

\*\*\*\*\*  
\*  
\* AUCKLAND COLOUR GENIE USERS GROUP \*  
\*  
\*\*\*\*\*

ISSUE NO. 12

FEBRUARY 1985

S E C R E T A R Y ' S R E P O R T

Hi,

Happy New Year to everyone, I hope that we have a great year with our computer.

I have been corresponding with a User Group in the Netherlands. They have 400 programs on sale, a lot that we haven't seen! They suggest a swap of our programs with theirs. Your committee is all for this of course, (saves us money) and I am writing to them to arrange it. The problem is, of course, that they already have a lot of the English Users Group's programs, and I don't know if we are going to have many programs that they will want. As a lot of their programs are Dutch, is there anybody out there who can speak Dutch and could help us with translating? They are sending us their magazines which would be fine if we could read them. We would appreciate any help we can get.

I have also ordered a lot of new software from England, among the programs is a Jumbo Jet Flight Simulator, and a Typing Tutor program. These should hopefully be here in time for the March newsletter and will be written up fully then.

Software now available includes:

**Super Agent Flint**

**Galadriel in Distress** all text adventure programs \$12.00 each

**The Staff of Law**

These programs are not quite as hard as the Colour Quest ones, however. I have spent many hours on them and I still don't think they are easy!

**A10 Bomber**

\$14.00

This is a very superior 'Skramble' and I am informed by my children, who have been spending hours on it lately, that it is exactly the same as the arcade version (with mazes and meteors etc)

**Droids**

\$14.00

This game, one which a lot of us have been waiting for, is now available. It consists of 10 different mazes that you have to go through, avoiding 4 'ghosts' that are chasing you all the way. These 'ghosts' are very smart animals and seem to know where you are going before you do in the harder levels. There are also 10 levels of difficulty to choose from. I really recommend this game - over Christmas I played it continuously (in fact, my Genie nearly got thrown through the window dozens of times!)

\*\*\*\*\*

We would like to welcome all of the following new members:

-----Auckland members-----

James Innes, 7 O'Shannessey Street, Papakura  
Ian McGovern, 24B Kathleen Street, Glenfield  
Andy Turner, 28 Sunray Avenue, Titirangi  
Chris Ward, 31 Marsden Avenue, Mt Eden  
The Bolter family, 16 West End Rd, Herne Bay  
Ted Doell, 11 Sandspit Rd, Waiuku  
Phil Lovegrove, 145 Carlisle Rd, Browns Bay  
A.T. Marrett, Wairoa Dam, RD3, Papakura  
the Adshead family, 19 Trinidad St, Blockhouse Bay  
the McNab family, 139 Penrose Rd, Mt Wellington  
Trevor Fowler, 249 Mahia Rd, Weymouth

-----country members-----

the Jones family, 45 Park Terrace, Blenheim  
Lower Hutt Taxation Service, Attn: G. Grimmitt, Box 31186, Lower Hutt  
Linda Couchman, Box 319, Palmerston North  
the Wakefield family, 25 Sunhaven Drive, Newlands, Wellington 4.  
D.G. Bryce, 95 Awatapu Drive, Whakatane

These are all members who have joined since the last list was published in Newsletter #10.

\*\*\*\*\*

#### S O F T W A R E   F I X E S

If those with **Bak Pak** like to send it back to me, I will send you out an updated copy as this program has now been fixed.

Also, **Genie Calc** has now been updated by the writer, who states:-

"These alterations include if you use the sheet calculator, you can use the result in the sheet simply by pressing 'RETURN' by itself in the numeric data input. The last calculation used by the calculator is inserted automatically on to the sheet.

Also provided is a display of the function keys at the bottom of the sheet. There is also a small bug in the program, when you change text in the recalculate/alter mode. It changes on the sheet, but not in memory. This is solved by the changing of line 3740 as below."

```
2045 COLOUR11:PRINT@924,"** F1=MC F2=MR FC=M- F4=M+ **":RETURN
3010 COLOUR1:PRINT@AP,"":VT=2:IL=7:GOSUB 40000:IF T=0 THEN T=VAL(A$)
3015 R(I)=T:C(I)=1:GOSUB 8900:SC=SC+40:I=I+1
3740 PRINT@AS,STRING$(9,32):COLOUR8:PRINT@AS+1,"":VT=5:IL=8:GOSUB40000:
R$(X)=T$:GOSUB 3700:RETURN
3760 GOSUB3710:PRINT@AS+10,STRING$(8,32):N=C(X):COLOURN:PRINT@AS+10,"":
VT=2:GOSUB 40000:IF T=0 THEN T=VAL(A$)
3770 R(X)=T:SL=AS+10:T=I:I=X:GOSUB 5510:I=T:GOSUB 3700:RETURN
11025 COLOUR11:PRINT@888,"BY E A JACKSON JAN 85":COLOUR1
```

