

The evaluation was conducted swiftly and successfully. A contract to build these aircraft in Switzerland under license was negotiated with France in an incredibly short time for today's standards. The 0-Series of eight aircraft – named D 3800 ('D' = Jagdflugzeug Jahrgang 38) were built by the Eidg. Konstruktions-Werkstätte (K + W) Thun. The feedback from the troop evaluations was in generally positive, although the propeller had to be replaced with the newly developed variable pitch propeller system EWV-3 from Escher Wyss.

In February 1939 a new numbering system including a prefix (J = Jäger) was introduced. 601 and 602 became J-1 and J-2 respectively. The aircraft from the 0-Series were numbered J-3 to J-10. The main series of 74 D 3800 was to be built by the Eidg. Flugzeugwerk (F + W) Emmen, Doflug Altenrhein and SWS Schlieren. The allocated numbers were J-11 to J-84.

With the development of a stronger engine - the Hispano-Suiza HS-51 12Y with 1000 PS replaced the HS-77 Y with 860 PS - it was possible to continue the output of a new aircraft with the model D 3801. The first D 3801 entered service in 1941 up until 1959. A total of 207 D 3801 numbered J-91 to J-297 were built in Switzerland.

Together with the D 3800 and Messerschmitt Me-109 D-1 / E-3, Switzerland operated a fighter fleet of nearly 380 aircraft during WWII. The people of Switzerland were willing to enforce neutrality with a force that was to be respected by the war parties of the surrounding countries. Airspace was blocked and pilots who neglected this fact or got lost were invited or forced to land in Switzerland.

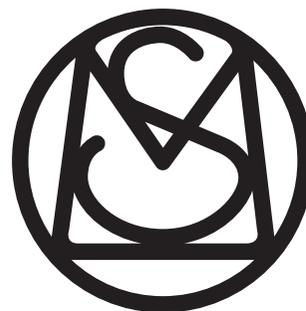
During these years, the appearance of the Swiss aircraft changed rapidly in order to adapt to the prevalent situations. Before the war inflicted all of Europe, the focus was on camouflage optimisation by using two tones, Schwarzgruen and Dunkelgruen over Blaugrau with paints obtained from Germany. Small roundels for the Swiss crosses were a further measure. To make things perfect, the demarcation line between colors was sharp edged by use of masking tape.

As the tension increased it became clear that the ground troops had difficulties to differentiate Swiss aircraft from others – since Germany and France operated the same aircraft types. Thus, large red areas on the bottom of the wings and the sides of the fuselage became standard. Further on, the paint scheme was simplified by omitting the Dunkelgruen. In Fall 1944 after 2 Swiss Me-109E got shot down by American P-51's on September 5th, the Air Force introduced a high-visibility-scheme (Neutralitätsschutz) by adding red and white stripes and white areas on the nose, wingtips and elevator. After the war camouflage on the fuselage was restored but the stripes were retained on top and bottom of the wings.



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Müllheim, June 2013

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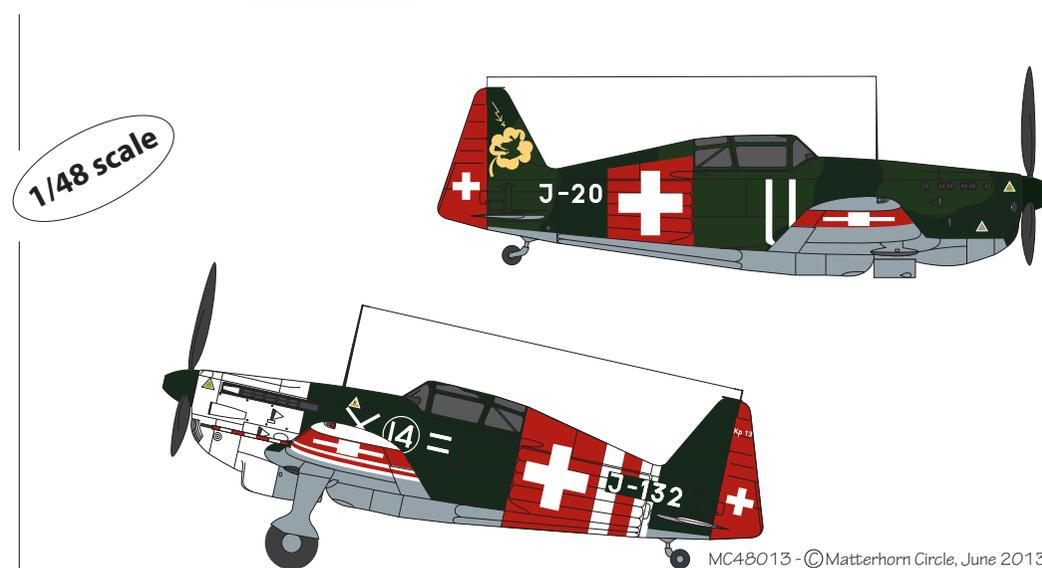


