The National Aerospace Library

Aircraft Project Designs Collection

In May 2011 David Clarke presented the National Aerospace Library at Farnborough with an extensive collection of material accumulated by his late father, C F D ‘Dave’ Clarke, during his long aviation career from starting as an apprentice at Armstrong Whitworth in Coventry just after WW2 through to his retirement from the British Aerospace Future Projects Department at Hatfield in 1986.

The collection contains a wealth of original material and project design outlines of a wide variety of civil and military aircraft concepts from supersonic airliners through to V/STOL transports — many of which were never built and are little previously recorded but were the basis of later aircraft designs which were produced — conceived by the design offices of Armstrong Whitworth, de Havilland and Hawker Siddeley Aviation among other companies from the mid-1950s through to the mid-1980s.

Cataloguing the collection is ongoing but some of the ‘highlights’ recorded so far are summarised below:


A Medium-Range M = 1.2 Swept-Wing Airliner. Report No R240. Sir W G Armstrong Whitworth Aircraft, Coventry. 1958. Illustrated. Describes a project study of the AWP14001 supersonic medium-range transport design to carry 100 passengers over a stage length of 1,500 nautical miles.

AWP15 NATO Medium Range Maritime Patrol Aircraft. Sir W G Armstrong Whitworth Aircraft, Coventry. 1958. 30pp. Illustrated. Includes arrangement diagrams/data and fuselage cross-sections for the AWP15001 design project.


British Aerospace 748 Series 2B Technical Data. British Aerospace...
Comet Experience: a survey of the BAC One-Eleven. Includes dimensions/data and a number of performance charts for its flight envelope and gust loads. Following a concise history of the Comet programme, a description then follows of the Comet operations of Aerolineas Argentinas, Royal Air Force Transport Command and the aircraft’s flight training, load factors, recurring defects, maintenance and overhaul.


De Havilland Comet 4B and 4C: Information for Airport Operators. De Havilland Aircraft Company, Hatfield. 1960. 38pp. Illustrated. Includes a number of detailed diagrams recording data/dimensions, turning radii, servicing points, landing gear and fire protection systems.


Hawker P1127: with BSE Pegasus 5 (18,000lb rating). Hawker Aircraft, Kingston-upon-Thames. 1963. 7pp. Illustrated. Summarises the aircraft’s standard characteristics including weapon loads, typical mission loading and performance and other dimensions/data.


The Aerospace Professional

Branch Profile

including interior arrangement diagrams.

Feasibility Study on Supersonic Transports. APG1000/2305. Hawker Siddeley Aviation Ltd — Advanced Projects Group. 1960. 110pp. Illustrated. Includes detailed studies of the M = 2.2 Aluminium Aircraft and M = 2.7 Steel Aircraft projects within a feasibility analysis of the UK embarking on the design, development and manufacture of a transatlantic supersonic transport.


Type 1023 — BEA Transonic Transport. Hawker Siddeley Aviation Ltd — Advanced Projects Group. 1962. 20pp. Illustrated. Describes the dimensions/data, arrangement/interior layout, weight, operating costs, drag breakdown and payload range — for a proposed transonic, variable geometry transport designed to carry 117 passengers for a perceived BEA requirement for the early 1970s and how it compared to the Trident IC/IE/IF and the Type 1011A.


DH129 V/STOL Medium Range Transport. Hawker Siddeley Aviation. c.1968. 30pp. Illustrated. Describes the design's potential military payloads, performance, systems (hydraulic/electrical/fuel/navigation), flight deck and propulsion system.


V/STOL Strike Fighter Aircraft: a Selection of HSA Project 1956-1968. Hawker Siddeley Aviation, Kingston-upon-Thames. c.1968. Unpaginated. Illustrated. Records details of the Armstrong Whitworth AW171, Blackburn B123, de Havilland DH128, Hawker P1126/P1127/P1132/P1137/P1139/P1140/P1143/P1144/P1150/P1152/P1154/P1155/P1156, Harrier T2, HS175/HS1177/HS1179/HS1181/1017B/C variable geometry aircraft/SP110-1/SP110-2 and their numerous variants among other project designs.


Miles M.100 Student Basic Jet Trainer. F G Miles Ltd, Shoreham. c.1957. 31pp. Illustrated.

CF-105 Supersonic All-Weather Fighter: USAF Presentation, August 1954. A V Roe Canada Limited, Ontario. 1954. 47pp. Illustrated. A detailed analysis of the proposed aircraft design which was to evolve into the Avro Arrow illustrating its armament (Falcon GAR1 and Sparrow 2 missiles) and equipment/engine installations, performance, interception and combat procedure and how the CF-105 compared with the RCAF specification for a supersonic all-weather interceptor and the USAF specification for a long-range interceptor.