-----  
- Nola Huggins

S O F T W A R E F I X E S

ELECTRONIC DESK

A big thank you to Keith McGill, who after much work, found the fix for this program. Please replace Line 810 with :-

```
810 GOSUB 1000
815 FOR I=1 TO TE:IF LEFT$(TE$(I),1)=SL$ THEN PRINT TE$(I);
820 NEXT
```

If line 810 is spread out into three lines it seems to work.

Those people who have purchased ELECTRONIC DESK since 24/11 will have this already done. If you don't want to do this yourself, please send the tape back and we will do it for you.

\*\*\*\*\*  
ORGEL

Those members with this program, please send it back for updating. With the copy that you now have, half the screen is not there!!

\*\*\*\*\*  
MEMBER'S REQUESTS

David Ryder (address under new members) would like help with getting out of FORTRESS OF EVIL. Please write to him direct.

\*\*\*\*\*  
SOFTWARE NOW AVAILABLE

Terry's Travels \$12.00

This starts off being a frogger-type game, but goes into several different screens, including a Pacman-type screen. Nice music. Great game.

Exterminator \$12.00

Death Star \$12.00

Two more arcade games from Algray. I haven't actually tried these programs yet, but knowing Algray, they will be good. First two people that buy these can get them at \$10.00 each, if they will write a review on the games.

\*\*\*\*\*

DO YOU WANT TO SAY GOODBYE TO LOADING PROBLEMS?

THEN, GIVE YOURSELF A CHRISTMAS PRESENT AND PURCHASE MARK LANGDON'S --

D A T A S T A B I L I S E R

ONLY \$18.50 plus postage - AVAILABLE FROM US

BOTH MARK AND I HAVE BEEN TESTING ONE, AND I CAN GUARANTEE THAT THEY WORK BEAUT !!! JUST AS GOOD AS THE ENGLISH ONES WHICH COST NEARLY \$30.00.

IT COMES COMPLETE, YOU JUST HOOK IT UP TO YOUR GENIE AND YOUR RECORDER.

SO, COME ON, ANYONE WITH LOADING PROBLEMS, GET ONE OF THESE, AND YOUR LOADING PROBLEMS ARE OVER

\*\*\*\*\*

A MERRY XMAS AND A HAPPY NEW YEAR TO ALL OUR MEMBERS

\*\*\*\*\*

THE COUNT  
By Mark Morrison

*FROM THE  
CHRIST CHURCH  
CLUB  
NEWS LETTER*

```
10 DEFINT A-Z:N=0
20 CLS:COLOUR7
30 INPUT"DO YOU WANT A COUNT:":A$
40 COLOUR7:PRINT@405,STRING$(30,218)
50 PRINT@525,STRING$(30,218)
60 PRINT@444,CHR$(219):PRINT@484,CHR$(219):PRINT@524,CHR$(219)
70 PRINT@475,CHR$(207):PRINT@515,CHR$(207):PRINT@555,CHR$(207)
80 POKE16410,71
90 COLOUR4
100 IFA$="Y" THEN120
110 PRINT@0," No. Between 0-255";:INPUT N
120 POKE32767,N
130 FORB=0 TO 7
140 IF CHECK(B,32767)=-1 THENI(B)=1 ELSEI(B)=0
150 NEXT
160 IFA$="Y" THEN180
170 PRINT"THAT No. IN BINARY IS "
180 PRINT@488,"";
190 COLOUR1
200 FORB=7TO 0 STEP-1
210 PRINTI(B);:NEXT
220 IFA$="Y" THEN N=N+1:IFN=256 THEN10 ELSE 120
230 FORT=1TO1000:NEXT:CLS:GOTO40
```

Type in this program and run. If you answer yes to "DO YOU WANT A - COUNT" The computer will count in binary from 0-255. If you answer no, you will be asked for a number and the computer will show a binary representation of it. This simple program illustrates how CHECK can be used.

\*\*\* HANDY HINTS \*\*\*

1. If you type 49152 at the MEM SIZE? prompt you will get an extra 255 bytes free for program use without destroying the FGR page.
2. replace your tiresome inkey\$ routines with CALL0049. This ROM routine waits for you to press a key .
3. Although INKEY\$ is easy to understand it is slow and not as flexible as PEEKING the keyboard area.