Morane Saulnier D 3800 & D 3801



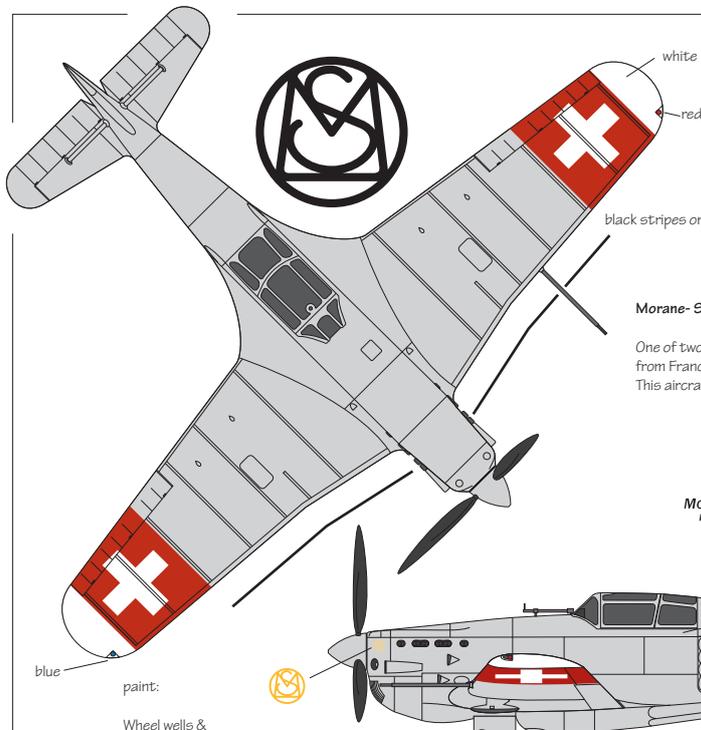
collection P. Gunti

Despite or probably because of the intense political situation in Europe at the end of 1938 – with the neighbors up north turning dark and the threat of an imminent war - the Swiss Federation was able to acquire two Morane Saulnier MS-406 (601 & 602) from France on short notice for evaluation. This happened in parallel to the efforts of acquiring a fleet of 99 Messerschmitt Me-109 aircraft from Germany before the break out of hostilities.



MC48013 - ©Matterhorn Circle, June 2013

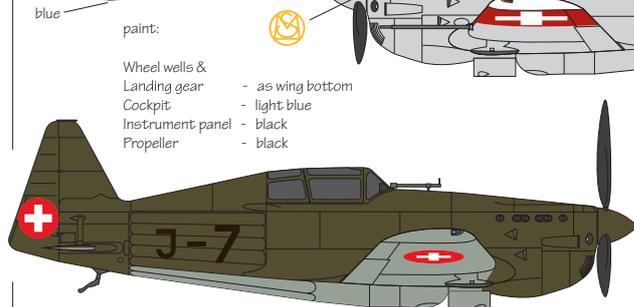
Morane Saulnier D 3800 & D 3801



Morane-Saulnier MS-406 C-1 601

One of two MS-406 purchased 1939 from France for testing and evaluation. This aircraft was later renumbered to J-1.

MORANE SAULNIER PUTEAUX FRANCE



D 3800 J-7 Thun 1939

this aircraft has been license built bei K + W Thun - one of 8 aircraft of the O-Series. The temporary khaki and grey scheme (Tarnanstrich K + W 1936) was later replaced with Schwarzgruen over Graublau. Black serials and roundels in 6 positions - no stencils.