This collection complements the National Aerospace Library’s existing holdings of the extensive Derek Wood Collection of company brochures from the 1940s-1960s relating to specific aircraft and engine types (some of which were never built or built in limited numbers) described in The Aerospace Professional December 2004 and May 2005.

For any enquiries regarding this material, please contact the librarians at Farnborough (T +44 (0)1252 701038/701060; E hublibrary@aerosociety.com)
director of the collaborative Institute of Engineering and Medicine — working with Benadryl inventor George Rieveschl, UC VP of special projects; Henry Heimlich, the man who invented the choking-rescue manoeuvre and was director of surgery at Cincinnati’s Jewish Hospital; and Edward Patrick, Purdue University professor of electrical engineering. The team attempted to apply NASA advances to develop a miniature human heart-lung implant.

On 1 January 1980, Armstrong resigned from UC. “I stayed in that job longer than any job I’d ever had up to that point, but I decided it was time for me to go on and try some other things,” he later said.

In 1982, he came back as UC’s commencement speaker and the recipient of an honorary degree. In 1985, President Ronald Reagan named him to a commission to devise a space agenda for the 21st century and, the next year, he was named Vice Chairman of the Presidential Commission on the Space Shuttle Challenger Accident.

Following his academic career, Armstrong entered the business world, serving for ten years as chairman of Computing Technologies for Aviation and later as chairman of AIL Systems, a New York electronic systems company. A Fellow of the Royal Aeronautical Society, Armstrong was decorated by 17 countries. Internationally, he received the Royal Geographic Society’s Gold Medal, the Federation Aeronautique Internationale’s Gold Space Medal and the Harmon International Aviation Trophy. In the US, he received the first Congressional Space Medal of Honor, presented by President Jimmy Carter; the Congressional Gold Medal, presented by President Barack Obama as the highest civilian award bestowed by Congress; the Presidential Medal of Freedom; and the NASA Distinguished Service Medal. When the American hero died, President Obama said via Twitter, “Neil Armstrong was a hero not just of his time, but of all time. Thank you, Neil, for showing us the power of one small step.”

“As long as there are history books, Neil Armstrong will be included in them, remembered for taking humankind’s first small step on a world beyond our own,” added NASA administrator and former astronaut Charles Bolden. “As we enter this next era of space exploration, we do so standing on the shoulders of Neil Armstrong. We mourn the passing of a friend, fellow astronaut and true American hero.”

Armstrong was living in the Cincinnati suburb of Indian Hill when he died of complications resulting from cardiovascular procedures. He is survived by his wife, two sons, a stepson, a stepdaughter, ten grandchildren, a brother and a sister.

Based on an article by Deb Rieselman, Editor, University of Cincinnati Magazine

The National Aerospace Library

de Havilland Comet

On 5 October filming was undertaken at the National Aerospace Library at Farnborough as part of a forthcoming new Channel 4 documentary on the pioneering de Havilland Comet jet airliner. Produced by Darlow Smithson Productions, the documentary aims to portray the history of the Comet and its role as a forerunner of British post-WW2 civil aviation.

A focus of the documentary will be the tragic Comet accidents of the 1950s and at the National Aerospace Library the aviation historian Brian Rivas (author of the recent book A Very British Sound Barrier — the DH108: a Story of Courage, Triumph and Tragedy [Red Kite. 2012]) and co-author with Annie Bullen of the biography John Derry: the Story of Britain’s First Supersonic Pilot [William Kimber & Co Ltd. 1982]) was filmed looking through the Library’s copy of the Report by the de Havilland Engine Company Ltd, on engines recovered from Comet aircraft G-ALYP which crashed south of Elba — 10 January 1954 (six Parts).

This rare report complements the major Report on Comet Accident Investigation (12 Parts) which summarised the brilliant detective work undertaken by Sir Arnold Hall and his team at the Royal Aircraft Establishment at Farnborough, both intensive investigations being completed in a matter of a few months before the Court of Inquiry into the accidents to Comet G-ALYP on 10 January 1954 and Comet G-ALYY on 8 April 1954 opened on 19 October 1954 at the assembly hall of Church House, Westminster, with Lord Cohen acting as Commissioner.

The National Aerospace Library holds a wealth of original documents relating to the design and operation of the Comet airliner which the documentary will draw on including Type Specification of the de Havilland Comet Four Turbo-Jet Airliner (Type D.H.106-10-01) for British Overseas Airways Corporation (Issue No2 — October 1951), de Havilland Comet — Preliminary Pilots’ Notes (Hatfield: de Havilland Aircraft Company. 1950), performance and flight test reports on the DH Comet I and II 1951-1954 (15 folios), various de Havilland brochures for the Comet and its variants through to Comet 5 — Project Statement (‘Confidential’) (Hatfield: de Havilland Aircraft Company. 1956) which was never built, in addition to the Comet accident reports and the company journal de Havilland Gazette 1937 No1 – 1961 No124.

