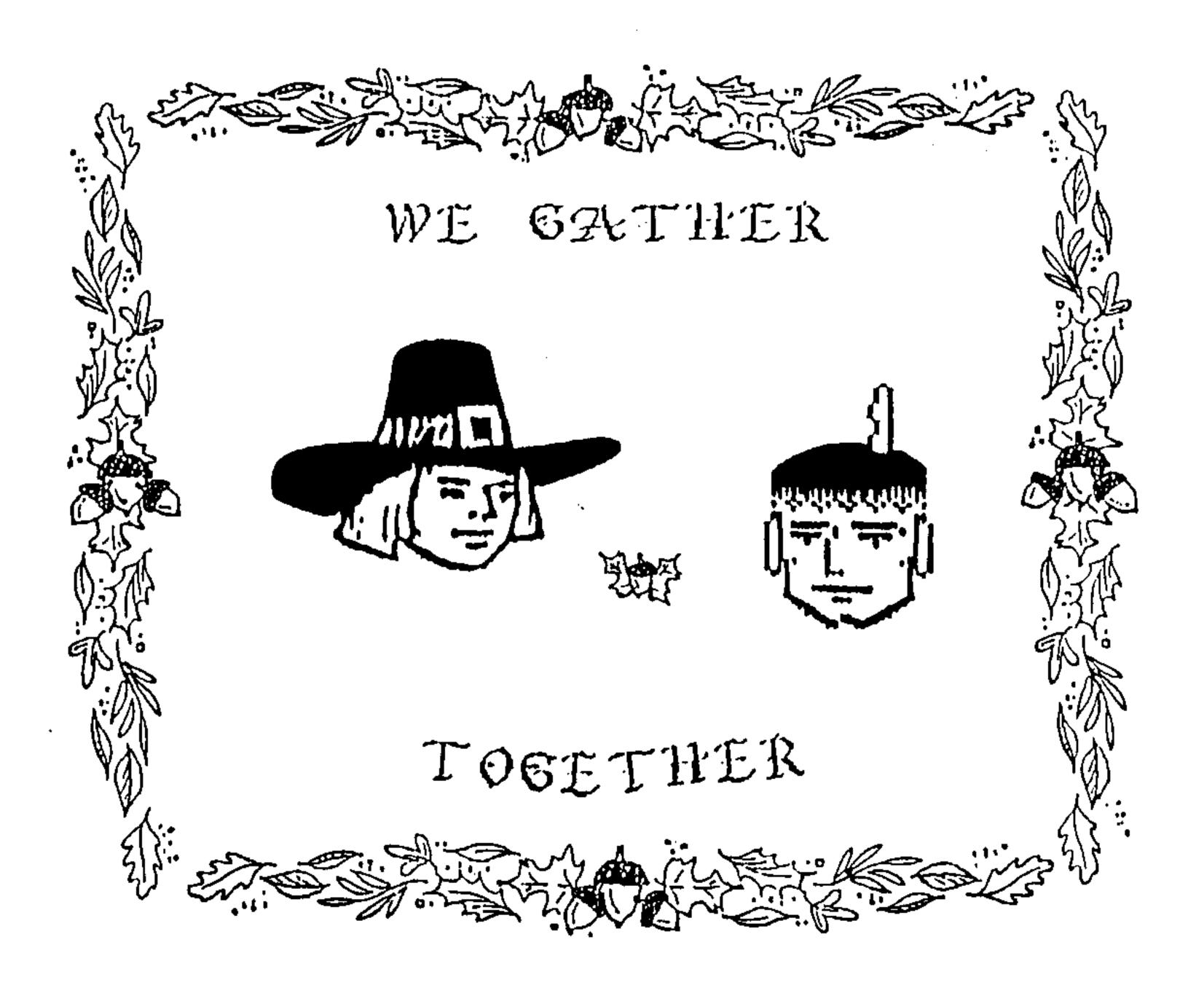


THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

PUBLISHED MONTHLY IN COLUMBUS OHIO

# 



\$1.50 VOL.7 NO.11 NOV 1989

# THE OFFICIAL RESIDENTS OF CONTACT OFFICE AND RESIDENTS



COPYRIGHT © 1985
Central Ohio NinetyNiners Incorporated
(C.O.N.N.I.). Columbus Ohio 43212, USA.
All rights reserved,
Spirit of 99 is published monthly for
Central Ohio NinetyNiners Inc. by C.O.
N.N.I. members and
is the official news
letter of C.O.N.N.I.
User Group.

Editorial, advertising and subscription address is:
181 HEISCHMAN AVE
WORTHINGTON, OH 43085

Subscription rate (USA) \$20.00 /1 year (12 issues). Foreign subscription rates available upon request. Third class postage paid at Columbus, Ohio.

CHANGE OF ADDRESS: Send both OLD and NEW address to: Subscription address above. WE assume no responsibility for manscripts, programs (tape or disk) not ac -companied by return postage. Letters to the Editor become property of Spirit of 99, If published, we reserve the right to edit at our discretion.

OPINIONS EXPRESSED HEREIN ARE THE AUTHORS AND ARE BASED ON VALID DOCUMENTABLE RESEARCH. THEY DO NOT NECESSARILY REFLECT THE OPINIONS OF THE PUBLISHER.

We will not knowingly publish copyright material without the permission
of the author and
credit due.

All programs published herein are of public domain unless otherwise noted.

Other non-profit user groups may use material from this newsletter only if source and credit is given.

Central Ohio Ninety Niners Inc. is a non profit organization comprised of ME MBERS who own or use the TI99/4A computer and it's related pro -ducts and have paid a yearly membership fee of \$28.00 and whose main objective is the exchange of Educational and Scientific information for the purpose of computer literacy.

C.O.N.N.I. meetings are held the 2nd Sat -urday of each month at the Martin Janis Senior Center - East Eleventh Ave. at the State fair-Ohio grounds, Meeting time is at 9 am. Meetings are open to the public. Membership dues (\$28,00) are payable yearly to C.O.N.N.I. and cover the immediate family of the member. (An application has been placed

in this newsletter for your convenience) Please address it to: EVERETT WADE 179 ERIE ROAD COLUMBUS, OH 43214 ADVERTISEMENT:

We do accept commercial advertisement at The following rates: Business Card(2x3.5): \$5.00/issue

1/4 Page: \$25.00
1/2 Page: \$45.00
Full Page: \$75.00
Write this newsletter
for other size arrang
-ements.

All ads should be submitted (camera re-ady) to advertising address above, payment enclosed. Members ads are published at no cost. (Limit of 25 words and must not be commercial please.)

\*\* INDEX \*\*

4-D GRAPHICS
ANNOUNCEMENTSP3
ARTPLUSP.14
CONNI MOVES
CONTEST-PROGRAMMING
FAIRWARE ANNOUNCEMENTP8
INDEXP2
MAPP5
MINUTESP6
PRESIDENT'S MESSAGEP6
PROG. THAT WRITE PROG/6P.10
RAG/TIWR V4.3 F1X
TI-BASE/PART 9P.16
TYPE IN PROGRAMS

EDITOR	JEAN HALL
ASSIST	CAROLE PARKINS
## OFF	ICERS ##
PRESIDENT	DICK BEERY
VICE PRES	JIM SEITZ
SECRETARY	CHARLES OSMENT
TREASURER	BEERY/WADE
LIBRARIAN	CHUCK GRIMES

#### ANNOUNCEMENTS

\*

Dues are usually paid at or before the March meeting, and are \$28 per year for full membership, library and voting privileges, plus the newsletter. You may also pay your dues in two installments if desired: \$14 in March and \$14 in September. If only the newsletter is desired, then payment is \$20 per year. Those who join during other months of the year pay a lesser, prorated amount:

Mar---28.00 Apr---25.75 May---23.50 Jun---21.00 Jul---18.75 Aug---16.50 Sep---14.00 Oct---11.25 Nov----9.50 Dec----7.00 Jan---4.75 Feb----2.50

Fill out an application blank (one on the back of this newsletter), make a check out to C.O.N.N.I. and give it to Everett Wade, the membership registrar, at one of the meetings or mail to him at the following address:

Everett Wade

179 Erie Rd

Columbus, OH 43214

\* MEETING AGENDA ---- SATURDAY 18 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

9:00 AM TI-Writer class Help for beginners

Games group DOS S.I.G.

9:45 AM Video: 89 LIMA FAIRE All libraries open D.O.M. available Raffle tickets available MICROpendium/Blank disks for sale

Help with TI-Writer, Xmas 10:30 AM BUSINESS MEETING

8:30 AM SETUP. COFFEE and DOUGHNUTS 11:00 AM DEMO 1: PC-Transfer - How to transfer files between IBM and the TI by Bill Wood

11:30 AM DEMO 2: TI-Artist Plus! by Ken Marshall, Jr

12:00 PM LUNCH. Bring your own. Question and answer session 12:45 PM Classes:

> Assembly-Karl Romstedt TI-Artist-Ken Marshall, Jr Help for beginner program-

letters and cards available 1:30 PM Adv. Graphics-K. Marshall,Jr

2:15 PM Cleanup and departure

mers

NOTE: this is a home football game day for OSU, we recommend that you plan to arrive early and leave late.

(YOU MAY ENROLL IN CLASSES ON OUR MEETING DAY!!)

