COLOUR GENIE

AUCKLAND DISTRICT USER GROUP

P.O. BOX 27-387, AUCKLAND 4, NEW ZEALAND.

NEWSLETTER NO. 24 MARCH 1986

Guess what time of the year it is again???? You guessed it!! It is subscription time!!! Please send the following amount in to us as soon as you can:

Auckland members who attend meetings	$15.00 per year
All country members	$10.00 per year
Student members (for Auckland people only)	$10.00 per year

Remember, the above amount includes families or single people, whether in Auckland or in the country. To qualify for student membership, you must be at school or at university. And if there are two students from the one family - sorry, but that is classed as family membership.

All those subscriptions paid before the end of March 1986 will receive a brand new program on tape free of charge - for our appreciation of early payment. Auckland members will be able to pay their subscription at our 31st March meeting. Yes, I know that this is in the middle of Easter - but that is how the hall is booked, and we cannot change it.

So, please support your Club, and get your subscriptions in so that we can purchase more software.

DISK DRIVES

You will remember seeing Chris's article on the disk drive interfaces which are now available through the Group. The only snag with these is that we require the money up front. Unfortunately, we have to order a minimum of 10 each time, and the Group just can't find a total of $3200.00 just lying around in some account or other, so that we can bring in the first lot of 10 orders, then hope that we can sell them!! To whet your appetite on these interfaces, I have typed out a list of the commands that are available - remember that you also get a free disk and manual (in English!) with each interface. We have received a few cheques already - some within 4 days of sending out the newsletter.

The disk drive interfaces are going to go a long way towards keeping the Genie alive and kicking. Even if you can't afford one right now, please let either Chris or I know that you will definitely want one - and approximately when you will want one. This way we can plan future orders. We only need a couple more cheques now, to be able to send the first order off.

Some of you Auckland members will remember seeing this particular disk drive interface in action at a Colour Genie meeting last year. Phil Lovegrove was able to get it up and running at the meeting with the help of Keith Dix who just happened to have a disk drive sitting in his car!!

CMD(M/C) AND DISK DRIVE COMMANDS

CLOSE buffer number
Closes all opened files or the ones specified by buffer number.

CVD(string variable)
Converts the string variable into a double precision number.

CVI(string variable)
Converts the string variable into an integer number.

CVS(string variable)
Converts the string variable into a single precision number.

CMD"<DR#=Typ"
Changes the type of drive specification on drive DR#.

CMD"? Addr"
Returns in hexidecimal the contents of addr and addr+1 (a double byte PEEK).

CMD"C"
Removes all REM statements and unnecessary spaces from a BASIC program.

CMD "D"
Performs the Z80 restart 30.

CMD "E"
Displays the last Disk Basic Error code on the screen.

CMD "F DR#"
Formats the diskette in drive DR#.

CMD "G start address,AF,BC,DE,HL"
Calls the start address and passes the values to the Z80 registers.

CMD"H"
Renews a program that has been deleted via the NEW command.

CMD"I DR#"
Displays the directory listing of drive DR#.

CMD"JKL"
Sends the contents of the screen to the printer.

CMD"L Name:DR#"
Loads a machine code program into memory from drive DR#.

CMD"N 01 dname:DR# Newname"
Renames the program Oldname on drive DR# to that of Newname.

CMD"R"
Switches the system clock on.

CMD"S Name:DR#"
Loads and executes the machine code program on drive DR#.

CMD"T"
Switches the system clock off.

CMD"U"
Turns the clock display on.

CMD"U,N"
Turns the clock display off.

CMD"V Addr"
Removes a machine code routine from the interrupt chain.

CMD"W Name,start addr,end addr,execution addr,offset"
Saves a block of memory from start address to end address with an execution address and memory offset with the file name of Name.

CMD"X Addr"
Puts the Addr into the restart 28 vector.

CMD"Y Addr"
Adds a machine code routine into the interrupt chain.

CMD"Z Addr"
Fills the memory from start address to end address with the value of byte.

DEFFN Function name (variable list)
Allows you to define single line functions (TRS80).

DEFUSRn=start address
Sets the start address of the usr function n, which can be from 0 to 9.

FN function name (variable list)
Recalls the function defined with DEFFN.

GET buffer number, record
Reads a random access field into the buffer.

INSTR(n,String 1,String 2)
Finds the position of string 2 within string 1 starting at byte n.

INPUT#buffer number,variable(s)
Reads data from a sequential file into the variables.

KILL"Filename"
Deletes a file or program from the diskette.

LINEINPUT "Text";String variable
As the INPUT command, but allows commas to be keyed into the string.

LINEINPUT#buffer number,string variable
As INPUT#, but ignores commas etc.

LOAD "Filename"
Loads a basic program from the diskette.

LOAD "Filename",R
As load, but RUNS the program once in memory.

LOC(buffer number)
Returns the last record access from an OPENed random file.

LSET
Left justifies data into an open fielded variable.

MERGE"Filename"
Merges an ASCII saved basic program with a program already stored in memory.

MID$(string 1,S,L)=string2
Replaces a portion of string 1 with string 2, starting at position S for a length of L.

MKD$(double precision)
Converts a double precision number into a string of 8 bytes long.

MKI$(integer)
Converts an integer number into a string of 2 bytes long.

MKS$(single precision)
Converts a single precision number into a string of 4 bytes long.

NAME
Prints the name of the last used BASIC program onto the screen.

OPEN "mode",buffer number,"filename"
Opens a file for processing.

PRINT#buffer number, vars
Writes the variables to the sequential file opened using buffer number.

PUT buffer number,record number
Puts the fielded variables onto record number of the file opened for random access.

RSET
Right justifies data into an open fielded variable.

RUN"filename"
Loads and runs a BASIC program.

SAVE"filename"
Saves a BASIC program in condensed form.

SAVE"filename",A
Saves a BASIC program in ASCII format.

SAVE"filename",Axx-yy
Saves a BASIC program in ASCII format, only including lines xx to yy.

TIME$
Returns a 17 byte long string containing the time and date information when set.

USRn(num)
Calls user machine code number n (0 to 9) set up with DEFUSRn, passing num to the routine.

There are also a number of RST calls listed and DOS Routines (37 of these) which are listed in the manual, and which are available to be called up.

There are several programs included on the free diskette, which include transfering tape programs (machine code) onto diskette. This would be a very handy program indeed, and is one which Commodore took months to release (and then it was released by a "hacker"!!)

Last Month's Newsletter

I must apologise to you all for not including my usual few pages in the last newsletter. However, I had fallen victim to the 'dreaded lurgy' once again, and got to the stage where I was even unable to get out of bed for several days. When one has just started a new job at the beginning of the year, one doesn't like to pander to one's illnesses and take time off, but I finally got to the stage (after three visits to the doctor) of collapsing on my bed and being unable to get off it again. I managed to get acute bronchitis and acute trachy-something-or-other, in the summertime for goodness sake! and the amount of coughing that I did managed to damage a rib or two as well. I was unable to even lift my arm for a couple of weeks there. I really thought I was about to be measured for a coffin. So I am very relieved indeed to be able to write my piece for this newsletter!!

