## THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on the correspondence and papers of CHRISTOPHER HINTON, BARON HINTON OF BANKSIDE (1901-1983) engineer

Vol I

deposited in the Institution of Mechanical Engineers

Reproduced for the Contemporary Scientific Archives Centre (CSAC 116/7/86)

by

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1986

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# CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

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> Catalogue of the papers and correspondence of CHRISTOPHER HINTON OM, KBE, FRS, FEng BARON HINTON OF BANKSIDE (1901 – 1983)

Compiled by: Jeannine Alton Peter Harper Margaret Erskine VOLUME I List of contents General Introduction Sections A - E

Deposited at The Institution of Mechanical Engineers, London

1986

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## GENERAL INTRODUCTION

The collection was received via The Institution of Mechanical Engineers in September and October 1984 and December 1985.

It represents Hinton's selection of the material in his possession. The many requests he received for information on the historical events he had witnessed, notably perhaps the contacts with M.M. Gowing during the preparation of her history of the British atomic energy project and the consequent writing of his own memoirs, had encouraged an interest in history. His service on the Royal Society's Sub-committee on Contemporary Scientific Archives had contributed to his sense of the problems involved in evaluating and sorting the extensive accumulation of paper amassed by distinguished public figures. Accordingly he and his long-time secretary, Phyllis Ellis, conducted regular pruning exercises on his papers. Many of the folders in which the material was received bore dates 'Examined by Lord Hinton', some as early as 1972 but mainly between February 1979 and April 1982; thus, while some material may be missing, what remains is what he deemed of interest. Another feature is his bringing together of documents on a particular topic, with his own title and comments (for example, the grouping of lectures on atomic energy and electricity supply) and his frequent and outspoken manuscript comments on letters, articles or other documents which he received. Attention is drawn to these features in the relevant catalogue entries.

## OUTLINE OF THE CAREER OF LORD HINTON OF BANKSIDE

Lord Hinton was born at Tisbury, Wiltshire, in 1901. The son of a schoolmaster, he became at 16 an engineering apprentice with the Great Western Railway at Swindon. He regarded the six years he spent there, first on the shop floor and then in the drawing office, as the foundation of his subsequent success in engineering. At 22 he was awarded the William Henry Allen scholarship by the Institution of Mechanical Engineers which sent him to Trinity College, Cambridge. He took a first class degree in the Mechanical Sciences Tripos in two years, spending the final year on research under Sir Charles Inglis on vibration of railway bridges.

Hinton's first post on leaving Cambridge was on the staff of Brunner Mond & Company (later part of ICI) where he became Chief Engineer at the remarkable age of 29. In 1940 he was seconded to the Ministry of Supply becoming, in 1942, Deputy Director General in charge of the Royal Filling Factories. At the end of the war he was asked to take charge of the production organisation of the newly-formed Department of Atomic Energy and when the United Kingdom Atomic Energy Authority (UKAEA) was set up in 1954 he became a Member of the Board and Managing Director of the Industrial Group. In the ten years 1946-1956 his organisation was responsible for designing and building the factory at Springfields for extracting uranium from ore, purifying it and making it into fuel elements for the nuclear reactors, for building Windscale with its production piles and its immensely complex chemical plants, the diffusion plant at Capenhurst, the first industrial nuclear plant at Calder Hall and the fast breeder reactor with its ancillary fuel element and chemical plants at Dounreay. In 1957 Hinton became the first chairman of the newly-created Central Electricity Generating Board (CEGB) - a position he held until his retirement from full-time salaried employment in 1964. One of Hinton's interests during his chairmanship was the development of the Board's research organisation; this interest continued into retirement, and indeed up to his death in 1983, in his capacity as Deputy Chairman of the Electricity Supply Research Council. Hinton's chairmanship of the CEGB was also marked by his great sensitivity to the problems of visual amenity which the Board's programme of generation and transmission construction work necessarily involved.

Although Hinton (in the last chapter of his unpublished autobiography) describes his immediate post-retirement activities as those of an 'odd job man' he nevertheless continued to make many important contributions to the public service. In 1965 he worked for six months in the Ministry of Transport and afterwards became a Special Adviser to the World Bank. He served as Chairman of the International Executive Committee of the World Energy Conference (WEC) 1962-1968 retaining an interest in its affairs for the rest of his life. He was an active member of the House of Lords having been made a life peer in 1965. He was a highly successful first Chancellor of the University of Bath 1966-1980. In particular, the years of retirement enabled Hinton to involve himself with the activities and organisation of the engineering

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profession. He was President of the Institution of Mechanical Engineers 1966–1967, Chairman of the MacRobert Award Evaluation Panel from the award's inception in 1969 to March 1977, President of the Council of Engineering Institutions (CEI) from 1976 and from 1976 to 1981 first President of the Fellowship of Engineering which he did so much to establish.

## DESCRIPTION OF THE COLLECTION

The collection is a substantial one. Although it cannot be said to present a full account of Hinton's life and work, being largely concerned with his later activities, it contains important documentation of his earlier career in the form of personal diaries, unpublished autobiographical writings, frequent allusions and reminiscences in correspondence with former colleagues, historians of science and others, not to mention his own comments and assessments written on folders or manuscripts.

The papers are presented in the order shown in the List of Contents. Additional explanatory notes accompany many of the Sections, sub-sections and individual entries in the body of the catalogue. The following paragraphs aim only at drawing attention to matters of particular substance or interest.

Section A (Biographical and autobiographical). In terms of historical interest this section is dominated by Hinton's unpublished autobiography and the 'non-secret' diaries on which it was based. The autobiography entitled 'The Memoirs of Christopher Hinton' (A.1-A.8) covers the period from its author's birth to the time of writing (1970) in 29 chapters and was supplemented by a 'Memorandum of Activities from 1970 to 1980' (A.9) written in 1981 at the request of M.M. Gowing. The autobiography has been drawn upon in compiling catalogue entries and reference has been made to it in the form 'Memoirs p. ...'. Hinton's personal diaries survive for the period 1941-1983; it is clear from the autobiography that he kept a diary from 1916-1923 but early diary entries survive only in abstracted form (A.13). Much of the remaining material in this section documents (albeit scantily) the events of his career, notably his successive moves to Swindon, Cambridge, ICI, Ministry of Supply, UKAEA and CEGB, and honours received, especially the knighthood, life peerage and Order of Merit.

Section B (Energy). This section brings together lectures (selected and arranged by Hinton) on atomic energy and electricity supply and general correspondence and papers on the same topics. The atomic energy lectures include a number of items of particular interest, for example Hinton's notes for the Risley induction lecture (B.2) which formed the basis of the BBC radio series 'The ABC of Atomic Energy' and the talk on safety to the people of Thurso in respect of the first Dounreay fast breeder reactor (B.7). The section also includes the contents of Hinton's nuclear power files 'excluding AEA papers and BNFL', material for Hinton's two investigations of the Prototype Fast Breeder Reactor at Dounreay undertaken at the request of the Central Policy Review Staff in the mid-1970s and for his last work for the Electricity Supply Research Council, unfinished at his death in 1983, also on Fast Reactors.

Section C (Engineering). This section documents Hinton's association with the various engineering institutions and organisations. Of special importance are papers relating to the Council of Engineering Institutions, 1967–1983, and the Fellowship of Engineering, 1975–1983. The CEI papers include the period of Hinton's Presidency and his work for the MacRobert Award which was administered by the CEI during Hinton's chairmanship of the evaluation panel. The Fellowship of Engineering papers record almost all aspects of its early years except the selection of fellows. Hinton's papers relating to the Finniston Committee of Enquiry into the Engineering Profession are presented in a separate subsection under the general heading Fellowship of Engineering.

Section D (House of Lords). This section brings together correspondence and papers relating to Hinton's House of Lords committee work, especially the European Communities Committee and his contributions to debates, principally on energy and engineering questions.

Section E (University of Bath). Although this is the smallest section in the catalogue, the surviving material documents well Hinton's contributions to the life of the university as its first Chancellor, including his work for the development appeal 1966-1968 and his addresses at degree congregations and other university occasions.

Section F (Lectures and publications). This section brings together notes, drafts and correspondence for the very numerous lectures and articles by Hinton covering a period of over 30 years. It includes some work for radio and television and Hinton's books on <u>Engineers and engineering</u> (1970) and <u>Heavy current electricity</u> (1979) and his contribution on atomic power to the Clarendon Press's <u>History of Technology</u> (1978).

Section G (Consultancies). Documentation for three consultancies undertaken by Hinton in retirement is presented here: the very slight material with the collection in respect of the Electricity Council, the more substantial record of the 1965 Ministry of Transport investigation and the especially full documentation of Hinton's work for the World Bank. This involved visits to Taiwan, Turkey, Brazil, East Africa and West Pakistan to assess projects and make recommendations. It was during a visit to East Africa that Hinton sustained an injury to his spine which left it permanently damaged.

Section H (Societies and organisations). This section brings together material relating principally to non-engineering organisations with which Hinton was associated. While some entries are relatively trivial, there are extensive sequences of material for the Royal Society and the World Energy Conference.

Section J (Correspondence). This section is relatively slight since most of Hinton's correspondence on his many and varied activities was kept with the related material and has been left in place in the appropriate sections of the catalogue. Of interest however are the daily carbons, 1978-July 1983, which record Hinton's total activity over a given period and at the very end of his career.

Section K (Non-print material). This section assembles a photographic record of Hinton's official career from the early 1950s. A photograph of Hinton as a GWR apprentice is the only one of him in the collection as a young man. The section also includes a 1956 film entitled 'Christopher Hinton' and gramophone records of Hinton's 'ABC of atomic energy' series for BBC radio.

## LOCATIONS OF OTHER MATERIAL

This collection of Lord Hinton's papers comprises those in his possession at the time of his death. However, the records of his extremely important work for ICI, Ministry of Supply, UKAEA and CEGB were contained primarily in their own files and this catalogue cannot provide detailed guidance on these holdings. Information about the archives of ICI and CEGB should be sought from those bodies; Ministry of Supply and UKAEA papers are covered by the Public Records Act and will at the appropriate time be available in the Public Record Office at Kew (UKAEA papers under the reference AB). This is also the case with the papers of the Production Group of the Authority which later became British Nuclear Fuels. Booklets giving the references to material used in M.M. Gowing's two volumes of <u>Independence and Deterrence</u>, the history of the UK atomic energy project in the period 1945-1952, are available on request from the Historian's Office, UKAEA, 11 Charles II Street, London SW1.

A little material was deposited by Hinton during his lifetime at Churchill Archives Centre, Churchill College, Cambridge.

### ACKNOWLEDGEMENTS

We are grateful to Mr. E.P. Davies of the Institution of Mechanical Engineers for help in assembling the material, to Professor M.M. Gowing and Mrs. A.V. Martin for information, and to Lady Phillips for assistance in the early stages of sorting and listing.

Oxford 1986

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SECTION A	BIOGRAPHICAL AND AUTOBIOGRAPHICAL A.1 - A.231
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A.118-A.133	BIOGRAPHICAL ARTICLES AND MATERIAL
A.134-A.221	CAREER AND HONOURS
A.222-A.226A	FAMILY AND PERSONAL CORRESPONDENCE

A.227-A.231 MISCELLANEOUS

### Biographical and autobiographical

## AUTOBIOGRAPHICAL WRITINGS

## A.1-A.8 'The Memoirs of Christopher Hinton'

In the 'Foreword' Hinton explains that the memoirs were written in 1970 and describes them as 'my personal memories of the problems and difficulties which we faced in the early years of atomic energy'. Disclaiming any intention to write history, he says: 'What I have done is to write an account of the impact of events on myself as this is recorded in my non-secret diaries and in my memory'. In fact, the memoirs range over the whole of Hinton's life, from birth to the time of writing, in twenty-nine chapters.

The work is a carbon copy, 496 pp., with a few ms. corrections by Hinton, and appendices in the form of documents of special importance (see A.2, A.3, A.4, A.7).

Foreword (i, ii)

Chapter I	Childhood days, pp.1-10.
Chapter II	Learning Engineering on the Shop-floor, pp.11-23.
Chapter III	Learning the Theory of Engineering, pp.24-33.
Chapter N	(wrongly typed as VI) Mainly family affairs, pp.34-42.

Chapter V Years of Development, pp.42-52.

Chapter VI The Chief Engineer, pp.53-67.

A.2

A.1

Chapter VII War work, pp. 68–83, and Appendix: Hinton's report on 'The construction of Bishopton and Wrexham Royal Ordnance Factories', 7 September 1940.

Chapter VIII The Filling Factories - The build up of the Organisation, pp.84-100, and Appendix: 'The Royal Filling Factories', Hinton's ms. notes, charts and diagrams referred to on p.96 (pp.1-6, 10, 17-19, 22 only).

Chapter IX The Filling Factories - Factory Problems and Personal Difficulties, pp.101-117.

Chapter X Filling Factories - The End, pp.118-129, with Appendix: Hinton's 'Scheme for the progressive reduction of strength of the Royal Ordnance Filling Factories', 22 September 1944, referred to on p.118.

A.3

A.4

Chapter XI The Risley Organisation, pp.130-140.

Chapter XII The fuel element factory at Springfields, pp.140-156. There is a footnote on p.140 beginning: 'Throughout this and the following chapters it should be remembered that I retained no atomic energy papers when I left Risley in 1957 and that I have not had access to them since.

 I rely on my memory, which is fallible, and on my diaries which, because they were kept as open records, are cryptic'.

Chapter XIII B.E.P.O. and the Windscale Piles, pp.157-185.

Included in the folder is a photocopy of Hinton's lecture 'The manufacture of uranium metal from ore' given to Institution of 'Chemical Engineers, Manchester, January 1955.

