

~~~~~  
W-AGE/99 \* NEW-AGE/  
99 \* NEW-AGE/99 \* N  
EW-AGE/99 \* NEW-AGE  
/99 \* NEW-AGE/99 \*  
~~~~~

* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 *
9

COMPRODINE, Part One

Okay, I've been hearing about JIFFY CARD and ARTIST PRINT SHOP and JIFFY FLYER and GIANT ARTIST POSTERS for some time now, but I just never got around to demoing the materials for NEW-AGE/99 reviews. Not because I'm unfamiliar with the work of COMPRODINE owner Rodger Merritt. On the contrary, I own and use and thoroughly enjoy PICTURE IT and PRINT IT. They are two superb graphics/text packages that most TIers would not want to be without once they got using them regularly (particularly the handy and very professional disk catalog printer program).

Sister Pat Taylor of Dubuque, Iowa, has been the leading fan of COMPRODINE materials in the world the past few years. When I was in for repair last year following an accident, Sr. Pat and her contingent of TIing nuns at the hospital where she lives inundated me with unique and colorful "get well" cards and banners and signs. They also sent me a nice gift of a package of delightful greeting cards for all occasions. Everything was made on the TI with COMPRODINE software.

Now when Sr. Pat finds something useful, user friendly, and fun, it gets used and used and used. Her use of COMPRODINE goodies is the best review there is. But I've been lax in my reviewer duties.

So it was with great pleasure when Rodger Merritt-called me from his home in California to see if I'd be interested in demoing some COMPRODINE software at the Boston Fayuh.

"YES! YES! YES!" I screamed before he changed his mind.

I had never met Rodger, so he didn't know what kind of TI maniac he entrusted his masterpieces with. Phil Townsend of the Kawartha group in Canada knew I'd be at the Boston shindig and recommended me. (It's obvious that Phil, a fellow elementary teacher, had never met me, either.) Anyway, Rodger ran up a two-hour phone bill explaining each of the pieces of software.

I could hardly contain myself waiting for the mail the next few days.

Then... THE DAY! When I came home from work, my wife informed me that the package had arrived from COMPRODINE. She did require my attendance at the dinner table under penalties of Doom, Death, and Destruction (though not necessarily in that order). So I complied with She Who Must Be Obeyed and waited impatiently to open the treasures until after cleanup.

I'm not sure my little fifth-graders didn't suffer much the next day because of that Merritt fiend.

I took my package to my Computer Room, opened it, and played with the new toys - er, tools, I mean - until almost 4 AM. As I have to get up at 5 to go to work, I didn't get much of a beauty rest. (I was a real beauty at work next day, I can tell you.), but did not learn a lesson. I was at it again when I got home; once again to the wee hours (this time 2 AM). But what fun!

Fortunately, I already owned PRINT IT and PICTURE IT and all of the Great Lakes Software in the package also distributed by COMPRODINE: JOYPAINT 99, JOYPAINT PAL, CLIP ART, EXTENDED BUSINESS GRAPHS, BANNERS 99, and the superb CERTIFICATE 99 with its companions). Otherwise, I'd

still be at it.

Because I'd like to spend next month's "Part Two" article entirely on the graphics' programs for which COMPRODINE is justifiably famous (ARTIST PRINT SHOP, JIFFY CARD and FLYER [including color versions], FORM SHOP, GIANT ARTIST POSTERS, and all the various companions). I'm going to use the rest of this article to examine a couple of COMPRODINE's other programs: LIVING TOMB and WAR ZONE.

These are games by a decidedly fiendish 14-year-old lad, Quinton Tormanen. Because both have permanent scoring systems built in (which I *), I'd suggest making backup copies and store the originals. Actually, I'd suggest you do that with all COMPRODINE materials, as they are unprotected.

These fast auto-load assembly games are so good, so professional, that I have a hard time picturing anyone so young devising them.

WAR ZONE (\$10), a futuristic arcade game, is almost as fascinating for the instantaneous status and scoring boxes along the right side of the screen as the game itself. Not quite. But they are well designed and ingenious, if you have time to view them. ("P" gives you pause when you need it.) Mostly, your time will be taken up trying to get your M15 through 6 levels (each a 2500-mile flight over rough terrain - rough, because you are being attacked in 5 different ways by 5 different enemy vehicles) to the enemy bases which must be destroyed. This is no easy task. However, you will be rewarded with an extra craft added to your one-at-a-time fleet for every 1000 miles you survive (2 levels). There are color and attack pattern changes as you move over new terrain. The enemy gets more vicious the better (farther) you get.

