## ROYAL AIR FORCE MUSEUM Department of Research and Information Services

## **Accession List**

AC93/8 Papers of Mr John Henry Broughton Larrard, 1922-1975

Mr John Henry Broughton Larrard CBE C.Eng FRAeS Fl.Prod.E was born 25 September 1895. He was commissioned as a Second Lieutenant into the Royal Engineers on 30 March 1922.

An aviation engineer, he was Technical Officer in the Airworthiness Department, Royal Aircraft Establishment (RAE) Farnborough, 1922-1934.

He transferred to the Air Ministry and served as Assistant Director, Aeroplane Production with the Ministry of Aircraft Production, 1940-1942.

From 1942-1945 Larrard served as Deputy Controller, Ministry of Aircraft Production, Ministry of Production Northern Ireland and was a member of the Northern Ireland Government Production Council.

From 1945-1953 he was Regional Controller, Ministry of Supply for the South-West region and from 1953-1957, Regional Controller, Board of Trade and Ministry of Supply for the region.

The collection relates mainly to the development of in-flight refuelling at Royal Aircraft Establishment (RAE) Farnborough. It includes forms, certificates, patents and other technical documents.

Title Career summary of Mr John Henry Broughton

Larrard, 1973

Maker Name IPC Business Press

Maker Role Author

Content Note Copy of a directory entry describing his career, attached

to a letter asking for updates.

Production Date 24 May 1973

Brief Description Cutting on A4 sheet.

Object Number AC93/8/2

Title Commission certificate of 2Lt John Henry Broughton

Larrard, 1922

Maker Name War Office

Maker Role Issuing Authority

Content Note Larrard's commission into Royal Engineers.

Production Date 20 October 1922 Brief Description Folded commission.

Object Number AC93/8/3

Title Patent specification: Improvements in aircraft

framework, 1925

Maker Name H.M.Patent Office Maker Role Issuing Authority

Content Note Relates to an improved method of girder construction.

Production Date 29 July 1925 Brief Description Folded booklet.

Object Number AC93/8/4

Title Three letters relating to technical control of Albemarle

aircraft, 1939-1940

Maker Name Air Ministry
Maker Role Issuing Authority

Content Note Reports that Larrard has been made responsible for the

production of Albemarle aircraft.

Production Date 1939-1940

Brief Description Four typescript sheets. Fragile papers.

Title Two letters concerning "Invention relating to aircraft

and other vehicles patent 21000/30 (356862)", 1932

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Issuing Authority

Content Note Letter allowing Larrard to deal in the commercial rights of

this invention.

Production Date February 1932

Brief Description Two typescript sheets. Fragile papers.

Object Number AC93/8/6

Title Miscellaneous papers and cuttings about in-flight

refuelling, n.d.

Maker Name Imperial Airways

Maker Role Maker

Content Note Includes documents about Imperial Airways routes and

the flight of Mrs Victor Bruce.

Production Date Circa 1930s

Brief Description Papers and cuttings of various sizes.

Object Number AC93/8/7

Title Three mounted photographs of in-flight refuelling,

1929-1930

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Photographer

Content Note One photo is of a world record attempt in Chicago, for

time spent in the air, the others form a series showing in-

flight refuelling from the air.

Production Date 1929-1930

Brief Description Medium sized mounted prints.

Object Number AC93/8/8

Title Two RAE reports and one memorandum on wing tip

to wing tip refuelling, 1933

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Reports on experiments with a Vickers Virginia.

Production Date January 1933

Brief Description Five foolscap sheets.

Title RAE report K.2584 on tests leading to the refuelling of

Virginia aircraft in flight, 1932

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Reports on experiments with a Virginia using tail turret

method. Two copies, one with attached plans and

illustrations.

Production Date November 1932

Brief Description Foolscap sized reports.

Object Number AC93/8/10

Title RAE report K.2524: Further experiments on the

refuelling of aircraft in flight, 1931

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Report on tests with Virginias, primarily to test the

refuelling apparatus.

Production Date November 1931

Brief Description Foolscap sized report, eight pages.

Object Number AC93/8/11

Title RAE report EE108: Investigation of the risk of petrol

fires resulting from frictional electricity, 1929

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Report into the safety issues of in-flight refuelling.

Production Date 29 October 1929

Brief Description Foolscap sized report, 10 pages.

Object Number AC93/8/12

Title RAE report K.2458: Report on experiments in

connection with refuelling Virginia aircraft in the air.

1930

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Experiments based around delivering fuel to the gunner's

cockpit in the aircraft tail.

Production Date September 1930

Brief Description Foolscap sized report, seven pages.

Title Refuelling of aircraft in flight, RAE tail turret method,

1932

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Report suggests the experiments with the tail turret

method be discontinued.

Production Date July 1932

Brief Description Foolscap sized report, eleven pages.

Object Number AC93/8/14

Title RAE report K.2508: The refuelling of aircraft in flight,

1931

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Review of the experiments so far carried out in this area.

Production Date August 1931

Brief Description Foolscap sized report, fourteen pages.

Object Number AC93/8/15

Title Two patent specifications 346/181 and 351/172: "A

method and apparatus for tanking aircraft in the air",

1930

Maker Name H.M.Patent Office Maker Role Issuing Authority

Content Note Two specifications for methods and apparatus of tanking

aircraft in the air.

Production Date 1930

Brief Description Two booklets.

Object Number AC93/8/16

Title RAE report K.1867: Experiments on refuelling

between aeroplanes in flight, 1924

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Author

Content Note Early experiments to investigate the possibility of in-flight

refuelling.

Production Date 24 March 1924

Brief Description Foolscap sized report seven pages.

