

The National Aerospace Library

Wartime Aircraft Production Statistics



On 6 September Mrs Bridget Conigliaro presented to the National Aerospace Library at Farnborough the surviving aeronautical papers of her father, James Valentine Connolly, FRAeS (1907-1993). Educated at Sydney University, he served as a pilot in the Australian Citizen Air Force 1925-1930 and was Secretary of the Royal Aeronautical Society's Australasian Branch 1930-1935. He later emigrated to Britain where he served during WW2 as Assistant Director of Aircraft Production at the Ministry of Aircraft Production [MAP] 1941-1946 (later to be amalgamated into the Ministry of Supply). Post-war his career included being Head of the Department of Aircraft Economics and Production at the newly formed College of Aeronautics at Cranfield and being a leading member of the Society's Management Studies Group which was originally formed in 1967.

The J V Connolly papers detailed below are of key historical importance recording in detail the wartime aircraft production

capacity of the British aircraft industry and how it compared with America, Germany and Japan, and includes a fascinating compilation of detailed plans of aircraft manufacturing sites/factories around Britain (including details of buildings, hangars and floor areas) which would be of interest not only to aviation but also local historians:

The Organisation and Duties of the Directorate General of Production ('Most Secret'). Ministry of Aircraft Production, London. 1939. 11pp. Includes summary of British aircraft production levels arranged by aircraft company at the outbreak of WW2.

Target Aircraft Production Programme and Provisioning Aircraft Programme and 1940-1942 ('Most Secret'). Ministry of Aircraft Production, London. 1940-1942.

Detailed statistical record of British month-by-month aircraft production — including the production of the shadow factories — arranged by aircraft

type. Includes summary of anticipated production requirements for aircraft engines, propellers, turrets, machine and cannon guns.

Memorandum for Sir Charles Craven from Patrick Hennessey, concerning Aircraft Production to June 1943. Ministry of Aircraft Production, London. 1943.

Memorandum on American Production. Ministry of Aircraft Production, London. 1939. 17pp. A review of the production capacity of the American aircraft industry including its efficiency and manpower.

Compilation of Production Graphs for the American Aircraft Industry 1940-1944. Aircraft Procurement Board. 1940-1944. 48pp. Illustrated.

Records detailed month-by-month analysis of US production of aircraft armament, heavy bombers, engines, propellers concluding with a summary of airframe weight production.

Total Labour Studies — Comparison of British and German Labour Forces. Report No 2. Ministry of Supply, London. 1947. Irregular pagination. Illustrated. A statistical comparative analysis of the total manpower used in the British and German aircraft industries 1940-1945.

Overall Statistics of British, American, German and Japanese Aircraft Industries. Report No 4. Ministry of Supply, London. c.1947. Irregular pagination. Illustrated.

A statistical comparative analysis of the aircraft production levels of the four major countries at war during 1939-1944 including aircraft deliveries, average structural weight per airframe and total labour force.

Rate of Attainment of Peak Output after First Delivery. Report No 5. Ministry of Supply, London. 1947. 6pp. Illustrated. A statistical analysis of actual deliveries of aircraft from 25 British factories during the period

Left: Short Stirlings and Sunderlands at the Short Queen's Island factory in Belfast. RAeS (NAL) photo.

1939-1946 taken to planned peak.

'Time Cycle for Development and Production of Aircraft' and 'Elapsed Time from Start of Project to Production. Report No 6'. Ministry of Supply, London. 1947. Irregular pagination. Illustrated.

Includes table recording for a number of leading WW2 British military aircraft types the timescales involved from the date of formulation of requirement through to the date of the first squadron operationally effective with the type and when peak production was reached.

Compilation of Plans of Aircraft Manufacturing Sites/Factories. Ministry of Supply, London. c.1946-1947. 185pp.

Illustrates the site arrangement (including buildings, hangars, floor areas) of Air Dispatch Ltd (Cardiff), Airwork General Trading Ltd (Gatwick), Air Service Training Ltd (Hamble), Airspeed Ltd (Portsmouth, Christchurch, Drayton, Farlington, Langstone), Sir W G Armstrong Whitworth Ltd (Babington, Whitley, Coventry, Bitteswell, Sywell), Auster Aircraft Ltd (Rearsby, Syston, Thurmaston), Blackburn Aircraft Ltd (Brough), Boulton Paul Aircraft Ltd (Wolverhampton), Bristol Aeroplane Company Ltd (Filton - Rodney, West Works, East Works, Gipsy Patch), Brooklands Aviation Ltd (Moulton, Sywell, Weybridge), de Havilland Aircraft Co Ltd (Hatfield, Welwyn Garden City), Dowty Equipment Ltd (Cheltenham, Bath Road, Ashchurch, Windrush), Electro-Hydraulics (Messier) Ltd (Warrington), English Electric Co Ltd (Preston, Salmesbury), Fairey Aviation Co Ltd (Hamble, Hayes, Ringway, Stockport, Heston), Field Aircraft Services Ltd (Croydon, Hanworth), Folland Aircraft Ltd (Hamble), General Aircraft Ltd (Feltham, Lasham), Gloster Aircraft Co Ltd (Hucclecote, Witcombe, Uckington, Bentham, Moreton Valence), Handley Page Ltd (Cricklewood, Radlett), Hawker Aircraft Ltd (Langley), Martin Hearn Ltd (Hooton Park), Helliwells Ltd (Walsall), Heston Aircraft Ltd, Lockheed Hydraulic Brake Co Ltd