Though you have unlimited firepower (including bombs for the land vehicles), your greatest asset is maneuverability. It's one of those frantic type games that raise havoc with your blood pressure.

LIVING TOMBS (\$15), a graphic adventure, is quite different. It's a "Tunnels of Doom" type of game with lots of excellent differences. (If you don't like TOD, just wait a second. LIVING TOMB has some interesting features, including an ability to view all kinds of stats and make all kinds of smart decisions BEFORE you make a fool of yourself by getting killed.) The multi-level tomb you travel through is a series of very complex 3-dimensional mazes. This 3D aspect is neat. Unless you make a map, you will get lost. I even had to drop some items along the way (like Hansel) to make sure I could find my way back to the trap doors to get to different levels. LT is rich with menued features, windows, and treasures, weapons, and monsters galore. You start with nothing but can gather up the right equipment left by previous brave but dead adventurers. And then only if you slay some demonic monsters to get them.

What are you doing in this tomb? Well, an evil Alchemist from days of yore was buried here. It is his tomb. A gem of suspected power was buried here, too. A curse was put upon this land of Ryder, and, though many have tried to enter the tomb and remove the evil gem to stop the curse, all have failed. Your mission, succeed.

The windowing menus, alone, are worth the price of this user-friendly, addictive, satisfying adventure. LIVING TOMBS: an excellent investment in intellectual and visceral fun. I hope Quinton continues to program for the TI.

COMPRODINE (which, by the way, stands for COMputer PROgrammers' DISktribution NETwork) is at 1949 Evergreen Ave., Fullerton, CA 32635. Ask for a catalog. Shipping and handling is \$1.50 for one item, \$3.00 for two or more.

(If you use NSW-AGE/99 please put me on your exchange list.)

USING A MODEM--PART 3 by Dick Beery

Well, here we are with part three. The first two articles dealt with some advantages of modeming, approximate costs, interpersonal modem uses, calling computer bulletin boards (BBS's), accessing your bank account, determining whether some libraries have the books or other materials you want, and whether these are already on loan or available, different "baud rates" i.e. speed of data transmission, and some other details.

As I reread the earlier articles prior to beginning this one, I noted that I may have confused some of you regarding the "AT" commands. If you are using the 300-baud Volksmodem, TI acoustic modem, or one of Radio Shack's Signalman series--the Mark 3, for example--, you will not need to use these AT commands. Placing your telephone handset securely in the cradle will make the connection for the TI acoustic model; the other modems mentioned have a "voice-data" switch that you push to the "data" position to make the connection. If the party you are communicating with has a modem with the AT-type connection routine, they proceed in that manner while you do what I outlined above. Sorry if I caused you any problems by not mentioning this before!

Several fears of modem usage that appear to be prevalent among some beginners are: he'll (the BBS system operator or the other person in an interpersonal transfer) think I'm really stupid because I'll make a lot of mistakes; I'll do something really dumb that will mess up the BBS and cause the operator a lot of money and frustration (I'll BREAK it!); I won't be able to read what is coming across fast

enough; I won't remember what to do next and will get really confused and frustrated. There are probably others, but these appear to be the major ones. The following paragraphs will address each of these in turn.

"He'll (she'll) think I'm really stupid...". Not so! Your chances of encountering such an insensitive individual are minimal. Most system operators (SysOps) don't sit and watch their monitors 24 hours a day, so the chance of your fumbling being noted is slim. If the SysOp does notice, he/she will probably break in on Chat mode and type helpful suggestions to get you going. You can type back your responses and questions (don't forget to go into HALF DUPLEX so that you can see what you're typing!). Following this interchange, the SysOp will put you back into terminal mode and you just continue from where you left off. If you are working across the line with just one other person, rather than a BBS, that person has probably encountered the same problems earlier that you are encountering now, and can thus be specifically helpful. Also, most modem users and SysOps WANT you to be successful at this activity that they themselves enjoy so much. I can't think of anyone I know who doesn't leap at the chance of "infecting" someone else with his/her own passionate love of modeming.

"I'll do something dumb...really mess up the BBS". Highly unlikely. Most BBSes have routines to take care of anything inappropriate that you might do. They are programmed to be "tough", since once in a while, rarely in my own experience as a

USING A MODEM--PART 3

(continued)

SysOp and Co-SysOp (thankfully!) an individual will attempt to sabotage a BBS. Don't fear that you will cause damage and be to blame. The chances are almost nonexistent.