E.G.                           10 A\$=INKEY\$:IFA\$="A" THEN ....  
                                  10 A=PEEK(16420):IFA=65 THEN ...

Yes you guessed it. 65 is the ASCII (askey) code for A.

This is faster than inkey\$ and it will repeat. That is, if you hold the key down it will repeatedly be registered. Here is a program to print out the ASCII codes for the letters of the alphanumeric characters on the colour genie.

```
10 FORT=32TO127
20 PRINT"ASCII CODE";T;"       ";CHR$(T)
30 NEXT T
```

3. Adress 16444 contains data concerning the cursor keys, return spacebar and clear keys. Use the following format

```
IF PEEK(16444)AND N
```

where N has the following values

```
N=32 left cursor
N=64 right cursor
N=8 up cursor
N=16 down cursor
N=128 space bar
N=2 clear key
```

Further example:   10 A=PEEK(16444):IFA AND32 THENX=X-1 ELSEIFAAND64 x=x+1

EDITORS NOTES

C.G.FOKER <CORRECTION>

Stops program coming up with an error when doubleing up

CHANGE:-

```
2250 FOR Q=0T07:IFP(Q)*2>32700 THEN P(Q)=32000 : NEXTQ ELSE
P(Q)=P(Q)*2:NEXTQ
```

FOR SALE

ZENITH green screen monitor \$240.00 O.N.O

D.PETERS WHAKATANE

WANTED

PAIR OF JOYSTICKS

contact C.BISHOP AUCKLAND

SWAP

ELECTRONIC DESK for W.H.U -- K.McGILL

ZEN for W.H.U -- H.VAN SITTEr

A reminder on the programs reproduced in the newsletter. My printer will not print "MODSEL" characters but prints instead the alfa char' with the same CHR# number. this normally only effects the titles of programs

e.g.

J = MODSEL @

M = MODSEL C

b = MODSEL X

d = MODSEL Z etc

Others can be found by writing a small program but the ones shown are the most common

# VIDEO DISPLAY PLANNING SHEET

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
640	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
760	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
880	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

```

10 CLEAR 1000
20 CLS
30 INPUT "TURN ON PRINTER, PRESS <RETURN> TO BEGIN..";A#
40 LPRINT CHR$(14);TAB(5);"VIDEO DISPLAY PLANNING SHEET"
50 LPRINT
60 LPRINTCHR$(15)
70 LPRINT" ";FOR X=0TO39:LPRINTUSING" ££";X;:NEXT:LPRINT
80 FOR Y=0TO920STEP40:LPRINTUSING"£££";Y;:FORX=0TO39:LPRINT" ";CHR$(95);:NEXT
90 LPRINT" ";NEXT
100 LPRINT CHR$(18)
110 LPRINT"":LPRINT"":LPRINT""
120 GOTO30

```

```

10 DIM MS(5): FOR A=1 TO 5: READ MS(A): NEXT A: REM
** READ M/C SUBROUTINE ADDRESSES
20 DATA 28672,29254,29998,30327,30600
30 IMENU:CLS:PRINT,"      MASTER MENU":PRINT
40 PRINT,"(1) . . . ."
50 PRINT,"(2) . . . ."
60 PRINT,"(3) . . . ."
70 PRINT,"(4) . . . ."
80 PRINT,"(5) . . . ."
90 PRINT,"(6) EXIT PROGRAM":PRINT
100 UU=0: REPEAT:PRINT,"      YOUR OPTION ";:INPUT
UU:UNTIL UU>0 AND UU<7 AND UU=INT(UU)
110 WHILE UU<6
120 CALL MS(UU):FOR A=1 TO 1000:NEXT A:JUMPMENU
130 ENDWHILE:END

```

Fig. 9

available because addresses do not have to be specified in 'integer' form, so 61440 can be specified as CALL\$61440.

The CALL command can be used to add new commands to BASIC, as in the program of Fig. 10 which adds a BEEP command. This routine is executed by:

CALL 32512, duration, pitch or  
CALL \$32512, duration, pitch  
where duration and pitch must be less than 256. Examples are:

```

350 DEFPROCERROR: REM ** ERROR ROUTINE
360 PRINT"INPUT ERROR":CALL 32512,50,50: REM **
SIGNAL ERROR
370 ENDPROC

```

## CANCEL

Cancel is a general 'abort' command and is used to abandon various operations.