Matterhorn Circle Decals

all measurements in mm

- Wheel wells & Landing gear - as wing bottom
 Cockpit - light blue
 Instrument panel - black
 Propeller - black

blue paint:



001 RAL 3001 Red

001 White

062 Aluminium

015 FS 34127 Khaki

062 FS 36307 Grey

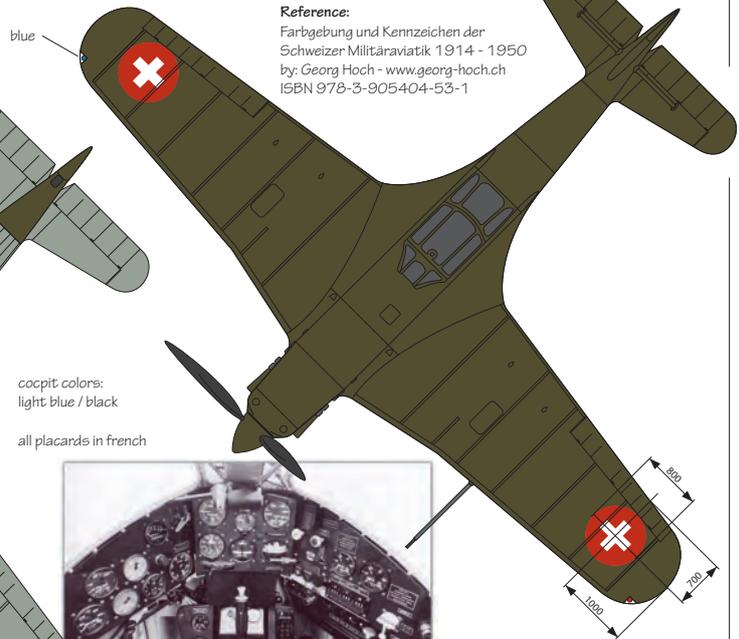
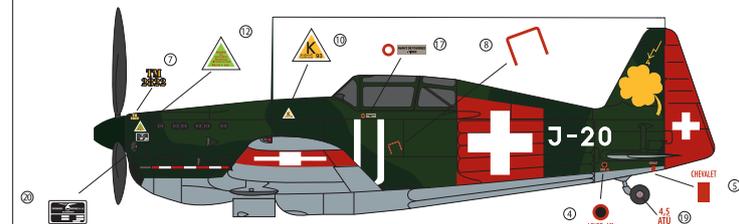
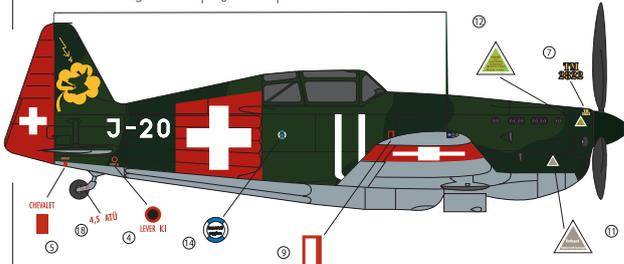
021 RLM 70 Schwarzgruen

015 RLM 71 Dunkelgruen

008 RLM 65 Graublau

D 3800 J-20 Cp. av. 4 Interlaken Summer 1940

The squadron badge on the left side of the fin has been fully painted and the witch has been omitted. The flash above the squadron badge indicates, that this aircraft had the radio equipment installed. The white stripes on top of the wing marked this D 3800 as the aircraft of the squadron leader. The paint scheme is Schwarzgruen / Dunkelgruen over Graublau. The edges were sprayed sharp.



Reference:

Farbgebung und Kennzeichen der Schweizer Militäraviatik 1914 - 1950 by: Georg Hoch - www.georg-hoch.ch ISBN 978-3-905404-53-1

blue

cockpit colors: light blue / black

all placards in french



Cp. av. 4



This scheme R-360a is valid for J-20 & J-48. The white stripes belong to J-20 only.

