

X5. List of references. List all the manuals, pamphlets, journal papers, books, etc. that have been used during the Pilot Study to compile the above information. Where possible, give full details such as author, originating organisation, date and place of publication, etc. The purpose is to allow subsequent researchers to check the facts in the Pilot Study. (Contributes to database blocks C1, D3).



E5X5. Elliott 900 Series: List of References.

I worked for “Elliotts” from September 1966 until December 1976, apart from a gap for around a year in New Zealand. I started with Airborne Computing Division in Borehamwood, and finished with Maritime Aircraft Systems Division in Rochester. During the whole of this time at Elliotts, I was involved with the 900 Series.

I left Elliotts around the time that many research organisations were giving their 903 machines second-hand to local schools, and, in response to requests from these schools, I wrote a compact interactive BASIC interpreter. To support this development, I borrowed a machine from one of the maintenance organisations.

I eventually bought this machine, and I still have it, complete with software and manuals. So far as I can tell, it is officially an ARCH 9000, the industrial version of a 920B or 903. Much of the information that I’ve posted to the Heritage study comes first-hand from my own knowledge and documents that I own.

The following referenced documents appear below in a logical order, but they have been numbered in the order that I first used them in this study. This numbering should be tidied up some day, consistently across all five files.

If you are reading a PDF version of this file with Acrobat Reader, then it is quite likely that you will not be able to follow the Internet URL links given below, just by clicking on them. But if you invoke the Text Select Tool “T” on the Acrobat toolbar, you should be able to cut-&-paste any of the links into your Internet browser’s address bar.

Series Overview.

[1]: “Elliott-Automation 900 Series Small Low-cost Computers”, a yellow-covered 8½x11 brochure. Published by Mobile Computing Division of Elliott-Automation Limited, an English Electric Company. No reference number. Undated. Copyright not stated.

[28]: “Elliott-Automation: Computer Orders and Deliveries, 1947 to 1966”. Published by the Directorate of Information Services, Elliott-Automation Ltd., 21 Portland Place, London W1. Undated, *but deduced as being early in 1967.*

18-bit machines.

[2]: “Programming Compatibility of 920 Series Computers”, a photocopy of an 8-page typed note by *CCS member* P.J. Lawrence of Mobile Computing Division. Reference 322/PJL/JGG. Dated 12th November 1965. Copyright not stated.

[3]: *“920A Instruction Times”, a single sheet of foolscap paper, written in pencil by myself at some point in my Elliott career. It finishes with the line “From 920A facts card, for 8192 word store”, which confirms that 920A facts cards did exist, even though I don’t have one. Also note the implication that other store sizes existed.*

[4]: “Elliott MCS 920 B Computer Programming”, a blue-covered 8½x11 brochure. Published by Elliott Bros. (London) Ltd.. Reference MCD/268/B/2/65, *implying by Mobile Computing Division in 1965.* Copyright not stated. *In one place my copy has SIR misspelt ISR: in some copies this is correct.*

[5]: “Elliott MCS 920B Facts”, a blue-covered 4x6 facts card. Published by Mobile Computing Division of Elliott Bros. (London) Ltd.. Reference MCD/B/5/68. Dated May 1968. Copyright not stated.

[6]: “Elliott 903 Computer Facts”, a yellow-covered 4x6 facts card. Published by Elliott-Automation Computers Limited. Catalogue No. 903. Issue 4, dated September 1967. Copyright not stated.

[7]: “Elliott 903 Computer Facts”, a yellow-covered 4x6 facts card. Published by Mobile Computing Division of Elliott Bros. (London) Ltd.. Reference HOWARD/903/69/6, *implying 1969, issue ≥5.* Copyright not stated.

[8]: “Elliott MCS 920M Facts”, an orange-covered 4x6 facts card. Published by Mobile Computing Division of Elliott Bros. (London) Ltd.. Reference MCD/M/68/2. Issue 2, dated October 1968. Copyright not stated.

[9]: “Elliott MCS920M Microminiature High-speed Computer MCM 2”, a golden-covered 8½x11 brochure. Published by Mobile Computing Division

of Elliott Bros. (London) Ltd., an English Electric Company.
No reference number. Undated. Copyright not stated.

[10]: “Elliott MCS920M Microminiature High-speed Computer MCM 5”, a yellow-covered 8½x11 brochure. Published by Mobile Computing Division of Elliott Bros. (London) Ltd., an English Electric Company.
No reference number. Undated. Copyright not stated.

