RAF COLLEGE CRANWELL "WWII Training Aircraft"



Training Aircraft at RAF Cranwell 1939 - 1945

Version 1.0 dated 7 November 2020 created by IBM Steward 6GE

Hawker Audax - 1935 to August 1939

According to Peter Green and Mike Hodgson, operated by: RAF College January 1929 - August 1939 (sic) more likely 1935 - 1939 STFS Cranwell September 1939 - 1940

The Hawker Audax was a Hart variant, designed for army cooperation, seeing much service in the British Empire. The first Audax flew in late 1931 and over 700 Audaxes were produced (including export). The Audax was similar to the Hart, though had some modifications, including a hook to pick up messages. The Audax was armed with a single .303 in (7.7 mm) Lewis light machine gun and a .303 in (7.7 mm) Vickers machine gun. The Audax was powered by a version of the Kestrel engine and had a maximum speed of 170 mph (274 km/h).



Westland Wallace - 1935 to 1941

According to Peter Green and Mike Hodgson, operated by:
1 E&W School August 1929 - September 1940 (sic) possibly only 1935 - 1940
1 Signals School August 1940 - January 1941

The Westland Wallace was a two-seat, general-purpose biplane of the RAF, developed by Westland as a follow-on to their successful Wapiti. As the last of the interwar general purpose biplanes, it was used by a number of frontline and Auxiliary Air Force Squadrons. Although the pace of aeronautical development caused its rapid replacement in frontline service, its useful life was extended into the Second World War with many being converted into target tugs and wireless trainers. In 1933, a Westland Wallace became the first aircraft to fly over Everest, as part of the Houston-Mount Everest Flight Expedition.



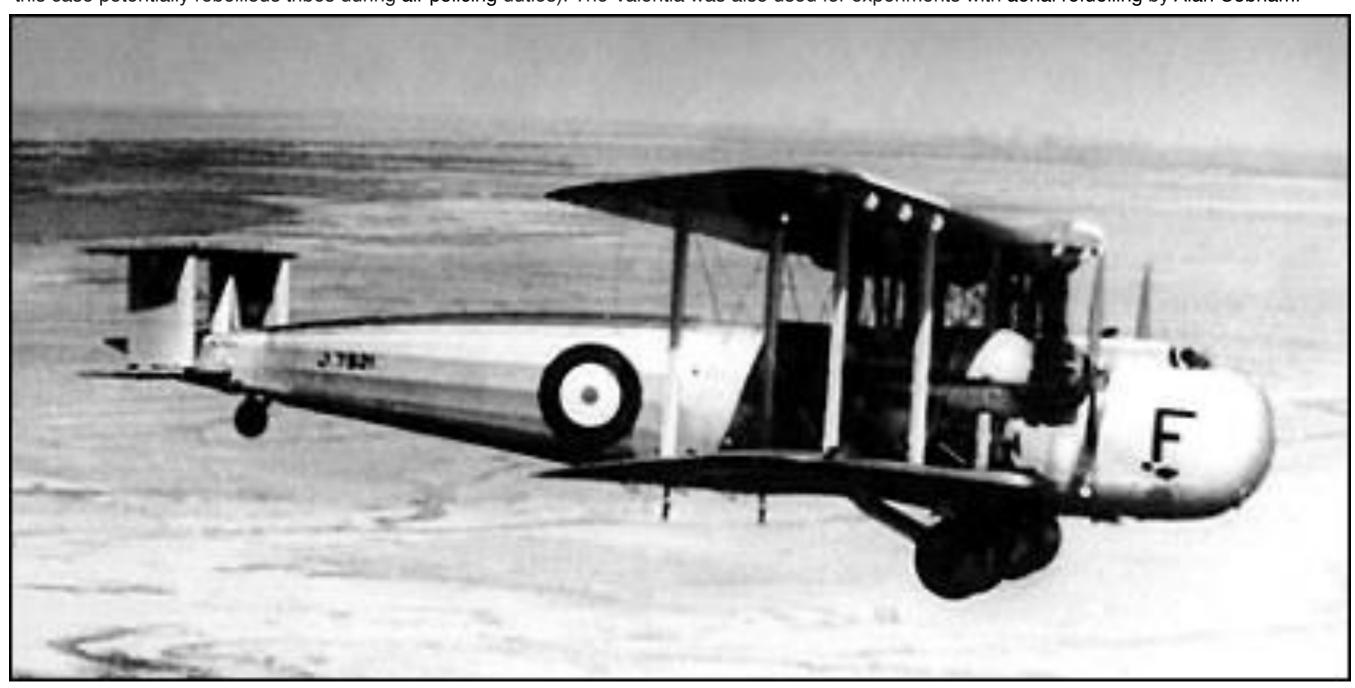
Vickers Valentia - 1936 to 1941

According to Peter Green and Mike Hodgson, operated by:

1 E&W School August 1929 - September 1940 (sic) possibly only 1936 - 1940

1 Signals School August 1940 - February 1942

The Vickers Valentia (company designation Type 264) was a biplane cargo aircraft built by Vickers for the RAF. The majority built were conversions of the earlier Vickers Victoria. Valentias were extensively used for transport operations in the Middle East, and when necessary used for bombing operations with bomb racks under the wings. Valentias were also experimentally fitted with loudspeakers used to address people being overflown (in this case potentially rebellious tribes during air policing duties). The Valentia was also used for experiments with aerial refuelling by Alan Cobham.



Notes Found on RAFC at War (1)

These notes are believed to have been made by a Staff Officer as part of a brief for the RAF College Commandant.

There is no indication of when his brief was prepared, but is likely to have been during the 1960s.

BRIEF NOTES ON ROYAL AIR FORCE CRANWELL OCTOBER 1939 TO MAY 1940

All Instructional Staff and Flight Cadets were recalled from leave to the College on 30 August 1939 in view of the grave international situation. Immediately after the declaration of war against Germany, the Royal Air Force College ceased to function as such and was formed as the Royal Air Force College Flying Training School. There was no change of staff or students, but the normal Flight Cadet syllabus was dropped and all emphasis was on Flying Training. The FTS had an Intermediate Training Squadron and an Advanced Training Squadron.

The last <u>PROPER</u> Flight Cadet Entry to pass out was the September 1937 Entry which passed out on 28 July 1939. The following entries were at various stages of instruction (normally the Flight Cadet Courses lasted 2 years) at the outbreak of war:

January 1938 Entry.

April 1938 Entry.

September 1938 Entry.

January 1939 Entry.

April 1939 Entry.

The Entry due in in September 1939 was already recruited and in the pipeline; this was sent initially to No 9 Elementary Flying Training School

to join the FTS and was called the April 1940 Entry.

