ARMEE DEL'AIR

A Pictorial History of the French Air Force 1937-1945

by Paul Camelio & Christopher Shores



squadron/signal publications

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[Cover] Lt. Ridray, the CO of the 4e Esc. of Groupe de Chasse II/1, is seen in his MB 152 No. 570, pulling up after a firing pass at an He 111 in the skies over Central France. For this incident on 3 June 1940, Ridray was credited with a probable kill. His Bloch carries standard French fighter camouflage of Dark Blue Grey, Green and Dark Earth [Gris Bleu Foncé, Vert and Terre Foncée] with Light Blue Grey undersurfaces [Gris Bleu Clair]. The emblem on the tail is the crowing rooster of SPA 62.



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Introduction

Until the time of the Munich Conference in 1938, Armée de l'Air aircraft were uncamouflaged. Fighters were either overall Dark Green (Vert Emaillite) or bare metal; day bombers were Dark Green; night bombers Dark Brown (Chocolat). After December 1938, the French rapidly camouflaged their aircraft. At first a hasty coat of Middle Brown (Kaki) was applied to uppersurfaces. Light Blue Grey (Gris Bleu Clair) was later added to undersurfaces and still later patches of one or more of three additional colors (Dark Blue Grey, Dark Earth and Green: Gris Bleu Fonce, Terre Fonce, Vert) were added. In May 1939, painting was standardized with Dark Blue Grey replacing Middle Brown as the primary uppersurface color.

French aircraft could carry up to three different sets of numbers. Constructor's numbers were a simple count of the unit's position in the production run. It was placed on the rudder along with manufacturer's name, code and occasionally type designation. Matricules were one letter and three number sets carried in large white characters under the wings. By Spring 1940 though, new planes were being delivered without matricules and those on older planes were being painted out. Individual aircraft numbers identified an aircraft's position within the Escadrille. Pre-war practice had numbers 1-12 for the first escadrille of a Groupe and 14-25 for the second, the numbers being placed on the vertical fin. There was, however, considerable variation in the system, with many colors and sizes of numbers. and even the use of Roman or Arabian (as opposed to Arabic) numerals confusing identification. After April 1940, an attempt was made to standardize on large white individual aircraft numbers placed on fuselage side next to the roundel, number 1-20 for the first escadrille and 21-40 for the second.

Before January 1940, national roundels were carried only at the four wingtip positions. Escadrille emblems, indicating derivation from World War I units, were frequently carried on the fuselage side. As of that date a fuselage roundel was adopted, followed in April by fuselage escadrille numbers, resulting in the displacement of the squadron insignia. Unsuccessful official attempts were made to suppress the emblems, most finally reappeared on the vertical fin. Blue, White and Red rudder stripes were a consistent marking.

Armée de l'Air units structure resembled that of other European Air Forces much more than it did American. The Escadrille is the basic unit of about 12 planes carrying on the traditions and identifications of Great War Squadrons. Unlike the WWI organization, however, escadrilles were paired in Groupes. In pre-war practice two or three groupes were then combined into Escadres, similar to the German Staffel-Gruppe-Geschwader system. Escadres were units of convenience, frequently covering all the Groupes at an airfield; a Groupe changing landing ground would frequently change Escadre designation. Thus GC II/2 (2nd Groupe de Chasse of the 2nd Escadre) upon movement, could become GC I/5 (1st GC of the 5th Escadre). Upon the outbreak of the war, the Escadres were broken up, Groupes being redeployed and reorganized into Groupements of varying size, retaining, however, their old Escadre designations.

While Groupements were frequently composed of Groupes of various purposes, Groupes were solely for one intent. Examples are: Groupes de Chasse-GC (Fighter Groups), Groupes de Chasse de Nuit-GCN (Night Fighter Groups), Groupes de Bombardement-GB (Bomb Groups), Groupes de Bombardement d'Assault-GBA (Attack Groups), Groupes de Reconnaissance-GR (Reconnaissance Groups), Groupes Aérien d'Observation-GAO (Army Co-operation Reconnaissance Groups).

Because GAO's and GCN's were not joined in Groupements, but operated independently, they carried a slightly different designation system, the individual Escadrille number was followed by the independent Groupe number (for example: ECN 1/13 or GAO 2/565).

[Right] 'Patrouille double' of Curtiss Hawks, these arrowmarked aircraft with the Vichy red and yellow stripes on nose and tail, are almost certainly from the 1e Escadrille of GC 1/4, based at Dakar.





With the clouds of war gathering, new equipment begins to arrive. Here a single Dewoitine D.500 monoplane is

seen with a number of NiD.622s during the Army Summer Manoeuvers of 1937.

The mid thirties found the French aircraft industry in a state of chaos caused by the process of nationalization, while the French air forces were caught in the midst of a programme of modernization and expansion. Like most nations, the French had run down their large and powerful air force after the First World War, and had kept it on a shoestring budget during the depressed late twenties and early thirties. During 1933 new equipment had at last appeared in the form of Nieuport Delage NiD 622C-1 and Morane Saulnier MS 225C-1 fighters, Loire 206 heavy bombers, and Potez 25 and 29 general purpose biplanes.

Up to this time the French air units had remained under the command of the Army, but now at last an independent air force, the Armée de l'Air, was formed. With the growing threat of German militarism under the Nazi regime beginning to make itself felt, a program of modernization was begun. To meet requirements three new types of fighters were ordered, the modern, low-wing monoplane Dewoitine D. 500 and D.501, the gull-wing Loire 46, and the biplane Bleriot Spad S.510. Also ordered were the Bloch MB 200 heavy bomber, and the Potez 54M and Amiot 143M 'multiplaces de combat', twin-engined general purpose reconnaissance bombers. At the same time six of the navy's land-based units were transferred to the Armée de l'Air in a move towards rationalization.

In 1937 the improved Dewoitine D.510 fighter entered service, as did the Bloch MB 210 bomber and

the heavy four-engined Farman F.221. The worsening of the international situation led the French in 1938 to plan an increased force of 2,500 modern combat aircraft, which were to be introduced into service at the rate of 200 per month. In the event output never got near even half of this total. In an effort to improve the quality of equipment, three new types - the Morane MS 405/406 fighter, the Bloch MB 131 'multiplace de combat', and the Potez 63 reconnaissance-bomber-fighter - were put into production. Orders were also placed in the United States for 100 Curtiss Hawk 75A fighters, followed by 100 more, 115 Martin 167F attack bomber/reconnaissance aircraft, and 100 Douglas DB-7 attack bombers, plus 200 North American NA-57 Yale trainers, 50 Koolhoven FK 58 fighters were also ordered from Holland.

By 1939 the types entering service from French factories were already obsolescent by world standards, but new types had been ordered which would greatly improve the position. These included Bloch MB 151/152 and Dewoitine D.520 fighters, Liore et Olivier LeO 451 and Amiot 351/354 bombers, the Bloch MB 174 reconnaissance aircraft, and the Breguet 691/693 attack aircraft. Curtiss Hawk 81A (P-40 Tomahawk) fighters had been ordered in the U.S., while the Aeronavale (the air arm of the Navy) was also modernizing, introducing American Vought V.156F Chesapeake and Loire Nieuport LN 401 dive-bombers to service, together with Laté 298 bomber-reconnaissance floatplanes. Improved types such as the Arsenal VG 33 and Dewoitine D.550 fighters were already construction in prototype form.

Despite these promising new types, the outbreak of war found the Armée de l'Air still equipped mainly with older types. In the fighter force only MS 406s and Hawks had yet entered service, though these made up about 450 of 550 aircraft available. Of the 400 bombers, only a mere handful were modern LeO 451s. Some Potez 631s and 637s had entered service with the night fighter and reconnaissance units, but none of the definitive P.63.11s had yet arrived. Among the

observation escadrilles all were equipped with elderly single engined types - mainly Mureaux 113, 115 and 117, but also Breguet 27, and Potez 25 and 39 aircraft.

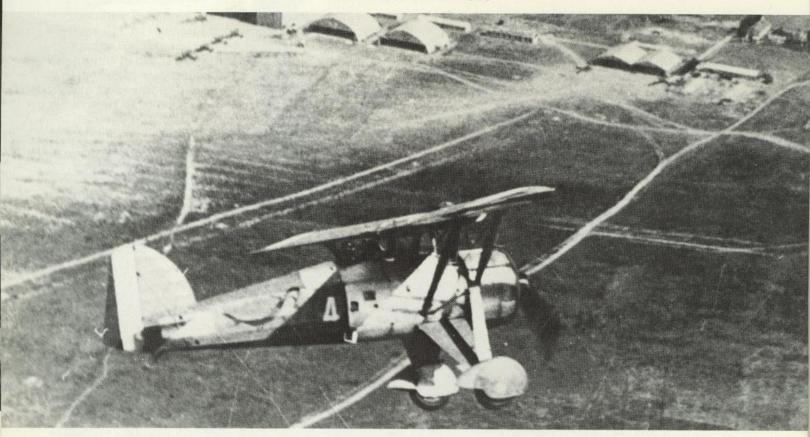
On mobilization late in August 1939, all units with older type equipment were ordered to the South of France, or to North Africa to be re-equipped as soon as possible. In particular, fighter units were to receive the Bloch 151s and 152s which were about to flow from the factories.



[Above] Nieuport-Delage NiD.622 sesquiplane fighters formed the backbone of the French fighter force during the early-mid thirties. This aircraft served with the 1e Escadrille of Groupe de Chasse II/1, as part of the 1e Escadre at Etampes. The aircraft is painted dark green overall, except for the natural metal engine cowling and hubcaps of the main undercarriage wheels. The 'Grim Reaper' insignia is in white on black, and the number 6 on the fin is also white.

[Below] 55 Morane Saulnier MS 225 fighters were built for the Armée de l'Air in 1932-33. They were still in front line service when seen here in 1937 with the 2e Escadrille of GC I/7 [7e Escadre, Dijon]. The aircraft in the foreground was production No.38. It carried the service number N537 in white beneath the wings. The insignia on the fuselage is the 'Jerusalem Cross' of the old World War I SPA 77; it was painted in yellow on a light blue background.





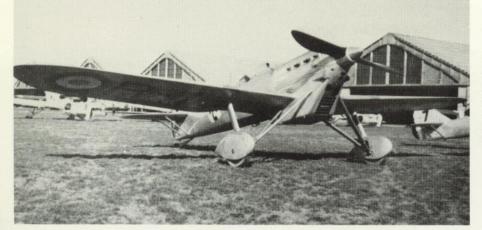
A number of Aeronavale shore-based fighter units were transferred to the Armée de l'Air during the thirties. One of these was Escadrille 3C1, which became GC II/8's 1e Escadrille. One of this unit's MS 225s, carrying the Shark emblem, is seen here over Istres airfield.

Bomber of the twenties. The Liore et Olivier LeO 20 was introduced to service in 1926, but in 1937 was still in service with several units. Once the main French bomber type, its pilot and co-pilot flew in an open cockpit, as did the gunners.

As an improvement on the LeO 20, the LeO 206 was introduced in 1934. With more powerful engines, enclosed cockpits, and a redesigned nose, this bomber was still in service with one Escadre in North Africa in September 1939. This particular aircraft which has come to grief is from the 12e Escadre at Reims. It is painted green overall, the snake insignia on the fuselage side being blue with yellow dots.







The excellent Dewoitine D.500, the first really modern French fighter, and a world trend setter, entered service in 1935. Distinguishable by its two-blade propeller, deep radiator and very wide undercarriage, this particular aircraft served with 2e Escadrille, GC I/1.



The D.501 differed from the D.500 only by virtue of the fact that a 20mm. Hispano 'moteur-cannon' was fitted between the cylinder banks of the engine, firing through the propeller boss. The muzzle can just be seen on this aircraft of 1e Escadrille, GC II/5. Photographed in 1937, it will be noted that these aircraft carry the famous 'Cigognes' [Stork] insignia of the 'crack' W.W.I Spad units.

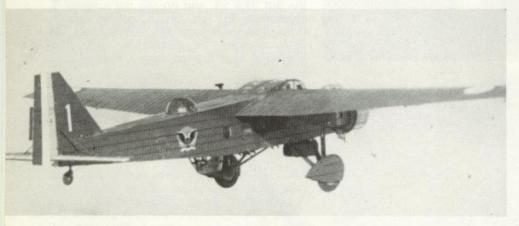
The definitive D.510 featured a three-blade metal propeller and a 20mm. 'moteur-cannon'. Production No. 290 is serving with the 5e Groupe de Chasse Autonome in Tunisia, and is seen here on Sidi Ahmed airfield, in 1939. It carries the white duck insignia of the old SPA 93, and on the tail a white 3, shadowed in red on a yellow circle. Converted to Morane MS 406 fighters, 5e GCA became 2e Escadrille, GC II/1, operating over France during 1940.





The last biplane fighter to enter French service was the Bleriot-Spad S.510. After service with the 7e Escadre, it was passed to the auxiliary Groupe Aérien Régional de Chasse 561, where it was still in service in 1939. A few

were also supplied to the Spanish Republican forces in 1936. It carried an above-average armament for the time, comprising four 7.7mm. machine guns, all mounted in the lower wings.



Entering service in 1934, the Bloch MB 200 twin-engined heavy bomber was soon the most numerous bombing type in the Armée de l'Air, with 195 in service by early 1935. This is a machine of 1e Escadrille, GB I/25.



Developed from the Bloch MB 200, the MB 210 was the most numerous French bomber at the outbreak of war, equipping six full Escadres de Bombardment. Its life as a day bomber was brief, as European fighter developments had swiftly rendered it obsolescent in this role. During the war it was employed only at night, and was in the process of being replaced with more modern types as swiftly as possible. Nonetheless, it did good service during raids over Germany in Summer 1940. This aircraft served with 2e Escadrille, GB II/21, one of the last two Groupes to operate the aircraft. Its insignia is an owl on a crescent moon, a much-favoured motif for night-flying units throughout the world.



[Above] 'L' Autobus Amiot', the slab-sided Amiot 143M 'multiplace de combat', was typical of the ugly general purpose aircraft ordered into service with the Armée de l'Air during the mid-thirties, and subsequently employed as bombers. The aircraft were finished in a chocolate brown paint overall, except for the natural metal engine cowlings. This one, a machine of the 22e Escadre de Bombardment, carries a white 7 on the fuselage, whilst on the fin is painted a winged devil, holding a grenade.

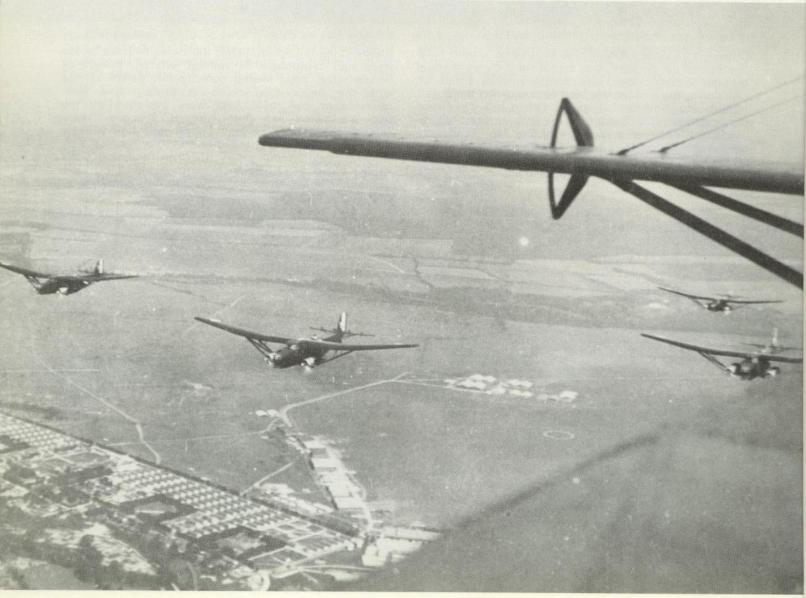
[Below] Like the Amiot 143M, the Potez 540/542 series were also 'multiplace de combat' aircraft, though of smaller size. After seeing considerable active service with the Republican forces in Spain, they were obsolescent by 1939, and were replaced in the Reconnaissance and Bombardment Groupes before seeing any action. Several subsequently served as transports however. This P.540, No. 204, served with GB II/51. Painted dark green overall, with natural metal engine cowlings, it carried a white rabbit blowing a trumpet, painted on a red disc as the unit insignia.

