

Catalogue H, for box-files H1 – H9.

Scope: All business-oriented (therefore mostly non-technical) reports such as: annual reports to shareholders, financial reports, general sales brochures, publicity leaflets, newspaper and magazine articles, etc. Computer orders and deliveries. The bidding and assessment process for the Royal Army Pay Corps (RAPC) contract. This catalogue covers Elliott-Automation and related companies such as Vaughan Programming Services.

Cat. No.	Date	Description	Comment
H1	March 1993	Bulletin of the Scientific Instrument Society, no. 36, March 1993. Contains (a): 'An introduction to the history of Elliott Brothers up to 1900' by Gloria Clifton (pages 2 – 7); (b) 'Elliott, instrument makers of London: products, customers and developments in the 19 th century' by H R Bristow (pages 8 – 11).	Two classic articles on the early history of Elliott Brothers (London) Ltd. H R (Ron) Bristow worked in the aerospace side of Elliotts from 1951 to 1952 and from 1955 to his retirement in 1992. He became an unofficial company historian, amassing documents that were eventually passed to the University of Oxford. For the details of the Oxford archival arrangements, see <i>(Two copies of this Bulletin issue)</i> .
H1	2002	Development of the Elliott company, 1804 – 1950. H R Bristow.	10-page typed paper, presented at the Institution of Electrical Engineers Summer Conference on the History of Electrical Engineering, University of Greenwich, summer 2002.
H1	c. 2000	M W Theiler & Sons: an early acquisition by Elliott Brothers London. H R Bristow.	Photocopy of a four-page article. No publisher indicated but almost certainly copied from the <i>Bulletin of the Scientific Instrument Society</i> (with the lower line of each page out of the copier's vision?) This article explains how G K E Elphinstone came to Elliotts.
H1	1958	Siemens Brothers, 1858 – 1958: an essay in the history of industry. J D Scott. Published by Weidenfeld and Nicholson.	Photocopy of this book's cover and pages 88, 89, 108, 109. Deals with the acquisition, and sale, of shares in Elliott Brothers (London) Ltd.
H1	c. 1920	Photo of Century Works, Lewisham; Also, extracts from GEC Review	Photocopy of annotated aerial photo of Elliott's Century Works at Lewisham, in about 1920, describing sections of the factory. This photo was reproduced in: GEC Review, vol. 14, no. 2, 1999, page 176. This page, and page 175, are included. The original photo was part of a much earlier Elliott brochure (date unknown).
H1	c. 1921	Notes on origins of the Electroflo meter	Photocopy of 2-page typed historical note of a company that was amalgamated with the Elliott-Automation group in 1956.

		Company Ltd.	Provenance: Ron Bristow, 4 th June 2009.
H1	Sept. 1943	Critical Report on the organisation of war-time production for the Admiralty at Elliott's Lewisham factory.	Photocopies of key pages from The National Archive, file ADM 178/309: <i>Report on morale and output of Elliot Bros Ltd: suggestions for improvement, 1943</i> . Produced by the Director of Naval Ordnance, September 1943, DNO. Note: this file was originally marked as 'Secret: closed until 2043'. Amongst other things, this interesting file contains a management organisational chart. Mentions Elphinstone, Smith, Siemens, Harben, etc.
H1	c. 1946	Swift: The Factory of Tomorrow – Today.	Photocopy of a 20-page illustrated, spiral-bound, booklet produced by B&P Swift Ltd., North Circular Road, London NW10. Contains many interesting photos. The original was seen by SHL at the Marconi Archives, Chelmsford. Now possibly moved to the Bodleian?
H1	c. 1949	Swift and Swallow mixer	Photocopy of a two-page advert for an 80 quart food mixer made by Swift and Swallow, Century Works, Lewisham.
H1	c. 1949	Swift: the world's finest weighing machines.	Photocopy of a seven-page illustrated brochure. Swift and Swallow, Century Works, Lewisham. Includes photo of the main machine shop at Lewisham.
H1	1945 – 1950.	Whittall's notes on the history of Elliott Brothers (London) Ltd.	A two-page typed letter, sent by C J Whittall to C Dupen on 7 th March 1966, being Mr Whittall's memories of company organisation and senior management in the period during which Leon Bagrit gained control of Elliotts. Also, the one-page reply letter from Dupen to Whittall, dated 23 rd March 1966. Note that these three pages have been scanned in by SHL as three files <i>LewishamBristowDupen1 – 3.bmp</i>
H1	c. 1947 – 1949.	Bowden's notes on Dr Ross and the history of Elliott Brothers (London) Ltd.	A two-page typed transcript of a verbal account by Harold Bowden in May 1997, when Mr Bowden was in his nineties. Harold joined Elliott Brothers in the 1920s, worked his way up and stayed with the firm until some time after the arrival of Bagrit and Ross. Also scanned in by SHL as two files <i>LewishamBristowBagrit-Ross1 – 2.jpg</i>
H1	c. 1963	Elliott-Automation Ltd.: History of the Group.	Photocopy of a two-page extract from a longer typed document, un-dated and anonymous. It was possibly written by Edgar Herzfeld between 1962 and 1965. The document was sent to SHL by Ron Bristow, who had given it the catalogue-number 4/18/2/8 in his 'Elliott Archive'. This history goes back to 1935 and concentrates on the involvement of Leon Bagrit. Other firms mentioned include Averys, Herbert & Sons, B & P Swift and the bankers Higginson & Co. Another copy.
