

LTD kits are produced to offer the 1/48th scale modeling enthusiast subjects that, for one reason or another, have been consistently overlooked. Having been a modeler for some 45 years and in the hobby business for almost 30 years, I have time after time tried to interest manufacturers in the somewhat lesser known, but never-the-less historically important aircraft (and to be honest, aircraft that I wanted to build).

Consequently, it is with great pleasure that we at LTD models are able to offer this line of limited production short run kits to those, like myself, who wish to add these aircraft to their collections

However, please note that these kits are not produced from highly sophisticated long run hardened steel molds and consequently some details, such as locating pins, etc., cannot be provided and may have to be fashioned by the modeler. Heavy sprues, and a certain amount of flash are unavoidable in the molding process. Care must be taken in removing each part from the sprue tree and additional time must be taken in cleaning up and dry fitting each part before assembly.

History:

Conforming to an unofficial design specification requiring a top speed of 520 km/h (323 mph), the D.520 was born as a private design effort in November of 1938 by Emile Dewoitine. The Dewoitine fighter design, named D.520 (referring to the 520 km/h requirement) was to be powered by a 1,200 hp Hispano-Suiza engine then under development. Although initially rejected by the *Service Technique Aeronautique*, which had already chosen the Morane Saulnier M.S. 406 to re-equip the fighter units, Dewoitine decided to go ahead with detailed drawings and two prototypes of the D.520.

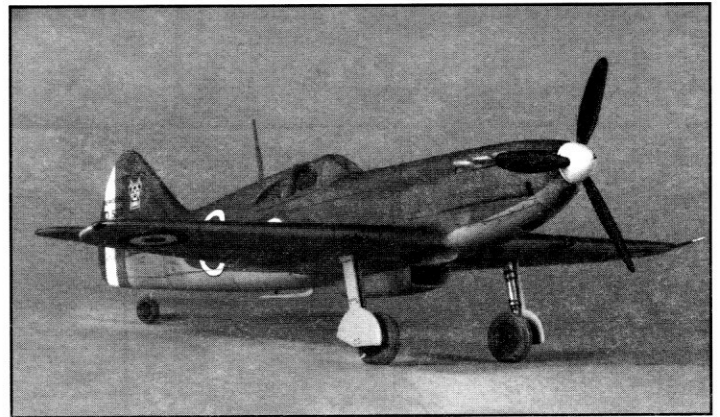
As the first prototype neared completion, SNCAM was finally awarded a contract on 3 April 1938. In early 1939, the second prototype with a completely redesigned tail, a rearward sliding canopy, and a provisional armament of one H.S.404 20MM cannon firing through the airscrew and a machine gun mounted in a gondola under each wing was completed. Re-engined with a Hispano Suiza 12Y20 engine and repainted in standard camouflage, prototype No 2 attained a speed of 550 km/h (341 mph).

As the political situation in Europe worsened and production of the M.S. 406 and Bloch 151/150 fighters fell behind schedule, on 17 April 1939 a production contract was placed with Dewoitine for 200 machines, followed on 5 June for an additional 1,000 machines.

Powered by a Hispano-Suiza 12Y45 engine, production aircraft differed from the prototype, by having a fuselage lengthened by 51 cm, the addition of two unprotected fuel tanks in the wing leading edges, and armor plate fitted behind the pilot seat. Armament was increased to a pair of 7.5MM machine guns mounted in each wing.

Between the end of April and the beginning of May *Groupe de Chasse I/3 (GC I/3)* at *Cannes Mandeliou* received 34 "war cleared" machines, with unarmed non-operational aircraft having been delivered to GC II/3, GC II/7 and GC III/3 for conversion training.