SATURDAY MORNING WEDNESDAY EVENING NEW MEMBERS, RENEWALS MEETING - NOV 22 COFFEE ANYONE? NL SUBSCRIPTIONS 

MARK AND LINDA

THOMPSON

. 1 Fin GE **99** 

NM

Call Jim Seitz (875) 5532) to be a host or hostess. SIGN UP IF YOU WANT ANY COFFEE!!

7:30 PM AT MC DONALD'S CORNER OF CLEVELAND AND AND MAIN IN WESTERVILLE

HOPE TO SEE YOU THERE

NOV - JEAN HALL

PAGE 3





# COMNI MOVES

WE WILL MEET AT CHEMICAL ABSTRACTS NOV 18 1989 3RD SATURDAY

8 30AM TO 2 30PM

2540 DLEN RIVER RD ENTER FROM

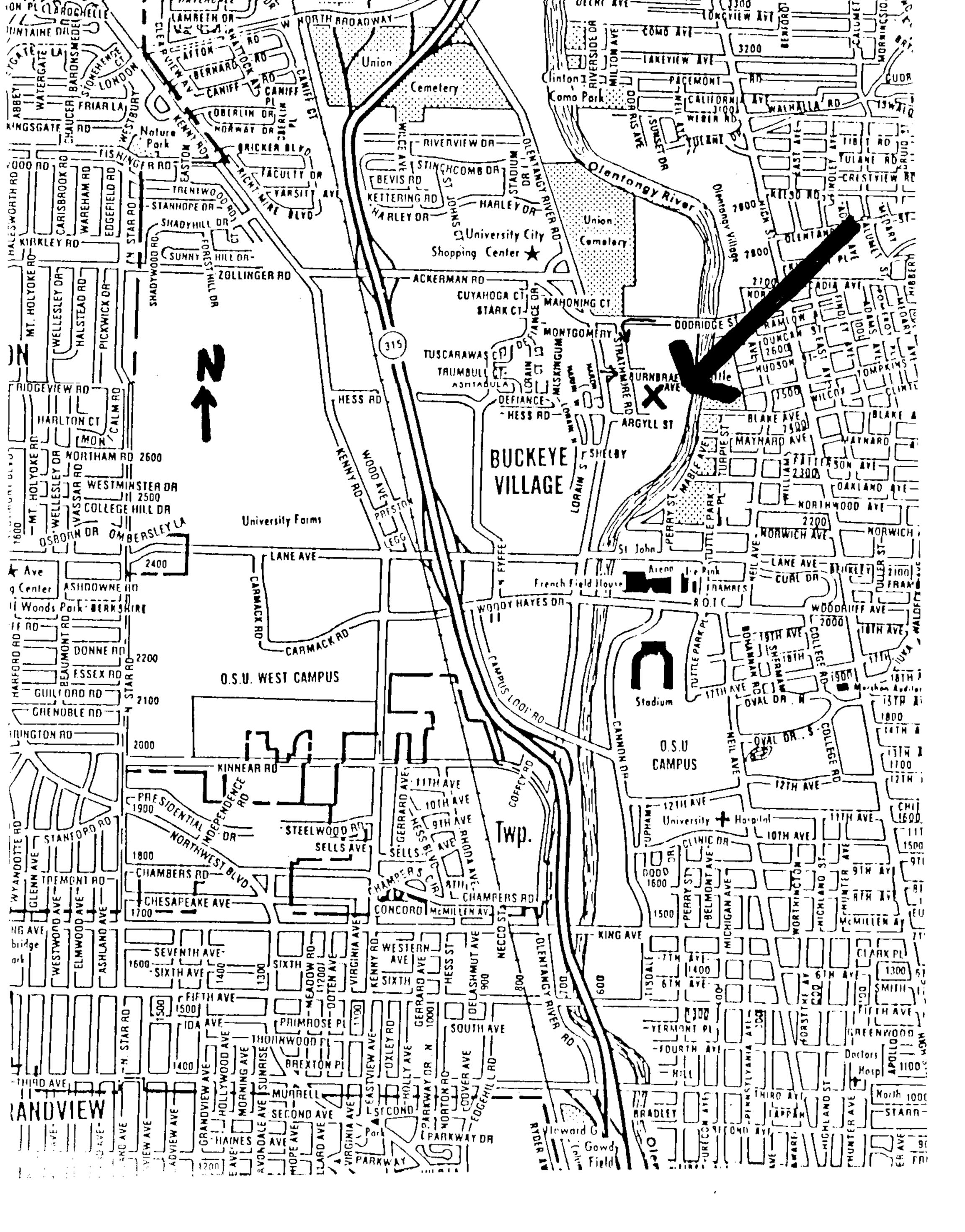
DODRIDGE DR

DLENTANGY RIVER RD

SEE YOU THERE









#### FROM THE PRESIDENT'S DESK by DICK BEERY

This will be a brief column, as I am working with Ken Marshall on a software review, also for this issue.

IT'S OFFICIAL! The membership has voted to move our regular Saturday meetings to Chemical Abstracts, and also to change from the 2nd to the 3rd Saturday of the month. Check the schedule that appears elsewhere in this issue for details. You will notice that a longer meeting time is available, so we will be trying out a slightly different format. Classes can be held on the same day as the meeting, thus eliminating the need for a second trip on the part of those participating. Let us hear your reactions and suggestions.

Thanks to the many people who volunteered to help with the Janis Center 10th Anniversary celebration on October 28th, and with our participation in the Silicon Express multi-computer show on Dec 17th at the Aladdin Shrine. Hope you made it to the Chicago and Milwaukee fairs. I'm writing this in advance, but both show promise of being extra fine.

Plans to change the week for the evening meeting have now worked out, so we will continue meeting at McDonald's in Westerville on the 4th Wednesday. See you at Chemical Abstracts on Saturday, November 18th.

#### C.O.N.N.I. Minutes Wednesday 9/27/89

The meeting was convened at 7:30 p.m. with a call to order by Dick Beery, President. During this time Dick and Ken Marshall, both long time TI users, set up the equipment for the Demos. Unfortunately technical difficulties hampered their progress getting the system to boot up. After much deliberation and consultation with each other it was pointed out by relative new comer to the TI world, Bill Wood, that they had failed to plug the Foot into the console. Embarassment was equally shared. At 8:00 p.m. visitors Mark and Linda Thompson were introduced after which the question and answer period followed. Old business was then was brought to the floor. One issue was the request by Treasurer Mike Chaney that he be allowed to step down from that position due personal reasons preventing him from carrying out his duties. Motion was made and passed that Dick Beery and Everett Wade will be the interim Treasurer until new elections are held.

New business included problems some may be having getting their copies of Genial Traveler. A good price on diskette drawers and Joysticks at Best Inc. was mentioned. We were informed that the 2nd hand computer store CompUsed is moving to a more accessable location. Computer Express was said to be going out of business and was having a 1/2 price sale. New software from Asgard and their free catalog were discussed. A new game called BoulderDash was described. Checkbook programs and Multi Plan were talked about. Jim Peterson said he will be coming out with a new public domain catalog soon.

The Disk of the Month was offered by Chuck Grimes. Irwin Hott explained the BBS's to the guests. MICROpendium and Disk sales were offered. A request for the August 84' issue of the club newsletter was made to complete the library. All members present introduced themselves to the guests. A possible relocation to Chemical Abstracts for the Sat. meetings was discussed with a change to the 3rd Sat of the month. Volunteers were asked to man the table at the Aladdin Temple computer show in November. Dick Beery then demonstrated a menu program using Icons. Meeting adjourned at 10:30

#### C.O.N.N.I. Minutes Saturday 10/14/89

The meeting was called to order at 9:00 A.M. by President Dick Beery with the question and answer period conducted by Irwin Hott and Jim Peterson. The business meeting began at 10:00 am with the introduction of officers and the sale of blank disks and MICROpendium by Everett Wade. New members Mark Thompson, Harley Ryan and Roger Olsen were introduced. New business included proposed relocation to Chemical Abstracts. After discussion a vote on the motion was conducted and passed unanamiously. Also voted on and passed were #1. to change meeting dates to 3rd Saturday and #2. begin at Chemical Abstracts in Nov.

Dick then mentioned the possibility of changing the 4th Ned night meeting to another Ned night. Chicago faire was talked about and a show of hands of those planning to go. Seven members indicated that they might attend. The Chicago Users Group programming contest was discussed. Members were encouraged to write to Computer Shopper to ask them to continue to support the TI column. Minutes and Treasurers reports were read. A discussion of lowering dues was brought forward. The disk of the month was then described by Librarian Chuck Grimes. It was mentioned Asgard Software was now making and selling cartridges. Jean Hall described a certificate award system she had devised to reward members for their mastery of TI Writer skills. New classes were then announced with sign up sheets. A ten minute break was held followed by a demonstration of MultiPlan spreadsheet by Charles Osment. Meeting adjourned at 11:30 to parking lot where a club flea market was held.

Respectfully Submitted Charles Osment, Secretary

PAGE 6 NOV. 1989 SPIRIT OF 99

#### PROGRAMS IN TYPE



VICIOUS

This was taken from the West Penn NL Aug 1989. No credit given to an author. An XB program that will run in a bare console W/XBASIC. Will remind some of "SPYS". Very good and accepts either keyboard or joysticks. May download from Spirit of 99 BBS if you do not want to type it in.

