CHAPTER 1

DEVELOPMENT OF THE ROYAL AIR FORCE

- 1. Except for the use made of balloons for reconnaissance, which led to the establishment of the balloon school at Chatham in 1879, military aviation in the United Kingdom may be said to have started in May, 1912, with the formation of the Royal Flying Corps (RFC), which consisted of a military wing and a naval wing under control of the War Office and Admiralty respectively. All pilots were trained at the central flying school at Upavon. The aircraft were unarmed and were intended to be used for reconnaissance in support of military and naval operations.
- 2. In June, 1914, it was decided that the use of aircraft in support of naval operations posed special problems and the naval wing broke away from the RFC to form a Royal Naval Air Service (RNAS).
- 3. At the outbreak of the First World War in August, 1914, the strength of the RFC was seven squadrons of aircraft and one squadron of balloons and the strength of the RNAS was one squadron only.
- 4. The aircraft were still used mainly for reconnaissance work and it was not until the Germans began to use fighter aircraft to shoot down our reconnaissance machines that we countered with our British fighters to protect the reconnaissance aircraft. The introduction of fighter aircraft on both sides led to the now legendary battles over the western front in which men like Ball, McCudden, Mannock, Von Richthofen, Immelmann and Boelcke fought for air superiority.
- 5. By 1916, as a result of early Zeppelin raids, it began to be appreciated by the allies that aircraft could be used for bombing and both the RFC and RNAS commenced bombing attacks against Germany. By 1917 the German Air Force used bomber aircraft to attack this country. This bombing and counter-bombing was to play a significant part in the formation of the Royal Air Force and in fact spurred the Government into action. A committee under General Smuts was set up and its recommendations resulted in the formation of the Air Council (on an equal level with the Board of the Admiralty and the Army Council) and the establishment of the Air Ministry. On the 1st April, 1918, the Royal Air Force was born through the amalgamation of the existing RFC and RNAS.
- 6. At the end of the war in November, 1918, the RAF had 190 squadrons and 290,000 officers and men. In less than two years the strength had dropped to 30 squadrons and 25,000 officers and men, and it was then that Lord Trenchard (the father of the Royal Air Force) and Sir Winston Churchill (Secretary of State for War and Air) agreed that the force should be kept at about this operational strength so that the annual budget of about £15 million could be concentrated on building up a sound training organization. As a result of this decision the Royal Air Force Cadet College, Cranwell, (1920), the Apprentices School at RAF Halton, (1922), and the RAF Staff College at Andover, (1922), were opened. The opening of these establishments was the first major step towards the provision of the high quality of aircrew and groundcrew whom we have in the RAF today.

- 7. The Auxiliary Air Force, destined to play a major role in the air defence of Great Britain, was formed in 1925. In 1937 The Royal Navy regained independent control of shipborne aircraft by taking over full responsibility for the Fleet Air Arm—a cause they had been fighting for since 1918. The responsibility for land-based maritime reconnaissance remained with the Royal Air Force.
- 8. Under the tutelage of Lord Trenchard the organization of the RAF continued to be consolidated in quality, not quantity. Always kept in mind was the need for a capability for quick expansion to be "built-in". The need for this policy was demonstrated towards the beginning of the Second World War when the worsening political situation in Europe led to expansion to such an extent that it became necessary by 1936 to introduce Bomber, Fighter, Coastal and Training Commands. On this framework the RAF was able to expand further as war approached until, at the peak of its strength during the war, it had some 9,000 operational aircraft as well as 40,000 aircraft engaged in training and non-operational duties. Helping this growth was the Commonwealth Air Training Plan, centred in Canada, whose 360 schools produced 137,740 aircrew, apart from those trained in the UK, Southern Rhodesia, South Africa, New Zealand and in the USA.
- 9. Meanwhile, the RAF was engaged on many active operations and small "wars"; in Russia; in Somaliland; in operations from Iraq and Kurdistan and Waziristan. During the 1928-29 Afghan rebellion the RAF evacuated some 590 people from the besieged British Legation at Kabul.
- 10. During the inter-war years, high speed flight was not neglected and the RAF won the Schneider Trophy in 1927, 1929 and 1931 at speeds ranging from 281-340 mph. It was from these aeroplanes that our eight-gunned fighters, the Spitfire and Hurricane, were developed. The Wellington and Whitley heavy bombers were also emerging.
- 11. But probably by far the most important achievement of the inter-war years was the development of radio location to detect and locate aircraft—RADAR. As a result, by the beginning of the war we had an early warning chain of 18 radar stations along the East Coast which, together with the Observer Corps, was to provide such vital assistance during later battles.
- 12. In the Second World War, as well as providing the air defence of this country, helping to keep the sea approaches open and mounting a strategic bomber offensive against Germany, the Royal Air Force fought in all theatres of war in support of land and sea operations. The first role of the RAF was again reconnaissance, but the primary role was that envisaged in 1918—strategic bombing. With radio navigational aids lending increasing accuracy and aircraft carrying greater bomb loads, large industrial areas of Germany were laid waste. The German Air Force was compelled to concentrate on defending the Reich with such losses that the Allied landing in Normandy, on D Day, 6th June, 1944, was practically unopposed from the air.
- 13. It is not possible in this Chapter to describe in detail the part played by the Royal Air Force in the war, but a comprehensive and readable account covering such epic events as the Battle of Britain and the raid in the Mohne and Eder Dams can be found in *The Royal Air Force* 1939–1945 by Denis Richards and Hilary St George Saunders, published by Her Majesty's Stationery Office.
- 14. As in 1918, the cessation of hostilities again led to the contraction of the Royal Air Force. From over 1,100,000 officers and men in 1945 the RAF had been reduced