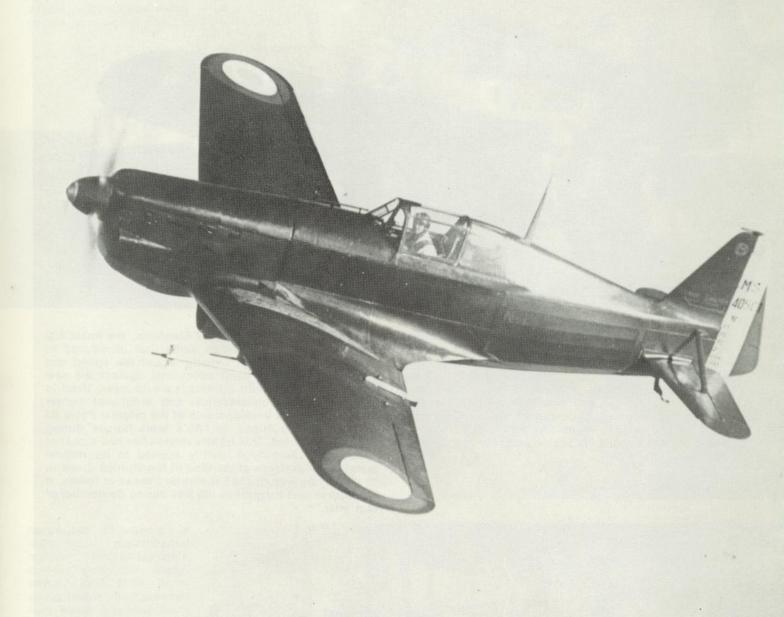


Still the main French heavy night bomber in 1940, the Farman 222 was powered by four engines in tandem pairs, and featured a retractable undercarriage. During the Battle of France GB I/15 and II/15 employed these aircraft in raids over Germany, suffering the lowest casualty rate of any French typesonly one aircraft!



Camouflaged like the Amiot 143s, in chocolate brown overall, but with natural metal engine nacelles, these Farman 222 heavy bombers of GB II/15 are seen in a rare day formation flight.





First of the 'new wave' of modern combat aircraft, this is the first Morane Saulnier MS 405, seen during a trial flight in February 1938. Ordered after success in a competition with the Bloch 150, Loire 250, Dewoitine 513 and Nieuport 161, 15 MS 405s were produced before the improved, but visually similar, MS 406 replaced it on the lines.



[Above] To make good production deficiencies within the French aircraft industry, large numbers of modern combat aircraft were ordered in the United States. The first type to arrive was this Curtiss Hawk 75A-1. These initial production aircraft, of which this was No. 10, were fitted only to carry a pair of nose-mounted machine guns, though they were subsequently to have two more added in the wings. Main production H.75A-3s, in service in 1940, carried six such guns, four in the wings and two in the nose.

[Below] Like the British Bristol Blenheim, the Potez 630 was a very advanced design when first introduced to service, but by 1939 it already lacked the speed and armament to defend itself adequately against the new German Messerschmitt fighters it would meet. Used in the bombing, reconnaissance, and multi-seat fighter roles, the various developments of the original Potez 63 were indeed the Armée de l'Air's 'work horses' during the 1939-40 period. This fighter version has had a coat of dark green camouflage swiftly applied to its natural metal upper surfaces at the time of the Munich Crisis in 1938. Serving with the 5e Escadre de Chasse at Reims, it is set up to test its guns in the pits during September of that year.



Three types of A.N.F. les Mureaux were used by the Groupes Aérien d'Observation in 1939, the 113, 115 and 117. These units were manned mainly by Reserve personnel, and operated in direct co-operation with army units on the ground. This is a Mureaux 117, camouflaged dark green overall, with natural metal engine cowling.

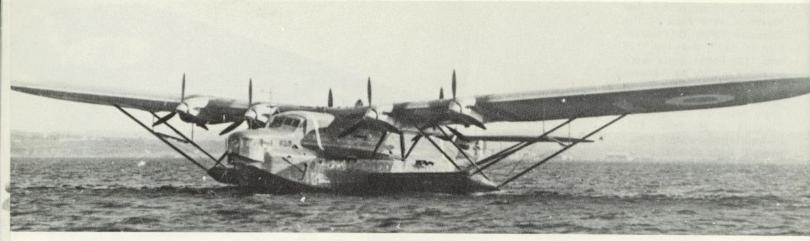


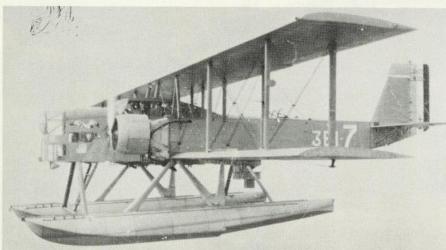
Mainly superceded and relegated to the training role by the outbreak of war, the Breguet 270s had served in large number with the G.A.O.s during the thirties. Two are seen here engaged in a training flight.



Introduced to service in only small, experimental numbers for observation duties, were the revolutionary LeO C.30 Autogyros, two of which are seen here being prepared for a flight. Within four years the autogyro had been rendered obsolete by the introduction of the helicopter.









The Aeronavale's largest flyingboat was the big Latécoere 523, developed from the civil trans-Atlantic Laté 521. Powered by six engines [four tractor, two pusher], various Laté 521s, 522s and 523s served with two Escadrilles d'Exploration, E6 and E12.

The ugly and ungainly LeO 257bis bomber floatplane, was the main bombing type employed by the Aeronavale at the outbreak of war, and actually saw daylight action against the Germans in the Atlantic coastal area during June 1940. Available also as a landplane, a few of these aircraft were also used by the 25e Escadre de Bombardment of the Armée de l'Air. Handed over to the Aeronavale in 1940, these aircraft last saw active service in Syria in July 1941. This particular aircraft is serving with Escadrille 3B1 during the late thirties.

Designed to replace the old CAMS 55 flyingboat, the Breguet 521 Bizerte was in Service with three escadrilles during the 1939/40 period. This particular aircraft was the only Br.522, in which the normal three Gnome et Rhone 900 h.p. engines, were replaced with 940h.p. Hispano-Suizas. The installation did not prove a success. The aircraft served with Escadrille E5.

Typical of the many types of flyingboats in service with the Aeronavale in small numbers at the outbreak of war, was this Laté 381 seen in service with Escadrille d'Exploration E3.





[Above] Widely used as a shipboard catapult aircraft, and for general coastal reconnaissance duties, the Loire 130 served with the Aeronavale in substantial numbers.

[Below] The elderly all-wood CAMS 55 flyingboat served with several Aeronavale units during the thirties, but had been almost totally replaced in front line units by the outbreak of war. These are aircraft of Escadrille E2, serving in the 3e Region Maritime area. The nearest aircraft carries on its fin the white star denoting that it belongs to the commanding officer.

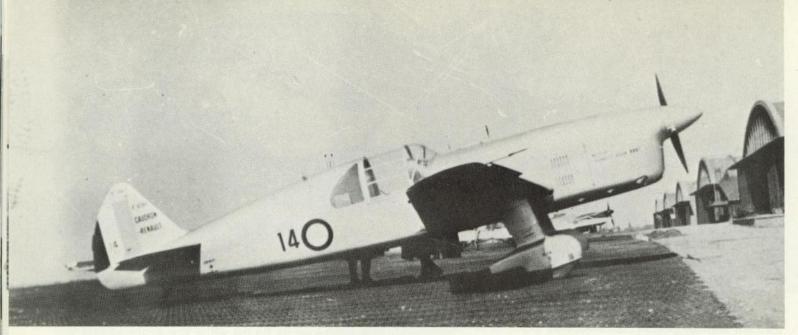






The well-liked basic trainer of the French military flying schools was the Hanriot 182, a sound aircraft of sesquiplane design, which entered service in 1937.

Probably one of the best-known, and certainly one of the most widely used and well loved trainers of the thirties and forties, was the parasol-wing Morane Saulnier MS 230.





[Top] When a young trainee pilot progressed to the racy and elegant Caudron C.690 advanced trainer, he knew he was almost there. The next step was a fighter aircraft.

Purchased in large numbers from the United States was the North American NA-57 Yale. A very sound basic trainer, the Yale was popular in France, and was widely used. A number were later taken over by the Luftwaffe in 1942.

Used in only small numbers for training was the little-known Maillet 201, an example of which is seen here, depicting an unusual camouflage scheme.



Developed from the Potez 540 'multiplace de combat', was the Potez 65 military transport, which employed the same wing, engine and tailplane design, but married to a new, capacious fuselage. Seen just before the war, this machine is serving with the 601e Groupe d'Infantérie de l'Air [paratroops].



PREWAR PERIOD: 1935-1937





On the outbreak of war 308 MS 406 fighters were in service with the Armée de l'Air. Called 'the most beautiful fighter in the world' by the French, it was already outdated, with inadequate armament and too low a top speed. Production No. 47 seen here, is serving with 1e Escadrille, GC I/7, at Sidi-Ahmed, Tunisia; early

in 1940 this unit would move to Syria, to provide a fighter defense for that protectorate. The aircraft is camouflaged dark blue-grey, brown and green; The Bayard helmet insignia is grey with white plumes, and the numeral 3 on the tail is red on a white circle.

PHONEY WAR: September 1939-April 1940

While all was quiet on the ground during the Fall of 1939, in the air things were much busier. While fighters patrolled over the frontier, Bloch 131s, Potez 637s and various Mureaux types flew reconnaissances, some of them deep into Germany. Luftwaffe reaction was swift, and severe losses were suffered - so great in fact, that after September only the Pz.637s were permitted to continue penetrating hostile air space. On 8 September 5 Hawks of GC II/4 engaged an equal number of Messerschmitt Bf 109s, claiming two shot down in the first fighter combat of the war. The first to fall was credited to Sgt. Chef Casenoble.

By the end of the first month of war some 27 German aircraft had been claimed - mainly by the Hawk units - for the loss of 8 French fighters, and activity remained brisk until December. On 6 November GC II/5 fought a very fierce combat with a large force of Bf 109Ds, bringing down 8 of these for the loss of one Hawk, which crash-landed in a repairable condition.

While not bombing German targets for fear of inviting reprisals from the more modernly-equipped and larger Luftwaffe bomber force, Farman F.222s, Amiot 143s and Bloch MB 210s did fly many night sorties deep into Germany to drop propaganda leaflets.

By the end of 1939 five fighter groups had converted to Blochs, while the 54e Escadre de Bombardment was converting from Potez 540s to Potez 633s, taken over by the government from uncompleted export orders for Greece and Rumania. A hard winter greatly reduced activity in the air, and early in 1940 the Escadre system was dropped, being replaced with larger and more flexible Groupements of 2-5 groupes.

In the Spring one groupe of D.520s (GC I/3), and the first Potez 63.11s had entered service, and by early May 1940 the position had much improved. Four groupes of LeO 451s and two more of Bloch 152s were fully operational, as were two groupes of Potez 633s, two of Martin 167Fs, two of Breguet 691s, and 12 of Potez 63.11s; some 34 G.A.O.s with a strength of 6 aircraft each, had also converted to the aircraft. In Africa three groupes of Douglas DB-7s were virtually ready, while two more, plus two of Martin 167Fs and four of LeO 451s were in training. More units of Br.693s were also training, while two Bloch MB 210 groupes were beginning conversion to Amiot 351/354s, and two more were about to start. Bloch 174s had reached two groupes which were partially re-equipped, and two more were starting. Finally, another groupe and 5 G.A.O.s were in the process of converting to Potez 63.11s.

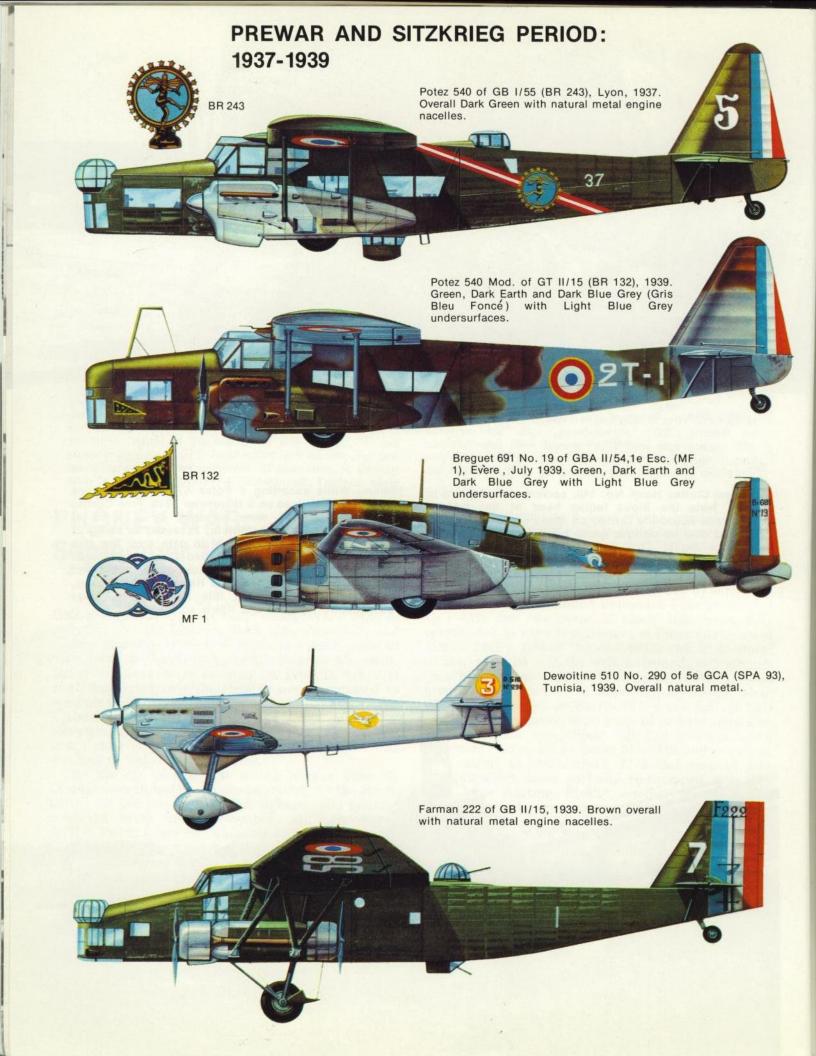
The Aeronavale also now offered a handy reinforcement to the main air force, with two fighter escadrilles with Potez 631s, one just completing conversion from D. 510s to Bloch MB 151s, and two more just forming. Additionally there were two escadrilles of V.156Fs, two of LN 401s, 6 of Late 298 floatplanes, two of LeO 257bis bomber floatplanes, and one of Farman 223s (a civil development of the F. 222 converted for use as a bomber), together with a substantial number of escadrilles with a variety of flyingboats and floatplanes, and one of Laté 29.0 torpedo-bomber floatplanes.



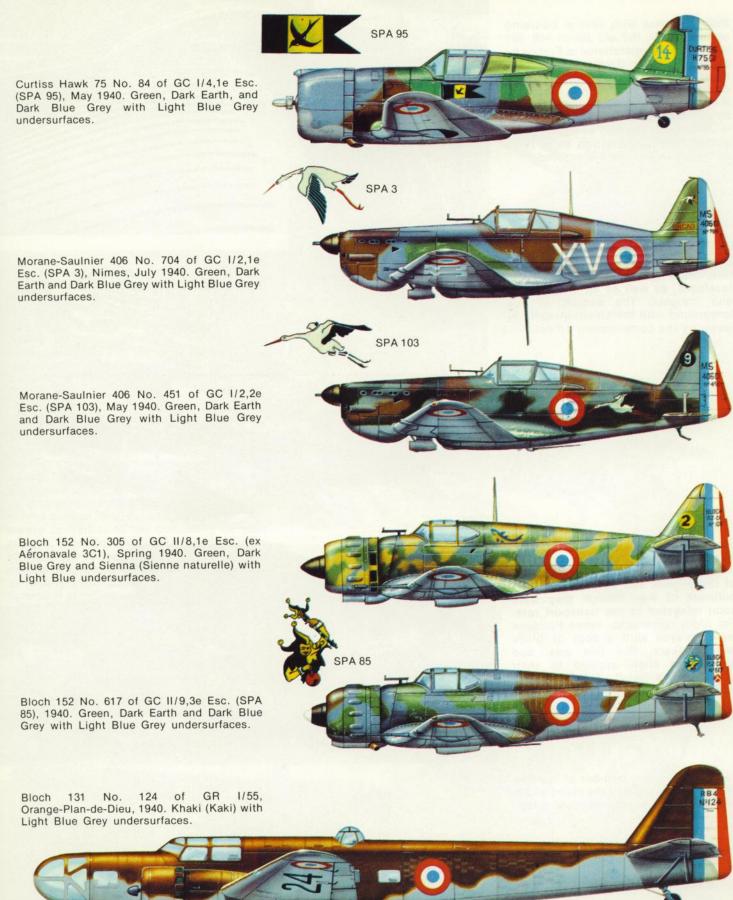
[Above] Curtiss Hawk No. 140, serving with GC II/5 in 1940. Note the Sioux Indian head of the famous LaFayette Escadrille carried on these aircraft, which is painted over an oblique green band in this case.