100 @=1 :: \_=2 :: CALL CLEAR :: CALL SCREEN( ):: RANDOMI ZE :: CALL MAGNIFY(3):: FOR A=@ TO 14 :: CALL COLOR(A, 16 ,0):: NEXT A :: CALL COLOR(1 1,11,0):: CALL CHAR(48, "007C 4444444447C")

110 CALL CHAR(96, "070B132141 B1E3FFFFE3B14121130B07E0D0C8 84B281C7FFFFC7B18284CBD0E") 120 CALL CHAR(100, "030C30204 04080808080404020300C03C0300 C040202010101010202040C30C", 108, 007E7E7E7E7E7E001C2A497 F492A1C")

130 CALL CHAR(112, "808080808 08080800101010101010101FF000 00000000000000000000000000000FF\* ):: DISPLAY AT(@,8): "VICIOUS CIRCLE\*

140 DISPLAY AT(4,0): "AVOID T HE CIRCLES WHILE": "CLEARING THE GRID.": : "USE THE JOYST! KEYS TO MOVE." CK OR ARROW 150 DISPLAY AT(10,0): "YOU RE CEIVE 10 PTS FOR EACH SQUARE , DR 1000 PTS FOR AN ENTIRE GRID.": :"ONCE YOU HAVE BEE N HIT 10 TIMES, THE GAME W ILL END."

160 DISPLAY AT(17,0): "FOR EV ERY 5000 PTS, YOU": "GET AN E XTRA LIFE." :: DISPLAY AT(23) ,7):"JOYSTICKS?(Y/N)"

170 CALL KEY([,B,C):: IF C=[ THEN 170

180 D=[ :: IF B=89 OR B=121 THEN D=0':: IF B=121 THEN 21

190 IF D=1 THEN 210 200 FOR A=@ TO 4 :: DISPLAY AT(23,4): "RELEASE ALPHA-LOCK KEY" :: FOR E=@ TO 40 :: NE XT E :: DISPLAY AT(23,4):: N EXT A 210 CALL CLEAR 220 F=85 :: G=117 :: H,I,J=[ :: K=10 :: L=5000 :: CALL H CHAR(\_,9,115,17):: CALL HCHA R(20,9,114,17):: CALL VCHAR( 3,8,113,17):: CALL VCHAR(3,2 6,112,17) 230 DISPLAY AT(@,\_):"000000"

240 FOR A=4 TO 18 STEP \_ :: DISPLAY AT(A, B) SIZE(16): RPT\* ("1 ",8):: NEXT A :: FOR A=\_ TO 9 :: IF A/\_=INT(A/\_)THEN M=-@ ELSE M=@ 250 M=M#INT(RND#10+12+J):: C

ALL SPRITE(#A, 100, INT(RND#14 +3),200,A\$16+37,M,[):: NEXT A :: GOSUB 420

260 DISPLAY AT(22,9): \*PRESS ANY KEY" :: DISPLAY AT(22,9) :: CALL KEY([,N,D):: CALL KE Y(@,P,Q):: IF D={ AND Q={ TH EN 260 ELSE CALL SOUND (500, 2 62, 3, 330, 3, 392, 3)

270 CALL SPRITE(#0,96,15,F,6 ):: GOTO 300

280 IF D={ THEN 390 ELSE CAL L JOYST(@,B,C):: IF A8S(B)=A BS(C) THEN 320

290 G=MIN(181, MAX(69, G+B\$4)) :: F=MIN(133, MAX(21, F-C\*4)): : CALL LOCATE(#@,F,G)

300 CALL GCHAR(INT(F/8)+\_,IN T(G/8+),R):: IF R<>108 THEN 320 ELSE CALL SOUND(140,-6,

3,900,4,1100,5,1300,6) 310 CALL HCHAR (INT (F/8+\_), IN  $T(G/\theta+e),32,_):: I=I+e:: IF$ 

I=64 THEN 330

320 CALL COINC(ALL,R):: IF R =[ THEN 280 ELSE CALL SOUND( 200,-6,\_):: K=K-@ :: GOSUB 4 20 :: IF K=[ THEN 350 ELSE 2

330 CALL SOUND (1600, 131, \_, 39 2,\_,1047,\_):: J=J+\_ :: CALL DE; SPRITE(ALL):: 1/[ :: F=85

:: 6=117 :: H=H+1000 :: DIS PLAY AT(@,7-LEN(STR\$(H)))SIZ E(6):STR\$(H)

340 IF H=L THEN K=K+0 :: 60S UB 420 :: L=L+500 :: GDTD 24 0 ELSE 240

350 FDR A=@ TO I :: H=H+10 : : CALL SDUND(30,523,\_):: DIS PLAY AT(@,7-LEN(STR\$(H))):ST R\$(H):: CALL SOUND(20,200,30 ):: NEXT A :: DISPLAY AT(22, 11): "GAME OVER" :: FOR A=@ TO 340 :: NEXT A 360 DISPLAY AT(22,B): "PLAY A GAIN? (Y/N) \*

370 CALL KEY([,8,C):: IF C=[ THEN 370

380 IF B=89 OR B=121 THEN CA LL DELSPRITE(ALL):: CALL CLE AR :: 6010 220 ELSE END 390 CALL KEY((,N,0):: B,C=[ :: IF N=83 OR N=115 THEN B=-4 ELSE IF N=68 OR N=100 THEN B=4

400 IF N=69 DR N=101 THEN C= 4 ELSE IF N=B8 OR N=120 THEN C=4

410 6010 290 420 DISPLAY AT (0,16):RPT\$(" ",13-K)&RPT\$("m",K):: RETURN

STRESS SYNDROME

This article and program was taken from the PUNN newsletter - issue Aug 1989 STRESS is on the SFIRIT OF 99 BBS if you do not want to type it in.

This month we are offering a little program to test your courage, patience and composture. It is very easy to type in, just be sure you check the DATA numbers carefully before you run the program.

I have heard that some folks have had a severe stress syndrome after

running this program, but I am sure that none of our members have any of those symptoms.

However, run the program at your own risk and the Editor and the entire PUNN staff will not be responsible in any way for liabilities.

Chuck Ball, Editor

100 REM SAVE DSK1.HELLO

110 REM

120 REM Mystery Program

130 REM by Chris Schan

140 REM

150 REM Requires Memory Expa

nsion

160 REM and Synthesizer

170 REM

180 REM Runs in Extended Bas ic or Console Basic

190 REM with Editor/Assemble y or Mini-Memory

200 REM

210 REM

220 REM

230 DATA 71,64,72,65,70,75

240 DATA 73,70,76,67,66,66

250 DATA 65,68,76,68,77,68

260 DATA 78,71,77,66,68,66

270 DATA 66,67,74,67,74,77

280 DATA 74,68,73,71,64,67

290 DATA 72,68,76,65,72,68

300 DATA 76,65

310 CALL INIT

320 CALL PEEK(-28672,A)

330 IF A()96 THEN 430

340 FOR 2=1 TO 11

350 FOR X=1 TO 4

360 READ A

370 CALL LOAD(-27648,A)

380 NEXT X

390 CALL LOAD (-27648,64)

400 CALL LOAD(-27648,80)

410 NEXT Z

420 STOP

430 PRINT "You don't have a

Speech"

440 PRINT "Synthesizer attac hed!"

#### FAIRWARE

#### LANGUAGES AND EDUCATIONAL PROGRAMS

(Editor-Jean Hall)

I received a letter and a flyer from Don Shorock, a TI user and programmer in Great Bend, Kansas. He has been writing programs of an educational nature and is now offering his programs as fairware. Try them and if you like them, send him what you think the program is worth to you.

If you are interested in learning a language, please send for and try the one of your choice. They are listed below. He also

offers 2 disks of miscellaneous educational programs.

SUPPORT OUR FAIRWARE PROGRAMMERS!!!!

Languages with files:

- A. Loader/Menu starts from XB and automatically loads other programs
- B. Main program for the language in question.
  - a. defines accents, tildes, umlauts, etc., needed for that language.
  - b. contains a vocabulary list in the program (data statements).
  - c. allows creation of new vocabulary lists (disk files) that include all of the special marks.
  - d. saves those custom vocabulary lists.
  - e. loads lists previously saved.
  - f. makes easy true/false questions based on the vocabulary list currently in use.
  - g. immediately tells right or wrong and explains reason.
  - h. stops after each 10 questions.
  - i. if score was high, gives visual reward (usually national flag) appropriate to that language.
  - j. reward includes appropriate musical piece (usually national anthem).
- C. Edit files utility which allows correction of errors in vocabulary list.
- D. Join files utility which allows joining of files (thus allowing creation of a unit file out of a set of chapter files, if working from textbook).
  - E. Hardcopy utility which makes printed copies of vocabulary files.
  - F. Catalog program which returns you to Loader/Menu.
  - Documentation file in DV/80 format.
    - a. may be printed with TI-Writer FORMATTER.
    - b. may be viewed on screen from Loader/Menu option.
- H. Sample file(s) with additional vocabulary lists for the language. These disks each have all of the above with 210-240 sectors still free for the files you create. Each sector holds about ten pairs of words, so the disk could be used for files containing over 2000 more words... a decent vocabulary start. The disk is copiable so you may start again and develop even more vocabulary. Such disks are currently available in the following languages:
  - 1. CZECH
- 2. DANISH
- 3. FINNISH
- 4. FRENCH
- 5. GERMAN
- 6. GREEK (modern)

- 7. GERMAN
- 8. NORWEGIAN 9. SPANISH
- 10. SWEDISH
- 11. JAPANESE-01 12.RUSSIAN-01

13. CZECH-02

Other educational programs:

- 14. MISC.EDUC.-Ol geography, Joystick America, history, astronomy, math.
- 15. MISC.EDUC.-02 geography, math and a Mirror game that flashes mirror image of random words.