H1	1948 - 1985	Elliott Flight Automation Limited: a brief history. Anon.	This 30-page typed document gives varying degrees of coverage for period 1948 to 1985, with some staff listings to 1992. Ron Bristow, who has a long-standing interest in Elliott company history, provided the following further information on the provenance in an e-mail to SHL in 2007. " <i>It is an updated version of the document 'Elliott Flight Automation History' by David Broadbent. After Broadbent's death, Broadbent's notes were added to by C.R Reese, an engineer and manager in Elliott Flight Automation from about 1955 to 1993, using press releases and company announcements</i> ". The document is now part of the Marconi Archives at the Bodleian Library, Oxford.
H1	14 th May 1952	Research Laboratories: organisation for research and development.	Annotated photocopy of a 10-page typed internal memo, issued just after John Coales had left Borehamwood and therefore at a time when the Lab was in great difficulties. Gives names of key staff and descriptions of current research projects. Very informative. Another copy.
H1	1968	Two documents giving brief notes on	Photocopies of six typed pages, taken from two related documents produced in 1968 by Dennis Birkett, the ICT

		the development of the British computer industry from the perspective of ICT	Company Information Officer. Gives a timeline of computers manufactured by Elliotts, Leo, BTM/ICT and English Electric. These items come from two documents in the Science Museum's collection, one with the reference-number COM/1993/1437 and entitled: <i>EEC/Elliott-Automation - Computer Background / Birkett, Dennis A., Jan 1968.</i>
H1	21 st April 2011	The story of Elliott-Automation, 1946 – 1986. CCS seminar.	Notes and print-out of Powerpoint slides for SHL's talk at the Science Museum to mark the publication of the book <i>Moving Targets</i> . Includes a list of ex-Elliott people expected to attend and those who sent their good wishes.
H1	c. 1948	John Coales notes on Elliott company finances.	Photocopy of hand-written notes, deposited in the IEE Archives, Savoy Place, London, under catalogue number SC168/1/6/2/1. These give John Coales attempts to analyse the financial state of Leon Bagrit's companies over the last few years and, in particular, to explain how Bagrit gained control of Elliott brothers (London) Ltd.
H1	2 nd June 1947	Issue of shares	Photocopy of circular to shareholders concerning issue of Preference Shares. Copied from Group Archives, Lloyds TSB Group plc, Lombard St. See Cat. no. S/1/4/b/25.0. Prospectuses of firms with whom Higginson and Company have a connection. 1 file. From 1944 to 1951. (Higginsons were the merchant bankers for Leon Bagrit. See also SHL's file <i>Higginsons.doc</i>)
H1	10 th March 1948	Issue of shares	Photocopy of circular to shareholders concerning issue of Convertible Notes. See also above.
H1	7 th Feb 1951	Issue of shares	Photocopy of circular to shareholders concerning issue of Convertible Notes. See also above.
H1	2003	Notes pertaining to Higginsons Ltd., Merchant Bankers.	Higginsons (founded in 1907) were the financial backers of Leon Bagrit in the crucial period 1945 – 1955 (and possibly at other times). Higginsons became part of Hill Samuel in 1965 and then part of Lloyds TSB. These notes refer to a visit made by SHL to the Lloyds TSB Group Archives in Lombard Street in February 2003.
H1	11 th May 1953	Notice from page 11 of <i>The Times</i> newspaper.	Large (22.2 x 9.52 inches) advertisement from <i>The Times</i> , "issued in compliance with the Regulations of the Council of the Stock Exchange, London, for the purpose of giving information to the public with regard to the Company [Elliott Brothers (London) Ltd.]. Gives detailed profit/loss figures & dividends paid for the years 1943 – 1952, together with current assets, liabilities, etc. Also, list of Directors and a small amount of company history.
H1	c. 1954	Acquisition of Bristol Instrument Co.	Photocopy of an undated newspaper article, most probably from 1954. Gives financial details.
H1	1954	Stock Exchange Official Year-book	Photocopy of pages relevant to Elliott Brothers (London) Ltd.
H1	1955	Stock Exchange Official Year-book	Photocopy of pages relevant to Elliott Brothers (London) Ltd.
H1	1960	Stock Exchange Official Year-book	Photocopy of pages relevant to Elliott-Automation Ltd and to Elliott Brothers (London) Ltd.
H1	Jan. 2002	Companies House enquiries.	Results of searching Companies House records (on the web, in January 2002) for all mentions of Elliott, Elliott-Automation, GEC Computers, Marconi, etc.