Believe it or not, I was still able to keep up with the cassette tape orders, but those people who are still waiting for a letter from me are still doing just that - waiting!! Sorry folks, there seem to be just so many hours in the day, but I will get around to it yet, don't give up hope.

By the way, I don't work at Rakon any more, and from what some of you are telling me over the phone at home, Rakon are getting pretty darned tired of telling you all so when you ring up for me - so, please ring me at home (Ph 655 718) in future, and not at Rakon. Let's give the phone girl at Rakon a pleasant day! Several of you have mentioned to me of the shortness of temper of the girl who answers the phone at Rakon - perhaps there have been rather a lot of calls from members.

DATA SAVING AND LOADING - reliably

Andy Russell demonstrated a machine code program that he has written himself, that takes up about 1 byte of memory, and enables you to save and load data quickly and effortlessly! He has been using this program for some time now, and has never had a save failure. This program is being distributed free to all members who pay their subscriptions before the end of this month.

A 'NO FRILLS' MACHINE CODE WORD PROCESSOR

Andy has been very busy lately, he has also written a machine code word processor. This doesn't right justify, but it does everything that is basically required in a word processor, and it contains his data saving and loading routine. This is available from him on receipt of a blank tape. That's the only cost.

The actual programs - source code, assembly code and BASIC code - will be included in next month's newsletter free of charge. BUT remember that the only people who will be getting next month's

There are a lot of new programs that have come in over the last couple of months. Our family haven't had time to have a look at all of them yet, so I have just listed what is available, and will bring them along to the next meeting so that people can try them during the meeting. This doesn't help the country members I know, but I will put a description of them in the next newsletter.

Some of the new programs are:-

Cowboy $15.00
Now this game fascinates me. You have to push all these hay bales around the screen using the arrow keys, and eventually you block in three steers. These steers are pretty smart and unless you block them in properly, they can get through practically anywhere. So far, I have got up to the sixth screen, with each screen getting progressively harder and the steers getting progressively faster! I really recommend this game!

Tank Maze $15.00
All I really know about this game, is that you have a pile of tanks and a pile of 'something-elses', and I think you have to get the tanks through the something-elses! More on this next month.

Grabit $15.00
There are three or four policemen chasing you and you have to race around the screen grabbing the bags of money and avoiding the police. There are several varying screens all with the same idea. Quite a good game.

swagman $15.00
This is really based on the same idea as the last one - you have to grab the piles of 'whatever' and store them, then race back and get some more. You can create your own 'whatevers' with this game using the spacebar. The more 'whatevers' you get and store, the more points you get. Again, there will have to be a better description in the next newsletter.

Drone $15.00
This one has several different screens to it. According to the writeup in the latest Gum magazine you have to collect the little black boxes and bring them back to base, all the while avoiding and shooting at, the enemies.

Munchman $15.00
This is based on the good old Pacman style, and is quite a good version of Pacman.

Jump Jack $15.00
I'm darned if I can figure this one out. It is very fast moving, and to me at least, very difficult. I intend to farm this one out to our enthusiastic sub-group in Feilding to see if they can figure out how to play it.

Tron $15.00
Same with this one.

Ghostrider $15.00
This one gets my interest for some time, then I get so frustrated with it that I swear I'll never play it again. Based on the Punkte game, you have a big square of dots, you start at the top left hand corner, and your opponent (the Genie) starts at the bottom right hand corner. You go round and round (the screen has decreasing rows) eating the dots, and your opponent is trying to catch you. It took me hours before I worked out that you have to use the down arrow key right at the start to even get into the middle part and start the game.

GProbe $25.00
This looks to be an extremely good Database program. You get a 10page manual on how to use the program, and this manual goes slowly through setting up a database with the countries of the world, and their capitals. A very thorough manual, and if the program is as good as it looks, it will be a very good program indeed.

My friends in Holland have just sent me another couple of tapes. They don't mention the last letter and tape I sent them before Xmas, so it looks as though it might have gone astray. However, I hope to sort out the programs on these two tapes over the next month, so it looks as though it will be a busy month. Then too, I have received a tape from a D. Huggins in England, who has only just found out that our group exists, and is willing to sell his programs to us. Those of you who receive the Gum magazine will have seen reviews on some of his programs. These too will have to be listed next newsletter, I haven't had time to look at any of these three tapes yet.

So, we have plenty of programs coming up over the next couple of months. In nice time for the winter months when we all have nothing to do but play on the Colour Genie.

In the latest Gum, on page 23 there is a program with part of it being very hard to read. Rather than type out a page to go with each newsletter, I am putting the hard-to-read part of the program in this newsletter.

```
260    IF BU<1 GOTO 2430

300    FOR P=0TO19:COLOUR RND(16):PRINT@P,CHR$(128);:
       COLOUR RND(16):etc

310    FOR P=1TO18:COLOUR RND(16):PRINT@40+P,CHR$(128);
       TAB(19):CHR$(128);:NEXT
```

This is out of the September/October/November/December 1985 issue of Gum. For those of you that haven't got yours yet, it is on its way UNLESS YOU HAVEN'T PAID FOR EITHER SOFTWARE ORDERED OR FOR YOUR LAST GUM MAGAZINE. And the issue date isn't wrong either, the latest Gum covers all four months. The English Group's last letter to me asked me not only how was the weather here in Australia!!, but also said things were really tough on the home computer front in England, and that the English Group would try and hold out till about September this year! Very bad news as far as we are concerned, and even worse news for the 1000-2000 Colour Genie members in England.

Getting back to those people that owe us money, PLEASE send us your overdue payments, the Group is not able to carry it's members. We have quite a few people that have had outstanding invoices for some months now, including one person whose cheque bounced LAST YEAR and who still hasn't honoured his account.

You will notice that this newsletter is a reasonable size this month - I had to make up for last month!

Let's make the Easter meeting a good one Aucklanders - if one of our Feilding members can make the meeting (and has done so on other occasions as well) surely those of us actually living in Auckland can come along too. It is unfortunate that the next meeting is actually on Easter Monday, but that comes with the annual booking that we make, and cannot be changed. One of our committee members is arranging tea, coffee and bikkies again, so you won't go away thirsty or hungry!

The next meeting is on the 31st March - please try to come along and bring your subscriptions with you.

Your committee is looking forward to seeing a big crowd in the hall again - we've forgotten what one looks like!!

Nola Huggins

PEOPLE WHO HAVE ORDERED DISC DRIVE INTERFACES HAVE A SPECIAL MESSAGE AT THE BOTTOM OF THIS PAGE.

SO IF YOU HAVE ORDERED AN INTERFACE AND THERE IS NO MESSAGE ON YOUR COPY PLEASE CONTACT CHRIS BISHOP AT ONCE_____

SUBSCRIPTIONS

The following is our list (so far) of members whose subscriptions have already paid for the 1986/1987 year. This is, of course, before all those subscriptions are collected at the Easter Monday meeting!

