



DH 2

VS

ALBATROS D I/D II

Western Front 1916

JAMES F. MILLER

DH 2 **VS** **ALBATROS D I/D II**

Western Front 1916



JAMES F. MILLER

CONTENTS

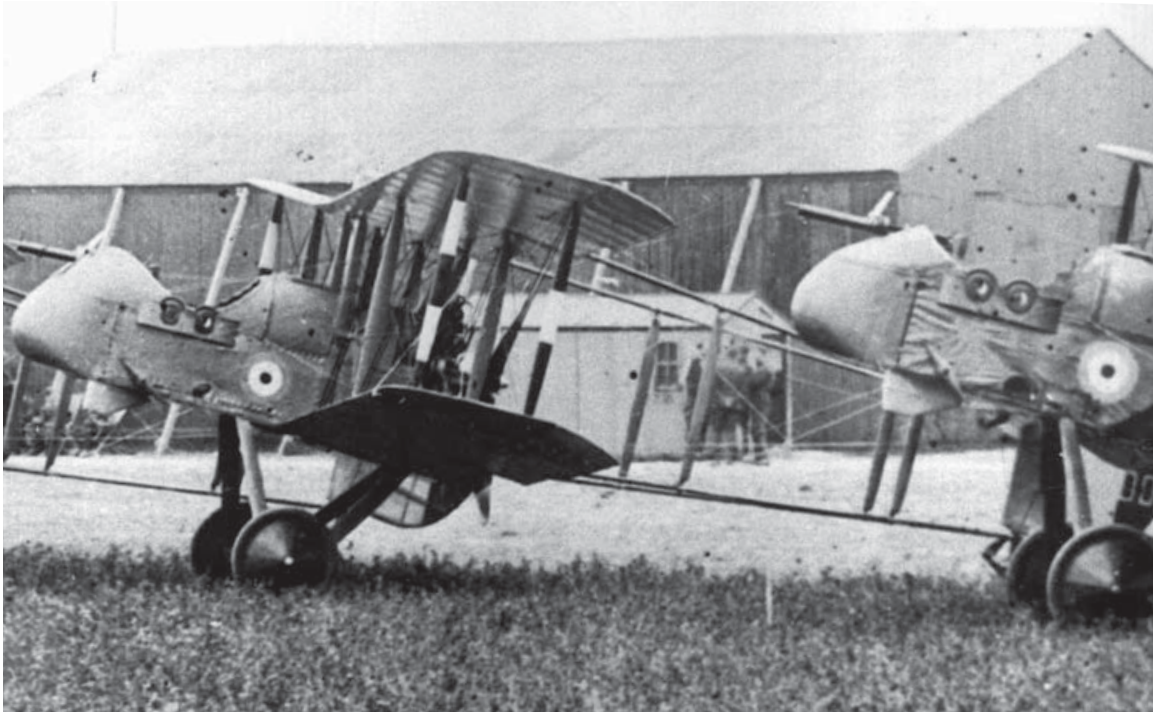
Introduction	4
Chronology	8
Design and Development	10
Technical Specifications	21
The Strategic Situation	38
The Combatants	43
Combat	49
Statistics and Analysis	71
Aftermath	76
Further Reading	79
Index	80

INTRODUCTION

While modern air forces employ time-tested, combat-proven tactics and decades-old aeroplanes designed on well understood aeronautical principles and built with ample time for testing and refining, air forces of World War I were literally writing the book on tactics and aeroplane design as dictated by the current state of the war. Indeed, throughout the conflict a perpetual reactionary arms race existed to counter and hopefully conquer the enemy's latest aeroplane technology. Nowhere was this more evident than with single-seat scouts.

Better known today as 'fighter aeroplanes', single-seat scouts were born as a direct result of two-seater aerial reconnaissance and artillery observation. Such infantry cooperation aeroplanes were crucial for the furtherance of army strategic and tactical planning for ground force success. This was particularly the case on the static Western Front, where trench-based warfare throttled any cavalry-based reconnaissance. Without exaggeration, two-seater photographic reconnaissance was as important in World War I as satellites are today.

