IS 1889": :"I KNEW THAT WOUL
                                 CHAR(B+1, E, 32, T±4):: READ T,
D BE THE": :"ANSWER!": :"LIS
                                 A,B :: E=17-T#2
T THE PROGRAM AND SEE!"
                                 27# CALL HCHAR(A,E,32+INT((A
216 !!!!!!!!!!!!!!!!!!!!!!!!!!
                                 +1)/2) *8, T*4):: CALL HCHAR(A
228 ! THE ANSWER WILL BE !
                                 +1,E,32+INT((A+1)/2) #8,T#4):
23# !
               1989
                                 : CALL HCHAR(B,E,32+INT((B+1
24# !!!!!!!!!!!!!!!!!!!!!!!!!!!!!
                                 )/2) ±8, T±4)
                                 28# CALL HCHAR(B+1,E,32+INT(
188 DISPLAY AT(8, 18) ERASE AL
                                 (B+1)/2) ±8, T±4):: FOR D=1 TO
                                  T :: CALL SOUND (-999, S(A), $
L: "SHENANDOAH": : : " Across
 the wide Missouri*: : : : :
                                 ,S(B),7)
 ::::::::programmed by
                                 298 NEXT D
 Jim Peterson*
                                 399 NEXT J :: LL=0 :: FOR SE
118 FOR D=1 TO 1888 :: NEXT
                                 T=2 TO 14 :: X=INT(15#RND+2)
D :: CALL CLEAR :: DIM S(24)
                                 318 Y=INT(15#RND+2):; IF Y=X
:: RANDOMIZE :: M$=*4218995A
                                  THEN 318
#B7E99819#5A24DBC31824243C5A
                                 326 CALL COLOR(SET, X, Y):: CA
7EA56618993CDB66BD3CA542187E
                                 LL SOUND(-999,3(6),LL,S(1),L
5AC324425A18A51866B1##81187E
                                 L):: LL=LL+2
423CBDDBC3" :: R=1
                                 338 NEXT SET :: RESTORE :: 6
128 FOR CH=48 TO 136 STEP 8
                                 OTO 269
138 CALL CHAR(CH, SEG$(M$, INT
                                 >>>>>>>MEMORY FULL<<<<<<<
```

 $-(J+1=S)+(J+1=S+13)+(J>14)\pm1$

(43±RND+1) ±2-1,16)):: CALL H

TIPS FROM THE TIGERCUS

#48

Copyright 1986

TISERCUB SOFTWARE 156 Collingwood Ave. Columbus, DH 43213

Distributed by Tigercub Software to TI-99/4A Users Groups for promotional purposes and in exchange for their newsletters. May be reprinted by non-profit users groups, with credit to Tigercub Software.

Over 138 original programs in Basic and Extended Basic, available on cassette or disk, only \$3.88 each plus \$1.50 per order for PPM. Entertainment, education. programmer's utilities. Descriptive catalog \$1.88. deductable from your first

Tips from The Tigercub, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 58 original programs and files, just \$15 postpaid. Tips from the Tigercub Vol. 2, another diskfull, complete contents of Nos. 15 through 24, over 60 files and programs, also just \$15 postpaid.

₹ Tips from the Tigercub
₹ ₹ Vol. 3 is now ready. # Another 62 programs, ≠ routines, tips, tricks. ≠ ₹ from Nos. 25 thru 32. # Also \$15 postpaid, Any # ≠ two Tips disks \$27 or all 3 for \$35 postpaid.
 ≠ ********************

Nuts & Bolts (No. 1), a full disk of 100 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms,

and 5 pages of documentation with an example of the use of each subprogram. All for just \$19.95 postpaid. Nuts & Bolts No. 2, another full disk of 188 utility subprograms in merge format. all new and fully compatible with the last, and with 18 pages of documentation and examples. Also \$19.95 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!

TISERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILI-TIES. BRAIN GAMES. BRAIN TEASERS. BRAIN BUSTERS!. MANEUVERING GAMES, ACTION REFLEX AND CONCENTRATION. TWO-PLAYER SAMES. KID'S MORE GAMES, WORD GAMES. SAMES, ELEMENTARY MATH, MID-DLE/HIGH SCHOOL MATH, VOCAB-ULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPES AND DISPLAYS

For descriptions, send a dollar for my catalog!

The READFILE subprogram on my Nuts & Bolts #2 disk has a backward parentheses in line 21161. This is the corrected line -

21161 DISPLAY AT(17,1): "OPEN PRINTER #": "NAME? " :: ACCE PT AT(17,15) VALIDATE(DIGIT)S IZE(-3):P :: ACCEPT AT(18,7) :P\$:: OPEN #P:P\$:: GOTO 21

When Texas Instruments developed Extended Basic, they took away the ability Basic to redefine or color the characters in sets 15 and 16, ASCII 144 to 159, in order to make room in memory for sprites (they did let us have color set # instead. That is why Basic programs which use sets 15 and 16 will crash if you try to run them in XBasic.

Finally. John Behnke published in the Chicago Times newsletter an amazing routine which gave us back those missing sets. His routine was 13 sectors long. Recently, Richard Heath published in the L.A. newsletter a shortened version. And, without having any idea how it works, I have managed to scrunch it down to only 4 sectors -

1 CALL BXB 29999 !BXB by Jim Peterson, adapted from VDPUTIL2 by Joh n Behnke/Richard Heath 38888 SUB BXB :: CALL INIT : : CALL LDAD(8194,37,194,63,2

38881 CALL LOAD(16368,88,79, 67,72,65,82,37,58,89,79,75,6 9,86,32,37,168)

39892 1

30003 FOR J=1 TO 136 :: CALL LOAD(9529+J, ASC(SE6\$()[\[]\$,J,1))):: NEXT J :: SUBEND 38884 SUB CHAR(A,A\$):: CALL LOAD (9588, A):: CALL LINK (*PO CHAR*, A\$):: SUBEND 39995 SUB COLOR(A, B, C):: CAL L LOAD (9492, B, 15+A, (B-1) ±16+ C-1)

38886 CALL LINK("POKEV"):: S **UBEND**

Note than line 38882 is missing. That's because there is no way to key it in. Once again we need a program that writes program -100 FOR J=1 TO 136 :: READ A :: M\$=M\$&CHR\$(A):: NEXT J 118 OPEN #1: "DSK1.BXBDATA", V ARIABLE 163, OUTPUT :: PRINT #1:CHR\$(125)&CHR\$(8)&*][\[]\$ *&CHR\$(198)&CHR\$(199)&CHR\$(1 36) &M\$&CHR\$(B) 128 PRINT #1: CHR\$ (255) &CHR\$ (255):: CLOSE #1

138 DATA 2,224,37,28,3,8,8,8

,2,5,48,48,2,6,37,2,285,133, 2, 134, 37, 17 148 DATA 17,252,4,192,2,1.8. 1, 2, 2, 37, 1, 2, 3, 18, 1, 212, 131, 4.32.32.20 158 DATA 288,4,9,88,2,32,3,8 ,2,1,37,2,2,2,0,8,2,7,11,0,2 ,8,7,1,193 168 DATA 1,192,193,193,188,9 7, 133, 145, 135, 21, 1, 113, 136, 6 ,198,145 178 DATA 135,21,1,113,136,21 **8,78,18,198,177,137,228,198,** 2,131,37,19 188 DATA 17,248,4,32,32,36,1 6, 6, 2, 224, 37, 28, 3, 8, 8, 8, 4, 32 , 32, 32, 4 198 DATA 192,216,8,131,124,2 ,224,131,224,4,96,8,112

RUN that to create a file BXBDATA on the disk. Then load the BXB program, and enter MERGE DSK1.BXBDATA. The unprintable line will pop into place. SAVE this completed BXB routine in MERGE format, and merge it into any Basic-only program. If you want, the result can be run through a Compactor program and turned into multi-statement program lines for more speed.