Format: CANCEL expression

Expression, when evaluated, must result in one of four values:

**Result of Action taken**  
**expression**

- 0 Cancel current REPEAT-UNTIL loop
- 1 Cancel current PROC call
- 2 Cancel current GOSUB
- 3 Cancel EXEC mode

If a CANCEL2 is specified, that will cancel the RETURN address, so that a future RETURN will produce an RG error. That is, the outcome of a CANCEL 2 would be as if the calling program GOTOed instead of GOSUBed.

The same applies to CANCEL 1. It will cancel the ENDPROC address so any future ENDPROC will produce an "ENDPROC WITHOUT PROC" error.

7F00 CF	ORG	7F00H	
7F01 2C	RST	8	;check for comma
7F02 CD 21 7F	DEFB	' , '	
7F05 43	CALL	7F21H	;evaluate duration
7F06 C5	LD	B,E	;B = duration
7F07 CF	PUSH	BC	
7F08 2C	RST	8	;check for comma
7F09 CD 21 7F	DEFB	' , '	
7F0C C1	CALL	7F21H	;evaluate pitch
7F0D 4B	POP	BC	
7F0E C5	LD	C,E	;C = pitch
7F0F 3E 02	PUSH	BC	
	LD	A,2	;first half of sound
			;blip
7F11 41	LD	B,C	;B = pitch
7F12 D3 FF	OUT	(255),A	
7F14 10 FE	DJNZ	7F14H	;wait a bit
7F16 3E 01	LD	A,1	;second half of blip
7F18 41	LD	B,C	
7F19 D3 FF	OUT	(255),A	
7F1B 10 FE	DJNZ	7F1BH	
7F1D C1	POP	BC	
7F1E 10 EE	DJNZ	7F0EH	;loop until dur = 0
7F20 C9	RET		;return to BASIC
7F21 CD 02 2B	CALL	2B02H	;evaluate expression
7F24 C8	RET	Z	;return if result OK
7F25 C3 B2 07	JP	07B2H	;overflow if result>255
7F28	END		

Fig. 10

If a program jumps out of a REPEAT-UNTIL loop, CANCEL0 will cancel the incomplete loop. CANCEL3 will abort EXEC mode (explained later).

If expression, when evaluated, results in a value less than zero or greater than three, a syntax error will occur.

## EXEC

The EXEC command is a new type of command and is used to execute a string, just as if it was a line of BASIC.

Format: EXEC (string expression)

The string is tokenised and an END command is placed on the end. The tokenised string is then executed by the BASIC interpreter. When the END command is encountered, control is returned to the statement following the EXEC command. Note that nested EXECs are not allowed.

When EXEC is executed, EXEC mode comes into force. The END command exits EXEC mode. It is possible for the string to contain statements which transfer control to the areas of the program. This is perfectly okay, but must be used with care. If this feature is used, then END will return control to the statement

```

10 CLEAR 1000: READ NC: DIM SC$(NC): FOR A=1 TO NC:
READ SC$(A): NEXT A
20 REM ** ARRAY SC$ CONTAINS ALL COMMANDS
30 DATA 5,SAVE,LOAD,VERIFY,PRINT,EDIT
40 CLS:PRINT"WORD PROCESSOR":PRINT"COMMAND MODE":
PRINT
50 PRINT"COMMAND ?":CM$="":REPEAT:LINPUT"***":CM$:
UNTIL CM$<>" "
60 REM ** TEST FOR COMMAND AND EXECUTE APPROPRIATE
PROCEDURE
70 A=1:REPEAT
80 WHILE CM$=SC$(A):CANCEL0:EXEC("PROC"+SC$(A)):
GOTO 50
90 ENDWHILE:A=A+1:UNTIL A=6:GOTO 40

100 REM ** PROCEDURES
110 DEFPROCLOAD: . . . load routine
200 DEFPROCSAVE: . . . save routine
. . . rest of procedures . . .

```

Fig. 11

following the EXEC command. This is where CANCEL3 is useful. If, via EXEC, control is transferred to another area of the program, then CANCEL3 will cancel EXEC mode, and the END command will act as normal, ending the program.

The EXEC command must be used with care. The only restriction is that INPUT and LINPUT cannot be used without some kind of error resulting, and EXEC cannot be used in FOR-NEXT loops. Examples of EXEC are given in Fig. 11.