On 10 May the so-called Phony War turned into real war as the German war machine spilled across western Europe under an umbrella of some 3,500 Luftwaffe aircraft. Scarcely ready for combat GC I/3 with their D.520s was rushed into combat and on 13 May claimed three Hs 126s and an He 111 without loss. The next day GC I/3 claimed four Bf 110s, two Bf 109s, two Do 17s and two He 111s, for the loss of two pilots. On 21 May a second D.520 *Groupe*, GC III/3 went into combat, and during the next two weeks claimed 31 Germans while losing 20 of their own number (two of which were downed by French ground fire).



Robust, well armed, extremely agile the D-520 proved to be an extremely tough opponent of the Luftwaffe and was the mount of a number of Aces, such as W/O Pierre Le Gloan adjutant of III/6. Certainly the best fighter of the *Armee de l'Air*, the D.520 proved to be able to hold its own against the Bf 109. While the Messerschmitt 109E, due to its more powerful engine was some 20 mph faster than the D.520, the French fighter's superior handling qualities gave it a definite advantage in a dog fight.

By the time hostilities ceased 437 D.520s had been produced with 351 going to the *Armee de l'Air*, 52 to the *Aeronavele*, with 34 remaining at Toulouse/Froacazal not being officially accepted by the French Air Force. Five operational *Groupes de Chasse*, GC I/3, II/3, II/7, III/6, were equipped with the D.520, with GC II/6 and GC III/7 being re-equipped with D.520s at the time of the armistice. During the Battle of France a total of 106 D.520s were lost to all causes including accidents.

As the Battle of France came to an end three D.520s of GC III/7 escaped to England where they, together with six Hurricane Is formed the Free French Air Force's 1st Fighter Group. 175 machines were flown to North Africa. At the insistence of the Luftwaffe the terms of the armistice dictated that no Dewoitine D.520s were to remain on French soil, consequently those remaining D.520s were either dispersed overseas or put into storage.

With the large number of D-520s on hand the Vichy Air Force in Africa was in fact a rather potent air arm. In Syria GC II/6, GC II/3, GC I/7 took part in operations against the Fleet Air Arm claiming 19 confirmed and 4 probable kills (Pierre Le Gloan was credited with 5 kills and 2 probables).

Surprisingly, in August of 1941, the Germans agreed to the Vichy government re-equipping its fighter arm, with D.520s replacing its aging M.S. 406s, Bloch 152s, and Hawk 75s. An order was placed with SNCASE, for 550 machines.

In response to the Allied Torch landings in North Africa in November of 1942 the Germans moved into the unoccupied zone of France dissolving the Vichy air force and taking over its aircraft including 246 D.520s and a further 169 under construction. The Germans initially used the D.520 for training, with the training *Geschwader* JG 105 being entirely equipped with the D.520. Highly praised by *Luftwaffe* veterans, a few found their way into operational units on the Eastern Front. Some sixty machines were transferred to the *Regia Aeronautica* and a small number were turned over to the Rumanian Air Force where they operated alongside Bf 109s, and the Bulgarian Air Force received large numbers of D.520s.

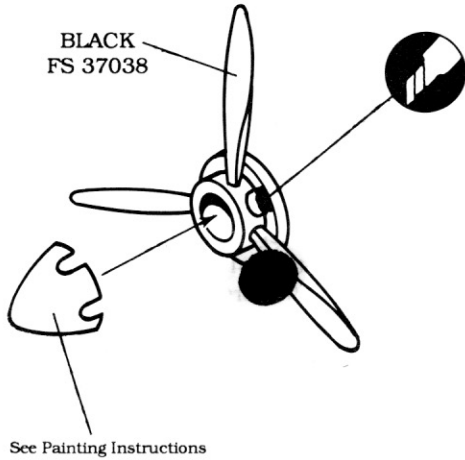
When Southwest France was liberated a Free French fighter group was formed with D.520s named *Groupe Doret* for its commander Marcel Doret. On 1 December 1944, when the French Air Force was reformed, *Groupe Doret* became GC II/18, equipped with some fifteen D.520s. GC II/18 re-equipped with Spitfires and its D.520s were relegated to the training role at Tours where one was converted to a two seater.