[Below] While escorting a Potez 637 reconnaissance aircraft over the lines on 6 November 1939, nine Curtiss Hawks of GC II/5 were engaged by a force of Messerschmitt Bf 109D fighters, assessed as being 27 strong. In the biggest dogfight to date, over the area between the Maginot and Siegfried Lines, the French pilots dispatched eight Bf 109s, four of which crashed and four force-landed. Only one Hawk was shot down, Lt. Tremolet crash-landing this fighter, which was subsequently repaired and flown again.





BATTLE OF FRANCE: 1940



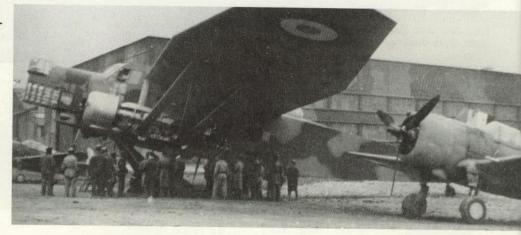
Still in service with several bombing units in 1940, the old Bloch MB 200 was no longer operational in France by the time of the German 'Blitzkreig'. Consequently it flew only leaflet-dropping night sorties over Germany. It did however bomb in earnest - and by day at that - albeit briefly, in Syria in June 1941. The unit to which these aircraft, seen here during early 1940, belong, has not been identified.

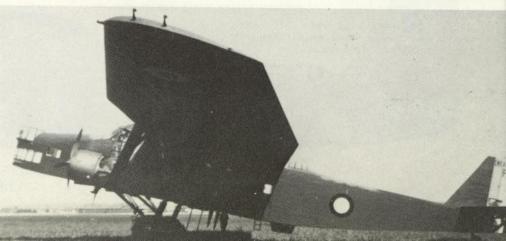
Six Bloch MB 210s are seen here, five carrying Roman numerals on their fins, and a lightning flash along their fuselages, as well as an unidentified unit insignia. The aircraft in the foreground with the shield insignia is flown by the commanding officer.



Predecessor of the Farman 222, was the earlier F.221, which featured a fixed undercarriage. A few of these were still in service at the outbreak of war, though they were soon relegated to the transport role. For night operations, some Farmans were sprayed with a coat of black paint. Others, like this one, had patches of khaki applied to their overall brown finish. This particular aircraft is flanked by a pair of Curtiss Hawks - early H.75A--2s, with only four guns.

Farman 222 heavy bomber of the 15e Escadre, showing well the chord width of its huge, shoulder-mounted wing.





An elderly observation aircraft, which saw limited service early in the war, and later flew with the Free French in the Tchad area of West Africa, this Potez 390, camouflaged in the standard G.A.O. scheme of dark green with natural metal engine cowling, carries an interesting insignia depicting a wasp with a pair of binoculars.



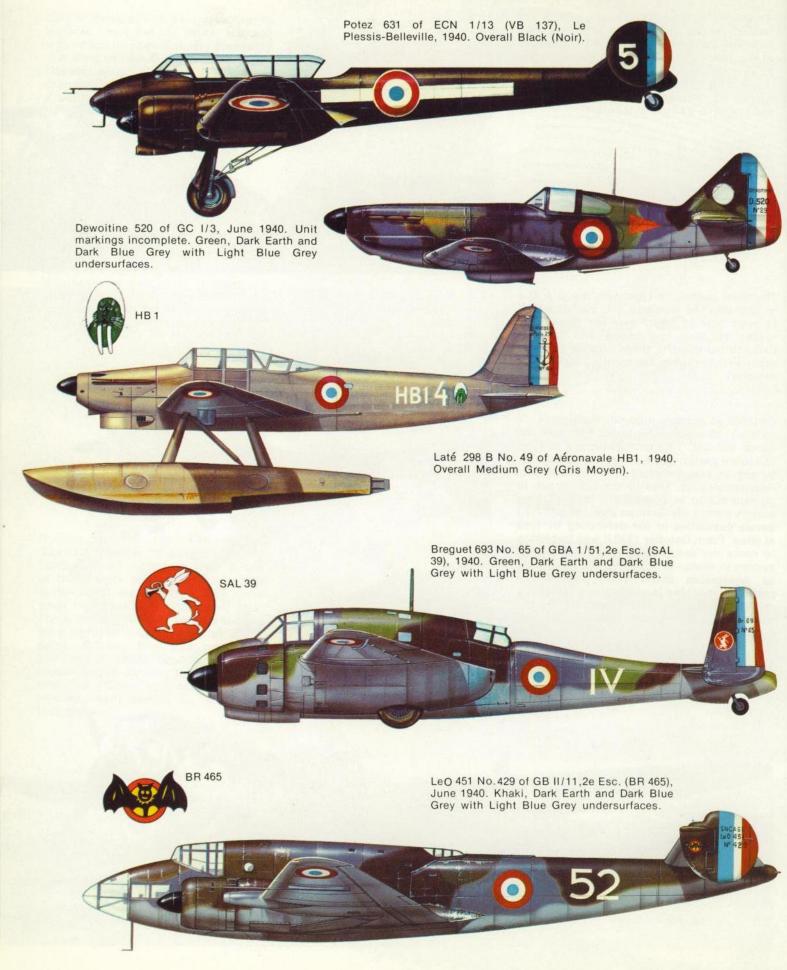
The most numerous type with the G.A.O.s in 1939 was the Mureaux 117, one of which is seen here in flight over the Alps. Due mainly to their low speed and lack of defensive armament, these aircraft suffered many losses during the opening months of the war.

Ordered as a more modern 'multiplace de combat', to replace the Potez 540, was the Bloch MB 131. This aircraft proved to have too low a performance to serve as a bomber by day, so was delivered to the Escadres de Reconnaissance. One of the first types to go into action in September 1939, making sorties across the German lines, it suffered severe casualties to the defending Bf 109s at once. From October 1939 it was forbidden to cross the lines, and was phased out of service in favour of Potez 63.11s as quickly as conversion could take place. This particular machine is serving as a target tug at Istres airfield in 1940 - indicated by the white and red bands round the rear fuselage.





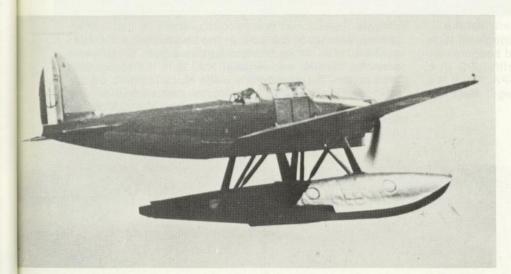
BATTLE OF FRANCE: 1940





Entering service with the Groupes de Reconnaissance in early 1940, the Potez 63.11 became the most widely-utilized aircraft in the Armée de l'Air. Though a great improvement over the Bloch MB 131, it was only a

stopgap until the far superior Bloch MB 174 became available. Although reliable, it was no match for German fighters, and very heavy losses were suffered by some of the units operating this type.



The Late 298 torpedo-bomber floatplane was operational with six Aeronavale Escadrilles de Torpillage by May 1940. Three of these were based in Northwest France, and played an active role against the advancing German columns during June, strafing them and dive-bombing bridges. Subsequently these aircraft flew against the Italians; with the Vichy French; and then with the Aeronavale on general coastal operations until 1945.



Potez 650 troop transport seen here in 1940 after application of khaki camouflage to its basic dark green

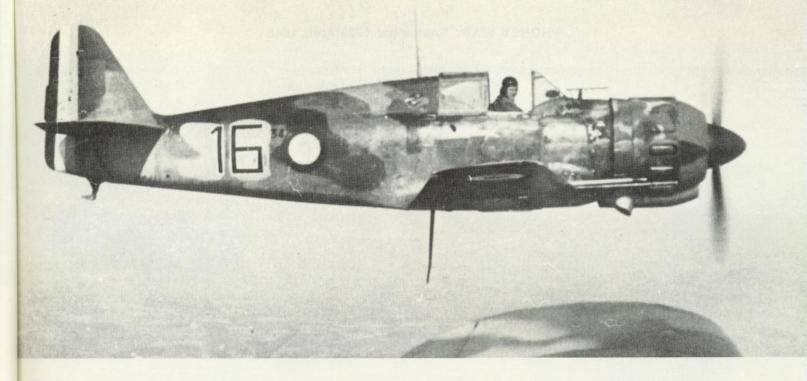
paint finish. Note that the engine nacelles have now also been fully painted.



[Above] By March 1940, when this photograph was taken, the shortcomings of the MS 406 had become very obvious. This is an aircraft of 2e Escadrille, GC II/1, carrying the 'Cigogne' marking of the old SPA 103. It is a white bird, with red wing tips, bill and legs. Note the little roundel on the wing.

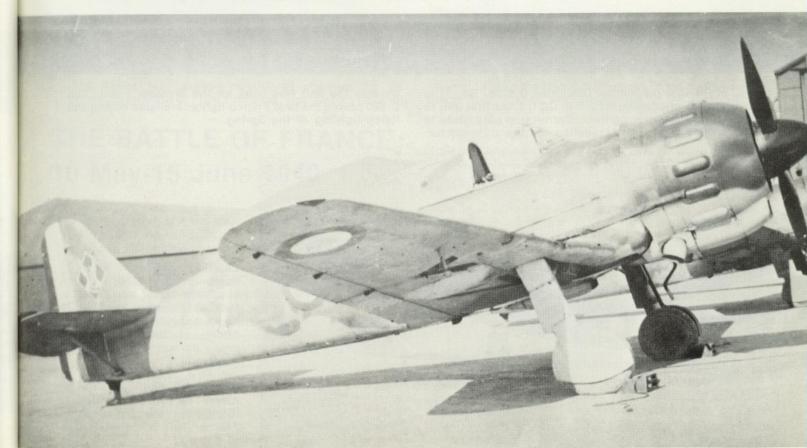
[Below] Line up of MS 406s of the 2e Escadrille, GC III/1 in June 1940. Note the fuselage roundels of different sizes on the first two aircraft. No. 35 in the foreground also carries the escadrille's white duck insignia on the tail; this is the same emblem as that carried on the D.510s of the unit's predecessor the 5e G.C.A. in Tunisia.





[Above] Much was hoped of the Bloch MB 152 when it entered service late in 1939, but although heavily armed, with a pair of 20mm. cannons and two 7.7mm. machine guns, its performance was not much improvement on the MS 406, and it did not fare well against the Bf 109s of the Luftwaffe. This fine flying shot of No. 347 shows it to be an aircraft of the 2e Escadrille, GC 1/8, which carried the leaping lion insignia just behind the cockpit. A previous aircraft-in-unit number has been roughly painted out, and a red 16, outlined in white, has been substituted. The radio mast beneath the fuselage folded back before landing.

[Below] Bloch MB 152 of GC III/9 carries on its tail an insignia depicting a famous ancient French warrior, 'Le Gaulois'. Beneath the starboard exhaust stub, the manual starting handle can be seen.





One of the first production Dewoitine D.520s, No. 17 is seen shortly after being issued to GC I/3, the first unit to convert to these new fighters. Conversion took place in March 1940 at Cannes-Mandelieu, on the Côte d'Azur.

By May the unit was back on the Western Front. The D.520 proved the best French fighter available during the fierce fighting of the Spring.



Entering service in small numbers in 1939, the excellent Liore et Olivier LeO 451 bomber did not begin operations until the Spring of 1940. By that time it was the most numerous French bomber available, and played an important part in the Armée de l'Air's activities throughout the Battle of France. This is an aircraft of GB I/12.



The Amiot 143, already considered obsolete for its intended mission of night bombing, was employed in an

attempt to stop the German advances in the Sedan area. Predictably, losses were disastrous.

THE BATTLE OF FRANCE: 10 May-15 June 1940

Immediately the German 'Blitzkrieg' was begun on 10 May 1940, a period of six weeks' heavy fighting in the air began. Night bombers - Amiot 143s, Farman 222s and Bloch 210s - now raided targets in Germany, while by day the fighters attempted to defend towns, airfields and the troops at the front. There is no doubt at all that the French fighters put up a stout resistance, the figures speaking for themselves. In the first three weeks of the German offensive, they claimed 350 confirmed and 145 probables; they were overwhelmed by events on the ground however, particularly once the Germans had broken through the Ardennes Forest, and smashed the French line at Sedan. Isolated successes, such as that on 12 May when 5 Hawks of GC I/5 caught Ju 87s bombing French troops in this latter area, and shot down 16 of them, could do little to change the overall course of events.

Initial crisis points were the bridges over the Belgian canals, following which columns and bridges in the Sedan area became priority targets. Bombers were thrown in in daylight, at times suffering crippling losses. During its first operations on 12 May, GBA I/54 sent in a dozen Br.691s to strafe German columns in Belgium. 7 were shot down, two crashed-landed, and one more was too badly damaged to fly again.

Two days later Amiot 143s were sent out by day at Sedan, nearly the whole of one formation being shot down by Bf 109s and flak. The LeO 451s, the most numerous day bombers, suffered 47 losses during the campaign, whilst the Martin 167Fs, which proved very successful in action, lost 18.

As the German armoured spearheads advanced towards Dunkirk and Calais, the Aéronavale units were thrown in. V.156Fs and LN 401s attacked several times between 13 and 21 May, but suffered staggering casualties. The tough Laté 298s were also used, but these too fell foul of the German defenses, suffering four losses in a day on 23 May while attacking bridges over the Somme. Even the elderly LeO 257bis biplanes and Laté 29.0 floatplanes made attacks on the columns,

the former also suffering heavily. Potez 631s of the Aéronavale Flotille 1F, and of the Armée de l'Air night fighter and 'multiplace du jour' escadrilles also put up a resourceful fight in the face of strong opposition.

During the fighting, five fighter groupes converted from MS 406s to D.520s, one to Hawks and one to MB 152s, several of these units getting back into the fight with their new mounts, and claiming further victories. The Aéronavale Flotille 1F also converted from Potez 631s to D.520s during June. A unit formed with Polish pilots who had arrived in France after their own country was overrun in September 1939, had been provided initially with MS 406s, but then with Caudron C.714 light fighters. In early 1940 this unit was to have been sent to Finland, but the war there ended before they could move, and they remained in France. During May the C.714 proved a disappointment in combat, and the groupe re-equipped with Bloch 152s. Other Poles served, as did a number of French pilots, in 'Chimney Flights' comprising small numbers of fighters based for protection of specific factories or towns. Most of these flew MS 406s, but some were supplied with the few Koolhoven FK 58s which had actually arrived from Holland. Apart from the Poles, a number of Czech pilots served with the Armee de l'Air, some flying Hawks and others MB 210s within established French units.

During the night of 7/8 June 1940 the Aeronavale Escadrille B5, equipped with a single Farman 223.4

aircraft fully converted for military purposes, made the first Allied bombing raid of the war on Berlin with this machine. However, on the evening of 10 June Benito Mussolini declared war on the Allies, and next day his Regia Aeronautica began attacks on French bases in Tunisia and on the island of Corsica.

The Martin 167F units, the remains of the Aéronavale dive bomber escadrilles, and Esc. AC3, with its MB 151s, were diverted to the South to combat this new threat, while GC III/6 which was completing its re-equipment with D.520s in the South was also readied. LeO 451s and Farman 222s flew night bombing raids against Northern Italy, while Potez 63.11s were hastily fitted with extra guns beneath the wings to strafe Italian columns, and Laté 298 floatplanes also undertook night attacks on Italian targets.

