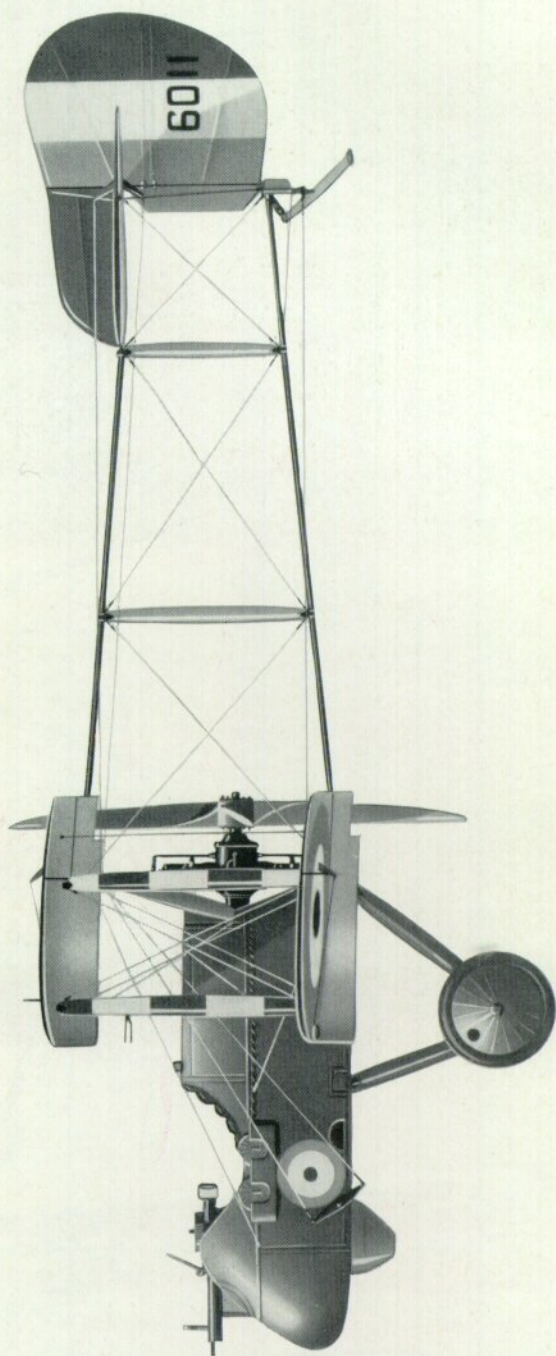
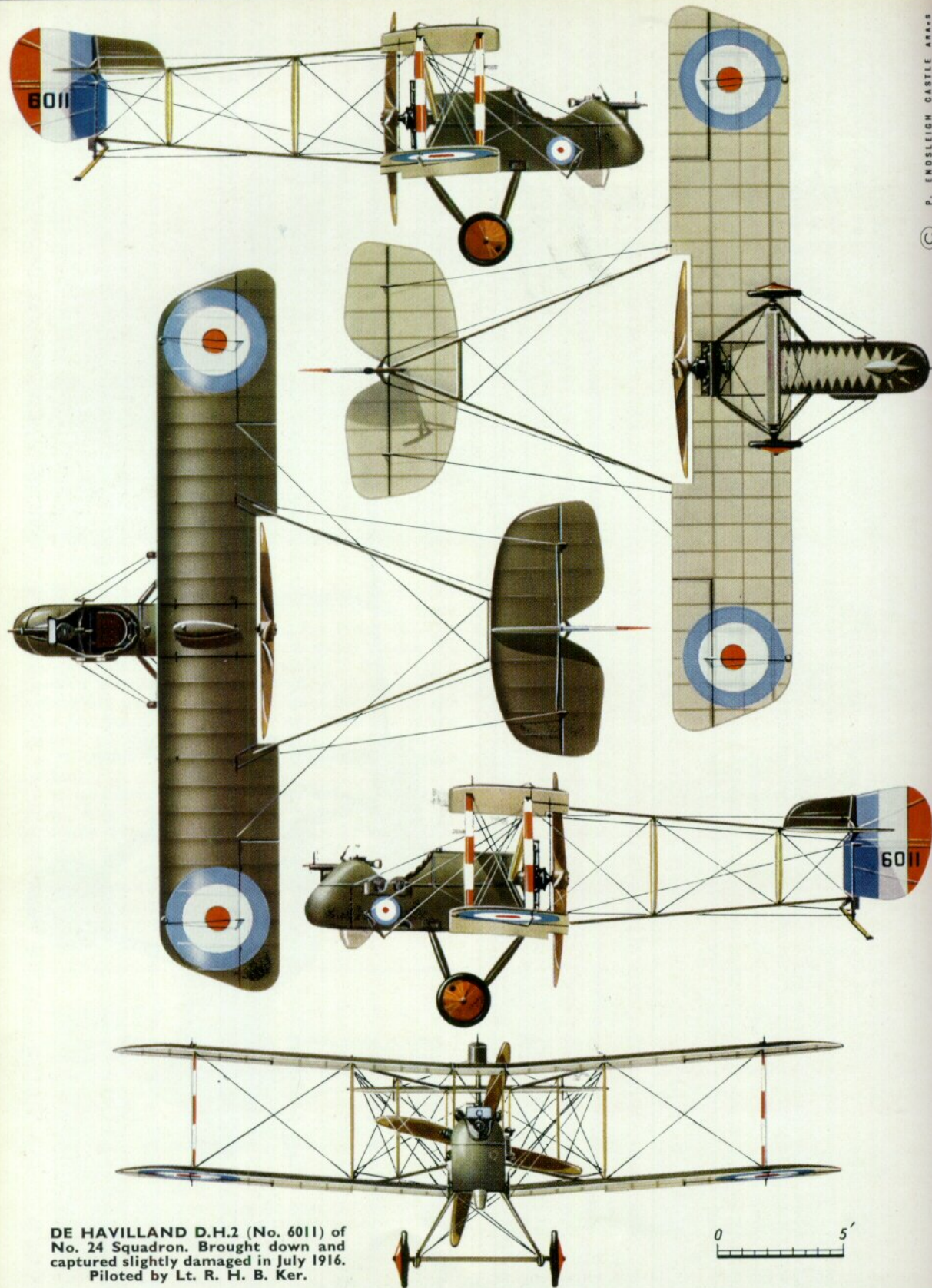


PROFILE PUBLICATIONS

The de Havilland D.H.2

**NUMBER 91
TWO SHILLINGS**





DE HAVILLAND D.H.2 (No. 6011) of No. 24 Squadron. Brought down and captured slightly damaged in July 1916. Piloted by Lt. R. H. B. Ker.