to about 200,000 by 1950, and to less than 100,000 by 1970. Wartime conscription was continued after the war in the form of National Service, but this ended in 1962 and the RAF is now an all regular force.

- 15. The re-equipment with jet-engined aircraft in the immediate post-war years marked a revolutionary change in the Service. The Meteors and Vampires began a long line of military jet-engined aircraft, in which the Canberra became the world's first jet-engined bomber. It was built under licence in the USA and many other air forces acquired it. Another notable world's "first" for the RAF was a jet-engined transport squadron of Comet 2s in 1956.
- 16. Britain's decision to produce nuclear weapons and the four-engined V-bombers paved the way for the RAF to assume the task of providing the British strategic nuclear deterrent. Valiant aircraft dropped the first British atomic bomb at Maralinga in 1956 and the first British hydrogen bomb at Christmas Island in 1957. Vulcan and Victor aircraft followed the Valiant into V-bomber service. In 1970 the Royal Navy's Polaris submarine force became operational and assumed responsibility for providing Britain's strategic nuclear deterrent and the V-bombers reverted to other roles.
- 17. In 1960 the first RAF supersonic fighter, the Mach 2 Lightning, entered service. The development of in-flight refuelling techniques and the creation of a tanker force—first with Valiant and subsequently with Victor aircraft—greatly enhanced the ability of fighters, and other combat aircraft, to rapidly re-inforce overseas theatres. To further exploit the mobility conferred by the air, No 38 Group was re-formed as a specialized tactical force, working closely with the Army and capable of being flown rapidly to potential trouble-spots overseas by RAF transport aircraft. In 1968 the Government decided to withdraw forces from the Far East and Persian Gulf and to concentrate British defence efforts mainly in Europe and the North Atlantic area relying on the RAF to reach trouble spots in other theatres quickly. The first of the VC 10 aircraft was delivered to the RAF in 1966 and contributed to a substantial increase in the RAF's airlift capability.
- 18. In 1969 the RAF achieved another "first" when the V/STOL Harrier, the world's first fixed-wing vertical/short take-off/landing, close support, aircraft entered squadron service. Other developments brought the Nimrod, the Buccaneer, the Phantom and the Hercules into Royal Air Force service. Collaboration with Europe has resulted in arrangements with France for the joint development and production of the Jaguar and three types of helicopter, the Puma, Gazelle and Lynx. By far the most important of these projects is the multi-role combat aircraft, the Tornado, developed and produced in Britain, Germany and Italy. This aircraft will take over from most of the earlier tactical reconnaissance and strike aircraft in the three countries and will also provide long range fighter defence for Britain. The Hawk has replaced the Gnat and Hunter for advanced training and was also selected by the United States Navy and other foreign air forces.
- 19. To some extent Britain's security rests in the strength of the North Atlantic Treaty Organization alliance. It is to NATO that the greater part of Britain's military forces, of which the Royal Air Force is a vital part, is committed. But British interests and responsibilities are also world-wide and so Britain must be willing, within her means, to play her part in countering threats to stability outside Europe. This is a responsibility we share with other members of the Commonwealth, with our Treaty partners and with the international community as a whole. In 1982 the Falklands War provided a stern test of the RAF's ability to deploy air forces at extreme range.

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The nearest available air base was at Ascension Island, beyond normal range from the Falklands. Flight refuelling became the vital factor and the emergency conversion of tankers and receivers, together with training of crews became a top priority.

20. In order to carry out the Government's defence policy Britain needs armed forces of sufficient quality and quantity possessing the high degree of skill and professionalism demanded by the conditions of modern conflict and the increasing complexity of military equipment. The Royal Air Force will continue to train, to reequip and to redeploy in order to play its part in maintaining the strength of the Western Alliance sufficient to deter aggression and maintain peace.

