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MAYO

Reports and Papers of R.H. Mayo in the field of aviation.

MAYO

The papers of R.H. Mayo, covering the period 1913-1956.

Reports, logbooks, newspaper and magazine articles, photographs on the work of R.H. Mayo in the field of aviation. The papers concentrate particularly on Mayo's design of the Mayo composite aircraft and his connection with Imperial Airways. R.H. Mayo was born in 1891. After graduating in mathematics and mechanics, Mayo entered the Royal Aircraft Factory. During the 1914-1918 war he served in the Royal Flying Corps in France and at the Air Ministry. He subsequently became a consulting engineer and in 1935 formed a company to exploit the composite aircraft he patented. Mayo was also involved, on behalf of Imperial Airways, in the specification for the Short Empire C flying boat for the Empire Air Mail Scheme. Mayo died in 1957 at the age of 66.

The papers were presented to the Science Museum by Mrs J. E. Chorley, daughter of R. H. Mayo.

1 Reports and Papers of R.H. Mayo.

- 1/1 1913-1916 [Folder containing] reports on BE2
 longitudinal stability, SE4 lateral trim,
 RE1a effects of curvature at trailing
 edge of wings, Proposed methods of
 measuring wind gusts, A new method of
 controlling an aeroplane.
- 1/2 1912-1917 [Folder containing] Papers, reports and memoranda of the Advisory Committee for Aeronautics.
- 1/3 [1914- Notebook kept by R.H. Mayo of aircraft 1918?] characteristics. MS.
- 1/4 1915 Mar- Pilot's flying log book. / R.H. Mayo, 2nd
 Apr Lieutenant, R. F. C. (S. R.).
 [13]p, MS.
- 1/5 1915-1918 Pilot's flying log book. / R.H. Mayo, Captain, R. F. C. (S. R.). [75]p, MS.

		figures including photographs. [missing p59-67]
1/7	1923	Royal Commission on Awards to Inventors. Sopwith claim. Proof of evidence of Major R. H. Mayo. 4 leaves, typescript
1/8	[1920?]	Royal Commission on Awards to Inventors. Bristol fighter claim. Proof of evidence of Major R. H. Mayo. 10 leaves, typescript, duplicated.
1/9	1924	Royal Commission on Awards to Inventors. Major R.H. Mayo cross examined in the matter of the claim by the Aircraft Manufacturing Company Limited in respect of D.H.4, D.H.5, D.H.9, D.H.9A and D.H.10 designs. 113 leaves, typescript, carbon copy.
1/10		Daniel Guggenheim fund, Holland. Correspondence and notes on the fund for the promotion of aeronautics and safer flying" Typescript.
1/11	1927	Some notes on the design of commercial aircraft from the operational point of view. /R. H. Mayo. [40] leaves, typescript Draft of a Royal Aeronautical Society Paper.
1/12	1928 May	Report on the application of radio communication to British air transport. /R. H. Mayo. 96 leaves, typescript, carbon copy, plus 7 illustrations
1/13	1928 Nov	Report on investigation into the possibilities of air transport between Bermuda and the United States of America. / R.H. Mayo. 117 leaves.
1/14	1929	The Schneider Trophy Contest 1929. Notes on the regulations and organisation of the contest / R.H. Mayo. [15] leaves, typescript, carbon copy.

1/15 [nd] Comparative notes on RAE and Cobham (Flight Refuelling Ltd.) methods and apparatus. 5 leaves, typescript plus 2 leaves of figures. 1/16 [nd] The Cierva autogiro. / R. H. Mayo. 6 leaves, typescript Reports on aviation industry by R. H. Mayo et al. 2 1930-1949 2/1 1932 May Report on prospects and air-port requirements for British aviation in the West Atlantic. / R. H. Mayo. 89p. Printed for the use of the Colonial Office. 2/2 1933 Jul Report on the aims and prospects of the joint aviation advisory committee of Lloyds register and the British Corporation register. / R. H. Mayo. 44 leaves, typescript, carbon copy, signed. 2/3 1935 Nov Minutes of evidence taken before the Royal Commission on the private manufacture of and trading in arms. Witnesses R. H. Mayo and E. Geddes. 2/4 1936 Jun Landplanes for North Atlantic Services/B. W. Galpin. 7 leaves, typescript, duplicated. 2/5 1939 Sept Report on replacement of the fleet under the Empire air mail scheme. / R.H. Mayo. 80 leaves, typescript, carbon copy. 2/6 1941 Jan Addendum to report dated 16th September 1959 on replacement of the fleet under the Empire Air Mail scheme. / R. H. Mayo. 21 leaves, typescript, carbon copy. 2/7 Memorandum. Report of the Empire mail scheme consequent upon demands for higher speeds as a result of the Melbourne Air Race.