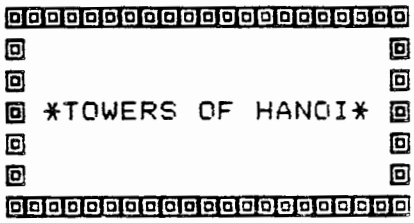
Chris Bishop,6 Jenanne Place,Glenfield,Ph 444 5301
Alistair Clark,36 Forbury Road,Dunedin
Clyne family,6 Alfred Place,Fairfield,Dunedin
Nola Huggins,612 Mt Albert Road,Royal Oak,Ph 655 718
Phil Lovegrove,145 Carlisle Road,Browns Bay,Ph 478 9761
Nisbet family,6 Oratu Place,Greenhithe,RD1 Albany,Ph 413 9874
Pearson family,109 Ranfurly Road,Epsom,Ph 686 179
Andy Russell,98 Union Road,Howick,Ph 535 4006
Ivan Robinson,P O Box 2215,Rotorua,Ph 89640

I know that there are a few people who joined at the beginning of this year, but if you remember, you all got the back issues of the newsletters for the past year as well as the 40 page booklet, in effect making you a member for the whole of the 1985/1986 year, so your subscriptions will also be due.

P.S. on the DISK DRIVE INTERFACES

Chris is holding up the first order as some country members have been in touch with him letting him know that their cheques are on the way. He is quite happy to wait until these cheques arrive, but please make sure, if you are going to want a disk drive interface from the first order, and you haven't let us know yet, get in touch with us NOW to make sure you don't miss out.

```
50 CLS                          'This is > > TOWERS OF HANOI < <
60 CHAR4
90 PRINT                        adapted for GENIE by Ron Hart Aug.84
100 REM INITIALISE
110 DIMT(7,3)
120 E=0
130 FORD=1TO7
140 FORN=1TO3
150 T(D,N)=0
160 NEXTN
170 NEXTD
175 A=17655:B=-3849
176 FORK=ATOA+20:POKEK,183:NEXTK
177 FORK=A+240TOA+240+20:POKEK,183:NEXTK
178 FORK=A+20TOA+20+240STEP40:POKEK,183:NEXTK
179 FORK=ATOA+240STEP40:POKEK,183:NEXTK
180 FORL=BTOB+20:POKEL,12:NEXT
181 FORL=BTOB+240STEP40:POKEL,12:NEXT
182 FORL=B+240TOB+240+20:POKEL,12:NEXT
183 FORL=B+20TOB+20+240STEP40:POKEL,12:NEXT
190 COLOUR7:PRINT@369,"*TOWERS OF HANOI*"
192 FORT=1TO1500:NEXT:CLS
195 PRINT"TOWERS OF HANOI":PRINT:PRINT"DO YOU NEED RULES (Y/N)";:INPUTQ$
196 IFQ$="Y"THENGOTO200ELSEGOTO215
200 COLOUR1:PRINT"THERE ARE THREE TOWERS-1,2,3 FROM THE   LEFT."
201 PRINT:PRINT"ON TOWER 1 THERE ARE";:COLOUR5:PRINT" UP TO 6";:COLOUR1:PRI
NT" DISCS,     NUMBERED 3,5,7,9,11,13":PRINT:PRINT"THE MORE DISCS-THE HARDE
R THE GAME-OF COURSE"
202 PRINT:PRINT"THESE MUST BE TRANSFERED TO TOWER 3 AND PLACED IN THE SAME
ORDER."
203 COLOUR5:PRINT:PRINT"DURING TRANSFER,YOU MAY NOT PLACE A DISC LARGER THA
N THE ONE BENEATH IT."
204 COLOUR1:PRINT:PRINT"E.G. YOU MAY NOT PLACE DISC 7 ON DISC 5 AND SO ON."
210 COLOUR13:PRINT:PRINT"IF YOU PLAY WITH  ONLY THREE DISCS-THEY WOULD BE 9
,11,13...OR 4 WOULD BE 7,9,11,13 ETC
211 PRINT:COLOUR2:PRINT"PRESS ANY KEY"
212 K$=INKEY$:IFK$=""THEN212
215 CLS:COLOUR9:PRINT:INPUT"PLAYING WITH HOW MANY DISCS";S
220 PRINT
230 M=0                                         GOOD-LUCK
240 FORQ=1TO7
250 IFQ=STHEN350                                      *              *              *
260 NEXTQ                                             *              *              *
270 E=E+1                                             *              *              *
280 IFE>2THEN310                                    *******          *              *
290 PRINT"SORRY -ILLEGAL MOVE":GOTO215             *********         *              *
310 PRINT"STILL NO GOOD-GAME ENDS":STOP           ***********        *              *
350 CLS                                          ***********         *              *
390 PRINT:PRINT"GOOD-LUCK":PRINT
400 Y=7:D=13
420 FORX=ST01STEP-1                             MOVE WHICH DISC ?
430 T(Y,1)=D:D=D-2:Y=Y-1
460 NEXTX
470 GOSUB1240
480 COLOUR13:PRINT:PRINT:PRINT"MOVE WHICH DISC ";:E=0:COLOUR2
500 INPUT D
510 IF(D-3)*(D-5)*(D-7)*(D-9)*(D-11)*(D-13)*0
530 E=E+1:IF E>1THEN590
590 FOR R=1TO7
600 FORC=1TO3
610 IFT(R,C)=DTHEN640
620 NEXTC:NEXTR
640 FORQ=RTO1STEP-1
645 IFT(Q,C)=0THEN660
650 IFT(Q,C)<DTHEN680
```



```
660 NEXTQ
670 GOTO700
680 PRINT"THAT DISK IS BELOW ANOTHER ONE.MAKE ANOTHER CHOICE."
690 GOTO480
700 E=0
705 PRINT:PRINT:INPUT"TO WHICH NEEDLE...";N:PRINT
730 IF(N-1)*(N-2)*(N-3)=0THEN800
735 E=E+1
740 IFE>1THEN780
750 PRINT"ASSUME YOU HIT WRONG KEY":GOTO705
780 PRINT"TRIED TO WARN YOU...GAME OVER":STOP
800 FORR=1TO7
810 IFT(R,N)<>0THEN840
820 NEXTR
830 GOTO880
840 IFD<T(R,N)THEN880
850 PRINT"YOU CAN'T PLACE A LARGE DISK ON A SMALLER ONE.NOW THEN":GOTO480
880 FORV=1TO7:FORW=1TO3
900 IFT(V,W)=DTHEN930
910 NEXTW:NEXTV
930 FORU=1TO7
940 IFT(U,N)<>0THEN970
950 NEXTU
960 U=7:GOTO980
970 U=U-1