On 13 June a series of Italian attacks on airfields in the South began, destroying a number of Aéronavale V.156Fs and the ground, and shooting down one. They returned on 15th, again attacking grounded aircraft with telling results; AC 3 was also caught on the ground while taking off, and two MB 151s were shot down, another deliberately ramming one of the attacking Fiat CR 42 biplanes. However, Adj. Chef Pierre LeGloan of GC III/6, who had shot down two Fiat BR 20 bombers during the previous raids, now excelled himself, shooting down four CR 42s and another BR 20 in three combats.



[Above] A D.520 of GC I/3 at the front. First engaged against the Luftwaffe on 13 May 1940 with its new aircraft, the unit claimed 50 confirmed and 18 probables in about a month. At the time of the Armistice it was the second highest-scoring Groupe de Chasse in the Armée de l'Air. Note that the chaotic events of May have not allowed the crews to complete the painting of the unit insignia and individual aircraft number.

[Below] Only a few D.520s served with 'Chimney Flights'. This aircraft, production No. 79, was an exception however, and is seen here on Salon airfield with one such Special Defense Escadrille. It carries a red 5 on the tail, shadowed in yellow.





Standard French multi-seat fighter was the Potez 631, which served with 5 night fighter and one day fighter escadrilles. This aircraft, partially covered with camouflage nets during June 1940, is possibly serving with the latter unit, Escadrille de Chasse Multiplace du Jour 1/16.

An all-Black night fighter Potez 631 serving with Escadrille de Chasse du Nuit 1/13 [ECN 1/13]. The former Escadre de Chasse de Nuit 13 was broken up into four individual escadrilles on January 1, 1940. While French night fighters frequently carried standard day fighter camouflage most were painted overall Black. Confusion with the Bf 110, which led to several accidental "Kills" by French fighters, caused the painting of a broad white stripe down the side of the aircraft, and the addition of a white surround to the roundel, anticipating the later Vichy markings.

Dutch airframe, French engine, Belgian machine guns, and Polish pilots! Such was the accolade given to the Koolhoven FK 58 fighter. Only a small proportion of those ordered actually reached France. Intended initially for fighter units in the colonies, the FK 58 was then planned to go to Finland with volunteer units of Czech and Polish pilots. Subsequently they were issued to some of the 'Chimney Flights' for local factory protection, most being flown by Polish pilots. They saw very little action.





A dozen Arsenal VG.33 fighters had been delivered by 25 June 1940, but the type never had the chance to enter service. It was an excellent fighter, and formed one element in the plan to re-equip all fighter units with these aircraft, the D.520 and its developments, and Hawk 81As [P-40s] from the U.S.A. The VG.33 was of all-wood construction, and carried one enginemounted 20mm. cannon, and four wing-mounted 7.7mm. machine guns.





The LeO 451 featured a 20mm. cannon in the dorsal turret position as an important element of its defense. Manually operated, this did not come fully up to expectations, though occasional successes with it were noted. Two of these bombers are seen in flight here, that in the foreground with its cannon manned. This aircraft No. 234, carries the insignia of the 2e Escadrille of GB I/12; white 5 is from the 1e Escadrille.

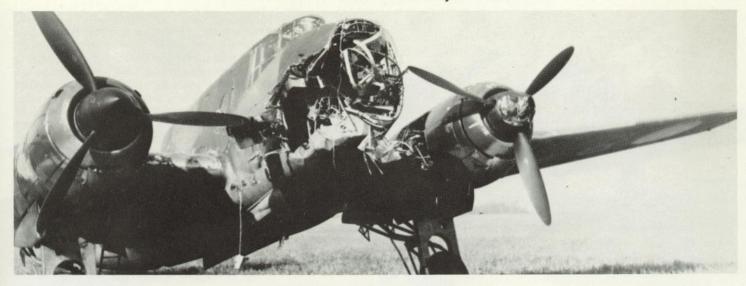
Second Escadre to convert to Breguet attack aircraft was the 51e. This Br. 693 of GBA I/51 carries the white trumpet-playing rabbit insignia, previously carried on the unit's Potez 540s, and an individual aircraft number in Roman figures. This maneuverable little aircraft carried an armament of one forward-firing 20mm. and two 7.7mm. machine guns, plus a small bomb load for attack, and two 7.7mm. guns for rear defense, one above and one below.

Breguet 693s of GBA I/51. The aircraft in the foreground is flown by the commanding officer, and carries a special insignia on the fuselage, incorporating the emblems of both escadrilles, the rabbit and a phoenix, the latter painted in blue.



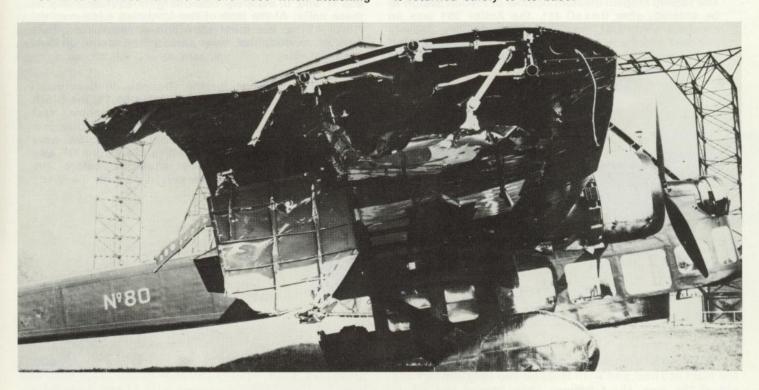


THE BATTLE OF FRANCE: 10 May-15 June 1940



The LeO 451 could take it! This aircraft of GB II/12 suffered a direct flak hit on the nose when attacking

Panzer columns on 17 May 1940. Despite severe damage, it returned safely to its base.

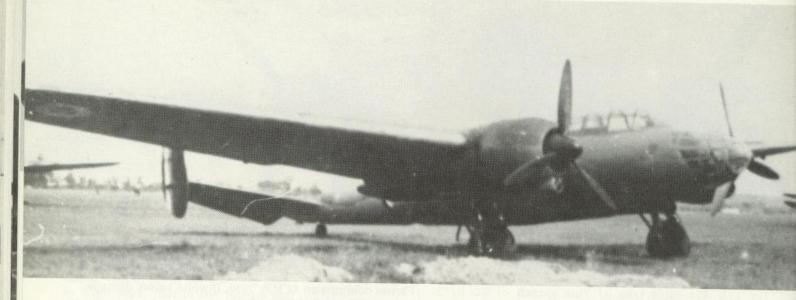


Only once were Amiot 143s sent out by day to bomb, and that was during the desperate attempts to stave off the German breakthrough at Sedan. Most Amiots failed to return from this mission on 14 May, but

Equipping two of the Aeronavale's four dive-bomber escadrilles, the Loire Nieuport LN 401 was quite an advanced single-seat aircraft. Operating alongside the American-built Vought V.156s of the other two escadrilles, they were active against German columns approaching the Dunkerque-Calais area during the latter part of May, but suffered very heavy losses. This particular LN 401 came to grief on 20 May 1940 after being hit by flak while attacking Panzer units on a bridge at Origny.

this one, badly damaged by both flak and an attack by three Bf 109s, landed safely at an airfield near Reims. It would never fly again.





The second modern medium bomber of French design to be ordered, after the LeO 451, the Amiot 351 was an excellent aircraft of most promising design. Delivery was just beginning at the time of the 'Blitzkrieg', and while a few actually entered service with GB I/ and II/21

and I/ and II/34, they never fully re-equipped any of these units. At the time of the Armistice a few reached North Africa, but most were stored when their units were disbanded, and never saw further service in their designed role.



Designed for the Groupes de Reconnaissance to replace the Potez 63.11, the Bloch MB 174 was an excellent machine, fast enough to escape fighter interception on most occasions. Sadly, only a few were available by May 1940, and only one GR was to become fully equipped before the Armistice. A few served on with the Vichy forces.

With the British driven out of France at Dunkirk at the start of June, and with Holland and Belgium already out of the war, the Germans then turned the whole weight of their war machine against the remaining French forces in Central France. Some desperate final combats took place, but there was little that could stop the inevitable, and on 25 June 1940 an Armistice was agreed.

All possible units were ordered to fly to North Africa before this, including the D.520, Hawk, Martin 167F and DB-7 units, together with some of the LeO 451s, Bloch 174s, Amiot 351s and 354s, and Potez 63.11s. The MS 406s and MB 152s lacked the range to make the flight, but sundry other types also got across.

At the close of hostilities the fighters had claimed some 696 confirmed and 253 probable victories since 2 September 1939, not including those achieved by the Aeronavale and multi-engined units. Heading the list of top-scorers were three Curtiss Hawk pilots, Capt.

Edmond Marin la Meslée of GC I/5 with 15 and 5 probables, Capt. Michel Dorance of the same unit, and Sous Lt. Camille Plubeau, each with 14 and 3 probables. Of the total victories claimed, the Hawks had gained 230 confirmed and 81 probables, while MS 406 units had claimed 269 confirmed, and the D.520s 114 and 39 probables. Nearly all the remainder accrued to the Bloch units.

During the last few days before the fighting ceased, GR I/22 in Morocco, GB I/39 in Syria and five Aéronavale bomber escadrilles in North Africa were re-equipped with Martin 167Fs, though GR I/22 would later exchange these for LeO 451s. When operations ended, so good had been deliveries of new aircraft during May and June that, despite heavy losses, the French actually had *more* aircraft available than on 10 May! The Axis Armistice Commission now ordered the Armée de l'Air and Aéronavale to be disbanded.

Ordered initially as a reconnaissance aircraft, the fast and well-armed Martin 167F in the event served with four bomber groupes, and played an important part in the Battle of France, first against the Germans, and then during June against the Italian forces which invaded the Riviera. Although 18 aircraft were lost on these operations, most to German flak, the M.167F gave a good account of itself.



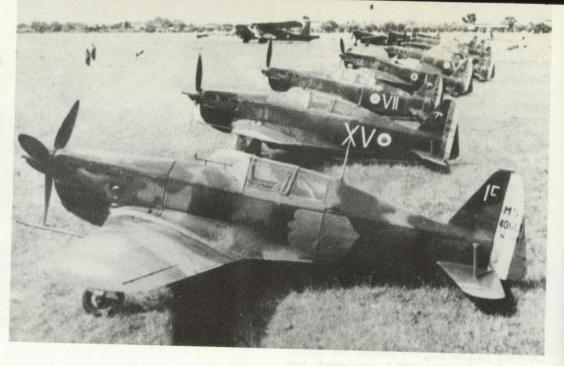
Entering service slightly behind the Martin 167F, the Douglas DB-7 equipped five bomber groupes, but only two of these were ready for action during Summer 1940. The aircraft proved satisfactory in this role, but did not play so important a part in the fighting as did the Martin machine.



A Douglas DB-7 seen in flight during a bombing mission over France, June 1940.



Still bearing the insignias of various fighters groupes noteably the 'Cigogne' -Morane these MS 406s were by employed the Vichy air force during 1940-41 as advanced trainers.



VICHY OPERATIONS: July 1940-November 1942

No sooner had hostilities ceased than French units were again in action, this time against their recent allies, the British. On 3 July 1940 units of the Royal Navy, including Skua dive bombers and Swordfish torpedo bombers, attacked the French Fleet at Oran's Mers el Kébir Harbour, Algeria. The attack was in an effort to immobilize this fleet, and prevent its falling into Axis hands. Attacks were repeated on 6 July, causing considerable damage and killing some 1,000 Frenchmen.

Hawks of GC I/5 and II/5 intercepted, but were generally unwilling to press their attacks home against the British. Two Skuas were claimed shot down and two probables, while another claim was made by a Bizerte flyingboat, which became involved with 5 fighters, and subsequently crashed itself. Only one Skua was actually lost by the Royal Navy. As a reprisal against the British on 6 July Martin 167F bombers from Aéronavale Escadrilles B3 and B5, attacked Gibraltar from North African bases.

The attacks on Mers el Kébir caused much anti-British feeling, and prevented numbers of pilots who were planning to escape, in order to continue the fight from England, from going through with their plans. In the light of this feeling, and to protect against further attacks on the South of France or the African colonies, the Axis Armistice Commission decided to allow the French to retain a part of their air force. In the Unoccupied Zone of Metropolitan France, five fighter groupes with Bloch MB 151, 152, and the improved 155 were retained, while the D.520 continued in limited production. Four groupes of LeO 451s, three of Potez 63.11s and two with Bre. 693s and 695s also remained in service, together with two groupes of Amiot 143s and some transport aircraft. Overseas,

substantial air components remained in Morocco, Algeria, Tunisia, Syria and West Africa, with smaller contingents in Somaliland, Madagascar and Indo-China.

An attempt by British and Free French forces to land at Dakar in West Africa on 23 September 1940, on the premise that the local garrison would not resist their fellow countrymen, proved unfounded. Heavy resistance was offered, Armée de l'Air Martin 167F bombers attacking the British fleet units, whilst defending Hawks of GC I/4 shot down several Swordfish. In retaliation Martin 167Fs from Aéronavale Escadrilles, escorted by Flotille 1F D.520s, twice again flew from Morocco to bomb Gibraltar on 24 and 25 September.

During the same week Japanese forces occupied Tonkin, the Northern province of Indo-China, to gain bases for air operations over South China. At once the local Armée de l'Air contingent reacted, and three days of intermittent operations followed before the Vichy government reached an agreement with the Japanese to their occupation of the territory. Three escadrilles of MS 406s and a few Potez 631Cs (all ordered by the Chinese, but seized by the French in Indo-China on the outbreak of war in Europe), a few Farman 221s and Potez 542s, some Loire 130 flyingboats and five escadrilles of Potez 25TOE biplanes were availabble to the French. In a handful of engagements one Potez was shot down and one destroyed on the ground, while one Japanese fighter was claimed by an MS 406 pilot. Subsequently, on 20 October, a Ki 21 bomber which strayed over French territory was also shot down by a Morane.

Following a border disagreement during late 1940, Thailand launched an attack on French Indo-China in mid January 1941. Both sides made a number of air raids, the French by night and the Thais by day. In both cases the numbers available were small, but each side destroyed some of their opponents aircraft on the ground. The MS 406s also shot down 4 Thai machines in two engagements, and another was claimed by the gunners of a Loire 130. Late in January Japanese diplomatic pressure and mediation forced the French to cede the disputed territory to the Thais.



Immediately after the Armistice, this Bloch MB 174 in North Africa shows the special marking applied at this time to all Vichy aircraft, a white stripe along the fuselage, and white outer circle to the fuselage roundel.

A simply-marked Curtiss Hawk of GC II/5, shows the 'Cigogne' emblem of the 2e Escadrille, and the basic minimum Vichy recognition markings. This unit was operational over Mers el Kébir, Algeria, in July 1940 when the British Navy attacked the French Fleet units there, but later it moved to Morocco, where it resisted the U.S. landings in November 1942.

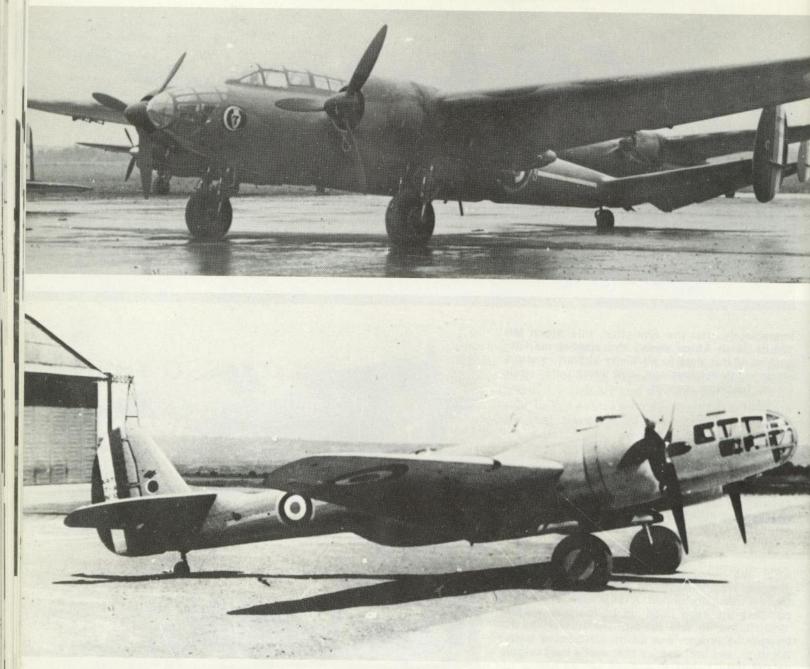
After the Armistice four LeO 451-equipped groupes were retained in Metropolitan France, the rest being disbanded. A large number of these bombers are seen lined up in rows in August 1940, following this action. The aircraft in the foreground is from one of the disbanded units, GB II/11, and still carries that unit's bat insignia on the tail.