Chapter XIV	The Diffusion Plant, pp.186-205.
Chapter XV	The Windscale Chemical Plants, pp.206-228.
Chapter XVI	The Reasons Why, pp.229-256.

Included in the folder is a reprint of Hinton's Castner Memorial Lecture 'The chemical separation processes at Windscale Works', February 1956, referred to on p.206.

A.5	Chapter XVII	The Fast Breeder Reactor, pp.257-274.
	Chapter XVIII	Calder Hall, pp.275-292.
	Chapter XIX	The First Phase of the Industrial Programme, pp.295-313.
A.6	Chapter XX	The Atomic Energy Authority is Formed, pp.314-328.
	Chapter XXI	Troublesome Years, pp.329-341.

#### Continued

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Biographical and autobiographical

Chapter XX II	The Japanese Interlude, pp.342-350.	
Chapter XXIII	Decline and Fall, pp.351-371.	

Chapter XXIV The Nuclear Programme - the events of 1957, pp.372-389.

Chapter XXV The Nuclear Programme - Second Phase, pp.390-419, with Appendix:

'1960 Review of the nuclear power programme', 14 March 1960, with a ms. note 'Written and submitted to the Minister of Power by Sir Christopher Hinton'.

Chapter XXVI The Nuclear Programme - the Third Phase, pp.420-438.

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A.7

Chapter XXVII	The Sad Failure, pp.439-467.
Chapter XXVIII	Exit, pp.468-484.
Chapter XXIX	The Odd Job Man, pp.485-496.

A.9

'Memorandum of Activities from 1970 to 1980'

13pp. typescript (2 copies), June 1981, prepared at the request of M.M. Gowing, with forwarding letter, and a later ms. note.

In the opening paragraph Hinton explains why 'the present notes' were written and that 'I should not wish them to be used as an additional chapter of my Memoirs because they lack continuity'.

A.10-A.12 Shorter autobiographical writings.

A.10 'Script for recording and film made for I.E.E. records', August 1972. Uncorrected typescript, and version with ms. corrections and additions. See also C.250.

A.11 'Autobiographical sketch' for McGraw-Hill Modern Scientists and Engineers, 1978 (update of 1966 version).

A.12 2pp. autobiographical outline, February 1981.

### DIARIES

In his memoirs Hinton writes (p.28) 'On the day when I was awarded the William Henry Allen Grant my diary, which I had kept since 1916, stops and it was not until the middle of the Second World War that I started keeping one again. As a result the events between 1923 and 1943 are not supported by notes which I made at the time'. The surviving diaries in fact date from 1941 (A.27) and the early diary entries survive in abstracted form at A.13.

The material at A.13-A.26 was received as 'Notes from diaries (useful for locating events)' and was used by Hinton in compiling his memoirs and autobiographical writings.

### A.13-A.26 Notes from diaries

With the exception of A.13, these are ms. foolscap notes, with dates or titles, usually paginated. In chronological order.

- A.13 'Notes from diary 1918-23'. Small red notebook of brief entries, 1 January 1918-25 May 1923.
- A.14 'Notes for Chapt. 4', 1918-36.
- A.15 'Whittaker's Almanacks'. Miscellaneous notes on events 1919-25.
- A.16 1941 (2 pp.), 1942 (1 p.), 1943 (3 pp.), 1944 (3 pp.).
- A.17 1945 (3 pp.), 'Springfields' 1946-52 (3 pp.), 'Chemical Separation' 1947-52 (3 pp.).
- A.18 'General organisation' 1946-52 (11 pp.).
- A.19 'Diffusion' 1946-55 (4 pp.), 'Piles' 1946-51 (5 pp.), 'Calder Hall' 1947-56 (4 pp.).
- A.20 'General (Second stage)' 1949-60 (15 pp.).
- A.21 'Dounreay (Fast reactor)' 1950-57 (3 pp.), 'Generating Board' 1952-64 (15 pp.).
- A.22 'Industrial Programme' 1953-64 (11 pp.).

- A.23 'Research' 1957-64 (1 p.), 'Personnel' 1957-64 (3 pp.), 'Fuel' 1958-64 (1 p.), '1958-65' (4 pp.).
- A.24 'General' 1958-64 (3 pp.), 'Amenity' 1960-64 (3 pp.), 'Outside Activities' 1960-64 (1 p.).
- A.25 'Abstracts bearing on all relationships with the Atomic Energy Authority in years 1960/64 ...'.

39 pp. typescript dated 1 March 1982.

A.26 Page from December 1961 diary with underscorings (on Wylfa), 1966-67 (2 pp.), 'Pocket diary notes' 1967-80 (6 pp.), 'Topics 1970-80' (pp. a-d).

## A.27-A.69 Personal diaries 1941-83

These are the narrative journals kept by Hinton. There are occasional later notes on the flyleaf of dates of special interest to him, and marginal scorings in the entries.

A.27	1941		A.32	1946
A.28	1942		A.33	1947
A.29	1943		A.34	1948
A.30	1944		A.35	1949
A.31	1945		A.36	1950
A.37	1951		A.42	1956
A.38	1952	• •	A.43	1957
A.39	1953		A.44	1958
A.40	1954		A.45	1959
A.41	1955		A.46	1960

	<b>Biographical and autobiographical</b>		
A.47	1961	A.52	1966
A.48	1962	A.53	1967
A.49	1963	A.54	1968
A.50	1964	A.55	1969
A.51	1965	A.56	1970
A.57	1971	A.62	1976
A.58	1972	A.63	1977
A.59	1973	A.64	1978
A.60	1974	A.65	1979
A.61	1975	A.66	1980
A.67	1981	A.69	1983
A.68	1982		

# A.70-A.93 Small format pocket diaries 1959-82

Entries mainly by Hinton, but some in the hand of Mrs. Ellis.

A.70	1959		A.76	1965
A.71	1960		A.77	1966
A.72	1961		A.78	1967
A.73	1962	4	A.79	1968
A.74	1963		A.80	1969
A.75	1964		A.81	1970

	Biographical and autobiographical				
A.82	1971	A.87	1976		
A.83	1972	A.88	1977		
A.84	1973	A.89	1978		
A.85	1974	A.90	1979		
A.86	1975	A.91	1980		
A.92	1981				

# A.94-A.117 Appointments diaries 1968-83

1982

A.93

Most of these are large format desk diaries kept by Mrs. Ellis. Some are kept in duplicate.

A.94	1968	A.96	1970
A.95	1969		
A.97	1971	A.104	1976 (1)
A.98	1972	A.105	1976 (2)
A.99	1973 (1)	A.106	1977
A.100	1973 (2)	A.107	1978
A.101	1974 (1)	A.108	1979 (1)
A.102	1974 (2)	A.109	1979 (2)
A.103	1975	A.110	1980 (1)
		A.111	1980 (2)

A.112	1981 (1)	A.115	1982 (2)
A.113	1981 (2)	A.116	1983 (1)
A.114	1982 (1)	A.117	1983 (2)

## BIOGRAPHICAL ARTICLES AND MATERIAL

A.118-A.125 Biographical notes prepared for miscellaneous gazeteers and biographical dictionaries.

A.118	1971	Included here are notes by Mrs. Ellis of Hinton's Honorary	
		es (1955–66) and of 'Publications in which Lord Hinton's	
	bicgraphy	appears'.	
A.119	1972-78	Correspondence with Edizioni Scientifiche e Techniche	

Mondadori re Hinton's entry in various editions of Modern Men of Science and suggestions for others to be included.

- A.120 1973-76
- A.121 1978-80
- A.122 1981
- A.123 1982 rearticle on Hinton by M. M. Gowing in <u>Dictionary of</u> <u>Business Biography</u>. Includes correspondence, draft of article with ms. revisions by Hinton, copy of article as published.

A.124 1982

A.125 1983

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#### Biographical and autobiographical

A.126 'Reflections on Britain's nuclear history: a conversation with Lord Hinton'.

> Transcription of interview with Hinton conducted 19 January 1983 by D. Lowry of the Energy Research Group, Open University. Includes photocopies of miscellaneous obituaries of Hinton, and brief correspondence.

A.127 Requests for historical information made by or to Hinton:

1972-73 J. Chadwick (early ideas on atomic energy)

- 1974 L. Hannah (electricity industry)
- 1976 A. Albu (professional engineering education)
- 1977 M. Holly (fast breeder reactor)
- 1978 M. Wright (Lord Holford)
- 1983 F. Maynard (nuclear policy)
- 1983 A. Jones (atomic energy programme)
- 1983 Dictionary of National Biography

A.128 Press-cuttings (some photocopies)

A.129-A.133 Standardisation of stores

It is clear from his Memoirs that Hinton attached great importance to this matter as a key to rationalisation and efficiency. His first experience was at ICI in the 1930s of which he writes (pp.64-66): 'One of the most interesting jobs that I did in those years was the standardisation of stores for the whole of ICI'. He drew on this experience for the Filling Factories during the Second World War (p.96): 'We borrowed one of the Standards Engineers from ICI and standardised all the small rods, gauges and general stores just as had been done in ICI before the war', and later at Risley (p.251): 'Our general and engineering stores were all standardised and we had stores and drawing office standards

Continued

books; ... we had a universal stores code which was used at all the factories and the condition of the stores at all of them was excellent'.

- A.129 Filling Factory General Standards Code Book 1944.
- A.130 Department of Atomic Energy General Stores Code Book.
- A.131 Department of Atomic Energy Standard Accounting Instructions.
- A.132 Department of Atomic Energy Risley Standard Instructions.
- A.133 'A.E.A. Cost Code.'

## CAREER AND HONOURS

Many of these documents have later comments and reflections added by Hinton.

## Early schooling

A.134 Ivy Lane Council School, Chippenham, Report.

County Secondary School, Chippenham, Report Book 1913-17. Certificate of award of County Junior Scholarship 1915.

A.135 Education Certificates 1913, 1914, 1916.

## Great Western Railway, Swindon

After a brief period as apprentice at Andrew Barclay & Co., Kilmarnock, Hinton enrolled as a Premium Apprentice in October 1917. He remained at the works until he went to Cambridge in 1923.

- A.136 Arrangements with Hinton's father for apprenticeship and payment of premium 1917-19.
- A.137 Rule Book, signed by Hinton 17 October 1917 and with later annotations by him (Memoirs, pp.14–15).
- A.138 Testimonials for Hinton, itemising his training and service with the Company, written when he was 'desirous of taking a College Course', 1923.
- A.139 Hinton's ms. timetable for his studies at Swindon Technical Institution, and National Certificate from Institution of Mechanical Engineers, 1922 (Memoirs, pp.24-25).
- A.140 Letter from fellow apprentice at Swindon, 1966.

- A.141, A.142 Later correspondence re engine 7318, which Hinton helped to build at Swindon (Memoirs, p.20) and other matters relating to Swindon works.
  - A.141 1961, 1969, 1971, 1982
  - A.142 1983. On sculpture bust of Hinton and use of '7318' as motif; includes recollections.

#### W.H. Allen Scholarship and Trinity College, Cambridge

- A.143 Award of Scholarship, value £1,000, granted via Institution of Mechanical Engineers. Includes Hinton's telegram home ('Got it. Cheerio Chris'), letter from W.H. Allen, etc. 1923.
- A.144 First Class degree, Cambridge. Press-cutting, letters of congratulation from W.H. Allen and Institution of Mechanical Engineers 1925.

Also included here are letter from C.E. Inglis (Hinton's supervisor) 1927 and a later letter from R.W. Allen recalling his father's scholarship 1951.

#### Brunner Mond & Company/ICI

- A.145 1926 Correspondence re appointment and starting work, April-July; bonus agreement, December.
- A.146 1927 Contract of employment, July. St. John's Ambulance certificate.
- A.147 1928 Question papers for 'Passing-out examination of C. Hinton -April 1928', and results 'on a stringent basis' (Alpha for practical and for whole examination).

Letter notifying increase in salary, December.

A.148 1931, 1933 Miscellaneous information on salaries.

## Biographical and autobiographical

- A.149 1939 Election to Delegate Board, Alkali Group.
  - 1943, 1944 Personal letters from Chairman notifying salary increases.
- A.150 1945 Offers of posts in ICI at Wilton and Ardeer (declined by Hinton).
  - 1973 List of guests at Brunner Mond Centenary Dinner.

## Ministry of Supply

- A.151 Hinton's report on Bishopton & Wrexham Royal Ordnance Factories, September 1940 (original of copy at A.2).
- A.152 Two ms. reports by Hinton.

'Distribution of I.C.I. (Alkali) Staff working for M of S' with a later note 'written about Oct-Nov 1940'.

'Ranskill', with a later note 'layout of services and specification of requirements for Ranskill. Prepared by Spalding & myself in one weekend about November 1940' (referred to in Memoirs, pp.80-81).

A.153 Drawing of Ordnance Factory Risley Administration Building (Memoirs, p.110), with later note by Hinton 'The building is the one used as the first atomic energy office at Risley'.

Correspondence and memos. re reduction and transfer of Filling Factory organisation 1945.

- A.154 Correspondence <u>re</u> appointment as Deputy Director of Ordnance Factories 1941, <u>re</u> possible evacuation to Risley 1944 (see A.153) and <u>re</u> explosion at Ordnance Factory Hereford (1945).
- A.155 Appointment as Deputy Controller of Production, Atomic Energy, resignation from ICI (1946), financial and pension arrangements (1946-50).

## Knighthood 1951

Letters of congratulation.

A.156	A - D	A.158	s - w
A.157	G - M	A.159	First name and u fied signatures.

and unidenti-

### Monte Bello test 1952

A.160 Telegrams of congratulation from Prime Minister and Lord Cherwell.

#### Coronation 1953

A.161 Award of commemorative medal.