980 T(U,N)=T(V,W):T(V,W)=0
1000 CLS:GOSUB1240
1020 M=M+1
1030 FORR=1TO7:FORC=1TO2
1050 IFT(R,C)<>0THEN1090
1060 NEXTC:NEXTR
1080 GOTO1120
1090 IFM<=128THEN480
1100 PRINT"SORRY BUT I HAVE ORDERS TO STOP YOU IF YOU MAKE MORE THAN128 MOV
ES":STOP
1120 IFM<>2IS-1THEN1140
1130 COLOUR5:PRINT:PRINT"CONGRATULATIONS!!!!"
1140 COLOUR12:PRINT:PRINT"YOU HAVE PERFORMED THE TASK IN";M;"MOVES."
1150 COLOUR2:PRINT:PRINT"TRY AGAIN(YES/NO)";:INPUTA$
1160 IFA$="NO"THEN1390
1170 IFA$="YES"THEN90
1180 PRINT:PRINT"'YES'OR'NO'PLEASE";:INPUTA$:GOTO1160
1240 FORK=1TO7
1250 Z=7                                        *            *            *
1260 FORJ=1TO3                                  *            *            *
1270 IFT(K,J)=0THEN1330                         *            *            *
1280 PRINTTAB(Z-INT(T(K,J)/2));                 *            *          *******
1290 FORV=1TOT(K,J)                             *            *         *********
1300 COLOUR1:PRINT"*";                          *            *        ***********
1310 NEXTV                                      *            *      ************
1320 GOTO1340
1325 PRINT
1330 COLOUR6:PRINTTAB(Z);"*";       YOU HAVE PERFORMED THE TASK IN 25 MOVES.
1340 Z=Z+13
1350 NEXTJ
1360 PRINT                          TRY AGAIN(YES/NO)?
1370 NEXTK
1380 RETURN
1390 PRINT:PRINT"THANKS FOR THE GAME":PRINT:END
```

```
10 CLS
20 CLS:PRINT@43,"* M E T R I C  C O N V E R T E R *"
30 PRINT:PRINT:PRINT
40 PRINT"PRESS ANY KEY FOR MENU"
50 Q$=INKEY$:IF Q$="" THEN 50
60 IF Q$<>"" THEN 70
70 PRINT"(1) CM. TO IN."
80 PRINT"(2) M. TO YDS."
90 PRINT"(3) CC. TO CU.INS."
100 PRINT"(4) KM. TO MILES"
110 PRINT"(5) LITRES TO GALS."
120 PRINT"(6) GRAMS TO OZ."
130 PRINT"(7) KG. TO LBS."
140 PRINT"(8) DEG.C TO DEG.F"
150 PRINT"(9) CU.M TO CU YDS."
160 PRINT"(10) IN. TO CM."
170 PRINT"(11) YDS. TO M."
180 PRINT"(12) CU.INS. TO CC."
190 PRINT"(13) MILES TO KM."
200 PRINT"(14) GALS. TO LITRES"
210 PRINT"(15) OZ. TO G."
220 PRINT"(16) LBS. TO KG."
230 PRINT"(17) DEG.F TO DEG.C"
240 PRINT"(18) CU.YDS TO CU.M."
250 PRINT"(19) MPG TO Lper100K"
260 PRINT"(20) Lper100K TO MPG"
270 PRINT"(21) SQ MTRS to SQ YDS"
280 PRINT"(22) SQ YDS to SQ MTRS"
290 INPUT"ENTER THE NUMBER OF YOUR CHOICE";A
300 CLS
310 IF (A>=1)*(A<=22) THEN 330
320 PRINT"TRY AGAIN !":GOTO 290
330 A=INT(A)
340 IF A=1 THEN A$="CM":B$="IN"
350 IF A=2 THEN A$="M":B$="YDS"
360 IF A=3 THEN A$="CC":B$="CU.IN"
370 IF A=4 THEN A$="KM":B$="MILES"
380 IF A=5 THEN A$="L":B$="GAL"
390 IF A=6 THEN A$="Gr":B$="Oz"
400 IF A=7 THEN A$="Kg":B$="LBS"
410 IF A=8 THEN A$="DEG.C":B$="DEG.F"
420 IF A=9 THEN A$="CU.M":B$="CU YDS"
430 IF A=10 THEN A$="IN":B$="CM"
440 IF A=11 THEN A$="YDS":B$="M"
450 IF A=12 THEN A$="CU.IN":B$="CC."
460 IF A=13 THEN A$="MILES":B$="KM"
470 IF A=14 THEN A$="GAL":B$="LITRES"
480 IF A=15 THEN A$="OZ":B$="GMS"
490 IF A=16 THEN A$="LBS.":B$="KG"
500 IF A=17 THEN A$="DEG.F":B$="DEG.C"
510 IF A=18 THEN A$="CU.YDS":B$="CU.M"
520 IF A=19 THEN A$="MPG":B$="L/100K"
530 IF A=20 THEN A$="L/100K":B$="MPG"
540 IF A=21 THEN A$="SQ M":B$="SQ YDS"
550 IF A=22 THEN A$="SQ YDS":B$="SQ MTRS"
560 PRINT@492,"HOW MANY ";A$;:INPUT B
570 PRINT@401,STRING$(38,"-");PRINT@441,"▮";PRINT@478,"▮"
580 PRINT@481,"▮";PRINT@518,"▮";PRINT@561,STRING$(38,"-")
590 PRINT@521,"▮";PRINT@558,"▮"
600 IF A=1 THEN C=B*.3937
610 IF A=2 THEN C=B*1.0936
620 IF A=3 THEN C=B*.061025
630 IF A=4 THEN C=B*.621377
640 IF A=5 THEN C=B*.219969
650 IF A=6 THEN C=B*.03527
660 IF A=7 THEN C=B*2.20437
670 IF A=8 THEN C=B*(9/5)+32
680 IF A=9 THEN C=B*1.3079
690 IF A=10 THEN C=B*2.54
700 IF A=11 THEN C=B*.91441
710 IF A=12 THEN C=B*16.386
720 IF A=13 THEN C=B*1.6093
730 IF A=14 THEN C=B*4.54609
740 IF A=15 THEN C=B*28.3527
750 IF A=16 THEN C=B*.4536
760 IF A=17 THEN C=(B-32)*(5/9)
770 IF A=18 THEN C=B*.763553
780 IF A=19 THEN C=100/1.6093*4.54609/B
790 IF A=20 THEN C=62.1388/(B*.219969)
800 IF A=21 THEN C=B*1.196
810 IF A=22 THEN C=B*.836
820 PRINT:PRINT
830 PRINT@483,B;" ";A$;"=";C;" ";B$
840 PRINT@800,"TYPE 1 TO CONTINUE OR 2 TO QUIT"
850 Q$=INKEY$:IF Q$="" THEN 850ELSE Q=VAL(Q$):ONQGOTO 70,860
860 PRINT"GLAD TO BE OF SERVICE":FOR P=1 TO 1000:NEXT:CLS:END
870 INPUT"L PER 100K";L
880 MPG=(100/1.6093)*(4.54609/L)
890 PRINTL;" LITRES PER 100K= ";MPG;" MPG"
900 END
910 INPUT "MPG";M
920 LPK=454.609/(M*1.6093)
930 PRINTM;"MPG= ";LPK;"LP100K#"
940 END
950 REM:FROM '55 ADVANCED COMPUTER PROGRAMS IN BASIC' (WATSON,TAB BOOKS)
960 REM:ARRANGED FOR CG BY AKM
```