Only three Breguet 693s managed to reach North Africa after the Armistice. This is one of them, after painting with the new recognition markings.









[Top] A few Amiot 351s and 354s from the 1e Escadrille of GB II/21 flew to North Africa, where three of them are seen late in 1940. Note the owl and crescent moon insignia on the nose, as previously carried by the unit's Bloch MB 210s; the marking is repeated in smaller size on the outside fins.

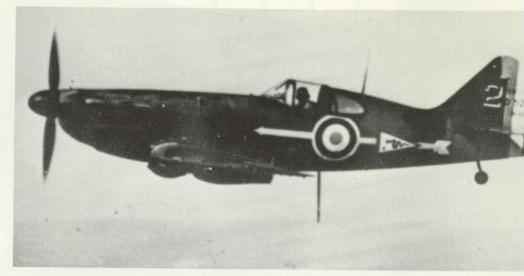
[Above] Commanding officer's aircraft of one of the Martin 167F groupes, GB 1/61, all of which reached North Africa. Note that both escadrilles' emblems are painted on the tail fin.

A Romano 82 trainer of the Aéronavale after the Vichy take-over. Note the Potez 631 in the background, probably one of the aircraft which served with Flotille 1F during May 1940.

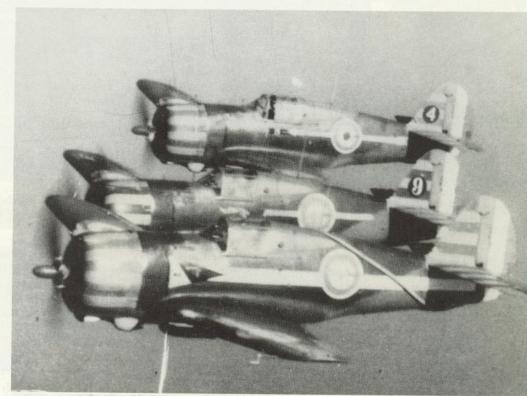


VICHY OPERATIONS: July 1940-November 1942

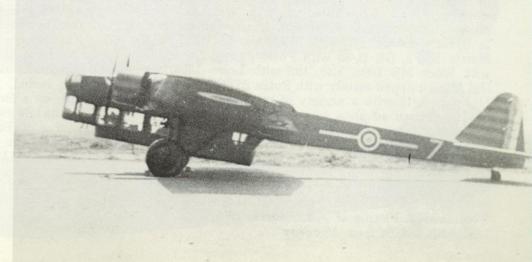
By the end of 1940 the fighter units were beginning to embellish the Vichy recognition markings. This D.520 of GC I/3 has had the fuselage bar turned into an arrow, and the emblem of the 1e Escadrille has been painted over part of this. The insignia is a red viper on a white pennant, with red border. Re-designated GC III/3, this unit's fighters took a heavy toll of Allied aircraft over Oran on 8 November 1942.

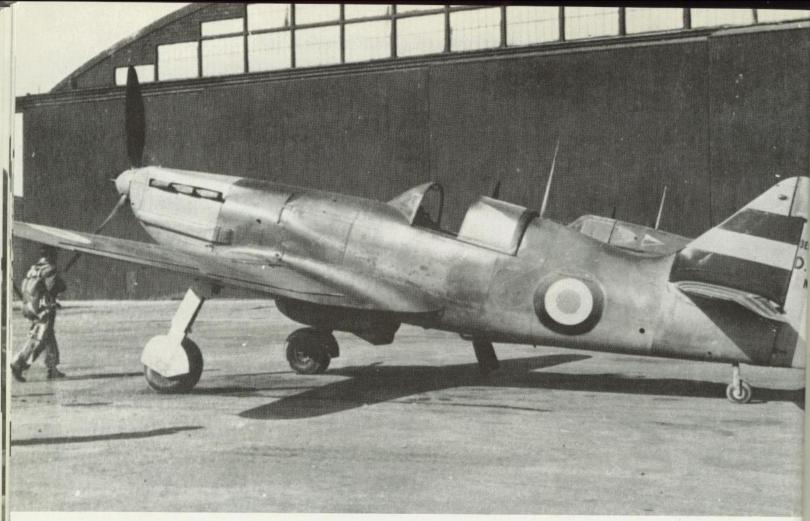


More elaborate markings for Vichy aircraft had been felt necessary, and these had been added to most aircraft by early 1941. Though of poor quality, this photograph is of great interest, depicting a variety of schemes applied to Hawks of GC I/4, which was based at Dakar in West Africa, and had also seen action against British Naval aircraft during 1940. The nearest aircraft carries the tricolour band of the Aces, a thick fuselage stripe, and a pennant carrying the emblems of both escadrilles; it is the aircraft of the groupe commander, Cdt. Stehlin. The second Hawk, carrying an ornate 9 on the fin, has a short and simple fuselage stripe, and carries the emblem of the 2e Escadrille, while the third aircraft, with arrow-finished stripe, and individual number 4 in simpler style, bears the insignia of the 1e Escadrille.



This Amiot 143 with full Vichy markings, including yellow and red striping to each of the engine nacelles, was in use as a transport with either GT 1/15 or 11/15.





This D.520, seen at an airfield in Metropolitan France, has had yellow paint applied to the nose, but while the tail has received pristine new red stripes, application of

these to the nose has not yet been begun. Note the cockpit of the Bloch MB 152 which can be seen behind it, this carrying the insignia of GC I/8.

In the Mediterranean area more trouble was brewing. An uprising against the British in Iraq during May 1941 was encouraged by the Axis, and by the Vichy authorities in neighbouring Syria. The latter supplied arms, and allowed German aircraft heading for Iraq to land and refuel on Syrian airfields. The British retaliated by attacking these airfields, and as soon as the revolt had been put down, resolved to occupy Syria.

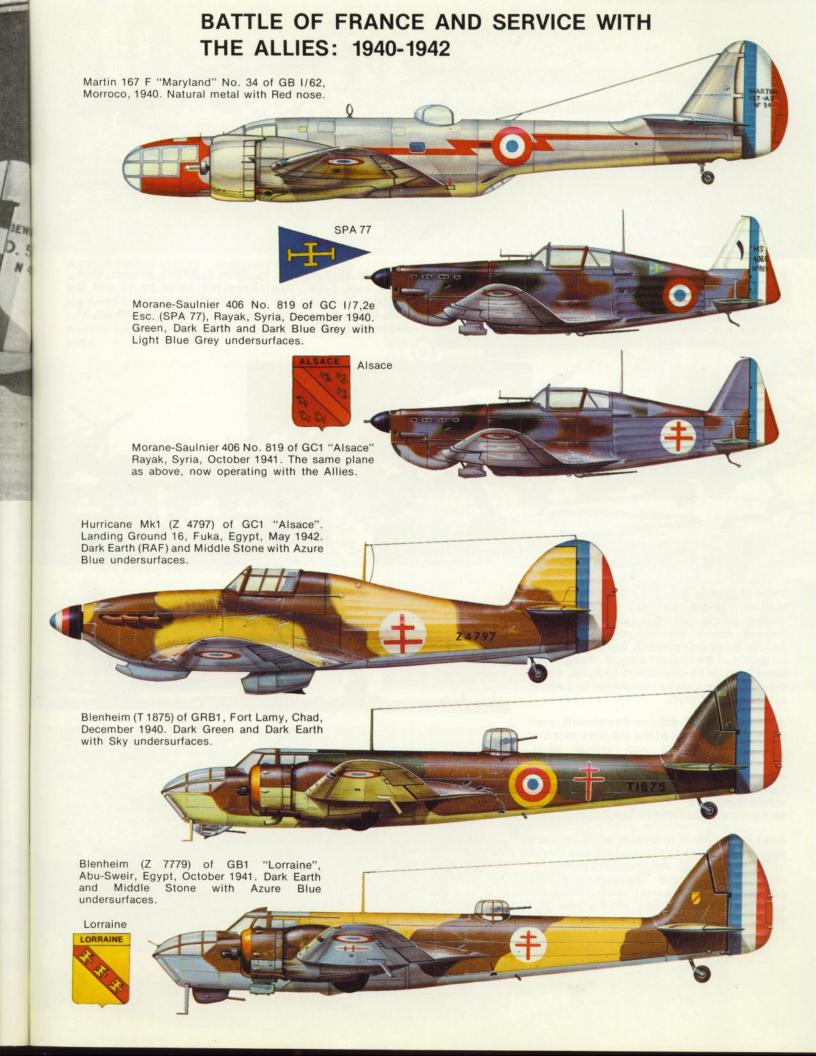
Alarmed by the British air raids, the French stiffened the defenses by sending the experienced GC III/6 with its D.520s from Algeria early in June. On 8 June the British crossed the border, again spearheaded by Free French troops in the hope that the Vichy forces would come over to the Allied cause. Instead a hard and bitter campaign began, which was to last over a month. In Syria were GC I/7 with MS 406s, GB I/39 with Martin 167Fs, GR II/39 with Potez 63.11s, Esc. 3/39 with Bloch MB 200s, Esc. 19S with Loire 130s, six G.A.O.s, equipped mainly with Potez 25TOEs, and GT I/15 and II/15 with a variety of transports.

The British advance was supported by a cruiser squadron off the coast, and it was here that initial action was seen. GC III/6's D.520s proved more than a match for defending Fulmars and Hurricanes, shooting down several while escorting bombing raids on the ships. More reinforcements were rushed in, including three groupes of LeO 451s from France, GC II/3 with D.520s from Tunisia, Flotille 4F with Martin 167Fs and Esc. 1AC with D.520s from Morocco.

Raids on front line targets, R.A.F. airfields in Palestine, and British bases on Cyprus were made, but towards the end of June success began to tail off. Reinforced R.A.F. units begun a series of telling attacks on French airfields, many aircraft being destroyed on the ground. During the latter part of June French aircraft found a column advancing from Iraq on Palmyra, and began a series of strikes. This column, 'Habforce', was without air cover, and was pinned down for several days, unable to progress, and suffering heavy losses. Finally Tomahawks were sent to cover the hapless column, and a formation of six Martin 167Fs of Flotille 4F were caught by these over the area on 28 June, all being shot down with great loss of life. Against the Tomahawks, and the R.A.F.'s maneuverable Gladiator biplanes, the D.520s had a less easy time and losses began to mount. Right to the end they could bite back however, and in July, two days before the campaign ended, Esc. 1AC fighters inflicted severe casualties on a formation of Blenheim bombers.

All units left the country at the close of hostilities in the favour of the British. Of 289 aircraft committed, 179 had been lost, the majority of them on the ground. GC III/6 had claimed 19 confirmed and 4 probable victories, 7 credited to Sous-Lt. Pierre LeGloan. Other fighter units had claimed a further 13 and 4 probables, but 34

D.520s had been lost, 20 of them in combat.





On this D.520 the fuselage band has been carried right to the nose, and also given an arrowhead. It also carries the diagonal tricolour band denoting that its pilot is one of the Aces. The fighter is in fact from GC III/6, and the pilot Adj.-Chef Pierre LeGloan, who shot down five Italian aircraft in one day on 15 June 1940. Later in June

and July 1941 he was to claim 7 British aircraft shot down over Syria. This raised his score to 18 and 2 probables, making him top French ace at that time. He was killed in an accident in a P-39 Airacobra on 11 September 1943.



Three D.520s of GC III/6's 1e Escadrille on Maison Blanche airfield, Algiers. These aircraft have all had tricolour bands painted round the wingroots, and the African mask unit emblem can just be seen on the fin of the nearest aircraft. Soon these aircraft would be dispatched to Syria, where they would be heavily committed to combat with British aircraft.

A fully-striped MS 406; on this aircraft, even the control surfaces of the tail have received their quota of red and yellow paint. Identification is not definite, but this is believed to be aircraft No. 204 of the 1e Escadrille, GC I/7, in Syria. Note the similarly-marked Potez 63.11 in the background, possibly of GR II/39.

Seen at an airfield in Greece while en route from North Africa to Syria, are these Martin 167F bombers of Aéronavale Flotille 4F. Note the weathered appearance of the paintwork to the nearest aircraft, and the gun ports in the leading edge of the port wing. [Bundesarchiv]





VICHY OPERATIONS: July 1940-November 1942

This D.520 of GC II/3 crash-landed in Syria after a fight with a British fighter. This aircraft features a striped tailplane, and a full length, arrowheaded band on the fuselage. Although noted by the French as having been shot down by a British P-40, a check of combats shows that this was more likely the aircraft of Sgt.-Chef Killy, hit by fire from a Hurricane of 127 Squadron, R.A.F., flown by Fl. Lt. Cremin on 1 July 1941, and claimed by him as damaged. Killy in fact was wounded, and crashed.



A crash-landed LeO 451, reputedly from GB 1/25, which crash-landed after an engagement with an R.A.F. fighter over Syria. This aircraft carries only the white fuselage recognition markings, and it is noteworthy that the white outer band to the roundel appears to have been roughly enlarged by hand.



The remaining Farman 223.4 bombers were used by the Vichy forces as transports, ferrying between France and North Africa. These aircraft were much in evidence during the Syrian Campaign in 1941, flying from France via Italy and Greece to their destination. Note the Khaki and dark brown camouflage pattern.



This DB-7 of GB II/ 19 shows clearly the markings standard on Vichy aircraft during 1942 - yellow and red stripes to engine cowlings and tail assembly, no fuselage roundel, and tricolour diagonal stripes around the outer wing panels. The unit insignia on the nose depicts a wolf's head.



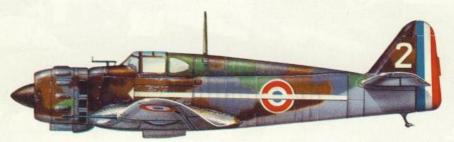
VICHY PERIOD: 1941-1942



Curtiss Hawk 75 No. 299 of GC II/5 (SPA 167), 1941. Dark Green, Natural Sienna and Dark Blue Grey with Light Blue undersurfaces.

Morane-Saulnier 406 No. 788 of GC I/7,1e Esc. (SPA 15) Rayak, Syria, May 1941. Green, Dark Earth, Dark Blue Grey with Light Blue Grey undersurfaces.





Bloch 151 of Aéronavale AC2, 1941. Khaki, Green, Dark Earth and Dark Blue Grey with Light Blue Grey undersurfaces.

Dewoitine 520 No. 52 of GC III/6,2e Esc. Syria, June 1941. Green, Dark Earth and Dark Blue Grey with Light Blue Grey undersurfaces.

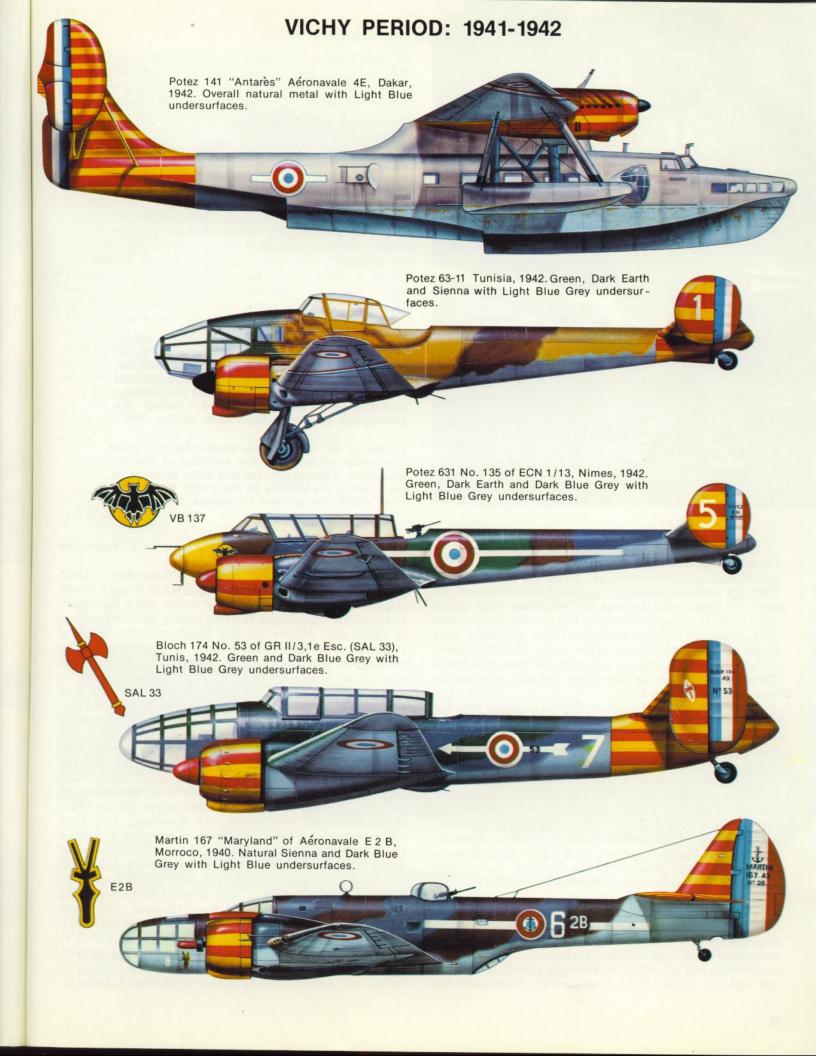




Dewoitine 520 No. 277 of GC III/6,5e Esc. Syria 1941. Green, Natural Sienna and Dark Blue Grey with Light Grey (Gris Clair) undersurfaces.