For any enquiries regarding this material, please contact the librarians at Farnborough (T +44 (0)1252 701038/701060; E hublibrary@aerosociety.com).

Brian Rivas and his publisher Red Kite will be present at the forthcoming Aerospace and Aviation Book Fair to be held at the Royal Aeronautical Society’s headquarters at No.4 Hamilton Place, London W1 on Monday, 19 November 2012.


The Cirrus Major Aero Engines Series II and III. Blackburn and General Aircraft, Brough. c.1947. 8pp. Illustrated.


The de Havilland Mosquito. de Havilland Aircraft Company, Hatfield. c.1947. 32pp. Illustrated. Records technical performance data of the FB6, B16 and TR33 variants, concluding with a description of each variant type (including production types built in Australia and Canada) from the PR1 through to FB41. Includes diagrams of the aircraft fuselage/wing construction, tail unit structure, undercarriage, tailwheel and engine installation.

The de Havilland Vampire DH100. de Havilland Aircraft Company, Hatfield. c.1949. 37pp. Illustrated. Records technical data (including performance graphs) for the Vampire Mk5 (Goblin 2), Vampire Mk6 (Goblin 3) and Sea Vampire Mk20 (Goblin 2). Includes diagrams of the aircraft’s undercarriage, tail unit/structure, nose-wheel, flying controls, fuel system and engine cowlinginstallation.


de Havilland Firestreak Guided Weapon. de Havilland Aircraft Propellers, Hatfield. c.1957. 4pp. Illustrated.


Hawker Fury Single-Seater Fighters. Hawker Aircraft Ltd. c.1944. 36pp. Illustrated. Illustrated by a number of black-and-white photographs, this is a detailed technical summary of the aircraft including diagrams of its fuel/oil/coolant systems.


Blue Steel: Reprinted from the Hawker Siddeley Review, April 1960. G. Travers. 6pp. Illustrated. A compilation of well-illustrated articles which describe the aircraft's design evolution, structure, flying controls (including automatic landing), systems, ground handling, interior design and its Spey power plant among other areas.

Miles M100 Centurion. F.G. Miles Ltd, Shoreham Airport. c.1959. 6pp. Illustrated.


For Trans-Ocean Travel — the Saunders-Roe Princess (SR/45) long range flying boat; For Maritime Defence the SR/A1 fighter flying boat. Saunders-Roe, East Cowes. c.1947. 6pp. Illustrated.


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

As described in The Aerospace Professional, December 2004, pp 14-15, cataloguing of the extensive collection of over 500 company brochures relating to specific aircraft and engine types of the mainly 1950s and 1960s which belonged to the aviation journalist and historian Derek Wood is ongoing. Summarised below are some of the latest additions to the Library's holdings:


**Cheetah Seventeen, Eighteen and Twenty-Seven Engines.** Armstrong Siddeley Motors, Coventry. c.1948. 14pp. Illustrated.

**Double-Mamba Power Group.** Reprinted from The Aeroplane, 1 April 1949. Armstrong Siddeley Motors, Coventry. 1949. 5pp. Illustrated.


**The Avro Athena Mk 1 and Mk 2 Advanced Trainer.** A.V. Roe & Co., Manchester. c.1948. 8pp. Illustrated.


**The Blackburn Universal.** Blackburn and General Aircraft, Brough. 1953. 27pp. Illustrated.


**Bristol Siddeley Rocket Engines.** Publication TJ 163/2. Bristol Siddeley Engines, Filton. 1964. 16pp. Illustrated. Describes the Bristol Siddeley Stentor (power plant for Blue Steel), Screamer, Super Sprite, Double Spectre and Gamma Mark 301 (power plant for Black Knight).

**Bristol Ramjets.** Bristol Aero-Engines, Filton. 1958. 20pp. Illustrated. Describes the Bristol Thor selected to power the Bristol Bloodhound surface-to-air missile and the Bristol High-Altitude Test Plant.

**Project 201 Utility Transport Aircraft.** British Aircraft Corporation, Weybridge. c.1968. 4pp. Illustrated.

**The de Havilland Ghost Jet Propulsion Unit 5,000lb, 2,270kg, static thrust — May 1950.** de Havilland Engine Company Ltd, Edgware. 1950. 41pp. Illustrated.

**The de Havilland Goblin Jet Propulsion Unit: 3,500/3,600lb, 1,586/1,631kg static thrust — August 1950.** de Havilland Engine Company Ltd, Edgware. 1950. 26pp. Illustrated.