Or, you can write an Extended Basic program using all 16 character sets for graphics and color actually 17, because set 8 is also available. Even the characters 24 through 31 can be redefined! Craig Miller has warned against fooling around in that area of memory, but there seems to no problem with redefining the cursor (30) or the edge character (31). Sprites can only

characters between 32 and 143 and their color cannot be changed with CALL COLOR(* ,). I have not found any other bugs, but have not had time for much experimenting.

Here's an easy Tigercub challenge - run this one in Basic, not Extended Basic.

>LIST
188 DISPLAY AT(1,1):8
>RUN
8
Why did it print the zero
twice?

I wrote this next one primarily for blind users. It converts each PRINT or DISPLAY directly to speech output and also provides a speech prompt for INPUTs.

100 !PRINT SPEAKER by Jim Pe terson - to add OPEN #1: SPE ECH*, OUTPUT and convert PRIN T and DISPLAY statements to PRINT #1 110 !Also writes a PRINT #1 for INPUT prompts 12# !Program to be converted must first be SAVEd in MER6 E format. Recommend it be RE Sequenced before SAVEing, to make room for INPUT lines 138 PS\$=CHR\$(156)&CHR\$(253)& CHR\$(299)&CHR\$(1)&"1"&CHR\$(1 14# DISPLAY AT(3,1) ERASE ALL :"INPUT FILENAME?":"DSK" :: ACCEPT AT(4.4): IF\$:: OPEN # 1: "DSK"&IF\$, INPUT , VARIABLE 15# DISPLAY AT(5,1): "OUTPUT FILENAME?": "DSK" :: ACCEPT A T(6,4):OF\$:: OPEN #2:"DSK"& OF\$, OUTPUT, VARIABLE 163 168 PRINT #2: CHR\$(8) &CHR\$(1) &CHR\$(159)&CHR\$(253)&CHR\$(28 1) &CHR\$ (1) & 1 * &CHR\$ (181) &CHR \$ (199) &CHR\$ (6) & "SPEECH" &CHR\$ (179)&CHR\$(247)&CHR\$(B) 178 LINPUT #1:M\$:: P=POS(M\$,CHR\$(156),3):: A=POS(M\$,CHR \$(162),3):: Z=POS(M\$,CHR\$(1B 1),3) 189 I=POS(M\$,CHR\$(146),1):: 1F I=8 THEN 218 :: IF Z=8 OR ZKI THEN PRINT #2:M\$:: GOT 198 M2\$=SEG\$(M\$,1,1)&SEG\$(M\$.2.1)&PS\$&SE6\$(M\$.I+1,Z-I-1) &CHR\$(9):: PRINT #2:M2\$

288 PRINT #2:SEG\$(M\$,1,1)&CH

R\$(ASC(SE6\$(M\$,2,1))+1)&SE6\$

218 IF P+A=8 THEN PRINT #2:M

(M\$,3,255):: 60TO 24#

\$:: 50TO 248

220 M=MAX(P.A) 23# M\$=SE6\$(M\$,1,2)&PS\$&SE6\$ (M\$,M+1,255):: PRINT #2:M\$ 248 IF EOF(1)(>1 THEN 178 EL SE CLOSE #1 :: CLOSE #2 25# DISPLAY AT(12,1) ERASE AL L: "Type NEW and Enter" :: DI SPLAY AT(15,1): "Type MERGE D SK*:OF\$:: END -******************** MOLLY DARLING 188 CALL CLEAR :: CALL SCREE N(5):: FOR SE=1 TO 12 :: CAL L COLOR(SE, 16,5):: NEXT SE 116 DISPLAY AT(3.8): "MOLLY D ARLING": : " Written and perf ormed by": :TAB(9):"Eddy Arn old" :: DISPLAY AT(24,1):"Pr ogrammed by Jim Peterson" 128 FOR D=1 TO 288 :: NEXT D :: DISPLAY AT(12.1): "Just a moment.....": :"....look ing for my music...