H1	1956 – 1962.	Financial summaries, probably of the Computing Service at Borehamwood.	Two photocopied sheets, probably part of the Science Museum Document Centre's item COM/1993/167. Gives figures for the capitalisation, depreciation and book value of the major equipment in the Computing Service section at Borehamwood. Includes two Elliott 405 computers, a 402F, an 802, an 803 and a lineprinter. This internal document was

			probably amongst the papers of Patrick Shackleton. Another copy.
H1	July 1967	Offers by the English Electric Co. Ltd.	Photocopy of letter and company accounts (16 pages in total), sent to shareholders. The front page bears the title: 'Offers by Lazard Brothers & Co. Ltd. on behalf of the English Electric Company Ltd. to acquire all the Preference and ordinary Shares of Elliott-Automation Ltd.'
H1	1970	Future of a monolith.	Photocopy of page 319 of <i>Anatomy of a merger: a history of GEC, AEI and English Electric</i> , by Robert Jones and Oliver Marriott. Published by Jonathan Cape, 1970. ISBN: 0-224-61872-5. Gives a Table showing year-by-year profits of GEC, English Electric and four other companies, 1949 – 1969. See also SHL's file <i>Booksrce1.doc</i>
H2	1957	Elliott-Automation Report and Accounts 1957	Photocopy of Report Presented at the Annual General Meeting held on 27 th June 1958. 16 pages. Note that extracts and summary-statistics from several Annual General Meeting Reports are in SHL's files <i>ECompanies1.doc</i> , <i>ECompanies2.doc</i> and <i>E-Notes1.doc</i>
H2	1958	Elliott-Automation Report and Accounts 1958	Photocopy of Report Presented at the Annual General Meeting held on 26 th June 1959. 20 pages. Contains photos.
H2	1959	Elliott-Automation Report and Accounts 1959	Presented at the Annual General Meeting held on 30 th June 1960. 25 pages. Contains photos. Also, a photocopy of this Report.
H2	1960	Elliott-Automation Report and Accounts 1960	Photocopy of Report Presented at the Annual General Meeting held on ? June 1960. 25 pages. Contains photos.
H2	1961	Elliott-Automation Report and Accounts 1961	Presented at the Annual General Meeting held on 29 th June 1962. Glossy orange cover. 33 pages. Contains photos.
H2	1962	Elliott-Automation Report and Accounts 1962	Presented at the Annual General Meeting held on 28 th June 1963. Glossy red cover. 32 pages. Contains photos
H2	1963	Elliott-Automation Report and Accounts 1963	Presented at the Annual General Meeting held on ? June 1964. Glossy white cover. 32 pages. Contains photos
H2	1964	Elliott-Automation Report and Accounts 1964	Presented at the Annual General Meeting held on ? June 1965. Glossy white cover. 32 pages. Contains photos
H2	1965	Elliott-Automation Report and Accounts 1965	Presented at the Annual General Meeting held on 29 th June 1966. Glossy white cover. 24 pages. Contains photos
H2	1966	Elliott-Automation Report and Accounts 1966	Presented at the Annual General Meeting held on 23 rd June 1967. Glossy white cover. 24 pages. Contains photos.
H2	1961 - 1966	Elliott-Automation Report and Accounts: extracts.	Photocopies of various key pages from these Reports.
H3	1946; 1961; 1992	Various Lease and Sale documents referring to properties at Elstree Way.	Refers to the original Admiralty Fuse Factory (paper stamped <i>Admiralty Lands Branch, 29th August 1946</i>). Also, Legal and General Assurance Society Ltd. Outline plans for buildings included. This bundle of documents given to SHL by David Wilson, Site Manager, Borehamwood, on 18 th July 2002, when the former premises of Elliott-Automation were being cleared prior to being handed over to new tenants.
H3	c. 1964	Elliott-Automation factories.	30-page (landscape format) illustrated glossy booklet, giving photos and floor-areas of most of the E-A sites. Also, SHL's notes and extracted figures from this booklet.
H3	2002	St Modwen	50-page A4 illustrated glossy brochure. See aerial site-photo

		Properties plc – Annual Report 2002.	and caption on page 12, which says that the St Modwen property company “acquired an interest in a Ministry of Defence site at Borehamwood in Hertfordshire let to Marconi which we subsequently sold into a joint venture with Legal and General”.
H4	27 th July 1959	Visit to the United States of America.	Photocopy of a two-page typed internal memo from Patrick Shackleton to Laurence Clarke, giving commercial and technical reasons why someone from Elliotts should visit the USA.
H4	18 th Dec. 1961	Function chart for the Elliott Computing Division.	Photocopy of single typed sheet. Gives the names of senior staff and their role and reporting-line in the organisation. At that time the Divisional Manager was Peter F King. Photocopy probably comes from the Science Museum’s Document Centre, item COM/1993/167.