These sound very interesting for anyone interested in learning a new language, teach school or have children in school. I plan to order the GERMAN language disk, maybe I'll be able to read some of those German birth records I have received in the quest for my German roots.

If you desire to order any of the above mentioned disks, send a blank, unformatted disk along with a self-addressed, stamped mailer and a donation based on the value of the disk to you and your ability to pay. In view of the extra postage costs, those outside the U.S. need not send a blank disk and mailer. Instead, the donation should simply be increased to cover the cost of the blank disk and the extra postage.

Mail to: DON SHOROCK POST OFFICE BOX 501 GREAT BEND, KANSAS 67530 U.S.A.

#### 1990 PROGRAMMING CONTEST

FOR THE TEXAS INSTRUMENT TI-99/4A

COMPUTER

AND

FOR THE MYARC GENEVE / 9640

The CHICAGO'S TI-99/4A USERS GROUP is having a programing contest. And what happened is someone said that we should get it going early the next time. (ME!) Well, I got the contest to run the next time. Here is the run-down!

START NOW.

Last entry accepted on 04-01-1990. JUDGED IN APRIL 1990. WINNERS ANNOUNCED AT THE MAY, 1990 CHICAGO'S USERS GROUP MEETING. PRIZES WILL BE:

1ST PRIZE = \$100.00 SECOND PRIZE = \$75.00 THIRD PRIZE = \$50.00.

FORTH to TENTH PRIZES WILL BE A COMPLETE COPY OF ALL ENTRIES! (NOW!) THINK ABOUT IT! FORTH to TENTH PRIZES WILL PROBABLY BE BETTER THEN THE FIRST THREE PRIZES. NOW IF THAT AIN'T SOMETHING. I'M GOING FOR MORE THEN 200 ENTRIES FROM ALL OVER THE WORLD. IN ANY LANGUAGE THAT CAN BE USED, LOGO, ASSEMBLY, FORTH, BASIC, EXTENDED BASIC, C, P, G, PLOTER, SUPER FORTH, SST, ASPIC, PASCAL & etc.. NOW IF THAT AIN'T SOMETHING.

Did I miss any of them? Any language that the computers can use, With or without any cartridge. (MINIMEM - TE-II - ADVENTURE - TUNNELS OF DOOM - SUPERCART) Well, If I can't review them, I'll get help.

The reviews will be in the June newslettr. All entries will be reviewed and commented on and numbered. No matter how large or small any program is, it will be entered.

Any age is acceptable. I do not want to know any ages. (It would make me look bad that a 7 year old kid can do better then I can.) In fact, My kid is better then I am in some programing. "Back to the programing contest!"

As soon as you are done reading this article, Go write a program! Get started NOW. When you are done with your program, Then read the rest of the newsletter. All entries will become the property of the CHICAGO'S USERS GROUP LIBRARY. And will become part of the library.

Programs should be coming in from all over the world. AUSTRALIA, CHINA, SOUTH AMERICA, NORTH AMERICA, EUROPE, &AFRICA. There are programers and users all over the world. Any and all entries will be mailed to me at my home or to THE CHICAGO USERS GROUP. To my attention OR, If you wish: I have a 1200 baud MODEM. VOICE first! I'LL GIVE ALL THAT INFORMATION AT THE END OF THIS.

Now just a word on getting you off your duff. There are some people who tell me that I ain't got a chance of getting more than twenty programs. Well, I have more confidence in the people who still play and use our computers. Show them all that we are still alive, well and still loving our toy computers. There is no limit of how many entries you can put in. Send them in on DISK (S.S.S.D.) or TAPE. Or 1200 baud MODEM!

The CHICAGO'S TI-99/4A USERS GROUP BBS PHONE NUMBER is: 1-312-862-0182 or 1-708-862-0182

MY COMPUTER phone number is 1-312-755-0051 or 1-708-755-0051.

There will be a change in the area code for some of the phones in the CHICAGO area starting on NOVEMBER 1, 1989, (to the 708 area code). That is in case you want to modem your program in.

Now, so that you can mail or bring it in:

TONY ZLOTORZYNSKI OR

CHICAGO TI USER'S GROUP

3607 WALLACE

P.O.BOX 578341

STEGER, IL 60475 U.S.A.

CHICAGO, IL 60657 U.S.A.

ATT. PROGRAMMING CONTEST

Att. PROGRAMMING CONTEST

P.S. I think this is a chance for you to win a good mess of programs for yourself or for your USER GROUP.

Thanks All! TONY ZLOTORZNSKI



PAGE 9

NOV. 1989

by Jim Peterson

The first five parts of this series were written long ago, but since then I have found a new method to write programs that really do write programs. I must give Karl Romstedt credit for this idea.

To illustrate this technique I will use a program which writes and autoloader to display a diskfull of programs by their complete name rather than the abbreviated filename. This is the LOAD program which I put on all my TI-PD disks.

First, we key in the part which will always be a part of the LOAD program. Do not change the line numbers because there is a reason for them, and leave that REM in line 11 because something else will be plugged in there later.

10 CALL CLEAR :: DIM M\$(127) :: CALL SCREEN(5):: FOR S=0 TO 14 :: CALL CDLOR(S, 2, 8):: NEXT S :: CALL PEEK(8198,A) :: IF A(>170 THEN CALL INIT 11 REM 12 ON WARNING NEXT 13 X=X+1 :: READ M\$(X):: IF M\$(X)<>"END" THEN 13 14 R=3 :: FOR J=1 TO X-1 :: READ X\$ :: DISPLAY AT(R,1):5 TR\$(J);TAB(4);X\$ :: R=R+1 :: IF R<23 THEN 17 15 DISPLAY AT(24,1): "Choice? or 0 to continue 0" :: ACCE PT AT (24, 26) VALIDATE (DIGIT)S 17E(-3):N :: IF N>X-1 THEN 116 IF N(>0 THEN 19 :: R=3 17 NEXT J 18 DISPLAY AT(24,1): "Choice? :: ACCEPT AT(24,9)VALIDATE

THEN 18

19 CALL CHARSET :: CALL CLEA
R :: CALL SCREEN(8):: CALL P

EEK(-31952,A,B):: CALL PEEK(
A\$256+B-65534,A,B):: C=A\$256
+B-65534 :: A\$="DSK1."&M\$(N)
:: CALL LOAD(C,LEN(A\$))

20 FOR J=1 TO LEN(A\$):: CALL
LOAD(C+J,ASC(SEG\$(A\$,J,1)))
:: NEXT J :: CALL LOAD(C+J,0)
):: GOTO 10000
10000 RUN "DSK1.1234567890"

Now, save that "source code" by SAVE DSK1.CAT/S,MER GE. Then key in this "assembler" which will convert the "source code" into an "object code."

100 OPEN #1: "DSK1.CAT/S", VAR
IABLE 163, INPUT
110 OPEN #2: "DSK1.CAT/O", VAR
IABLE 163, OUTPUT
120 FOR J=10 TO 21 :: LINPUT
#1:M\$ :: PRINT #2:CHR\$(0)&C
HR\$(J)&CHR\$(156)&CHR\$(253)&C
HR\$(200)&CHR\$(1)&"2"&CHR\$(18
1)&CHR\$(199)&CHR\$(LEN(M\$))&M
\$&CHR\$(0):: NEXT J
130 PRINT #2:CHR\$(255)&CHR\$(
255):: CLOSE #1 :: CLOSE #2

Note what this routine does. It reads in each line of the tokenized CAT/S and prints it back out to CAT/O preceded by line numbers 10 to 21 in tokenized two-byte format followed by the tokens for PRINT #2, the tokens for a quoted string followed by the CAT/S record and the CHR\$(0) end-of-line indicator. Then it prints the double-255 end-of-file indicator and closes the files

Now key in the CATWRITER program.

1 CALL CLEAR :: CALL TITLE(1
6, "CATWRITER"):: CALL CHAR(1
27, "3C4299A1A199423C"):: DIS
PLAY AT(2,10): "Version 1.4":
;:TAB(8); Tigercub Softwar
e"
2 DISPLAY AT(15,1): "For free
":"distribution": "but no pri
ce or": "copying fee": "to be

charged. .. .. 12 Des (D. 190) 21 NEXT DER LIVE BLEUGEBAREL ALL) 3 DISPLAY AT(2,3)ERASE ALL:\* TIGERCUB CATWRITER V.1.4":;: \* Will read a disk directory ,":"request an actual progra m": "name for each program-ty pe" 4 DISPLAY AT(7,1): \*filename, and create a merg-":"able Q uickloader which dis-": "play s full program names and":"r uns a selected program." 5 DISPLAY AT(12,1): Place d isk to be cataloged":"in dri ve 1 and press any key" :: C ALL KEY(0,K,S):: IF S=0 THEN 9 OPEN #2:"DSK1.CAT", VARIABL E 163, OUTPUT 100 OPEN #1: "DSK1.", INPUT ,R ELATIVE, INTERNAL :: INPUT #1 :N\$,A,J,K :: LN=1000 :: FN=1 110 DISPLAY AT(12.1): "Disk n ame?":;:N\$ :: ACCEPT AT(14,1 )SIZE(-28):N\$ :: LX\$=STR\$(14