14 leaves, typescript, duplicated.

2/8 1940 Nov British Airways Corporation. Report on commercial aviation developments in America. Based on visit by air to Canada and U.S.A. Aug-Oct 1940. / R. H. Mayo 51 leaves, typescript, carbon ropy, signed. 2/9 1943 Feb Post-war prospects for British civil aviation. I [R. H. Mayo?) 74 leaves, typescript, carbon copy. 2/10 1943 Jun Report on future use of flying boats on probable British routes / [R. H. Mayo]. 31 leaves, typescript, carbon copy. 2/11 1943 Jun British Overseas Airways Corporation Application of type 50 to Atlantic and Empire services / [R. H. Mayo?]. 5 leaves, typescript. 2/12 1943 May British Overseas Airways Corporation. Study of specifications of landplanes for Atlantic and Empire services. / R. H. Mayo. 6 leaves, typescript. 2/13 1943 Jul British Overseas Airways Corporation. Note on effects of changing from all up to surcharged mail. / [R.H. Mayo]. 7 leaves, typescript, carbon copy. 2/14 1943 Jul British Overseas Airways Corporation. Application of type 52 to African mediumstage and European services. / [R.H. Mayo]. 2 leaves, typescript. 2/15 1943 Sept British Overseas Airways Corporation Note on payload capacities of types B & C (types 50 & 52) for certain special stages. I R. H. Mayo. 4 leaves, typescript, carbon copy, initialled. 2/16 Shipping Airlines Limited. Outline of proposed scheme for U.K. / Continental air services. Report No. M/SA/4. / R.H. Mayo.

18 leaves, typescript.

[with] Memorandum on some economic aspects of U.K. Continental air transport. 6p, typescript, duplicated.

- 2/18 1945 Feb Scheme for proposed air terminal on the East side of London. / R. H. Mayo.
 [18] leaves, typescript, 1 diagram.
- 2/19 1945 Feb Shipping Airlines Limited.
 Proposal for a system of air services
 between the United Kingdom and the
 Continent of Europe. For submission to
 the Minister for Civil Aviation. / [R. H.
 Mayo].
 34 leaves, typescript~ duplicated.

3 The Mayo Composite Aircraft.

- 3/1 1932 Apr Patent No. 12015. Complete Specification Improvements in means for launching aircraft I Robert Hobart Mayo. 44 leaves, typescript, carbon copy.
- 3/2 1932 Nov Confidential Memorandum on the Mayo Composite Aircraft (Military Application).
 23 leaves, typescript.

[with] General Note on the Mayo Composite

Aircraft

3 leaves, typescript, carbon copy.

3/3	1934 Sept	Outline specification of 'Mayo' Composite Aircraft to meet the Requirements of Messrs: Imperial Airways. I Short Brothers (Rochester & Bedford) Ltd. Seaplane Works. 20 leaves, typescript; 16 blueprint diagrams.
3/4	1935 Jan	Short-Mayo Composite Aircraft Schedule III List of Equipment to be supplied by the Air Ministry. <i>I</i> Compiled by Short Bros. Ltd. and Imperial Airways. 8 leaves, typescript, duplicated.
3/5	1935 Nov	Mayo Composite Aircraft. Design specification for upper component as high speed long range bomber to meet requirements specified by the Mayo Composite Aircraft Company limited. I Gloster Aircraft Company Ltd. 12 leaves, typescript, carbon copy; 5 figs.
3/6	1935 Nov	Appendix 1 Design specification for single engine high speed bomber to give the same average cruising speed as the Mayo composite type. Pegasus X engine. I Gloster Aircraft Company Ltd. 10 leaves, typescript, carbon copy; 1 fig.
3/7		The Mayo Composite Aircraft. <i>I</i> The Mayo Composite Aircraft Company Ltd. 21 leaves, typescript.
3/8	1935	Certificate of Registration of Aircraft for two seater Short float seaplane monoplane, S796, owned by Imperial Airways Ltd. G-ADHJ 4p, photocopy
3/9	1935	Certificate of Registration of Aircraft for twenty-seven seater Short boat seaplane monoplane S797, owned by

Imperial Airways ltd. G-ADHK
4p photocopy.