Dewoitine 520 No. 471 of GC II/3,2e Esc. (SPA 81), Algiers, 1942. Green, Natural Sienna and Dark Blue Grey with Light Grey undersurfaces.









Throughout 1941 the backbone of the fighter force in Metropolitan France remained the Bloch MB 152. These striped aircraft of 3e Escadrille, GC II/8 feature narrow tricolour stripes around the outer wing panels, but have had the fuselage roundels and stripes removed, dating the photograph as having been taken during 1942.

A pilot of GC II/8 with his Bloch MB 152. This illustration shows well the marking of the 2e Escadrille, a thistle on a red and white pennant. It also carries the identity of the World War I unit from which the emblem is derived, SPA 36.

Minor skirmishes between the tiny air component in French Somaliland, and British aircraft mopping-up the last of the Italian forces in East Africa during the Fall of 1941, did not lead to outright fighting. Indeed it was the entry of Japan into the war in December 1941 which saw the next cause of action in the air. On 27 January 1942 Japanese fighters attacked three MS 406s over Hanoi and shot them down in the belief that they were A.V.G. P-40s from Burma. Later in the year two Potez 25s were shot down by American fighters in a similar case of mistaken identity.

Japanese carrier attacks on Ceylon in April 1942 led the British to fear that they might subsequently set up submarine bases at Diego Suarez naval base, Madagascar. Consequently a British task force set out to occupy this harbour complex on the Northern tip of this huge island in the Indian Ocean. A small air element comprising one escadrille of MS 406s and one of Potez 63.11s, plus a few Potez 25s and other liason aircraft were available, but during the first three days, 5-7 May 1942, 4 Potez and 3 Moranes were shot down by Royal Navy Martlet fighters, and other aircraft were destroyed on the ground. The occupation was swiftly completed thereafter, and the French withdrew into the interior.

In September the British decided to occupy the whole island, and a leisurely advance began, accompanied by further seaborne landings. The defenders put up little resistance other than roadblocks, but a handful of aircraft, including one MS 406 and one Potez 63.11, occasionally harrassed the

British troops until the final armistice on 6 November 1942.

Two days later, on 8 November 1942, Anglo-American troops landed at dawn in French North Africa. Believing that the Vichy forces were less likely to resist the Americans, the two mainly British landings at Oran and Algiers on the Mediterranean coast of Algeria, were spearheaded by U.S. contingents. The landings at Casablanca on the Moroccan Atlantic coast was an all-American affair.

In fact the French resisted strongly at Oran and Casablanca. At Algiers a ground mist prevented the veteran GC II/3 and III/6 getting off, and the landings met with little opposition. A single DB-7 on reconnaissance was shot down by Royal Navy fighters, and a few other aircraft were shot-up on the ground. After a few hours of uneasy truce, the French units took off and withdrew into the Southern part of Algeria. At Oran GC III/3 was most active, taking off to intercept Royal Navy Albacore bombers, and then intercepting a big force of paratroop-carrying American C-47s, which had flown from England. In a series of fierce combats the D.520 pilots claimed six Albacores and an escorting Sea Hurricane, three C-47s and two probables, for the loss of four aircraft and two pilots.

During later operations they claimed two more Hurricanes and two Seafires while escorting LeO 451s, losing one more D.520. Towards evening U.S.A.A.F. Spitfires from Gibraltar arrived over Tafaraoui airfield, 3 D.520s attacking and shooting down one of these. In return the Americans shot down all 3 French fighters,

VICHY OPERATIONS: July 1940-November 1942

Cdt. Engler, the Groupe commander, being killed. GC III/3, which had been re-numbered from GC I/3 in 1940, but now reverted to its old title in an effort to cover up its activities, had claimed 17 victories and 7 probables; Sgt. Poupart was credited with 4 confirmed and 3 probables, Capt. Georges Blanck - already an 'ace' in 1940 - with 3 and 2 probables.

LeO 451s had also flown a number of bombing raids with minimal results, but next day the Oran units also flew to the interior, LeOs of GB I/11 bombing Tafaraoui

on the way.

At Casablanca fighting lasted four days. On the initial morning Hawks of GC II/5 shot down a U.S. Navy floatplane, then joined with Aéronavale D.520s of Flotille 1F in a whirling dogfight with Wildcats and Dauntlesses over the city and its environs. 6 Hawks were shot down and 5 damaged, while 1F lost 2 D.520s. GC II/5 had more of its best pilots killed in this one day than in the whole of the 1940 campaign. In return 8 Wildcats and one probable were claimed by GC II/5, and 3 more by 1F. During the day strafing American aircraft inflicted considerable losses on French aircraft on the ground, 1F alone losing 9 D.520s. Several

bombing raids were carried out against U.S. shipping.

Next day Hawks of GC I/5, so far not engaged, were intercepted by Wildcats when escortng DB-7s, M-167Fs and LeO 451s on a raid. 4 Hawks were shot down, with 2 of the pilots wounded, for the loss of one Wildcat. Other strafing Wildcats destroyed 5 Hawks and 6 D.520s of GC II/5 on the ground, together with 3 DB-7s

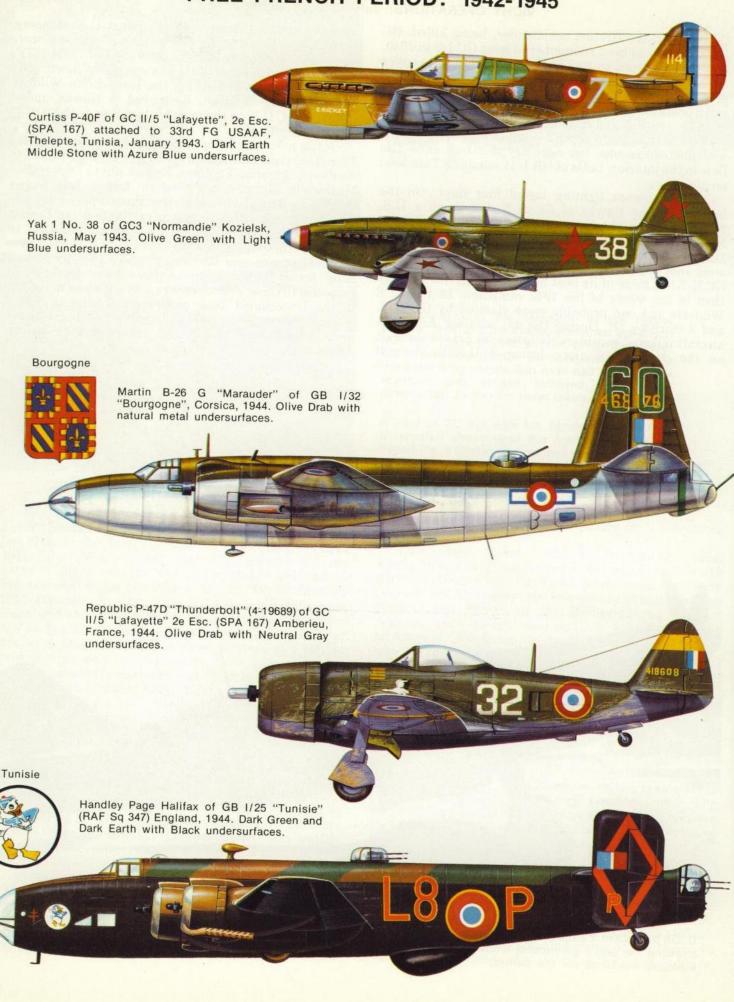
during one attack.

A few more operations followed, but most surviving French aircraft now withdrew to join the other units in Southern Algeria. Fighting ceased on 11 November. Meanwhile German and Italian forces had begun landing in Tunisia to meet the threat posed by the Allied landings. After some procrastination the French decided to join the Allies, flying their air units out to safety in Algeria. Bloch MB 174s of GR II/33 then flew reconnaissances over the area to check the strength of Axis forces building up in the Tunis locality. In response to these French moves, the Germans moved in to the Unoccupied Zone of France, seizing all Vichy aircraft based there, and disbanding the home-based units. The French had at last returned fully to the Allied fold.



D.520 No. 423 of 2 Escadrille, GC II/3 in Algeria in 1942, showing the unit's greyhound emblem on the fin, and standard markings for the period.

FREE FRENCH PERIOD: 1942-1945

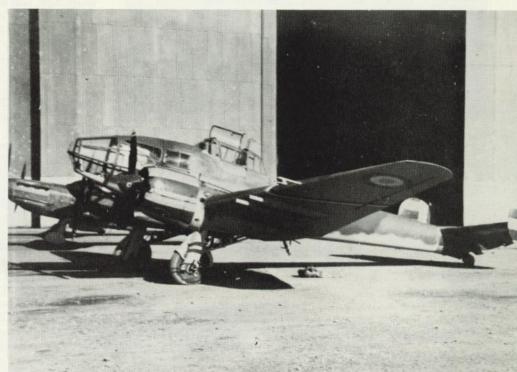


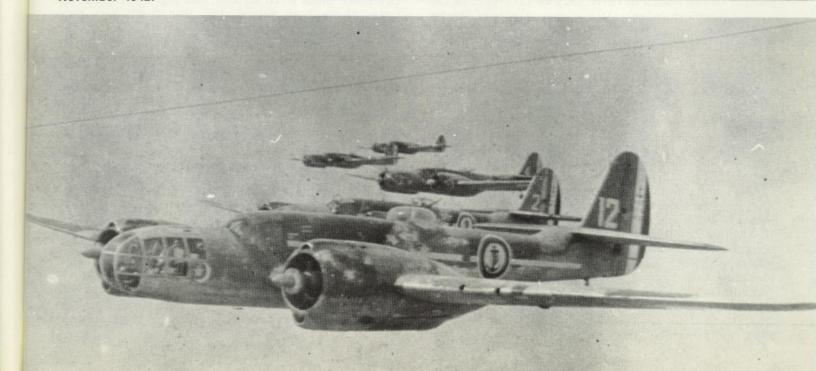


A line-up of Douglas DB-7s of GB I/19 on El Aouina airfield, Tunisia, late in 1940.

Potez 63.11 reconnaissance aircraft in North Africa in 1942, in full Vichy recognition markings of the time. Note the underwing machine gun mountings, and the D.520 in the background.

Bearing on its nose the star and crescent moon insignia of Escadrille 3B, Martin 167F No. 12 leads a formation of five aircraft from this Aéronavale unit over Morocco. The escadrille formed a part of Flotille 3F, which was almost totally wiped out on the ground by U.S. Navy fighters in November 1942.









WITH THE ALLIES: 1940-1945 WITH THE RAF: 1940-1945

From the time of the Armistice in June 1940, many French aircrew escaped to fly on with the R.A.F. A number of French pilots reached England, where they were posted to R.A.F. units, but the majority reached British bases in the Middle East, frequently with their own aircraft.

In the Sahara GRB 1 with Blenheims, Lysanders and a few French aircraft, flew operations against Vichy forces and the Italians in Southern Libya, before moving to the Sudan in early 1941 to take part in the East African campaign's later stages. A pair of Martin 167Fs operated as EB 1, attached to 8 Squadron in Aden, until both were shot down over Ethiopia. EB 2 was formed by the British with Marylands in West Africa in December 1940, flying to Egypt in April 1941 to operate as part of 223 Squadron. In July 1941 GRB 1 and EB 2 joined in Syria to form GB 1 'Lorraine', and equipped with Blenheim 4s, played an active part in the Western Desert fighting from November 1941 to February 1942. The personnel were then transported to England to form 342 Squadron (GB I/20 'Lorraine') with Douglas Boston 3 light bombers.

A second unit in West Africa operated in the Tchad area in support of General LeClerc's Free French forces, flying Marylands, Lysanders and later, Blenheims. Eventually named GB 'Bretagne', this unit accompanied LeClerc's forces to Tunisia in 1943, and was subsequently re-equipped with B-26s as GB II/20, operating from Corsica and in France with Armée de l'Air units.

EC 2, with a handful of MS 406s and Potez 63.11s, was attached to 274 Squadron in Egypt in Summer 1940, operating over the front during the Fall of that

One of the two groupes sent to England in late 1943 to re-equip with Handley Page Halifax heavy bombers, and join R.A.F. Bomber Command in the night attack on Germany, was GB I/25 'Tunisie', known to the R.A.F. as 347 Squadron. The Halifax carries French national markings, and the codes are in red, outlined with yellow. The individual aircraft letter is repeated low on the fin, the tailplane also carrying a red hollow diamond marking.

The nose of a GB I/25, [347 Squadron] Halifax, showing the Donald Duck marking.

year. In January 1941 EC 1 was formed from French pilots, and equipped with Hurricanes, being attached to 73 Squadron. It flew with distinction in defense of Tobruk with the squadron during April. In August the two escadrilles united in Syria to form GC 1 'Alsace', subsequently flying Hurricanes in the Western Desert from January to September 1942. This unit too was then transferred to England, where it formed 341 Squadron in January 1943 with Spitfires.

In the United Kingdom 340 'Ile de France' Squadron had been formed with Spitfire 2s as GC 2 in November 1941. Re-equipped with Spitfire 5s, it gained its first successes over Dièppe on 19 August 1942. Operating in Fighter Command with Spitfire 9s until 1944, these two units then joined 145 Wing of 2nd. Tactical Air Force for the invasion of Normandy. Meanwhile in early 1944 two more units were formed, 329 and 345 Squadrons. Later these both joined 145 Wing, all four units operating as fighter-bombers in support of I Canadian Army in Belgium, Holland, and North Germany for the rest of the war. All were re-equipped with Spitfire 16s during 1945. The two veteran squadrons, 340 and 341, saw much action. 340 claimed 35 victories and 6 probables, but lost 73 pilots, including several commanding officers and flight commanders. 341 Squadron claimed 33 and 4 probables for the loss of 31 pilots.

The bomber unit, 342 Squadron, served with 2 Group of Bomber Command, making daylight attacks on Continental targets throughout 1943/44. Becoming a part of 2nd T.A.F., it moved to France in October 1944, flying support to the ground forces. In April 1945 it was re-equipped with B-25 Mitchells, and moved to an airfield in Holland for the final month of the war.

During early Summer 1944 the two Halifax heavy bomber units, 346 and 347 Squadrons, formed from the LeO 451 personnel from Africa, entered operations with Bomber Command, flying night, and later day raids over Germany from Bases in England for the rest of the war.

Spitfire 9s of GC I/7 [RAF 328 Sq.] are re-armed on a Corsican airfield during 1944. These aircraft carried R.A.F.-style Desert camouflage of Sand and Stone.

Second fighter type supplied to the Armée de l'Air in North Africa by the U.S.A.A.F. in early 1943 was the Bell P-39N Airacobra. Several fighter groupes were initially re-equipped with these aircraft, and operated them on patrol duties over convoys moving through the Western Mediterranean for the invasions of Sicily and Italy. This is an aircraft of GC I/4 'Navarre', which moved from Dakar to Algeria to re-equip. The aircraft has the fuselage roundel ringed by an outer circle of yellow, distinctive of the new Armee de l'Air with the Allies.