H4	Jan. 1962	Functional chart for the Borehamwood Computing Services Division.	Photocopy of single typed sheet. Gives the names of senior staff and their role and reporting-line in the organisation. At that time the Technical Manager was Patrick Shackleton. Photocopy probably comes from the Science Museum’s Document Centre, item COM/1993/167.
H4	Dec. 1962	Selection interviewing. I A Millar and M J Jones, Personnel Dept., Borehamwood.	12-page typed manual of general advice and company procedures, bound in grey covers.
H4	c. 1962.	Miscellaneous brochures, formerly the property of Alan Wakefield (ex-Borehamwood).	(a) The Factories Act 1961; (b) A short guide to the Factories Acts 1937 & 1948; (c) Functions of a Personnel department by G R Moxon; (d) Short courses, Autumn Term 1962, Dept. of Mathematics, Hatfield College of Technology; (e) accompanying correspondence between SHL and Alan Wakefield, Jan/Feb 2009.
H4	1 st Aug. 1966	Installation and maintenance work on Elliott computers.	Photocopy of single typed sheet from E-A Technical Services Ltd., being a list of amendments to current maintenance work on various customer-sites with installed Elliott computers. Mentions work scheduled for Moscow, Munich, Pakistan, etc. This document comes from the Science Museum Document Centre, catalogue number COM/1993/1135.
H4	June 1962	The future prospects of Airborne Radio and Radar Division. R E Ford and P F Mariner.	Internal Report, approx. 20 pages, approx. A4, blue binder. Gives predictions of future turnover.
H4	Nov. 1965	Airborne Radar Division. W J Hanks	Internal Report, 12 pages, foolscap, grey binder. Includes summaries of current and proposed future projects.
H4	1968	Research in Elliott Automation.	A4 report, approx 35 pages, white covers. Covers the following Research Laboratories: Computing Research (Borehamwood); Space and Weapons (Frimley); Radar Research (Borehamwood); Flight Automation (Rochester); Metallurgical (Willesden); Fluid Dynamics (Park Royal). Summarises current research projects and lists recent internal research reports.
H4	1975	Navigation and attack system options: Jaguar international. Marconi-Elliott Avionics.	46-page glossy technical brochure with photos, etc. Landscape format, spiral-bound, black/red cover. Promotional brochure highlighting the wide range of avionics equipment produced by Marconi-Elliott, with interesting (Jaguar) system block-diagrams. Ends with a list of new devices such as Terrain Avoidance, Helmet sight, 664 Head-up Display, the 920ATC computer and the dates of their first availability.
H5	1963 – 1965.	Collection of letters, memos and internal	These two proposals have in common the input of Dr Jeremy Bray MP, who was a consultant to Elliotts during most of the

		reports, donated by S L H Clarke (Elliott-Automation), concerning: (a) a joint project in the area of automatic control of chemical processes (1963); (b) the formation of a suggested National Data Processing Service (1964 – 1965).	relevant period. (The original folder is headed 'The "BRAY" project'). Bray communicated mainly with Laurence Clarke at Elliotts. Also mentioned in correspondence are: Dr L L Ross (Elliotts); NRDC, especially Warren Spring Lab. and Dr F H H Valentine; Humphreys & Glasgow Ltd. A proposal for a joint project in the area of process control, involving Elliotts, resulted in a Transfer Line Reactor at the Warren Spring Lab. The proposal for a National Data Processing Service passed out of Elliott's hands.
H5	May 1976 to June 1977	Collection of letters, memos and internal reports, donated by S L H Clarke (GEC's technical Director (Automation)) covering efforts to rationalise the UK's minicomputer business.	Proposals for merger of small UK computer organisations, particularly GEC Computers Ltd. (excluding military computers), Ferranti Ltd. (excluding automation products), Computer Technology Ltd. and Digico Ltd. Besides Laurence Clarke, amongst the people involved in the correspondence are: Robert Telford (GEC), M P Lam (Under Secretary, Dept of Industry), Peter Dorey (Director & General Manager, Computer Systems Group, Ferranti Ltd.). Contains notes on GEC/Ferranti proposals on minicomputers. By June 1977 the proposal seems to have come down in the end to a suggested joint GEC/Ferranti company, with input from the National Enterprise Board. In the event, nothing happened.
H6	July 1982.	The Royal Army Pay Corps (RAPC) and its antecedents: a short history.	40-page A5 typed booklet, glossy blue cover. In 1957 the RAPC was a pioneer government department in seeking to adopt electronic digital computers, Furthermore, the RAPC's work-load was extremely challenging for the computer equipment available commercially at the time.
H6	1930s to 1950s	Notes (based on Internet downloads) on Burroughs accounting machines.	Before installing computers, the RAPC operated a manual payroll system based on the use of approximately 850 Burroughs Class 9 Simplex accounting machines – the majority of which were first installed during 1942/43. These notes give photos and specifications of the principle Burroughs equipment.
