

Catalogue of documents relevant to the UK's early computing history.

1. Size and scope of the material.

The emphasis of the documents is on British-designed stored-program computers of the period 1948 – 1978. The collection comprises 124 box-files of material and the catalogue runs to about 212 A4 pages

The material is divided for convenience into five main subject-areas, within which there are sub-divisions. The sub-divisions may seem strange: this is because they reflect practical matters such as volume of material, the timing of donations and cataloguing activity. Not all sub-sections are relevant to computers currently featured in the *Our Computer Heritage* site but it is convenient to keep the entire catalogue together on the OCH site for ease of public access. The 124 box-files are stored in different physical archives, so a single web-available catalogue has advantages.

A note on collection history, provenance and the physical location of documents is given in section 3 below.

2. Overview of the collection and link to catalogue pages.

Main area	Sub-area	Approx x dates	Box IDs	Link to catalogue pages
Elliott-Automation; GEC	Computer hardware & software manuals, etc. Nicholas, 400 series, 800 series, 503. Analogue computers.	1951 - 1970	F1 – F9	https://www.ourcomputerheritage.org/Catalogs/CatF.pdf
Elliott-Automation; GEC	Computer hardware & software manuals, etc. 502, 900 series, ARCH, 4100 series; Assemblers, Algol; Minilog; microelectronics.	1960 - 1978	G1 – G8	https://www.ourcomputerheritage.org/Catalogs/CatG.pdf
Elliott-Automation; GEC	Defence projects; Nicholas; 401; nucleonics, automation & process control; GEC Avionics & flight automation	1949 - 2005	V1 – V7	https://www.ourcomputerheritage.org/Catalogs/CatV1.pdf
Elliott-Automation; GEC	Company financial reports, business history, factory sites, etc. Computer orders & deliveries. Related companies: NCR, Vaughan Programming Services	1804 - 1992	H1 – H9	https://www.ourcomputerheritage.org/Catalogs/CatH.pdf
Elliott-Automation; GEC	The MRS5, the 151 computer and other defence projects; formerly-classified internal reports.	1945 - 1966	J1 – J4	https://www.ourcomputerheritage.org/Catalogs/CatJ.pdf
Elliott-Automation; GEC	The CDS project: formerly-classified reports and photos.	1945 - 1953	V0	https://www.ourcomputerheritage.org/Catalogs/CatV0.pdf
Elliott-Automation; GEC	153 (DF) and 311 (Oedipus); correspondence with GCHQ, MOD, etc.; Borehamwood Visitors' Books	1946 - 2005	K1 – K10	https://www.ourcomputerheritage.org/Catalogs/CatK.pdf
Elliott-Automation; GEC	Mechanical & electronic naval gunnery fire-control & related radar	1920 - 1955	L1 – L4	https://www.ourcomputerheritage.org/Catalogs/CatL.pdf
Elliott-Automation;	Letters, e-mails & notes received from ex-Elliott staff	1994 - 2009	M1 – M6	https://www.ourcomputerheritage.org/Catalogs/CatM.pdf

GEC				
Elliott-Automation; GEC	Personal & biographical details of former Elliott staff.	1923 - 2007	N1 – N6	https://www.ourcomputerheritage.org/Catalogs/CatN.pdf
Elliott-Automation; GEC	Patent applications and NRDC contracts and negotiations	1936 - 1968	P1 – P2	https://www.ourcomputerheritage.org/Catalogs/CatP.pdf
Elliott-Automation; GEC	Loose photographs of equipment & people, technical diagrams, photo albums and CDs	1930 - 1985	R1 – R4	https://www.ourcomputerheritage.org/Catalogs/CatR.pdf
Manchester computing	Professor D B G Edwards' documents, incl. Differential Analyser; SSEM (Baby); Turing; Ferranti Mark I; MUSE; Ferranti Atlas; Computing Machine Lab.; Dept. of Computer Science.	1935 - 1988	E1 – E4	https://www.ourcomputerheritage.org/Catalogs/CatE.pdf
Manchester computing	SHL's documents, incl.: Differential Analyser; SSEM (Baby); CRT litigation; Ferranti Mark I & I*; Meg; experimental Transistor computer; Ferranti Mercury; MUSE; Ferranti Atlas; MU5; Computing Machine Lab.; Dept. of Computer Science.	1935 - 2012	MA1 – MA14	https://www.ourcomputerheritage.org/Catalogs/CatMA.pdf
Manchester computing	Eric Sunderland's documents, incl. Ferranti Atlas, MU5.	1963 - 1978	S1 – S5	https://www.ourcomputerheritage.org/Catalogs/CatS.pdf
Ferranti computers	General company background. Computers: Argus, Poseidon, Apollo, Gemini, F1600, Sirius, Orion, etc.	1951 - 1978	FA1 – FA2	https://www.ourcomputerheritage.org/Catalogs/CatFA.pdf
Ferranti computers	Pegasus; Perseus	1954 - 1965	PF1 – PF4	https://www.ourcomputerheritage.org/Catalogs/CatPF.pdf
All other UK mainframes, allied information and research projects	English Electric computers: (NPL Pilot ACE, DEUCE, KDP10, KDF9, KDN2, KDF6, KDF7, M2140); Lyons: (LEO I, LEO II, LEO III). A D Booth: ARC, etc.; BTM: (HEC, ICT 1200 & 1300); ICL 1900 series, ICL 2980 series. Computer applications; computer surveys & delivery information; historic computer conferences; staff lists from UK university Computer Science departments.	1947 - 1999	UK1 – UK10	https://www.ourcomputerheritage.org/Catalogs/CatUK.pdf
Miscellaneous	British Computer Society: early days.	1957 - 1982	B1 – B2	https://www.ourcomputerheritage.org/Catalogs/CatB.pdf
Miscellaneous	Cambridge University Engineering Dept's hybrid computer project.	1964 - 1967	C1	https://www.ourcomputerheritage.org/Catalogs/CatC.pdf
Miscellaneous	Tube Investments Ltd., Birmingham: setting up a first Computing Centre.	1955 - 1958	D1	https://www.ourcomputerheritage.org/Catalogs/CatD.pdf
Miscellaneous	UK's National Archive for the History of Computing	1981 - 1987	NA1 – NA4	https://www.ourcomputerheritage.org/Catalogs/CatNA.pdf
Miscellaneous	Telecommunications Research Establishment (radar & guided weapons)	1942 - 1948	T1 – T5	https://www.ourcomputerheritage.org/Catalogs/CatT.pdf
Miscellaneous	Honeywell 300, 400/1400, 800/1800.	1961 - 1964	W1	https://www.ourcomputerheritage.org/Catalogs/CatW.pdf