**de Havilland Goblin and Ghost Jet Propulsion Unit.** de Havilland Engine Company Ltd, Edgware. 1947. 8pp. Illustrated.


**The Argosy Turboprop Freighterco.** Hawker Siddeley Aviation. c.1962. 5pp. Illustrated.


**Napier Scorpion Rocket Power.** D. Napier & Son, Luton Airport. c.1957. 9pp. Illustrated.

**WE-01: a New Concept in Executive and Light Liaison VTOL Transport.** Westland Aircraft, Yeovil. c.1969. 4pp. Illustrated.

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

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Library Additions
The extensive Derek Wood Collection comprising of original company brochures relating to specific aircraft and engine types of the 1940s through to the 1960s (some of which were unbuilt or built in limited numbers) is an important historical record of the British aircraft industry in the immediate postwar years which, in retrospect, could be seen as a ‘golden age’ of manufacturing and design.

The collection, along with 5,000 photographs, was originally donated to the Library in September 2004 by his widow, Lin Wood and the following is a list of further brochures from the collection which have recently been catalogued and were not previously recorded in The Aerospace Professional:


Brochure for the Britannia 310 (including various interior arrangement layouts), Type 170 Freighter, Sycamore (and its variants) and Bristol Type 173.


The de Havilland Heron: General Statement — October 1951. de Havilland Aircraft Co Ltd, Hatfield. 1951. 86pp. Illustrated.


The de Havilland Ghost: the Power Unit of the Comet jet Airliner. de Havilland Engine Company Limited, Leavesden. c.1953. 8pp. Illustrated.

Firestreak. de Havilland Propellers Limited, Hatfield. c.1958. 4pp. Illustrated.


Society News

Attacker/Spitfire two-seat trainer/Spitfire Mk4/Seafang/Sea Otter (Civil Version).


Discusses the design evolution of the Vickers-Armstrong V850 and V900 Vanguard.


An advanced tandem rotor helicopter project design study.

Earlier listings from the Derek Wood Collection were previously recorded in the December 2004 and May 2005 issues of The Aerospace Professional; pdfs of these articles are available via the Library’s website www.aerosociety.com/About-Us/nal/speccollections along with a number of other articles which record key aviation collections held at the National Aerospace Library (www.aerosociety.com/nal).

For any enquiries regarding this material, please contact the librarians at Farnborough T +44 (0)1252 701038/701060 E hublibrary@aerosociety.com
One of the great names in British aircraft construction — Sir Frederick Handley Page (1885-1962) — from the early crescent-wing design HP1 of 1909 for much of his lifetime Handley Page specialised in large aircraft design, his WW1 designs the O/100 and O/400 — among the first strategic bombers — being later adapted to civilian use in 1919 when he founded Handley Page Air Transport. Always keen to make flying safer, the Handley Page leading-edge slots achieved a significant reduction in take-off and landing speed and were used on the upper wing of the HP42 four-engined biplane airliners operated by Imperial Airways developing international civil aviation during the inter-war years. The Hampden, Halifax and Victor bombers continued the name of Handley Page well into the post-war years, his company — one of the first to build aircraft in Britain — surviving its founder by just eight years.

In addition to numerous books and articles on the company’s aircraft designs over the years and its house journal Handley Page Bulletin 1935 Vol 7 No 75 — 1939 Vol 11 No 130; 1948 Vol 14 No 160 — 1958 Vol 24 No 231, the National Aerospace Library holds, as detailed below, a historically significant collection of the company’s project designs, a number of which were presented to the Library in September 2012 by Stephen Cronbach having belonged to his father Peter L Cronbach, CEng, FRAeS, (1919-2011) who had first joined the company as a technical apprentice in 1936 and who was to become its Future Project Designer 1952-1964 and later Marketing Manager for the Jetstream having earlier been Technical Sales Manager for the Herald:

Some Notes Regarding The Technical Sales Manager for the Herald: earlier been Technical Sales Manager for the Jetstream having 1964 and later Marketing its Future Project Designer 1952-1964 and who was to become the company as a technical apprentice in 1936 and who was to become its Future Project Designer 1952-1964 and later Marketing Manager for the Jetstream having earlier been Technical Sales Manager for the Herald:

Some Notes Regarding The Technical Sales Manager for the Herald: earlier been Technical Sales Manager for the Jetstream having 1964 and later Marketing its Future Project Designer 1952-1964 and who was to become the company as a technical apprentice in 1936 and who was to become its Future Project Designer 1952-1964 and later Marketing Manager for the Jetstream having earlier been Technical Sales Manager for the Herald:

The National Aerospace Library

**Handley Page Projects**


High Speed Bomber (Type HP.65). Handley Page Limited, Cricklewood. 1943. 22pp. Illustrated. Describes the HP65 project design developed from the Halifax summarising its weight, parasite drag, bomb load, range and performance.