The de Havilland D.H.2



by J. M. Bruce

Four D.H.2s on the aerodrome of the Fourth Army Aircraft Park at Beauval, 1916.

(Photo: Imperial War Museum Q11897)

When war broke out in August 1914 few aircraft designers were more widely experienced than Geoffrey de Havilland. After the success of the second biplane that he had himself designed and built in 1910 he joined the small staff of His Majesty's Balloon Factory at South Farnborough as designer and test pilot. His aircraft was purchased by the War Office for £400 and was given the official designation Farman Experimental No. 1, or F.E.1. It thus initiated the first British official system of aircraft nomenclature and was the first of the "Factory" aeroplane series, for by successive changes of title H. M. Balloon Factory became the Army Aircraft Factory in April 1911 and the Royal Aircraft Factory a year later.

For three and a half years Geoffrey de Havilland worked at Farnborough. During that time he worked on the designs of the S.E.1, B.E.1, B.E.2, F.E.2 and, possibly the most significant of all, the B.S.1. This last was a sleek single-seat tractor biplane powered by a 100-h.p. Gnôme rotary engine. Its designation signified Bleriot Scout No. 1; its speed, recorded in April 1913 as 91.4 m.p.h., made it the fastest British aircraft of its day and one of the fastest aeroplanes in existence. Historically the B.S.1 is of the greatest importance for it was the first high-speed single-seat scout in the world, the first expression of a formula that was to produce generations of single-seat fighters in later years.

The Royal Aircraft Factory was also early in the field of aircraft armament. The original F.E.2 was a somewhat refined development of de Havilland's F.E.1, having a sketchy nacelle with a Maxim machine gun on a movable mounting in the prow. A completely revised design was built, again designated F.E.2, but crashed and was destroyed on 23rd February 1914.

A further redesign produced the F.E.2a, a three-bay pusher biplane powered by the 100-h.p. Green engine.

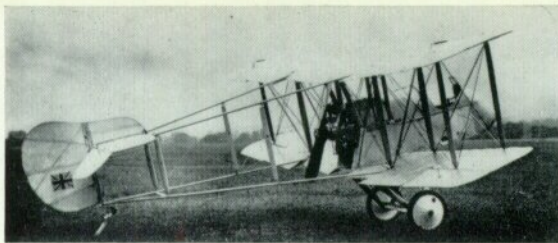
The Green was subsequently replaced by the 120-h.p. Austro-Daimler (Beardmore-built) and twelve F.E.2a's in all were built. Several saw operational service with No. 6 Squadron, R.F.C., in 1915.

It is unlikely that Geoffrey de Havilland had much, if anything, to do with the design of the F.E.2a, for he had left the Royal Aircraft Factory to join the Aircraft Manufacturing Co. Ltd. in June 1914. His first design for his new firm was to the same formula as the F.E.2a, and was a two-seat pusher biplane powered by a 70-h.p. Renault engine and capable of carrying a single machine gun in the front cockpit.

The Airco two-seater was given the designation D.H.1. It inaugurated a series of great D.H. designs that ran in unbroken sequence during Sir Geoffrey de Havilland's lifetime. The D.H.1 and F.E.2a were almost precisely contemporary: the Airco two-seater appeared in January 1915, and the first F.E.2a made its first flight on the 26th of that month. Although 100 D.H.1s were ordered, most being delivered as D.H.1As with the 120-h.p. Beardmore engine, the type saw little operational service and later official orders were for the F.E.2b, the production version of the F.E.2a.

It will probably never be known whether Geoffrey de Havilland had learned anything about the pre-war experiments with machine gun synchronising mechanisms conducted by Raymond Saulnier in Paris (see *Profile* No. 38, page 4). Had he known about these it is just possible that the D.H.2 might have been a tractor biplane stemming from the B.S.1/S.E.2 design rather than a pusher that was more or less a scaled-down D.H.1.

In early 1915, however, no kind of synchronising mechanism was available to Allied aircraft designers, the Saulnier gear having been abandoned. Indeed, at that early stage of the war, attempts to fit machine



This three-quarter rear view of the prototype shows that only the port side of the forward decking was cut away to accommodate the gun-mounting. At this time there was no national marking on the upper surface of the wings.



No. 4732 down on the German side of the lines. Tricolor stripes and the serial number had been painted on the rudder by this time.

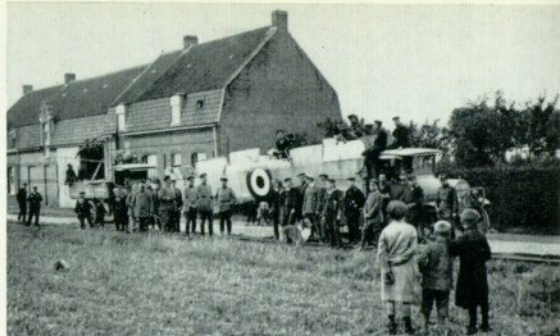
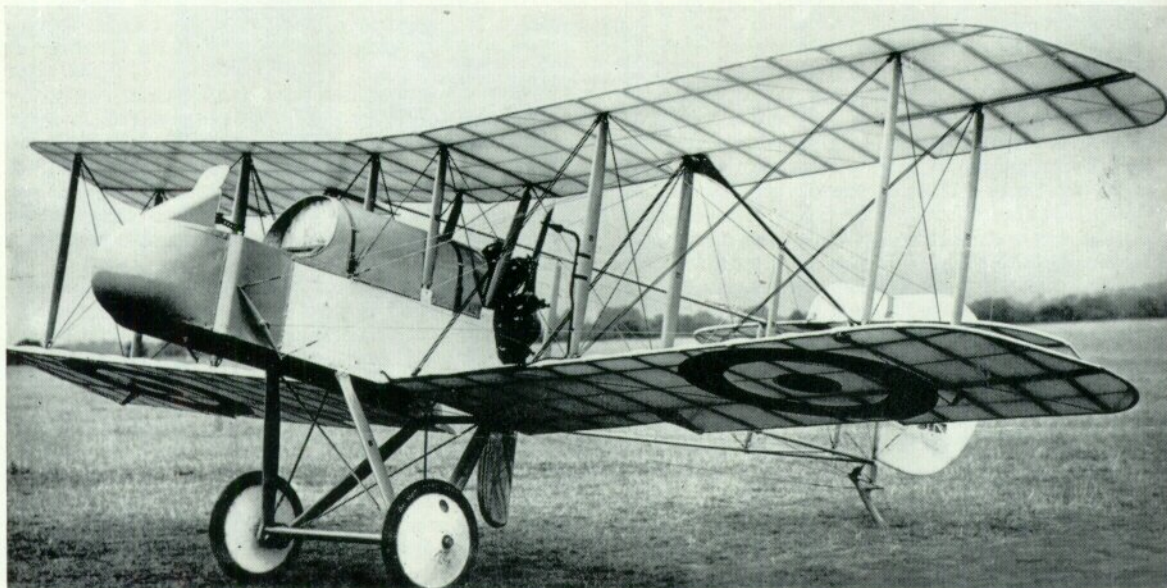
(Photo: Alex Imrie)

