

ELLIOTT 900 SERIES SIMULATOR

TJF BASIC

TJF BASIC is an implementation of the BASIC programming language for the Elliott 903. It was written by Terry Froggatt to meet the needs of a number of schools who were using Elliott 903 computers in the 1980s to teach programming at the time when the first generations of home computers such as the BBC Micro had made BASIC popular.

TJF BASIC is available in two configurations, 8K and 16K. It is still supported by Terry Froggatt on a commercial basis and he provides unique tapes for each installation. For this reason no binary BASIC system tapes are available in the archive, these must be obtained from Terry directly.

TJF BASIC is not particularly fast - all data are held as real numbers and arithmetic uses the QF interpretive floating-point library, BASIC programs are held as text and each line of a program has to be parsed each time it is executed. It is perfectly suitable for small student programs and much easier to use for simple calculations than, for example, the WORKSHOP calculator program elsewhere in this archive.

The BASIC system tape is loaded under initial instructions, announces itself and then prompts for user input on the teleprinter. At this point the user can enter BASIC commands.

Input text can be terminated by RETURN or LINEFEED, the program automatically responds with a RETURN LINEFEED sequence to ensure correct layout.

Previously prepared programs can be input from paper tape using the OLD command and edited programs output to paper tape using the SAVE command.

The BASIC system can be restarted by entry at 8, however any program in store from a previous session will be lost.

An executing program can be halted using a manual level 3 interrupt which returns to the main loop and prompts for further commands, preserving the current program in store.

ELLIOTT 900 SERIES SIMULATOR

SYSTEM FILES

8K and 16K BASIC system tapes are available by application to Terry Froggatt.

DEMONSTRATIONS

DEMO1.900: Shows how to read in BASIC programs from paper tape and run them. Two sample programs are shown, one to calculate the date of Easter for a given year, the other to compute a table of great circle distances between a series of international destinations (tracing a trip made by Terry Froggatt to New Zealand). The date of Easter program is in the file EASTERD.900, the great circle program is in the file GCDLOOP.900.

DEMO2.900: Shows a pseudo interactive run of the classic BASIC TICTACTOE (noughts and crosses) game, transcribed for TJF BASIC by Erik Baiger. The program is in the file 920-TIC-BAS.900.