All the Flight Cadets in these 6 entries were listed as Aircraftmen 2 (AC2) on 7 September 1939, then on 8 September 1939 as Leading Aircraftmen (LAC).

at Royal Air Force Ansty. Later they came back to Cranwell in April 1940

The Senior Flight Cadet Course, ie January 1938 Entry, were posted at the outbreak of war to Specialist Courses or to Operational Training Units. The rest of the 5 Flight Courses formed the nucleus of the first 5 Courses of FTS at Cranwell.

These 6 Flight Cadet Courses did <u>NOT</u> complete the proper Flight Cadet Training Course.

These first 5 FTS Courses were a mixture of ex-Flight Cadets, Royal Air Force Volunteer Reserve Pilots and ex-University Air Squadron Pilots.

The last ex-Flight Cadets (ie April 1940 Entry) were trained on No 9 Course FTS and were joined by 16 Australians. They passed out late August-early September 1940.

The May 1940 Course, ie No 10 Course FTS, were recruited from the Initial Training Squadrons and Elementary Flying Training Schools.

At some time early in this period (I cannot trace the actual date) the title of Royal Air Force College Flying Training School changed to Royal Air Force Service Flying Training School (RAFSFTS).

The length of the Course in Intermediate Training Squadron was 6 months, and concentrated on Flying Training with some ground school studies (navigation etc).

The Advanced Training School length of Course is not known, but they made detachments to West Freugh and Warmwell for gunnery and bombing practice. During May 1940 the Advanced Training School was dropped and the Intermediate Training School doubled in size to accelerate the flow of replacement pilots to the squadrons.

The average Course was about 39 students and the pilot wastage was approximately 25%.

The aircraft flown were:

Hawker Audax.

Hawker Hind.

Hawker Hart.

Hawker Fury.

Hawker Hector.

Miles Master.

Airspeed Oxford.

and the single-engined aircraft were given up cMay 1940 in favour of the twin-engined Oxfords.

Accommodation was in the College Hall Building. The 'old' single rooms of the Flight Cadets were now double rooms. The larger rooms like the games rooms, lecture rooms etc were used as dormitories - there was gross overcrowding in all rooms. With the overcrowding, life in the Mess was a lot more informal and less rigid.

Cooks and dining hall staff were mainly all Women's Auxiliary Air Force (WAAF's). There was almost continuous flying, therefore meals were at all times. Strict food rationing was in force in the UK and meals were difficult to produce, eg early diners got meat, later ones got gravy!! Local farmers were asked to supply extra produce, meat and vegetables, for the 'War Effort'.

In the time span of October 1939 to May 1940 there was a particularly hard winter. From 1 to 25 February 1940, instructors and pupils were give leave because of the thick snow and the ice-bound state of the airfield.

The above facts were gleaned from various notebooks, journals and papers deposited in the Royal Air Force College archives - there is no <u>ONE</u> definitive source. Indeed, as the College was officially closed and SFTS records were taken with them when they left in 1944, it is very difficult to piece together accurate details of College life 1939-1944.

Notes Found on RAFC at War (2)

These notes are believed to have been made by a Staff Officer as part of a brief for the RAF College Commandant.

There is no indication of when his brief was prepared, but is likely to have been during the 1960s.

CRANWELL

COMMAND 21 Group Training Command 1939-40 21 Group Flying Training Command 1940-45

SATELLITE AIRFIELDS

 Barkston Heath
 1941-43

 Fulbeck
 1941-42

 Caistor
 1943-44

 Wellingore
 1943-45

 Coleby Grange
 1944-45

During the Second World War, Cranwell was one of the largest training centres in the RAF and housed up to 5000 personnel. Courses were conducted for both air crew and ground staff and large numbers of flying instructors, pilots and airborne wireless operators, as well as many crews for Coastal Command squadrons were trained here.

In September 1939 the RAF College and No 1 Electrical & Wireless School were the principal occupants of the Station. At the outbreak of war the College's Flying Wing was mobilised as a Service Flying Training School and was equipped with Audaxes, Hinds and Oxfords, plus a smaller number of Harts and Furies. As such it was split into Intermediate and Advanced Training Squadrons, and in the first six months of war part of the course was carried out by detachments at such stations as West Freugh and Warmwell where bombing and gunnery training was undertaken. During May 1940 Master Aircraft were introduced and in that fateful summer the school took on a further changeable appearance when it was rapidly reorganised, firstly to drop Advanced Training and double the Intermediate output in order to accelerate the flow of replacement pilots to the squadrons, and shortly afterwards to give up its single engined aircraft and concentrate on twin engined training with Oxfords. The Luftwaffe were not slow to realise the importance of the Station and several raids were made on Cranwell during June and September that year.

No 2 Flying Instructors' School was formed in September 1940 alongside the College SFTS for the purpose of training selected pilots as instructors which were urgently needed as the Air Force rapidly expanded. The new unit was equipped with Oxford and Tutor aircraft and after a few weeks was renamed No 2 Central Flying School. It quickly became an important unit in its own right, and moved out in June 1941 to a new airfield at Church Lawford.

The College SFTS meanwhile was growing both in size and importance, and by the Spring of 1941 was operating a fleet of over 150 Oxfords. To relieve the consequent congestion and facilitate night flying, Relief Landing Grounds were therefore brought into use at Fulbeck and Barkston Heath. In January 1942 the function of the unit was again changed to provide half single and half twin-engined training, and a number of Oxfords were replaced again by Master aircraft.

Pilots of many nationalities were a notable feature at Cranwell and in May 1942, for example, countries represented included Belgium, France and Turkey. British Army officers transferred to the RAF were also given training here. During 1943 Refresher Courses were introduced for pilots who had been on non-flying duties and during the latter half of the war a regular flow of Turkish aircrews passed through the School, and carried out an abridged operational training course on special flights of Spitfire and Blenheim aircraft. By 1943 the original Relief Landing Grounds at Fulbeck and Barkston Heath had been earmarked for development by Bomber Command and the satellite airfields at Caistor and Wellingore were taken over in their place. Coleby Grange airfield was also adopted as a relief landing ground in the autumn of 1944 when it had ceased to function as an operational night fighter station.

The SFTS was moved out of the College buildings in January 1944 and a few weeks later was redesignated 17 SFTS. Following the Invasion in June it was required to deal with increasing numbers of aircrew released from POW captivity and the training given to these pilots, as well as to aircrews from a number of countries overseas, including Iraq and Persia, formed the main duty of the unit in the last months of war. During this period the complement of Oxfords and Masters was augmented by Harvards, Blenheims and Spitfires and immediately before VE day the unit moved to Grantham (Spitalgate). Its place was taken by 19 FTS which commenced to form with Harvard aircraft on 1st May 1945.

The departure of No 2 CFS in June 1941 had meanwhile left room for the arrival of No 3 (Coastal) Operational Training Unit which was reformed at Cranwell in August as a lodger unit. Wellingtons and Whitleys formed the principal equipment of the unit, which also used a number of Ansons, and its function was to train crews for Operational Squadrons in Coastal Command.