guns to aircraft were remarkably diverse, and it must have seemed that only an aircraft of pusher configuration offered a reasonable hope of allowing consistently effective use to be made of a gun.

Although the D.H.2 was to enjoy considerable success against the Fokker monoplane, it was not designed specifically as a counter weapon to the enemy type. The first prototype D.H.2 was completed in the early summer of 1915, at just about the time when the first few Fokkers were reaching the front. It was a compact little two-bay biplane powered by a 100-h.p. Gnome Monosoupape rotary engine. The wooden airframe was wire-braced and, with the exception of the nacelle nose and top decking, fabric-covered. Ailerons were fitted to upper and lower wings; there was no spanwise balance cable, the upper ailerons

The first prototype D.H.2 shortly after completion, with bracket gun-mounting on the port side of the fuselage only.

(Photo: Real Photographs Co., Ltd.)



The wings of No. 4732 being transported from the scene of its crash. This rare photograph shows that the prototype D.H.2 had, by the time of its operational service, acquired an unusual national marking: a single roundel, centrally placed above the centre section.

(Photo: Alex Imrie)

being spring loaded in order to ensure their return to the neutral position when the controls were centred.

The armament consisted of a single Lewis gun, for which at that time only the 47-round ammunition drum existed. On the prototype D.H.2 the gun was carried on a bracket mounting the vertical shaft of which was attached to the outside of the nacelle on the port side and was faired over by a piece of sheet aluminium. The upper part of the nacelle nose fairing was cut away on the port side to accommodate the gun.

This prototype D.H.2 was given the official serial number 4732. When its manufacturer's trials were over it was sent to France for operational evaluation on 26th July 1915. Perhaps as a foretaste of what lay in store for D.H.2 squadrons its engine (No. 30045/B.1c) was changed immediately on arrival in France; the replacement Monosoupape was No. 4475/B.152. The D.H.2 was attached to No. 5 Squadron, R.F.C. (its presence on the strength of that unit on 31st July 1915 was officially recorded), but its career was brief. It was reported missing on 9th August 1915; the Germans subsequently dropped a message stating that

its pilot, Captain R. Maxwell-Pike, had died of wounds. When No. 4732 came down behind the German lines it overturned on landing; nevertheless it was substantially intact and presented the enemy at the earliest possible moment with a specimen of the latest British military aircraft. The reason for No. 4732's downfall is not known. In a statement made on 21st June 1916 to the Judicial Committee of Inquiry into the administration and command of the R.F.C. the late C. G. Grey said: "In July last year Mr. de Havilland produced a single-seater scout with the engine—a 100-h.p. Gnome—behind. That first went to the front on August 15th [*sic*] last. Unfortunately that machine was shot down by the Germans almost the first day it arrived." As Mr. Grey was wrong in the date he quoted he may also have been wrong in saying that No. 4732 was shot down: the aircraft may have merely been an early victim of the unreliability of the Monosoupape engine, its pilot's death the result of injuries rather than wounds.

In spite of this early acquisition of a D.H.2 it seemed to take the Germans a remarkably long time to establish the type's identity. In their eyes all British pushers were "Vickers" aircraft (a not inconsiderable compliment to the sturdy Vickers F.B.5), and in contemporary German documents the D.H.2 was usually described as a "Vickers single-seater". Several sound specimens of production D.H.2s fell into German hands in 1916 and official recognition drawings, correctly titled, were produced for the use of the German pilots and observers of the time; nevertheless uncertainty persisted into 1917, when the German journal *Flugsport* published a detailed description of a captured F.E.8 but described it throughout as a D.H.2.

Despite the premature end to the career of the prototype, the D.H.2 was ordered in quantity from the Aircraft Manufacturing Co. Deliveries of the production aircraft began late in 1915; according to *The War in the Air*, Vol. II, page 159, a few single examples were flying in France before the end of 1915. These



may have been some of the few D.H.2s that were with Squadrons Nos. 11 and 18. The latter unit acquired No. 5919 on 9th January 1916, No. 5916 ten days later. On 11th January No. 5920 joined No. 5 Squadron.

The production D.H.2s were substantially similar to the prototype. All major components were unaltered,

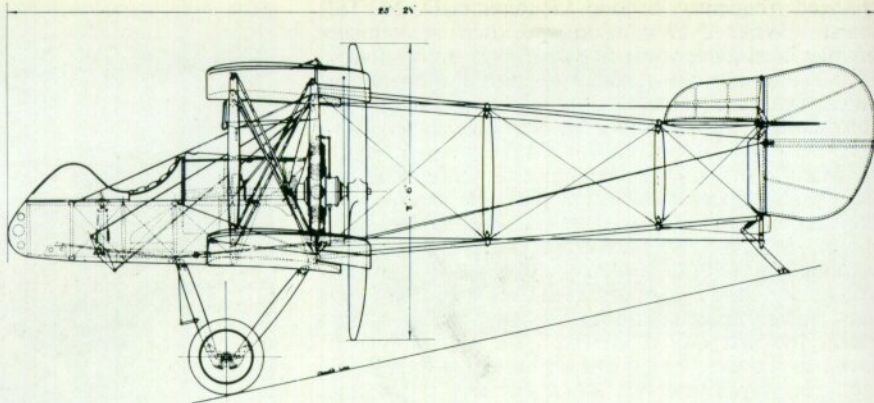
Four aspects of No. 5943, a production D.H.2 of the first batch. These aircraft had longer ailerons than those of the prototype, and the gravity tank was, originally at least, mounted under the port upper mainplane.