100
110 DISPLAY AT(12,1): "Disk n
ame?":;:N\$ :: ACCEPT AT(14,1
)SIZE(-28):N\$ :: LX\$=STR\$(14
-LEN(N\$)/2):: LXLEN=LEN(LX\$)
120 PR\$=CHR\$(0)&CHR\$(11)&CHR
\$(162)&CHR\$(240)&CHR\$(183)&C
HR\$(200)&CHR\$(1)&"1"&CHR\$(17
9)&CHR\$(200)&CHR\$(1)&"1"&CHR\$(17
9)&CHR\$(200)&CHR\$(1)&"1"&CHR\$(17
81)&CHR\$(199)&CHR\$(LXLEN)&LX\$
130 PR\$=PR\$&CHR\$(182)&CHR\$(1
81)&CHR\$(199)&CHR\$(LEN(N\$))&
N\$&CHR\$(0)
140 PRINT #2:PR\$
145 DISPLAY AT(23,1):"To omi

t a file, press Enter" 150 X=X+1 :: INPUT #1:P\$,A,J B :: IF LEN(P\$) = 0 THEN 190 :: IF ABS(A)=5 OR ABS(A)=4 A ND B=254 THEN 160 ELSE X=X-1 :: GOTO 150 160 DISPLAY AT(12,1):P\$;" PROGRAM NAME?" :: ACCEPT AT (14,1)5IZE(25):F\$ :: IF F\$=" \* THEN X=X-1 :: GOTO 150 170 PRINT #2:CHR\$(INT(FN/256 ))&CHR\$(FN-256\$INT(FN/256))& CHR\$(147)&CHR\$(200)&CHR\$(LEN (F\$))&F\$&CHR\$(0):: FN=FN+1 180 M\$=M\$&CHR\$(200)&CHR\$(LEN (P\$))&P\$&CHR\$(179):: IF X<11 THEN 150

190 IF M\$="" THEN 210
200 PRINT #2:CHR\$(INT(LN/256))&CHR\$(LN-256\*INT(LN/256))&CHR\$(147)&SEG\$(M\$,1,LEN(M\$)-1)&CHR\$(0):: LN=LN+1 :: M\$="

210 PRINT #2suliks . -1)&CHR\$(LN-256#INT(LN/256))& CHR\$(147)&CHR\$(200)&CHR\$(3)& "END"&CHR\$(0) 220 PRINT #2:CHR\$(255)&CHR\$( 255):: CLOSE #1 :: CLOSE #2 230 DISPLAY AT(8,1) ERASE ALL :"Enter -":;:" NEW":;:" ME RGE DSK1.CAT":: \* DELETE "" DSK1.CAT"":;:" SAVE DSK1.L OAD" 240 SUB TITLE(S, T\$) 250 CALL SCREEN(S):: L=LEN(T \$):: CALL MAGNIFY(2) 260 FOR J=1 TO L :: CALL SPR ITE(#J, ASC(SEG\$(T\$, J, 1)), J+1 -(J+1=5)+(J+1=5+13)+(J>14)3,J\$(170/L),10+J\$(200/L)):: NEXT J 270 SUBEND

Next, enter MERGE
DSK1.CAT/O and that "object
code" will pop into place
right after line 9. If you
list it, it will look like
a blown file, because most
of the token codes are unprintable, but don't worry.
Save the program as
CAT-WRITER.

When you run the program, it will open an output MERGE format file called CAT and write those merged lines from CAT/O in MERGE format. Then it will open the disk you are cataloging, read the directory sector, and ask you for a disk name with the existing diskname as default. You can select any disk name you want to title the menu screen, up to 28 characters long. Line 110 computes the position to center the title, and lines 120-140 write to the CAT file a tokenized line 11 (overwriting that REM line) to display your title at the top of the screen.

Line 150 reads each filename from the disk directory, skipping over anything

PAGE 10

(DIGIT):N :: IF N=0 OR N $\times$ 1-1

NOV. 1989

SPIRIT OF 99

When the last filename has been read, line 210 prints one last DATA item "END" to signal line 13 to stop reading, and then prints the double-255 end-of-file. Then you are given instructions to clear memory with NEW, merge in the CAT file, delete it because you don't need it any more, and save it back as LOAD.

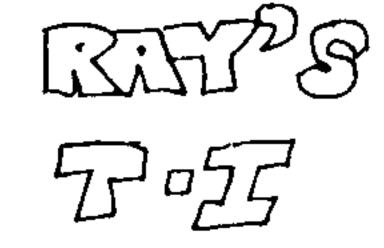
When you list the LOAD program, you will find the original CAT/S restored in lines 10-19 and 1000, the line to display the title in line 11, the filenames in DATA lines starting with 1000 and the program names in DATA lines starting 1100.

When you run the program, it will display the disk name, and read the file-names into an array. Then it will display the program names, numbered, on as many screens as necessary, and ask you to select a program by number. The corresponding filename by number is selected from the array, and lines 19-20 rewrite line

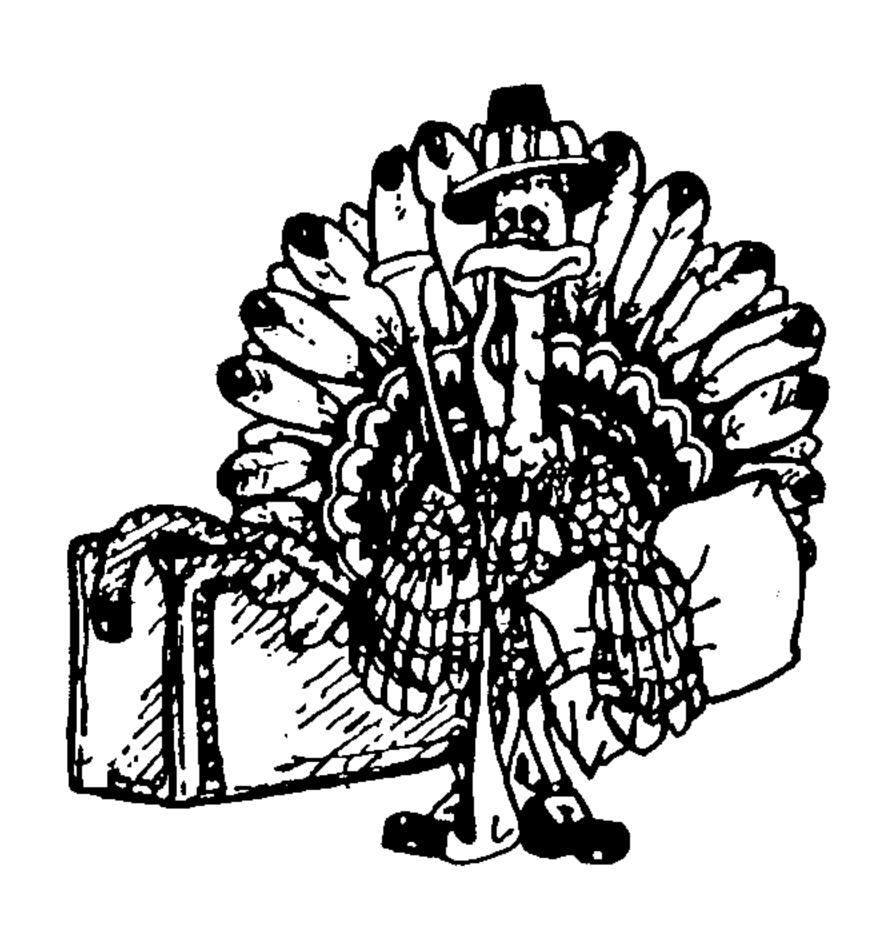
10000 to RUN that filename. List the LOAD program after you have used it to load something, and you will see that it has changed.

That algorithm in lines 19-20 was published in one of the earlist 99'ER magazines, in a letter by A. Kludge. It has been the basis for every XBasic menu loader, and has saved us uncounted thousands of hours. The author had asked me not to reveal his identity, but I think I can tell you that "A. Kludge" was really the late Dr. Stefan-Romano, who passed away recently at the age of 57. He was a brillant man who did much for the II world, at first as editor of the IUS library, and then through the Amnion library and Amnion Helpline. He was of great help to me on several occasions.

Some of you may have obtained from me a copy of CATWRITER which wrote GOSUB 21 in line 12, and CALL LOADs in lines 21-25 to change the cursor to my Tigercub emblem. If you have begun to have problems with the resulting LOAD program or with my previous Tigercub Menuloader which used the same CALL LOADs, I have finally found out the cause. When my Horizon RamDisk is on, any program containing those CALL LOADs will lock up the second time it is run!









SUDHANSHU (PAT) PATEL
Owner

CHERRI PARK SOUARE

15 Cherri Park Square Westerville, Ohio 43081 (614) 899-1403



1... (TOP 99

NOV. 1989

#### PROGRAMMING 4-DIMENSIONAL GRAPHICS



by Jim Peterson



Those of you who remember your first lesson in geometry are aware that a straight line has only one dimension, that of length. Ignoring the necessary breadth of one pixel, this can be programmed on the TI by CALL HCHAR(12,1,95,32).

Now, if you fix that one-dimensional line at one end and rotate the other, you will describe a circle, which is of course a two-dimensional figure having length and breadth. This too is easily programmed on the TI using its built-in SGN function.

Proceeding in logical sequence, if you fix that two-dimensional circle at two points and rotate it, you will describe a three-dimensional globe having length, width and breadth. The programming of this will require a slightly more complex algorithm and the radius should be limited to 14 units, since the TI-99/4A screen has only 29 planes.