In addition to conversion training on to large aircraft, the bombing and gunnery practice, the 3 OTU syllabus included long cross country and overseas training flights from Cranwell; one regular exercise route extended out to Rockall and required some 980 miles of flying.

It was a Whitley of 3 OTU which, during night flying on 18th March 1942, crashed into the roof at the west end of the College, killing its crew of three and causing extensive damage to the building. A year later the last Whitleys were withdrawn from service, and the unit received additional Wellingtons, some of which were equipped with Leigh Light equipment. No 3 OTU remained at Cranwell until June 1943 when it moved to Haverfordwest.

Returning to September 1939, Cranwell was also the home of No 1 Electrical and Wireless School, which was responsible for the training of airborne Wireless and Radar Operators and ground electrical and wireless tradesmen. The Schools' flying activities were carried out by the Signals Squadron, which in 1939 was mainly equipped with Wallace aircraft and was located on the North aerodrome. Other types

used included Magisters and DH 86s as well as one or two ancient Valentias, which continued in use as flying classrooms until the last was retired in February 1942.

The flying element of 1 E&WS became part of No 1 Signals School during a reorganisation in August 1940, and shortly afterwards its fleet of Wallaces was replaced by more modern Proctors. These bore the brunt of airborne W/OP training and were assisted by a smaller number of DH 86 and DH 89 aircraft. The unit was again redesignated in January 1943 becoming No 1 Radio School, but its functions and equipment remained the same and it continued its training programme until it was disbanded in may 1944.

Before the war Cranwell had become one of the first airfields to be equipped with a concrete runway, which was provided for the experimental long distance flights made by Wellesley aircraft in 1938. This facility subsequently proved valuable for trials of aircraft requiring a long take-off run, such as the massive Hamilcar glider which carried out some of its early flying from here. On 15th May 1941 an event of the utmost importance took place. On that day the Gloster E28/39 prototype was wheeled out of a guarded hangar and after running up its experimental jet engine took off from the runway for its flight. Though few were there to witness it at the time because of the need for top security, this was to be a historic moment not only for Cranwell but for the whole of British aviation. Trials with this aircraft continued at Cranwell and elsewhere and within two years a number of F9/40 development aircraft were ready for trials. One of these was also sent to Cranwell and on 5th March 1943 made its first flight here. Fourteen months later Meteors were joining the squadrons as the first jet aircraft to enter service in any of the allied Air Forces.

Notes Found on RAFC at War (3) These notes are believed to have been made by a Staff Officer as part of a brief for the RAF College Commandant.

There is no indication of when his brief was prepared, but is likely to have been during the 1960s.

<u>CRANWELL</u>	VS 1.8.40	1 Signals School	*** **	(0.40.40)		1.1.43	To Redesig
PRINCIPAL UNITS			Wallace	(8.40-40)			
			Proctor	(11.40-1.43)			
From Date Unit Aircraft Mark Code Date To			DH. 86	(8.40-42)			
RAF College 20.3.44 Redesig			Dominie	(40-1.43)			
Service Flying			Valentia	(8.40-2.42)			
Training School 1 SS	1.1.43	1 Radio School				31.5.44	Disbanded
Audax (9.39-40)			Proctor	(1.43-5.44)			
Hind (9.39-40)			Dominie	(1.43-5.44)			
Oxford (9.39-3.44) Formed	d 10.9.40	2 Flying Instructors				14.11.40	Redesig
Hart (9.39-40)		School					
Fury (9.39-40)			Oxford	(9.40-11.40)			
Master (5.40-9.40) (1.42-3.44)			Tutor	(9.40-11.40)			
Spitfire (43-3.44) 2 FIS Blenheim I (43-3.44)	14.11.40	2 Central Flying School				15.6.41	Ch Lawfd
det West Freugh 23.9-22.10.39			Oxford	(11.40-6.41)			
det West Freugh 6-21.12.39			Tutor	(11.40-6.41)			
det West Freugh 10.1-6.2.40 Reform	ned 6.8.41	3 Operational				20-23.6.43	Havfdwest
det Warmwell 21.2-6.4.40		Training Unit					
det Warmwell 26.4-9.5.40			Wellington	(8.41-6.43)			
det Dumfries 25.8.43-9.43			Whitley	(8.41-4.43)			
det Dumfries 23.11.43-12.43				6			
4	Data	¥Iå	A *	3.61	C. I.	Data	Tr-
From	Date	Unit	Aircraft	Mark	Code	Date	To
From Date Unit Aircraft Mark Code Date To			Anson	(8.41-4.43)			
RAFC 20.3.44 17 Service Flying 1.5.45 Spitalgate SFTS Training School			Lysander	(8.41-43)			
Oxford (3.44-5.45)			Martinet	(43)			
Master (3.44-5.45)					det Templeton	30.11.42-	
						22.6.43	
Spitfire (3.44-5.45) Reform Blenheim I (3.44-5.45)	ned 1.5.45	19 Flying Training School				-	-
Harvard (9.44-5.45)		School	Harvard	(5.45)			
Blenheim V (3.45-5.45)				(5.45)			
1 Electrical and 1.8.40 Redesig			Anson	(5.45)			
Wireless School			Tiger Moth	(5.45)			
Wallace (9.39-40)							
Magister (9.39-40)							
	ER UNITS						
DH.86 (9.39-40)	•	21 Group				44	Spitalgate
Envoy (9.39-40)		Communication Flight					
Valentia (9.39-40) Heroard (0.30-40) Shawbi	ury 25.10.41						
Harvard (9.39-40) Shawbi			Oxford	II		11.41	Shawbury
Snailw	rell 8.43	2 Heavy Glider Maintenance Unit	Oxioiu	11		44	Junuary