The EXEC command can also be used to evaluate expressions, for example:

```

AS="A=B*A+C+.76+INT(COS(A)*.75*SIN(B)+(C/A+A))":
EXEC(AS)

```

The program in Fig. 11 shows that EXEC can be a very useful command. However, it also shows that care must be taken when using procedure names and labels. It should work okay when the user types VERIFY, PRINT or EDIT. However, if either SAVE or LOAD is typed, the machine will respond with a syntax error in line 80. This is because the string to be executed is either PROCSAVE or PROCLOAD. Note that PROC SAVE and PROC LOAD work. Why? -Because there is a hidden (embedded) command in the original examples - CSAVE and CLOAD. To overcome this, change line 80 to:

```

80 WHILE CM$=SC$(A):CANCEL0:EXEC("PROC "+SC$(A)):
GOTO 50

```

The DEFPROCs in lines 110 and 200 will also have to be changed:

```

110 DEFPROC LOAD: . . .
200 DEFPROC SAVE: . . .

```

The program should now work fully. If you are thinking "Well, he probably typed out the program, then typed it into his computer and found it didn't work. So he had to add a bit to his instructions" - you're right!!

That concludes the instructions for VGBAS1.

## LEARNING TO COUNT WITH FREDDY FROG

Although Freddy takes some time to get his numbers ready, he's worth waiting for. This is a well-devised programme for 6-9 year-olds, and should put some joy back into mental arithmetic

We are given the choice of addition, subtraction, or multiplication (why no division, one must wonder?) — and two levels of difficulty, 'Easy' — for up to 5 year olds and 'Hard' — up to 10 years. As 1X1 came up in the 'hard' section I'm not too sure of the grading; I think a competent 10-year old would find little challenge, especially as no answer is greater than 20!

But for J1 to S2 the programme has its uses.

It is certainly well designed. The FOB graphics are impressive — I am persuaded to buy the FOB tape. Not only frogs and beetles, but also cars, tanks, funny faces, helicopters, teapots, ducks and houses

From a teaching point of view, it is quite sound — positive reinforcement and immediate correction of errors.

If you have a child under 10 in the house, buy this!