A total of 905 D.520s were built when production terminated.

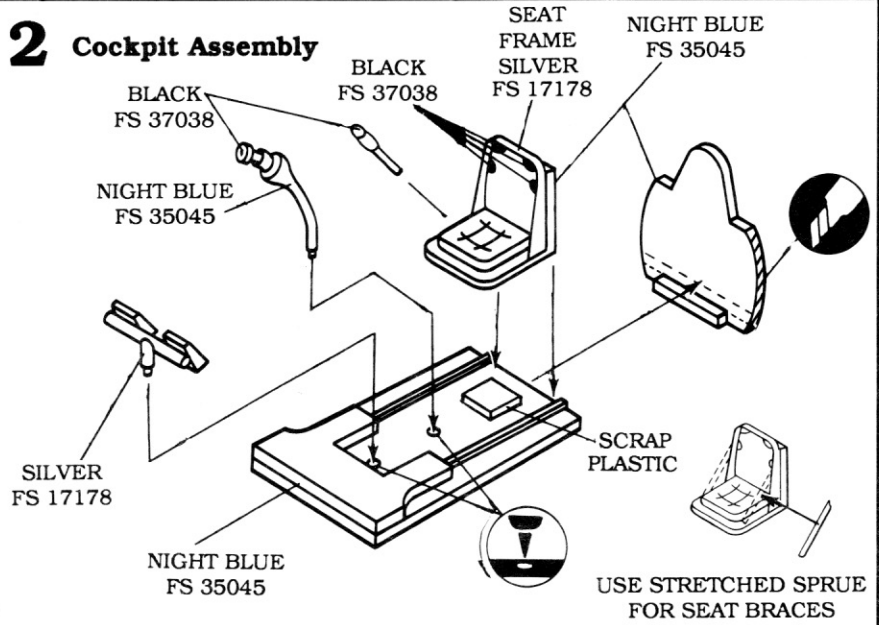
ASSEMBLY LEGEND

- | | | | | |
|---|--|--|--|---|
|  Trim To Fit |  Remove |  Fill Hole |  Apply Decal |  Caution |
|  Do Not Cement |  Open Hole |  Repeat Right & Left |  Optional |  Omit |