* 138 DIM N(188), N2(188), A(258),B(250),C(250):: F=110 :: F OR J=1 TO 8# :: N(J)=INT(F=1 .859463894^(J-1)+.5):: NEXT 148 DATA 16,11,8,16,8,11,16, 4.11.18.11.8 150 DATA 28,16,11,23,11,16,2 5, 21, 16, 28, 16, 21 169 DATA 23,28,16,23,16,28,2 3, 11, 16, 23, 16, 11 17# DATA 2#,11,16,2#,16,11,2 1,8,11,21,11,8 18# DATA 2#,11,16,25,16,11,2 3,11,16,20,8,4 198 DATA 18,16,18,18,18,16,1 8, 16, 18, 18, 11, 16 288 DATA 18,15,11,18,9,15,1B ,11,9,1B,9,3 219 DATA 28,8,1,28,13,8,28,8 ,13,28,13,4 228 DATA 27,28,18,27,18,28,2 8,18,12,28,12,18 239 DATA 25,21,16,25,16,21,2 5, 13, 16, 25, 16, 13 248 DATA 27,23,21,27,21,23,2 7,23,18,27,18,21 250 DATA 28,23,20,28,20,23,2 8,28,16,27,16,28 269 DATA 39,21,13,28,13,21,2 7, 21, 13, 25, 13, 21 279 DATA 23,28,16,23,16,29,2 9,11,16,29,16,11 281 DATA 31,23,13,28,13,23,2 3, 28, 13, 28, 13, 16 298 DATA 25,21,16,25,16,21,2

5, 21, 16, 27, 16, 21

380 DATA 28,23,28,28,16,11,1 8, 15, 11, 28, 11, 15 31# DATA 16,11,8,16,8,11,16, 9,1,16,1,9 329 DATA 16,11,8,16,8,11,16, 1,8,16,13,1 338 DATA 25,21,16,25,16,13,2 5, 13, 9, 25, 9, 4 348 DATA 23,28,16,23,16,11,2 3,11,8,23,8,4 359 DATA 21,18,11,21,11,9,21 .9,6,29,6,3 369 DATA 21,16,11,28,16,11,2 1,11,8,21,8,4 37# DATA 18,13,18,18,18,6,18 ,6,1,29,13,19 38# DATA 22,18,13,28,22,18,2 7,18,22,25,22,18 398 DATA 23,18,15,23,15,11,2 3,11,6,23,6,3 488 DATA 23,21,15,23,15,11,2 3,11,9,23,9,6 418 DATA 16,13,8,16,8,13,16, 13,8,18,13,9 428 DATA 28,11,8,21,8,11,28, 11,8,18,11,6 438 RESTORE 148 :: T=16 :: 5 OSUB 488 :: RESTORE 148 :: T =4 :: 60SUB 48# :: RESTORE 1 88 :: T=12 :: 60SUB 488 :: R ESTORE 148 :: T=16 :: GOSUB 484 448 RESTORE 215 :: T=28 :: 5 OSUB 488 :: RESTORE 178 :: T =4 :: 60SUB 48# :: RESTORE 2 58 :: T=4 :: 60SU8 488 :: RE STORE 288 :: T=4 :: 50SUB 48 8 :: RESTORE 198 :: T=8 458 GOSUB 488 :: RESTORE 148 :: T=16 :: 60SUB 48# :: RES TORE 29# :: T=48 :: 60SUB 48 # :: RESTORE 14# :: T=16 :: 60SUB 489 :: RESTORE 419 :: T=8 :: 50SUB 488 468 RESTORE 318 :: T=8 :: 60 SUB 488 :: 5070 498 478 60TO 498 489 FOR J=1 TO T :: X=X+1 :: READ A(X), B(X), C(X):: A(X) =A(X)+12 :: B(X)=B(X)+12 :: C(X)=C(X)+12 :: NEXT J :: RET498 DISPLAY AT(18,1): "Contro 1 volume of 3 voices": "using 1, 2 and 3 keys for":"loude r and Q, W and E for": "softe r.*:** 500 DISPLAY AT(15,1): *Contro 1 speed using 'F' for": 'fast

er and 'S' for slower."