H6	Aug. 1957	Application of automatic data-processing to soldiers' pay accounting. The War Office.	Photocopy of the Royal Army Pay Corps (RAPC): Electronic Computer Investigating Committee's Report of Working Party. 66 pages. In moving from Burroughs desk-top electro-mechanical accounting machines to computers, the RAPC surveyed several candidate systems. In particular, a detailed technical comparison was carried out between the IBM 705 and the Elliott 405. This Report, and the one below, give the details.
H6	Dec. 1957.	Report of the Electronic Computer Investigation Committee. The War Office (F9)	Photocopy of 14-page Report.
H6	Oct./Nov. 1990	Correspondence relating to Major General P S Gray and Lt Colonel Donald Moore.	Concerns the preservation of the originals of the above two Reports.
H6	2002.	Notes and correspondence relating to a visit by SHL to the RAPC, Worthy Down, Wiltshire in July	Mentions Donald Moore, Major Euen Simmonds and Steve Sharpe. Contains a note on the history of Worthy Down with some photocopied photos.

		2002.	
H6	c. 1960	RAPC Electronic Accounting Bulletin no. 1	Photocopy of an 18-page internal illustrated bulletin. Looks forward to the installation of an IBM 705 at Worthy Down. Contains system diagrams, intended to prepare staff.
H6	c. 1960	RAPC Electronic Accounting Bulletin no. 2.	Photocopy of a 14-page internal illustrated bulletin Contains information about the new computer building at Worthy Down.
H6	Principally c. 1965	Various extracts from other RAPC Reports.	Contains tender data regarding the Elliott 4130.
H6	1968 – 1969	Correspondence; J C Heyward, J Daltrop, D S Laughton, P D Hall, H K Cameron.	The Cambridge University Hybrid System was an Elliott 4130 digital computer connected to two EAL 231 Mark 5 analogue computers manufactured by Electronic associates Ltd. It was installed in the Engineering Lab., Cambridge, under professor John Coales in 1965. By 1968 the reliability of the 4130 was causing concern. This correspondence, between Elliott-Automation Systems Ltd., ICL and Cambridge, concerns a replacement 4130.
H6	1969	Correspondence and contracts relevant to the Elliott 4130 at the Royal Observatory, Edinburgh.	Amongst other matters, this concerns delays in delivery of equipment, etc.
H6	1965 to 1969	Thomson computer typesetting agreement and correspondence.	Agreement between Elliott Brothers and The Thomson Organisation Ltd. of Grays Inn Road, London, regarding the commercial exploitation of computer typesetting equipment, Includes mention of Invac printers, punches and keyboards and PDP 8/I computer.
H7	Aug 1963	Anon, <i>Computer and data processing installations</i> . Elliott Computing Division. Issued 31 st August 1963 by Elliott Brothers (London) Ltd., Borehamwood.	Photocopy of a 25-page. A4, illustrated brochure. Details of Elliott 803 series installations are treated in more detail than other Elliott computer installations.
H7	Dec. 1966; March 1967	Elliott-Automation: computer orders and deliveries, 1947 – 1966.	23-page A4 black/white brochure, listing Elliott computers, NCR Elliott computers and ARCH industrial control systems delivered and on order as at 31 st December 1966. The booklet is arranged by computer type, including: 152, 153, Nicholas, 401, 402, 403, 405, 802, 803 & ARCH 8000, 502, 503, ARCH 1000, 4120 & ARCH 2020, 4130, 900 & ARCH 9000, ARCH 102. A single-sheet Addendum summarises computers delivered and on order as at 31 st March 1967. The lists are thought to contain a few slight errors: see comments in Appendix 8 of the book <i>Moving Targets</i> . Also, two photocopies of this document.
H7	1964 - 1966	Extracts from Elliott-Automation pocket diaries.	Each year Elliott (sales) personnel could be given a pocket diary with certain company information printed therein. One A4 sheet shows photocopies of two relevant pages each from Alan Wakefield's diaries for 1964, 1965 and 1966. Amongst other information, the pages contain price ranges for the 803 and 503 computers. A second sheet shows a photocopy of a page from a 1965 diary. See also file <i>ElliottDiaries.bmp</i>
H7	Aug. 1966	Amendments to 'Current Order' work. Internal memo, IC 328/VFC/RW	Photocopy of a single typed sheet, being a list of amendments to work-in-progress on the orders for eleven computers (803s, ARCH1000, ARCH 9000, 920, etc.)
H7	1970	Extracts from <i>Computer Survey</i>	Approx 40 typed pages, produced by Richard Burwood, dated 4 th February 2002, being an extract of all Elliott

		vol. 9 no. 6, November/December 1970.	computers from the 402 onwards, as listed in this 1970 volume of <i>Computer Survey</i> .
H7	13 th April 1977	Telex from I P Evans to S L H Clarke, regarding numbers of 900 series computers delivered.	Photocopy of the Telex, indicating that the 900 series derivatives (920B, 920M, 920ATC, etc.) were at that time being produced by several divisions (or ex-divisions) of Elliotts and that it was difficult to estimate the total number being produced. Some specific numbers are given in the Telex.