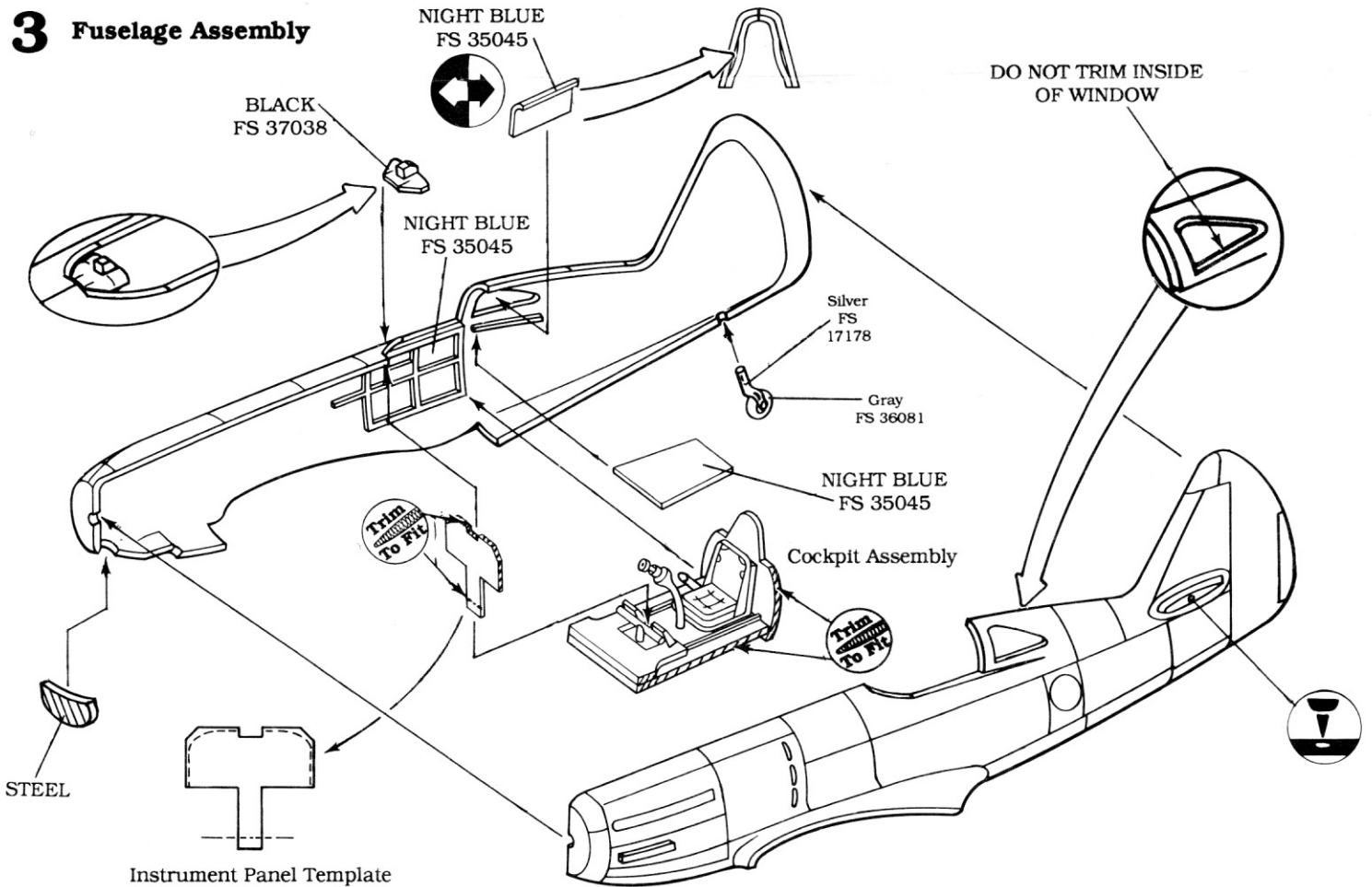
1 Propeller Assembly



2 Cockpit Assembly



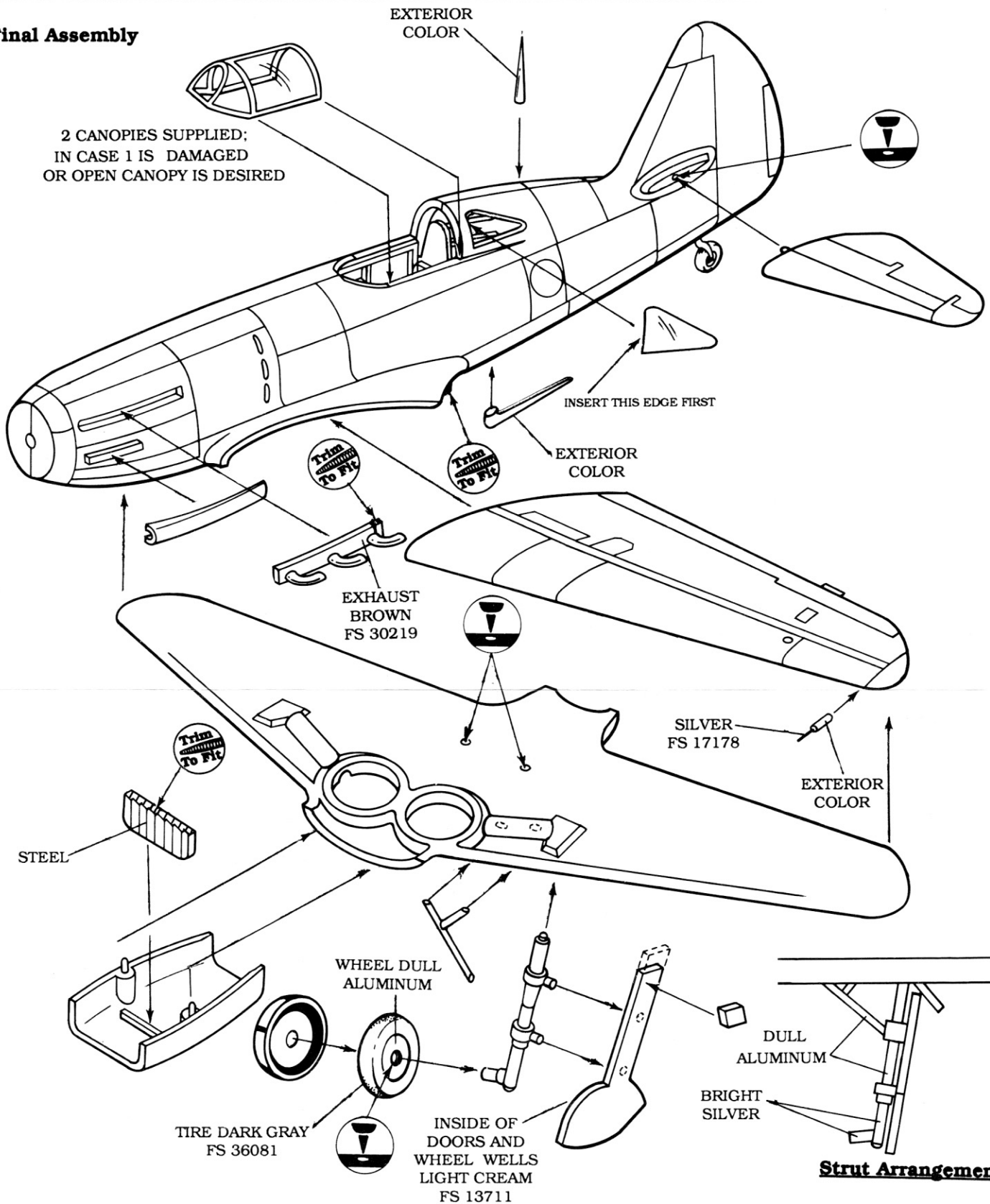
3 Fuselage Assembly



4 Final Assembly



2 CANOPIES SUPPLIED;
IN CASE 1 IS DAMAGED
OR OPEN CANOPY IS DESIRED



Strut Arrangement