(Photos: (top) "Flight International"; (remainder) K. M. Molson)



Side elevation of production-type D.H.2.

(Photo: Crown copyright)



the only significant changes being in the gun mounting and fuel system. The Lewis gun was carried on a central mounting that enabled it to be traversed, elevated or depressed and had a considerable range of movement. To accommodate this new arrangement the top of the nacelle nose fairing was redesigned: it was now symmetrical and had a central slot in which the gun lay when fully lowered. A quaint feature of the installation was the mounting of the windscreen on the gun itself.

A gravity tank was added to the fuel system. Its position varied: on some D.H.2s it was mounted centrally on top of the centre section; on others it was either above or below the port upper mainplane.

On 1st September 1915, No. 24 Squadron was formed at Hounslow; on the 28th, command of the new unit was taken over by Captain L. G. Hawker, v.c., d.s.o. The squadron had to work up to operational strength and efficiency before going overseas, and was responsible for three Home Defence night-flying stations at Wimbledon, Sutton's Farm and Hainault Farm. No. 24 Squadron had to be content with an ill-assorted collection of Curtiss, Avro, Caudron and Farman two-seaters, a Bristol Scout and a few Martinsyde S.1s.

The squadron had been selected as the first to be equipped with the D.H.2. The first of the little pushers to be delivered to No. 24 arrived on 10th January 1916, and by the time the unit left for France on 7th February it had received a total of twelve D.H.2s. On 10th February No. 24 Squadron arrived at Bertangles, a time which, in the words of the squadron's historian, was "fraught with great possibilities". The Fokker monoplanes were then at the zenith of their influence: on 7th February the escort detailed to protect a single reconnaissance B.E.2c of No. 12 Squadron consisted of three other B.E.2c's, four F.E.2b's, four R.E.7s and one Bristol Scout. "The reconnaissance was not made," says the official history, "but there could be no more significant tribute to the supremacy of the Fokker than is implied in this order for twelve pilots to escort one reconnaissance aeroplane."

No. 24 Squadron spent their first few weeks in France in gaining experience of their aircraft and their area of operations. Early casualties were caused by spinning. In early 1916 spinning was not properly understood; it was regarded as a catastrophic situation to be avoided, for at that time there was no accepted and understood recovery action. In his book, *Hawker, V.C.*, Lt.-Col. Tyrrel Hawker tells how his brother, Major L. G. Hawker, v.c., d.s.o., deliberately spun a

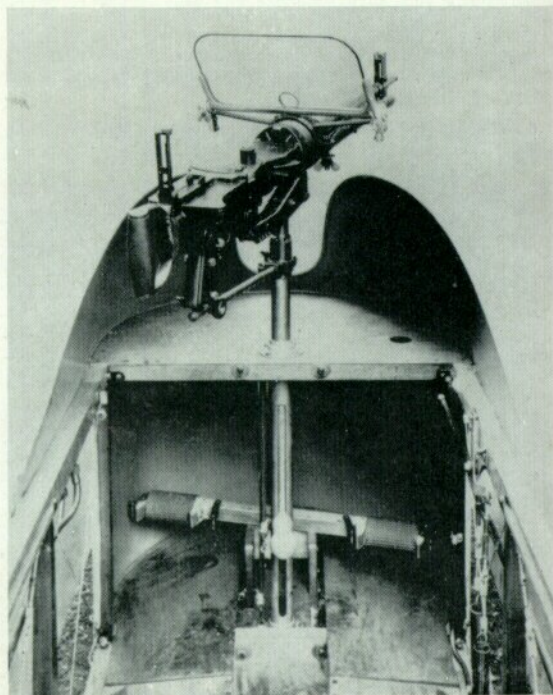
D.H.2 repeatedly to demonstrate to his pilots that the aircraft could be brought under control readily and effectively. This was in mid-February 1916, six months before Captain F. W. Goodden deliberately spun an F.E.8 at Farnborough and recovered successfully. It seems extraordinary that Major Hawker's feat was not recorded in the official history of No. 24 Squadron. Following a reference to the D.H.2's proneness to spinning the history says:

Lieutenant Cowan did much to inspire confidence by the facility with which he handled his machine. He was the first pilot really to "stunt" this machine, and gradually the Squadron gained complete assurance.

Armament was a problem on the D.H.2. The original gun mounting was useless in combat; for the gun itself only the standard 47-round ammunition drums were available and magazines had to be

This photograph of the cockpit of a D.H.2 shows the nature of the gun mounting and the method of elevating the weapon.

(Photo: K. M. Molson)



changed frequently. Second Lieutenants D. M. Tidmarsh and A. M. Wilkinson were the first members of No. 24 Squadron to fit two Lewis guns to their D.H.2s, presumably as fixed weapons firing straight ahead, but it seems that this modification was officially frowned upon and the twin guns had to be removed.