### Salary and Pension

Correspondence and papers on conditions of appointment at Ministry of Supply and Atomic Energy Authority, comparability with ICI, transfer of pension rights, etc. Hinton felt that the Establishment branches of the Ministry and Treasury were protracted and ungenerous in staffing arrangements, in his own case and others (Memoirs, pp.234, 332, Chapter XXI passim).

A.162-A.168 are the contents of Hinton's folder 'Personal salary & pension' with his ms. comment 'They shew the difficulty I had in getting reasonable treatment from the M.O.S. and in the early days of A.E.A.'

- A.162 1953 December-January 1954. Includes draft letter of appointment as Member for Engineering and Production, Atomic Energy Authority.
- A.163 1954 May. Further draft letter of appointment, Hinton's amendments, pension rights.
- A.164 1954 June. Includes letter of appointment.

- A.165 1954 July, November, December.
- A.166 1955 January-April.
- A.167 1955 May-October.
- A.168 1956, 1957.
- A.169 'Special Fund'

Folder of correspondence re Hinton's fees for broadcasts and lectures undertaken for AEA (and later CEGB) which were paid into a 'Special Fund' and used for purposes such as the 'Good Housekeeping' competition (see K.11). Folder includes itemised list of fees received and disbursements 1958-64.

## United Kingdom Atomic Energy Authority (UKAEA)

A.170	Correspondence with H. Hartley on future organisation of AEA and Hinton's career, 1956 (Memoirs, p.361).
A.171	Photocopy of Hinton's evidence to Organisation Committee (on Industrial Group of AEA) with extensive corrections; copy of letter on subject to A. Fleck 1957.
A.172	Correspondence on Windscale, and on lectures by Hinton 1957.
A.173	Later correspondence on UKAEA affairs, 1972 (visit to Dounreay), 1975 (30th anniversary dinner of opening of Risley, paid for by Hinton), 1977 (21st anniversary of Calder Hall).
4.174	Miscellaneous correspondence on visits, Annual Dinners of Risley Nuclear Engineering Society, closure of Capenhurst, etc. 1982.

A.175 Correspondence 1983 on gift of Hinton's chair at Risley, and drawings, to Institutions of Nuclear Engineers, made shortly before his death.

## Honours 1957

- A.176 Letters of congratulation on K.B.E. (few survive), including letter from Chippenham schoolfellow.
- A.177 Election as Honorary Fellow, Trinity College, Cambridge; includes a little later (1978-82) correspondence re College Feasts, meetings
   with and recollections of old friends at Trinity, etc.

### Central Electricity Generating Board

A.178 Correspondence with Lord Mills and others re appointment as Chairman, CEGB, from 1 September 1957.

Letter from C.R. King on his appointment as Chairman, Electricity Council 1959.

- A.179 Correspondence 1960 re Presidency of Institution of Mechanical Engineers. Hinton was pressed to accept the Presidency for 1961-62, or for 1962-63, but was obliged to decline at the instance of the Minister of Power.
- A.180 Miscellaneous on staffing and appointments at CEGB 1961, 1962.
- A.181 Correspondence with Lord Chandos, July 1963, re House of Lords debate on tender for Wylfa power station (Memoirs, pp.407-419).
- A.182 Correspondence 1964, including letters on Hinton's resignation from CEGB.
- A.183 Correspondence 1965 (Dungeness B), 1971 (amenity), 1975 (visit).

- A.184 Correspondence 1982-83 mainly re visit to Central Electricity Research Laboratories with Lord Ashby.
- A.185 Correspondence 1983. Mainly notes of sympathy sent to Hinton in hospital, several with his replies, especially re his anxiety to complete his paper on liquid metal coolant fast breeder reactor for visit to Dounreay. See B.121 for unfinished draft of paper. Also includes arrangements for visit to CEGB Staff College to learn current computing methods.

### Life Peerage 1965

Correspondence with Lord Penney, re choice of title, and Hinton's original wish to adopt 'Lord Hinton of Calder Hall'.
Included here is letter from W.L. Owen, on war work, May 1945.
Both letters have later ms. comments by Hinton.
Correspondence re induction to House, title and bearings, 1965.
Description and photographs of bearings, and later (1981) related correspondence with Tisbury Local History Society (Hinton's birthplace).
Letters of congratulation A - F.
G - M.
P - T and unidentified.

### Offers of retirement posts

A.192	Stothert & Pitt Limited	1964-65
A.193	Country Ide Line to d	
A. 195	Courtaulds Limited	1964-65, 1968

A. 194	Whessoe Limited	1964-65
A.195	Ministry of Health	1965-66, 1968

## **Photographs**

A.196 Correspondence re portrait photographs of Hinton, 1966 (for Institution of Mechanical Engineers), 1970 (National Portrait Gallery).

## Rumford Medal

A.197 Letter notifying award of Royal Society Rumford Medal, 1970. Hinton's reply to a letter of congratulation with his ms. note 'Many similar letters received'.

### Honours 1973, 1974

- A.198 Honorary Fellowship, Institution of Civil Engineers. Includes Hinton's recollections of his early association with the Institution in 1930s.
- A.199 Honorary Membership, The Metals Society.
- A.200 Institution of General Technician Engineers. Hinton was first Honorary Fellow.

## Order of Merit 1976

- A.201 Arrangements for investiture.
- A.202-A.205 Letters of congratulation, a few replies, including recollections from all periods of Hinton's career.

A.202	B - D		A.204	0 - T	
A.203	G-M		A.205	w-z	

## Honours, 1977, 1978

- A.206 Honorary Membership, Institute of Fuel, 1977
- A.207 Award of first Hinton Medal of the Institution of Nuclear Engineers, 1977.
- A.208 Mark Twain Society, 1978.

## Honours, 1981-83

- A: 209 Honorary Fellowship, Institution of Municipal Engineers, 1981.
- A.210 Correspondence, etc. re Society of Retired Chartered Engineers, 1982-83.
- A.211 re Honorary Fellowship, Society of Engineers, 1983.

### Hinton's last illness and death

- A.212 Letters and cards received while Hinton was in hospital, some with replies by Hinton or by Mrs. Ellis; includes a little correspondence received after Hinton's death, answered by Mrs. Ellis.
- A.213 Cards with no reply.

Correspondence with Churchill College, Cambridge, re Hinton's papers.

- A.214 1968-70
- A.215 1971-77
- A.216 1982 Includes Hinton's letter to Master, April 1982, describing work on design of various atomic power stations (6 pp. typescript).

# Gifts, endowments and bequests

A.217	Cheshire Masonic Covenants, 1970
	Council of Engineering Institutions, 1977
	Doncaster and District Hospitals, 1979
A.218	Institution of Mechanical Engineers, 1972-75
A.219	Fellowship of Engineering, 1981
A:220	Home Farm Trust, 1981
1. 19	Risley Drawing Office Apprenticeship Design Prize, 1981

## Obituaries and tributes

A.221

Obituary of Hinton, The Times (photocopy).

Address by M.M. Gowing at the Service of Thanksgiving, Westminster Abbey, 26 October 1983 (photocopy).

## FAMILY AND PERSONAL CORRESPONDENCE

A.222 Family letters; from father, and from uncle, on Hinton's knighthood, 1951.

Also included here is letter, 1970, re upkeep of Hinton's mother's grave, and letter, 1973, re Hinton's father's articles on Lacock Church.

- A.223 Correspondence with Joan Hinton (sister), 1951 (on knighthood), 1971, 1973 (Hinton's carbons only).
- A.224 Death of Lady Hinton.

Folder includes list of letters of condolence received; 'Mourn over the death of Lady Hinton' by Japanese friend; correspondence 1974-75 re Hinton's gift of dress and accessories worn by his wife at Bath University to Museum of Costume, Bath.

- A.225 Letters to C. Mole (grandson), 1981-83.
- A.226 Correspondence with R. Tanner (former schoolmaster at lvy Lane School) with family and personal recollections, 1977-82. Includes draft for Hinton's speech for Dedication Service of Church Hall at Tisbury, December 1977, read for him by Tanner.
- A.226A Brief correspondence 1983 re Tisbury Team Ministry.

## Biographical and autobiographical

## MISCELLANEOUS

A.227	Address book.
A.228	Presentation folder expressing the appreciation of Royal Swedish Academy of Sciences, on the occasion of the Axel Axson Johnson lecture 1957. Includes photograph. See also B.8.
A.229	Christmas cards 1964-68 and n.d., illustrations and text by hand, featuring power stations and other technological subjects.
•	70th birthday card, from staff at Springfields.

A.230, A.231 Invitations 1980-83, some with replies.

SECTION B ENERGY B.1 - B.145

B.1 -B.58 LECTURES

B.59-B.141 GENERAL CORRESPONDENCE AND PAPERS

B.142-B.145 BACKGROUND MATERIAL

### LECTURES

The lectures are presented as arranged by Hinton and reflect his views on their value.

B.1 -B.41	Atomic Energy
B.42-B.58	Electricity Supply

### ATOMIC ENERGY

B.1-B.17 'Atomic energy major papers'

Contents of a folder thus titled.

B.1 Contents list (20 items; 10, 11, 17 and 19 not found).

B.2 'Atomic Energy made easy', n.d.

Hinton's ms. notes for lecture, with a later ms. identification by him: 'They are the notes for the Risley induction lecture on which "ABC" of Atomic Energy was based'. See B.16, B.17.

B.3 'Atomic Energy developments in Great Britain', Industrial Conference, New York, 31 October 1953.

10pp. draft with later ms. note by Hinton 'worth glancing through because it was the first lecture on the industrial effort in the UK'.

B.4 'Nuclear Reactors and Power Production', James Clayton Lecture to Institution of Mechanical Engineers, 26 February 1954.

Printed version (CEGB) with 3pp. typescript addendum.

B.5 'The Graphite-Moderated, Gas-Cooled Pile and its place in Power Production', International Conference on the Peaceful Uses of Atomic Energy, Geneva, August 1955.

'Notes for Geneva' (11pp.); printed version (UKAEA).

B.6 'British Thoughts on Nuclear Power', UNIPEDE Conference, London, 19 September 1955.

11pp. duplicated typescript; 1p. list of diagrams.

B.7 'Speech on "Safety"', Thurso, December 1955.

4pp. (2 copies); 1p. extract from speech, dated 26 March 1979.

B.8 'The Future for Nuclear Power', Axel Johnson Lecture, Stockholm, 15 March 1957. See also A.228.

Photocopy of printed version (Royal Swedish Academy of Engineering Science); background material. The lecture was given on the occasion of the presentation of the Axel Johnson award to Hinton who reflects on the occasion and the importance of the award, Memoirs, p.372.

B.9 'The Development of Nuclear Power in the United Kingdom', Scientific American, 1958.

14pp. types cript 'final draft', 10 December 1957; 'Addenda' to paper (2 versions). Hinton describes the paper as 'nothing more than journalism'.

B.10 Melchett Lecture, Institute of Fuel, 19 February 1958.

20pp. 'final draft' (photocopy).

B.11 'The Development of Nuclear Energy for Electricity Supply in Great Britain', British Electrical Power Convention, Brighton, 17 June 1958.

Printed version only.

B.12 'A Review of the Future of Nuclear Reactor Systems in the Light of Available Research and Operating Experience', World Power Conference, Montreal, September 1958.

19pp. typescript draft; printed version, with L. Rotherham as co-author. Hinton notes on the typescript draft that, while the philosophy was his, the details were provided by others.

B.12A 'The Development of Nuclear Power in Competition with other Power Sources in U.K.', Oxford University Scientific Society, 6 November 1959.

Miscellaneous typescript notes; figures.

B.13 'The Lessons of the Past Seven Years in Atomic Energy',
 World Power Conference - Madrid Sectional Meeting, 7 June 1960.

8pp. typescript. Hinton describes this general address as 'short but important'.

B.14 'The Economics of Nuclear Power in Great Britain' (with F.H.S. Brown and L. Rotherham), World Power Conference Sectional Meeting in Madrid, 7 June 1960.

22pp. duplicated typescript; figures. A later ms. note by Hinton records that although he 'was responsible for the skeletal shape of this paper and supervised its preparation, most of it was written by Rotherham's and Brown's staff'.

B.15 'The development of atomic energy and its industrial application', TUC conference on radiation in industry, 13 October 1960.

15pp. typescript draft; figures.

B.16, B.17 Series of talks for Australian Broadcasting Commission: 'The ABC of Atomic Energy', September 1964. (Revision of BBC series in 1958.)

B.16 Typescript drafts for 'Trailer to series' and six talks.

B.17 22pp. typescript draft for 'revised booklet to accompany talks'. In a later ms. note with this draft Hinton records his opinion that the revised version was 'better than the original talks because I have been able to eliminate some of the nonsense forced on me by the Public Relations department'.

For the booklet published to accompany the BBC talks in 1958, see F.110. For gramophone records of the BBC talks, see K.36.

B.18-B.31

'Atomic energy - minor papers'. Contents of a folder thus titled.

B.18 Contents list (16 items; 1, 2, 6, 9 and 13 not found).

B.19 'Atomic energy in industry', BBC 'lecture and interview', February 1955.

Script, 'questions suggested by Sir Christopher Hinton', etc.

B.20 'Notes for a lecture to the Federation of British Industries at Birmingham', 25 November 1955.

11pp. typescript.

B.21 'Draft of opening remarks for the symposium of the B.N.E.C.[British Nuclear Energy Society]', 30 November 1955.

3pp. typescript.

B.22 'Leonardo da Vinci lecture at the Institution of Mechanical Engineers', 11 April 1956.

18pp. typescript.

B.23 'First draft for an introductory note for the journal of nuclear energy edition dealing with the opening of Calder Hall', August 1956.

2pp. typescript.

B.24 'Nuclear reactors for the generation of electrical power', Endeavour, April 1957.

