Library Additions

July/August 2004

BOOKS

Air Law


Numerous photographs — both colour and black-and-white — illustrate this history of the development over 70 years of the airport at Speke, which was officially opened on 1 July 1933.


Air Transport


Swissair 1931-1981: Aircraft past and present. Swissair. 1981. 64pp. Illustrated. Concise technical details are provided of 28 different aircraft types operated by Swissair from its origins (a merger in 1931 of Ad Astra Zero of Zurich and Balair of Basle), illustrated throughout by colour line diagrams showing the airline’s changing livery over the years.


Aircraft Design and Construction


Airworthiness and Maintenance


Aviation Medicine


Historical


Mathematics and Dynamics


Propulsion


Space

PAPERS


REPORTS

Aerodynamics


Aerospace Engineering


Astronomy and Geodesy


Control


Materials

Space product assurance: data for the selection of space materials and processes. ECSS-Q-70-71A. 27

Meteorology


Safety


Testing Facilities and Techniques

Library’s photographic collections

The Royal Aeronautical Society's Library holds a very extensive photographic/glass lantern slide/lithographic collection of aviation images (over 100,000) from the early days of ballooning through to current aircraft, missiles and rockets, including a number of portrait photographs of aviation personalities. Prints from the collection can be supplied to members and non-members on a fee basis for reproduction in books, journals, CD-ROMs, Internet sites, lecture slides or for use as presentation prints.

All enquiries regarding the Library should be addressed to: Brian Riddle, Librarian, Royal Aeronautical Society, 4 Hamilton Place, London W1J 7BQ, UK. Tel: +44 (0)20 7670 4362. Fax: +44 (0)20 7670 4359. e-mail: brian.riddle@raes.org.uk.

Junkers G-38 D-2500 c.1932. Only two of this aircraft type were produced, of which this is the second production aircraft. The Society's Library holds a wealth of original Junkers' material relating to its aircraft and engine designs (including company brochures and its house journals Junkers Nachrichten and Der Propeller). The collection includes various original brochures, press releases, performance data etc. for the Junkers G-38 Commercial Air Liner.

Restoration of Cayley portrait

Born in Brompton in Yorkshire, Sir George Cayley’s (1773-1857) understanding of the principles of heavier-than-air flight was first published in his paper ‘Aerial Navigation’ published over three parts in Nicholson’s Journal 1809-1810. This work was a great advance over anything that had previously been written on the subject of aeronautics. Now widely regarded as ‘The Father of Aeronautics’, Cayley evolved the idea of an aircraft with fixed wings, in which the principle of lift was separated from the propulsion system, and in which inherent stability, as well as tail-unit control-surfaces, must be incorporated. Convinced of the future of heavier-than-air vehicles, he built and flew models and manned gliders in an attempt to demonstrate their potential. Cayley’s work on aerodynamics was widely read and directly inspired others to investigate the problems of flight.

There appears to be just one known photograph of Sir George Cayley taken late-in-life aged around 70, the other main contemporary likeness — other than various busts and engravings — being the 1840 oil portrait by Henry Perronet Briggs of Sir George Cayley which was presented to the National Portrait Gallery (NPG 3977) by Sir Kenelm Cayley in 1956 and used as a frontispiece to J.L. Pritchard’s Sir George Cayley: the Inventor of the Aeroplane (London: Max Parrish and Co Ltd. 1961) and C.H. Gibbs-Smith Sir George Cayley’s Aeronautics 1796-1855 (London: HMSO/Science Museum. 1962).

A 19th century replica of this oil portrait owned by the Cayley family descendants Mark and Belinda Evans was loaned to the Royal Aeronautical Society last year for its ‘Pioneers of Flight Exhibition’ 5-9 August 2003 where it was displayed alongside a number of the original Cayley manuscripts in the care of the Society’s Library. Following the exhibition, in arrangement with the Society’s Librarian, the painting has been restored by Caterina Goodhart and Elizabeth Roberts of The London School of Picture and Frame Restoration. The restoration, which was undertaken at the request of and sponsored by Mr and Mrs Evans, and involved over 60 hours removing an old polyurethane varnish which had oxidated and darkened, has transformed the appearance of the painting which is now displayed once more at the Cayley family home at Brompton-by-Sawdon.

Far right: Studio portrait photograph of Sir George Cayley taken late-in-life aged around 70.
Right: Oil portrait of Sir George Cayley before restoration.
Below right: Close-up view of the painting after restoration. The painting and its frame required many hours of careful restoration which has been undertaken by the London School of Picture and Frame Restoration.

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