mod/sel
SHIFT W

```
10 CLS:GOSUB 720
20 CHAR4
30 CLEAR 500:RANDOM:Q=0:Q$=""
40 LC=.5:RC=1-LC
50 LS$=CHR$(171)+CHR$(32):RS$=CHR$(32)+CHR$(182)
60 L$=",":R$="."
70 LT$=CHR$(171)+CHR$(209):RT$=CHR$(219)+CHR$(182)
80 B=32:EL=2:ER=36:C1=166:DEFINT V,W
90 GOSUB 570
100 PRINT:T=0:N=0
110 INPUT"ROAD WIDTH (4-15)";W
120 IF W<4 OR W>15 THEN 100
130 PRINT:PRINT"VISIBILITY CONDITIONS"
140 PRINT"1 - TERRIBLE"
150 PRINT"2 - BAD"
160 PRINT"3 - FAIR"
170 PRINT"4 - GOOD":PRINT
180 INPUT"VISIBILITY (1-4)";V
190 IF V<1 OR V>4 THEN 180
200 N=N+1:L=18:R=L+W+2:Z=18408-80*V
210 C=INT((L+R)/2):H=0
220 FOR J=1 TO 16:GOSUB 420:NEXT J
230 GOSUB 480
240 H=H+1:Q=RND(0):IF Q>RC AND R<ER THEN GOSUB 460:GOTO 270
250 IF Q<LC AND  L>EL THEN GOSUB440:GOTO 270
260 GOSUB 420
270 ZC=Z+C:ZP=ZC+1
280 Q$=INKEY$:IF Q$=L$ THEN C=C-1 ELSE IF Q$=R$ THEN C=C+1
290 IF PEEK(ZC)=B OR PEEK(ZP)=B THEN POKE ZC,C1:GOTO 240
300 FOR J=1 TO 8:Q$=INKEY$:POKE ZC,B:POKE ZP,B:FOR K=1 TO 50:NEXT
310 POKE ZC,C1:FOR K=1 TO 50:NEXT:NEXT
320 M=H*5:T=T+M:PRINT:PRINT"YOU WENT";M;"MILES FOR A"
330 PRINT"TOTAL OF";T;"MILES IN";N;"DAY(S)":PRINT
340 PRINT"HIT 'C'  - CONTINUE RACE"
350 PRINT"    'R'  - RESTART RACE"
360 PRINT"    'Q'  - QUIT"
370 Q$=INKEY$:IF Q$="C" THEN 200
380 IF Q$<>"R" AND Q$<>"Q" THEN 370
390 PRINT:PRINT"AVERAGE MILES PER DAY=";T/N
400 IF Q$="R" THEN 100
410 END
420 PRINTTAB(L);RS$;TAB(R);LS$
430 RETURN
440 PRINTTAB(L);LT$;TAB(R-1);LT$
450 L=L-1:R=R-1:RETURN
460 PRINTTAB(L+1);RT$;TAB(R);RT$
470 L=L+1:R=R+1:RETURN
480 P=Z+C:GOSUB 710:P=Z+C-17408-13
490 Q1$=CHR$(142)+CHR$(B)+"O"+CHR$(B)+CHR$(142)
500 P=P-200:PRINT@P,STRING$(5,152);
510 FOR J=1 TO 5:P=P+40:PRINT@P,Q1$;:NEXT
520 PRINT@P+40,STRING$(5,186);
530 FOR J=1 TO 600:NEXTJ
540 FOR J=4 TO 0 STEP -1:FOR K=1 TO 300:NEXT
550 PRINT@P+2-40*J,CHR$(143);:NEXT:PRINT@ 560,CHR$(B)
560 RETURN
570 DIM D(9):L=11:R=18:CLS
580 FOR J=1 TO 9:READ D(J):NEXT
590 DATA 82,79,65,68,82,65,67,69,32
600 GOSUB 420
610 GOSUB 460
620 FOR J=1 TO 2:GOSUB 440:NEXT
630 FOR J=1 TO 10:GOSUB 460:NEXT
640 P=17423:POKE P,C1
650 FOR J=1 TO 500:NEXT
660 P=P+41:GOSUB 710

670 FOR J=1 TO 2:P=P+39:GOSUB 710:NEXT
680 P=P+41:GOSUB 710
690 FOR J=1 TO 9:P=P+41:GOSUB 710
700 POKE P,D(J):POKE P+1,B:NEXT
710 POKE P,C1:FOR K=1 TO 50:NEXT:RETURN
720 PRINT@50,"* INSTRUCTIONS *"
730 PRINT@90,"$$$$$$$$$$$$$$$$"        CHR$(191)
740 PRINT@160,"  Use the '<' AND '>' keys to steer"
750 PRINT@240,"  Set the width and visibility to suit  your ability. The lower the
number the harder the course."
760 PRINT@414,"  Good luck !"
770 FOR P=1 TO 2000:NEXT
780 RETURN
```


Translated from TRS80 to CG by Keith McGill.

< ——— BIRD WATCHER'S CHART

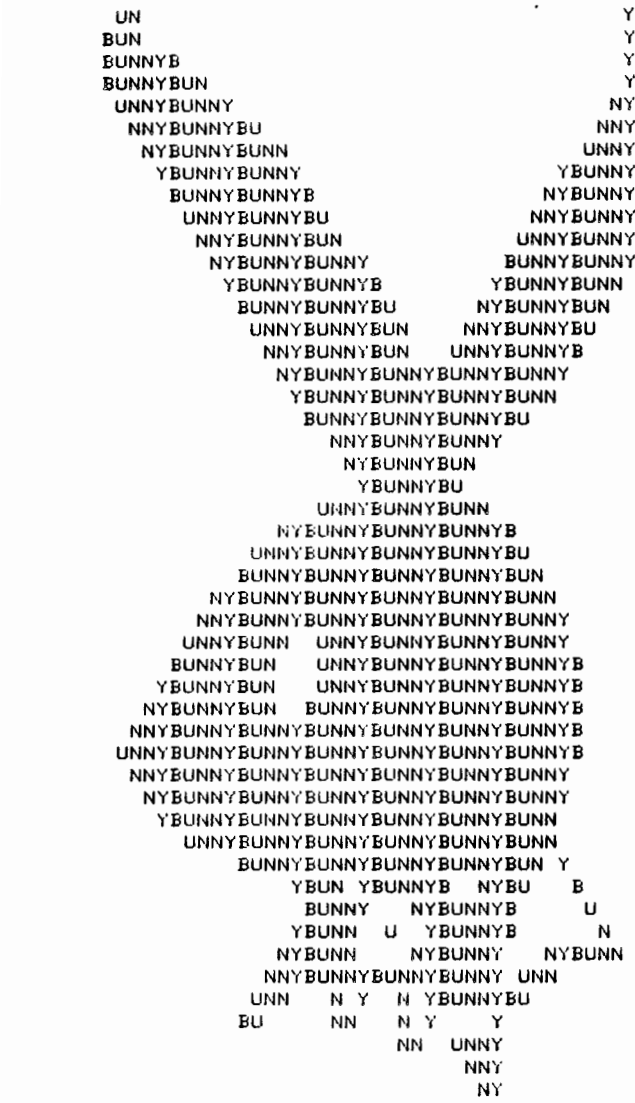
B	PLACE	WHEN	WHERE	SZ	COL	BEAK	M.F.
1	swamp	p.m.	low	sm	yel	sht	m
2	water	p.m.	high	sm	yel	sht	f
3	dsrt	p.m.	low	sm	yel	long	m
4	frst	p.m.	high	sm	yel	long	f
5	sw+wr	a.m.	low	sm	blu	sht	m
6	sw+dt	a.m.	high	sm	blu	sht	f
7	sw+ft	a.m.	low	sm	blu	long	m
8	wr+dt	a.m.	high	sm	blu	long	f
9	wr+dt	am/pm	hi/lo	?	yel	sht	m
10	dt+ft	am/pm	hi/lo	bg	yel	sht	f
11	wrdtft	am/pm	hi/lo	bg	yel	long	m
12	swdtft	am/pm	hi/lo	bg	yel	long	f
13	swwrft	a.m.	hi/lo	bg	blu	sht	m
14	swwrdt	a.m.	hi/lo	bg	blu	sht	f
15	s.w.d.f	a.m	hi/lo	bg	blu	long	m
16	s.w.d.f	a.m.	hi/lo	bg	blu	long	f