Heavily-corrected proof.

B.25 'Fifth draft of Financial Times article on the siting of nuclear power reactors', 1 March 1957.

4pp. typescript with ms. note 'this copy not used'.

B.26 'The Nuclear Propulsion of Ships' (with R.V. Moore), Institution of Marine Engineers, 27 November 1957.

Advance copy of printed version.

B.27 'Nuclear Power', <u>Times</u> Supplement to mark Tercentenary of the Royal Society, July 1960.

B.28 Speech at Symposium on the Advanced Gas-cooled Reactor, British Nuclear Energy Society, 14 March 1963.

4pp. typescript.

B.29 'The uses of nuclear power in Britain', lecture for Commonwealth -American current affairs unit, July 1966.

18pp. typescript.

B.30 Not used.

B.31 'Two decades of nuclear confusion', <u>New Scientist</u>, 28 October 1976. (Not in contents list at B.18.)

Printed text only.

B.32-B.34 'Atomic Energy Chemical Processes'

Contents of a folder thus titled.

B.32 'The Chemical Separation Processes at Windscale Works',
 Castner Memorial Lecture, Society of Chemical Industry, 23 February
 1956.

Photocopy of printed text.

B.33 'Solvent Extraction of Plutonium'

Booklet published by UKAEA for Royal Society Tercentenary celebrations exhibition, 1960.

B.34 'Lecture Notes - History of Springfields', n.d.

8pp. typescript,

B.35-B.41 'Atomic Energy Lectures given in Japan'

Contents of a folder thus titled. There is an account of Hinton's 1956 'Japanese Interlude' in Memoirs, pp.342-350.

B.35 Contents list (6 items).

Letter of thanks and appreciation from British Ambassador.

B.36 'Atomic Energy in Great Britain', 1st lecture, April 1956.14pp. typescript.

B.37 'Second lecture - for Scientists', April 1956.

17pp. typescript.

B.38 'A Talk to People in the Inner Circle of Atomic Energy in Japan', 3rd lecture, April 1956.

16pp. typescript.

B.39 'Article for the Yomiuri Shimbun Special Edition on the Occasion of the Opening of Calder Hall', 1956.

2pp. typescript.

B.40 'The problems and prospects of nuclear power', lecture to Atomic Industry Forum in Tokyo, 28 November 1962.

22pp. typescript; tables and figures.

### Energy

B.41 'Nuclear Power Plants in England and Wales', lecture to be given in Osaka, Japan, 30 November 1962.

15pp. typescript; figures.

### ELECTRICITY SUPPLY

B.42-B.49

'Electricity Supply - Short Papers'

Contents of a folder thus titled.

B.42 Contents list (20 items; 1, 2, 5, 11, 16, 18 and 20 only were found).

B.43 'Address for Fuel and Power Group of the Parliamentary Labour Party', 16 March 1960.

12pp. typescript; table.

B.44 'History of Electricity Supply Industry', notes for speech at opening of 'CEGB/TVA/Ontario Hydro Conference', 20 June 1960.

3pp. typescript.

B.45 'Article for the "Guardian"', 25 October 1960.

6pp. typescript.

B.46 Notes for Chairman's speech, CEGB press conference on annual report 1961/2, 18 September 1962.

8pp. typescript.

B.47 'Patterns of Growth - The Gas and Electricity Supply Industries', address to centenary meeting of Institution of Gas Engineers, 14 May 1963.

11pp. typescript.

B.48 'Notes for Chairman's Farewell Meetings with Local Advisory Committees, Autumn 1964'.

7pp. typescript.

B.49 'Electrical Power in England and Wales', lecture for
St. Dunstan's College Armstrong Society, 29 January 1964.
13pp. typescript; figures.

B.50-B.54 'Electricity Supply'

Contents of a folder thus titled.

B.50 Contents list (7 items; 2, 5 and 7 only were found).

B.51 'The British Electricity Transmission System', British Electrical Power Convention, Eastbourne, 13 June 1961.

Photocopy of printed text.

B.52 'Electrical Power in England and Wales', lecture given at Perth University, 9 October and in Adelaide, 15 October 1962.

15pp. typescript; figures. A ms. note records that this was 'the Mitchell Memorial Lecture, given at Stoke-on-Trent, 15 November 1961 revised and brought up to date'.

B.53, B.54 'The Future of Power Technology', The Citrine Lecture, British Electrical Power Convention, 1965.

45pp. typescript + figures (2 folders).

#### B.55-B.58

#### 'Amenity'

Contents of a folder thus titled. There is an account of Hinton's interest in amenity questions while Chairman of the CEGB in Memoirs, pp.478-481.

B.55 Contents list (3 items).

B.56 'Power Production and Transmission in the Countryside: Preserving Amenities', Royal Society of Arts, 25 November 1959.

Printed text only.

B.57 'The Amenity Problem as it affects the Electricity Industry', address to County Councils Association, 5 April 1960.

5pp. typescript paginated 9-13 and note explaining missing text.

B.58 'The Problem of Growth in the Electricity Supply Industry', address to conference of National Parks Authorities, Harlech, 5 May 1961.

15pp. typescript.

### GENERAL CORRESPONDENCE AND PAPERS

B.59 -B.97	Nuclear Power
B.98 -B.125	Fast Breeder Reactors
B.126-B.141	Miscellaneous

### NUCLEAR POWER

These are the contents of Hinton's files on nuclear power 'excluding AEA papers and BNFL'. The period covered is 1966-83 and the material for 1966-79 had a note 'examined by Lord Hinton - 10.12.81.'

B.59	1966 April
B.60	1967 February-July. Correspondence with Clerk to the House of Commons Select Committee on Science and Technology re Committee's enquiry into the UK nuclear reactor programme.
B.61	1967 December and n.d. Includes 7pp. typescript by Hinton on the future of the British nuclear power industry 'probably written about the end of 1967' according to Hinton's later (1981) ms. note.
B.62	1968 January, February. Includes exchanges with H. Kronberger and P.M.S. Blackett <u>re</u> desalination of sea water.
B.63	1968 May, July, August. Includes Hinton's 'Notes on draft biographical memoir on Sir John Cockcroft' (6pp. typescript) with covering letter to its author W.G. Penney.

B.64	1969 April, May, December.
B.65	1970 September-December. Includes correspondence re amenity questions; requests for information and advice re the American light water reactor (from T.E. Allibone), Sir John Cockcroft (from George G. Harrap & Co.) and political control of atomic energy programme (from C.E.S. Franks).
B.66	1971 January. Includes exchange with W.G. Penney on Hinton's 1968 World Bank report on nuclear power.
B.67	1971 February-April. Includes correspondence re the state of atomic energy in the UK and the training of engineers.
B.68	1971 May-August. Includes letter from the President of Atomic Energy of Canada Limited with 'heavy water information' and drafts of J.V. Dunworth's obituary notice of W.L. Owen with Hinton's comments.
B.69	1971 October, November. Includes correspondence with Director, Division of Reactor Development and Technology, US Atomic Energy Commission and letter from Hinton to B.H. Flowers re Flowers's Leverhulme Lecture.
B.70	1972 January.
B.71	1972 February. Correspondence re Oxford Professorship of the History of Science.
B.72	1972 June. Correspondence with L. Rotherham re his Royal Society memoir of H. Kronberger. Folder includes draft of memoir.
B.73	1972 July, November, December. Principally material re C.E.S. Franks's manuscript on 'Parliament and Atomic Energy'. Folder includes Hinton's 'Comments' (16pp. typescript). For the draft manuscript and a further note on it by Hinton, see B.131-B.139.
B.74	1973 January-May. Principally re Canadian nuclear development.
B.75	1973 June-December. Principally re reactor design.

B.76	1974. Includes correspondence re the energy crisis, 'galloping conductors', the choice of the Dounreay site and long-lived radioactive wastes.
B.77	1975. Correspondence re Institution of Nuclear Engineers and draft press notice headed 'Royal Commission on Environmental Pollution's views on demonstration commercial-scale fast breeder nuclear power station made known to Prime Minister'.
B.78	1976 February, March. Includes correspondence with S.H.U. Bowie re uranium, and Ann Moyal re nuclear developments in Australia.
B.79 .	1976 April, May. Includes draft article for <u>Sydney Morning Herald</u> which Ann Moyal based on her correspondence and discussions with Hinton and Hinton's 'amended script' of the article.
B.80	1976 June, July, September. Includes copy of the Ann Moyal article as published in the <u>Sydney Morning Herald</u> ; also questionnaire on the evolution of nuclear safety and its practice in the nuclear industry filled in by Hinton and paper on quantitative safety analysis in the nuclear industry annotated by Hinton (both sent to him by O. Critchley).
B.81	1976 October-December.
B.82	1977 March-June. Includes correspondence with the Institution of Nuclear Engineers re its proposal for a 'Hinton medal' and D.G. Richards re his official biography of Lord Portal.
B.83	1977 September, October. Includes Hinton's reflections on the development of the nuclear industry.
B.84	1978. Includes paper on 'Energy prospects and nuclear power in the global era' annotated by Hinton.
B.85	1979 January-May. Includes statement by W.K. Davis, Vice-President, National Academy on Engineering on the accident at Three Mile Island Nuclear Plant and F.L. Tombs's 'In-transit Notes on Visit to USA/ Australia 19 March-7 April 1979'.
B.86	1979 August, September. Includes correspondence re BBC Panorama programme on atomic energy.

Energy

B.87	1979 September 5. One letter only, on reactor sites.
B.88	1979 October-December
B.89	1980 March 21. One letter only, on choice of reactor design.
B.90	1980 March-May. Includes correspondence and papers re Institution of Nuclear Engineers.
B.91	1980 July-September.
B.92 .	1980 October. Includes transcript of the evidence of W.K. Davis before the House of Commons Select Committee on Energy.
B.93	1981 January, February. Includes correspondence <u>re</u> fast nuclear breeder reactors.
B.94	1981 March-September. Includes Hinton's recollections of personnel and incidents in early nuclear years; also exchange with A.H. Cottrell re Cottrell's monograph on the safety of nuclear power.
B.95	1982 November, December.
B.96	1983 January, February.
B.97	1983 March, April. Includes Hinton's comments on the recent history and present state of the nuclear power industry and on technological innovation in British industry with particular reference to nuclear energy

#### Energy

### FAST BREEDER REACTORS

B.98-B.104 '1st Visit to Prototype Fast Breeder Reactor at Dounreay - For Lord Rothschild's CPRS [Central Policy Review Staff] - 1974'.

Contents of a folder so inscribed.

B.98 1974 May, June. Rothschild's letter of 13 May asks if Hinton was prepared to visit the Prototype Fast Breeder Reactor at Dounreay and let him know what he thought about it. Folder also includes 11pp. typescript by Hinton 'The Fast Reactor. A basis for thought', 19 June.

B.99 1974 July, August. Includes programme for Hinton's visit to Risley and Dounreay, 12-14 August, 'Notes for Fast Reactor brief for visit of Lord Hinton', and 'Brief for Lord Hinton. The general case for developing a Fast Reactor capability in the UK'.

B.100 'Notes for discussion on CFR [Commercial Fast Reactor] with Lord Hinton ... August 12 1974' prepared by The Nuclear Power Group Limited, Risley.

B.101, B.102 'Report to Lord Rothschild on the Fast Reactor Project'.

34pp. + 3pp. typescript 'first draft', August 1974 (2 versions).

B.103 1974 September-November. Includes Hinton's letter of 2 September listing 'minor modifications' to the report.

B.104 'The Fast Breeder Reactor', Central Policy Review Staff, September 1974.

This is the printed version of Hinton's report with a preface by CPRS.

B.105-B.120 '2nd Visit to Prototype Fast Breeder Reactor at Dounreay - For Sir Kenneth Berrill - 1975'.

Contents of a folder so inscribed.

B.105 1975 July. Hinton agreed to undertake a personal investigation (in collaboration with L. Rotherham) into the prospects for a commercial fast reactor. Folder includes 'notes on meeting with AEA, D/En, CPRS and Lord Hinton ... 18 July 1975'.

B.106 1975 August (1). Includes 'special paper' on 'Fast Reactor Steam Generators' prepared for Hinton's visit to Risley.

B.107 1975 August (2). Includes paper on Fast Reactor Collaboration between the UK, France and Germany.

B.108 1975 August (3). Includes notes of discussions at Risley, 19–21 and 29 August.

B.109 1975 September (1). Includes draft report on the British fast reactor project 'written by Lord Hinton for discussion with Dr. Rotherham' (22pp.).

B.110 1975 September (2). Includes comments on and revisions of the draft report.

B.111 1975 October. Includes amended report sent to K. Berrill, 6 October (27pp.).

B.112 1975 December-1976 January. Correspondence arising from submission of report.

B.113 1976 February, May. Continuing correspondence arising.

B.114 1976 July. Photocopy of 'bowdlerised' version of report sent to Swedish colleague, with Hinton's covering letter.

B.115 Small format notebook used by Hinton in respect of visits to Risley and Dounreay.

B.116 Similar.

B.117 Top copy of Hinton's and Rotherham's report 'The British Fast Reactor Project - September 1975'.

B.118 Carbon copy, annotated by Hinton.

B.119, B.120 Background material.

B.121-B.125

Paper for Electricity Supply Research Council on Fast Reactors, 1983.

B.121 'Where is work on fast reactors leading us?'

6pp. 'unfinished' draft (carbon), 27 May 1983; figures. At the end of the draft is Mrs. Ellis's typescript note:

'This was only a very rough "first draft" of a paper Lord Hinton was intending to submit to the ESRC for their meeting at Dounreay in July 1983. Unfortunately he only got as far as this typescript when he had his fall and never recovered enough to complete this paper.'