*Keith McCall*



```

1 CLS
5 COLOUR4
10 DEFINT A-Z: CLEAR 100
11 PRINT@44,"MJJJJ JJJJ' MJJJ' MJJJ' JJJJJ"
12 PRINT@84,"J J J J J J J"
13 PRINT@124,"dJJJ' JJJJb JJJJJ J JJJJJ"
14 PRINT@164," J J J J J J"
15 PRINT@204,"JJJJb J J J dJJJb JJJJJ"
16 PRINT@287,"JJJJ' MJ' MJJJ' JJJJJ"
17 PRINT@327,"J J MJ J' J J"
18 PRINT@367,"JJJJb JJJJJ J JJJJJ"
19 PRINT@407,"J d' J J J J"
20 PRINT@447,"J J J J dJJJb JJJJJ"
25 GOTO 350
30 CLS:PRINT@165,"TOUCH RIGHT ARROW TO STEER RIGHT":PRINT@205,"OR LEFT ARROW TO STEER LEFT"
40 PRINT@805,"PRESS 'RETURN' WHEN READY"
50 A$=INKEY$:IF A$="" THEN PRINT@612,"SPACE MINER ":PRINT@612," ":GOTO 50
55 CHAR4
60 TR=0:SC=0:SD=0:L5=133:A=18062:B=14:C=B:D=1:F=0:G=25:H=43:KY=-1984:RI=64:LE=32:ST=18047:PT=255:LC=105:RC=95:CLS
70 FOR I=0 TO 15:PRINTSTRING$(B,"@");TAB(B+C)STRING$(40-B-C,"@");:NEXT
80 X=PEEK(KY):IF X AND RI THEN G=G+1:GOTO 100
90 IF LE AND X THEN G=G-1
100 IF RND(B)=3 THEN D=-D
110 B=B+D:IF B<3 THEN B=3:D=-D
120 J=B+C:IF J>36 THEN B=36-C:J=B+C:D=-D
130 POKE A,H:POKE A+1,H:A=ST+G:PRINTSTRING$(B,L5);
140 T=RND(7):IF T=7 AND RND(4)=1 THEN 160 ELSE IF T=3 THEN PRINTSTRING$(RND(C),32);"O";TAB(J)STRING$(40-J,L5);ELSE PRINTTAB(J)STRING$(40-J,L5);
150 GOTO 170
160 PRINTSTRING$(RND(C),32);"E";TAB(J)STRING$(40-J,L5);
170 P1=PEEK(A):P2=PEEK(A+1):IF (P1=32) AND (P2=32) THEN 180 ELSE IF (P1=79) OR (P2=79) THEN 220 ELSE IF (P1=L5) OR (P2=L5) THEN 200 ELSE IF P1=35 OR (P2=35) THEN 230 ELSE 180
180 POKE A,LC:POKE A+1,RC:F=F-1:IF F<1 THEN F=40:C=C-1:L5=RND(46)+192:IF C<6 THEN 260
190 GOTO 80
200 SC=SC+1:G=INT(C/2+B):PRINT"YOU RAN INTO THE WARP!"
210 FOR X5=1 TO 500:NEXT X5:FOR I=955 TO 959:PRINTSTRING$(B,L5);TAB(B+C)STRING$(40-J,L5);:NEXT:IF SC>3 THEN 340 ELSE 80
220 IF RND(2)=1 THEN 80 ELSE SD=SD+1:PH=515+B+C/2:FOR T=0 TO 30:PRINT@PH,"SPACE MINE!":PRINT@PH," ":NEXT:IF SD>5 THEN 340 ELSE 80
230 PRINT@920,,:GOTO 80
240 TR=TR+1:PH=515+B+C/2:FOR T=0 TO 30:PRINT@PH,"GOOD ONE!":FOR X5=1 TO 25:NEXT X5:PRINT@PH," ":NEXT:PRINT@920,,:GOTO 80
250 GOTO 230
260 CLS:PRINT:PRINT"GAME OVER!":PRINT:PRINT:PRINT"YOU RAN INTO THE WARP ";SC;" TIMES"
270 PRINT:PRINT:PRINT"AND HIT ";SD;" SPACE MINES"
280 PRINT"AND GATHERED ";TR*100;" POUNDS OF TRILLIUM!"
282 PRINT"YOUR SCORE IS: ";(TR*100)-(SC*10)-(SD*10)
283 PS=TR*100-SC*10-SD*10:IF PS>TS THEN TS=PS
285 PRINT"TOP SCORE = ";TS
290 PRINT"WANT TO PLAY AGAIN? (Y/N)"
300 A$=INKEY$:IF (A$="Y") OR (A$="N") THEN 310 ELSE 300
310 IF A$="Y" THEN CLS:GOTO 350
320 END
330 END
340 CLS:PRINT"SIMULATION ABORTED!":FOR X=1 TO 1000:NEXT:GOTO 260
350 PRINT@524,"DO YOU WANT INSTRUCTIONS (Y/N)"
360 A$=INKEY$:IF A$="" THEN 360 ELSE IF A$="N" THEN 40
380 PRINT"YOUR MISSION IS TO FLY A TORTUOUS COURSE TO GATHER A PRECIOUS METAL, TRILLIUM (E), AVOIDING THE SPACE MINES (O) AS YOU DO SO."
390 PRINT"AS A TRAINING PROCEDURE, YOU WILL BE ALL-OWED TO COLLIDE WITH THE SIDES OF THE SPACE-TIME WARP 3 TIMES, OR HIT A SPACE MINE 5 TIMES"
400 PRINT"ANY MORE THAN THIS WILL ABORT THIS SIMULATION"
410 PRINT:PRINT"PRESS ANY KEY TO CONTINUE"
420 A$=INKEY$:IF A$="" THEN 420
430 CLS
440 PRINT"PRESS ANY KEY TO BEGIN"
450 A$=INKEY$:IF A$="" THEN 450
460 GOTO 30
500 REM:ADAPTED FROM A PROGRAMME BY WM.SCOTT WATSON IN "55 ADVANCED COMPUTER PROGRAMS IN BASIC"(TAB BOOKS) FOR THE COLOUR GENIE, BY A.K. MCGILL