LEGEND:
```
s.or sw =swamp
w.or wr =water
d.or dt =desert
f.or ft =forest
     am =morning
     pm =evening
     sz =size
    col =colour
    m/f =male/female
      B =bird
```

———

```
2 ' This is >> BIRDWATCH << from simulated stimulations...or stimulating
 variations....or varigated permutations....(ATARI) by C.W.Engels...adap
ted for GENIE by Ron Hart june 83.
5 REM SET DATA
10 H=0:DIMB(16,14):DIMI(16):DIMN$(8):DIMP(16)
20 PRINT:PRINT"PLEASE WAIT!":FORI=1TO16
30 B(I,14)=0
40 P(I)=1/(17-I)
50 READN
60 FORJ=12TO1STEP-1
70 Q=INT(N/2)
80 B(I,J)=2*(N/2-Q)
90 N=Q
100 NEXTJ
110 NEXTI
```

```
120 DATA2128,1121,594,355,3220
130 DATA2725,2454,1703,1528,1017
140 DATA2042,3067,3516,3773,4030,4031
150 FORI=1TO8
160 READN$(I):NEXTI
170 DATABIG,SMALL,BLUE,YELLOW
180 DATALONG-BEAKED,SHORT-BEAKED,FEMALE,MALE
195 REMINPUT PLACE
200 FORI=1TO16:I(I)=0:NEXT
210 INPUT"PLACE-SWAMP-WATER,DESERT-FOREST..S/W/D/F";L$
220 PRINT:INPUT"WHEN SEEN-MORNING/EVENING-M/E";T$
230 PRINT:INPUT"WHERE SEEN-SKY/GROUND-H/L";A$
260 IFL$="S"THENI(1)=1
270 IFL$="W"THENI(2)=1
280 IFL$="D"THENI(3)=1
290 IFL$="F"THENI(4)=1
300 IFT$="M"THENI(5)=1
310 IFT$="E"THENI(6)=1
320 IFA$="H"THENI(7)=1
330 IFA$="L"THENI(8)=1
340 FORI=1TO16:B(I,13)=0:NEXTI
350 FORI=1TO16:FORJ=1TO8
360 IFB(I,J)<>I(J)ANDB(I,J)=0THEN390
370 NEXTJ
380 B(I,13)=1
390 NEXTI
395 REM FIND BIRDS
400 FORI=1TO2STEP.02
410 J=INT(16*RND(0)+1)
420 IFB(J,13)<>1THEN440
430 IFRND(0)<P(J)THEN460
440 NEXTI
450 PRINT:PRINT"NO SIGHTINGS":H=H+I:GOTO200
460 H=H+I
470 K=INT(4*RND(0)+1)
480 N=B(J,K+8)
490 PRINT:PRINT"THE BIRD IS ";N$(2*K-N):PRINT:PRINT"TIME LAPSE:  ";I::PRI
NT:PRINT"TOTAL TIME:  ";H
495 REM INPUT ID
500 PRINT:INPUT"IDENTIFY 1-16";I
510 IFI=JTHEN530
520 PRINT:PRINT"NOT CORRECT IDENTIFICATION":C1=C1+1:GOTO500
530 IFB(J,14)=1THEN PRINT"ALREADY SPOTTED":GOTO550
540 PRINT:PRINT"A NEW ONE!":B(J,14)=1
550 IFH>10THEN570
560 GOTO200
570 PRINT:PRINT"TIME UP"
580 FORI=1TO16
590 IFB(I,14)=1THENPRINT"YOU SAW BIRD# ";I:B1=B1+1
600 NEXTI
610 PRINT:PRINT"YOUR RATING IS ";10*B1-C1;"."
620 PRINT:INPUT"PLAY AGAIN Y/N";Y$
630 IFY$="Y"THENRUN
640 END
1000 ' YOU WILL (WILL) NEED THE CHART !!)
```



```
50 'THIS IS >> bunny << adapted for GENIE by Ron Hart from B.C. GAMES (AHL)
 Nov 85.
120 FORI=0TO4:READB(I):NEXTI
130 GOSUB260
140 L=64
150 :'
160 LPRINT
170 READX:IFX<0THEN160
175 IFX>128THEN240
180 READ Y
190 FORI=XTOY:J=I-5*INT(I/5)
200 LPRINTTAB(X);CHR$(L+B(J));
210 NEXTI
220 GOTO170
230 REM
240 GOSUB260:GOTO450
250 REM
260 FORI=1TO6:LPRINTCHR$(10);:NEXTI
270 RETURN
280 REM
300 DATA2,21,14,14,25
310 DATA1,2,39,41,-1,0,2,39,42,-1,0,5,39,43,-1,0,7,39,43,-1
320 DATA1,9,38,43,-1,2,11,37,43,-1,3,13,36,42,-1,4,14,34,42,-1
330 DATA5,15,33,41,-1,6,16,32,41,-1,7,17,31,40,-1,8,19,30,39,-1
340 DATA9,20,29,38,-1,10,21,28,37,-1,11,22,27,36,-1,12,22,26,35,-1
350 DATA13,34,-1,14,33,-1,15,31,-1,17,29,-1,18,27,-1
360 DATA19,26,-1,16,28,-1,13,30,-1,11,31,-1,10,32,-1
365 DATA8,33,-1,7,34,-1,6,13,16,34,-1,5,12,16,35,-1
370 DATA4,12,16,35,-1,3,12,15,35,-1,2,35,-1,1,35,-1
380 DATA2,34,-1,3,34,-1,4,33,-1,6,33,-1,10,32,34,34,-1
390 DATA14,17,19,25,28,31,35,35,-1,15,19,23,30,36,36,-1
400 DATA14,18,21,21,24,30,37,37,-1,13,18,23,29,33,38,-1
410 DATA12,29,31,33,-1,11,13,17,17,19,19,22,22,24,31,-1
420 DATA10,11,17,18,22,22,24,24,29,29,-1
430 DATA22,23,26,29,-1,27,29,-1,28,29,-1,4096
440 REM
450 END
```

```
10 CLS
15 PRINT:PRINT:PRINT:PRINT:PRINT:PRINT
20 PRINT"DOOMSDAY"
30 PRINT:PRINT:PRINT
40 PRINT" D L DONALDSON"
50 PRINT:PRINT:PRINT
60 INPUT"HIT ANY KEY TO START";N$
70 RANDOM
80 CLS
90 PRINT:PRINT:PRINT
95 R=0
100 PRINT"THE DOOMSDAY BOMB HAS JUST EXPLODED :-  SURFACE RADIATION IS"
110 PRINT"AT LETHAL LEVELS & YOUR ONLY CHANCE OF SURVIVAL IS TO REACH"
120 PRINT"LEVEL 10,DEEP IN THE RADIATION SHELTER.  UNFORTUNATELY THE"
130 PRINT"BOMB BLAST HAS MADE THE ELEVATOR COMPLETELY UNRELIABLE & IT"
140 PRINT"WILL NOT RESPOND CORRECTLY TO THE KEY PRESSED.  RADIATION IS"
150 PRINT"SLOWLY SEEPING DOWN THE SHELTER LEVELS. TO SURVIVE YOU **must**"
160 PRINT"GET TO LEVEL 10 BEFORE YOUR RADIATION EXPOSURE REACHES 30"
170 PRINT"GAMA UNITS"