Proposed ‘70 Ton’ Bomber. Handley Page Limited, Cricklewood. c.1944. 6pp + 2 pull-out diagrams. Illustrated. Describes the swept-wing project design and its variants (including a jet-propelled tailless version) summarising its parasite drag and other performance data.


Handley Page Four-Engined Jet-Propelled Bomber. Handley Page Limited, Cricklewood. 1946. 23pp. Illustrated. Describes the HP80 swept wing design project which was to evolve into the Victor.


A Design Study of the H.P. 108 Laminar Flow Airliner. Handley...
Detailed description of ‘flying jeep car’ project design.


For any enquiries regarding this material, please contact the librarians at the NAL, Farnborough T +44 (0)1252 701038/701060 E hublibrary@aerosociety.com

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The National Aerospace Library at Farnborough holds an extensive collection of aircraft company publications (brochures, reports, manuals and journals) which have been donated over the decades, mainly by individuals who either worked for, or did business with, those companies.

The Librarians wish to acknowledge the latest additions to its holdings as detailed below which have been catalogued from the collections of Frank Henry Robertson AFRAeS (1912-1995) [presented by his son Malcolm Robertson CEng FRaes] and Michael F Eacock (1928-2013) [presented by his sons Roger, Michael and Graham Eacock].

These publications are often a unique source of information and record of the evolution of that particular company’s products (including numerous unbuilt aircraft project designs), for the National Aerospace Library’s evolving collection being of particular importance as a historical record as the Aerospace Library’s evolving collection being of information and record of the evolution of that company’s products. The Librarians wish to acknowledge the latest additions to its holdings as detailed below which have been catalogued from the collections of Frank Henry Robertson AFRAeS (1912-1995) [presented by his son Malcolm Robertson CEng FRaes] and Michael F Eacock (1928-2013) [presented by his sons Roger, Michael and Graham Eacock].

The Miles X7 could carry up to 500 troops over short ranges. RAeS (NAL).
Helicopter Co, Rotorcraft Corp, Cessna Aircraft Company, McDonnell Aircraft Corp, Helicopter Air Service Inc, Doman Helicopters Inc, Sikorsky Aircraft Inc, Kaman Aircraft Corp, Piasecki Helicopter Corp, Kellett Aircraft Corp, Bell Aircraft Corp, Cornvair Ltd, Grumman Aircraft Engineering Corp and The Glenn L Martin Co. Also summarises visits to the Boeing Airplane Co, United Air Lines Maintenance Base at San Francisco, Fairchild Aircraft Division, Bendix Aviation Corp, the US Bureau of Aeronautics, Naval Experimental Station at Patuxent, NACA Langley Field and Wright Field at Dayton, Ohio.


Percival Aircraft Limited/ Hunting Aircraft Ltd/British Aircraft Corporation (BAC)


The History of Percival Aircraft Ltd. Reprinted from The Aeroplane Spotter Vol IX No. 206 7 February 1948. Concludes with detailed Percival Type Number list.


Aerial Survey from Camera to Map: the Comprehensive Service of Hunting AeroSurveys Ltd. Supplement to the Hunting Aviation Review. c.1948. 6pp. Illustrated.


Percival Provost in the Air: Flying Experience with the RAF's Latest Trainer. Reprinted from Flight 14 September 1951. Includes performance data for the P.56 Mk.1/Mk.2 and cockpit arrangement diagram.


Describes the evolution of the Percival P50 Prince and its variants including the Sea Prince TMk1. Includes a number of sectional diagrams.


Includes sectional diagrams of the aircraft's cockpit, interior arrangements and cutaway by John Marsden.


Includes cutaway diagrams of the Napier Oxyr NO.4 T750ghp Gas Generator and the Hunting Percival P105 helicopter project powered by the Napier Oxyr NO.4 825 gas-horse-power generator.


Describes the Hunting H.137/H.137R/H.142 project designs, their economics and loading sequences.


A development of the Jet Provost TMk.4, this brochure presented basic performance data (including rate of climb, stalling speeds and landing distances), range, nose compartment equipment, fatigue life, weight breakdown and armament.


Describes the aircraft's dimensions, range, flight envelope (including stalling speeds and landing distances), typical training sortie, cockpit, armament, structure, fatigue life and other data.


Describes the aircraft's dimensions, range, performance, flight envelope (including stalling speeds and landing distances), typical training sortie, cockpit, armament, stores, weapon loads, fatigue life and other data.