ARMEE DE L'AIR WITH THE ALLIES: December 1942-May 1945

At first there was some doubt about the willingness of the ex-Vichy units to fight the Germans, but giving them the benefit of the doubt, the U.S.A.A.F. in Morocco handed 25 P-40F Warhawks to GC II/5 in December. Before training was completed, two pilots defected to Southern France, but from January 1943 the unit redeemed itself. As the Groupe 'LaFayette', it was attached to the U.S. 33rd. Fighter Group at Thelepte, Tunisia, claiming its first two victories here on 10 January, and suffering its first two losses next day. When it withdrew to rest in mid March it had lost 20 aircraft, 6 in action and 14 to other causes, but had claimed 7 victories.

36 new P-40Ls were supplied, one escadrille of GC I/4 from Dakar also being re-equipped with the surplus now available. The units were too late to take part in any more fighting over Tunisia, as the final surrender came in mid May. However, coastal patrols were then flown until December 1943, when GC II/5 became the second French unit to receive P-47D Thunderbolts, the P-40s then being relegated to join the surviving Hawks and D.520s on advanced training duties.

Meanwhile during February 1943 Groupemente Mixte No. 8 had been formed with GB I/11, II/23 and I/25 at Biskra, Algeria, these units' LeO 451s joining R.A.F. bombers in night attacks on Axis targets throughout Tunisia. These activities continued until the end of the campaign, with several losses. GT I/15 and II/15 were also active, flying transport missions in support of the Allies, joined at one stage by GB I/25's LeOs, when ammunition had to be flown up to the front in substantial quantities in a hurry.

Considerable re-equipment of the French air force by the Allies now began. In April the first of 165 Bell P-39N and Q Airacobras were supplied, going initially to GC I/5 and II/6, and the following month to I/3 and III/6. GC I/4 initially got D.520s to replace its Hawks in the escadrille not equipped with P-40s, but in June this unit also received P-39s; with GC I/5 and III/6, this unit now formed 3e Escadre de Chasse. Spitfire 5s were also made available, GC I/7 (the old Syrian MS 406 groupe) being reformed on these, GC I/3 and II/7 then converting to them. GC II/3 apparently re-equipped for a brief period with Hawker Hurricane 2Cs. During August 1943 GC II/6 became the first French unit to begin conversion to P-47 Thunderbolts.

Among the bomber units also, new equipment was forthcoming. Due to shortage of LeO 451 spares, GB I/11 and I/23 were disbanded, the crews being sent to England to form two new Halifax heavy bomber units. GB I/22 was converted to Martin B-26 Marauders in September 1943, as were the two ex-DB-7 groupes, GB I/19 and I/32. At the same time GT I/34 was formed with 3 DB-7s and 3 Martin 167Fs for high speed communications and transport duties. In November 1943 GR II/33 began exchanging the MB 174s of one of its escadrilles for Lockheed F-4 and F-5 Lightnings; subsequently the other escadrille re-equipped with Spitfire 5s for tactical reconnaissance duties.

During Summer 1943 the Airacobras were active on coastal patrol and convoy escort duties, claiming several German bombers shot down over the Mediterranean. In September French forces played the major part in the occupation of the island of Corsica, GC I/3 and II/7 moving in at once to Ajaccio with their

Two fighter groupes flew the British Hawker Hurricane. GC II/3 operated these aircraft only briefly before converting to P-47s, but GC III/3, formed early in 1944 in Syria, operated them for a longer period, not changing to P-39s until October 1944, by which time it had moved to Algeria. This is possibly an aircraft of the former unit, marked with French rudder striping, but no fuselage roundel.



Spitfires to provide air cover. Luftwaffe attacks were forthcoming, and the French pilots were able to claim 9 in two days, including 5 on 24th, when 10 Do 217s attacked the harbour with glider bombs.

GC I/7 shared patrol duties over the Mediterranean flying with an R.A.F. Beaufighter unit, from Reghaia, in Wester Algeria. During October and November 1943, several heavy German raids were made on Allied convoys in this area, the attacks coming from bases in the South of France. On 26 November GC I/7 was able to intercept a force of Heinkel He 177 heavy bombers, claiming 4 shot down and 5 damaged. Early in 1944 the unit joined those on Corsica to form a full French Spitfire Wing, which during the Spring began flying sweeps and bomber escort missions over Italy. Here GC II/7 was able to claim an Fw 190 shot down on 14 June. At the same time all three units began receiving numbers of improved Mark 8 and 9 Spitfires.

Corsica was now becoming a main Allied air base, and in May GC II/5 with its new P-47Ds moved there, operating initially as a fighter-bomber unit, attached to the U.S. 57th Fighter Group. It was soon joined by GC II/3, converted to P-47s from its Hurricanes, and in June the two units ceased their attachment to the 57th, beginning to operate autonomously. Meanwhile the 3 French B-26s groupes moved to Sardinia to become a part of the U.S.A.A.F.'s 42nd Bombardment Wing, which was operating Marauders from that island. Three further groupes were also equipped with B-26s, joining

the Wing subsequently.

After initial operations over Italy, the main effort during the Summer of 1944 was turned on the South of France. Following the landings of Operation 'Dragoon', carried out on 15 August, the French units all moved steadily onto the soil of their homeland, where they operated in support of the French and American armies in a tactical role throughout the rest of the war. For the fighters combats were few and far-between, but while the Spitfires flew bomber escorts and sweeps, later also undertaking bombing sorties, the P-47s and B-26s were heavily involved in ground support from the start.

A new GC III/3 had been formed in Syria on Hurricane 2Cs early in 1944, moving to Algeria in June of that year. In October it re-equipped with P-39s, but subsequently received P-47s, joining GC II/3 and II/5 in France. Meanwhile GC I/4 and I/5 also re-equipped with these aircraft, while GC III/6 received Spitfires, all then moving to France to re-enter operations. Late in the war GC I/9 and II/9 were reformed with P-39s, to form an Airacobra Escadre, which subsequently also received a number of P-63 Kingcobras. Early in 1945 the Spitfire Escadrille of GR II/33 was re-equipped with F-6 Mustangs, and was then formed into a full groupe, keeping the original groupe numbers, while the F-5-equipped escadrille was expanded also, becoming GR I/33. At the same time GC III/6 exchanged its Spitfires for P-47s. From November 1942 onwards, French Naval flyingboats and floatplanes had joined R.A.F. Coastal Command units in patrolling the South Atlantic from their bases in Morocco and West Africa. Supplied with a number of Sunderlands and Wellingtons by the British to supplement the remaining French aircraft, they sank several U-Boats before the end of the war.



In December 1943 the veteran GC II/5 'LaFayette', after flying Hawks until November 1942, and then P-40F Warhawks during the Tunisian Campaign, continued its tradition of using American-built aircraft by becoming one of the first French fighter groupes to receive the P-47D Thunderbolt. The unit was to operate these

fighter-bombers until the end of the war. In front of the cockpit are four lines of white mission markers, whilst behind that are the unit emblem, the famous 'Cigogne' of the 2e Escadrille, and two black crosses, denoting the pilot's personal victory score. The aircraft, serial 419698, is seen at Ambérieu late in 1944.

Close-up of the markings on Thunderbolt No. 32 of 2e Esc., GC II/5.



The cockpit area of another GC II/5 Thunderbolt, this one from the 1e Escadrille, showing the famous Sioux Indian's head, and in this case a personal score for the pilot of four.

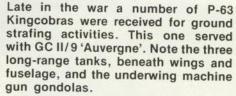


WITH THE ALLIES: 1940-1945





A Spitfire 9 of GC III/6 'Roussillon' takes off from Colmar during the Winter of 1944/45. Note winged laughing mask insignia beneath the cockpit; this was the emblem of the 2e Escadrille. In January 1945 this unit converted to P-47Ds.



Apart from the Mitchells used by 342 Squadron with the R.A.F.'s 2nd. Tactical Air Force, the Armée de l'Air also employed a few as V.I.P. transports, one of which is seen here on a North African airfield in 1944.







Based at St. Dizier in 1945 was GB I/32 'Bourgogne', one of whose aircraft is seen here, still with the upper surfaces and vertical tail painted olive drab. The B-26 in the left background is indeed still fully camouflaged.

Martin B-26G-10 Marauder on St. Dizier airfield, April 1945. This aircraft is blue 61, serial 334591, of GB I/19 'Gascogne', which has undertaken a good number of sorties, as can be seen from the tally on the nose. The ground crew are seated on a number of 1,000 lb. bombs.

A line-up of B-26s of GB I/19 undergoing maintenance. Note the unit code Q5 on the fuselage of each of these bombers.



WITH THE ALLIES: 1940-1945



Replacing the remaining Bloch 174s of the Armée de l'Air during late 1943 were the American-built Lockheed F-5 Lightnings. This is an F-5B of GR I/33, in which unit the famous writer-pilot, Antoine de St-Exupéry served.



A number of North American F-6 Mustangs were received during 1945 for photo-reconnaissance duties, and these were supplied to GR II/33 'Savoie'. The marking on the tail is the Savoie coat-of-arms.

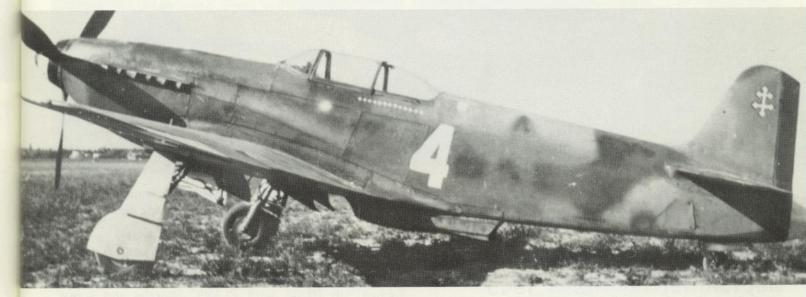


Miles Martinet trainers were supplied by the R.A.F., and were used in training schools in Morocco during 1944.



[Above] After arrival in France from the Eastern Front, the Regiment Normandie-Niemen's Yak 3 fighters were put on display. One of these is seen here, showing well the red, white and blue spinner.

[Below] Normandie-Niemen Yak 3, this one with 13 victory crosses beneath the cockpit. All the Groupe's aircraft carried the Cross of Lorraine marking on the fins, and the tri-colour spinner.



SERVICE IN RUSSIA: 1942-1945

Following Russian entry into the war in June 1941, it was agreed between Josef Stalin and the Free French authorities, that French fighter pilots might join the fight from Russian soil. This arrangement suited many pilots who were prepared to fight the Germans, but still harboured anti-British sentiments as a result of Mers el Kebir, Dakar and Syria.

Consequently pilots from England and the Middle East were gathered at Rayak in Syria in November 1942 to form GC 3. Travelling to Russia the following month, they were equipped initially with Yak 1 fighters, entering action as the Groupe 'Normandie' in March 1943. The unit achieved some early successes, although losses were by no means light. More than

enough volunteers were forthcoming to make up strength, and by January 1944 the Groupe had doubled its size, growing to four escadrilles and being re-equipped with Yak 9s. During the offensives at Vitebsk and Minsk the groupe flew as part of the Russian 303rd. Fighter Division, and in July 1944 received the latest Yak 3 aircraft. An important part was played in the invasion of East Prussia during 1945, and for its excellent performance during the crossings of the River Niemen, the Russians redesignated the unit Regiment Normandie-Niemen.

The most successful French fighter unit, the groupe claimed 273 confirmed and 37 probable victories for the loss of 52 pilots. It also produced the top 'ace' of the war, Capt. Marcel Albert, with 23 victories. 14 more pilots were credited with 10 or more victories in Russia. At the end of the war, the French pilots were presented their aircraft as a token of Franco-Soviet friendship, flying the Yak 3s home to France.



Still in its Luftwaffe camouflage, this repossessed D.520 was used by the Groupe Doret - later GC I/18 'Vendée', first against German forces retreating from Southern

France, and then against the garrisons still resisting in the Atlantic ports.

FORCES OF THE INTERIOR: September 1944-May 1945

Following the landings in the South of France, demobilized Armée de l'Air men and Resistance fighters set out to form units with what was available. Numbers of D.520s were found after the German evacuation of Toulouse, a unit being formed under Marcel Doret, which later became known as GC I/18, the aircraft being first used to strafe the retreating enemy during September.

16 serviceable Junkers Ju 88A bombers were also collected together, and began operations in October as Groupe F.F.I.Dor, subsequently becoming GB I/31. From North Africa GCB I/18 with Douglas Dauntless A-24 dive-bombers arrived during September, as did GB I/34, the redesignated GT I/34 with DB-7s, M-167Fs and a single Bf 110. The Dauntlesses had come from Syria, where GB I/17 'Picardie' had been formed earlier for policing duties with these aircraft; they were replaced by Martin Baltimores. With some of the

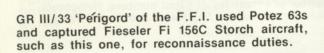
D.520s, the Dauntlesses then formed a composite GC I/18, the rest of the D.520s and some Spitfire 5s forming a new unit, GC II/18. An observation unit was also formed, GR III/33, with Fi.156C Storchs and a few Potez 63s.

Later in the year two Naval escadrilles, 3B and 4B, also arrived, equipped with SBD-5s, the Naval version of the Dauntless; several of the crews had flown dive-bombers in 1940, and Martin 167Fs in Syria in 1941. Escadrille 2S also arrived with Late 298 floatplanes, a second escadrille later being formed when more of these aircraft were repossessed from the Luftwaffe.

All these units then concentrated on attacking German garrisons left trapped in the fortified Atlantic ports, denying them to the Allies for as long as possible. These attacks were to be maintained for the rest of the war. During January 1945 the remaining aircraft of GB I/34 were transferred to GB I/31, the former unit returning to Africa to re-equip with B-26s. During the final weeks of the war the F.F.I. forces were joined by the P-47s of the 3e Escadre and by bombers of the U.S. 8th Air Force in their attacks.

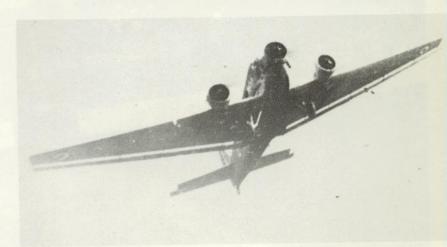


Carrying the same 'spotted' camouflage common to the repossessed D.520s, this is one of a number of captured Junkers Ju 88A bombers used by the French Forces of the Interior to form GB I/31 'Aunis' for action against the Atlantic port garrisons. Note the black and white Invasion-type bands round wings and fuselage.



Seen here in flight is a Junkers Ju 52/3m built in France during the war, and subsequently taken over and used by the Armee' de l'Air, which employed one escadrille of these aircraft.





Douglas A-24B Dauntless dive-bombers, after use with GB I/17 'Picardie' in Syria, served with the F.F.I. air force in GC I/18, alongside that unit's D.520s, dive-bombing the Atlantic garrisons.