Hawker Hind - September 1939 to 1940

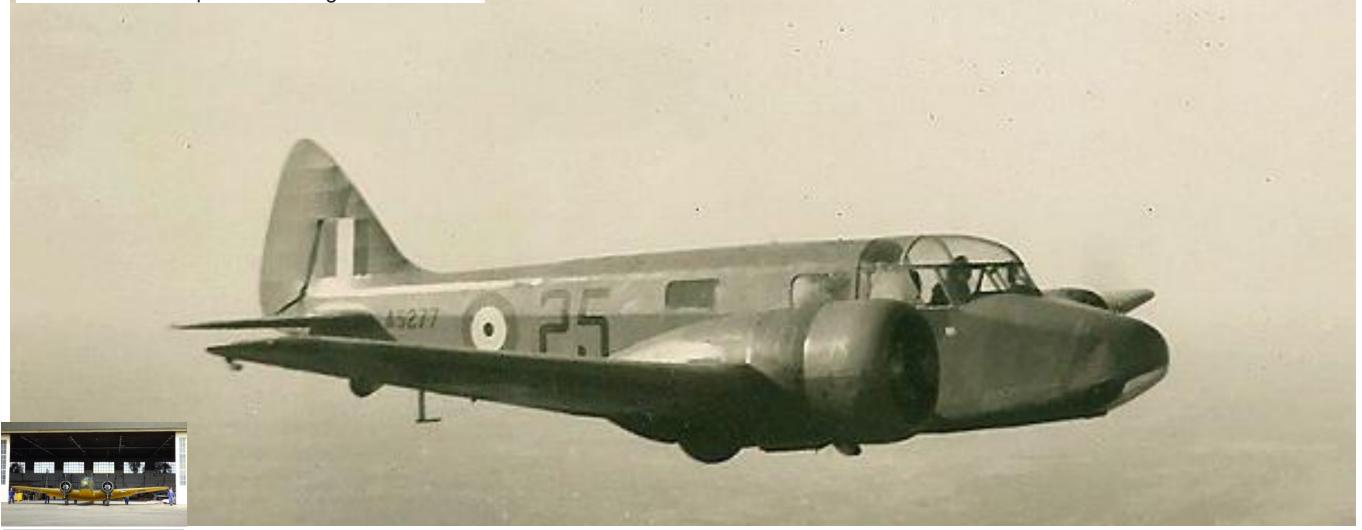
STFS Cranwell September 1939 - 1940



Airspeed Oxford - June 1937 to December 1950

According to Peter Green and Mike Hodgson, operated by:
RAF College January 1929 - August 1939
SFTS/17FTS Cranwell September 1939 - May 1945
2 Flying Instructors School/2 CFS - September 1940 - June 1941
1 Signals School September 1940 - January 1941
19 FTS (vice 17FTS) May 1947 - April 1947
11 SFTS Oxford II November 1941
6 Radio School October 1950 - December 1950

The Airspeed AS.10 Oxford was a twin-engine monoplane aircraft developed and manufactured by Airspeed. It saw widespread use for training British Commonwealth aircrews in navigation, radio-operating, bombing and gunnery roles throughout the Second World War. The Oxford was developed by Airspeed during the 1930s in response to a requirement for a capable trainer aircraft that conformed with Specification T.23/36, which had been issued by the British Air Ministry. Its basic design is derived from the company's earlier AS.6 Envoy, a commercial passenger aircraft. Performing its maiden flight on 19 June 1937, it was quickly put into production as part of a rapid expansion of the RAF in anticipation of a large-scale conflict.



<u>Hawker Hart - January 1929 to 1940</u>

According to Peter Green and Mike Hodgson, operated by: RAF College January 1929 - August 1939 SFTS Cranwell September 1939 - 1940

The Hawker Hart was a British two-seater biplane light bomber aircraft of the RAF. It was designed during the 1920s by Sydney Camm and manufactured by Hawker Aircraft. The Hart was a prominent British aircraft in the inter-war period, but was obsolete and already side-lined for newer monoplane aircraft designs by the start of the Second World War, playing only minor roles in the conflict before being retired. A specialised Hart Trainer was also built which dispensed with the gunner's ring.



Avro Tutor - January 1929 to June 1941

According to Peter Green and Mike Hodgson, operated by: RAF College January 1929 - August 1939 (sic), possibly only 1933 - 1939 2 Flying Instructors School/2 CFS September 1940 - June 1941

The Avro Type 621 Tutor was a two-seat British radial-engined biplane from the interwar period. It was a simple but rugged basic trainer that was used by the Royal Air Force as well as many other air arms worldwide. The Avro Model 621 was designed by Roy Chadwick as an Avro private venture metal replacement for the Avro 504. Conceived as a light initial pilot trainer, the biplane design featured heavily staggered equal-span, single-bay wings; the construction was based on steel tubing (with some wooden components in the wing ribs) with doped linen covering. A conventional, fixed divided main undercarriage with tail-skid was used in all but the latest aircraft, which had a tailwheel.



<u>Hawker Fury - 1931 to 1940</u>

According to Peter Green and Mike Hodgson, operated by: RAF College January 1929 - August 1939 (sic) more likely 1931 - August 1939 SFTS Cranwell September 1939 - 1940

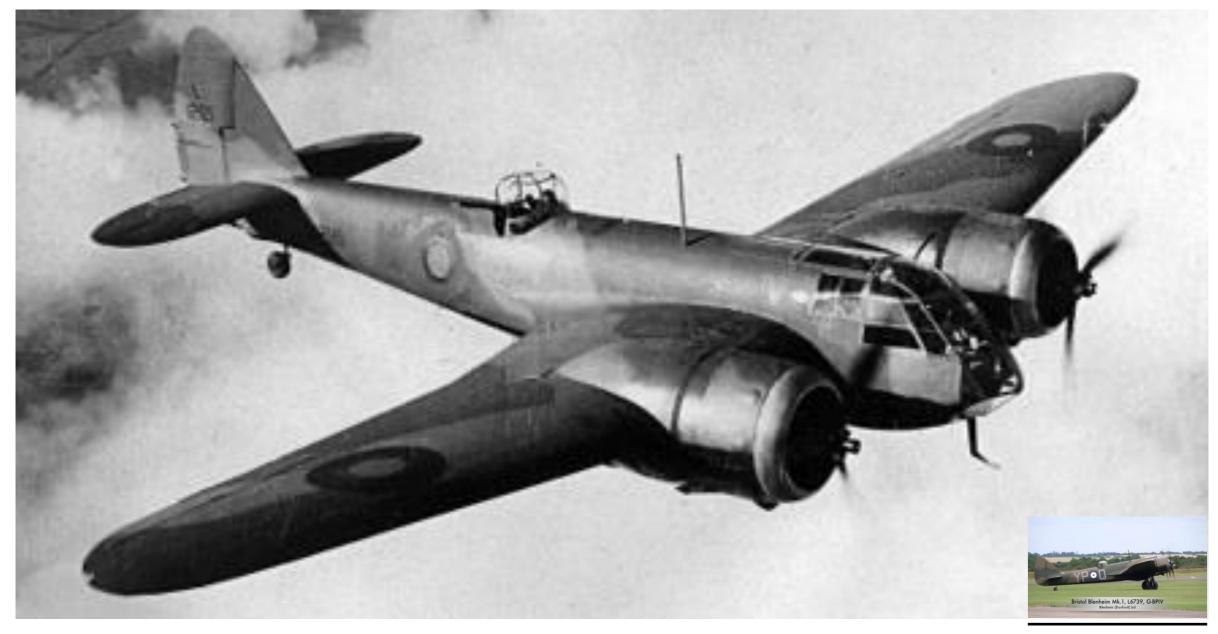
The Hawker Fury was a British biplane fighter aircraft used by the Royal Air Force in the 1930s. It was a fast, agile aircraft, and the first interceptor in RAF service capable of speed higher than 200 mph (321 kmh). It was the fighter counterpart to the Hawker Hart light bomber. After their front line service ended, they continued in use as trainers.