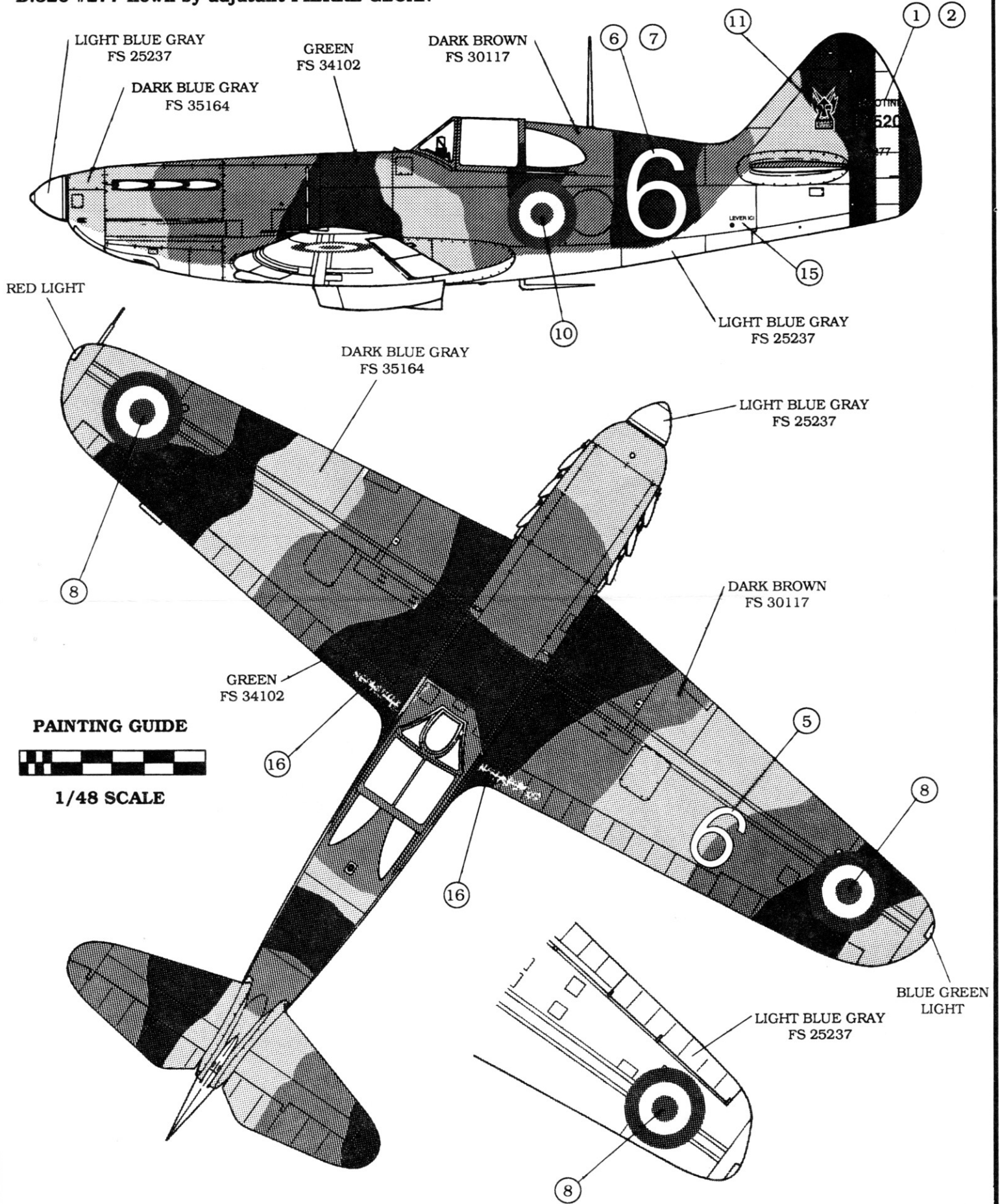
SCALE COLOR

The concept of "scale color" or "atmospheric perspective" simply acknowledges the fact that the atmosphere is not wholly transparent and this lack of transparency reduces the intensity or chroma of a color. A 1/32nd scale model viewed at one foot away would be the same as a real aircraft at 32 feet away, a 1/48th scale model viewed at one foot would be the same as a real aircraft at 48 feet away, and a 1/72nd scale model at one foot away would be the same as a real aircraft at 72 feet away.