"I won't be able to read...fast enough...". This is a real possibility. That is why, in an earlier article, I suggested that, whatever the baud rate your modem is capable of, you "get on" the BBS at 300 baud the first few times until through practice your reading speed has increased and you are ready for higher baud rates. The fact is, however, that most BBSes will send you one or two screens of information at a time and will then sit there waiting for your input. If you can learn to skim quickly what is coming across, this can be a tremendous help. Also, try jotting down (use a helper to write, if necessary) the keypresses that you will use one after another to get where you want to go on a BBS, then on subsequent visits, you can have the paper beside you and just read them as you go. It is a good idea to call only one or two BBSes at first and get really familiar with how they operate. Then when you access a hitherto-unfamiliar BBS you will already have some savvy that will make your contact much easier, even if the "new" board's system of commands is a bit different. The fact is that most BBSes use software chosen from among four or five leading software programs for that computer. That's why I can, and do, call BBSes all across the country and find many similarities to local boards. Don't forget, either, what I said in Part two about sending the menu screen of a BBS to the printer on your first or second

contact, so that all the commands needed are printed out and at your side. That helped me when I was beginning, and it probably will help you too.

"I won't remember...confused and frustrated". The solutions to this problem are already addressed by the suggestions I made in the preceding paragraph. Give them a try!

&@Avoiding^some^pitfalls: When downloading, I have run into some situations that were at first puzzling and frustrating. Here is how I handled these situations.

You have told both your computer and the other person or the BBS the filename of the program you want to receive. You begin the transfer and almost at once get the message "Bad device name". Solutions: first, check to see that the drive door is closed. Did you tell your computer to send the program to the right drive (the one with the disk in it!)? Did you provide a disk with enough space to accommodate the program you are receiving? Is the disk positioned properly in the drive, meaning is the notch up if it is supposed to be, etc.?

You are in the middle of a file transfer when your computer beeps or chimes and you get the message "File Transfer Complete". You know it's not. What to do?

There can be a variety of reasons why this happens. One is line noise. You can go through the steps to exit from that BBS, then call right back, hoping for a clearer line. Or you can stay on and attempt the same transfer again. Before you do this, CHANGE THE FILENAME for your own computer. (You will have to use

USING A MODEM--PART 3

(continued)

the same filename when requesting it from the BBS). If you don't change the filename at your end, in case the file that came over in an incomplete manner is protected, you will get an error message and have to start over.

One way that I change the filename is to put a "2" at the end of it, if there is room. If not, I just misspell it. I can correct the filename spelling at a later date while using a disk manager. If you haven't succeeded on the second download try, you probably ought to try downloading something else. You should also leave a message to the SysOp. He/She will want to know if there is a problem with that file, so that others will not be likewise inconvenienced.

If you happen to have the version of Fast Term that uses the filenames MD and ME (a version that I believe was modified by J. Peter Hoddie), you can probably avert the problem described above --getting the message "File Transfer Complete" halfway through the transfer--by using FCTN-B to reduce the buffer size from the default of 64 to 32. Do this BEFORE starting the transfer process. I do not know of any way of doing this while using Telco or other versions of Fast Term. Also, when using Fast Term (any version), you will not be prompted to enter the filename for your own computer to use in sending the program received to disk. Remember to press FCTN-N and then enter the appropriate drive number and filename for EACH file you are downloading.

The three problems just dealt with appear to be the most common ones. I may add others in article four if I feel that you might

encounter them often.

I hope this series is helping you. Please send me a letter, in care of the newsletter, if there are concerns or questions that you would like me to address.

That's all for now. See you next time!

GENEALOGY - Jean Hall
A Genealogy Record Keeping update

Joe Wright, Hunter Valley 99ers User Group, has written and is still working on a genealogy program called "Genealogy Record Keeping". He has written 2 versions: 1)Assembly, 2)Forth. I received an update in March 1990 (the FORTH version) and was very impressed with what he has accomplished. In the April issue of the Hunter Valley UG NL, Joe noted that he may consider a major reshuffle of the program due to suggestions that have been made by his TI'testers. Needless to say, all of the TI/genealogy lovers will be eagerly awaiting the final results.

The program is menu driven and includes some of the following features: An index printed numerically or alphabetically; a 4 generation chart; a detailed family group sheet (name, birth, christening, marriage, death, symptoms and illnesses, several lines for general information, parents and children's names and their birthdates. The data is input and printed out on the 4 generation chart and also on the detailed family group sheet. Sorting features also included.

I will be writing a review of this program when it is completed.