Bristol Blenheim I - August 1939 to May 1945

According to Peter Green and Mike Hodgson, operated by: SFTS/17 FTS Cranwell August 1939 - March 1944 (sic), likely 1943 - May 1945

The Bristol Blenheim was a light bomber aircraft designed and built by the Bristol Aeroplane Company (Bristol) which was used extensively in the first two years and in some cases throughout the Second World War. The aircraft was developed as *Type 142*, a civil airliner, in response to a challenge from Lord Rothermere to produce the fastest commercial aircraft in Europe. The *Type 142* first flew in April 1935, and the Air Ministry, impressed by its performance, ordered a modified design as the *Type 142M* for the RAF as a bomber. Deliveries of the newly named Blenheim to RAF squadrons commenced on 10 March 1937. The three-seat twin-engined Mk I was powered by two 840 hp (630 kW) Bristol Mercury VIII radial piston engines, armed with a 0.303 in (7.7 mm) machine gun in the port wing, plus a 0.303 in (7.7 mm) Vickers K gun in the dorsal turret, maximum bomb-load 1,000 lb (450 kg); 1,552 were built.



Miles Master - August 1939 to March 1944

According to Peter Green and Mike Hodgson, operated by: SFTS Cranwell/17 FTS August 1939 - March 1944 (sic), more likely May - September 1940 & January 1942 - May 1945

The Miles M.9 Master was a two-seat monoplane advanced trainer designed and built by aviation company Miles Aircraft Ltd. It was inducted in large numbers into both the RAF and FAA during the Second World War. Typical service use of the Master primarily revolved around (*Pilot*) Advanced Flying Units, where they were used for training aircrew in preparation for service with frontline squadrons. Amongst other parts of the training syllabus, pilots would often be first exposed to fighter tactics while flying the aircraft. By 1942, advertisements claimed that the Master was being flown by every RAF fighter pilot-in-training. Several hundred Master IIs were either delivered in, or subsequently converted to, a configuration that allowed their use in the glider-towing role. Such aircraft would have the lower portion of their rudder cut away to allow fitting of a towing hook. Starting in 1942, Miles Masters were extensively used as tugs for General Aircraft Hotspur gliders at various Glider Training Schools. Examples were also operated by multiple Anti-aircraft Co-operation Units of the RAF as a liaison aircraft with British Army units.



Spitfire Mk V - 1943 to May 1945

According to Peter Green and Mike Hodgson, operated by: SFTS Cranwell/17 FTS 1943 - May 1945

The basic Mk V was a Mk I with the Merlin 45 series engine. This engine delivered 1,440 hp (1,074 kW) at take-off, and incorporated a new single-speed single-stage supercharger design. Improvements to the carburettor also allowed the Spitfire to use zero gravity manoeuvres without any problems with fuel flow. Several Mk I and Mk II airframes were converted to Mk V standard by Supermarine and started equipping fighter units from early 1941. The majority of the Mk Vs were built at Castle Bromwich



North American Havard - September 1939 to April 1947+

According to Peter Green and Mike Hodgson, operated by:

17 FTS September 1944 - May 1945

1 E&W School September 1939 - 1940

8 Radio School January 1943 - June 1946 (sic), but no mention in College archived notes 19 FTS May 1945 - April 1947, likely longer as an RAF College asset

The real lineage of the Harvard began in 1937 with a USAAF competition to develop a basic trainer. The requirements were for a type capable of basic instruction as well as simulating the controls and feel of an actual combat aircraft. It also had to be able to carry guns and bombs as necessary. North American's new design was based on their NA-16, but was vastly improved. It incorporated the Wasp engine, A Hamilton Standard variable pitch prop, a hydraulic system to power the flaps and the new inward-folding retractable landing gear. Later a stressed skin fuselage, a new rudder and angular wingtips were added. This prototype (called the NA-26) won the competition. It went into production as the BC-1. (BC for "basic trainer") The Royal Air Force initially ordered several hundred of this variant, with British instruments and radios, in 1938. The Brits coined the name "HARVARD" for it. (by which name it would become known in all the commonwealth countries....except for Australia, where it was called the "WIRRAWAY") This version retroactively became known as the MK I.



Bristol Blenheim V - March 1944 to May 1945

According to Peter Green and Mike Hodgson, operated by: 17 FTS Cranwell March 1944 - May 1945 (sic), likely March 1945 - May 1945

The last bomber variant was conceived as an armoured ground attack aircraft, with a solid nose containing four more Browning machine guns. Originally known as the Bisley, (after the shooting competitions held at Bisley), the production aircraft were renamed Blenheim Mk V and featured a strengthened structure, pilot armour, interchangeable nose gun pack or bomb-aimer position and another Mercury variant with 950 hp (710 kW). The Mk V was ordered for conventional bombing operations, with the removal of armour and most of the glazed nose section. The Mk V (Type 160) was used primarily in the Middle East and Far East. The Blenheim served as the basis for the Beaufort torpedo bomber, which led to the Beaufighter, with the lineage performing two evolutions of bomber-to-fighter.



Miles Magister - September 1939 to 1940

17 FTS September 1939 - 1940



Beechcraft Mentor - September 1939 to 1940

1 E&W School September 1939 - 1940

The Beechcraft T-34 Mentor is an American propeller-driven, single-engined, military trainer aircraft derived from the Beechcraft Model 35 Bonanza. The earlier versions of the T-34, dating from around the late 1940s to the 1950s, were piston-engined. These were eventually succeeded by the upgraded **T-34C Turbo-Mentor**, powered by a turboprop engine. The T-34 remains in service more than six decades after it was first designed.



DH 86 Express - September 1939 to 1942

According to Peter Green and Mike Hodgson, operated by:

1 E&W School September 1939 - 1940

1 Signals School August 1940 - 1942

Possibly RAF College 1937 - 1939

The de Havilland Express, also known as the de Havilland D.H.86, was a four-engined passenger aircraft manufactured by the de Havilland Aircraft Company between 1934 and 1937. The D.H.86 was conceptually a four-engined enlargement of the successful de Havilland Dragon, but of more streamlined appearance with tapered wings and extensive use of metal fairings around struts and undercarriage. The most powerful engine made by de Havilland, the new 200 hp (149 kW) Gipsy Six, was selected. For long-range work the aircraft was to carry a single pilot in the streamlined nose, with a wireless operator behind. Maximum seating for ten passengers was provided in the long-range type; however, the short-range Holyman aircraft were fitted with twelve seats.



DH 89 Dominie - 1940 to 1946

According to RAF College archived notes and Peter Green and Mike Hodgson, operated by:

1 Signals School 1940 - January 1943

1 Radio School January 1943 - May 1945

Possibly 8 Radio School January 1943 - June 1946

When WWII began, 205 examples of DH.89 aircraft had been built. Many of them were pressed into British military service under the designation of DH.89 Dominie. They were typically used for passenger transporting and radio navigation training. Furthermore, the British military ordered over 500 DH.89 Dominie aircraft with the more powerful Gipsy Queen engines. To increase production, the firm Brush Coachworks Ltd. was contracted to build these aircraft as well, and this firm ended up building the larger portion of this contract. By the end of the war, 731 examples were built.