3. Collection history, provenance and the physical location of documents.

The documents have been collected by Simon Lavington (SHL), in the period 1970 – 2015. The collection was initially for private historical research but was widened in response to SHL's involvement in two initiatives:

- (i) The series of BCS/ICL/IEE Working Groups in the period 1981 - 86 which resulted in the establishment of the National Archive for the History of Computing;
- (ii) the Computer Conservation Society's 1999 Call for Documents, which led in 2003 to the *Our Computer Heritage* project.

SHL became an informal collecting-point for pioneers wishing to donate historical material. This process was, to an extent, given momentum by SHL's publishing activity and by news articles appearing in the Computer Conservation Society's bulletin *Resurrection*. In all, the collection now comprises about 124 box-files; the catalogue runs to about 212 A4 pages. These pages are being systematically uploaded to the *Our Computer Heritage* website as pdf files.

When arranging the catalogue, it has been convenient to divide the historical material into distinct units called *items*. Each *item* might be a single piece of information (letter, photo, newspaper article, etc.) or a larger piece (technical manual, company annual report, program listing, reel of magnetic tape, etc.) or a coherent group of artefacts (for example a folder of correspondence, an album of photographs). The totality of 124 box-files together contain 1,839 distinct items.

All formerly classified information has been officially declassified and is in the public domain. The declassification of material in box-files J1 – J4 and V0 was kindly facilitated by Lt. Cdr Peter Marland, Principal Scientist, DSTL Naval Systems Department, C41SR team, on 18th November 2013 and on 20th November 2015 after detailed inspections. Lt Cdr Marland also inspected the formerly-classified documents in box-files K1 – K10 on 21st August 2014 and asserts that: "The material I have examined in Box-files K1, K2 and K3 relates to internal Elliott company matters. It includes correspondence between the company, as contractor, and the Admiralty, as principal. Technical details of equipment, etc., are not covered. The material mainly relates the period up to 1954. I have seen nothing that should not be in the public domain". Information in box-files K3 and K4, relating to GCHQ projects, was made available in 2006 by Dr Gill Bennett, at that time Chief Historian at the FCO and by the late Peter Freeman of GCHQ. In conclusion, there is now nothing in the collection that ought not to be in the public domain.

From 2014 negotiations were begun to ensure that the collection was moved from SHL's private residence to more secure locations which offered long-term curatorial care. It was found that some likely archives were resource-limited and could not accept new material. The physical locations of the box-files is as given in the Table on the next page. The locations reflect synergy with an archive's existing holdings. At the time of writing (29/4/2016) all box-files except W1 have physically been moved to their new homes.

Box-file IDs	Archival location
B1, B2	British Computer Society HQ, North Star House, Swindon, Wiltshire
C1	Computer Laboratory Library, University of Cambridge
D1	Science Museum, London
E1 – E4	National Archive for the History of Computing, Manchester
FA1 – FA2	Science Museum, London
F1 – F9	Bodleian Library, University of Oxford
G1 – G8	Bodleian Library, University of Oxford
H1 – H9	Bodleian Library, University of Oxford
J1 – J4	Bodleian Library, University of Oxford
K1 – K10	Bodleian Library, University of Oxford
L1 – L2	Bodleian Library, University of Oxford
MA1 – MA14	National Archive for the History of Computing, Manchester
M1 – M6	Bodleian Library, University of Oxford
N1 – N6	Bodleian Library, University of Oxford
NA1 – NA4	National Archive for the History of Computing, Manchester
PF1 – PF4	Science Museum, London
P1 – P2	Bodleian Library, University of Oxford
R1 – R4	Bodleian Library, University of Oxford
S1 – S5	National Archive for the History of Computing, Manchester
T1 – T5	Malvern Radar and Technology History Society (MRATHS), Great Malvern, Worcs
UK1 – UK10	Science Museum, London
V0	HMS Collingwood Museum, Fareham, Hants
V1 – V7	Bodleian Library, University of Oxford
W	Jim Austin Computer Collection, Fimber, Yorkshire

4. Additions to the catalogue.

Whilst the Computer Conservation Society is not in a position to collect new material, we can often suggest a suitable home for relevant items. If you need to dispose of documents related to British-designed stored-program computers of the period 1948 – 1978 then we can advise. Please, however, first read our guide here:

https://www.computerconservationsociety.org/doc_rescue.htm

For further information contact SHL: lavis@essex.ac.uk