TIPS FROM THE TIGERCUB

No. 60

1 June 1990

My stock of Tigercub Software catalogs is depleted and it would not pay me to reprint it. Therefore I have released all copyrighted Tigercub programs, except the Nuts & Bolts Disks, for free distribution providing that no price or copying fee is charged. All of my Tigercub programs have been added to my TI-PD library and are cataloged, by category, in Supplement #8.

My three Nuts & Bolts disks, each containing 100 or more subprograms, have been reduced to \$5.00. If I run out of printed documentation, it will be supplied on disk.

My TI-PD library now consists of 400 disks of fairware (by author's permission only) and public domain, all arranged by category and as full as possible, provided with loaders by full program name rather than filename, Basic programs converted to XBasic, etc. The price is just \$1.50 per disk(!), post paid if at least eight are ordered. TI-PD catalog #2 with Supplement #8, listing all titles and authors, is currently available for \$1 which is deductible from the first purchase.

Here are a couple of improvements to the CHARFIX subprogram published in Tips #58.

```
29000 SUB CHARFIX(HX$()):: D
  ISPLAY AT(12,1)ERASE ALL BEE
  P:"Transliterate punctuation
  ?" :: ACCEPT AT(12,28)SIZE(1
  )VALIDATE("YN"):Q$ :: IF Q$=
  "N" THEN 29004
  29007 CALL CHARVIEW(HX$())
  29009 SUB CHARVIEW(HX$())
```

And call the routine by

CALL CHARFIX(HX\$()). These changes will avoid unwanted transliteration, and will make it possible to use CHARFIX for ASCII 24-31 and 144-159, if BXB has been merged in, as described in Tips #55.

The Spring 1990 issue of the TI\$MES newsletter from England contained an interesting challenge - write a program in any language to find the lowest power of 7 which contains six sevens in succession, i.e. "777777".

The computer cannot solve this by any normal means, because it soon goes into scientific notation in which large numbers are rounded off into long strings of zeros. So, I taught it to multiply the old-fashioned way -

```
100 A$=STR$(7):: Y=1
  110 Y=Y+1 :: FOR J=LEN(A$)TO
  1 STEP -1 :: E=(VAL(SEG$(A$,
  J,1))$7+X)/10
  120 X=INT(E):: F=(E-X)$10 ::
  X$=STR$(F)&X$ :: NEXT J
  130 IF X>0 THEN X$=STR$(X)&X
  $
  140 IF POS(X$,"777777",1)<>0
  THEN 160
  150 A$=X$ :: X$="" :: X=0 ::
  GOTO 110
  160 PRINT "7^";STR$(Y);"=";X
  $
  170 PRINT #2:"7^";STR$(Y);"="
  ";X$
```

The answer? 7^175=78011207 9122081581024046412791118077 7777188182006932636111839698 5716038858440266717799156064 7169989331265664440734763224 8554716494939953912586437943

My TI-99/4A computed that in 24 minutes. Would someone like to try it on the 9640?

Anyway, I thought I would use the same method to solve precise multiplication of numbers too large to be computed directly. This routine