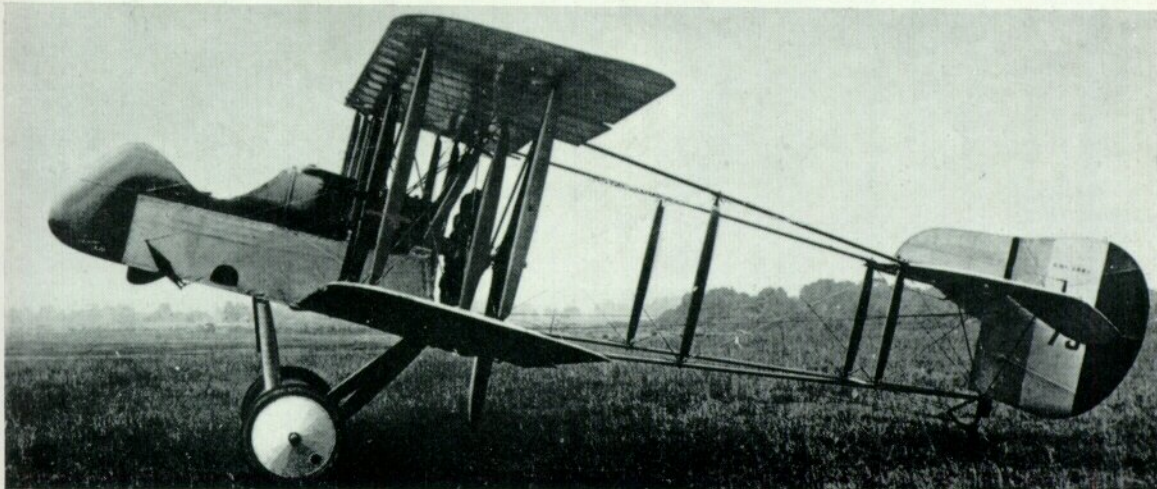
Apparently authority also disapproved of early attempts to dispense with the movable mounting and use the single Lewis as a fixed gun. The trouble with the original mounting was that it was too movable: the pilots of No. 24 Squadron referred to it as the "wobbly mounting". Major Lanoe G. Hawker's experience in dealing with higher authorities who must have been surpassingly obtuse, even by the standards of the 1914-18 war, is recounted thus in *Hawker, V.C.*:

The official gun mounting, as already mentioned, was quite impracticable; the pilot could not fly in one direction with one hand, and aim and fire his gun in another direction with the other hand; when elevated, the gun got in the way of the joystick. Lanoe first tried clamping down the muzzle of the gun in the straight-forward position; this was at once forbidden by higher authority; the gun on a Nieuport Scout could be fired upwards successfully; so it must be with the D.H.2, regardless of the fact that the relative positions of the pilot and of the gun were quite different. Orders were orders, and even though the pilot of a D.H.2 could not aim his gun upwards, and obviously he could not put his head upside down between his knees to do so, the gun must be free to fire upwards. Lanoe partly got over the difficulty by making a spring clip with a catch to hold the muzzle down, but enabling it to be released if required; it did not hold the gun as rigidly nor as securely as when clamped, but it was the best compromise possible with red tape.

It has been said repeatedly that the D.H.2's gun was ultimately fixed and the aircraft flown as a conventional fixed-gun fighter. It is uncertain whether the fixing of the gun went beyond Hawker's spring clip device, and it is difficult to determine the time when the general practice of flying the D.H.2 as a fixed-gun fighter began. In a combat report dated as late as 10th October 1916 Major Hawker wrote:

A Nieuport-type H.A. came overhead without seeing us, so turning I raised the mounting and fired a few ineffectual shots as the mounting was very wobbly.

A D.H.2 of the second production batch.



On this D.H.2 the windscreen was mounted on the rear of the Lewis gun, which is seen partly elevated.

(Photo: Ministry of Defence)

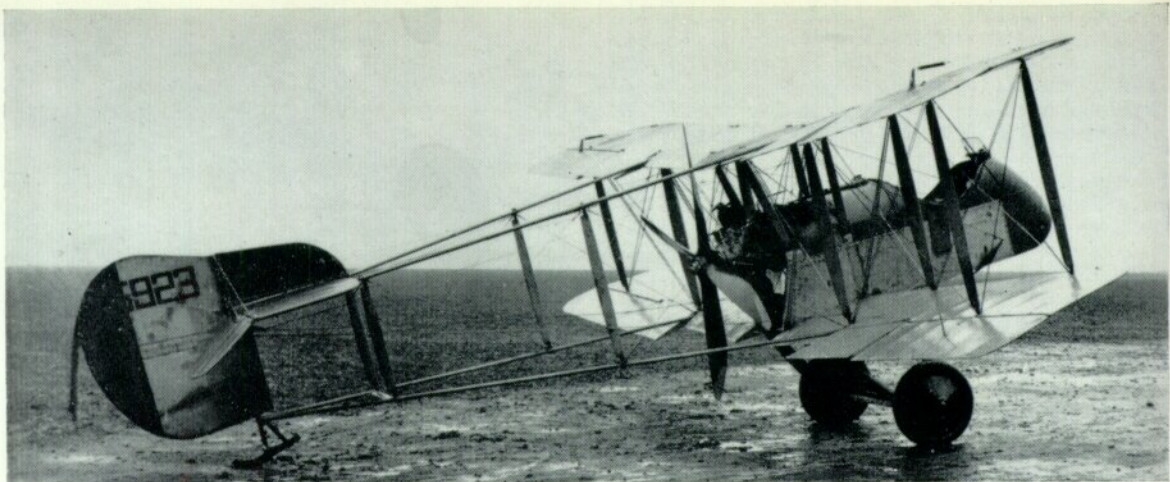
Later that month his squadron orders included detailed instructions for elevating the gun to fire upwards at enemy aircraft that were able to remain above the D.H.2.

A form of double ammunition drum was evolved by Major Hawker and Air Mechanic W. L. French, but it is not known whether there was any relationship between it and the standard 97-round drum, the earlier development of which has been attributed to the armoury section of No. 18 Squadron in December 1915.

No. 24 Squadron had its first engagement with the enemy on 19th March 1916, and the first victory came on 2nd April, when 2nd Lt. D. M. Tidmarsh shot down an enemy aircraft near Bapaume. The D.H.2's first major test occurred on 25th April, when a reconnaissance B.E.2c of No. 15 Squadron was escorted by four other B.E.2c's and three of No. 24's D.H.2s. The formation was attacked by a group of Fokker monoplanes, but the D.H.2s quickly proved themselves to be superior to their opponents, beat off the attack and drove down one of the Fokkers.

Once the D.H.2 had been proved capable of defeating the Fokker its pilots attacked the German fighter unhesitatingly. On 20th July 1916 four D.H.2s (Nos. 5924, 5992, 6010 and 7842) of "B" Flight, No. 24

(Photo: Real Photographs Co., Ltd.)



A four-blade airscrew was ultimately standardised for the D.H.2, as seen here on No. 5923.

(Photo: Imperial War Museum MH 3372)

Squadron, attacked a mixed formation of five L.V.G. two-seaters, three L.F.G. Roland C IIs and three Fokkers over Bapaume. The D.H.2 pilots were Captain R. E. A. W. Hughes-Chamberlain, Lt. C. M. B. Chapman, 2nd Lt. H. C. Evans and 2nd Lt. A. E. McKay. Chapman shot a Fokker down in flames, McKay accounted for a Roland, and at least one other enemy aircraft fell to Hughes-Chamberlain; two others were driven down and the others dispersed. Even longer odds were accepted by the D.H.2 pilots: on 15th September 1916 three of No. 24 Squadron attacked a formation of seventeen German aircraft near Morval, shot down two and scattered the remainder.