Mrs. Ellis also added a ms. note at the head of the draft 'Top copy was sent to Sir Alan Cottrell, Chairman, ESRC on 18/7/83'. Hinton died on 22 June 1983.

See A.185 for correspondence from hospital reflecting Hinton's anxiety to complete this paper during his last illness.

B.122 Hinton's ms. and typescript notes. Includes Hinton's note on the Three Mile Island incident, 10 December 1982 (2pp. typescript).

B.123 Correspondence, December 1982-February 1983, found with draft and notes.

B.124, B.125 Background material (2 folders).

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# Energy

# MISCELLANEOUS

A chronological sequence of miscellaneous papers, 1956-75.

B.126	Opening of the Calder Hall Atomic Power Station, 17 October 1956.
	Programme, overseas guest list, seating plan, etc.
	See also K.5.
B.127	Letter from Sir Richard Nugent, Chairman of the House of Commons Select Committee on nationalised industries, 6 June 1962.
	Nugent wrote at the end of the Committee's enquiry into the electricity supply industry that taking evidence from Hinton had been a remarkable experience:
	'Such a long and arduous examination is bound to penetrate the outer crust of personality and show the true nature of a man. Your brilliant mind and generous heart shine through, and left me with an impression which I shall always remember and treasure.
	'This has been a rich and unexpected bonus for me as Chair- man of the Committee, which will put me permanently in your debt! '
B.128	'The Electricity Supply Industry'
	10pp. typescript, with ms. corrections and additions. Ms. inscriptions at head of the paper indicate that it was 'for Lord Douglass' and 'typed 25.11.68'.
B.129	'Some questions on Fuel Policy'
	15pp. typescript 'second draft'. Ms. additions tentatively date this paper in November 1968.
B.130 ·	'The Philosophy of Generating Plant Design'
	4pp. typescript (carbon), 2 July 1969. Ms. inscriptions at head of the paper indicate it was 'sent to Dr Forrest' and 'for possible circulation to ESRC'.

B.131-B.139	'Parliament and Atomic Energy: The Political Control of a Government Programme'

Duplicated typescript draft sent to Hinton for comment in 1972 by its author, C.E.S. Franks. For related correspondence, see B.65, B.66, B.68, B.73, B.74.

B.131 Hinton's ms. note on the value of the manuscript, table of contents and chapter 1.

B.132	Chapter II
B.133	Chapter III
B.134	Chapter IV
B.135	Chapter V
B.136	Chapter VI
B.137	Chapter VII
B.138	Chapter VIII
B.139	Chapter IX

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B.140, B.141

Plowden Committee of Inquiry into the Structure of the Electricity Supply Industry, 1974-75.

B.140 1974 December-1975 January. Includes Lord Plowden's invitation to Hinton to submit a written statement of his views, 19 December and Hinton's 'Note for the Committee of Inquiry into the Structure of the Electricity Supply Industry', 9 January (15pp. typescript carbon).

B.141 1975 March, April, December. Includes Hinton's oral evidence to the committee, 10 April (4pp.).

## Energy

## BACKGROUND MATERIAL

B.142	Typescript lists of reference material on nuclear power, electricity supply, etc., with index. In original binder.
B.143	Extracts from newspapers and specialised publications on energy matters (typescript and photocopies); also Hinton's own notes for the file, some relating to House of Lords committee work, 1982–83. In original binder.
B.144	Duplicated and printed energy papers, annotated by Hinton.
B.145 ·	'Lectures by other people' (Hinton's category), 1956-81.
	Some have annotations, comments, etc. by Hinton. A few only relate to energy questions.

SECTION C ENGINEERING C.1 - C.266

C.1 -C.6	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
C.7	BRITISH ASSOCIATION CO-ORDINATING GROUP
C.8 -C.75	COUNCIL OF ENGINEERING INSTITUTIONS (CEI) With an introductory note
C.76 -C.248	THE FELLOWSHIP OF ENGINEERING With an introductory note
C.249	INSTITUTION OF CIVIL ENGINEERS
C.250	INSTITUTION OF ELECTRICAL ENGINEERS
C.251-C.260	INSTITUTION OF MECHANICAL ENGINEERS
C.261-C.264	NATIONAL ACADEMY OF ENGINEERING
C.265, C.266	NATIONAL ACADEMY OF ENGINEERING (MEXICO)

C.3

### Engineering

C.1-C.6	AMERICAN SOCIETY OF MECHANICAL ENGINEERS, 1973-83 Hinton was elected Honorary Member of the Society in 1973. The remaining papers relate to his nomination of other British engineers for the same honour.					
		C.2	1974	C.5	1979-80	

1978 (1)

### C.7

BRITISH ASSOCIATION CO-ORDINATING GROUP, 1976-77

C.6

1981-83

Brief correspondence and 'Paper 8' (annotated by Hinton) on 'education recruitment and deployment of professional level engineers to improve the performance of manufacturing industry and in particular production management'.

## C.8-C.75 COUNCIL OF ENGINEERING INSTITUTIONS (CEI), 1967-83

In 1966 the Council of Engineering Institutions was brought into being under the terms of a Royal Charter. HRH Prince Philip, Duke of Edinburgh, served as its first President for ten years (the maximum term of office). In 1976 the CEI was reorganised and Hinton assumed the Presidency initially for a term of five years, subsequently extended. Much of the general correspondence and papers relates to the various proposals for the reorganisation of the engineering profession including those of the Finniston Committee of Enquiry (1980). The MacRobert Award, administered by the CEI during the period Hinton was associated with it, is represented by separate sequences of material at C.38-C.75.

C.8-C.29 'General Correspondence', 1967-83.

Contents of a very bulky folder so inscribed.

C.8 5pp. typescript notes headed 'Fulton Committee', January 1967.

C.9 'Committee on the Civil Service. Note of a meeting held at H.M. Treasury ... 14th February 1967' (29 pp. typescript). Hinton was one of the five witnesses from the CE1.

C.10 1967 August. Secretaryship of the CEI.

C.11 'Draft paper on future activities of CEI', 1968, with ms. note by Hinton dated 23 November 1981 'I am almost certain that I wrote this paper'. See also C.30.

C.12 1971 October, November. Proposal for a CEI Senate. Hinton's carbon of 9 November has later ms. note by him 'Nothing came of this proposal which was one of Prince Philip's bright ideas'.

C.13 1974 January. Environmental engineering exhibition.

C.14 1974 November, December. Future organisation of the engineering profession.

C.15 1975 March 26. 'Report of the CEI Executive Committee to the Board of CEI on the future organisation of the engineering profession', annotated by Hinton.

C.16 1975 September-December. Future organisation of the engineering profession.

C.17 1976 January. Future organisation of the engineering profession. Includes 2 copies of note from the Presidents of the Institutions of Electrical and Mechanical Engineers, with different annotations by Hinton.

C.18 1976 February, March. Organisation of engineering profession. Includes 'Extract from the speech given by Lord Hinton at the Guildhall on Tuesday, February 10th 1976'.

C.19 1976 April-October. Organisation of engineering profession. Includes Hinton's 'Proposals' for CEI constitution and terms of reference, 12 April.

C.20 1977. CEI branches; Science Centre Project; Presidency of the CEI and the Fellowship.

C.21 1978. Presidency of the CEI and the Fellowship; Contemporary Scientific Archives Centre; MacRobert Award.

C.22 1979. Recommendation; corporate membership of constituent institutions.

C.23 1980. Presidency of the CEI.

C.24 1981. Committee on Creativity and Innovation; financing of the Engineering Council.

C.25 1982 January-June. Engineering Council; Foundation for Science and Technology; energy and raw materials questions.

C.26 1982 July-September. Engineering Council.

C.27 1982 October. Engineering Council's Policy Statement. Includes copy of statement annotated by Hinton and Hinton's letter to the Chairman of the CEI abstracting the Hansard record of debates on the Industry Bill.

C.28 1982 November. Engineering Council.

C.29 1983 February-June. Includes copy of bye-laws of Engineering Council annotated by Hinton.

C.30

Papers re possible central building for engineering institutions, 1967-68.

Brief correspondence (letter from the CEI Secretary of 9 February 1968 has later explanatory note by Hinton dated 30 November 1981); draft paper on 'A Combined C.E.I. Centre'; analysis of replies to questionnaire on joint housing; analysis of CEI activities under headings 'work done or in hand' and 'future developments'.

C.31, C.32 CEI Parliamentary Affairs Committee, 1970-72.

Correspondence, memoranda and minutes. The original folder (not retained) bore a ms. inscription 'examined by Lord Hinton 1/12/81'.

C.31 1970. New Education Act; Hinton's membership of Parliamentary affairs committee.

C.32 1971-72. Industrial relations, etc.

## C.33-C.35 CEI/CSTI Council for Environmental Science and Engineering, 1973-76.

Correspondence and committee papers. On the formation of the Council in 1973, its chairman, K.C. Dunham, invited Hinton to become a member. He resigned in 1976 because his other commitments were so heavy.

C.33 1973. Includes annotated agenda of 'formation' meeting (16 April) and Hinton's 4pp. letter of 19 April to M.W. Leonard setting out his views on the problems facing the Council and what its approach should be.

C.34 1974. Minutes only, of fifth and seventh meetings of the Council.

C.35 1975-76. Includes minutes of ninth meeting and Hinton's letter of resignation.

'CEI - Energy Crisis 1974'.

Contents of a folder so inscribed: correspondence, 'notes of a meeting of the CEI Chairman's Energy Panel' and photocopies of letters to <u>The</u> <u>Times on the Energy Crisis</u>.

C.37

Press-cuttings re CEI affairs, 1975-76 (photocopies). Many relate to Hinton becoming President of the CEI in succession to the Duke of Edinburgh.

C.36

### C.38-C.75 The MacRobert Award

The MacRobert Award, funded by the MacRobert Trusts, is made annually in recognition of 'an outstanding contribution ... by way of innovation in the fields of engineering or the other physical technologies or in the application of the physical sciences'. During the period when Hinton was concerned with the Award, the winner was nominated by the Board of the CEI on the advice of an Evaluation Panel which included representatives of the Royal Society as well as of the CEI Groups. Hinton played an important part in the preliminary negotiations between the MacRobert Trustees and the CEI and served as chairman of the Evaluation Panel for many years before offering his resignation in March 1977. The first award was made in 1969.

### C.38-C.52 'MacRobert Award - Correspondence', 1968-77.

Contents of a very bulky folder 'examined by Lord Hinton Dec. '81'. Includes Hinton's correspondence with the Secretary of the MacRobert Trustees, the CEI MacRobert Award office, members of the Evaluation Committee and others.

C.38	1968	C.45	1971 December
C.39	1969	C.46	1972
C.40	1970 January	C.47	1973 February-September
C.41	1970 February-April	C.48	1973 November, December
C.42	1970 May, June	C.49	1974
C.43	1970 August-November	C.50	1975
C.44	1971 February-April	C.51	1976
	C.52 19	77	

C.53-C.59

Committee Papers, 1968-76

Contents of a folder 'examined by Lord Hinton 15.2.79 and re-examined 4.12.81'.

Minutes, memoranda, evaluation sheets (short-listed topics considered against four criteria: merit of conception, merit of evolution to practical use, prestige and national prosperity) and a little correspondence.

C.53	1968-69	C.56	1973
C.54	1970	C.57	1974
C.55	1971-72	C.58	1975-76

C.59 MacRobert Award shortlists, 1969-76; membership of evaluation committee, 1974-76.

C.60-C.74 MacRobert Award winners, 1969-75

Miscellaneous material including draft statements prepared for CEI Board, public announcement of award, etc.

C.60 1969. Award to Freeman, Fox and Partners and Rolls-Royce, Bristol.

4pp. typescript statement re award winners.

C.61, C.62 1970. Award to British Petroleum.

C.61 Duplicated material from BP re their successful submission; letter from M.J. Lighthill.

C.62 'Speech 15.12.70' on 'The B.P. Exploration of the Alaskan North Slopes Oilfield'.

C.63 1971. Award to Gas Council.

4pp. typescript statement re award winner (2 copies); duplicated and printed background material.

C.64 1972. Award to EMI.

'Press conference. The new invention of X-ray techniques used in the EMI-scanner', 22 November (18pp. typescript).

C.65, C.66 1973. Award to Dunlop.

C.65 5pp. typescript draft re award winner.

C.66 Correspondence with G.W. Turner.

C. 67-C. 69 1974. Award to ICI.

C.67 Note of meeting between Evaluation Committee and ICI representatives, 17 October 1974; Hinton's ms. notes.

C.68 4pp. typescript statement on award winner; ms. notes for speech; letters of thanks from IC1.

C. 69 'Methanol Synthesis by ICI Low Pressure Process' (ICI publication annotated by Hinton).

C.70-C.73 1975. Award to British Railways Board and Westland Helicopters.

C.70 'Note of the second visit of the MacRobert Award Evaluation Committee to the Advanced Passenger Train', 8 October 1975; material supplied by British Railways Board Research and Development Division in support of their submission.

C.71 4pp. typescript draft 'The development of new principles for the design of suspension and support systems for railway rolling stock', 9 October 1975, with ms. annotations by Hinton and R.C. Bond; 5pp. typescript draft 'Developments in Railway Vehicle Suspensions', 30 October 1975, with ms. annotations by Hinton and (at head of first page) the date '2 December 1975' and 'Copy sent to L. Zuckerman 10/12/81'; correspondence with R.C. Bond, October, November 1975; 1p. ms. note on the MacRobert Award.

C.72 Report of Evaluation Committee's visit to Westland, 4 November 1975; 9pp. typescript statement + figures on 'The semi-rigid rotor', 19 September 1972, annotated by Hinton.

C.73 'Lynx' (Westland Helicopters Limited publication, 1972) and 'The Lynx Helicopter', 2 December 1975 (6pp. typescript statement by Hinton).