will multiply two numbers of up to 28 digits each, and will handle decimals and negative numbers. For even larger numbers, change the ACCEPTs to INPUTs and if necessary change the DIM. The only limitation seems to be that the result cannot contain more than 256 digits and even that could be programmed around.

```
100 DIM C$(100)
  110 DISPLAY AT(12,1)ERASE AL
  L:"FIRST NUMBER?" :: ACCEPT
  AT(14,1)VALIDATE(NUMERIC)BEE
  P:A$
  120 IF SEG$(A$,1,1)="-" THEN
  A$=SEG$(A$,2,255):: M=1
  130 A=LEN(A$):: D1=POS(A$,"
  ",1):: IF D1>0 THEN A$=SEG$(
  A$,1,D1-1)&SEG$(A$,D1+1,255)
  :: D1=A-D1
  140 DISPLAY AT(16,1)ERASE AL
  L:"SECOND NUMBER?" :: ACCEPT
  AT(18,1)VALIDATE(NUMERIC)BE
  EP:B$
  150 IF SEG$(B$,1,1)="-" THEN
  B$=SEG$(B$,2,255):: M=M+1
  160 Y=LEN(B$):: D2=POS(B$,"
  ",1):: IF D2<>0 THEN B$=SEG$(
  B$,1,D2-1)&SEG$(B$,D2+1,255)
  :: D2=Y-D2 :: D1=D1+D2 :: Y
  =Y-1
  170 FOR J=Y TO 1 STEP -1 ::
  W=W+1 :: B=VAL(SEG$(B$,J,1))
  :: FOR K=LEN(A$)TO 1 STEP -1
  :: A=VAL(SEG$(A$,K,1))
  180 D=(A$B+X)/10
  190 E=INT(D):: F=(D-E)$10 ::
  C$(J)=STR$(F)&C$(J):: X=E :
  : NEXT K
  200 IF X>0 THEN C$(J)=STR$(X
  )&C$(J)
  210 C$(J)=C$(J)&RPT$("0",W-1
  )
  220 X=0 :: NEXT J
  230 L=LEN(C$(1)):: FOR J=1 T
  O Y :: L2=LEN(C$(J)):: IF L2
  <L THEN C$(J)=RPT$("0",L-L2)
  &C$(J)
  240 NEXT J
  250 FOR J=LEN(C$(1))TO 1 STE
  P -1 :: FOR K=1 TO Y :: G=G+
  VAL(SEG$(C$(K),J,1)):: NEXT
  K
  260 G=(G+H)/10 :: L=INT(G)::
  G=(G-L)$10 :: D$=STR$(G)&D$
  :: H=L :: G=0 :: NEXT J
```

```
270 IF H>0 THEN D$=STR$(H)&D
  $
  280 IF D1>0 THEN D$=SEG$(D$,
  1,LEN(D$)-D1)&"."&SEG$(D$,LE
  N(D$)-D1+1,255)
  290 IF M=1 THEN D$="-"&D$
  300 PRINT D$
```

And this one will add up an almost unlimited number of integers of almost any length - I haven't figured out how to get it to line up decimals.

```
100 CALL CLEAR :: DIM C$(100
  )
  110 DISPLAY AT(12,1):"Input
  from D:" (D)isk or:" (K)
  eyboard?" :: ACCEPT AT(12,12
  )VALIDATE("DK")SIZE(-1):Q$ :
  : IF Q$="K" THEN 140
  120 DISPLAY AT(12,1)ERASE AL
  L:"Filename? DSK" :: ACCEPT
  AT(12,14):F$ :: OPEN #1:"DSK
  "&F$,INPUT
  130 X=X+1 :: LINPUT #1:C$(X)
  :: M=MAX(M,LEN(C$(X))): IF E
  OF(1)<>1 THEN 130 ELSE CLOSE
  #1 :: GOTO 160
  140 DISPLAY AT(12,1):"Press
  ENTER when finished":":"
  150 X=X+1 :: INPUT C$(X):: M
  =MAX(M,LEN(C$(X))): IF C$(X
  )<>" THEN 150 ELSE X=X-1
  160 FOR J=1 TO X :: IF LEN(C
  $(J))<M THEN C$(J)=RPT$("0",
  M-LEN(C$(J)))&C$(J)
  170 NEXT J :: FOR J=M TO 1 S
  TEP -1 :: FOR K=1 TO X :: G=
  G+VAL(SEG$(C$(K),J,1)):: NEX
  T K
  180 G=(G+H)/10 :: L=INT(G)::
  G=(G-L)$10 :: D$=STR$(G)&D$
  :: H=L :: G=0 :: NEXT J
  190 IF H>0 THEN D$=STR$(H)&D
  $
  200 PRINT D$
```

It is easy to invert characters on the screen simply by making the foreground "on" pixels a lighter color than the background "off" pixels - but when you make a screen dump, you will find that the "on" pixels will print and the "off" pixels will not.

Key this in, SAVE it by SAVE DSK1.INVERSE, MERGE and then merge it into any program by MERGE DSK1.INVERSE, call it at any point by CALL INVERSE(A,B), (A and B are the first and last ASCII to be inverted), and you will have all "on" pixels turned off and vice versa.

```
31111 SUB INVERSE(A,B):: FOR
  CH=A TO B :: CALL CHARPAT(C
  H,CH$)
31112 FOR J=1 TO 16 :: CH2$=
  CH2$&SE6$("FEDCBA9876543210"
  ,POS("0123456789ABCDEF",SE6$
  (CH$,J,1),1),1):: NEXT J ::
  CALL CHAR(CH,CH2$):: CH2$=""
  :: NEXT CH
31113 SUBEND
```

Here is a truly remarkable discovery by Bill Hudson of the Central Ohio Ninety Niners. This 2-line program will allow you to RUN a variable name such as - A\$="DSK1.PROGRAM"