180 PRINT:PRINT"BEST OF LUCK"
190 PRINT:PRINT"YOU ARE NOW IN THE ELEVATOR,SELECT WHICH LEVEL YOU WOULD LIKE"
191 PRINT"YOU ARE NOW ON THE SURFACE AT LEVEL '0'":GOTO 195
192 PRINT"SELECT THE LEVEL YOU WOULD LIKE'
195 PRINT"YOUR RADIATION EXPOSURE IS PRESENTLY ";R
200 INPUT L$
210 L=INT(10*RND(0))
220 IF L=10 GOTO 500
230 PRINT"THE ELEVATOR WENT TO LEVEL ";L
235 IF L=0 THEN PRINT"ON THE SURFACE, RADIATION LETHAL":GOTO 600
240 R=R+(10-L)
260 IF R<30 GOTO 192
270 IF R>30 THEN PRINT"RADIATION LETHAL FLOWERS WILL BE SENT TO YOUR FUNERAL"
275 GOTO 600
500 PRINT"YOU ARE NOW AT LEVEL 10 AND SAFE FROM DEATH,YOUR RADIATION LEVEL WAS";
505 PRINT:PRINT
510 PRINT"HOWEVER,   IT WILL TAKE 1000 YEARS BEFORE THE EARTH'S SURFACE IS'
520 PRINT"SUITABLE FOR HABITATION BY HUMANS AGAIN   ENJOY YOUR HOLIDAY."
540 GOTO 800
600 FOR K=1 TO 1300:NEXT K
610  CLS
620 PRINT:PRINT:PRINT:PRINT:PRINT
630 PRINT"                              ___"
640 PRINT"                             |   |"
660 PRINT"                             |   |"
670 PRINT"                          ___|   |___"
690 PRINT"                         |           |"
700 PRINT"                         |___     ___|"
710 PRINT"                             |   |"
720 PRINT"                             |   |"
730 PRINT"                             |   |"
740 PRINT"                             |   |"
750 PRINT"                             |   |"
760 PRINT"                             |___|"
765 PRINT
770 PRINT"                           R.I.P."
800 FOR A=1 TO 4000:NEXT A
810 GOTO 50
```

```
10 REM:GOLF
20 REM:FROM THE RAINBOW BOOK OF BASIC PROGRAMMES
30 REM:ADAPTED BY AKM
40 GOSUB 280
50 PRINT"   ZIGZAG GOLF"
60 H=1:S=0
70 N=10:GOSUB 300:A=R-1:GOSUB 300:B=R-1:IF ABS(B-A)>5 OR A+B=0 THEN 70
80 T=2:GOSUB 310:GOSUB 450:X=7:Y=1:GOSUB 350:PRINT"HOLE ";H:X=1:Y=8:GOSUB 350:PRINT"*"
90 FOR X=20 TO 800 STEP 40:PRINT@X,"a":NEXT
100 PRINT@62,"STROKES:";S
110 PRINT@102,"HOLES :";H-1
120 X=1+A+B:Y=9-A+B:GOSUB 350:PRINT"O":S=S+1:
130 X=1:Y=21:GOSUB 350:PRINT"ZIG ";:INPUT C:IF C>9 THEN 130
140 X=11:Y=21:GOSUB 350:PRINT"ZAG ";:INPUT D:IF D>9 THEN 140
150 X=1:Y=9:T=.2:IF C=0 THEN 170
160 FOR N=1 TO C:GOSUB 350:PRINT" ":X=X+1:Y=Y-1:GOSUB 350:PRINT"f";:GOSUB 310:NEXT N
165 REM:THE GRAPHICS CHARACTER IS SHIFT A
170 IF D=0 THEN 190
180 FOR N=1 TO D:GOSUB 350:PRINT" ":X=X+1:Y=Y+1:GOSUB 350:PRINT"f";:GOSUB 310:NEXT N
190 X=3:Y=14:GOSUB 350:IF A<>C OR B<>D THEN PRINT"MISSED!";:GOTO 60
200 PRINT"SUNK IT!"
210 T=2:GOSUB 310
220 H=H+1:IF H<10 THEN 70
230 GOSUB 450:PRINT:PRINT:PRINT"YOU TOOK ";S;" STROKES"
240 PRINT:PRINT:IF S<18 THEN PRINT"A REAL PRO!":GOTO 270
250 IF S<27 THEN PRINT"SHOWS PROMISE!":GOTO 270
260 PRINT"KEEP PRACTISING!"
270 PRINT:PRINT:PRINT"END":END


280 W=39:D=24:F=8:GOSUB 290:RETURN
290 CLS:PRINT@320,"";:RETURN
300 R=RND(N):RETURN
310 FOR Z=1 TO 150*T:NEXT Z:RETURN
320 G$=INKEY$:IF G$="" THEN 320
330 RETURN
340 K$=INKEY$:RETURN
350 PRINT@40*Y+X,"";:RETURN
360 PRINTTAB(X);:RETURN
370 PRINTCHR$(27);:RETURN
380 PRINTCHR$(25);:RETURN
390 INPUT K$:RETURN
400 CLS:RETURN
410 CALL 357C:RETURN
420 R$=CHR$(R+64):RETURN
430 P$=MID$(K$,P,1):RETURN
440 GOSUB 430:A=ASC(P$):RETURN
450 CLS:RETURN
460 DIM V$(26):RETURN
470 DIM W$(60):RETURN
480 GG=ASC(G$):RETURN
```

```
20 'this is > WORDSQUARE < adapted from 'rainbow book of programmes
25 'by Ron Hart august 85.
30 'SCORE as follows: 1 (ONE) point for each letter of a complete 2,3,4,or
 5 letter word.....computer will ask for scores by line and column
50 CLS:CLEAR1000
100 REMLETTERS
110 GOSUB1100
120 LETX=0:LETY=1
130 GOSUB1700
140 COLOUR8:PRINT"   1. 2. 3. 4. 5.
150 FORN=1TO5
155 PRINT
160 PRINT
170 PRINT;STR$(N)
180 NEXT
185 COLOUR2
190 LETN=26
200 FORT=13TO1STEP-1
210 GOSUB1300
220 GOSUB2500:LETK$=R$
230 LETX=0:LETY=18:GOSUB1700
240 COLOUR5:PRINT"MY CHOICE IS ";K$;"       "
250 GOSUB410
260 LETX=0:LETY=18:GOSUB1700
270 COLOUR7:PRINT"YOUR CHOICE IS ";
280 GOSUB2200
290 GOSUB410
300 NEXTT
310 FORC=1TO5
320 GOSUB480
325 PRINT@100,"                    "
330 PRINT@100,"LINE";C;" SCORE";
340 GOSUB2100
345 PRINT@180,"                     "
350 PRINT@180,"COLUMN";C;"SCORE";