510 DISPLAY AT(18,1): "Change key using 'A' for": "higher and 'D' for lower." 52# DISPLAY AT(21,1): "Press -'Z' for minor key, 'X'":"for major key." :: V1, V2, V3=18 :: F,P,Y=# :: X=2## 538 FOR J=1 TO 192 :: CALL S OUND(-999, N(A(J)-Y), V1, N(B(J)-Y), V2, N(C(J)-Y), V3):: FOR T=1 TO X/50 :: P=1^X :: NEXT 548 CALL KEY(8,K,S):: IF S(1 THEN 719 :: ON POS("1239WEF SADZX*,CHR\$(K),1)+1 60T0 718 ,559,569,579,589,599,699,619 ,628,638,658,678,698 559 V1=V1-1-(V1=0):: 50T0 71 56# V2=V2-2-(V2=#) #2 :: 50TO 719 578 V3=V3-2-(V3=#) ±2 :: 60T0 719 588 V1=V1+2+(V1=38) #2 :: 6DT 59f V2=V2+2+(V2=3f) #2 :: 60T 0 710 699 V3=V3+2+(V3=39) ±2 :: 50T 0 719 61# X=X-28-(X(2) #28 :: 60T0 628 X=X+28 :: 60TO 718 638 IF F=1 THEN 60SUB 788 648 Y=Y-1-(Y=-28):: 60TO 718 658 IF F=1 THEN 60SUB 788 668 Y=Y+1+(Y=6):: 50TO 718 678 IF F=1 THEN 718 :: GOSUB 688 :: 50TO 718 688 F=1 :: Y=# :: FOR W=3 TO 27 STEP 12 :: N2(W)=N(W):: N(W)=N(W-1):: N2(W+5)=N(W+5):: N(W+5)=N(W+4):: N2(W+14)= N(H+18):: N(H+18)=N(H+9):: NEXT W :: RETURN 698 IF F=8 THEN 718 :: GOSUB 788 :: 5070 718 788 F=8 :: FOR W=3 TO 27 STE P 12 :: N(W) = N2(W) :: N(W+5) =N2(W+5):: N(W+18)=N2(W+18):: NEXT W :: RETURN 718 NEXT J :: J=192 :: FOR V =18 TO 38 :: CALL SOUND(-999 ,N(A(J)-Y),V,N(B(J)-Y),V,N(C (J)-Y), V):: NEXT V :: FOR D= 1 TO 588 :: NEXT D :: 50TO 5

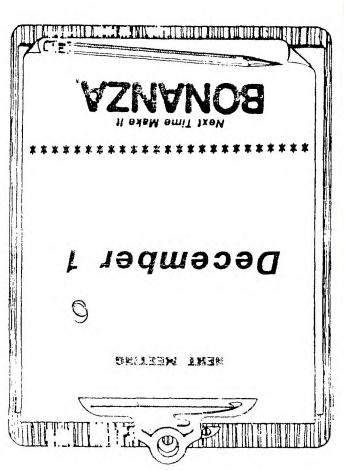
MEMORY FULL

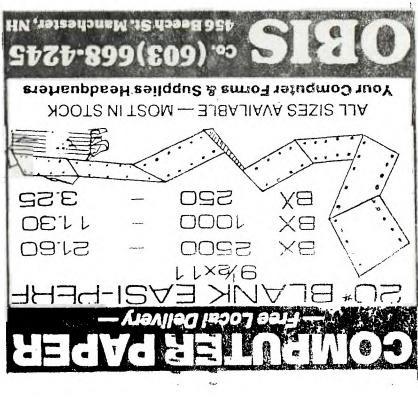
Jim Peterson

I got this from a friend - it isn't up to date, but it may give you some L gor ... boards to try. Cutton

NAME OF BOARD	*** 603 area code LOCATION FHONE *********	# HOUF	RS SYSOF	
COCOBEAN	Alenstown		24 hrs	D Bean
COMEX	Amherst		*24 hrs	
NORTH COUNTRY		224-0801		Dean nayden nacy
JOE'S ASYLUM	DOVER	742-0250		
P.E.R.C.S.	GREENVILLE	878-2642		
2280 RBBS	Hollis		*0700-22	P Ramsden
ACCESS ONE	Hudson	880-9426	15-0700	J Lafond
HUDSON BBS	HUDSON	883-2862	10 0/00	
FID0388	Keene	357-2090	24 hrs	C Vonschilling
NORTH NET	Keene	357-527B	024 hrs	o vouscurrring
USS FIDO	Keene	357-5278	18-0700	