[11]: “Elliott MCS920C Microminiature High-speed Computer”, a red-covered 8½x11 brochure. Published by Mobile Computing Division of Elliott Bros. (London) Ltd., an English Electric Company.
No reference number. Undated. Copyright not stated.

[12]: “Elliott MCS 920C Facts”, a maroon-covered 4x6 facts card, with a glued-in extra page quoting slower instruction times. Published by Mobile Computing Division of Elliott Bros. (London) Ltd.. Reference MCD 1/69/2. Issue 2, dated January 1969. Copyright not stated.

[13]: “Elliott 905 Computer Facts”, a biscuit-covered 4x6 facts card. Published by Marconi-Elliott Computer Systems Limited.
No reference number. Issue 2, dated November 1969.
Copyright “Marconi Elliott Computer (*sic*) Systems Ltd. 1969”.

[14]: “Elliott 900 Technical Manual, Volume 2A, Programming Information”, a grey 3-ring binder. Some updated pages are Copyright English Electric Computers Limited, May or July 1968, other updated pages are Copyright Marconi-Elliott Computer Systems Ltd., June 1969. Most pages are undated, *implying earlier than May 1968*.

[15]: “Elliott 900 Technical Manual, Volume 2C, Programming Information”, a grey 3-ring binder. Some updated pages are Copyright Elliott-Automation Limited, October or December 1967, other updated pages are Copyright English Electric Computers Limited, June or July 1968. Most pages are undated, *implying earlier than October 1967*.

[29]: “Elliott 900 Technical Manual, Volume 4, Engineering Maintenance, Part 6, Logic Elements”, a grey 3-ring binder. Copyright English Electric Computers Limited, July 1968.

[30]: “The MC 1800 Miniature Processor”, a mauve A3-folded-to-A4 leaflet. Published by Marconi Space and Defence Systems Limited, Stanmore. Dated 1977, reference LIT2-3SI-1-1, copyrighted. Updated 1979, reference LIT2-3SI-2-1, offering a larger core store in the same case.

[16]: “905 FORTRAN”. Published by GEC Computers Limited. *I only have a photocopy*. Most pages are SDRN/FORTRAN/2. Undated. Copyright not stated.

[17]: *I have photocopies of two different manuals for 900 CORAL, typed independently but containing much material in common. Neither has a title or a reference number. Neither is dated, although I believe that I received one at a course in Borehamwood in June 1970. Copyrights not stated.*

[18]: “Royal Aircraft Establishment 920C CORAL Compiler Users Manual”.
Published by Computer Analysts & Programmers (Reading) Ltd..
No reference number. Dated March 1974, updated November 1974. Copyright.

[19]: “900 BASIC”.
Published by *CCS member* Terry Froggatt for the Elliott Computer Users Association.
No reference number. Dated October 1978, updated September 1980. Copyright.

[20]: “Recollections of the Early History of the 900 Series” by Richard Kingslake,
published in the Summer 1979 issue of the Elliott Computer Users Association 900
Group Newsletter.

[21]: This simulator was written by *CCS member* Terry Froggatt, and the ALGOL image
was added by *CCS Member* Don Hunter. Both can be downloaded in a single Zip file
from the Internet at http://www.cs.man.ac.uk/CCS/ccs_arc2.htm

[22]: *Waiting for the current URL and for permission to publish it.*

[23]: “Computing” for the week of 19th November 1987, page 136. With photograph.

12/13-bit machines.

[24]: *I wrote a program for a friend in 1971, to convert 8-track FlexoWriter tapes to/from a 5-track tape format used “on the Humber project”, and I have a listing of a sample tape converted by this program, which looks very similar to the 18-bit T2. The Humber project may well have been using an ARCH 102. I’ll ask the friend.*

[25]: “900 Series 18-bit Computer Aids to 12-bit Computer Users”. Published by
Airborne Computing Division of Elliott Flight Automation, Rochester, describing
programs issued in 1968, 1969 & 1970. Copyright.

[26]: “MC2/144 902 Programming Manual”. *I only have a photocopy, which I noted as received from Marconi-Elliott Computer Systems Ltd. Software Division, in or possibly before 1971.* Copyright not stated.

[27]: “Systems Designers Limited CORAL 66 Reference Manual” Issue 1.3/3, May 1976.
Copyright. This is a generic manual for Systems Designers’ Portable CORAL Compiler,
with some appendices specific to the MEA 12/12 implementation.

Terry Froggatt, April 2004.