		ip photocopy.
3/10	[1935?]	Note on the Application of the Mayo Composite Aircraft to Atlantic Services. / Anon 7 leaves, typescript, carbon copy.
3/11	1938	Certificate of Airworthiness for Short Mayo float seaplane, S20 1 owned by Imperial Airways Ltd. G-ADHJ 4p, photocopy
3/12	1938	Certificate of Airworthiness for Short Mayo boat seaplane monoplane, 820, owned by Imperial Airways Ltd. G-ADHK. 4p, photocopy
3/13	1938 Feb	Combined and Separation Trials of the Short Mayo Composite Aircraft. Notes for the Press. / Press Section, Air Ministry. 10 leaves, typescript, duplicated.
3/14	1938 Jul	Statistics of Mercury's Trans Atlantic flight from Ireland to New York and Return Flight from New York via Azores to Southampton. 5 leaves, typescript.
3/15	1938 Oct	Mercury long range experimental flight, Scotland to South Africa, 6th-8th October .1938. Reports by Captain D.C.T. Bennett and I. Harvey. 18 leaves, typescript, signed, 3 plates
3/16	1939 Jan	Reports on test flights. I H. Henry 21 leaves, MS, bound.
3/17		Outline specification for a compression ignition engine. 8 leaves, typescript.
3/18	1940 Feb	Preliminary specification of high speed two seater twin engined unarmed bomber aeroplane. / Short Brothers (Rochester & Bedford) Ltd, Seaplane Works, Rochester. 9 leaves, typescript, carbon copy: two photographs.

3/19 1919-1935 10 patents (USA and Great Britain) for composite aircraft designs.

4 Press and magazine articles.

- 4/1 1928 Oct Advances in commercial aircraft design. / R.H. Mayo p.689-690 The Empire Mail.
- 4/2 1935 May Some extracts from official documents, the Press, etc., referring to the Mayo composite aircraft.
 6 leaves, typescript, duplicated.
- 4/3 1935 Nov The 'Mayo Composite Aircraft' / C.M.
 Poulson.
 7p, ill. Reprinted from Flight, November
 7 and 14.
- 4/4 1938 Feb The Composite Aircraft described in detail.
 11p, ill. Reprinted from Flight, February
 17
- 4/5 1938 Jul Transatlantic Flight of the Mercury.
 3p, ill. Reprinted from Flight, July 28.
- 4/6 1938 Oct Seaplane Distance Record for Britain.
 13 4p, ill. Reprinted from Flight, July 13
- 4/7 1938 Oct Newspaper cuttings from various newspapers on the flight of the Mercury. 96 leaves.
- 4/8 1938 Civil Aviation 1937. Annual report on progress with references to the Mayo Composite aircraft.
 92p, ill.
- Wonders of Aviation. Vol. 1 / edited by Clarence Winchester
 p.25-29 The Short-Mayo Aircraft.

5 Imperial Airways Ltd.

5/1 1923 May A National Aerial Transport Company.

Proposal by the Directors of the Instone
Air Line Ltd.

57p

5/2	[1930s]	Imperial Airways in Pictures. 8 leaves, ill.
5/3	1931 Apr	Programme of demonstration flights of the new 4-engine flying boats, "Scipio", "Sylvanus", and "Satyrus", constructed by Messrs. Short Bros. for Imperial Airways Empire routes. 11p, ill.
5/4	[ca. 1934]	Imperial Airways. Europe, Africa, Asia, Australia. The Empire Routes of Imperial Airways. Fold out leaflet with illustrations of the aircraft used.
5/5	1934 Jun	Imperial Airways European Summer Time Table. (abridged edition). Fold out leaflet.
5/6	1935-1936	Report of the Annual General Meeting. Imperial Airways Ltd. 2 volumes, 32p & 56p.
5/7	1935 Jul	Outline Specification for a Flying Boat for Passenger and Mail Services. <i>I</i> Imperial Airways Ltd. 22 leaves, typescript, carbon copy.
5/8	1935 Jul	Specification of a four engined flying boat for Imperial Airways Transatlantic Mail Service. / Supermarine Aviation Works (Vickers) Ltd. 2 leaves, typescript, carbon copy.
5/9	[1936?]	The Empire flying boat. The new class of flying boat now under construction for Imperial Airways. [15]p, ill.
5/10	1936 Oct	<pre>Information pack re Empire flying boat [containing] 1) Milestones in the progress of the Empire's airways.) 11p. 2) List of those flying in The Canopus, 8 leaves. 3) 2 cards issued to R.H. Mayo re seating at table and location of toilet facilities.</pre>