Airspeed Envoy - September 1939 to 1940

1 E&W School September 1939 - 1940

The Envoy was a twin-engined low-wing cabin monoplane of all-wood construction apart from fabric covered control surfaces. It had a rearward retracting main undercarriage with a fixed tailwheel. The aircraft was built in three series, the Series I was the initial production variant which did not have trailing-edge flaps, seventeen built. Thirteen Series II variants were built with split flaps and the Series III (19-built) was similar but had detailed improvements. Each series of the Envoy was sold with a choice of engines including the Wolseley Aries, Armstrong Siddeley Cheetah V or Armstrong Siddeley Lynx IVC radial engines. These different engines were housed under a variety of cowlings, mostly short chord Townend rings but also wider chord cowlings with and without blisters for cylinder heads.



Percival Proctor - November 1940 to June 1946

According to Peter Green and Mike Hodgson, operated by:

- 1 Signals School/1 Radio School November 1940 January 1943 (sic), actually May 1944
- 8 Radio School January 1943 June 1946

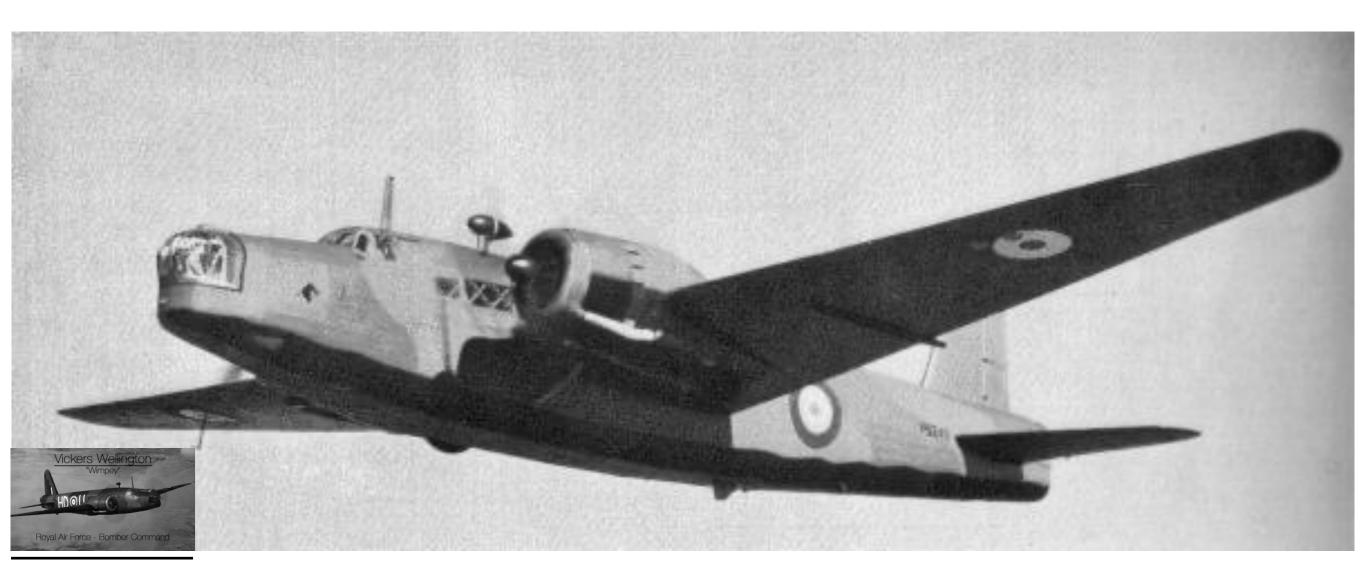
The Percival Proctor was a British radio trainer and communications aircraft of the Second World War. The Proctor was a single-engined, low-wing monoplane with seating for three or four, depending on the model. In 1941, the Air Ministry issued Specification T.9/41 for a four-seat radio trainer. The P.31 — originally known as the "Preceptor" but finally re-designated the Proctor IV — was developed for this requirement with an enlarged fuselage. One Proctor IV was fitted with a 250 hp (157 kW) Gipsy Queen engine. This was used as a personal transport by AVM Sir Ralph Sorley but production models retained the 210 hp (157 kW) motor of earlier marks.



<u>Vickers Wellington - August 1941 to June 1943</u>

According to Peter Green and Mike Hodgson, operated by: 3 (Coastal) OTU August 1941 - January 1943 (sic), more likely June 1943

The Vickers Wellington was a twin-engined, long-range medium bomber. It was designed during the mid-1930s at Brooklands in Weybridge, Surrey. Led by Vickers-Armstrongs' chief designer Rex Pierson; a key feature of the aircraft is its geodetic airframe fuselage structure, which was principally designed by Barnes Wallis. Development had been started in response to Air Ministry Specification B.9/32, issued in the middle of 1932, for a bomber for the Royal Air Force. The Wellington was adopted by Coastal Command, in which it contributed to the Battle of the Atlantic. It was used to carry out anti-submarine duties; on 6 July 1942, a Wellington sank its first enemy vessel. Specialised DWI variants, fitted with a 48 ft (14.63 m) diameter metal hoop, were used for exploding enemy mines by generating a powerful magnetic field as it passed over them. In 1944, Wellingtons of Coastal Command were deployed to Greece and performed various support duties during the British intervention in the Greek Civil War.



Avro Anson - August 1941 to April 1947+

According to Peter Green and Mike Hodgson, operated by:
3 (Coastal) OTU August 1941 - January 1943 (sic), more likely April 1943
1 Signals School September 1940 - January 1941
19 FTS (vice SFTS/17FTS) May 1945, - April 1947 possibly with the RAF College till the 1960s

The Avro Anson was a twin-engined, multi-role aircraft built by the aircraft manufacturer Avro. Large numbers of the type served in a variety of roles for the RAF, FAA, RCAF and numerous other air forces before, during, and after the Second World War. It was initially used in the envisioned maritime reconnaissance operation alongside the larger flying boats. After the outbreak of the Second World War the Anson was soon found to have become obsolete in front line combat roles. Large numbers of the type were instead put to use as a multi-engined aircrew trainer, having been found to be suitable for the role, and became the mainstay of the British Commonwealth Air Training Plan. The type continued to be used in this role throughout and after the conflict, remaining in RAF service as a trainer and communications aircraft until 28 June 1968.