INSTANT SETWARE		357-4306	24HRS	
ALTER-NET	Laconia	524-1000	18-0700	
M-TEK-2	Litchfield	424-8124	#24 hrs	M Mallett
ACCESS 69	Londondor y	434-6225	@24 hrs	C Robertson Fritz-Muller
BLACK BEARS DEN	•	645-4917		see Helene's article
NARROW WAY	Manchester	644-2255	24 hrs.	Sec deletes better
XLISP	Manchester	623-1711	*24 hrs	D Betz
STATELINE BBS	Merrimack	424-5497	*24 hrs	
ACCESS-80	Nashua	888-6999	024 hrs	The same same
HCCECCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Nashua Nashua		eza nrs	Š Eurleson
BRIAN'S BBS	Nashua Nashua	424-3815		
DAVE'S HIDAWAY	Nashua Nashua	888-8694 573-5235	24 hrs 16-2000	B Wallace D Lee (SatiGum)
SOFTLOGIC	14# \$11EK	644-5556	18-0900	D
ELEC. ORPHANAGE	Nachus			
FASFAX	Nashua	882-9312	@24 hrs 24 hrs	
M'CYCLE BBS	Nashua	889-0946 889-3366	±4 nrs *24 hrs	
OUTPOST	Nashua			T-1
ROVER	Nashua Nashua	986-1371 888-8179	*24 hrs *24 hrs	R Schwarz
SNAC	Nashua	883-6168	24 hrs	B Hartman
SIA BBS	Nashua Nashua			
TOM'S PLACE	Nashua Nashua	883-9891	18-0700	T' bel
UHIX GATEWAY	Nashua Nashua	881-8914 888-8179	@24 hrs 24 or=	T Mogavero
X-RATED	Nashua	882-8024	24 hrs	
80186 BBS		888-7562	*24 hrs	T. C to in
NASHUA BBS	Nashua 300/1200		TZ4 NCS	I Smith
PALEHORSE			Z Finka – z Alad	
SIA BBS	NASHUA 300	886-5897	6FM-6AM	
	NASHUA	883-9891	(7) A 1-	
BYTE	Peterboro	924-9820	24 hrs	
INCIDER	Peterboro	924-9801	024 hrs	* **
80-MICRO	Peterboro	924-6985	24 hrs	30 Micro
NET-WORKS	PORTSMOUTH	436-3461	en al Lumen	
QUAGMIRE (ATARI		433-1859	24HRS	
ROCKINGHAM	WINDHAM 300/1200		24HRS	
SOFTWARE REFERR	et below (the	625-1919		

FELCOR MER CA	2 13		and the second
CONTROLSENCE	NeSilve	and and the control	అమెం కురఉ
DOW JONES	Nashua	882-6435	@24 hrs
SOURCE	Nashue	130-514	Statistics of the





NEW HAMPSHIRE 99'ERS USER GROUP, INC.

PO BOX 5991 MANCHESTER, NH 03108-5991







FIRST CLASS MAIL

EDMONTON USER'S GROUP PO BOX 11983 EDMONTON ALBERTA CANADA T5J-3L1

RETURN TO SENDER
LETTERS AND PRINTED MATTER
ADDRESSED TO FOREIGN COUNTRIES

MUSE SE PLACED IN ENVELOPES

OR .UNDER WRAPPERS SEE: IMM 224.4/244.41