Version 2, October 2011. **CCS-F6X4**

Software for the Ferranti Poseidon, Hermes, Apollo and Argus computers.

Ferranti Poseidon

A set of *Initial Orders* were available for Poseidon, the purpose of which was to input instructions written in either directly in an octal version of the instructions, expressed as "UVW A B C" or in a format known as "FF M Address". Programs were loaded starting from the requested locations in store. Various other facilities were provided to aid program development and documentation at the machine code level.

Various standard mathematical sub-routines were produced, together with programs to control inter-computer transfers, since one of the major naval systems using Poseidons required three machines.

Ferranti Hermes

The main software used for program development was an autocode system known as *FIXPAC* (Fixed Point AutoCode, so-named to distinguish it from *FLOPAC*, Floating Point AutoCode. This was similar to erranti Pegasus autocode and used the same teleprinter code and symbols. 'Assembly' allowed the linking of selected sub-routines from the Standard Library to a master FIXPAC program. Every standard Hermes Autocode instruction was translated into a single Hermes basic instruction which is executed at full speed.

As an example of Hermes Autocode, the instruction:

*v*A = *v*B + *v*C

adds the contents of working register B to the contents of working register C, leaving the result in working register A.

Similarly, the Autocode instruction:

vn1 = vn2 + vn3

refers to the addition of two main store addresses whose addresses are contained in index registers N1 and N2, leaving the result in the location whose address is given in N3.

A compiler for the language CORAL was provided in 1964. CORAL was originally defined at RSRE, Malvern for use on a particular defence project (not using Hermes computers). CORAL was an acronym from Computer Oriented Real-time Applications Language. Its definition was superseded in 1966 by another version, styled CORAL 66 (which lead to the earlier version being called CORAL 64). A compiler for CORAL 66 was provided for Hermes computers.

Software to handle magnetic tape was provided to aid software development, though few Hermes applications systems required the use of magnetic tape.

Supervisors (ie Operating Systems) were developed to form the basis for management of the running of operational systems, providing real-time task handling and scheduling.

Ferranti Apollo
Software facilities were minimal - just enough to load and test machine code programs written by Ferranti staff to implement the application programs required for air traffic control.

Ferranti Argus Series
No data has currently come to hand.