360 GOSUB2200
370 T=T+K+VAL(K$)
380 NEXTC
390 COLOUR4:PRINT@260,"YOUR SCORE IS ";T:COLOUR2:FORX=1TO2000:NEXT
400 CLS:END
410 COLOUR8:LETL$=K$:PRINT:PRINT" LINE  ";
420 GOSUB2100
430 LETY=1+K*3
440 COLOUR7:PRINT:PRINT" COLUMN ";:GOSUB2100
450 LETX=K*3
460 GOSUB1700
470 PRINTL$
480 LETX=0:LETY=18:GOSUB1700
490 FORN=1TO5
500 PRINT"                         "
510 NEXTN
520 RETURN
1000 REM DRAGON SUBROUTINES
1100 W=40:D=24:F=4:GOSUB1200:RETURN
1200 CLS:PRINT@256,"";:RETURN
1300 R=RND(N):RETURN
1500 G$=INKEY$:IFG$=""THENGOTO1500
1510 RETURN
1700 PRINT@40*Y+X," ";:RETURN
2100 INPUTK:RETURN
2200 INPUTK$:RETURN
2500 R$=CHR$(R+64):RETURN
```

```
5 DIMA$(200)
10 CLS
50 'This is a TEXT ANALYSIS programme.
60 'an exercise in data dealings by Ron Hart November 85
90 N=54:'number of words in text (YOUR CHOICE)....change line 5 and line 90
 to suit
130 COLOUR2:PRINT"THE COMPUTER CONTAINS AN EXTRACT FROM A MAGAZINE.IT WILL
ANALYSE THE SCRIPT BY  WORD LENGTH OR SPECIFIC WORD OCCURANCE...OR WORD INI
TIAL LETTER"
135 LETK=0:LETJ=0:LETC=0
140 PRINT:PRINT"THE FULL TEXT FOLLOWS"
150 COLOUR1:PRINT:PRINT">>>>I HAVE ASSUMED THAT YOU HAVE NO     EXPERIENCE
OF COMPUTERS OR ELECTRONICS.I HAVE NOT EVEN ASSUMED THAT YOU HAVE    ELECTR
ICAL KNOWLEDGE.A BOOK SUCH AS THIS DOES NOT APPEAR WITHOUT A CONSIDERABLE A
MOUNT OF HELP   FROM OTHE
155 PRINT"FINALLY,THE LISTINGS IN THIS BOOK HAVE  BEEN SET DIRECTLY FROM A
PRINTOUT<<<":COLOUR2
170 PRINT:PRINT"WORD/S OF GIVEN LENGTH-WHAT LENGTH";:INPUTL
210 PRINT:PRINT"WORD  REQUENCY-WHICH WORD";:INPUTB$
215 PRINT:INPUT"INITIAL LETTER FREQUENCY-LETTER";C$
245 FORT=1TO200:NEXT:CLS
250 FORX=1TON
290 READA$(X)
330 IFA$(X)=B$THENK=K+1:PRINT
370 REMCHECK WORD LENGTHS
410 I=LEN(A$(X))
450 IFI=LTHENJ=J+1:COLOUR8:PRINT:PRINTL;"LETTER WORD ";A$(X):COLOUR2
455 IFLEFT$(A$(X),1)=C$THENC=C+1:COLOUR7:PRINT:PRINT"INITIAL ";C$;" WORD ";
C;"--";A$(X)
490 NEXTX
500 COLOUR7:IFK=0THENPRINT:PRINT"WORD * ";:COLOUR5:PRINTB$;:COLOUR7:PRINT"
* NOT FOUND":COLOUR2:GOTO570
530 PRINT:PRINT"THE WORD ";:COLOUR5:PRINTB$;:COLOUR2:PRINT" OCCURS ";K;" TI
MES"
570 PRINT:COLOUR6:PRINT"CONFIRM  ";L;" LETTER WORDS= ";J:COLOUR2
580 COLOUR7:PRINT:PRINT"CONFIRM INITIAL ";C$;" WORDS NUMBER ";C:COLOUR2
591 PRINT
650 COLOUR15:PRINT"DO YOU WISH TO CONTINUE-Y/N";:INPUTR$
655 IFR$=""THEN650
656 IFR$="Y"THENRESTORE:CLS:GOTO135
660 CLS:PRINT:PRINT@539,"O.K.THANKS"
670 END
690 DATAI,HAVE,ASSUMED,THAT,YOU,DO,NOT,HAVE,A, LOT,OF, COMPUTING,EXPERIENCE
,.,I,HAVE,NOT,EVEN,ASSUMED,THAT,YOU,HAVE,ANY,ELECTRICAL,KNOWLEDGE
700 DATAA,BOOK,SUCH,AS,THIS,DOES,NOT,APPEAR,WITHOUT,A,CONSIDERABLE,AMOUNT,O
F,HELP,FROM,OTHER,PEOPLE
710 DATAFINALLY,THE,LISTINGS,IN,THIS,BOOK,HAVE,BEEN,SET,FROM,A,PRINTOUT
```

```
INITIAL E WORD  1 --EXPERIENCE

INITIAL E WORD  2 --EVEN


INITIAL E WORD  3 --ELECTRICAL

 8 LETTER WORD  1 LISTINGS

 8 LETTER WORD  2 PRINTOUT

THE WORD ELECTRICAL OCCURS  1  TIMES

CONFIRM   8  LETTER WORDS=  2

CONFIRM INITIAL E WORDS NUMBER  3

DO YOU WISH TO CONTINUE-Y/N?
Break in 650
READY
>LPRINTUSR(7)
```

Planet Search (P)

This will initiate a sensor search for any planet within teleport range. A report will give details of the planet, atmosphere, surface temperature, pressure, gravity and population, if any, if the search is successful.

Beam (B)

This control will teleport you down to the surface of the planet where you may, or may not, meet a helpful or otherwise alien. In the interests of personnel retrieval return to the Enterprise is automatic.

STARBASES

There are a limited number of starbases in the galaxy, their position is shown by a green square on the galaxy map and a green symbol on the quadrant display. Docking under impulse drive with a starbase will replenish your energy and torpedo levels and repair any damage. To dock with the starbase try and move your ship over the base using the four arrow keys.

SUMMARY

Arrow keys	- Impulse Drive
W	- Warp Drive
S	- Shield Control
D	- Damage Reports
T	- Torpedo Fire
1,2,3	- Phasor Fire
L	- Long Range Scan
P	- Planet Search
B	- Beam
Space-bar	- Quadrant Display/Instrument Screen switch