```

```

10 CLS
11 PRINT@50,"JJJJJ J J      JJJJJ"
12 PRINT@90,"J      J J      J "
13 PRINT@130,"JJJJJ J J      JJJJJ"
14 PRINT@170,"J      J J      J "
15 PRINT@210,"J      J JJJJJ JJJJJ"
20 PRINT@445,"THIS PROGRAMME WILL SAVE UP TO 100      NAMES,ADDRESSES,AND TELEPHONE Nos."
30 PRINT@808,"PRESS ANY KEY TO CONTINUE"
40 K$=INKEY$:IF K$="" THEN 40
100 CLEAR5000
110 CLS:DIM N$(80),P$(80),A$(80)
111 GOSUB 1000
112 ON Q GOTO 120,220,240,400,500,600,700,1200,1400
120 FOR N=1 TO 80
130 PRINT@160,"NAME";:INPUT N$(N)
140 IF N$(N)="9999" THEN P1=N:GOTO 111
150 PRINT"TEL.NO."::INPUT P$(N)
160 PRINT "ADDRESS";:INPUT A$(N)
170 PRINT@160,STRING$(39,32)
180 PRINT@200,STRING$(39,32)
190 PRINTSTRING$(39,32)
200 NEXT N
210 CLS:PRINT"LIST COMPLETE"
212 GOTO 111
220 INPUT" ENTIRE FILE";S$
230 IF S$="Y" THEN 340 ELSE 111
240 PRINT"PICK AN INITIAL"
250 INPUT J$
260 FOR N=1 TO 80
270 IF J$= LEFT$(N$(N),1) THEN GOSUB 300
280 NEXT N
290 PRINT"NAME NOT IN FILE":FOR V=1 TO 500:NEXT
295 INPUT "TYPE (1) TO RETURN TO MENU, OR      TYPE (2) FOR ANOTHER INITIAL";Q
296 IF Q<1 OR Q>2 THEN 295
297 CLS:ON Q GOTO 111,240
300 PRINT"NAME- ";N$(N)
310 PRINT"NUMBER- ";P$(N)
320 PRINT"ADDRESS- ";A$(N)
325 INPUT "PRESS RETURN TO CONTINUE";X
330 RETURN
340 FOR N=1 TO P1
350 PRINT"NAME - ";N$(N)
360 PRINT"TEL NO:- ";P$(N)
370 PRINT"ADDRESS:- ";A$(N)
380 NEXT N
385 INPUT"TO RETURN TO THE MENU,PRESS RETURN";X
390 CLS:GOTO 111
400 CLS:PRINT"ENTER THE NAME FOR THE ENTRY YOU WISH      TO CHANGE"
410 INPUT N$
420 FOR N=1 TO P1:IF N$=N$(N) THEN 435
425 NEXT N
430 PRINT"NAME NOT IN FILE":GOTO 460
435 PRINT"ENTER THE CORRECT INFORMATION"
440 INPUT N$(N),P$(N),A$(N)
450 PRINT"THE LINE NOW READS :":PRINTN$(N):PRINT P$(N):PRINTA$(N)
460 INPUT" TO RETURN TO THE MENU,PRESS RETURN";X
470 CLS:GOTO 111
500 CLS:FOR N=P1 TO 80:GOTO 130
600 CLS:PRINT
610 PRINT"PLEASE PREPARE DATA CASSETTE FOR "
620 PRINT"RECORDING.PRESS THE PLAY AND RECORD"

```

```

800 PRINT"KEYS OF THE RECORDER, THEN ANY KEY OF"
512 PRINT"THE COMPUTER"
650 K$=INKEY$:IF K$="" THEN 650
660 PRINT"RECORDING NOW..."
665 PRINT£-1,P1

670 FOR N=1 TO P1:PRINT£-1,N$(N),P$(N),A$(N):NEXT
680 PRINT"RECORDING COMPLETE-PRESS STOP BUTTON "
690 PRINT"AND REWIND CASSETTE":PRINT"PRESS ANY KEY TO RETURN TO MENU"
695 K$=INKEY$:IF K$="" THEN 695
697 CLS:GOTO 111
700 CLS:PRINT
710 PRINT"PREPARE DATA CASSETTE TO REPLAY"
720 PRINT"PRESS ANY KEY WHEN READY"
730 K$=INKEY$:IF K$="" THEN 730
740 PRINT"LOADING DATA INTO COMPUTER NOW..."
745 INPUT £-1,P1
750 FOR N=1 TO P1:INPUT£-1,N$(N),P$(N),A$(N):NEXT
755 PRINT"DATA LOADED:PRESS ANY KEY TO CONTINUE"
760 K$=INKEY$:IF K$="" THEN 760
770 CLS:PRINT@160,"DATA LOADED"
780 INPUT"TO SEE MENU PRESS RETURN":X
790 GOTO 111
1000 REM:MENU
1010 PRINT@135,"* MENU *"
1015 PRINT
1020 PRINT" TO BUILD A FILE,TYPE 1 (ENTER 9999 WHEN COMPLETE"
1026 PRINT
1030 PRINT" TO DISPLAY WHOLE FILE, TYPE 2"
1040 PRINT" TO DISPLAY ONE INITIAL, TYPE 3"
1050 PRINT" TO MAKE A CORRECTION,TYPE 4"
1060 PRINT" TO ADD TO THE FILE IN MEMORY, TYPE 5"
1070 PRINT" TO SAVE A FILE ON TAPE, TYPE 6"
1080 PRINT" TO RETRIEVE A FILE FROM TAPE, TYPE 7"
1085 PRINT" TO QUIT,TYPE 8"
1087 PRINT" TO SEND A FILE TO THE PRINTER,TYPE 9"
1090 INPUT Q
1092 IF Q<1 OR Q>9 THEN PRINT"ILLEGAL CHOICE-TRY AGAIN":GOTO 1090
1095 CLS
1100 RETURN
1200 END
1300 REM:ADAPTED FROM A TRS-80 PROGRAM BY A.E.McGILL
1400 PRINT"PREPARE THE PRINTER TO RECEIVE THE FILE"
1410 PRINT"PRESS ANY KEY OF THE COMPUTER WHEN READY"
1420 K$=INKEY$:IF K$="" THEN 1420
1430 CLS:PRINT"PRINTING NOW"
1440 LPRINTP1:PRINT:PRINT
1450 FOR N=1 TO P1:LPRINT N$(N),P$(N),A$(N):NEXT
1460 PRINT"PRESS ANY KEY TO RETURN TO THE MENU"
1470 K$=INKEY$:IF K$="" THEN 1470
1480 CLS:GOTO 111

