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Contrails

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CAvSoc

Battle of Britain 1935 by Steve Robson

Our September talk told the story of the political and military situation between WW1 and WW2 and identified 1935 as a key year when key developments came together that enabled novice fighter pilots with novel aircraft to stop the Luftwaffe gaining the air supremacy needed as a prelude to an invasion.

Back in 1908 Charles Rolls, of Rolls-Royce fame, had advised the government that 'Britain had ceased to be an island' and in 1915 the Zeppelins roamed our skies with impunity initially. General Smuts, a former Boer general, was tasked with reviewing Britain's aviation capability and response which was shared between the RFC and RNAS. He delegated General Ashmore to work out a defence scheme for London and Smuts concluded that the



two air arms should be combined into a single fighting force. Ashmore developed the London Air Defence Area which was the forerunner of the Royal Observer Corps. The combined air arms became the Royal Air Force but as soon as WW1 finished the ten

year rule (based on no more wars for ten years) was imposed which decimated military budgets. The RAF fared relatively well as there was a policy to keep the range of aircraft companies alive with small orders and aircraft were being used effectively in the Middle East. As chancellor, Churchill wanted to roll over the ten year rule in 1928 but by 1931 it was realised the cuts had gone deep at a time when Nazi Germany was gaining strength and ignoring the limitations imposed by the Versailles Treaty. 1935 saw the Luftwaffe formally announced and the first flights of the Heinkel111, Me109 and Stuka.

The Schneider Trophy was won outright in 1931 thanks to Lady Houston who donated £100,000 towards the aircraft and engine when the government refused to do so. Rapid development of the 'Rolls-Royce R' engine for the Supermarine sea planes provided the basis for the RR Merlin. The Hurricane, Spitfire and Merlin engine had all started as private ventures with first flight of the Hurri-

cane in November 1935 and Spitfire a few months after with the Merlin still at a development stage. Meanwhile two scientists; Watson and Wilkins, in February 1935 had started developing what was to become the Chain Home radar network. On its own all radar did was to identify aircraft at up to 100 miles but when integrated with the Observer Corps in what was to become known as the Dowding system it enabled our outnumbered forces to react effectively and sparingly without the waste of flying standing patrols.



A key decision in 1935 was to change fighter armament from 4 Vickers guns to 8 Brownings which gave a higher rate of fire albeit still with the puny .303in rifle round. Whilst cannons provided far better fire power they were too few and troublesome at the time to affect the Battle of Britain.

Aircraft performance was dramatically improved around 1938 by the introduction of 100octane fuel which gave up to 30% more power when the available increased boost was used. Also in 1938 the constant speed feathering propeller was introduced which gave faster climb rates and shortened take off runs by enabling the optimum use of engine power. War stocks, of fuel and equipment, and production across the fighter force including dispersal of Spitfire production were achieved just in time.

Bournemouth Air Festival 2019

The Red Arrows tour of the USA in 2019 means they will not be available to display at Bournemouth, or other venues, during August and September. The Reds last visited USA in 2008 but a full tour goes back to 1993.



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Next Meeting - Wednesday 07Nov18
Royal Observer Corps by Neville Cullingford
Meeting Wednesday **2nd January 2019**
History of Aviation by Ernie Ball
Meeting Wednesday **6th March 2019**
Battle of the Atlantic by Dr Henry Goodall