C.74 1976. No award.

Copy of <u>Times</u> article 'Is innovation caught in a poverty trap?' and letter from Hinton to the <u>Times's</u> Technology Correspondent (both 3 December 1976); also MacRobert Award shortlists.

C.75 List of MacRobert Award winners, 1969-82.

#### Engineering

C.76-C.248 THE FELLOWSHIP OF ENGINEERING, 1975-83			
	C.76 -C.179	General correspondence and papers	
	C.180-C.205	Appeals and finance	
	C.206-C.248	Finniston Committee of Enquiry into the Engineering Profession.	

In 1975 the CEI's new Charter and Statutes created a Fellowship of Engineering thus meeting the wishes of Prince Philip for 'the formation of an elite body which would do for engineering what The Royal Society does for the sciences and scientific technology'. In accordance with the terms of the Charter Hinton, as President of the CEI, became President and Chairman of the Fellowship, serving a five-year term to 1981. In his 'Memorandum of Activities from 1970 to 1980' (A.9) Hinton draws attention to some of the difficulties experienced in getting the new organisation off the ground, including the absence of secretarial support and inadequate finances. It is clear from the very extensive documentation which survives how much of the burden of these early years was borne by Hinton and his private secretary, Mrs. Ellis.

Hinton's files of general correspondence and papers relate to the founding, organisation and administration of the Fellowship, including the Annual Distinction Lecture and Annual Soirée. There is very little material relating to selecting members of the Fellowship. For the period of Hinton's Presidency this was the responsibility of a subcommittee chaired by Sir Hugh Ford. Hinton's appeal committee files relate to his efforts to put the Fellowship on a sound financial footing.

Hinton's Finniston Committee papers are presented in a separate subsection under the general heading of Fellowship of Engineering since except on the occasions when he acted in a personal capacity he was acting as President of the Fellowship in respect of the Finniston Enguiry.

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## Engineering

# GENERAL CORRESPONDENCE AND PAPERS, 1975-83

## 1975-76

C.76	1975 December - 1976 March	C.81	1976 August
C.77	1976 April, May	C.82	1976 September
C.78	1976 June (1)	C.83	1976 October
C.79	1976 June (2)	C.84	1976 November (1)
C.80	1976 July	C.85	1976 November (2)

C.86 1976 December

## 1977

C.87	January (1)	C.99	May (2)
C.88	January (2)	C.100	June
C.89	January (3)	C.101	July
C.90	February (1)	C.102	August (1)
C.91	February (2)	C.103	August (2)
C.92	March (1)	C.104	August (3)
C.93	March (2)	C.105	September (1)
C.94	March (3)	C.106	September (2)
C.95	April (1)	C.107	October
C.96	April (2)	C.108	November (1)
C.97	April (3)	C.109	November (2)
C.98	May (1)	C.110	December (1)

C.111

December (2)

## Engineering

<u>1978</u>			
C.112	January	C.120	June (2)
C.113	February (1)	C.121	July
C.114	February (2)	C.122	August
C.115	March (1)	C.123	September
C.116	March (2)	C.124	October
C.117	April	C.125	November (1)
C.118	Мау	C.126	November (2)
C.119	June (1)	C.127	December

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# 1979

C.128	January (1)	C.138	June (2)
C.129	January (2)	C.139	July
C.130	February (1)	C.140	August (1)
C.131	February (2)	C.141	August (2)
C.132	March (1)	C.142	September (1)
C.133	March (2)	C.143	September (2)
C.134	April	C.144	October (1)
C.135	May (1)	C.145	October (2)
C.136	May (2)	C.146	November (1)
C.137	June (1)	C.147	November (2)
	C 140 D 1		

C.148

December

64

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C.149	January (1)	C.157	June
C.150	January (2)	C.158	July (1)
C.151	February (1)	C.159	July (2)
C.152	February (2)	C.160	August
C.153	March	C.161	September
C.154	April (1)	C.162	October
C.155	April (2)	C.163	November
C.156	Мау	C.164	December

## 

C.165	January (1)	C.168	March
C.166	January (2)	C.169	April-June
C.167	February	C.170	July-December

## 

C.171	January	C.174	March
C.172	February (1)	C.175	April-July
C.173	February (2)	C.176	September-November

## 

C.177	January, February		C.178	March, April
	C.179	May		

Engineering

## APPEALS AND FINANCE

'Fellowship of Engineering - Appeals Committee 1977/80'

Contents of a folder so inscribed and with a further ms. note 'examined by Lord Hinton 19.11.81'.

C.180	1977 May	C.190	1979 February (1)
C.181	1977 August-November	C.191	1979 February (2)
C.182	1978 July, August	C.192	1979 March
C.183	1978 September, October	C.193	1979 April
C.184	1978 November	C.194	1979 May
C.185	1978 December (1)	C.195	1979 June
C.186	1978 December (2)	C.196	1979 July-October
C.187	1979 January (1)	C.197	1980 February-May
C.188	1979 January (2)	C.198	1980 July-November
C.189	1979 January (3)	C.199	Appeal brochure (1980)

'1 Wolfson Foundation 2 B.P. Energy Research Prize 3 Parliamentary and Scientific Cttee.'

Contents of a folder so inscribed and with a further ms. note 'examined by Lord Hinton -19.11.81.'

C.200-C.203 Correspondence re possible financial support for the Fellowship from the Wolfson Foundation.

C.200	1978 July, August	C.202	1979 July-October
C.201	1979 March-May	C.203	1980 February-May

C.204	Correspondence r	e 'BP	Energy	Research	Prize',	August-October	1979.

BP were preparing to launch the prize to stimulate energy research projects in higher education and looked to the Fellowship, together with the Royal Society, to provide a judging panel. Folder includes BP's 'official proposal' to the Fellowship.

C.205 1 letter only, from Secretary of the Parliamentary and Scientific Committee, 29 December 1978.

## FINNISTON COMMITTEE OF ENQUIRY INTO THE ENGINEERING PROFESSION

The Secretary of State for Industry (Eric Varley) announced an enquiry into the engineering profession chaired by Sir Monty Finniston on 5 July 1977. Much of the material in Hinton's Finniston Committee files relates to the preparation of the Fellowship's submission to the Committee and the response of the engineering profession in general and the Fellowship in particular to the Committee's report.

See also D.164, D.165.

### Correspondence

Contents of Hinton's correspondence files relating to the Finniston Enquiry, 1977-81, 'examined by Lord Hinton - 1/12/81.'

C.206	1977 February-November	C.218	1980 April
C.207	1978 January-March	C.219	1980 May, June
C.208	1978 April	C.220	1980 July
C.209	1978 May, June	C.221	1980 August
C.210	1978 July-November	C.222	1980 September
C.211	1979 January, April	C.223	1980 October (1)
C.212	1979 September, December	C.224	1980 October (2)
C.213	1980 January, February	C.225	1980 November, December
C.214	1980 March (1)	C.226	1981 January (1)
C.215	1980 March (2)	C.227	1981 January (2)
C.216	1980 March (3)	C.228	1981 March-July
C.217	1980 March (4)	C.229	1981 August-October

## Submissions

Contents of a very bulky folder inscribed 'Evidence to Finniston Cttee'.

C.230	Department of Industry Press Notices, July and December 1977.
C.231	Submission to the Committee of Inquiry into the Engineering Profession by the Council of the Institution of Electrical Engineers, January 1978.
C.232	The Institution of Chemical Engineers. A Submission to the Committee of Inquiry into the Engineering Profession. (Supplement to the February 1978 issue of <u>The Chemical Engineer</u> ).
C.233	The Council of Engineering Institutions' Submission to the Committee of Enquiry into the Engineering Profession, May 1978.
C.234	Evidence to the Committee of Inquiry into the Engineering Profession. Submitted by the Royal Society and the Fellowship of Engineering, September 1978. (Annotated by Hinton.)
C.235	University of Bath School of Electrical Engineering. Proposals for Support Technology in the 4-Year Industry-Linked Degree, January 1979.
C.236	Further papers relating to engineering at Bath.
C.237	Papers relating to technology and industry in Japan, January, February 1979.
C.238	'Wealth of the Nation – Engineers for an Industrial Future', July 1979. (The Institution of Electrical Engineers.)
C.239	'Comment by the Institution of Mechanical Engineers on the Report of the Committee of Inquiry into the Engineering Profession', n.d.
C.240	'Finniston Report', 13 February 1980. 13pp. typescript paper by Hinton.

C.241	'Consideration of the Report of the Committee of Inquiry into the Engineering Profession'.
	47pp. transcript of tape-recording of meeting of the Fellowship of Engineering, 3 March 1980. Hinton was in the Chair.
C.242	Institution of Structural Engineers 'Response to the invitation from the Department of Industry to comment on the recommendations of the Finniston Committee Report', March 1980.
	Folder includes press release and letter from President of Institution of Structural Engineers to Secretary of State for Industry (Sir Keith Joseph).
C.243	'Response to the Department of Industry by the Council of Engineering Institutions on the Report of the Committee of Inquiry into the Engineering Profession', March 1980.
C.244	Institution of Production Engineers 'Comments on the Report of the Committee of Inquiry into the Engineering Profession', April 1980.
C.245	'An outline constitution for an engineering authority', April 1980. (Joint submission to Sir Keith Joseph from the four leading engineering Institutions.)
	Folder includes press release.
C.246	'Engineering our future', HMSO, 1980. (Summary of Finniston report.)

C.247	Copy of Finniston Report. In ring-back binder.			
	There are 7pp. 'amendments to text', dated 19 November 1979, at the front of the report. This is very probably the advance copy sent to Hinton by Finniston, 14 December 1979 (C.212).			
C.248	Hinton's ms. notes on the Finniston Report (14pp.). Found loose			

Hinton's ms. notes on the Finniston Report (14pp.). Found loose in preceding.

#### Engineering

## C.249 INSTITUTION OF CIVIL ENGINEERS

Brief correspondence re draft report on 'The role of Women in Engineering'.

For Honorary Fellowship and recollections see A. 198.

## C.250 INSTITUTION OF ELECTRICAL ENGINEERS

1970-72

1970

Contents of a folder inscribed 'examined by L. Hinton - 15.4.82'.

1970 correspondence relates to proposed nuclear power station at Stourport-on-Severn and the I.E.E.'s Centenary celebrations (May 1971).

In 1971 Hinton was made an Honorary Fellow and in 1972 he agreed to be filmed 'as a permanent record'. The film took the form of a brief address by Hinton. For Hinton's script see A.10.

#### C.251-C.260 INSTITUTION OF MECHANICAL ENGINEERS

1962-83

Hinton examined his I.M.E. files in April 1982. The surviving material is presented as a chronological sequence.

C.251 1962-64. Includes correspondence re Presidential succession.

C.252 1965. 'Thoughts on the proposal for reorganisation of the Institution of Mechanical Engineers on Divisional Lines'. Hinton's 11pp. draft (2 versions).

C.253 1967-68.

C.254 1969 April-December. Correspondence etc. re education and training for overseas students of engineering. Includes paper by Hinton for 21 July meeting of Joint Overseas Activities Committee.

#### Engineering

C.255 1969 June. Report (sent to Hinton by Secretary, I.M.E.) on meeting at Royal Society to consider papers of distinguished modern scientists, and related correspondence.

C.256 1970. Golden Jubilee of National Certificate Scheme; developing countries; green paper on research; history of engineering education in Britain.

C.257 1971. Hinton's completion of fifty years as a member of the Institution and his election as an Honorary Fellow, etc.

C.258 1972. Includes correspondence and papers re membership trends and philosophy.

C.259 1973-81. Includes 'Note of what was said by Mr. J. Bradbury-Williams, Chairman of the Thames Valley I. Mech. E. when presenting Lord Hinton with a small gift on behalf of the panel', 12 January 1976.

C.260 1982-83. Principally social (invitations to Council Dining Club dinners, etc.) and re bust of Hinton.

#### C.261-C.264 NATIONAL ACADEMY OF ENGINEERING

1976-83

Hinton was elected as a Foreign Associate of the Academy in 1976. This was the first occasion the Academy had elected Foreign Associates.

C.261 1976. Hinton's election; visit of NAE President to Britain.

C.262 1977-78. Invitations to meetings, etc.

C.263 1980-81. Includes correspondence with President NAE on early difficulties of the Academy, its relations with the National Academy of Sciences, the American government and the specialised American Societies and Institutions, etc.

C.264 1983. Includes list of NAE British Foreign Associates.

Engineering

C.265, C.266 NATIONAL ACADEMY OF ENGINEERING (MEXICO)

1977-82

Hinton was elected as Corresponding Member in 1977.

C.265 1977, 1980 C.266 1981-82.

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SECTION D HOUSE OF LORDS D.1 - D.176

INTRODUCTION TO SECTION D

D.1	-D.20	GENERAL CORRESPONDENCE
D.21	-D.107	EUROPEAN COMMUNITIES COMMITTEE (SUB-COMMITTEE F)
D.108	s-D.127	EUROPEAN COMMUNITIES COMMITTEE (SUB-COMMITTEE G)
D.128	-D.142	SELECT COMMITTEES (PRIVATE BILLS)
D.143	-D.172	SPEECHES IN DEBATES
D.173	-D.176	PR INTED AND DUPLICATED MATER IAL

Hinton was made a life peer in 1965 taking the title Baron Hinton of Bankside. He was an active member of the House of Lords taking part in committee work, especially the European Communities Committee (Sub-Committees F and G) and speaking in debate on topics of special interest to him such as engineering and energy.