You can write lines before these, after these, and even RES the program. You can also use MOVE from GK UTILITY. You can do anything to the program you want as long as you don't change the content of line 1000. The line number does not even have to be 1000 BUT IT MUST BE THE FIRST LINE THAT YOU KEY IN!! You can merge a program into this but can't merge this into a program. Line 900 can also be a different line number but program execution must go to that line first.

```
900 FOR Z=1 TO LEN(A$):: CAL
  L LOAD(-41+Z,ASC(SE6$(A$,Z,1
  )),0):: NEXT Z :: CALL LOAD(
  -41,LEN(A$)): CALL LOAD(-44
  ,4+LEN(A$))
1000 RUN "DSKx.1234567890"
```

It's been a long time since we had a screen display to watch just for the fun of it, so here is a tiny program -

```
100 CALL CLEAR :: FOR SET=1
  TO 14 :: CALL COLOR(SET,SET+
  1,SET+2):: NEXT SET :: CALL
  SCREEN(2):: CALL VCHAR(1,1,3
  1,768)
110 FOR CH=32 TO 136 STEP 8
  :: CALL CHAR(CH,"FF00000000
  000FF"): NEXT CH
120 X=INT(RND*6+1)*2-1 :: Y=
  INT(14*RND+1)*8+32 :: FOR R=
  12-X TO 12-INT(RND*X):: CALL
  HCHAR(R,5,Y,R)
130 CALL HCHAR(25-R,5,Y,R)
140 CALL HCHAR(R,28-R,Y,R)
150 CALL HCHAR(25-R,28-R,Y,R)
160 ON INT(2*RND+1) GOTO 170,
  190
170 CALL HCHAR(R,4+R,Y+8,25-
  R*2)
180 CALL HCHAR(25-R,4+R,Y+8,
  25-R*2)
190 NEXT R :: GOTO 120
```