[4]p. 5/11 1936-1938 Imperial Airways Gazette 5 copies. [incomplete run] 5/12 [1937] Imperial Airways, Europe, Africa 1 Far East, Australia. Fold out leaflet with illustrations of the aircraft used. 5/13 [nd] The future is in the air. A publicity leaflet about the third film in a series of films on Imperial Airways. 8p, ill 5/14 1937 The Imperial conference of 1937 and the Empire flying boats. I Imperial Airways. 8p, ill. Short Bros. "C" class aircraft. 5/15 1937 Specification. 67 leaves, 54 diagrams. 5/16 1937 May The Empire air mail programme / R. H. Mayo Two editions. 24 & 25p, ill. 5/17 [1938] The Parliamentary air committee and the all-air Empire mail. p. 5-8, ill, [incomplete]. 5/18 1938 Jul Presentation pack to mark the inauguration of the Empire air mail programme [containing], 1) Programme, 3p. 2) list of those present at the: ceremony, 11p 3) the story of the Empire mail programme, Op 4) Imperial Airways, a survey of its organisation, 67p, ill. 5/19 [ca. Services, london-Le Touquet. Timetable and fares. 1938] 5/20 1938 Dec Imperial Airways sixth annual staff dinner and dance. Menu. 2p.

4) The Empire flying boat1 The Canopus.

6 Ephemera

6/1	1919 Jun	Luncheon to the winner of the Daily Mail
		Prize for the Trans-'Atlantic Air Race
		1919. Alcock and Brown. Menu. [photograph
		of original which was given to
		Manchester International Airport
		Authority].

- 6/2 1927-1933 Programmes of the Royal Air Force displays, Hendon. 1927, 1928, 1930, 1933.
- 6/3 1931 Details of the International Illumination Congress, Royal Airforce display of night flying and landing, Exhibition at Croydon airport.

 4p.
- 6/4 1934 Jul Air race for the King's cup. Programme. 28p, ill.
- 6/5 1953 International air race. England to New Zealand.
 [23]p, ill.
- 6/6 1927 May Banquet to Captain Charles Lindeburgh.
 Savoy Hotel, 31st May 1927.
 Menu and toast list.
- 6/7 1956 Mar 1132 miles per hour. Fairey & Rolls-Royce.

 Menu and toast list.
- 6/8 nd Volume of newspaper cuttings on early years of aviation development.
 36 leaves.

7 Films - [Video Cassette A 11]

- 7/1

 Paramount news

 Mid ocean airfield planned by scientist.

 Wilmington Del.

 Monster seadrome larger than SS Leviathan carrying both hotels and hangars is demonstrated by models.

 16mm film. B&W. Silent.
- 7/2 British Movietone News
 Aviation latest. Mayo composite aircraft.
 Mia & Mercury and the Mayo split

16mm film. B&W. Silent.

7/3

British Movietone News Cutting Room

Mayo composite plane at Southampton, at
Luton and making trans-Atlantic test.

Mercury's pilot, Mercury in Canada, Ready
for
Cape flight, Mercury just misses record.

35mm film. B&W. With sound

The original films have been deposited with the National Film Archive but a copy of the above films is available at the Science Museum Library in London, shelfmark 'Video cassette A 11'.

8 Photographs and illustrations.

8/8 1930

8/1	1927 Feb 23-27	Some pictures of a flight from London to Cairo on the Imperial Airways D.H. Airliner. G-EBMZ. 25 prints.
8/2	1937	Photographs of the Short Mayo Composite aircraft under construction. 141 prints
8/3	1937-1938	Photographs of the Short Mayo composite aircraft in flight. 177 prints.
8/4	1917- 1940s	Photographs of R. H. Mayo. 36 prints.
8/5	1938	Photographs from the British Movietone News of the separation of the Short Mayo Composite aircraft. 45 prints. [with] flickbook of photographs showing the separation of the upper and lower components.
8/6	1928	Photographs of the Short 'Calcutta' aircraft 6 prints
8/7	1918	Photographs of the Tarrant Tabor, from RAE. 17 prints

Photographs of the competitors in the

Daniel Guggenheim safe aircraft

competition. 24 prints.

8/9 Miscellaneous views of civil aircraft.

46 prints.

MSL Sketch of the Mayo composite aircraft

26/1 before take-off.

By G. Sales

MSL "Breakaway".

26/2 Photograph of the Mayo composite aircraft

in flight at the point of separation.

By Fox Photos.

Items transferred to main stock.

1918 May Types of British Aeroplanes. / Air

Ministry 73p, ill.

[ca. Military and civil aircraft / Handley

1925] Page Ltd. 16 p, ill.

1939 Handley Page Bulletin 1939

p.70-74 precis of company history 1909-

1939.

1943 The case for the flying boat. / Saunders-

Roe Ltd. 16p, ill.

1953 1st Wilbur Wright Memorial Lecture. List

of award winners with brief biographies.

Inv. No. 1988-6