H7	3 rd May 1957	Making computers at Elliotts. <i>Financial Times</i> article.	Photocopy of an article by "a Financial Times Correspondent", being number 12 in a series of articles on Modern British Factory. The article features the Elliott 405. Copied from NAHC file NRD/86/11/1.
H7	c. 1956	Electronic Accounting. An important announcement ...	Photocopy of a four-sided A4 brochure. In June 1956 Elliotts announced an arrangement with the British arm of the National Cash Register (NCR) company of Ohio, America, under which NCR would market in the UK Elliott's digital computers, particularly the Elliott 405, for business data-processing applications. This was followed by the undated illustrated four-page brochure, issued jointly by both companies, of which this item is a photocopy. It states that "the marketing and installation of Elliott computers [sic] for business data processing applications will now be undertaken by the Electronics Section of The National Cash Register Company Limited, 206 – 216 Marylebone Road, London NW1". The agreement was formally signed in 1957. The agreement effectively ended in October 1967.
H7	c. 1957	The National - Elliott data-processing system.	Photocopy of an 8-page article, possibly taken from the NCR house journal called <i>Post</i> . Celebrates the agreement between Elliott and NCR, and the opening the NCR's London Computing Centre, equipped with a 405.
H7	Oct. 1957	National-Elliott 405 computer: 'here, now!' Advert in Computer Bulletin, Oct. 1957, page 120.	Photocopy. "The fully operative demonstrational version of the National-Elliott Electronic Data Processing System illustrated above is on permanent exhibition at the Head Office of the National Cash Register Company Ltd., 206 – 216 Marylebone Road, London NW1".
H7	c. 1960	Back page of: The ABC of Electronic Brains.	Photocopy of back page only of a 47-page illustrated booklet. This was the text for a series of six talks given by Leon Bagrit and broadcast by the External Service of the BBC. For a photocopy of the complete booklet, see catalogue section 8.
H7	June 1960	Notes on the state of digital computing in the USSR. Laurence Clarke.	Photocopy of first and last pages of Clarke's paper in <i>Computer Journal</i> , vol. 3, no. 3, 1960, pages 164 – 16742. Describes (amongst other things) the arrangements to exhibit an Elliott 803 computer at the Scientific instrument Manufacturers Association exhibition in Moscow in June 1960.
H7	4 th Oct. 1960	<i>The Times</i> supplement on computers in commerce.	12-page newspaper supplement, containing technical articles, editorial comment, advertisements, etc. Many photos.
H7	2 nd Nov. 1960	"Electronic brain" is damaging to sales and exports, says Elliott computer manager. <i>Electronics Weekly</i> , page 14.	Photocopy of an article quoting H E C (Eddie) Nash of Elliotts, Borehamwood. Contains sales figures and export figures for the Elliott 803. Includes a photo of Elliott's special 'international' delivery lorry and the statement: "Not one of the computers shown [at exhibitions] abroad by Elliott has ever been brought back to the UK. They are sold on the spot to foreign buyers ...".
H7	Jan. 1961	Elliott Brothers (London) Ltd.: a	Six pages (incl. covers) printed brochure, dealing with this division of the Elliott-Automation group. There are 32

		short summary of the activities of the principal divisions of the company	'companies', with a short para on each. Judging from the text on the last page, this brochure may have been used for recruiting staff.
H7	c. 1961	The Elliott-Automation Group.	Dark grey binder, containing the following sections: (a) brief history of the company; (b) Elliott-Automation and Aviation, reprinted from <i>The Aeroplane and astronautics</i> , March 1961 (with photos); (c) company organisation, etc.; (d) Weapons Division; (e) a few brochures for instrumentation products.
H7	1961 - 1963	Nine advertisements of Elliott computers that appeared in the <i>New Scientist</i> .	Photocopies of adverts relating to the Elliott 803, 503, and ARCH computers, with covering letter from Gordon Brand.
H7	Spring 1963	Using electronic computers for production control. J H A Smith. Reprinted from <i>Mass Production</i> , Feb., march, April 1963.	This is a three-part article, here re-printed and bound together as a 30-page A5 illustrated booklet published by The National Cash Register Co. Ltd., 206-216 Marylebone Road, London. Contains photos of the NCR315 and the Elliott 803 computers.
H7	9 th Feb 1964	Wanted: growthmanship. Sunday Times article by Peter Wilsher.	Photocopy of newspaper article. A business perspective of Elliott-Automation. Describes sales of process control equipment in the UK and abroad.
H7	c. 1964	Digital computers: what they are, how they work, what they do.	28-page A5 printed booklet, published by Elliott-Automation computers Ltd. Contains lots of photos of Elliott computers and input/output equipment.
H7	June/July 1966	Do-it-yourself computing. Article in <i>NCR Post</i> vol. 19. no. 5, page 24.	Photocopy of an article announcing the setting up of a new service called NCR Elliott Computer Workshops Ltd., based on Elliott 803 and 4100 series computers.