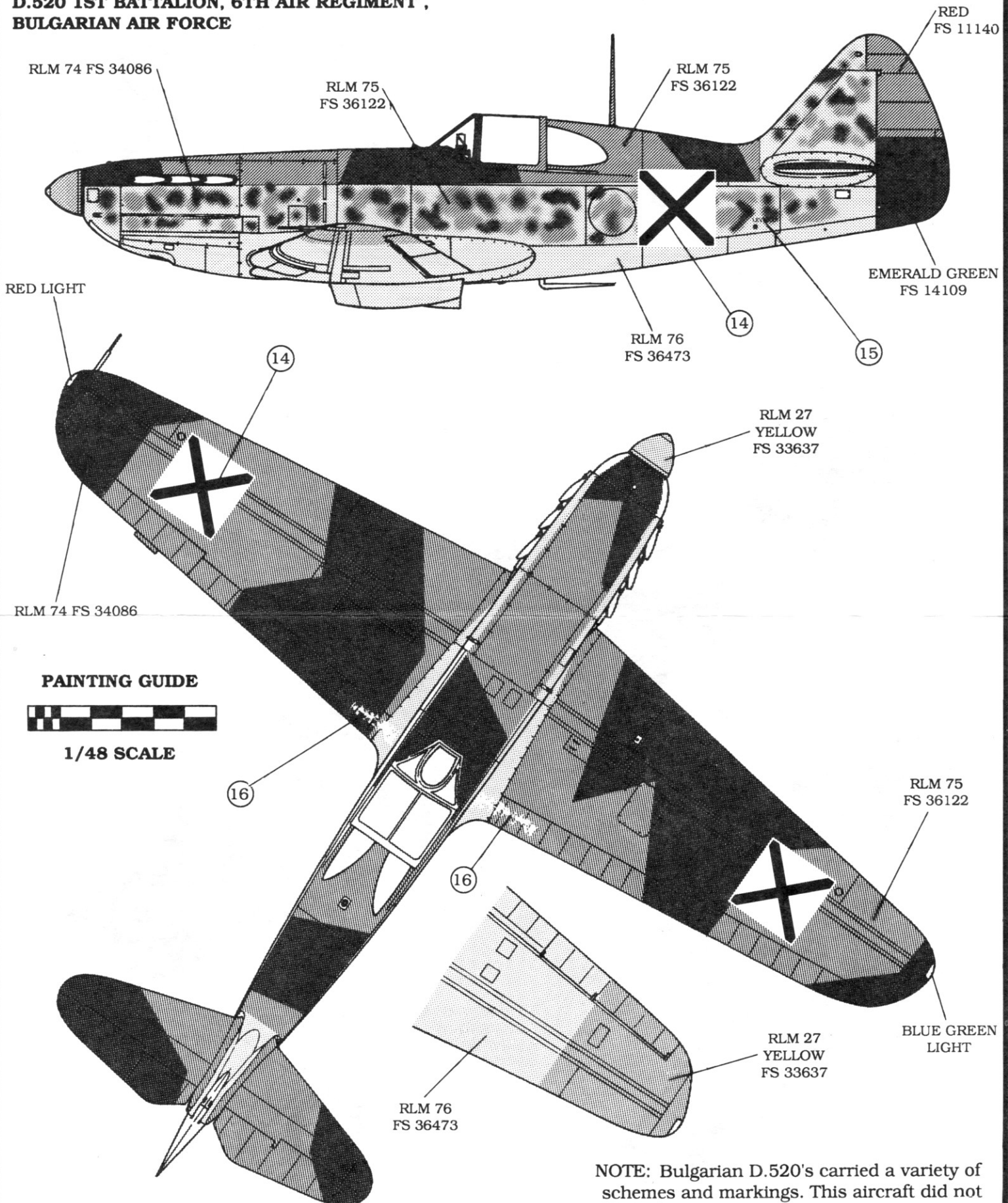
Thomas Hitchcock and Ken Merrick's book "**The Official Monogram Guide To German Aircraft 1935-1945**" (now out of print) presents an in depth discussion of this concept. To reduce the intensity of color they recommend, adding 15% white to most colors for 1/32nd scale aircraft, 25% white for 1/48th scale color, and 33% white for 1/72nd scale color.

Space limitations prevent a more detailed explanation of the scale color concept, however; occasionally a discussion of scale color can be found in Fine Scale Modeler, Scale Modeler and especially Ian Huntly's column in Scale Aircraft Modeler. We have also been informed that Aeromaster is now marketing a new line of authentic camouflage scale colors to 1/48th scale.

D.520 #277 flown by adjutant PIERRE GLOAN



**D.520 1ST BATTALION, 6TH AIR REGIMENT,
BULGARIAN AIR FORCE**



NOTE: Bulgarian D.520's carried a variety of schemes and markings. This aircraft did not carry underwing insignia.

D.520 #5 flown by GROUPE DORET (FFI)