Proceeding further in logical sequence, if you fix this 3-dimensional globe at three points and rotate it, you will obviously describe a four-dimensional figure. The algorithm required here is somewhat beyond the limits of my high-school gerometry, so I will leave it to some other programmer. The first one to publish this routine will have performed a valuable service to the TI community.

The more observant among you will have detected an apparent fallacy in my line of reasoning. It is impossible, you say, to fix an object at three points and still be able to rotate it. That is a valid argument, and it is perhaps theoretically impossible to describe a 4-dimensional object having perfect symmetry in all four dimensions.

However, it is not necessary to fix one point of a line in order to rotate the other. You may vary the point of fixing during rotation, alternately fix one point and then the other, move both points simultaneously, etc., and thereby create an infinite variety of two-dimensional objects. You might even rotate both points in a third plane, in either the same or opposite directions, and thereby convert a single-dimensional line into a three dimensional cylinder or opposing cones.

Similarly, it is not necessary to maintain the two points on a circle in a fixed position while rotating it. Note that it is not even necessary that the points be opposite, nor that they be moved only in a two-dimensional plane. It is only necessary that they maintain their relative distance from each other.

Therefore, the same obviously holds true for the rotation of an object having three dimensions.

I am sure that some young genius will soon take advantage of this technique to create some truly mind boggling graphics on our TI screen.

### RAG SOFTWARE

R.A. Green 1032 Chantenay Dr., Gloucester, Ont. K1C 2K9 (613) 837-1955

September 12, 1989

(Editor's note: This letter was received by yours truly and if you have a copy of this utility or are planning to obtain a copy, please make the changes indicated below.)

To: Users of TI Writer Version 4.3:

Gulp! Another bug in the Formatter. Actually, it is in the same area as the .DR bug we just fixed. The new bug is in the translation of the character >00. This translation is done in order to implement the .TL command.

I'm not going to change the version number for this fix since I haven't sent out any disks labeled 4.4. The patch is to file FORMA1 again. On the 4.3 disk:

Fix .DR patch:

Sector >0069 Offset >0006 Is now >C06C SHOULD BE: >C06B

Quite a few people have asked for enhancements to TIW. Do you have any? In order to add enhancements more memory must be made available for code. There are two possibilities, which ones do you like?

- Reduce the size of the text buffer.
   Means maximum file size is reduced.
- Require the use of an E/A super cart.
   That is, BK RAM in the cartridge slot.
- 3. Neither. If it ain't broke, don't fix it!

If I get enough responses, I might be tempted to do some coding.

NOV. 1989

#### TI-ARTIST PLUS

#### A Review By Ken Marshall, Jr. and Dick Beery

This is a hot new release from Inscebot that you won't want to miss. If you already have an official copy of the earlier TI-Artist, you can mail it in with \$14.95 for the new one, a savings of \$10.00. You must send with your money the original disk and the cover from the Instruction Manual.

When you boot the program, you will notice that the title screen has been changed from the original landscape. It is now a moving screen, with sliding titles and whirling globes. A very effective means of letting the user see instantly that the program now offers ANIMATION. The method of moving to and from workscreens and menus has been preserved. The TI-Artist section now offers the capability of drawing arcs, has spray-paint capability, and has separated the foreground and background color icons for greater ease of use.

The Enhancements section now separates slide and instance access. A new section for Vectors has been added, and it is exciting. This latter offers the capability of distorting figures in a number of ways, so as to create new shapes, convey the feeling of motion in a single drawing, or set up a sequence of slightly-different drawings that, when used with the animator, would create effects of smooth motion. Lots of possibilities here!

The whole presentation is nothing short of DAZZLING. Use of color and attractiveness of layout, plus much greater ease of use add much to the program, even if there were not so many great new features.

The Main Menu now allows one to choose directly among Fonts, Vectors, Movies, Input DSR, and Conversion, and now allows one to Print directly without accessing another section, and, Hallelujah! there is now a Quit option. No longer do you have to turn off the console when exiting the program or risk hitting the "E" key when changing sections, which often caused you to lose your picture with no hope of retrieving it. All this in addition to the usual options of accessing either the Artist or Enhancements section. Terrific! I (Ken) find that several of the new features are ones that I suggested, or that many people have felt were needed. Hats off!

The capability of Indexing has been scattered among many more of the modules. Slides and Instances, now separately accessed, offer Load, Save and Index each. Vectors, in addition to the features commented upon above, offers the ability to Scale and to design one's own vectors. According to the Users' Manual, "creating a vector file lets you convert a section of the picture into vectors. Using Vectors allows you to rotate, spin, tip, (utilize)horizontal and vertical range (options), and scale by percentages."

Earlier, we mentioned new presentation techniques. The Fonts menu is like a giant TV screen. A "control panel" on the right of the "picture tube" allows many types of options.

The Movies section offers choices among: Use (Select movie to append, play, etc.); Create (creates a movie file for use with the rest of the Movie commands, and allows one to choose border colors); Append (add a frame to the movie in use); Play (plus adjust speed); Show (current picture); Load (loads a picture into memory); Getlast (gets the last frame of the movie in use); Catalog device(catalogs the disk); Index (e.g. Index DSK2 I); and finally, Delete (Delete filename). Impressed?

A program named PLAY, which is included with the package, allows one to play movies created in the Movies section, and to vary speed of execution. This program, though not the others, has been released to the Public Domain.

The Print option, accessed from the main menu, allows one to choose among: upright, rotate, low or high density, half page, full page, spread apart or scrunch. One, two or three pages may be printed. Banners may now also be created from this section.

The InputDSR option allows the user to Load filename DSK2.EXTDSR. Currently, this option accesses the joystick for use with the program and also allows direct access to the Geneve mouse or the Mechatronics mouse.

The Convert section permits the Loading, Viewing, or Saving of pictures in a variety of formats, including Graph-X and others.

We had to get this article written quickly, so as to meet the newsletter deadline. There was no time to explore in depth all the features outlined above, although we worked fast and did as much as time permitted. We are sure there are many other things that could have been said. Anyway, we glowingly recommend this program to all those who enjoy working with TI graphics.

Note: We have just been informed that apparently the first 250 copies of Artist Plus will not load from EA/5. A patch has now been made available to solve this problem, in the form of a "fix". One place where it can be found in on the BBS named TIABS in Columbus, Ohio. Phone number is (614)442-1852. This is a quality board that offers, in addition to many downloads and message bases for both the 4A and Geneve, similar sections for other computers, including MS-DOS.



101277 OF 99 NOV. 1989 PAGE 15

TIDEASE - From INSCEBUT
TUTORIAL 9.1.1 By Martin Smoley
NorthCoast 99'ers - April 15, 1989 /
Copyright 1989 By Martin A. Smoley

I am reserving the copyright on this material, but I will allow the copying of this material by anyone under the following conditions. (1) It must be copied in its entirety with no changes. (2) If it is retyped, credit must be given to myself and the NorthCoast 99ers, as above. (3) The last major condition is that there may not be any profit directly involved in the copying or transfer of this material. In other words, Clubs can use it in their newsletters and you can give a copy to your friend as long as its free.

### COMPLICATED DATABASE OPPERATIONS AND GRAPHICS

It's time we started to do more complicated chores with II-Base. With this tutorial I am starting a mini-series. In this mini-series we will create a set of CFs and DBs for a computer club disk librarian who handles mail order requests from wembers who live in other states. The system should rapidly locate a members name in the club DataBase (Db), print out the three labels you see below (To:, From:, and CAUTION) and keep track of who received disks and the club disk inventory. The system will keep us informed of the disk inventory and start telling us to order more disks at a pre-set quantity. At this point we will only keep the quantity of disks shipped to a person and the date. This will not include information on the disk name or type of disk. I want to save some information and demo how it's done, but I don't want to turn the operator into a data entry person either. I have the system working at this time, but I may make some changes as we go or by next months tutorial. I will cover as much as possible each wonth without stretching my page limatations too much.