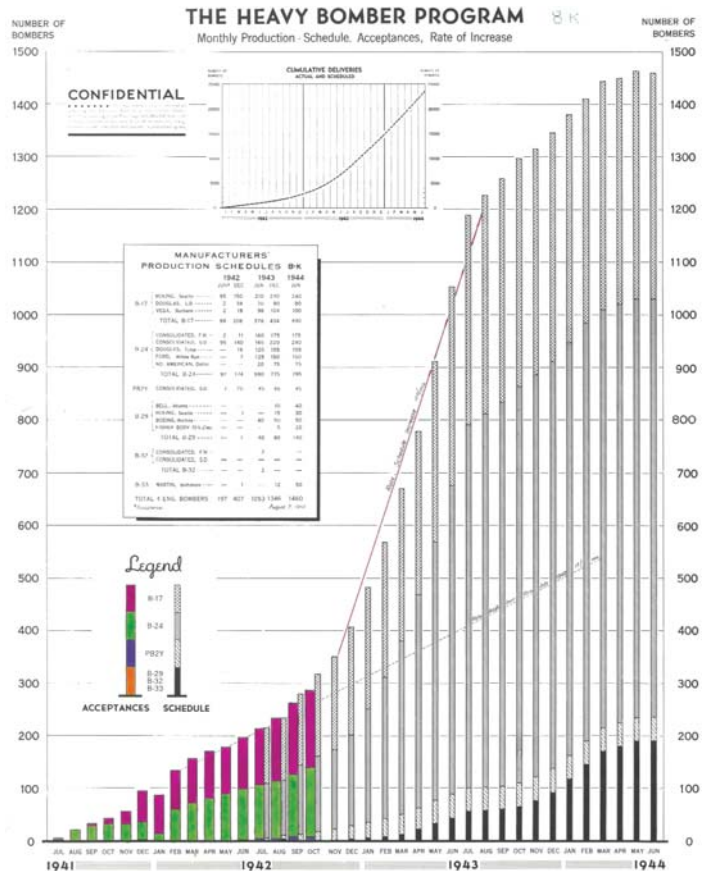
(Leamington Spa), R Malcolm Ltd (White Waltham), Marshall's Flying School Ltd (Cambridge), Marston Excelsior Limited (Wolverhampton), Miles Aircraft Limited (Newtownards, Reading), Percival Aircraft Ltd (Luton), Portsmouth Aviation Ltd (Portsmouth, Christchurch, Rochester), Reid & Sigrist Ltd (Desford), A V Roe & Co Ltd (Middleton, Bracebridge Heath, Langar, Woodford), Saunders Roe (Eastleigh, Cowes, Osborne), Scottish Aviation Limited (Prestwick), Short Brothers Ltd (Rochester), Short & Harland (Altona, Belfast, Glen, Lindsay & Dawnay, Hawlmark), Slingsby Sailplanes Ltd (Kirbymoorside), Southern Aircraft (Gatwick) Ltd (Crawley), Turner Manufacturing Co, Vickers-Armstrong Ltd (Weybridge - Tumbling Bay, Brooklands House, Members Hill, Foxwarren, Pyrford, Wisley, Shawbury, Hursley Park, Swindon), Vickers Aircraft Ltd (Chilbolton, Eastleigh, Newbury, Trowbridge), Western Airways Ltd (Weston-Super-Mare) and Westland Aircraft Ltd (Ilchester, Yeovil).

Analytical Section Bulletins. Federal Aircraft Limited — Analytical Section, Montreal. 1944. Irregular pagination. A detailed measurement analysis of performance man-hours of the Canadian aircraft industry originated by the Analytical Section of the Department of Munitions and Supply — Aircraft Production Branch.

Summary of American aircraft production 1940-1944. War Production Board. 1944. 6pp. Illustrated. An overview of American wartime aircraft production including its distribution between fighters, bombers, transport and training aircraft including the Army Air Forces post-war planning charts.

Aircraft Production: Student Committee Report. The Industrial College of the Armed Forces, Washington, DC 1947-1948. 115pp. A detailed industry analysis of American aircraft and engine production during WW2 and in the immediate post-war aftermath.

Final Report on Relationships for Determining the Optimum Expansibility of the Elements of a Peacetime Aircraft Procurement



US Heavy Bomber Production Statistics (Aircraft Procurement Board — August 1942). RAeS (NAL) photo.

Program: SRI Project No 144 prepared for United States Air Force — Air Materiel Command. Stanford Research Institute, Stanford, CA. 1949. Irregular pagination. Includes analysis of the Direct Manhours Progress Curve.

Proposals for a Course in Aircraft Economics and Production at the College of Aeronautics. J V Connolly. College of Aeronautics, Cranfield. c.1947-1948. Irregular pagination.

Statistical Review 1939-1945 ('Secret'). Ministry of Aircraft Production. 1946. 53pp. Detailed statistical summary report by year/quarter of the British aircraft industry's output during the WW2 summarising deliveries of aircraft, engines, aircraft and engine accessories (carburetors/pumps/radiators/oil coolers), propellers, armaments (guns/turrets), spares, labour and raw materials by type/firm including RAF fighter aircraft in storage units.

Aircraft, Engine and Propeller Production ('Confidential'). Report No 15. Aircraft Production Board

— Resources Control Office. 1944. 6pp. Compilation of detailed statistical graphs summarising American aircraft/engines/propellers deliveries by type and the number of people employed in their production.

The J V Connolly papers complement other key papers on wartime aircraft production held in the archives of the National Aerospace Library at Farnborough including the papers of the Advisory Committee of the Royal Aeronautical Society to the Ministers of Aircraft Production, the Reports of the Fedden Mission to America (December 1942 - March 1943), the Fedden Special Technical Mission to Germany (June 1945), the Farren Mission to Germany (June 1945) and the wartime intelligence reports (described in *The Aerospace Professional* January 2010 pp 10-11).

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