Ch 145, describes the aircrafts aerodynamic data, range, weight breakdown, flight envelope (including stalling speeds and landing distances), stores, weapon loads, fatigue life, cabin pressurisation systems and other data. Evolved into the Strikemaster.


**Shorts**


Describes the Shorts PD17 jet-lift aircraft design developed from an English Electric concept.


Describes the Shorts PD25/4 single-seat delta-winged fighter design which was to be powered by eight Rolls-Royce RB108 engines mounted amidships to provide vertical lift and a Bristol Orpheus 12R mounted in the rear of the fuselage to provide horizontal thrust.


Describes the Shorts SC7 Skyvan and records the design philosophy which led to the decision to proceed with the project.


Describes the Shorts PD65 jet-powered design considered as a replacement for the DC-3 (including general arrangement diagrams, aerodynamics, wing/fuselage structure, performance, passenger accommodation, flap system, air conditioning/hydraulic/fuel systems, operating costs).


Includes as appendices descriptions of the F H Robertson ‘Rotacoupe’, the McCandless single-seat gyroplane, Short PD66.00.11 4-5 seat autogiro design, Short PD59 Rotolibus (a 20-seat autogiro design with fuselage accommodation identical to the PD80) and a report on autogiros compiled by Arthur D Little for Shorts.

**Other Papers**

**2-Seat Glider Type R.11.** F H Robertson, Robertson Aircraft, Isle of Wight. 1947. Irregular pagination.


The Robertson “Rotacoupe”. F H Robertson, c.1965. 23pp. Illustrated. Describes a two-seat autogiro design powered by a 210hp piston engine and fixed pitch propeller.


For enquiries regarding this material please contact the librarians at the National Aerospace Library: T +44 (0)1252 701038 or 701060; E hublibrary@aerosociety.com
The National Aerospace Library at Farnborough holds a historically important archive of original material relating to the British and Colonial Aeroplane Company and its successor the Bristol Aeroplane Company.

Included in the Library’s archives is ‘The British and Colonial Aeroplane Company Minute Book No.1’ (which contains the hand-written accounts of monthly meetings of Directors from its formation in February 1910 through to December 1919), the company’s record book of fuselage construction and repair 1911–1917, numerous internal company reports and a large number of original notebooks containing the design calculations for a variety of Bristol types compiled by F S Barnwell, A J Newport, W T Reid, G A Stephens, and W G Morgan.

In August 1912 the British and Colonial Aeroplane Company entered two aircraft designated GE2 (having been originally designed by E C Gordon England) for the War Office Military Aeroplane Competition held at Salisbury Plain — Military Trials No.12 being piloted by C Howard Pixton and No.13 by Gordon England.

The National Aerospace Library holds 45 large original sheets (c.40 x 27 inches), hand-drawn by Barnwell and others, recording the company’s detailed engineering design calculations for the GE2 two-bay non-staggered biplane and its component parts, 31 of which have recently been conserved and individually encapsulated in a polyester laminate (housed in a made-to-measure archival storage boxes) which means that they can be handled and studied without damaging the originals.

The conservation of these historic drawings — which has been undertaken by the conservators Riley, Dunn and Wilson Ltd of Falkirk — has been funded from the sale of National Aerospace Library’s sales of donated aviation books at its annual Book Fairs.

The 2014 Aviation & Aerospace Book Fair will take place on Monday, 17 November (11 am–6 pm) at No.4 Hamilton Place, London W1J 7BQ, UK.

The National Aerospace Library will have available 100s of new/secondhand aviation books to sell on the day — a wide range of aviation history books, autobiographies, biographies, histories of individual aircraft/aircraft companies, old journals, ‘as new’ textbooks, etc. Most of the books will be sold between £1 and £5, the money raised from the Library’s stand to be used towards conserving further historic material held in the Library’s archives.
The National Aerospace Library

HM Balloon ‘Thrasher’ Album

On 8 June the Society’s Library received from Mrs Helen Martin Leake a large album of material relating to an early air accident in the history of British military aviation which appears to be unrecorded in many of the standard histories of the period. The album was presented to the Library at the wish of her late husband Kenneth Martin Leake who died on 26 December 2008.

At 4.22 pm on Tuesday, 28 May 1907 Lieutenant Theodore Edward Martin Leake (1879-1907) and Lieutenant William Talbot McClintock Caulfield of the Royal Engineers ascended from Cove Common in the military HM Balloon ‘Thrasher’ in the presence of King Edward VII and Prince Fushimi of Japan who were paying a visit to the Balloon Factory at Farnborough following a military review at Aldershot earlier that day.