#### To:

Exp. Date 88/09 Raymond (Slim) B. Whitman 2574 East 254th. Eastlake OH. 44094

#### From:



Martin A. Smoley 6149 Bryson Drive Mentor, OH 44060

#### \*\* CAUTION \*\*



COMPUTER DISK
DO NOT BEND OR FOLD
DO NOT X-RAY

DO DSK2.PREP1 DO DSK2.DSKSCR1 LOCAL SEL2 N 5 0 LOCAL MORE C 1 LOCAL TEMP1 C 60 LOCAL ANS N 3 0 SELECT 5 USE DSK2.GRF1 SELECT 4 USE DSK2.MSRET SELECT 3 USE DSK2.DSKINV SELECT 2 USE DSK2.SLSREC BOTTOM SELECT 1 USE DSK2.TNAMES REPLACE MORE WITH "Y" WHILE (MORE = "Y") TOP WRITE 23,6, "ENTER NM " READ 23, 17, SEL2 IF SEL2 = 0CLOSE ALL RETURN ENDIF CLEAR FIND SEL2 IF (NM = SEL2)DO DSK2.DSKNAP1 DO DSK2.INVUPDT ELSE WRITE 23,4 "Number Not Found" WAIT 3 ENDIF WRITE 23,4,"FIND another Y/N" READSTRING 23,23, MORE CLEAR ENDWHILE CLOSE ALL DO DSK5.SETUP RETURN Save as DSKSHP1/C \* DSKSHP1 \*\* \*\*\*\*\*\* Ver. 2.01 03/31/89 \* Find NM using "FIND" \* Print a label and mave record \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

CLUSE ALL

July 1876 16

#### Continued Next Page.

#### **TNAMES**

					· · · <del></del>							
REC	NM	LN	FN	MI	SA	CT	ST	ZP	PH	XΡ	6P	ID
0002		1 Aardvark	Grant	Ε.	9995 State Rt. 84	Geneva	OH	44014	1-465-9876	89/02	NOCO	0717851
0003		2 Aardvark	Willard	J.	No Newsletter		OH		1-465-7689	89/09	NOCO	0717852
0005		3 Jones	Quincy	W.	37285 Burgandy Lane	Mentor-on-the-Lake	OH	44060	257-1029	89/08	NOCU	0820871
0000		4 Smoley	Martin	A.	6149 Bryson Drive	Mentor	OH	44060	216-257-1661	90/02	NOCO	0713831
0004		5 Vivannovitch	Elexxie	ı.	111 E. 98th. St.	Cleveland	OH	91023	541-5415	89/05	NOCO	0712881
0001		6 Whitman	Raymond (Slim)	В.	2574 East 254th.	Eastlake	OH	44094	951-2345	89/09	MOCO	0921863

#### TI-BASE - From INSCEBOT TUTORIAL 9.1.2 By Martin Smoley NorthCoast 99'ers - April 15, 1989 Copyright 1989 By Martin A. Smoley

In this series I will attempt to include all the data you will need to complete this task. This will require some redundency that I hope will not boar the more advanced TIB users. I am printing three labels in each print cycle because I always seem to need return address and CAUTION labels. OK, let's get started.

You should recognize the database TNAMES. I have updated it and filled in some blanks. I use it because it is a direct substitute for the NorthCoast DB, but smaller. (NOTE: The only real name is mine.) Two items of importance are NM and ID. NM is an N type field with a width of 5 and 0 decimal places, while ID is a C type field with a width of 7. In order to get the desired end product I SORTed TNAMES ON LN, FN before I placed the numbers in the NM field. I then entered the NM field and SORTed ON NM. This was because I wanted the names in LN,FN order, but they had to be sorted on NM to allow me to use the FIND function on the NM field. This was all covered previously, I believe it was around Nov./Dec. 1988. FYI: A field type can be changed at will using MODIFY STRUCTURE. You can change a C type to an N type or vice versa, but don't change any field lengths or you'll lose the data. Also, I do not recommend changing a C)haracter field that contains names to a N)umeric field. The field should already contain numbers before it is changed. If you want to experiment with this idea, use a database you can afford to lose.

PREP1

CLEAR
CLOSE ALL
SET PRINTER=RS232.CR.LF.DA=B
SET HEADING OFF
SET RECNUM OFF
COLOR WHITE DARK-BLUE
SET TALK OFF
RETURN

Pre-Program Preparation

\* PREP1 Save as PREP1/C

\* \*\*\*\*

CLEAR
WRITE 3,9, "This section Locates a record"
WRITE 5,9, "using the NM field in the"
WRITE 7,9, "TNAMES Database. It then"
WRITE 9,9, "displays the name and address"
WRITE 11,9, "and asks how many disks to"
WRITE 13,9, "be shipped. It also keeps a"
WRITE 15,9, "running inventory of disks"
WRITE 17,9, "in stock and shipments."
RETURN

DSKSCR1 Save as DSKSCR1/C \*\*\*\*\*\* Info Screen 12/1/88

DSKSHP1 is the main CF. To start this small system you would place the disk containing all the needed files in disk drive #2 and type DO DSK2.DSKSHP1 (E). The TIB processor will find DSKSHP1 and start executing the commands one line at a time. The first thing TIB will do is CLOSE ALL Dbs. The next command will DO the PREP1 CF on DSK2. The PREP1 CF is my general purpose preparation file. It resets the defaults for a particular set of CFs. The only line in PREP1 that I feel is important is SET PRINTER=RS232.CR.LF.DA=8. I am using one of the original TI 99/4 Impact Printers to do the labels. This printer runs off the RS232 port and not PIO. It was also necessary to place Dip switch #1 of the SW2 set to the OFF position for graphics mode (see your printer manual), and last, it is also necessary to send the command DA=8 in the PRINTER statement. This was all necessary to set up my printer for the graphics I intend to print on the second and third label.

The ability to print graphics, which can now be done with Version 2.01, will create an exciting new area of capability for the TI-Base user.

left hand corner of this page. It can say anything you want, or you can leave it out of the CF altogether. The next four lines in DSKSHP1 are not important, but then again they are important. Sounds like I'm confused, "HUH". Well, I'll explain. As far as I can tell the local variables are limited to about seven names with a size that is currently about 256 bytes. You can increase the size somewhat with the SET command but the point is that this space is a precious commodity. It seems like I run out of local space every few minutes. So, in the future I will try to use one or more databases to temporarily store information that IIB needs. As you will see in this tutorial the information is as readily available in a Db as is would be in LOCALs and I can store as many as I need.

	CRTD	04/03/89	7 CHNG	D 04/05	/89	CRTD	04/06/8	9 CHN6	D 04/06	/B9
	FIELD	DSCR	TYPE	WIDTH	DEC	FIELD	DSCR	TYPE	HTDIW	DEC
	1	FR	C	006		1	GRENM	С	010	
	2	TO	C	003		2	6R1	X	080	
	3	NAME	C	030		3	GR2	X	080	
	4	STREET	£	030		4	6R3	X	080	
	5	CISTIP	C	030		5	6R4	ĭ	080	
	6	CTN	Ç	020		6	GR5	X	080	
	7	CD	C	030		7	GRA	X	080	
	8	DNB	C	030						
•	9	DHX	C	030		000 1	6RF1	0000	0/00001	,
	10	NSI	£	010						
	11	M52	C	010						
•	12	MS3	C	010		CRTD	03/31/0	89 CHNO	5D 04/08	5/89
	13	MS4	C	010		FIELD	DSCR	TYPE	WIDTH	DEC
•	14	CDI	X	020						
	15	CD2	X	020		1	RTOT	N	005	00
	16	CD3	X	020		2	LDT	D	800	
	17	CD4	X	020		3	PDT	D	008	
	000	1 MSRET	000	00/0000	i	000	ı DSKIN	V 000	00/0000	i
						Conti	nued	Next	Page	

#### TI-BASE - From INSCEBOT TUTORIAL 9.1.3 By Martin Smoley April 17 1989 NorthCoast 99'ers -Copyright 1989 By Hartin A. Smoley

1 1£ 10 10

The statement SELECT 5 means select the number 5 work area, or as I like to call it, "slot 5". We then open the GRF1 database, which is located on disk drive #2 in slot 5, with the statement USE DSK2.6RF1. We then SELECT slots 4,3,2 and 1, and open MSRET, DSKINV, SLSREC and my old favorite INAMES respectively. I SELECTED 1 last because that is the slot I want to be in when TIB is ready to start performing its tasks. [']] get into it more later, but for now the DBs look like this. GRF1 is the DB where I will keep my graphic data to make up the OHIO and DISK graphics. MSRET is a DB that contains Martin Smoley's RETurn address and a bunch of other tricks which I will explain as we go. DSKINV, of coarse, is our DiSK INVentory, and SLSREC holds the SaleS RECords. INAMES holds the name and address list and must be sorted on the NM field. I have listed the STRUCTUREs for three of these Obs in the lower right corner of sheet 9.1.2 to help you understand and enter the information needed. I have squashed them slightly to make them fit in the corner, but all the information is there. Let's look at GRF1. my graphic Db, first. It contains 7 fields. Field 11, GRFNM, is a C)haracter field with a maximum width of 10. This field will hold our graphic name, such as OHIO or DISK. This Db must be SORTed ON GRENM to allow F18 to FIND a graphic by its name. Fields 2 through 7 are X-type fields, and will contain our graphic and other interesting stuff. I have listed the data from GRF1 at the bottom of this page. It was quite confusing to me at first, so don't expect to grasp the idea immediately. Special Note: (04/11/89), 1 told Dennis Faherty about these new discoveries in graphics last night and he was amazed. Until then he had not grasped the unbelievable potential of the X-type field even though he created it. The X-type field is very special. You type in normal ASCII character like 123ABC. The character must be entered in a very special pattern, but the actual entry is easy. The character must be entered in pairs because TIB will interpret them as Hexidecimal numbers. For example, the pair of characters 18 would be interprited by TIB as Hex for the number 27 and 27 to your printer means ESC, or escape. We now have the basics for all printer control codes.