Whitley Mk V - January to April 1943

According to Peter Green and Mike Hodgson, operated by: 3 (Coastal) OTU August 1941 - January 1943 (sic), more likely April 1943

The Armstrong Whitworth A.W.38 Whitley was one of three twin-engined, front line medium bomber types that were in service with the RAF at the outbreak of the Second World War. Alongside the Vickers Wellington and the Handley Page Hampden, the Whitley was developed during the mid-1930s in accordance with to Air Ministry Specification B.3/34, which it was subsequently selected to meet. In 1937, the Whitley formally entered into RAF squadron service; it was the first of the three medium bombers to be introduced. Following the outbreak of war in September 1939, the Whitley participated in the first RAF bombing raid upon German territory and remained an integral part of the early British bomber offensive. In 1942 it was superseded as a bomber by the larger four-engined "heavies" such as the Avro Lancaster. Its front line service included maritime reconnaissance with Coastal Command and the second line roles of glider-tug, trainer and transport aircraft. The type was also procured by British Overseas Airways Corporation as a civilian freighter aircraft. The aircraft was named after Whitley, a suburb of Coventry, home of one of Armstrong Whitworth's plants. It was a Whitley that caused the only war damage to the RAF College, crashing into the cupola en route from Skellingthorpe, searching for the South air field in poor visibility.



Westland Lysander - August 1941 to 1943

According to Peter Green and Mike Hodgson, operated by: 3 (Coastal) OTU August 1941 - January 1943

The Westland Lysander is an army co-operation and liaison aircraft produced by Westland Aircraft used immediately before and during the Second World War. After becoming obsolete in the army co-operation role, the aircraft's exceptional short-field performance enabled clandestine missions using small, improvised airstrips behind enemy lines to place or recover agents, particularly in occupied France with the help of the French Resistance. RAF army co-operation aircraft were named after mythical or historical military leaders; in this case the Spartan admiral Lysander was chosen.



Miles Martinet - 1943

According to RAF College archived notes, operated by: 3 (Coastal) OTU 1943

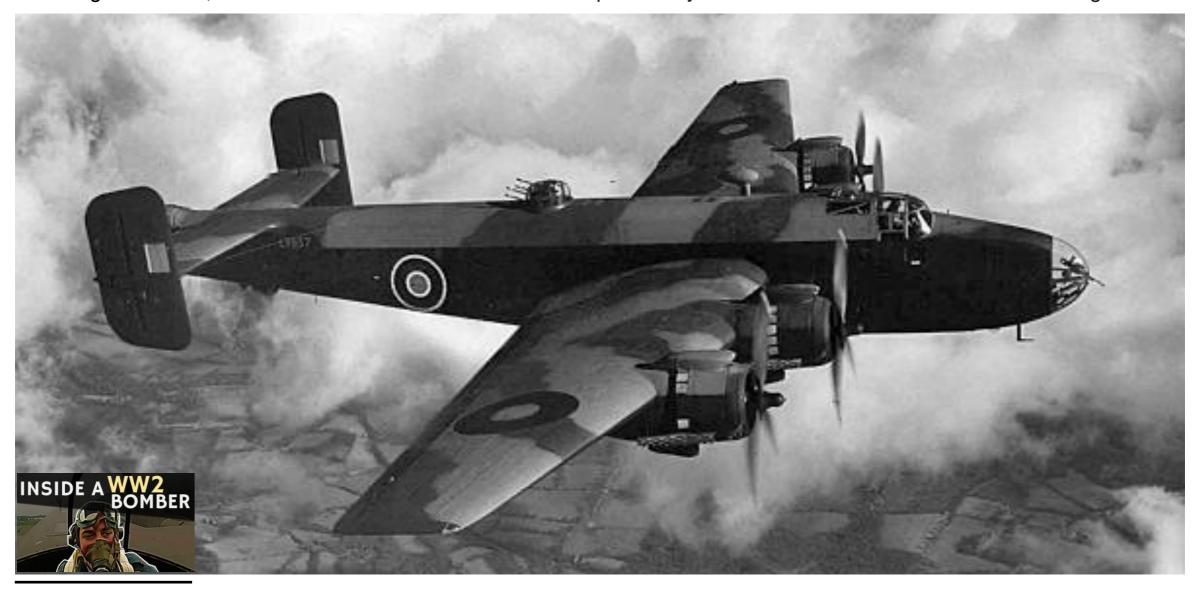
The Miles M.25 Martinet was a target tug aircraft of the Royal Air Force and Fleet Air Arm that was in service during the Second World War. It was the first British aircraft to be designed specifically for target towing. Based upon the Miles Master II, the Martinet featured a strengthened airframe to handle the stresses of towing a target drogue. Other differences from the Master included a longer nose, higher cockpit and greater wingspan, but otherwise the two aircraft shared many common components. The targets and towing gear were contained in a fairing beneath the fuselage and were retracted by an external, wind-powered winch.



<u> Handley Page Halifax - January 1943 to June 1946</u>

According to RAF College archived notes, operated by: 8 Radio School January 1943 - June 1946 (no mention in College archived records)

The Handley Page Halifax is a British RAF four-engined heavy bomber of the Second World War. It was developed by Handley Page to the same specification as the contemporary twin-engine Avro Manchester. The Halifax has its origins in the twin-engine *HP56* proposal of the late 1930s, produced in response to the British Air Ministry's Specification P.13/36 for a capable medium bomber for "world-wide use." The HP56 was ordered as a backup to the Avro 679, both aircraft being designed to use the underperforming Rolls-Royce Vulture engine. The Handley Page design was altered at the Ministry to a four-engine arrangement powered by the Rolls-Royce Merlin engine; the rival Avro 679 was produced as the twin-engine Avro Manchester which, while regarded as unsuccessful mainly due to the Vulture engine, was a direct predecessor of the famed Avro Lancaster. Both the Lancaster and the Halifax would emerge as capable four-engined strategic bombers, thousands of which would be built and operated by the RAF and several other services during the War.



Tiger Moth - May 1945 and likely till the 1950s

According to Peter Green and Mike Hodgson, operated by: 19 FTS (vice SFTS/17FTS) May 1945 - April 1947, likely staying at the College until the 1950s

The de Havilland DH.82 Tiger Moth is a 1930s biplane designed by Geoffrey de Havilland and built by the de Havilland Aircraft Company. It was operated by the RAF and many other operators as a primary trainer aircraft. In addition to the type's principal use for *ab-initio* training, the Second World War saw RAF Tiger Moths operating in other capacities, including maritime surveillance and defensive anti-invasion preparations; some aircraft were even outfitted to function as armed light bombers. The Tiger Moth remained in service with the RAF until it was succeeded and replaced by the de Havilland Chipmunk during the early 1950s.



Notes Found on RAFC at War (3)

These notes are believed to have been made by a Staff Officer as part of a brief for the RAF College Commandant.

There is no indication of when his brief was prepared, but is likely to have been during the 1960s.