Imbued with the offensive spirit of its commanding officer, No. 24 Squadron continued to fly the D.H.2 with panache and distinction until its long-overdue replacement by the D.H.5. In 774 combats between 8th April 1916 and 25th May 1917 the D.H.2s of Hawker's Squadron destroyed or captured forty-four enemy aircraft, forced seventeen to land in their own lines, and drove down many others.

These achievements were not easily won. The D.H.2 was never very fast; in particular it was slow in a dive and could be left behind by many contemporary types. Its Monosoupape engine was not reliable, even by the standards of 1916: mechanical failure could have fatal

consequences, for it was not unknown for the engine to shed cylinders: at best this caused violent vibration until the engine could be stopped, at worst the ejected cylinder severed a tailboom and the aircraft broke up. In No. 24 Squadron Lt. A. E. Glew and Captain D. Wilson were victims of this failing of the Monosoupape.

The shortcomings of the early 100-h.p. Gnome Monosoupape may have prompted the trial installation of a 110-h.p. Le Rhône in at least one D.H.2, which was tested at Central Flying School. The recorded performance figures suggest that climbing performance with the Le Rhône was poorer than with the Monosoupape, which remained the standard engine.

Two other D.H.2 squadrons took the field in France in 1916. No. 29 Squadron arrived on 25th March, No. 32 on 28th May, and fought with the same skill and gallantry as the pilots of No. 24 Squadron. No. 29 Squadron had had an unfortunate start. Of ten D.H.2s that left Gosport for France six were forced down by a sudden snowstorm before crossing the Channel. Four of the aircraft were damaged and two of the pilots injured.

Captain L. P. Aizlewood of No. 32 Squadron had reason to be grateful for the sturdy construction of the D.H.2 on 9th September 1916. He and two other members of his squadron attacked five enemy aircraft over Thiepval. Aizlewood dived to within twenty yards of his victim before opening fire and flew into the tail unit of the German aircraft; his D.H.2's undercarriage was wrecked, its airscrew shattered and its tailbooms damaged; nevertheless Aizlewood brought his aircraft down without injury to himself. His opponent crashed near Miraumont.

Some two months earlier Aizlewood's commanding officer, Major L. W. B. Rees, had fought the action for which he was awarded the Victoria Cross. On 1st July 1916 Rees, flying No. 6015, came upon a formation of ten German two-seaters bound on a bombing mission across the British lines. He had at first thought they were British aircraft returning from a sortie but attacked without hesitation when he identified them. His attacks made one of the enemy dive homewards and drove a second down; the formation broke up, only three holding their course. Major Rees kept up his attack and, although wounded

A D.H.2 pilot and his gun.

(Photo: Imperial War Museum Q7237)



in the leg, obliged the enemy leader to abandon the raid entirely.

On 3rd August 1916 Flight Sergeant J. T. B. McCudden was posted to No. 29 Squadron, R.F.C. This move introduced to single-seat fighters a man who was to become one of the greatest fighting pilots of the war. McCudden had been flying F.E.2d's with No. 20 Squadron, and in his book *Five Years in the R.F.C.* he wrote:

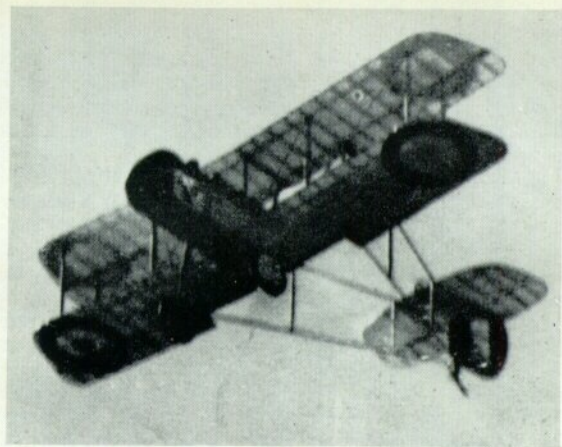
I was allotted machine No. 5985, which had already done about eighty hours flying. The same evening as I arrived in [No. 29] Squadron I went up to have some practice on my machine. I found it very nice and light after flying the heavy F.E. . . .

The D.H.2 was a very cold little machine, as the pilot had to sit in a small nacelle with the engine a long way back, and so of course he got no warmth from it at all.

McCudden's first victory occurred on 6th September 1916, when he shot down a German two-seater over Gheluve. In his description of a combat on 8th September he indicated clearly that the gun on his D.H.2 could be elevated.

A distinguished fighting career was almost prematurely terminated on 9th November 1916. In a hard-fought combat in the morning McCudden's D.H.2 sustained twenty-four hits: "My tailplane was a mass of torn fabric, and various wires were hanging, having been cut by bullets." That afternoon he tried a loop on a D.H.2 but changed his mind just before becoming inverted; he pushed the stick forward and, with the sudden change of curvature, the spare ammunition drums shot upwards and rearwards. They struck the airscrew, breaking three of its four blades.

I now found that I wanted full right rudder to keep the machine straight and discovered, on looking round, that the lower right-hand tail boom had been cut clean



Flying views of D.H.2s are rare. Although somewhat lacking in sharpness, this photograph conveys some impression of the airborne appearance of an aircraft with clear-doped wings; the outline of the upper roundels can be seen through the translucent fabric.
(Photo: H. F. Cowley)

in two by one of the flying propeller blades, and all that was holding my tail on was a diagonal 10-cwt. tail-boom bracing wire.

McCudden managed to bring his severely damaged D.H.2 down to a successful landing.