Database:

condensed form to give you a quite sook at what is a first Note: The ">" is generally used to denote a Hex number. " line GR1 (under DISK) goes like this. 1B = >1B = 27 = ESC, 33 = 33 = 51 = 3, 18 = 18 = 24, or (ESC)"3"CHR\$(24), 24 being 24/216\*, right out of the printer users manual. To my printer that phrase means, set line spacing to 24/216ths inch. This is needed for graphics. Next, 1B = 27 = ESC, 4B = 34B = 75=  $K_*$  1F = >1F = 31, 00 = >00 = 0, or (ESC)\*K\*CHR\$(31)CHR\$(0). To my printer this says, print normal-density graphics, 31 bytes of graphic data will follow. The printer will then consider the next 31 bytes of data to be part of the graphic itself. As you can see we are taking the characters two at a time, 18, 33, 18, 18, 48, etc. Each of these small units is one byte. This means that the printer will actually need 62 characters from this data field to make a total of 31 bytes. "I hope this is helping and not confusing you." So the FF, AA, D5, etc. are used to print the first line of the DISK graphic. At this point I have designated 6 lines for a graphic in the Ob, but the biggest graphic is OHIO which takes only 5 lines. I have temporarily placed the characters ODOA at the beginning of lines 686. OD = ASCII code 13, or CR, and OA = ASCII code 10, or LF. If printed, 6R6 will produce a Carriage Return and a Line Feed. The reasoning is this. Printing 6R1 will not force the printer into action. Apparently a LF is needed to cause the data in the printer buffer to be printed on the paper. 686 contains both a CR and an LF, so printing out the complete disk graphic would go like this: PRINT 6R1,6R6,6R2, 686,683,686,684,686. In DISK, 685 graphically prints a blank. Remember 6R6 contains CR, LF. We also have the ability to use the TIB system CR. LF. They are entered like this: PRINT GR1, (CR), (LF), GR2, (CR), (LF), GR3, etc. This is too much typing for me, but the functions can be used together to an interesting advantage. The line PRINT GRI.(CR), GRI, GR6, GR2. (CR), GR2, GR6, etc. will produce a double struck graphic. GR1 will be printed, the (CR) will return the carriage to the beginning of that line without a line feed, the second GRI will then be printed for a double strike affect, and the GR6 will then send a CR, LF to set up for the next graphic line. As we progress in this area I don't see any reason why it wouldn't be possible to produce sales reports or purchase orders. These printout sheets can incorporate letterheads with graphics that could be anything from disks, as I used here, to intricate company logos. Once the graphic database is created you can Next Page, use it anywhere.

0000	Database:	GRF1	use it anywhere.	Next rage,
GRFNM	DISK			NEAANEAANSAANEABEBAAAA
GR1	183318184B1F00FFAAD5AAD	5AAD5AAD5	AAD5AAD5AAD5AAD5AAD5AA	ADDHADDHADDHADCADCOOO
GR2	1B33181B4B1F00FFAA55AA5	5AA55AA <b>5</b> 5	AA57AF5CB858B858B85CAF57AA	155AA55AA55AAD5AAFF0000
GR3	1B331B1B4B1F00FFAA55AA5	5AA55AA55	AADSFA351A1F1B1F1A35EAD5AE	5FAE55AA55AA55AAFFUUUV
GR4	19331918481E00FFAB55AB5	5AB55AB55	AB54AB55ABFDFFFDAB55AB54AB	355AB55AB55AB55ABFFUUUU
GR5	1833181848150000000000000	000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000
GR6	ODOA000000000000000000000	000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000

GRF1

0001

GRENM OHIO

BB331B1B4B21000704040404040404040404020201010000000101010202020404040B0B101F00 GR1 GR2 GR3 GR4 

GR5 GR4

#### TITEASE - From INSCEBOT TUTORIAL 9.1.4 By Martin Smoley NorthCoast 99'ers - April 15, 1989 Copyright 1989 By Martin A. Smoley

The next Db is MSRET. This is a good example of how to use a Db to store information that would have previously taken up LOCAL variable space. I have used all 17 fields. Even though I don't need them at this time, I will probably use them later. You will notice that I have mixed C)haracter fields with X-type fields in a normal database. This is a very important development. If you need to do a very special printout or you have paper size restriction etc., special control codes could be saved with individual data records to automatically change the printer settings for special fields. A simple example of this would be a Db containing 100 names, which must be printed weekly for inventory. 90 of those names have 80 characters or less, and the other 10 names have from 80 to 110 characters. The standard form you print on has 85 spaces to print the names. You can include special control codes with certain names to change the print pitch, or micro-justification if you have a very expensive printer, and the names will fill the space perfectly every time. I am probably confusing you with ideas, so let's get back to the subject. MSRET is self explanatory. As you will see late, I use these fields to print labels and screen messages. There is only one record in this Ob, the one listed below. A more complicated system could use more records for different labels and different messages.

#### Database: MSRET

1 FR From
-----------

2 TO .... To:

3 NAME ... Martin A. Smoley

4 STREET . 6149 Bryson Drive

5 CTSTZP. Mentor, OH 44060

6 CTN .... \*\* CAUTION \*\*

CD .... COMPUTER DISK

8 DNB ... DO NOT BEND OR FOLD

9 DNX ... DO NOT X-RAY

10 MS1 ... \*\*\*\*\*\*

11 MS2 ... \* ORDER \*

12 MS3 .... \* MORE \*

13 MS4 ... \* DISKS \*

14 CD1 ... 1B331B000000000000000

15 CD2 ... 1B332400000000000000

16 CD3 ... 000000000000000000000000

The screen below is the structure of SLSREC. It will be used to save 3 items. The ID number of the member requesting disks, the date the disks were shipped and the quantity of disks that were shipped to that ID number, or member.

#### CREATED 04/01/89 CHANGED 04/05/89 FIELD DESCRIPTUR TYPE WIDTH DEC

1	ΙD	C	007	
2	SDT	D	008	
<u>-</u>	ars	N	004	OO

000 1 SLSREC 00000/00063

The SLSREC Db should be created, but left empty. The Cf will fill in the data automatically each time disks are shipped. INAMES is opened last, and I hope, needs no further explanation. The statement REPLACE MORE WITH "Y" will get us into the WHILE loop. "I hope that most of this standard stuff is familiar to you by now." You are then asked to enter a number for the NM field you wish to FIND. If you enter a zero, all databases will be closed and the CF will be ended. That's a quick way out that I may modify later. If you enter a good number it will be found by TIB, the statement IF (NM = SEL2) will be true and DO DSK2.DSKNAP1 will be executed. DSHNAP1 is the Command File I created to display the name, if found, on the screen so you can decide if it is the name you want. However, I am going to leave that until next months tutorial.

### TI-Artist Instances To TI-Base

Wes Richardson has said that he would attempt to write a program to convert TI-Artist Instances into a format that can be imported into a TI-Base Database using the Convert function. Knowing Wes' past record I would eliminate the word attempt from that statement. The creation of this type of program will open up a new world to the TI-Base user. There are currently large quantities of graphics available to everyone. There are also many program arrund to change those graphics to TI-Artist Instances. A program to change Artist Instances to data in a TI-Base database would give II-Base users more tools in this area than had ever been imagined before. If everything goes well, the conversion program will be published in the NorthCoast Newsletter in the next couple months. Hopefully that timing will bring the program out at the end of my mini series on graphics and exactly when you are ready for it.

#### HORIZON RAMDISKS

I must throw in a plug for Bud Mills. I forced myself to do this graphic series on a standard disk drive to experience the speed of the system. I must say that it is too slow, and too noisy. If you have a real need for a database system like TI-Base then you will probably put your TI through some heavy use. In that case a Horizon Randisk is the only way to go. Bud Mills has been unbelievably helpful and supportive to me for the whole time I have known him, and I hear the same story from other people. His Randisks are a top quality item, they are super fast compared to a normal disk drive and they don't make a sound. If you're interested, I recomend that you call Bud at (419) 385-5946 and get further information.

#### THE MULTI USERS GROUP CONFERENCE

If everything works out I hope to see many of you at the Lima, Multi Users Group Conference on May 20. I am looking forward to the possibility of meeting many of the users I know by mail or by phone, but haven't met face to face yet. I am currently shuffling through ideas for my scheduled demonstration of II-Base for the conference. As the NorthCoast members will tell you, the biggest problem is getting me to shut up. Quite a few NorthCoast members are planning to attend. I think we will all have a great time and make a lot of new friends. Try to make it if you can.

Continued Next Month.

#### MEETING DATES FOR

C.O.N.N.I. BOARD MEMBERS

1989 - 90

Pres. - Dick Beery (614) 459-3597

Vice Pres. - Jim Seitz (614) 875-5532

Treas. - (acting) D.Beery/E.Wade

Sec. - Charles Osment (614) 833-1698

Membership - Everett Wade (614) 262-6346

Librarian - Chuck Grimes (614) 268-8821

Cassette - Sonny Grubb (614) 1-873-8708

Cartridges - Dave Truesdale (614) 238-0719

NL Exchange -Curt Borders (614) 279-5208

TIBBS - Irwin Hott (614) 263-5319

Dick Beery (614) 459-3597

Editor- Jean Hall (614) 885-4223

Assist.- Carole Parkins (614) 891-4965

# Happy Thanksgiving

Spirit of 99

Bulk Rate
U.S. Postage
PAID
COLUMBUS 43221
Permit No. 1945

C.O.N.N.I. 181 HEISCHMAN AVE WORTHINGTON, OH 43085



TIME SENSITIVE MATERIAL
POSTMASTER - PLEASE DELIVER PROMPTLY

EXCHANGE NL

SMAUG USER'S GROUP/99 RT 4, BOX 23 BREWTON, AL 36426

***	MEMBERSHIP	APPLICATION	* * 1

ADDRESSSTATEZIPZIP	
ACEA COSE LIGHT CHICKE PLONE	
AREA CODE HOME PHONEBUSINESS PHONEEXT#	
WHAT IS YOUR PROFESSION/VOCATION	
HOW LONG HAVE YOU OWNED YOUR COMPUTER?	
DATE OF APPLICATIONACCEPTED BY	