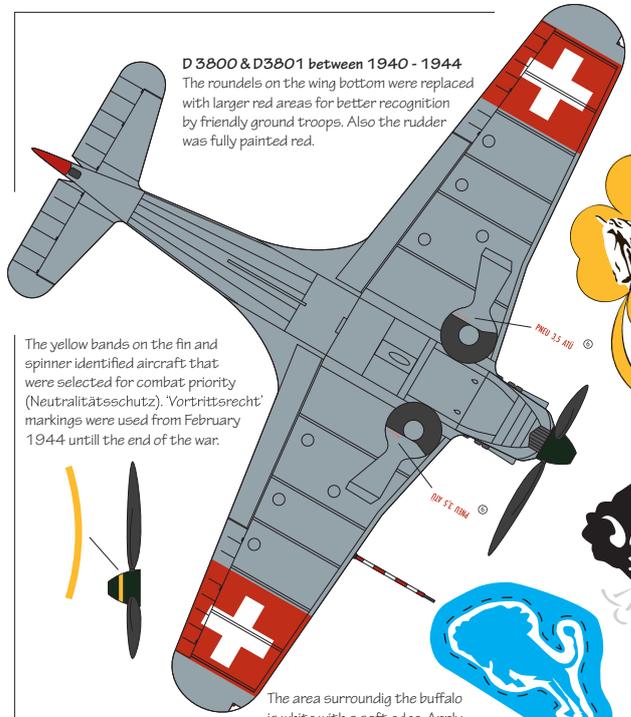
D 3800 1939 - 1940

two tone camouflage Schwarzgruen / Dunkelgruen. The edges were sprayed sharp, but after fall 1941, repairs were done freehand due to the lack of masking tape.



Morane Saulnier D 3800 & D 3801

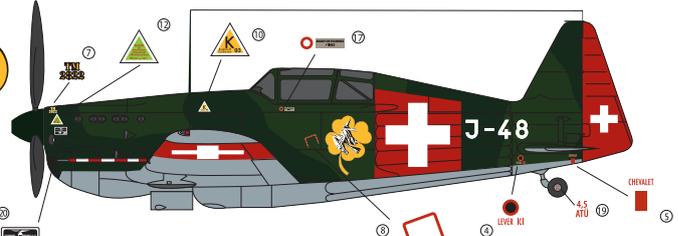
D 3800 & D3801 between 1940 - 1944
The roundels on the wing bottom were replaced with larger red areas for better recognition by friendly ground troops. Also the rudder was fully painted red.



The yellow bands on the fin and spinner identified aircraft that were selected for combat priority (Neutralitätsschutz). "Vortrittsrecht" markings were used from February 1944 until the end of the war.

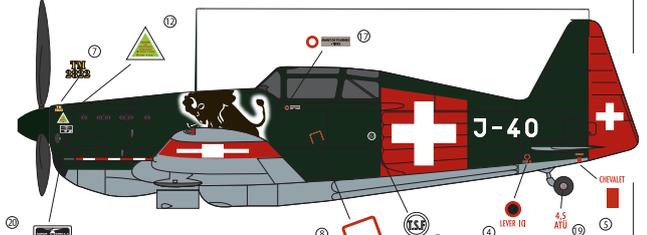


Badge of the Cp. av. 4



D 3800 J-48 Cp.av.4 Thun 1941

Still wearing the original 2-tone paint scheme Schwarzgruen / Dunkelgruen. The edges were sprayed sharp. Extended visibility markings on fuselage sides and lower wings. Roundels on top of the wing. Top view on page 2.



D 3800 J-40 Fl.Kp. 20 1944

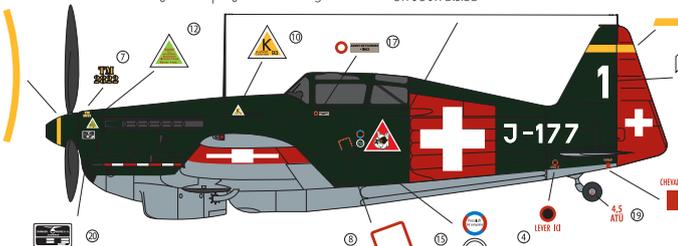
From September 1941 onwards, the Dunkelgrün was omitted. Roundels on top of the wing.



The Buffalo of the Fl. Kp. 20 designed 1943

The badge of the Cp. av. 3 was applied on both sides

Bulldog of the Cp. av. 3



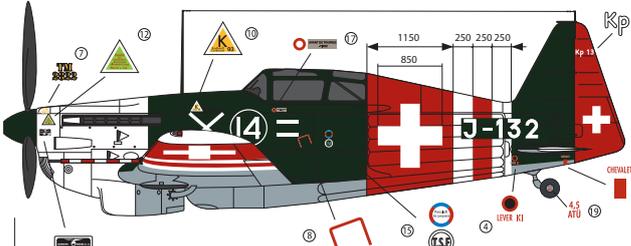
D 3801 J-177 Cp. av. 3 Sion, Summer 1944

It is possible that the Buffalo was not painted black but Schwarzgrün. Paintmasks, and decals (A, B, C) are provided.



T.S.F. = Télégraphie Sans Fil

Identified aircraft that had radio equipment installed. All aircraft had the antennas installed but often only the leader had the the radio equipment.