Naturally, it became desirable for all combatants not only to amass as much intelligence as possible via two-seater excursions over the frontlines but to simultaneously prevent the enemy from achieving the same. This begat two-seater crews arming themselves for aerial interception of their belligerent counterparts, but soon single-seat 'scouts' were developed to use speed to dash quickly over the lines, conduct a specific observation, and then quickly regain the lines. However, both sides realised that single-seat scouts provided an effective means with which to hunt and shoot down enemy reconnaissance aeroplanes, as well as to protect their own reconnaissance types from similar treatment. A natural result of these tactical implementations was scout-versus-scout combat – the 'fighter aeroplane' and 'dogfighting' were born.



However, the superiority pendulum swung without equality as each side strove to counter what the enemy already possessed. The Germans struck first with their Fokker Eindeckers, armed with a single Maxim machine gun that was synchronised to fire through the propeller arc. Not necessarily an extremely nimble aeroplane – it did not have to be when pursuing sluggish two-seater reconnaissance types such as the Royal Aircraft Factory (RAF) BE 2c – the monoplane’s armament and speed (approximately 88mph compared to the BE 2c’s modest 69mph at 10,000ft) allowed it to plunder Allied reconnaissance machines. This in turn gave rise to the legendary ‘Fokker Scourge’ description given to German air superiority over the Western Front from late 1915 through to early 1916.

As yet the Triple Entente (Great Britain, France and Russia) had no reliable synchronisation gear with which to counter the new threat. However, the single-seat French Nieuport 11 ‘Bebe’ soon appeared with a single Lewis machine gun mounted atop the upper wing that fired *over* the propeller arc, bypassing the need for propeller synchronisation.

The British answer to the problem was to employ the ‘pusher’ aeroplane concept – i.e. locate the engine behind the cockpit to allow the pilot freedom to fire a machine gun forward without any interference from the propeller. This arrangement had previously been used in two-seaters such as the Farman F 40 and RAF FE 2b, but the Aircraft Manufacturing Company’s DH 2 was the first single-seat pusher designed specifically for air-to-air interdiction.

Now equipped with fighters that were as fast and more nimble than the German monoplanes and, crucially, available in greater numbers, the Entente had once again

No. 24 Sqn DH 2s 6000 (left) and 5925 (right) at Bertangles in July 1916 – note 5925’s slightly lower nacelle front. This aircraft was one of three DH 2s involved in an epic clash with *Jasta 2* that saw the loss of No. 24 Sqn CO Maj Lanoe Hawker.



With a dose of right rudder, *Jasta 2*'s Lt'n Otto Höhne guns Albatros D I 390/16 Hö on its takeoff run in the autumn of 1916. Höhne had shot down six aeroplanes with *Jasta 2* by the time he was wounded in January 1917. A year later he would return to the unit as *Staffelführer*.

achieved control of the skies over the Western Front by the summer of 1916. A post-war German analysis concluded:

The start of the Somme battle [1 July 1916] unfortunately coincided with the low point in the technical development of our aircraft. The unquestioned air supremacy we had enjoyed in early 1916 by virtue of our Fokker monoplane fighters had shifted over to the enemy's Nieuport, Vickers [generic German term for British lattice-tailed pushers, in this instance referring to the DH 2] and Sopwith aircraft in March and April.

As the German monoplanes were replaced by biplane fighters such as the Fokker D I and various Halberstadt machines, pilots wanted a fighter that had power enough to promote speed *and* bear the weight of twin-gun firepower. Enter the Albatros D I and D II, each boasting a 160hp engine that gave the pilots what they had asked for. The Albatros Ds were not as manoeuvrable as the Nieuport 11 or DH 2, but this was not a detriment when one considers that shooting down ungainly two-seaters was a primary endeavour. All pilots sought to attack under a cloak of surprise, using speed to swiftly approach one's target unseen and then hammer it down before the crew of the aeroplane was even aware that they were under attack.

Head to head, the DH 2 was more manoeuvrable than the Albatros D I and D II, but the latter were faster, had better rates of climb and were equipped with two belt-fed machine guns and 1,000 rounds of ammunition. The DH 2 had a single gun with less than half that amount of ammunition, carried in 47- or 97-round drums that

had to be replaced during combat. The Albatros also enjoyed a much more reliable inline engine than the DH 2's rotary motor, which was prone to power loss or outright failure due to mechanical faults. However, even with properly running engines, speed triumphs manoeuvrability. The latter is a defensive tactic and fighter aeroplanes are offensive weapons, best employing surprise in order to prevail over an opponent. The DH 2's nimble attributes, therefore, could not easily overcome the Albatros's superior speed (the DH 2 was nearly 20mph slower in level flight), especially when in a dive, and firepower.