H7	Nov. 1966	'Big order book at Elliott'	Article from the 24 th November 1966 edition of <i>Computer Weekly</i> , giving Elliott-Automation group sales figures for the first half of 1966.
H7	9 th Feb. 1967.	Mr Kosygin's visit.	Front and back pages of the London Evening News, reporting the goodwill visit of Mr Kosygin, the Soviet Union's Prime Minister. Includes photos of Mr K's visit to Elliott-Automation at Borehamwood.
H7	June 1967	Press release: <i>Advanced industrial automation on show at Poznan International Fair, 11th - 25th June 1967.</i>	Photocopy of a one-page hand-out issued by Elliott-Automation's head office (34 Portland Place, London). "The centre-piece of the Elliott display is the ARCH 102 process control computer.
H7	Feb. 1970	Divide and rule: the fine white line. (The GEC-Elliott Automation Group).	Two-page article, reprinted from <i>Dataweek</i> , vol. 10, no. 9, Feb. 1970. Describes Laurence Clarke and Joe Wiltshire's efforts to restructure GEC-Elliott Automation, which included at that time elements of AEI, SDS, English Electric and Marconi. Three photos.
H7	Oct 1992	A brief history of Rochester Airport (compiled by J Preston and M F Moulton). Revised edition, October 1992.	Illustrated 50-page, A4 landscape, glossy brochure with lots of photos. Designed & produced by GEC Avionics Ltd. presented by the Royal Aeronautical Society, Medway branch. The history starts in 1909 with the Short Brothers. Mentions Pobjoy engines, the Stirling bomber, Bagrit & Elliott Brothers, GEC, etc. See also SHL's file <i>Rochester1.doc</i>
H7	2001 - 2003	Marconi end-of-an era information	(a) Two articles from the <i>Guardian</i> newspaper (29/8/02 and 9/9/03) about the financial troubles of the ailing company.

		(Guardian articles, etc.)	(b) Print-out of various Marconi pages from the Companies House website. (c) List of 'further reading' printed from the Marconi website in February 2003.
H8	Relevant to the 1950s.	Treasury organisation and methods and the computerisation of government work. John Agar.	Photocopy of third draft of chapter 8 (63 pages) of the book: <i>The Government Machine: a Revolutionary History of the Computer</i> . John Agar. The MIT Press (October, 2003). Gives the UK public sector background in the 1950s to the RAPC project.
H8	1971	British computers and industrial innovation; the implications of the Parliamentary Select Committee. Edited by Eric Moonman. Published by Allan & Unwin, London.	Photocopy of 11 pages, especially those containing Tables of market value, etc.
H8	20 th Feb to 9 th March 1956	Elliott Electronic Computing Course. Report S51.	Photocopy of a five-page typed brochure giving a timetable of the lectures, names of lecturers and the names and affiliations of 21 attendees. In the Norfolk County Record Office are several documents relevant to the 405 and also 'a substantial 405 manual that accompanied this Computing Course.
H8	1958	National-Elliott 405 computer courses. Advert in Computer Bulletin, Feb/March 1958, page 173.	One page photocopy. Gives dates of various courses (April to December 1958), under the headings of 'managerial', 'computer methods' and 'vocational programming'.
H8	1800 - 2000	Marconi and GEC: historical notes.	Print-outs of various pages taken from official Marconi and GEC websites, giving histories of the constituent companies from 1800 onwards. Includes useful time-chart, showing how AT&E, Plessey, Marconi, Elliott, English Electric, BTH, AEI, Vickers, Ferranti, etc., all contributed in part or in whole to GEC which, on 30 th November 1999, was re-named Marconi plc.
H8	1998	Forty years of Marconi radar from 1946 to 1986. R W Simmons and J W Sutherland. GEC Review, vol. 13 no. 3, pages 172 - 189	Photocopy of an article in company history. Another photocopy.
H8	1884 - 2000	NCR company history	Print-out of the 'history' section of the NCR corporate website. Shows that NCR was acquired by AT&T in 1991.
H8	2007	Miscellaneous notes on the NCR/Elliott connection: e-mail correspondence between SHL and Ian Ormerod (ex-NCR).	Ian Ormerod developed an interest in NCR history and followed this up when he retired from the company. He has a collection of relevant NCR documents.
H9	2 nd Nov. 1960	This firm will write programmes for computers. Electronic Weekly.	Photocopy of an article describing the founding of Vaughan Programming Services by Mrs A N St. Johnston – (formerly Dina Vaughan) – "believed to be the first of its kind". (Article written by Pearce Wright).