Although very considerable documentation of Hinton's work in the House of Lords is presented here, the catalogued papers must form only a small fraction of what passed through his hands. In an undated note preserved at D.21, Mrs. P. Ellis, Hinton's secretary, explains the procedure for dealing with papers used at the meetings of Sub-Committees F and G:

'It was not possible to keep all the papers used for House of Lords committee work simply because they were too voluminous. LH therefore decided that in general when the cttee's red report was published ... the background papers could be destroyed. There were cases, however, when papers were retained for various reasons - special comments on them by LH, important information, etc.'

At the request of the receiving repository a further weeding has been undertaken by the present cataloguers so that only those committee papers bearing significant annotation by Hinton have been preserved. When Hinton's annotation has been limited to a brief summation on the cover or title page of a lengthy report only that cover or title page has been retained.

Lord Hinton's interest in the selection and preservation of his own papers is evident from his comments on the original folders of House of Lords material. Examples of these comments are preserved with the committee papers on which he was passing judgement.

#### House of Lords

## GENERAL CORRESPONDENCE, 1968-83

Contents of a very bulky folder inscribed 'House of Lords Miscellaneous'. Includes correspondence and papers from firms and organisations drawing Hinton's attention to legislation of interest to them and providing him with information they thought he ought to have; also correspondence with fellow peers on matters of mutual interest.

D.1	1968, 1971
D.2	1972. Correspondence and papers re Green Paper on 'Government Research and Development'; copy of Hinton's letter to Lord Rothschild, 5 December, re 'curiosity oriented research' and 'product oriented research'.
D.3	1973, January-March. Includes draft speech for debate on White Paper Cmnd. 5174 - 'Education: A Framework for Expansion' and letter from L. Rotherham commenting on draft.
D.4	1973, April-June. Includes correspondence and papers re freedom of movement of engineers in the European Economic Community.
D.5	1975. Includes correspondence and papers re Trade Union and Labour Relations (Amendment) Bill and Top Salaries Review Body: Peers' Expenses Allowance.
D.6	1976, March-May. Includes correspondence and papers re Aircraft and Shipbuilding Industries Bill, Local Government (Miscellaneous Provisions) Bill and new Advisory Council on Applied R and D.
D.7	1976, June, July. Continuing correspondence and papers re Aircraft and Shipbuilding Industries Bill and Local Government (Miscellaneous Provisions) Bill.

D.8	1976, October, November. Includes letter from BBC television producer re 'Panorama' programme on future of the House of Lords and photocopy of questionnaire on the subject completed by Hinton.
D.9	1977. Includes correspondence and papers re Severn Barrage and letter from Hinton commenting on 'Report to the Congress which deals with the American work on development of the Fast Reactor'.
D.10	1978, March, April. Correspondence and papers re Scotland Bill, Nuffield Foundation study of the role of a Second Chamber within the British Constitution and river water quality.
D.11	1978, May, November. Correspondence and papers re 'Coal Conference '78' and product liability.
D.12	1979, October, December. Includes material reacid rain.
D.13	1980, January. Correspondence and papers re radioactive release from coal-fired power stations.
D.14	1980, February, March. Correspondence and papers re emissions from power stations and County of Kent Bill.
D.15	1980, April, May. Correspondence and papers re County of Kent Bill, Licensing Amendment Bill and Gas Bill.
D.16	1980, July. Correspondence and papers re Local Government, Planning and Land (No.2) Bill.
D.17	1981, January-June. Includes material re Control of Pollution Act, 1974, and Energy Conservation Bill.
D.18	1981, August, October, November. Includes completed questionnaires on environmental concerns.

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#### House of Lords

D.19 1982. Includes completed questionnaire for Review Body on Top Salaries which was seeking information about 'the circumstances in which Peers carry out their Parliamentary duties and Peers' views on the present expenses allowance'.

D.20 1983

EUROPEAN COMMUNITIES COMMITTEE SUB-COMMITTEE F (Energy, Transport, Technology and Research)

- D.21 Information
- D.22-D.92 Committee papers
- D.93 Minutes
- D.94-D.107 Correspondence

#### INFORMATION

D.21

Note by Mrs. P. Ellis (Lord Hinton's secretary) on Hinton's policy in respect of the retention or destruction of papers used for House of Lords committee work.

Lists of papers used at Sub-Committee 'F' meetings, 1975-80.

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## House of Lords

## COMMITTEE PAPERS

In the following entries the dates of the committee meetings are given and some indication of the agenda topics represented by the surviving documentation.

## 1975

D.22	January 25. Weight and dimensions of commercial road vehicles.
D.23, D.24	February 19. 'R/3333/74 (New Energy Policy strategy for the Community: Commission targets for 1985 and sectoral guidelines required to attain them)'.
· · ·	2 folders.
D.25	February 27. 'R/3333/74'.
D.26	March 5. 'R/3333/74'.
D.27-D.30	March 13. 'R/3333/74'. 4 folders.
D.31	March 20. 'R/3333/74'.
D.32, D.33	March 26. 'R/3333/74'. 2 folders.
D.34	April 16. 'R/3333/74'.
D.35	June 19. Annotated agenda only.
D.36	July 17. Technological problems of nuclear safety.
D.37	July 30. Technological problems of nuclear safety; development of energy sources within the Community.

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D.38	September 18. Lead pollution; pollution of sea water and fresh water for bathing.
D.39	September 19. Financing of Community energy policy.
D.40	'Circulation of papers and advance warning of future meetings', dated 3 October 1975, with two papers re Community environment action programme.
D.41	October 15. Community intervention in the field of air transport and air safety.
	Folder includes brief correspondence between Hinton and Civil Aviation Authority, July 1975.
D.42	'House of Lords Sub-Committee "F" Visit to Brussels, October 1975'. Contents of a folder so inscribed.
D.43	November 6. R3333 (Community energy policy).
D.44	November 20. OECD's Dragon high temperature reactor project.
D.45	'R/210/75 - Draft Directive on the reduction of water pollution caused by wood pulp mills' and related papers.
1976	
D.46	January 15. Hinton's ms. note only.
D.47	March 3. Energy policy.
D.48	March 11. 'Further consideration of Aeronautical Programme'.
D.49	March 18. Site for the Joint European Torus (JET).

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D.50	April 1. Siting of JET.
D.51	September 30. '1977-80 Multi-annual programme for the Joint Research Centre'.
D.52	Further papers on Joint Research Centre (contents of a plastic folder) kept with preceding.
D.53	October 21. Carriage of goods by road; inland waterways.
D.54	'Background papers <u>re</u> visit to Ispra – 8–11 November 1976'. Contents of a folder so inscribed.
D.55	November 25. 'J.R.C. Multi-annual Programme'.
D.56	December 9 (Joint meeting with Sub-Committee G). 'JRC Multi- Annual Programme'.
1977	
D.57	January 21. European R&D Policy.
D.58	February 2. EEC Energy Policy.
D.59	'Visit to Brussels by Members of Sub-Committee F - March 77'. Contents of a folder so inscribed.
D.60	March 31. EEC Energy Policy.
D.61	July 21. EEC R&D Policy.
D.62-D.65	November 11. EEC R&D Policy. 4 folders.

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1978	
D.66	February 23. Fast breeder reactors; reprocessing of irradiated nuclear fuels.
D.67	May 18. EEC Coal Inquiry.
1979	
D.68	'World Energy Supply and Demand up to 2020 A.D.'
	Hinton's 17pp. typescript paper (with ms. corrections) 'For H of I. Sub-Cttee F', 10 January. Folder also includes typescript 'Data from Energy 2020' and 'Energy Projections 1979', and ms. notes on 'Uranium Resources and Demand in the EEC', 'Uranium Prices', etc.
1980	
D.69	April. EEC Transport Policy.
D.70	July 24. Biomolecular Engineering.
D.71	[October 9]. Community Energy Policy.
D.72	October 30. Community Energy Policy.
D.73	November 13. Community Energy Policy.
D.74	November 27. Community Energy Policy.
D.75	EDecember 171. Gas Appliances; Nuclear Power Industry.

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1981	
D.76	[May 7]. Community Energy Policy.
D.77	July 2. Public Transport; Electricity Supply.
D.78	EOctober 217. Community Energy Policy.
D.79	EOctober 291. Community Energy Policy.
D.80	November, December. Community Energy Policy.
1982	
D.81	February 18, March 4 and 18. Raw materials.
D.82	March 25, May 6. Raw materials.
D.83	June 17. Annotated agenda only.
	July 18. Hinton's ms. comments on strategic materials in respect of a meeting he was unable to attend.
D.84	October 14 and 21. Rational use of energy.
D.85	November 11, 18 and 25. Rational use of energy.
D.86	December 2, 9 and 16. Rational use of energy.
1983	
D.87	February 3 and 17. The role for coal in Community energy strategy
D.88	March 3, 10 and 17. Coal in Community energy strategy.

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#### House of Lords

D.89	Miscellaneous coal papers, February, April 1983.
D.90	March. Regulations controlling use of road vehicles in the United Kingdom.
Miscellaneous	
D.91, D.92	Miscellaneous committee papers unattributed as to meeting.
	Topics include oil supply problems, natural gas, strategic minerals and rational use of energy.

2 folders.

#### MINUTES

D.93

Minutes of Sub-Committee F meetings, 25 November 1976 and 17 February 1977, annotated by Hinton.

#### CORRESPONDENCE

Hinton's correspondence with clerks, peers and expert advisers in respect of his work on Sub-Committee F.

D.94 1974, December - 1975, July. Includes invitation to serve on Sub-Committee C (education, employment and social health) and Hinton's reply suggesting that the Sub-Committee on which he could be most useful was that dealing with energy, i.e. Sub-Committee F; also correspondence on 'R/3333/74 EEC Energy Policy Strategy'.

D.95 1976, October-December. Includes correspondence re energy policy and Joint Research Centre. 85

D.96	1977, January-May. Includes Hinton's 'Questions for Sir Brian Flowers' (in his capacity as President of the European Science Foundation), 'Note on draft report on EEC Energy Policy' and 'Notes on Mr. Thorley's Draft Table (Appendix 1)'. (C.G. Thorley was Specialist Adviser, House of Lords, 1975-79.)
D.97	1977, June, July. Includes Hinton's 'Notes on draft report on EEC R & D Policy'.
D.98	1977, November, December. Includes Hinton's 'Suggested Conclusions on R & D in EEC', 'Notes for the Committee "F" Enquiry into the Coal Industry', and 'The Energy Resources and Requirements of Greece, Portugal and Spain' (ms. and typescript drafts).
D.99	1978, January-March. Includes Hinton's notes on 'President Carter's Nuclear Policy' and 'Thorium in the Nuclear Power Cycle'.
D.100	1978, April-October. Includes correspondence and papers re proposed visit to Brussels.
D.101	1978, December-1979, March. Includes correspondence and papers re 'Energy Objectives for 1990' and small hydroelectric units.
D.102	1979, April, May. Correspondence and papers re 'Energy Objectives for 1990'.
D.103	1979, June, October-December. Includes correspondence and papers <u>re</u> 'Fusion Report'.
D.104	1980, January-August. Includes correspondence and papers <u>re</u> 'Energy Objectives for 1990' and biomolecular engineering.
D.105	1981, February-December. Includes correspondence and papers re Information Technologies and 'Combined Transport'.
D.106	1982. Includes correspondence and papers restrategic minerals.
D.107	1983, January-May. Principally Hinton's comments on draft minutes.

# EUROPEAN COMMUNITIES COMMITTEE SUB-COMMITTEE G (Environment)

D.108	Information
D.109-D.122	Committee papers
D.123-D.127	Correspondence

## INFORMATION

D.108

Lists of papers used at Sub-Committee 'G' meetings, 1975-81.

## COMMITTEE PAPERS

In the following entries the dates of the committee meetings are given (where known) and some indication of the agenda topics represented by the surviving documentation.

1981

D.109	CFebruary 27. Asbestos.
D.110	March 17. Oil pollution of the sea.
D.111	May 19. Discharge of cadmium into the aquatic environment; wastes from the titanium dioxide industry; participation by the EEC in the Action Plan for the Mediterranean.
D.112	June 23. Discharge of cadmium into the aquatic environment; wastes from the titanium dioxide industry.

Hinton	of	Bankside
CSAC	116	5/7/86

	n Y
D.114 October 27. Recycling and reuse of containers of liquid for huma consumption.	n
1982	
D.115-D.119 Committee papers and notes by Hinton on the polluter pays princip October-December and n.d.	le,
5 folders.	

1983

D.120-D.122 Committee papers (including 'Suggested changes to draft report by Lord Hinton of Bankside') on the polluter pays principle, etc., January-March.

3 folders.

### CORRESPONDENCE

Principally correspondence with clerks respecting committee business.

D.123	1978, June. Includes Sub-Committee G's draft report <u>re</u> protection of groundwater.
D.124	1980, November - 1981, November.
D.125	1981, December - 1982, October.
D.126	1982, October, November. Includes Hinton's 'Alternative Thoughts on Pollution Control'.
D.127	1983. January-May. Includes note by Hinton on 'Sewage Disposal'.

### SELECT COMMITTEES (PRIVATE BILLS)

D.128-D.134 'House of Lords - Select Committees'.

Contents of a folder so inscribed and with further ms. inscription 'Examined by Lord Hinton - Dec. '81'.

D.128 Turbary Lands in the County of Dorset.

Correspondence, April-September 1972.

D.129 Kensington and Chelsea Corporation Bill.

Minutes of evidence, 2 May 1972 (2pp. only).

D.130 Maplin Airport Bill.

Brief correspondence only, July 1973.

D.131 Portland Bill.

Brief correspondence, March, April 1974; 4pp. 'Suggested Amendments' with Hinton's ms. note 'The whole Bill was disallowed'.

D.132 County of South Glamorgan Bill.

Correspondence, etc., May, November, December 1975.

D.133 Tyne and Wear Bill.

Minutes of evidence, 4 May 1976 (4pp. only).

