1. Standard Fighter Formation

The standard British fighter formation is the three aircraft section or Vic.

The three fighter Vic formation allows both wingmen to formate on the leader. Thus any problem experienced by the Section No.2 in keeping formation does not hinder the progress of the Section No.3.

2. Standard Fighter Attacks on Bomber/Reconnaissance Aircraft

a) Fighter Attack No.1 (From Dead Astern) - This attack is for solitary targets.

From the Vic formation the Section Leader will order his section thus, “Section line astern GO!” The section will move to the above formation. The Section Leader will then order the attack thus, “No.1 attack GO!” Each fighter will attack the same target in turn, following which he will roll to his left and re-establish formation.

b) Fighter Attack No.3 (From Dead Astern) Approach Pursuit - For multiple targets.

This is the easiest attack, in that the section will already be in the Vic formation. The Section Leader will order the attack thus, “No.3 attack GO!” Each fighter attacks his opposite number in the enemy formation.
RESTRICTED

FIGHTER COMMAND OPERATIONAL TRAINING

FIGHTER SQUADRON FORMATION

INSTRUCTION No. 2 - THE FLIGHT

1. Search and Cruise Formations

a) Flight in Aircraft Close Vic, Sections Close Astern. The sections are slightly stepped down astern.

b) Flight in Aircraft Close Vic, Sections Close Echelon Starboard.

After “Sections form Vic, GO!”, the leader will then order, “Sections astern, GO!”

After the order “Sections form Vic, GO!”, the leader will then order, “Sections starboard echelon, GO!”

Hawker Hurricane Mk I

The standard British fighter aircraft presently serving in France and is armed with eight wing-mounted .303in machine guns. Maximum Speed: 324mph (521 km/h).

Gloster Gladiator Mk II

Pre-dates the Hurricane and is present in far less numbers. It is armed with four .303in machine guns in the nose and under the wings. Maximum Speed: 253mph (407 km/h).

Boulton-Paul Defiant

Merlin-engined Bomber destroyer - mounting four .303in Browning machine guns in a rear mounted power-operated turret. The Defiant has no forward firing armament. Maximum Speed: 304mph (489 km/h).
2. RAF - Bomber Command (Light Bombers)

The following aircraft are in use by Bomber Command along the Western Front.

**Fairey Battle Mk I**

The Battle is the standard light bomber presently serving in France. It can carry a 1,000 lb bomb load and has a range of 1,050 miles at 25,000 feet (7,620m). It is armed with one wing-mounted .303in Browning machine gun and one Vickers ‘K’ gun, fired and operated from the rear cockpit. **Maximum Speed: 241mph (388 km/h).**

**Bristol Blenheim Mk I**

The Blenheim is slowly replacing the Fairey Battle as the RAF’s main light bomber. It can carry a 1,000 lb bomb load and has a range of 1,500 miles at 31,000 feet (9,600m). It is armed with one Vickers ‘K’ gun in the nose and two .303in Browning machine guns in the dorsal turret. **Maximum Speed: 266mph (428 km/h).**

**Bristol Blenheim Mk IV**

This is the ‘long nosed’ version of the Mk I. Performance is roughly the same but defensive armament consists of one .303in Browning machine gun in the port wing and one Vickers ‘K’ gun in the dorsal turret.

3. Armée de l’Air Française - Unités de Chasse (Fighter Arm)

The following fighters are in use by the French Air Force along the Western Front.

**Morane-Saulnier MS 406**

The Morane is France’s most numerous fighter. It is armed with one 20mm Hispano-Suiza cannon and two 7.5mm machine guns in the wings. **Maximum Speed: 302mph (485 km/h).**

**Curtis H-75 Hawk**

The Hawk 75 is France’s second most numerous fighter, having been heavily imported from the U.S.A. prior to the war. It is armed with one 0.30in and one 0.50in machine gun in the nose with an additional two 0.30in machine guns in the wings. **Maximum Speed: 302mph (485 km/h).**

**Dewoitine D520**

France’s best fighter, although too few in number to be of much use. Armament consists of one 20mm Hispano-Suiza 404 cannon and four 7.5mm machine guns in the wings. **Maximum Speed: 329mph (530 km/h).**
4. Armee de l’Air Française - Unités de Bombardement (Bomber Arm)

The following bombers are in use by the French Air Force along the Western Front.

**Potez 633**

The Potez 633 provides the French Air Force with a very competent light bomber, capable of carrying a 1,323 lb (600kg) bomb load. It has only two machine guns, one forward-firing and the other in the rear cockpit. *Maximum Speed: 273mph (440 km/h).*

**Messerschmitt Bf 109E**

The ‘109’ is the standard German short-range fighter aircraft and is armed with two 7.92mm Rhinemetall-Borsig MG 17 machine guns above the engine, one 20mm MG FF firing through the propeller hub and two MG FF in the wings. *Maximum Speed: 348mph (560 km/h).*

**Messerschmitt Bf 110C**

The ‘Zerstorer’ (Destroyer) is the standard German long-range fighter aircraft and is armed with two Oerlikon Mg FF cannons, four 7.92mm Rhinemetall-Borsig MG17 machine guns fixed firing forward in the nose. One 7.92mm MG 15 is situated in the rear of the cockpit and is operated by the gunner. *Maximum Speed: 349mph (562 km/h).*
6. Luftwaffe - Kampfflieger (Bomber Arm)

The following bombers are in use by the German Luftwaffe along the Western Front.

Junkers 88A
Designated as a ‘Schnellbomber’, or ‘fast bomber’, the Ju88 is the newest aircraft in the German inventory. Able to carry a bomb load of 1801 kg (3,968 lb), it also has defensive armament consisting of three 7.92mm machine guns in front and rear cockpit mountings and ventral gondola. Maximum Speed: 286mph (461 km/h).

Junkers 87B ‘Stuka’
Developed as a Stuka (short for ‘Sturzkampfluezeg’ or ‘dive-bomber’), this type did extremely well in the recent Polish Campaign. The Junkers 87B carries an external bomb load of 1000 kg (2205 lb). Defensive armament consists of two 7.92mm Rhinemetall-Borsig MG-17 machine guns in the wings and one rear firing 7.92mm MG 15 operated by the rear gunner. Maximum Speed: 242mph (390 km/h).

Dornier Do 17Z
The ‘Flying Pencil’, as it is known, is a fast medium bomber, dropping its bombs during level flight. Bomb load is 1000 kg (2205 lb), and defensive armament consists of between four and eight 7.92mm machine guns in front, rear and beam cockpit mountings as well as ventral position. Maximum Speed: 255mph (410 km/h).

Heinkel He.111H-3
The He.111 is the Luftwaffe’s standard medium bomber and as such, accounts for around half the total number of bombers available for the campaign in the West. The He.111 carries an internal bomb load of 2002 kg (4410 lb). Armament consists of three 7.92mm machine guns in nose, dorsal and ventral positions. Maximum Speed: 247mph (398 km/h).
7. Luftwaffe - Transports

The following transports are in use by the German Luftwaffe along the Western Front.

**Junkers Ju52**

The Ju52 is the ‘work horse’ of the German armed forces. It is equally at home ferrying supplies as it is towing a glider or dropping paratroops. Defensive armament consists of one 13mm or 7.92mm trainable rearward-firing machine gun in a rear dorsal position. There is also provision for one 7.92mm trainable lateral-firing machine gun in each of the two beam positions. *Maximum Speed: 178mph (286 km/h).*