This is a challenging and educational math puzzler which I think is unlike anything you have seen. I had it in my Tigercub catalog for 7 years and sold just 18 copies. If you don't want to key it in, it is now one of the programs on TI-PD disk No. 1300.1.

```
100 GOTO 140
110 J,K,ST,LV,I,R(),T,X,A,A$
  ,X$,B,B$,C,C$,D,D$,AY,BY,BE$
  ,BY$,CY,CY$,CE$,Q,Y(),YE,XE(
  ),FLAG,R$,RL,Z,YY,DE(),Q$
120 CALL CLEAR :: CALL CHAR
  :: CALL COLOR :: CALL VCHAR
  :: CALL SCREEN :: CALL KEY :
  : CALL SOUND
130 !@P-
140 CALL CLEAR :: FOR J=1 TO
  12 :: CALL COLOR(J,5,16)::
  NEXT J
150 CALL VCHAR(1,3,32,672)::
  DISPLAY AT(5,1): " @%X%*%*%
  RITHMATIK %+%X%e "
160 DISPLAY AT(10,1): " Selec
  t difficulty level -": " Ty
  pe 1 or 2"
170 CALL KEY(0,K,ST):: IF ST
  <1 THEN 170
180 IF (K<49)+(K>50) THEN 170
190 LV=K-48
200 CALL VCHAR(1,3,32,672)::
  FOR I=1 TO 4 :: RANDOMIZE
```

```
210 R(1)=INT(RND*10):: IF R(
  1)=0 THEN 210
220 FOR T=1 TO I-1 :: IF R(I
  )=R(T) THEN 210
230 NEXT T
240 NEXT I :: X=R(1)*1000+R(
  2)*100+R(3)*10+R(4)
250 A=INT(4*RND)+1
260 ON A GOSUB 330,340,350,3
  60 :: A=X$
270 B=INT(4*RND)+1 :: IF B=A
  THEN 270
280 IF (LV=1)*(LEN(STR$(R(B)
  /R(A)-INT(R(B)/R(A))))>2)THE
  N 250
290 ON B GOSUB 330,340,350,3
  60 :: B=X$
300 C=INT(4*RND)+1 :: IF C=A
  THEN 300
310 IF C=B THEN 300
320 ON C GOSUB 330,340,350,3
  60 :: C=X$ :: D=10-A-B-C ::
  ON D GOSUB 330,340,350,360
  :: D=X$ :: GOTO 370
330 X$=" 1st " :: RETURN
340 X$=" 2nd " :: RETURN
350 X$=" 3rd " :: RETURN
360 X$=" 4th " :: RETURN
370 AY=R(B)/R(A):: BY=ABS(R(
  C)-R(B)^2):: IF BY=0 THEN 38
  0 ELSE 390
380 BE$="" :: BY$=" equal to
  " :: GOTO 400
390 BE$=STR$(BY):: BY$=" mor
  e or less than"
400 CY=ABS(R(D)-R(C)-R(B)-R(
  A)): IF CY=0 THEN 410 ELSE
  420
410 CY$=" equal to" :: CE$="
  " :: GOTO 430
420 CY$=" more or less than"
  :: CE$=STR$(CY)
430 DISPLAY AT(2,1): " I have
  a 4-digit number ":" with n
  o two digits the ":" same." :
  : DISPLAY AT(6,1): " The";B$;
  "digit is";AY;" times the";A
  $;"digit."
440 DISPLAY AT(9,1): " The";C
  $;"digit is ";B$;BY$;" the
  square of the";B$;" digit."
  :: DISPLAY AT(14,1): " The";D
  $;"digit is ";CE$;" ";CY$;"
  the sum of the other digits"
450 DISPLAY AT(18,1): " What
  is the number?" :: ACCEPT AT
  (20,2)VALIDATE(DIGIT)SIZE(4)
  BEEP:Q :: IF Q=X THEN 530
460 Y(1)=INT(Q/1000):: Y(2)=
  INT((Q-1000*Y(1))/100):: Y(3
```

```
)=INT((Q/100-INT(Q/100))*10)
  :: Y(4)=(Q/10-INT(Q/10))*10
  :: IF Y(B)<>INT(Y(A)*AY) THEN
  570
470 IF BY<>0 THEN 490
480 IF Y(C)<>Y(B)^2 THEN 570
  ELSE 500
490 IF (Y(C)<>Y(B)^2+BY)*(Y(
  C)<>Y(B)^2-BY) THEN 570
500 IF CY<>0 THEN 520
510 IF Y(D)<>Y(A)+Y(B)+Y(C)T
  HEN 570 ELSE 530
520 IF (Y(D)<>Y(A)+Y(B)+Y(C)
  +CY)*(Y(D)<>Y(A)+Y(B)+Y(C)-C
  Y) THEN 570
530 DISPLAY AT(22,1): " Corre
  ct!": " :: FOR J=1 TO 2 :: C
  ALL SOUND(100,392,5):: CALL
  SOUND(100,440,5):: CALL SOUN
  D(100,494,5):: CALL SOUND(10
  0,523,5)
540 NEXT J :: CALL SOUND(100
  0,523,5,392,5,330,5)
550 DISPLAY AT(24,1): " Hit a
  ny key"
560 CALL KEY(0,K,ST):: IF ST
  <1 THEN 560 ELSE 200
570 DISPLAY AT(22,1): " Wrong
  ." :: CALL SOUND(900,30000,3
  0,30000,30,400,30,-4,0):: DI
  SPLAY AT(23,1): " Type A to t
  ry again or Z" to see the
  number"
580 CALL KEY(0,K,ST):: IF ST
  <1 THEN 580
590 IF K=65 THEN 450
600 IF K=90 THEN 610 ELSE 58
  0
610 DISPLAY AT(22,1): " The n
  umber was";X$:" " :: GOTO 550
  :: END
```

Nearly out of memory and all out of ideas. More next time, maybe.

Jia Peterson

Tigercub

AIR TAXI by Don Shorock, reviewed by Jim Peterson

I have always wished that there were more educational programs, above the 2+2=? level, for our computer. And I have always thought that the best educational programs were those that took advantage of computer capabilities to entertain while teaching.

Also, I have always much preferred games that require me to exercise my mind, rather than depending on quick reaction or blind guessing. And, being a programmer, I admire efficient, memory-saving programming.

All that is why I was so very impressed by the new game, Air Taxi, recently released by Don Shorock. It is uniquely educational, very entertaining, and so compactly programmed that the basic version is available on cassette!

The game can be played alone, as it usually will be, or by up to 8 players. Don customizes each game with the default names of whatever number of players you choose and with your home town as the starting point. Each player may select his own handicap level, ranging from A to Z for 6 to 81 cities, and his skill level ranging from 1 to 9 which determines the target size.

A black silhouette map of the entire United States and southern Canada is then displayed; the only features are the Great Lakes, Great Salt Lake, and the coast lines. You are randomly offered a destination to fly to. Since all your friends bum rides from you, and TI users are cheapskates (that is my comment, not Don's!), you are not even paid for your gas for this first trip. It may therefore pay you to refuse any offer to a distant destination - however, each refusal costs you \$2.00.