D.134 Four Counties Bills.

Lord Hinton's 'Opening Remarks' as chairman; minutes of evidence (4pp. only); 'Record of advice on the Four Counties Bills received from Lord Aberdare'; brief correspondence, March-May 1978. See also D.159.

D.135-D.142 Lanca

Lancashire Bill.

Hinton served as Chairman of the Lancashire Bill.

D.135, D.136 Correspondence, March-October 1982. 2 folders.

D.137-D.142 'Lord Hinton's Working Papers and Briefing material'. 6 folders. A note by Hinton's secretary dated 6 July 1983 explains the survival of the material: 'Normally most of this would be destroyed - it has not been done as the Bill has not yet been debated. (This was put off due to Gen. Election)'.

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### House of Lords

### SPEECHES IN DEBATES

Although Hinton was created a life peer in 1965, the extant material covers his contributions to the House's debates 1970-82 only. These are principally typescript drafts for speeches; other significant material is noted in the entries which also give the date of the debate and some indication of topic.

1970

D.143	March 4. Pearson Report; help for developing countries.
<u>1972</u>	
D.144	February 29. Green Paper on 'Government Research and Develop- ment'.
1973	
D.145	February 28. 'The need for a National Energy Plan in relation to Britain's entry into the EEC and the increasing inadequacy of world energy supplies'.
D.146	March 29. White Paper Cmnd. 5174 - 'Education: A Framework for Expansion'.
	Folder includes annotated copy of White Paper and brief corres- pondence arising from debate.
D.147	July 19. 'Speech for Dinordwic (North Wales Hydro Electric Power Bill) if necessary'.
	Folder includes printed and duplicated background material.
1975	
D.148	February 12. 'Energy Conservation'.
D.149	July 22. Second Special Report of the Select Committee on the European Communities.
D.150	December 2. EEC Commission plans for energy supplies to 1985.

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1976	
D.151-D.153	January 29. Technological Problems of Nuclear Safety. Includes correspondence and background material.
D.154	April 1. Environment (disposal of effluents and other wastes).
D.155	May 18. Joint European Torus (JET). Folder includes brief correspondence and printed background material.
D.156, D.157	December 22. Sixth Report of the Royal Commission on Environmental Pollution (Flowers Report). 2 folders.
	D.157 contains related correspondence, October 1976-January 1977. See D.174.
1978	
D.158	February. Research and Development in the EEC.
D.159	July 17. Report on Opposed Clauses of Local Government Private Bills.
	Folder includes correspondence with clerks and peers, June, July. See also D.134.
1979	
D.160	January 23. Coal.
	Folder includes letter from Chairman of National Coal Board.
D.161	January 24. Amenity.
	Folder includes related correspondence.
D.162	March 7. 'To draw attention to the need for revising the current provisions of the energy programme and the prices and incomes control programmes in the light of recent events in Iran'.
	Typescript draft has ms, note 'L. Hinton ill with influenza speech used by L. Sherfield'. Folder also includes brief correspondence with Lord Halsbury and 'Data from Energy 2020'.

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	House of Lords
D.163	October 23. Construction Products. Folder includes related correspondence. See also D.175.
1980	
D.164, D.165	February 27. Finniston Report.
	D.164 Includes 13pp. note on the Finniston Report dated 13 February.
	D.165 Correspondence with engineers and engineering organisations, February, March.
	For further material on the Finniston Report, see C.206-C.248.
D.166 .	March 19. Energy Conservation.
	Folder includes related correspondence and background material.
1981	
D.167	March 9. Industry Bill.
<u>1982</u>	
D.168, D.169	October 21. Natural Gas.
	D.168 Folder includes ms. notes by Hinton and correspondence with Lord Kings Norton, the mover of the motion for debate.
	D.169 Printed and duplicated background material.
D.170-D.172	December 8. Fast Reactor.
	D.170 Folder includes 'Second draft' of speech with ms. note 'Superseded' and 'Sketch of Opening Speech to be reduced as other speakers indicate they will deal with the points made'.
	D.171 Correspondence with Lord Halsbury re organising of the debate; Hinton's ms. notes; background material.
	D.172 Correspondence with W. Marshall and P.B. Hirsch re fast reactor policy and design.

## House of Lords

# PRINTED AND DUPLICATED MATERIAL

D.173	Duplicated copy of Hinton's evidence before House of Commons Select Committee on Estimates (Sub-Committee B), 22 April 1959.
D.174	Sixth Report on Nuclear Power and the Environment of the Royal Commission on Environmental Pollution.
	Hinton's annotated copy with loose ms. and typescript items.
D.175 .	Report of the Select Committee on the European Communities on Construction Products, 1979, with some loose items.
D.176	Report of the Select Committee on the European Communities on EEC Energy Policy, 1980.
	Title page has note of Hinton's comment on this report.

SECTION E UNIVERSITY OF BATH E.1 - E.65

INTRODUCTION TO SECTION E

- E.1 -E.7 GENERAL CORRESPONDENCE
- E.8 -E.10 DEVELOPMENT APPEAL
- E.11-E.14 APPOINTMENTS
- E.15 CONVOCATION
- E.16 UNIVERSITY COURT
- E.17-E.19 DEGREE CONGREGATIONS
- E.20-E.65 SPEECHES, ADDRESSES, WRITINGS

When the Bristol College of Science and Technology became the new 'University of Bath, A Technological University' in 1965, Hinton was invited to become its first Chancellor. He had doubted the wisdom of the Robbins Report which recommended that Colleges of Advanced Technology should have university status and it is apparent that he never lost this doubt. He later regretted the removal of the words 'A Technological University' from Bath's title. He hesitated to accept the Chancellorship; however, once he had decided to do so, he became a staunch supporter of the University and worked tirelessly for it until his retirement fifteen years later.

One of his first tasks was to help with the appeal which was launched in 1965 for funds to build student residential accommodation and other facilities. Hinton gave invaluable support to this appeal and personally approached leading industrialists asking for donations (E.8-E.10).

The quality of his formal addresses was recognised by the University which arranged for the publication of his Installation Address and his yearly speeches at Degree Congregations. A copy of the volume, published after Hinton's retirement under the title 'Some Speeches of a Chancellor', is included at E.65. In his preface the then Vice-Chancellor, Professor P.T. Matthews, wrote: 'Throughout this period Lord Hinton exerted a profoundly beneficial influence on the University, not least through the special flavour which he gave to its ceremonies through the dignity of his presence'.

In addition, Hinton spoke on many other occasions: informal talks to the students, speeches proposing the toast of the Honorary Graduates, speeches at meetings of the Court and of Convocation, and at the Peppercorn Rent ceremonies. Drafts and notes for these speeches, showing the same careful preparation and ever present concern for the future of Britain, the part the students would play in it, and the qualities they would need in life, are to be found in items E.20-E.64

## GENERAL CORRESPONDENCE 1965-83

Hinton's correspondence with Vice-Chancellors, academic staff, students and others about the general affairs of the university.

E.1	1965-66. Hinton's acceptance of invitation to become Chancellor (March 1965); presentation of a mace to the new university by the Goldsmiths Company; the title of the new university.
E.2	1968. Includes correspondence re proposed address to the student body on 'Student Responsibility' and re title of the university.
E.3	1969. Includes continuing correspondence readdress to student body (which took place in February) and retitle of the university.
E.4	1970-73 ·
E.5	1974-77. Includes correspondence and papers restudent grants campaign and disinvestment in South Africa.
E.6	1978–81. Hinton offered his resignation from the Chancellorship in February 1980.
E.7	1982-83

## DEVELOPMENT APPEAL 1966-68

An appeal was organised with Hinton's active support to raise money to provide the new university with residential accommodation and communal buildings.

E.8	1966, April-June. Correspondence with university officers and industrialists reappeal. Includes draft text for appeal brochure.
E.9	1966, June-1968 January. Continuing correspondence with university officers and industrialists re appeal. See also E.21.

E.10 Copies of The Proposed University of Bath, A Technological University (1965) and The Proposed University of Bath, A Technological University, Development Appeal (n.d.).

#### APPOINTMENTS 1967-69, 1975-76

Correspondence re appointment of new Vice-Chancellors.

E.11-E.13 1967-69

3 folders.

E.14 1975-76

### CONVOCATION 1969-79

E.15 Correspondence and papers re meetings of Convocation, including agendas, a report by the chairman of the graduates' standing committee on the effectiveness of Convocation (1970) and Convocation Newsletter no.3. Hinton gave the Convocation Address in January 1975 on 'The decline in British industrial pre-eminence'.

## UNIVERSITY COURT 1970-79

E.16 General correspondence re meetings; agendas 1970 and 1975, annotated by Hinton.

## University of Bath

# DEGREE CONGREGATIONS 1969-80

Hinton's correspondence with Vice-Chancellors and others re arrangements.

E.17	1969-74. Includes lists of honorary graduates, 1966-79.
E.18	1975-76. Includes background material and drafts for 1976 congrega- tion address.
E.19	1977-80
SPEECHES, ADDRES	SSES, WKITINGS
1965	
E.20	'A University of Technology: The New Concept'
	Hinton's foreword for book on the new University of Bath by G. Walters; brief related correspondence.
1966	
E.21	'Appeal Luncheon, Bath University, June 29th'. 6pp. typescript.
E.22	'Speech at Induction Ceremony', November. 11pp. typescript.
	Hinton's address on the occasion of his induction as first Chancellor of the university. Folder also includes press-cutting. See K.22.
E.23	'Reply to Sir Eric Ashby proposing toast of university', November. 6pp. typescript.
E.24	'Honorary Graduates'. 4pp. typescript.
E.25	'Replies to Questions from the Bath University Union Newspaper', November. 3pp. typescript.

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# University of Bath

1967	
E.26	'Notes for talk to students at Bath', 12 October. 11pp. typescript.
E.27	'Speech for Degree Day', 13 October. 8pp. typescript.
E.28	'Notes for talk at Bath', October. 9pp. typescript with ms. cor- rections and additions.
1968	
E.29 ·	'Bath University Degree Day', 18 October. 8pp. typescript.
E.30	'Speech for the Opening of Physics and Materials Second Building by the Speaker', 23 November. 1p. typescript.
E.31	'Speech for Bristol Prize Day', November. 6pp. typescript.
	Hinton's speech on the occasion of his presenting the prizes and awards in electrical engineering at Bristol Technical College.
1969	
E.32	'Presentation Speech to Dr. Moore on his Retirement', 27 June. 5pp. typescript.
	Moore was the first Vice-Chancellor of the University of Bath.
E.33	'Notes for meeting of Convocation', 4 July. 5pp. typescript.
E.34	'Notes for meeting of Court', 4 July. 6pp. typescript.
E.35, E.36	'Bath Degree Ceremony', 24 and 25 July. 10pp. and 5pp. typescript. 2 folders.

1970

E.37	'Speech for Court', 3 July. 5pp. typescript.
E.38	'Speech for Convocation', 4 July. 3pp. typescript.
E.39	'Degree Day', 10 July. 11pp. typescript.
E.40	'Degree Day - Autumn', 19 November. 15pp. typescript.
1971	
E.41, E.42	'Degree Day' addresses, 8 and 9 July. 14pp. and 9pp. typescript. 2 folders.
E.43	'Notes for the meeting of the Court', 15 December. 2 copies (different format), 16pp. and 5pp. typescript.
	Folder also includes press-cutting from the THES, 17 December, reporting Hinton's address under the heading 'Graduates will only find "sub-professional" jobs'.
1972	
E.44	'Payment of Peppercorn Rent', 29 June. 5pp. typescript.
E.45, E.46	'Degree Day' addresses, 29 and 30 June. 18pp. and 16pp. typescript.
	2 folders.
1973	
E.47, E.48	'Degree Day' addresses, July. 21pp. and 20pp. typescript. 2 folders.
E.49	'Introduction to Convocation Lecture to be given by Sir Frederick Dainton', 1 November. 10pp. typescript.

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# University of Bath

1974	
E.50-E.52	'Degree Day' addresses, 3, 4 and 5 July. 20pp., 16pp. and 14pp. typescript.
	3 folders.
1975	
E.53	'Convocation Lecture', 6 May. 2 copies both 24pp. typescript, one with ms. additions.
	This lecture on the decline in British industrial pre-eminence was first given at a seminar in Oxford, 3 December 1973.
E.54	'Degree Day' address, 9, 10 and 11 July. 28pp. typescript.
	Folder also includes brief related correspondence.
E.55	'Peppercorn Rent Ceremony', 22 December. 5pp. typescript.
1976	
E.56	'Chancellor's speech at Bath Degree Congregations', 30 June- 2 July. 24pp. typescript.
	Folder also includes brief correspondence arising and <u>University of</u> <u>Bristol Gazette</u> , October 1976, with related article.
E.57	'Toast to the Honorary Graduates', July. 16pp. typescript.
	Hinton paid tribute to the retiring Vice-Chancellor, L. Rotherham, who was one of the honorary graduates.
1977	
E.58	'Speech for Bath Degree Congregations', July. 24pp. typescript.
E.59	'Speech for meeting of Convocation', 15 October. 4pp. typescript.

E.65

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# University of Bath

1978	
E.60	'Speech for Bath Degree Congregations', June. 15pp. typescript.
E.61	'Peppercorn Rent Ceremony', 19 December. 5pp. typescript.
1979	
E.62	'Chancellor's Speech for the University of Bath's Degree Congregations', 27-29 June. 23pp. typescript.
1980 .	
E.63	'Notes for Lord Hinton to use at meeting of Convocation', 12 April. 5pp. typescript.
E.64	'Chancellor's Speech for the University of Bath's Degree Congregations', 24-27 June. 18pp. typescript.

Some Speeches of a Chancellor, Bath University Press, 1981.