APPENDIX I

Order of Battle, 2 September 1939

Escad	roc	do	Ch	0000
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do do ondose	
1e (GCI/1 and II/1) D. 510	Etampes
2e (GC I/2, II/2 and III/2) MS 40	6 Chârtres
3e (GC1/3, II/3 and III/3) MS 400	6 Dijon
4e (GCI/4 and II/4) Hawk	75A Reims
5e (GCI/5 and II/5) Hawk	75A Reims
6e (GC I/6, II/6 and III/6) MS 400 (one groupe in North Africa	6 Chârtres
7e (GC1/7, II/7 and III/7) MS 406	
(one groupe in North Africa	
8e (GCI/8 and II/8) D.510	Marignane

Escadre de Chasse du Nuit

13e (GCN I/13 and II/13) Potez 631	Etampes

Groupe de Chasse Autonome

5e	D.510	Bizer

Group Aerien Regional de Chasse

,0.50	1,5.510	Villacoublay
	1,0.50	D.501,S.510

Escadrilles Regional de Chasse

562	D.501	Lvon
571	NiD.622	Maison-Blanche
572	NiD.622	Oran
573	NiD.622	Rabat
574	D.371	Tunis

Escadres de Bombardement

11e (GBI/11 and II	/11) MB 210	Toulouse
12e (GBI/12 and II	/12) MB 210	Reims
15e (GBI/15 and II.	/15) F.222	Avord
19e (GBI/19 and II.	/19) MB 210	Bordeaux
21e (GBI/21 and II.		Bordeaux
23e (GBI/23 and II)		Toulouse
25e (GB I/25 and II)	(25) MB 200 and LeO 25	7his Bizerte
31e (GBI/31 and II)		

32e (GB I/32 and II/32)	MB 200	Chateauroux
34e (GBI/34 and II/34)	Amiot 143	Le Bourget
35e (GB I/35 and II/35)	Amiot 143	Lyon
38e (GB I/38 and II/38)	Amiot 143	Metz
39e (GB1/39)	MB 200	Rayak
51e (GBI/51 and II/51)	MB 210	Tours
54e (GB1/54 and II/54)	Potez 540	Le Bourget
61 e (GB I/61 and II/61)	MB 200	Blida
62e (GBI/62 and II/62)	LeO 206	Meknes
63e (GBI/63 and II/63)	Potez 54 and Amiot 143	Marrakech

Escadres de Reconnaissance

-coudico de liccollilais	Sance	
22e (GR I/22 and II/22)	MB 131	Orléans
33e (GR I/33 and II/33)	Potez 637	Nancy
35e (GR I/35 and II/35)	Potez 54	Pau
39e (GRII/39)	Potez 29	Rayak
52e (GR I/52 and II/52)	Potez 637	Nancy
55e (GR I/55 and II/55)		Lyon
61 e (GR II/61)	MB 131	Blida

Groupe de Reconnaissance Autonome

14e	MB 131	Mourmelor

Groupes Aérien d'Observation

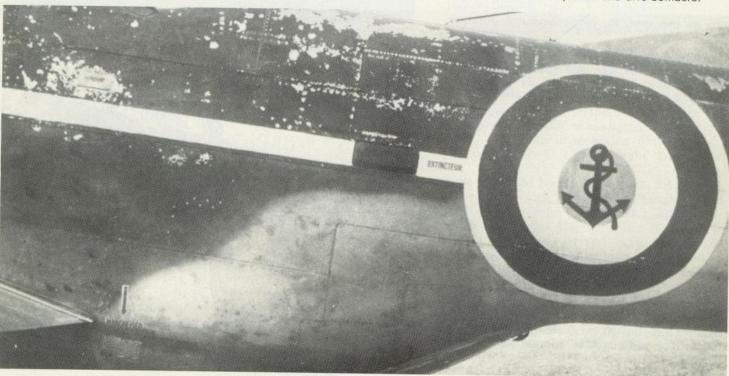
About 60 escadrilles with Mureaux 113, 115, 117, Breguet 27, Potez 25 and 39 aircraft.

AERONAVALE

Escadrille de Chasse

AC1	D.373
AC2	D.373
AC3	D.510

Plus a number of escadrilles of patrol bombers, flyingboats, floatplanes, torpedo-bomber floatplanes and dive-bombers.



A rare close-up of the side of an Aéronavale Martin 167 in early Vichy markings. Note the stencils indicating the location of the fire extinguisher ["extincteur," next to the roundel] and kick-plate ["marchepied," under the arrow

behind the wing trailing edge]. Note also the poor quality of French paint, badly chipped all along the top of the fuselage. [Squadron/Signal Archive]

APPENDIX II

Order of Battle, 10 May 1940

Groupes de Chasse

Groupement 21 (Chantilly)

GC I/1 Bloch 152
GC II/1 Bloch 152
GC III/3 Morane 406
GC II/10 Bloch 151
GC III/10 Bloch 151

Groupement 23 (Laon)

GC II/2 Morane 406 GC I/5 Hawk 75A GC III/7 Morane 406 Plus one Potez 631 escadrille, ECMJ 1/16.

Groupement 25 (Avie sur la Lys)

GC 1/4 Hawk 75A GC III/2 Morane 406

GCIII/1 Morane 406 (ex 5 G.C.A.)

Groupement 22 (Velein en Haye)

GC 1/2 Morane 406
GC 11/4 Hawk 75A
GC 11/5 Hawk 75A
GC 11/6 Morane 406
GC 1/8 Bloch 152

Part Groupement 24 (Dijon)

GC II/7 Dewoitine 520 GC III/6 Morane 406

Part Groupement 24 (Lyon)

GC I/6 Morane 406
GC II/3 Dewoitine 520
GC III/9 Bloch 151
GC I/3 Dewoitine 520
GC II/9 Bloch 151

Poles

GCI/145 Caudron 714

North Africa

GC III/5 Morane 406
GC I/9 Morane 406
GC I/10 Morane 406
(these units formed from ECRs 571-4)
GC I/7 Morane 406 (Syria)

Escadrilles de Chasse du Nuit

ECN 1/13 Potez 631 ECN 2/13 Potez 631 ECN 3/13 Potez 631 ECN 4/13 Potez 631 ECN 5/13 Potez 631

Groupes de Bombardement

GB I/11 and II/11 LeO 451 LeO 451 GB I/12 and II/12 Farman 222 GBI/15 and II/15 GBI/19 and II/19 Douglas DB-7 GB I/21 and II/21 Bloch 210, Amiot 351-4 GB I/23 and II/23 LeO 451 LeO 451 GB 1/25 GB II/25 LeO 257bis GB I/31 and II/31 LeO 451 GB I/32 and II/32 Douglas DB-7 GB I/34 and II/34 Bloch 210, Amiot 351 GB1/35 Amiot 143 GB I/38 and II/38 Amiot 143 GB1/39 Martin 167F (Syria)

Esc. 3/39 Bloch 200 (Syria)
GB II/61 Bloch 200
GB II/61 Douglas DB-7
GB I/62 and II/62 Martin 167F
GB I/63 and II/63 Martin 167F

Groupes de Bombardement d'Assaut

GBA I / 51 and II / 51 Breguet 691, Potez 633
GBA I / 54 and II / 54 Breguet 691, 693
GBA II / 35 Breguet 691, Potez 633

Groupes de Reconnaissance

GR I / 14 Potez 63.11 (ex 14 G.R.A.)
GR II / 14 Potez 63.11, Bloch 131
GR I / 22 and II / 22 Potez 63.11

GR I/33 and II/33 Potez 63.11, Bloch 174, Potez 637 GR II/35 Potez 63.11 Bloch 131

GR1/36 Potez 63.11, Potez 637

GR II/36 Bloch 174, Potez 63.11, Potez 637
GR II/39 Potez 63.11 (Syria)
GR I/52 Bloch 174, Potez 63.11, Potez 637
GR II/52 Potez 63.11, Potez 637

GR I / 55 and II / 55 Potez 63.11 GR I / 61 and II / 61 Bloch 131

Groupes Aérien d'Observation

About 60 escadrilles, 39 with, or converting to, Potez 63.11s. Remainder mainly with Mureaux types.

AERONAVALE

Escadrilles de Chasse

AC1 Potez 631 AC2 Potez 631 AC3 Bloch 151

(AC 4 with D.520s and AC5 with MS 406s in course of formation)

Escadrilles de Bombardement en Piqué

AB1 Vought 156F
AB2 Loire Nieuport 401
AB3 Vought 156F
AB4 Loire Nieuport 401

Escadrilles de Bombardement

 B1
 LeO 257bis

 B2
 LeO 257bis

 B3
 Martin 167F

 B5
 Farman 223

Escadrilles de Torpillage

T1 Laté 298
T2 Laté 298
T3 Laté 298
T4 Laté 298
HB1 Laté 298
HB2 Laté 298
IS1 Laté 298
1S1 Laté 298

Escadrilles d'Exploration

LeO 257bis E2 Breguet Bizerte Late 301, 302 E4 E5 Breguet Bizerte E6 Late 521, 522, 523 E7 Loire 70 E8 Potez-CAMS 141 E9 Bizerte, LeO 470 E10 Farman 222

Plus 12 escadrilles of short-range floatplanes and flyingboats (mainly Loire 130s) for coastal reconnaissance and shipboard catapult operations.

APPENDIX III

Vichy Metropolitan Air Force, Summer, 1940

Groupes de Chasse			
GCI/1	Bloch 151, 152, 155	GB II/25	
GCII/1	Bloch 151, 152	GB 1/31	LeO 451
GC1/8	Bloch 151, 152	GB1/38	LeO 451
GCII/8	Bloch 151, 152	GB II/38	Amiot 143
GC11/9	Bloch 151, 152	GB 11/38	Amiot 143
GCIII/9	Bloch 151, 152	Groupes de Bombardement d'Assaut	
Escadrilles de Chasse du Nuit		GBA1/51	Breguet 693, 695
ECN 1/13	Potez 631	GBA1/54	Breguet 693, 695
ECN 4/13	Potez 631		
2011 47 10	Potez 631	Groupes de Reconnaissance	
Groupes de Bombardement		GR I/14	Potez 63.11
GB1/12		GR II/14	Potez 63.11
GB1/25	LeO 451	GR1/22	Potez 63.11
GB1/25	LeO 451	Plus one Groupe de transport.	. 0.02 00.71



A Farman 223 warming up her four engines, wearing standard night bomber camouflage; Chocolate Brown with Natural Metal nacelles. She also carries standard White markings, individual aircraft number and name [in

this case: S-Lieutenant Casse]. Naming heavy bombers after famous individuals who lost their lives during the fighting of 1940 was normal Armée de l'Air practice. [Squadron/Signal Archive]

APPENDIX IV

Armée de l'Air units in Syria; June-July 1941

Groupes de Chasse

GCI/7 GCII/3 Morane 406 Dewoitine 520 GCIII/6 Dewoitine 520

Groupes de Bombardement

Martin 167F GB1/39 LeO 451 GB1/12 GB1/25 LeO 451 LeO 451 GB 1/31

Escadrille de Bombardement

Bloch 200 EB 3/39

Groupe de Reconnaissance

GR II/39 Potez 63.11

Groupes Aerien d'Observation

GAO 1/583 Potez 63.11 GAO 592 Potez 25 Potez 25 **GAO 593** Potez 25 **GAO 594** Potez 25 **GAO 595** Potez 25 **GAO 596**

Groupes de Transport

Farman 221, 222 GT1/15 GT II/15 Potez 650, 540

Aéronavale

Escadrille 1E

Martin 167F (Escadrilles 6B and 7B) Flottille 4F Escadrille 1AC Dewoitine 520 Loire 130 Escadrille 19S Laté 298 Escadrille 1T LeO 257bis

APPENDIX V

Armée de l'Air Units in North Africa, 8 November 1942

Morocco

Groupes de Chasse

GC1/5 Hawk 75A, D.520 Hawk 75A GCII/5

Aéronavale

D.520 Flottille 1F

Groupes de Reconnaissance

LeO 451 GR 1/22 Potez 63.11 GR 1/52

Groupes de Bombardement

LeO 451 GB1/23 GB II / 23 LeO 451 GB1/32 Douglas DB-7 GB II/32 Douglas DB-7

Aéronavale

Flottille 3F Martin 167F

Groupes de Transport

Various GT1/15 GT II/15 Various

Algeria

Groupes de Chasse

GCII/3 D.520 GCIII/3 D.520 GCIII/6 D.520

Groupe de Reconnaissance

GR II/52

Aéronavale

Potez 63.11 Esc. 4BR

Bloch 175

LeO 451

Groupes de Bombardement

GB1/11

Douglas DB-7 GB I/19 GB II/61 Douglas DB-7

Aéronavale

Flottille 4F LeO 451

Flottille de Torpillage

Flottille 5F Late 298

Tunisia

Groupe de Chasse GCII/7 D.520

Groupes de Bombardement

GB1/25 LeO 451 GB II/25 LeO 451

Groupe de Reconnaissance

GR II/33

Bloch 174/175

Aéronavale

Esc. 1E Flyingboats

APPENDIX VI

Order of Battle, 1945

Armée de l'Air

Groupes de Chasse

GC II/3 'Dauphine' Thunderbolt GCII/5 'LaFayette' Thunderbolt GC III/3 'Ardenne' Thunderbolt GCI/4'Navarre' Thunderbolt GC1/5 'Champagne' Thunderbolt GC III/6'Roussillon' Thunderbolt GCII/6'Travail' Thunderbolt

Spitfire 9 (R.A.F. 327 Squadron) Spitfire 9 (R.A.F. 328 Squadron) Spitfire 9 (R.A.F. 326 Squadron) GC1/3'Corse' GC 1/7 'Provence' GC II/7 'Nice'

Airacobra (also some Kingcobras arriving) GC1/9'Limousin' GCII/9'Auvergne' Airacobra (also some Kingcobras arriving)

Groupes de Bombardement

GBI/19 'Gascogne' Marauder GB1/32 'Bourgogne' Marauder GB1/22 'Maroc' Marauder GBI/34 'Bearn' Marauder GBII/20 'Bretagne' Marauder GB II/52 'Franche-Marauder Comte'

GB II/63 'Senegal Marauder

GB II/23 'Guyenne' Halifax (R.A.F. 346 Squadron) GB1/25 'Tunisie' Halifax (R.A.F. 347 Squadron)

Groupes de Reconnaissance

GR I/33 'Belfort' Lightning GR II/33 'Savoie' Mustang

Plus one Escadre de Transport with two escadrilles of C-47 Dakotas, one of Ju 52/3ms, and one of C-45s.

French Units with 2nd Tactical Air Force, R.A.F.

Fighters

329 Squadron Spitfire 16 (GC 1/2 'Cicogne') Spitfire 16 (GC IV/2 'lle de France') 340 Squadron 341 Squadron Spitfire 16 (GC III/2 'Alsace') 345 Squadron Spitfire 16 (GC II/2 'Berry')

Bombers

342 Squadron Mitchell (GBI/20 'Lorraine')

French Forces of the Interior

GCI/18 'Vendée' A-24 Dauntless, D.520 GC II/18 'Saintonge' D.520, Spitfire 5 GBI/31 'Aunis' Ju 88A, DB-7, Martin 167F Fi.156C, Potez 63 GR III/33 'Perigord'

Russia

Regiment

Normandie-Niemen Yak 3

Indo-China

1/CBS Loire 130 and Potez 25 Esc. Transport et

Bombardement Potez 542 and Potez 25 E.O. 1/595 Potez 25 and Potez 29 E.O. 1/42 Potez 25 and Potez 29

Syria

GBI/17 'Picardie' Martin Baltimore

Aéronavale

Escadrille 1FC Seafire/Spitfire Escadrille 2FB Wellington Escadrille 3FB Douglas SBD-5 (with F.F.I.) Escadrille 4FB Douglas SBD-5 (with F.F.I.) Escadrille 5FE Late 298

Escadrille 6FE Consolidated PBY/Lockheed PV-1

Escadrille 7FE Sunderland Escadrille 8FB Consolidated PBY Escadrille 2S Late 298 (with F.F.I.) Escadrille 3S Late 298 (with F.F.I.)

Escadrille 4S Walrus

APPENDIX VII

a. Top scoring Groupes de Chasse, 2 September 1939 - 25 June 1940

GC 1/5 85 confirmed, 26 probables GC 1/3 51 confirmed, 21 probables GC 11/4 48 confirmed, 23 probables GC 11/5 48 confirmed, 22 probables GC II/7 40 confirmed, 10 probables

Curtiss Hawk 75A 5:1 on Morane 406, rest on Dewoitine 520 Curtiss Hawk 75A

15:9 on Morane 406, rest on Dewoitine 520

b. Top scoring fighter units of the war, 1939-1945

Régiment Normandie-Niemen GC I/5 'Champagne'

GC 1/3 'Corse'

GC II/7 'Nice'

GC II/5 'LaFayette'

273 confirmed, 37 probables. 91 confirmed, 26 probables. GC III/2 'Alsace'

87 confirmed, 17 probables.

80 confirmed, 29 probables.

73 confirmed, 16 probables. 67 confirmed, 25 probables. Yak 1, 3 and 9.

Curtiss Hawk 75A

Curtiss Hawk 75A in France and Morocco, P-39s and P-47s Mediterranean and South of France.

21:8 with Morane 406s and 14:3 with Hawk 75As in 1940; 19:2 with Hurricanes in the Desert; 33:4 with Spitfires as 341 Squadron, R.A.F. 51:21 in 1940; 17:7 on D.520s on 8 November 1942; 12:1 on Spitfires, Mediterranean and South of France

40:10 in 1940; 33:6 on Spitfires, Mediterranean and South of France. 48:22 in 1940; 9:1 on Hawk 75As on 8 November 1942; 7 on P-40Fs in Tunisia, 1943; remainder on P-39s and P-47s, Mediterranean and South of France.