The balloon was subsequently recovered by a trawler ‘Skylark’ some 8 miles off the coast of Exmouth in Devon on 31 May in which was found the balloonists’ log, the last entry in which recorded that at 8.15 pm on the evening of their flight they were ‘Trailing’ at a height of 100ft. The bodies of the two aeronauts were recovered from the sea some weeks later — Lieutenant Caulfield from West Bay on 23 June and Lieutenant Martin Leake on 29 June off the coast of Burton Bradstock.

The Daily Chronicle on 1 June 1907 noted: “Taking a bee-line from Farnborough the aeronauts probably thought they might, on reaching the mouth of the Exe, safely cross from the east to the west coast of the bay, and land near Brixham. Unhappily, their calculations were inaccurate, and it is to be feared that they were carried out to sea.”

What happened to ‘Thrasher’ is a mystery, the album including a report on the fate of the balloon signed by Colonel J.E. Capper, Commandant of the Balloon School, which concludes:

“There is no explanation I can give. It appears perfectly obvious that the officers made no attempt at all to land, and why they should suddenly disappear from a balloon which was in first class condition, had ample ballast, and was in every way fitted for a long run, is incomprehensible.”

Ju88 booklet to the Library

The Society’s Library has been presented by David Cookson with a rare booklet entitled Instructions for Flying the Junkers 88. A.M. Pamphlet 114D issued by the Air Ministry in April 1942. The booklet — which includes pull-out diagrams showing the instrument and cockpit layout of the aircraft and a cutaway illustration — was probably issued in connection with the captured Ju88A-5 (later allocated the RAF serial number EE205) which was ferried to the Royal Aircraft Establishment at Farnborough in August 1941 and flown extensively over the following months.

Through a donation in January 1941 by a Mr Trost, who managed a sales office for Junkers in London Victoria, the Ju88 company is well-represented in the Library’s archives through a large number of original Junkers brochures for specific aircraft and engine types, in addition to the company’s journals Junkers Nachrichten, Junkers — Luftverkehr Nachrichtenblatt, Junkers Luftverkehrs Informationen and Der Propeller and the booklet complements this collection.

All enquiries concerning this collection should be directed to: Brian Riddle, Librarian, Royal Aeronautical Society, No.4 Hamilton Place, London W1J 7BQ, UK. Tel: +44 (0)20 7670 4362. e-mail: brian.riddle@aerosociety.com
The National Aerospace Library

Westland Aircraft Projects

Included among the James Goulding aviation artwork (described in The Aerospace Professional February 2011 p 22) presented to the National Aerospace Library were a number of oversize original Westland Aircraft Limited documents.

Further research has revealed these to hold a particular historical significance being the original tender documents submitted in response to the Air Ministry specification operational requirements for various future military aircraft designs. They include the original concepts for the Westland Whirlwind, Welkin and the Lysander prototype all designed under W E W (William Edward Willoughby) Petter (1908-1968), the major aircraft designer who left the Westland company and joined English Electric Company Limited (Aircraft Division) in July 1944 for whom he was to design the Canberra and Lightning.

The details of these project designs are as follows:


Amendment to Westland Tender for Torpedo Bomber Reconnaissance Aeroplane to Specification S.24/37. Westland Aircraft Limited, Yeovil. 1938. 10pp + 5 pull-out blueprint diagrams. Describes the Westland P.10 project design.


A number of the colour originals of the original James Goulding aviation artwork are currently being individually archivally encapsulated in a polyester laminate (so that they can be handled and studied without damaging the originals) to be housed in a made-to-measure archival storage box. The conservation of this artwork has been funded from the proceeds of the National Aerospace Library’s stand at the Aviation Book Fair held on 21 November 2011 at which 100s of as-new/secondhand donated aviation books were sold.

As part of a major digitisation project undertaken at the National Aerospace Library in July 2011, all the James Goulding aviation artwork was digitally photographed.

For any enquiries regarding this material, please contact the librarians at Farnborough T +44 (0)1252 701038 / 701060; E hublibrary@aerosociety.com
ADOPT-A-BOOK APPEAL

‘Adopt-a-Book’ Appeal
— Aerospace Company Journals

The worldwide coverage of its journal holdings — covering developments in aeronautics, aviation, aircraft/aerospace technology from the 1860s to the present day — is a key strength of the Society’s Library and, as this has been a policy of the Society since its formation, it has resulted in probably a unique collection recording the development of aviation around the world.

Included in the collection are a number of journals produced over the years by aerospace companies around the world which are often a unique source of information and record of that particular company’s products and the people involved in the company. Partly financed by donations to the Library’s ‘Adopt-a-Book’ programme, a number of the previously unbound older pre-1950 aircraft company journal titles have been archivally bound for their conservation (including titles such as Handley Page Bulletin, The Armstrong Siddeley Air-Mail, Saro Progress, Douglas Airview, Martin Star, Junkers Nachrichten, Bulletin Fokker, Chronique des Avions Louis Breguet and Bulletin Techniques des Avions Potez).