When you accept an offer, you then use the S and D keys to set your initial flight direction, in 45 degree increments (i.e., north, northeast, east, etc.) and press Q. You hear the sound of the motor revving up, and a small cursor dot begins moving from your town in the direction you selected, while your gas gauge shows your fuel being used up. You can use the S and D keys to change direction. If you get close enough (depending on the skill level you selected) before your fuel runs out, the cursor will stop, the motor revs down, and you will be shown the cost of the fuel expended and your remaining bank balance. If your fuel runs out too soon, you will glide to the nearest airport and you must then set your direction from that point and try to reach your original destination. However, if you were too far from any airport when your gas tank ran dry, you will be returned to your home town and will be assessed repair costs.

Once you have reached your first destination and said goodbye to your freeloading friends, you will then be randomly offered fares, at prices depending on distance, from that point to another city. You have the option to refuse offers, at a cost of \$2.00. If you can fly to that point with a minimum of maneuvering, the fare will more than cover the cost of fuel, and you will make money - plus an occasional tip.

There are too many other features to describe here. The program comes with four pages of printed documentation, and the disk version includes three additional files, which can be merged in, to add many more cities or to convert the program for use with a joystick.

At the handicap and skill level K 7 which Don set for me as defaults, I found that I was able to stay ahead of the game by refusing most fares except coastal cities and then cruising along the coast until the airport radar picked me up and brought me in. Trying to find Kansas City or Cheyenne on that black silhouette map would be very difficult without consulting a regular map - and in doing so, you would learn a great deal about the relative location of cities.

This is a commercial program, not fairware, and it is customized for each purchaser. The price is \$15 for the disk version, \$20 for the cassette version. To get an order form, on which you can specify your own default options, write to Don Shorock, P.O. Box 501, Great Bend KS 67530.

SPIRIT OF 99

NEXT MEETING TUESDAY OCTOBER 9, 1990. HAPPY HALLOWEEN

MUNCH OFFICERS AND NUMBERS (all in 508 area unless noted)

President	W.C. Wyman	865-9683		
Vice President	Bruce Willard	852/3250	MUNCH DUES	
Secretary	Jim Cox			
Treasurer	Jim Cox	869-2704	NEW MEMBERSHIP	\$25.00
Acting Editor	Jim Cox		RENEWAL MEMBERSHIP	\$15.00
Adv.Prog. Chair	Dan Rogers	248-5502	NEWSLETTER ONLY	
Library	Al/Lisa Cecchini		SUBSCRIPTION	\$12.00
Disk Librarian	Lou Holmes	617 965/3584		
Tape Librarian	Walter Nowak	413 436/7675		
+++++++	Jack Sughrue	476/7630		

SEPTEMBER MEETING. At this month's meeting we saw a number of members we haven't seen over the summer. Don Constantino demoed a game called the Mine, was very well received and is this month's DOM. Jack Sughrue did his cassette demonstration, as usual, it was top notch. There were 12 members present. Ben Parada won the raffle for the second month in a row.

OCTOBER MEETING. This month Steve McCann will do a demo of Multiplan, this will be a first for our group. There will also be other topics of interest to all discussed.

NEW TI PUBLICATION. Vulcan's Computer Buyer's Guide is a new Computer Shopper like magazine with one BIG difference. It will have a monthly T.I. column. The cost of a subscription is \$12 for 12 issues or \$19 for 24 issues. To order call 1-800-824-0676; MC, VISA & AMEX are accepted. This looks like a good magazine let's get behind it.

RAFFLE. Every month we have a raffle to help defer the cost of the monthly rental. The number of prizes awarded depends on the number of tickets sold. This month we have some TI T-Shirts, disk holders and some games for prizes. If you have some old things you no longer use how about some donations for the raffle, our prize chest is getting low!!!

LIBRARY NOTICE. Please return any items borrowed from our library. If you can not come to a meeting or give these items to someone who will be at the meeting.

REPRINTS. Reprints are permitted as long as credit is given to M.U.N.C.H.

ARTICLES. I am always looking for articles for this newsletter, anything which interests you will probably interest other members of the TI community, so please share your ideas and opinions with all of us.

DISK LIBRARY. The disk library will be at the meetings from now on. We have copies of all disks in the library and they are available to members for just \$1.50 each.

DISK OF THE MONTH. This month's disk is the German fareware disc called The Mine, it is a most challenging game.

FOR SALE. The group has a TI Count Business Software package available for sale. If interested contact Jim Cox at the above number or the club address.