H9	1955 to 1978	Orange file containing the	Vaughan Programming Services (VPS) was founded by Dina St Johnston (née Vaughan) on 9 th February 1959 'with a

		following documents of Vaughan Programming Services and successors: (a) Articles of Association, Certificates of registration, etc.; (b) correspondence with the bank and with solicitors; (c) correspondence with companies and clients (including some pre-VPS letters concerning Dina on Elliott company business; (d) press cuttings. These and related documents passed to SHL by Harriet St Johnston at Hedgerow Farm on 28 th October 2007.	dining room table and some paper' at her home, a converted pub called <i>Five Horseshoes</i> in Brickendon, Hertfordshire. To quote Dina in a Press Release in February 1969 to mark VPS's tenth anniversary, "VPS was the first registered independent Software unit in the UK, that was not a part of a computer manufacturer, not a part of a computer bureau, not a part of a users' organisation and not a part of a consultancy operation". Much of VPS's initial contract work was for Elliott-Automation. In 1975 the company name was changed to Vaughan Systems and Programming. In November 1977 a limited company, Vaughan Systems and Programming Ltd. (simplified to <i>Vaughan Systems Ltd.</i> in 1989) was formed. Vaughan Systems Ltd. was sold in July 1996 to Harmon Industries, an American railway signalling company, and traded as Vaughan Harmon Systems. Harmon Industries in turn sold out to GE Transportation Ltd., part of the General Electric empire, in August 2000. Andrew St Johnston died in 2005; Dina died after a fall at home at Hedgegrove Farm on the weekend of 30 th June/1 st July 2007. See: Simon Lavington, <i>An Appreciation of Dina St Johnston, 1930 – 2007, founder of the UK's first Software House.</i> Computer Journal, volume 52, number 3, pages 378 – 387.
H9	1959 – 1998.	Grey file containing documents of Vaughan Programming Services (VPS) and successors	Contents include: (a) CVs of staff; (b) salaries of staff; (c) list of major Vaughan Harmon projects, 1959 – 1998; (d) colour brochure with photo of staff in 1989.
H9	25 th Feb 1969	Folder containing VPS Press Hand-outs.	Vivid pink folder. Two hand-outs: (a) the role of software houses; (b) typical programming work that has been carried out for customers.
H9	8 th Nov. 1984.	VPS 25 th Anniversary folder.	Green plastic folder. Contains programme of events, staff listing; CV of Dina with photo; accounts of recent projects with photos (including train signalling and describer systems; list of major projects over the last 25 years. A second copy of this folder.
H9		VPS 25 th anniversary calendar (for 1984) and accompanying colour brochure.	Gives twelve colour photos and twelve corresponding accounts of twelve successful VPS projects.
H9	1959 – 1998.	Lists of main VPS projects	Two lists. Includes many Elliott-Automation projects in the areas of industrial and military process control.
H9	c. 1965 - 1970	MACE.	Dark green A4 technical brochure, five pages, with diagram. Vaughan's Master Control Executive (MACE) was first introduced in about 1960. It was a robust timesharing mini operating system with predictable and precise response times, which was to perform satisfactorily well into the 1980s. VPS used MACE in over twenty different applications running on eight different types of computer. MACE had seven principle sections: initial settings; main computational cycle; process modules; common subroutines; device routines; interrupt routines; a common database and interface storage area. The database, which included the parameters of the particular application (alarm limits, scaling factors, telemetry data, etc.) made MACE systems adaptable, expandable and easily testable.

H9	c. 1978	A range of 16-bit 4M microprocessor system modules, designed by VPS for industrial applications.	Light green technical brochure, effectively six pages, with photos. The Vaughan 4M computer was based on the 16-bit Texas 9900 microprocessor chip-set. The 4M was designed by Geoff Monk, who had joined Vaughan from Borehamwood in 1970. Using standard 19-inch racking, the CPU had a multi-level interrupt facility and hardware multiply and divide. The memory could be a mix of EPROM, static RAM and dynamic RAM. Backing memory was floppy discs or Winchester discs. A wide range of analogue and digital Input/Output modules was available.
H9	c. 1978	The system approach to Train Describers, associated displays and information systems.	Light green technical brochure, eight pages, with photos. Describes a range of railway systems equipment, including displays, signalling, controlling and monitoring equipment. At the heart is a dual-processor Vaughan 4M computer.
H9	c. 1978	An approach to computer based flight information systems that allows complete freedom of choice of display media.	Light green VPS A4 technical brochure, effectively ten pages, with photos. Airport applications, including passenger displays, based on an Active Flight File and operator updating.
H9	Feb. 1999	Forty years of excellence. <i>Rail Professional</i> , page 21.	Photocopy of a single-page anonymous article in praise of the many railway applications carried out by Vaughan Harman Systems Ltd. and its predecessor VPS. Contains two photos. "This year sees Vaughan Harman Systems starting an £8m Railtrack contract to replace signalling on the Cromer branch line in Norfolk".
H9	Oct. 2007.	Richard Burwood's notes on Vaughan staff, VPS Motorway projects and other matters.	10-page series of typed retrospective notes, plus covering letter dated 24 th Oct. 2007, from Richard Burwood who worked for VPS for 17 years. Includes comments on named staff, VPS projects, MACE, etc. Some of the notes are comments on a draft of text written by SHL.