From
Prom
Prom
From Pate Unit Aircraft Mark Code Date To From Pate Service Flying Training School From Pate Service Flying Training School From Pate
Provided
Profession Pro
Audax Q-39-40 Formed Q-40-11-40 Formed
Hind 0,394-04 14.11.40 14
Fury
Fury (3.9-40) Master (5.40-9.40) (1.42-3.44) Spiffre (43-3.44) G4-9.40 (1.42-3.44) Spiffre (43-3.44) G4-9.40 (1.42-3.44) Spiffre (43-3.44) G4-9.40 (1.42-3.44) G4-9.40 (1.
Spiffire (3.40-9.40) (1.42-3.44) Spiffire (3.40-9.40) (1.40-9.40) Spiffire
From Date Unit Mark Code Date Last Spittler (3.44-5.45) Code Date Last Code Code Last Code Cod
From Date Unit Aircraft Mark Code Date To Date Spiting School
From Date Unit Aircraft Mark Code Date Date Spitalgate Spitalga
From Date Unit Aircraft Mark Code Date 1.5.45 Spitlagate Spitla
From Date Unit Aircraft Mark Code Date 1.5.45 Spitalgate Spits S
From Date Unit Aircraft Mark Code Date 1.5.45 Spitalgate SFTS Spitalgate
From Date Unit Aircraft Mark Code Date 1.5.45 Spitalgate Spital
From Date Unit Aircraft Mark Code Date To SFTS 23.44-5.45 17 Service Flying Training School
From Date Unit Aircraft Mark Code Date To From Date Unit Aircraft Mark Code Date 1.5.45 Spitalgate From Date Unit Aircraft Mark Code Date Code Code
RAFC SFTS 20.3.44 17 Service Flying Training School
RAFC SFTS 20.3.44 17 Service Flying Training School
Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Lysander (8.41-43) Martinet (43) det Templeton 30.11.42-22.6.43
Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Martinet (43) det Templeton 30.11.42- 22.6.43
Spitfire (3.44-5.45) det Templeton 30.11.42- Blenheim I (3.44-5.45) 22.6.43 Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training
77 1 (4.40)
Wr 1 0 1 1
Wallace (0.20.40)
11821 1/1011 (3.43)
Magister (9.39-40)
Magister (9.39-40) Mentor (9.39-40)
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40)
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) OTHER UNITS
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) 21 Group 44
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) OTHER UNITS 21 Group Communication
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Magister (9.39-40) OTHER UNITS 21 Group Communication Flight
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Shawbury 25.10.41 11 SFTS
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Shawbury 25.10.41 11 SFTS Oxford II 11.41
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Shawbury 25.10.41 11 SFTS
Wallaca (0.20.40)
W' 1 0 1 1
Wallace (0.20.40)
Wallace (9.39-40)
Tigger Moth (5.45)
11821 MOUL (3.43)
11821 1/1011 (3.43)
Magister (9.39-40)
Tiger Moth (5.45)
11851 191041 (3.43)
Tiger Moth (5.45)
Tiger Moth (5.45)
Tion Math / AR
Tiger Moth (5.45)
Tiger Moth (5.45)
Wallace (9.39-40)
Wallaca (0.20.40)
Alison (J.43)
Alison (J.43)
Alison (J.43)
Alison (J.43)
Wireless School Anson (5.45)
Alison (J.43)
Alison (J.43)
Alison (J.43)
Wallana (0.20.40)
Wallace (9.39-40)
W808CE 19 19-401
Tigge Math (EAS)
T: 1 1_A. /F 1F
Wallace (9.39-40)
Wallaca (0.20.40)
Alison (J.43)
Wireless School (5.45)
W. 1 0.1 1
W. 1 0 1 1
W. 1 0 1 1
W. 1 0 1 1
W. 1 01 1
Alison (J.43)
Wallana (0.20.40)
Wallace (9.39-40)
Wallace (9.39-40)
Wallace (9.39-40)
Wallace (9.39-40)
Wallace (9.39-40)
W808CE 19 19-401
Wallace (9.39-40)
Wallace (9.39-40)
Wallace (9.39-40)
Wallace (9.39-40)
Wallana (0.20.40)
Wallace (0.20.40)
Alison (J.43)
77 1 (4.40)
Blenheim V (3 45-5 45) School
Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training
Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Spitfire (3.44-5.45) det Templeton 30.11.42- Blenheim I (3.44-5.45) 22.6.43 Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Spitfire (3.44-5.45) det Templeton 30.11.42- Blenheim I (3.44-5.45) 22.6.43 Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Martinet (43) det Templeton 30.11.42- 22.6.43
Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Martinet (43) det Templeton 30.11.42- 22.6.43
Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Lysander (8.41-43) Martinet (43) det Templeton 30.11.42- 22.6.43
SFTS Training School Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Anson (8.41-4.43) Lysander (8.41-4.3) Martinet (43) det Templeton 30.11.42- 22.6.43
Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Lysander (8.41-43) Martinet (43) det Templeton 30.11.42-22.6.43
SFTS Training School Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Anson (8.41-4.43) Lysander (8.41-4.3) Martinet (43) det Templeton 30.11.42- 22.6.43
RAFC SFTS 20.3.44 17 Service Flying Training School 1.5.45 Spitalgate Anson (8.41-4.43) Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
RAFC 20.3.44 17 Service Flying Training School Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training RAFC 20.3.44 17 Service Flying Training School Anson (8.41-4.43) Lysander (8.41-4.3) Martinet (43) det Templeton 30.11.42-22.6.43 1.5.45 Parker (1.5.45) Reformed 1.5.45 19 Flying Training
RAFC SFTS 20.3.44 17 Service Flying Training School 1.5.45 Spitalgate SFTS 20.3.44 17 Service Flying Training School 1.5.45 Spitalgate Spitalgate SFTS 20.3.44 17 Service Flying Training School 1.5.45 Spitalgate Spitalgate SFTS 20.3.44 17 Service Flying Training School 1.5.45 Spitalgate SPITAL SP
RAFC SFTS 20.3.44 17 Service Flying Training School
RAFC SFTS 20.3.44 17 Service Flying Training School 1.5.45 Spitalgate Anson (8.41-4.43) Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Traini
SFTS Training School Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Anson (8.41-4.43) Lysander (8.41-4.3) Martinet (43) det Templeton 30.11.42- 22.6.43
Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Lysander (8.41-43) Martinet (43) det Templeton 30.11.42-22.6.43
Oxford (3.44-5.45) Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Lysander (8.41-43) Martinet (43) det Templeton 30.11.42-22.6.43
Master (3.44-5.45) Spitfire (3.44-5.45) Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training Martinet (43) det Templeton 30.11.42- 22.6.43
Spitfire (3.44-5.45) det Templeton 30.11.42- Blenheim I (3.44-5.45) 22.6.43 Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Blenheim I (3.44-5.45) Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training -
Harvard (9.44-5.45) Reformed 1.5.45 19 Flying Training
Blenheim V (3.45-5.45) School
W. 1 0.1 1
Magister (9.39-40)
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40)
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) 21 Group 44
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) OTHER UNITS 21 Group Communication
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Valentia (9.39-40) Fight (5.43) OTHER UNITS 21 Group Communication Flight
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Shawbury 25.10.41 11 SFTS
Magister (9.39-40) Mentor (9.39-40) DH.86 (9.39-40) Envoy (9.39-40) Valentia (9.39-40) Harvard (9.39-40) Shawbury 25.10.41 11 SFTS