With the appearance of the fast and well armed Albatros D I and D II in the autumn of 1916 the D.H.2 was outclassed. Nevertheless, re-equipment of the D.H.2 squadrons was long delayed, and their combats became grimmer and more dogged as 1916 ended and 1917 came. By then Lanoe Hawker was gone, killed in combat with Manfred von Richthofen on 23rd November 1916. Despite the considerable

Subject of the five-aspect colour plate on page 2, No. 6011 of No. 24 Squadron is here seen in German hands. It was brought down by a two-seater of Kampfgeschwader 1. By the time of the Battle of the Somme the D.H.2s of No. 24 Squadron had been given a coat of khaki dope on all upper surfaces. The squadron also had its individual marking of red and white bands on the outer interplane struts and used the khaki dope to provide a "saw-tooth" effect on the underside of the nacelle.
(Photo: Egon Krueger)



superiority in speed and armament of von Richthofen's Albatros D II, Hawker, flying No. 5964, gave the Rittmeister no easy victory. No one had done more than Hawker to make the D.H.2 a useful weapon; his death, at the time when the D.H.2's decline had begun, was one of the war's cruellest ironies.

Replacement of the D.H.2 began in March 1917, when No. 29 Squadron was re-equipped with Nieuport 17s. On 1st May No. 24 Squadron's first D.H.5 arrived, but the little pushers did not finally disappear from operational service in France until June was well advanced.

The R.N.A.S. had been interested in the D.H.2. An aircraft that had originally been ordered for the R.F.C. was transferred to the R.N.A.S.; it was renumbered to become No. 8725. It was at the R.N.A.S. unit at Hendon in May 1916 and was flown by Flight Commander Harry Busteed on the 26th of that month. Apparently it was subjected to speed tests on the following day. The R.N.A.S. did not adopt the D.H.2, possibly because the Sopwith Pup and triplane were then in prospect.

No Home Defence unit was equipped with the D.H.2; two examples of the type went to H.D. units in 1917, but its performance was inadequate for Zeppelin hunting. Nevertheless, one D.H.2 participated in the destruction of the Zeppelin airship L.48 on 17th June 1917. Flown by Captain R. H. M. S. Saundby, it was from the armament experimental station at Orfordness. Saundby attacked the airship at the same time as Lt. L. P. Watkins of No. 37 Squadron, to whom the destruction of the L.48 was credited.

After the D.H.2's withdrawal from operational use in France small numbers of the type continued in service in Palestine and Macedonia. By the end of May 1917 two D.H.2s were with the Fifth Wing, R.F.C., which at that time consisted of Squadrons Nos. 14 and 67 (Australian) and operated in Palestine. On 27th October 1917 three were on the strength of No. 111 Squadron at Deir el Balah. In that month one D.H.2 was sent to join "X" Flight at Aqaba; this was a special detachment, independent, self-contained, and under the direct control of R.F.C. Headquarters in Egypt, that had been formed on 9th September 1917 for permanent attachment to the Arab forces. Such warlike acts as the Palestine D.H.2s may have committed seem to have been considered of insufficient importance to merit a place in the official history.

In Macedonia No. 47 Squadron, R.F.C., had a few D.H.2s in the spring of 1917. Two of these were allocated to the composite R.F.C./R.N.A.S. fighting squadron that was created in March of that year to combat the German bombing unit *Kampfgeschwader I*, then based at Hudova. No. 47 Squadron still had D.H.2s on its strength in September 1917.

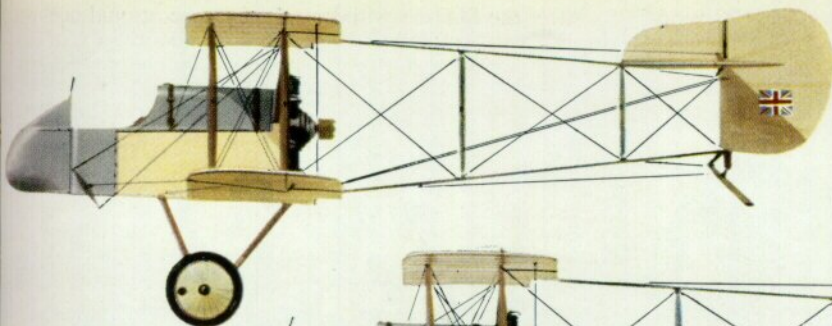
It is not now possible to be certain when the D.H.2 finally disappeared from service. Official statistics indicate that one went to France in 1918 but its mission can scarcely have been an operational one. Possibly the last in official use was A2569, which was flown for experimental purposes at the Royal Aircraft Factory. This D.H.2's last recorded flight at Farnborough was made on 20th March 1918, when the aircraft was employed to test Tampier controls, presumably of the carburettor.

(continued on page 12)

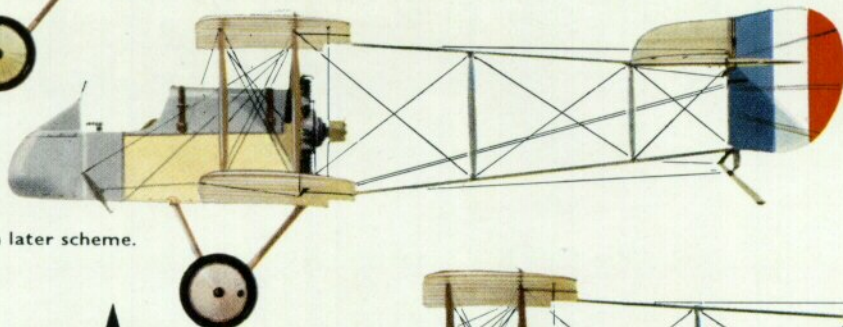
Another D.H.2 that fell intact into German hands. This was an aircraft of the second production batch, but its squadron is unknown. Note the fairing piece blanking off the front of the slot in the nacelle and the gravity tank above the port upper mainplane.

(Photo: Egon Krueger)





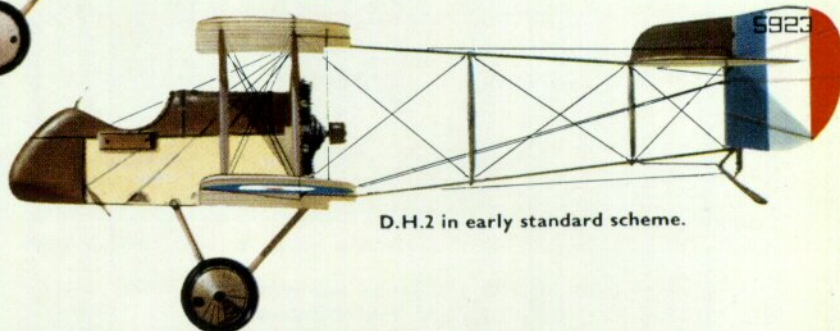
D.H.2 Prototype in original scheme.