Title Patent specification 236/698: "Means for supplying

aircraft with fuel in flight", 1924

Maker Name H.M.Patent Office Maker Role Issuing Authority

Content Note Early in-flight refuelling inventions.

Production Date 12 May 1924 Brief Description Booklet.

Object Number AC93/8/18

Title Mounted photographic sequence of trial refuelling of

Virginia aircraft, 1929

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Photographer
Production Date Photographer
06 October 1929

Brief Description Photographic sequence of trial refuelling of Virginia

aircraft, port side views. Mounted print.

Object Number AC93/8/19

Title Three plans of in-flight refuelling equipment, 1931

Maker Name Saunders-Roe

Maker Role Maker

Content Note Plans for methods of making contact on flight.

Production Date 1931

Brief Description Small copies of plans.

Object Number AC93/8/20

Title Folder entitled "Refuelling in the air", contains

miscellaneous sketches, cuttings etc, circa 1930

Content Note Various newspaper articles about pioneering long

distance flights and sketches about refuelling.

Production Date Circa 1930

Brief Description Sketches and newspaper cuttings.

Object Number AC93/8/21

Title Note to Mr John Henry Broughton Larrard about take

off difficulties and in-flight refuelling, 1936

Content Note Note in reply to one of Larrard's reports.

Production Date 24 October 1936

Brief Description One sheet of lined paper.

Title Memorandum on a new proposal for assisting take-off

of heavily laden aircraft, n.d.

Content Note Report by Larrard about this area.

Production Date Circa 1950s

Brief Description Two fragile typed sheets.

Object Number AC93/8/23

Title Static electricity in relation to refuelling in flight

Maker Name Marcus Langley, Flight Refuelling Limited

Maker Role Author, Publisher

Content Note Discussion of how this subject relates to in-flight

refuelling.

Production Date 1938

Brief Description Small white covered booklet.

Object Number AC93/8/24

Title Copy of the Journal of the Royal Aeronautical

Society, including an article by Larrard on in-flight

refuelling, 1931

Maker Name Royal Aeronautical Society

Maker Role Publisher

Content Note An example of Larrard's presentation of his ideas to his

peers.

Production Date December 1931
Brief Description Light blue magazine.

Object Number AC93/8/25

Title Copy of the Journal of the Royal Aeronautical

Society, including an article by J.A. Miller on the

history of in-flight refuelling, 1960

Maker Name Royal Aeronautical Society, J.A. Miller

Maker Role Publisher, Author

Content Note The history of this subject, which includes a mention of

Larrard.

Production Date November 1960
Brief Description Light blue magazine.

Title Extracts from Aerospace magazine concerning the

history of in-flight refuelling, 1975

Maker Name Aerospace Publications

Maker Role Publisher

Content Note The history of this subject, which includes a mention of

Larrard's work.

Production Date 1975

Brief Description Magazine pages.

Object Number AC93/8/27

Title RAE report K.2538 with attached plan: Combined

seat, safety harness and quick release gear, 1932

Maker Name Royal Aircraft Establishment (RAE) Farnborough

Maker Role Issuing Authority

Content Note Report about this invention and its testing.

Production Date January 1932

Brief Description Four foolscap sized pages.

Object Number AC93/8/28

Title Dossier entitled "Notes on the post-war possibilities

of civil aviation and the aircraft industry in Northern

Ireland", 1943

Maker Name John Larrard

Maker Role Author

Content Note A dossier which presents some of the salient points likely

to affect post war aeronautical problems in Northern

Ireland.

Production Date October 1943

Brief Description Typescript in beige folder.

Object Number AC93/8/29

Title Folder of items relating to Larrard's time as Deputy

Controller, Ministry of Aircraft Production and

Ministry of Supply, Northern Ireland, circa 1942-1945

Maker Name John Larrard Maker Role Compiler

Content Note Variety of items reflecting Larrard's time in these posts.

Production Date Circa 1942-Circa 1945

Brief Description Folders, papers and newspaper cuttings.

Title Annotated map of Northern Ireland showing existing

aerodromes and those under construction, 1943

Content Note Map and explanatory notes.

Production Date 22 July 1943

Brief Description Map and attached notes.

Object Number AC93/8/31

Title Collection of official photographs of site visits

collected during Larrard's time as Regional

Controller, South-West region, Ministry of Supply and

**Board of Trade, 1947-1957** 

Maker Name John Larrard Maker Role Compiler

Content Note Wide variety of group photographs at a number of

locations.

Production Date 1945-1957 Brief Description Assorted prints.

Object Number AC93/8/32

Title Programme: Industrial tour by Party D, Imperial

Defence College, South-Western region, 1956

Maker Name Imperial Defence College

Maker Role Issuing Authority

Content Note Tour includes industrial sites in the South-West of

England.

Production Date April 1956

Brief Description Foolscap sized programme.

Object Number AC93/8/33

Title Illustrated dossier: National Defence College of

Canada, South-Western region industrial tour, 1954

Maker Name Board of Trade, Ministry of Supply

Maker Role Maker, Maker

Content Note Programme for a tour of industrial sites organised by

Larrard.

Production Date 1954

Brief Description Foolscap sized programme.

Title Dossier: National Defence College of Canada, South-

Western Region industrial tour, 1955

Maker Name Board of Trade, Ministry of Supply

Maker Role Maker, Maker

Content Note Programme for a tour of industrial sites organised by

Larrard.

Production Date 1955

Brief Description Foolscap sized programme.

Object Number AC93/8/35

Title Folio of posters: Second World War, circa 1944

Content Note Posters in the "For Victory" series of various aircraft and

explanation of their roles.

Production Date Circa 1944

Brief Description In large bound folio.