Royal Flying Corps (RFC) pilot Capt R. H. M. S. Saundby's recollections succinctly set the stage for the chapters that follow:

The Albatros single-seater fighting machine was the first formidable tractor [engine in front] biplane scout produced by the enemy. While we had occasionally met them before, they only became numerous and, therefore, offensive at the beginning of November [1916]. The de Havilland Scout had a hard job when outnumbered by these machines, and only carried on because of its handiness and manoeuvring power, for its speed and climb were much inferior to these new Huns [slang for Germans and/or German aeroplanes].

This outstanding close-up photograph of American volunteer pilot Lt Geoffrey H. Bonnell of No. 32 Sqn clearly reveals the DH 2's nacelle and single 0.303in Lewis machine gun. Bonnell would later join the US Army Air Service and command the 147th Aero Squadron. (Aaron Weaver)



CHRONOLOGY

1914

March

Geoffrey de Havilland joins the Aircraft Manufacturing Company as chief aeroplane designer and test pilot. Begins work on a two-seater pusher, forerunner of the DH 2.

June

Albatros Type DD wins 100km (60 miles) speed prize at the Aspern *Flugmeeting* in Vienna. Designed by Ernst Heinkel and Robert Thelen, the Type DD is considered to be the forerunner of the Albatros D series of scouts.

28 June

Archduke Franz Ferdinand of Austria assassinated by Serbian student Gavrilo Princip, beginning a period of international diplomatic manoeuvring.

July

To end Serbian interference in Bosnia, Austria-Hungary delivers a ten-demand ultimatum to Serbia, intentionally made to be unacceptable and provoke war. Serbia agrees to eight demands.

28 July

Austria-Hungary declares war on Serbia.

29 July

Russian Empire orders partial mobilisation in support of Serbia.

30 July

German Empire delivers ultimatum to Russia to cease mobilisation against Austria-Hungary.

1 August

France orders mobilisation and Germany declares war on Russia.

3 August

Germany declares war on France and invades Belgium.

4 August

UK declares war on Germany in support of Belgian neutrality. World War I fully under way.

1915

June

de Havilland conducts inaugural DH 2 flight and begins series of test flights and refinements.

Summer

German monoplanes armed with synchronised machine guns decimate RFC reconnaissance two-seaters, begetting the 'Fokker Scourge'.

No. 32 Sqn DH 2 7907 features clear doped fabric sides, grey metal nacelle panels and dark undercarriage struts. A black ring on the white wheel cover denotes a 'B' Flight machine. [Aaron Weaver]





9 August DH 2 prototype sent to France for combat evaluation is shot down and captured mostly intact by the Germans.

**1916
February**

DH 2 arrives in France with No. 24 Sqn.

June

Thelen design team's Albatros D I undergoes flight evaluation and static load tests at Adlershof.

18 June

German 15-victory ace Lt n d R Max Immelman is killed in action, his death marking the end of the 'Fokker Scourge'.

July

Albatros D I ordered into production.

1 July

The Battle of the Somme commences. British Army suffers 60,000 killed or wounded on the first day of the offensive.

August

Germans implement the *Jagdstaffel*, a dedicated group of single-seat fighters tasked primarily with hunting enemy two-seater reconnaissance and artillery-spotting machines.

Albatros D I D.446/16 displays its high gloss finish. Although the engine and radiators necessarily jut into the slipstream, Albatros has taken care to reduce drag via faired inverted 'V' struts, wing root fillets and a 'bowl' over the port Maxim's expended belt chute.

16 September Albatros D Is and a single D II arrive in the frontline with *Jagdstaffel 2*.

28 October *Jagdstaffel 2* *Staffelführer* and 40-victory ace Hptm Oswald Boelcke is killed after a mid-air collision with Lt n Erwin Böhme, who survives.

22 November No. 24 Sqn pilots Capt John Andrews and 2Lt Kelvin Crawford shoot down and kill *Jagdstaffel 2* *Staffelführer* Stefan Kirmaier.

23 November No. 24 Sqn commanding officer and RFC luminary Maj Lanoe Hawker is shot down and killed by *Jasta 2*'s Manfred von Richthofen after an eight-minute swirling dogfight and race to the lines near Bapaume, France.

Late December Albatros D IIIs begin arriving at frontline *Jagdstaffeln*.