## APPLICATION NOTE NO. 24.

## THE USE OF MULTIPLE PROGRAMS

The Enterprise computers allow more than one independent BASIC program to reside in memory at any one time.  Switching between program areas in immediate mode is achieved by the EDIT command. Typing EDIT followed by a number between 0 and 255 will allow you to enter that program area.  You can see which area you are in by looking at the status line.

Programs in area 0 can contain up to 48K of code.  Programs in other areas can use up to 32K.  A BASIC program cannot share a segment with another BASIC program.  Therefore a maximum of eight BASIC programs can fit into a 128K machine regardless of whether they are 1K or 16K long.  Programs can 'CHAIN' each other and pass variables.  The two programs that follow are examples of this. These should be typed in exactly as shown and can be saved to cassette in the normal way so long as the correct program area has been selected.

i)  Reset computer.
ii) Type in this program.

```
100   PROGRAM "MAIN PROGRAM"
110   ! WRITTEN BY GERALD MORGAN.
120   TEXT
130   RANDOMIZE
140   PRINT:PRINT"IF YOU LOOK AT THE 'STATUS LINE' YOU
      WILL SEE THAT THIS IS PROGRAM AREA 0.  THIS IS
      THE PROGRAM AREA THAT IS USED WHEN THE MACHINE IS
      FIRST SWITCHED ON"
150   PRINT AT 12,4:"PRESS THE SPACE BAR TO START..."
160   IF JOY(0)=0 THEN 160
170   TEXT
180   FOR X=1 TO 50
190   SCORE=RND(32767)
200   PRINT AT 10,13:SCORE;"     "
210   NEXT X
220   PRINT AT 10,7:"SCORE="
230   PRINT:PRINT:PRINT:"ENTER YOUR NAME (UP TO 10
      LETTERS):":PRINT
240   INPUT NAME$
250   IF LEN(NAME$)>10 THEN 240
260   PRINT
270   PRINT"PRESS SPACE BAR FOR OTHER PROGRAM."
280   IF JOY(0)=0 THEN 280
290   CHAIN"HI_SCORE"(NAME$,SCORE)
300   END
```

iii) TYPE:EDIT 1 <RETURN>
iv) TYPE THIS PROGRAM IN:

```
100   PROGRAM"HI_SCORE"(NAME$,SCORE)
110   ! WRITTEN BY GERALD MORGAN.
120   TEXT
130   PRINT:PRINT"IF YOU LOOK AT THE 'STATUS LINE' NOW
      YOU WILL FIND THAT THIS IS PROGRAM AREA 1.  THIS
      AREA WAS ENTERED BY THE CHAIN command.  YOUR NAME
      AND SCORE WERE PASSED TO THIS COMPLETELY
      INDEPENDENT PROGRAM";
140   PRINT"IN THE TWO VARIABLES NAME$ AND SCORE."&CHR$(248)
150   PRINT:PRINT:PRINT"YOUR NAME IS";NAME$;"."
160   PRINT:PRINT"YOUR SCORE WAS";SCORE;"."
170   PRINT:PRINT"TO RUN PROGRAM AGAIN TYPE:":PRINT:PRINT"
      EDIT 0 <RETURN> RUN <RETURN>.":PRINT
180   END
```