```

```

10 REM HAPPY BIRTHDAY BY IRENE & BARRY WALKER
12 REM J=CHANNEL . K=OCTIVE . L=NOTE . M=DELAY .
14 '
16 REM DELAYS DEMISEMIQUAVER=25 SEMIQUAVER -50 QUAVER -100
OTCHET -200 MINIM -400 SEMIBREVE -800
17 REM REFERENCE FIG 9.3 PAGE 114 MASTERING THE COLOUR GENIE BY IAN SINCLAIR
18 REM THE DELAYS ARE ALL INTEGERS AS REAL NUMBERS OF THESE VALUES SOUND SLOW(TRY THE DIFFERENCE BY DELETING LINE 20)
20 DEFINT A,B,C
30 GOSUB 190
40 READ J,K,L,M
50 IF J=4 THEN SOUND 7,255 :GOTO 160
60 PLAY(J,K,L,15)
70 FOR A=1 TO M:NEXT A
80 FOR D=1 TO 50:NEXT D
90 GOTO 40
100 DATA 1,4,2,100,1,4,2,100,1,4,3,200
110 DATA 1,4,2,200,1,4,5,200
120 DATA 1,4,10,400,1,4,2,100,1,4,2,100,1,4,3,200,1,4,2,200,1,4,6,200,1,4,5,400
130 DATA 1,4,2,100,1,4,2,100,1,5,2,200,1,4,7,200,1,4,5,200,1,4,10,200,1,4,3,200
140 REM LAST HAPPY BIRTHDAY TO YOU
150 DATA 1,5,1,100,1,5,1,100,1,4,7,200,1,4,5,200,1,4,6,200,1,4,5,400,4,0,0,0
160 A#=INKEY$: IF A#="" GOTO 160
170 CLS
180 END
190 CLS:COLOUR7:GOTO 300
200 FOR Z=2 TO 38
210 COLOUR1
220 PRINT@Z,"y";
230 PRINT@880+Z,"y";
240 NEXT Z
250 FOR Z=42 TO884 STEP 40
260 PRINT@Z,"y";
270 PRINT@Z+36,"y";
280 NEXT Z
290 RETURN
300 PRINT@85,"
J J MJ' JJ' JJ' J J
J J J J J J J J
JJJJ JJJ JJb JJb JJJJ J J J J J J TU
J J J J J J TU"
310 PRINT@405,"
JJJ' J JJ' MJJ J J
J b J J J J J J
JJJ J J J JJJ JJJJ
J ' J J J J J J TU
JJJb J JJb J J TU "
320 GOTO 200

```

```
10 REM TRS-80 SOUND ROUTINE
20 REM WILL WORK WITH OLD ROMS
30 REM V=USR(X)
31 REM CASSETTE OUTPUT INTO AUX
32 REM INPUT OF CASSETTE PLAYER
33 REM   BY ROBERT MILLAR
40 CLEAR 5000:ZZ#=STRING$(29,0)
50 ZZ=VARPTR(ZZ#):Z1=PEEK(ZZ+1)
60 Z2=PEEK(ZZ+2):IF Z2>127THEN Z2=Z2-256
70 Z3=Z2*256+Z1:FORZZ=Z3TOZ3+28:READZ4:NEXT
80 IFZ01=PEEK(16396)POKE16526,Z1:POKE16527,Z2ELSECMD"T"
90 DEFUSR0=Z3:POKE14308,0
100 DATA205,127,10,62,1,14,0,237,91,61
110 DATA64,69,47,230,3,179,211,255,13
120 DATA40,4,16,246,24,242,37,32,241,201
```