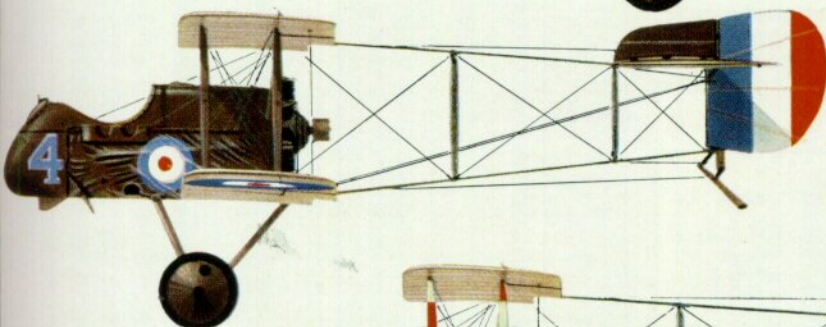
D.H.2 Prototype in later scheme.



Upper wing detail,
note central position of roundel.



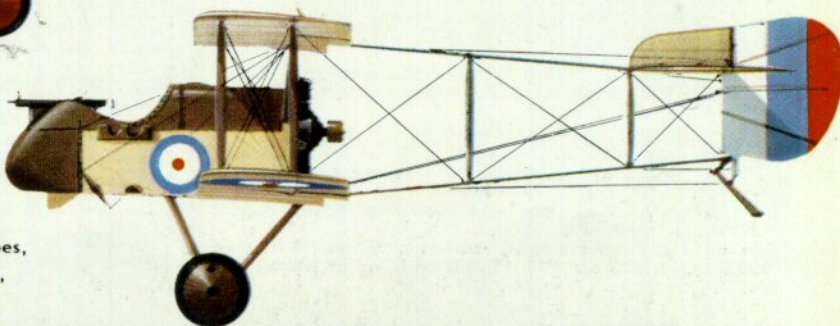
D.H.2 in early standard scheme.



D.H.2 of second production
batch in standard scheme.



D.H.2, No. 24 Squadron,
R.F.C., serial unknown.



D.H.2 with non-standard rudder stripes,
Fourth Army aircraft park, Beauval,
France, 1916.



A D.H.2 and a Vickers F.B.19 Mk. II, believed to be with No. 14 Squadron, Palestine.

(Photo: R. C. Bowyer)

By any standards the D.H.2's service was remarkable. It had an undistinguished performance, its armament was inadequate and inefficiently installed, yet it was in its day a weapon to be reckoned with. It played a major part in defeating the Fokker monoplane and in maintaining British aerial supremacy above the battlefields of the Somme.

SPECIFICATION

Power: 100-h.p. Gnôme Monosoupape; 110-h.p. Le Rhône 9J.

Dimensions: Span 28 ft. 3 in., length 25 ft. 2½ in., height 9 ft. 6½ in., chord 4 ft. 9 in., gap 4 ft. 9 in., stagger nil, dihedral 4 deg., incidence 3 deg., span of tail 10 ft. 3 in., wheel track 5 ft. 9½ in., airscrew diameter (Integral D.G.70, two blades) 8 ft. 2½ in.

Areas: Wings, upper 128 sq. ft., lower 121 sq. ft., total 249 sq. ft.; ailerons each 14 sq. ft., total 56 sq. ft.; tailplane 20.6 sq. ft., elevators 13.5 sq. ft.; fin 2.7 sq. ft., rudder 11 sq. ft.

Armament: One 0.303-in. Lewis machine gun on movable mounting; a few experimental installations of two Lewis guns made in No. 24 Squadron.

PRODUCTION

It is difficult to be certain how many D.H.2s were built. The following serial numbers were allotted for D.H.2s ordered from the Aircraft Manufacturing Co., Ltd., Hendon, London, N.W.: 4732-4734, 5916-6015, 7842-7941, 8725, A2533-A2632, A4764-A4813, A4988-A5087.

The D.H.2 No. 8725 supplied to the R.N.A.S. was a renumbered R.F.C. aircraft. Additionally, 88824 was an A.R.D. rebuild.

SERVICE USE

France: R.F.C. Squadrons Nos. 5, 11, 18, 24, 29 and 32.

Palestine: Fifth Wing (possibly No. 14 Sqn.) R.F.C.; No. 111 Sqn., R.F.C.; "X" Flight at Aqaba.

Macedonia: "A" Flight of No. 47 Squadron, R.F.C.; R.F.C./R.N.A.S. Composite Fighting Squadron.

Training: No. 6 Reserve Squadron, Catterick; No. 10 Reserve Squadron, Joyce Green; No. 15 Reserve Squadron, Doncaster; No. 22 Training Squadron, Abu Qir, Egypt.

Examples of D.H.2s used by R.F.C. units:

No. 5 Sqn.—4732, 5920.

No. 18 Sqn.—5916, 5919.

No. 24 Sqn.—5924, 5925, 5964, 5989, 5991, 5992, 5998, 6007, 6008, 6010, 6011, 7842, 7884, 7909, 7918, 7930, A2541, A2544, A2554, A2563, A2564, A2581, A2592, A2594, A2606, A2607, A5007, A5018.

No. 29 Sqn.—5985, 7927, A2571.

No. 32 Sqn.—5986, 6015.

No. 47 Sqn.—A2584, A4770, A4771, A4776.

No. 6 Reserve Sqn.—7912, 7913.

No. 10 Reserve Sqn.—7866, 7867, A2550, A2559, A2560, A4798.

No. 15 Reserve Sqn.—A2633.

No. 22 Training Sqn.—A2585, A2618, A4778.

WEIGHTS AND PERFORMANCE

Engine	Monosoupape	Le Rhône
Weights (lb.):		
Empty	943	1,004
Military load	80	80
Pilot	180	180
Fuel and oil	238	283
Loaded	1,441	1,547
Max. speed (m.p.h.) at:		
Ground level	93	92
5,000 ft.	90	85
11,000 ft.	73.5	72
Climb to:	m. s.	m. s.
6,000 ft.	11 0	12 0
10,000 ft.	24 45	31 0
Service ceiling (ft.) ...	14,000	—
Endurance (hours) ...	2½	3

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