However, there remains a number of important titles produced by leading aerospace companies in Britain, Canada and the United States during the post-war years that have yet to be archivally bound. These journals are a part of a major collection of the world’s aeronautical heritage which should be conserved for current and future generations of researchers. The details of the journals are as follows:

**Avro Canada Jet Age**
Spring 1952–Spring 1956
[two volumes to be bound — Cost of conservation £60]

**Avro News**
[six volumes to be bound — Cost of conservation £180]

**Beagle News**
Nos 1–4, 6–7 1964–1968
[one volume to be bound — Cost of conservation £30]

**The Bee Hive** (The Pratt & Whitney Aircraft Co/United Aircraft Company/United Technologies)
Vol 6 (8)–Vol 17 (10), Vol 23 (1)–Vol 54 (5) August 1932–October 1942, January 1948–Fall 1979
[22 volumes to be bound — Cost of conservation £660]

**Bristol Siddeley Journal**
Vol 1 (1)–Vol 8 (3) Autumn 1959–1967
[five volumes to be bound — Cost of conservation £150]

**Convair Traveller**
Vol 12 (8)–Vol 21 (3) December 1960–Winter 1969
[five volumes to be bound — Cost of conservation £150]

**Dowty Group Journal**
[three volumes to be bound — Cost of conservation £90]

**de Havilland Gazette**
October 1955–December 1958 Nos 89–100, 102–108
[two volumes to be bound — Cost of conservation £60]

(The Society’s Library holds a complete run of de Havilland Gazette from 1937–1961 with the exception of Issue Nos 79 and 101, including the original The DH Gazette Vols 1–2 August 1926–May 1930)
Hunting Aviation Review
Spring 1948–Spring 1951 [one volume to be bound — Cost of conservation £30]

Lockheed Georgia Quarterly
(Lockheed Aircraft Corporation — Lockheed-Georgia Company)
Vol 1 (1)–Vol 2 (2), Vol 2 (4)–Vol 6 (2) April 1963–June 1969 [two volumes to be bound — Cost of conservation £60]

Lockheed Horizons (Lockheed Aircraft Corporation — Lockheed California Company)
Nos 1–8 Spring 1965–January 1970 [two volumes to be bound — Cost of conservation £60]

Miles Magazine
Vol 3 (1, 3–5)–Vol 4 (1–4) October 1945–October 1947 [one volume to be bound — Cost of conservation £30]

Northrop News
Vol 33 (5)–Vol 38 (9) May 1975–October 1980 [six volumes to be bound — Cost of conservation £180]

Rendezvous (Bell Aerosystems Company/Bell Aerospace Textron)
Vols 1–16 April–May 1962–Winter/Spring 1977 [six volumes to be bound — Cost of conservation £180]

Ryan Reporter/Teledyne Ryan Aeronautical Reporter
Vol 12 (7), Vol 13 (3)–Vol 34 November 1951–Spring 1973 [ten volumes to be bound — Cost of conservation £300]

SAAB Sonics
Nos 14–19, 21–29 April–June 1951–1961 [two volumes to be bound — Cost of conservation £60]

Shell Aviation News (Shell Group)
Nos 34–98 March 1934–August 1939 [ten volumes to be bound — Cost of conservation £300]

Shorts Quarterly Review
Vol 1 (1)–Vol 3 (11) January 1950–Summer 1965 [five volumes to be bound — Cost of conservation £150]

Short Story
Nos 20, 22–32, 34, 37–41, 44, 47 Easter 1975–Summer 1985 [two volumes to be bound — Cost of conservation £60]

Skyline (North American Aviation)

If any individual member, company or organisation would like to ‘adopt’ one of these journals (possibly in memory of someone else) and so conserve them for the present and future, please contact: Brian Riddle, Librarian, Royal Aeronautical Society, 4 Hamilton Place, London W1J 7BQ, UK. Tel: +44 (0)20 7670 4362. e-mail: brian.riddle@raes.org.uk Anyone who would like to contribute to rebinding costs will have their donation recorded on the bookplate inside the particular bound volume(s).

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Enterprise (de Havilland Companies)
August 1949–October 1955 [two volumes to be bound — Cost of conservation £60]

Fairey Review

General Aircraft News
Nos 5–8, 10 April 1940–July 1942 [one volume to be bound — Cost of conservation £30]

Hawker Siddeley Review
Vol 1 (1)–Vol 13 (1) February 1948–April 1960 [six volumes to be bound — Cost of conservation £180]

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