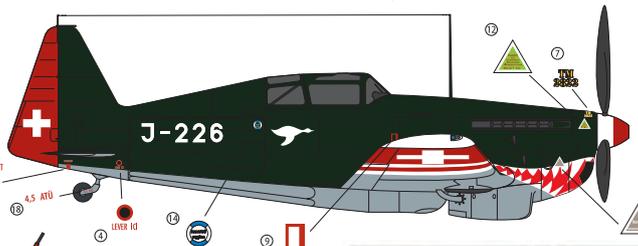
D 3801 J-132 Fl. Kp. 13 1945

Full Neutrality markings on the wings, elevator and fuselage. This scheme was valid between September 1944 - September 1945. After that the markings got removed on fuselage and elevator.



The flying duck was applied on both sides - flying forwards

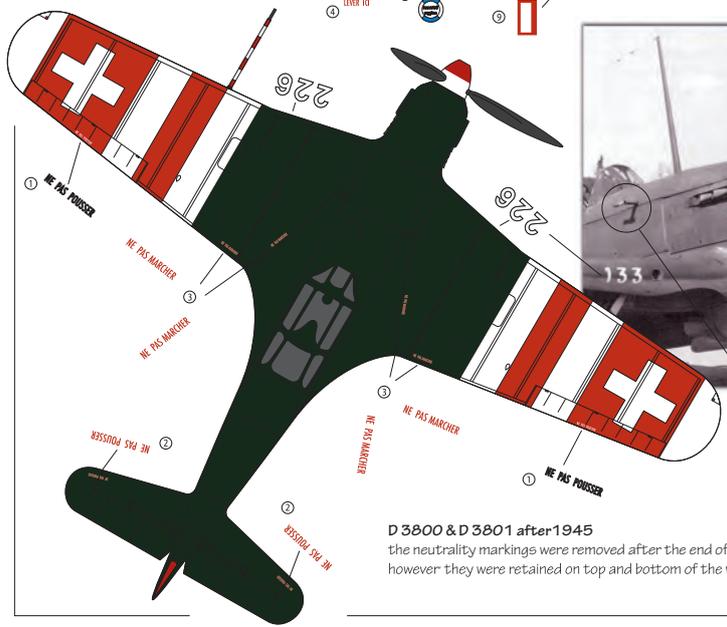
D 3801 J-226 Fliegerschule Emmen 1959



License plate of a D 3801 (J-276)

D 3800 & D 3801 1944 / 1945

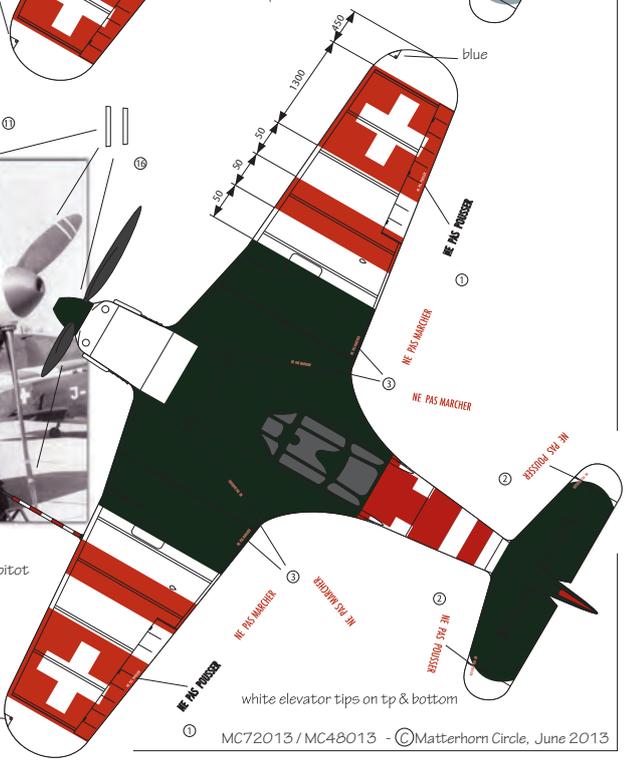
'Neutralitätsschutz Anstrich' per order A.H.Q. of September 15th 1944 valid for all military and transport aircraft.



D 3800 & D 3801 after 1945
the neutrality markings were removed after the end of WWII however they were retained on top and bottom of the wings



please note the pitot



white elevator tips on top & bottom



Camouflage Evaluation

Towards the end of WWII the topic of aircraft camouflage was evaluated again. While the British followed tradition, the Americans displayed air superiority by leaving their aircraft unpainted thus saving money, time and weight. On the other hand, the Germans started to camouflage their aircraft with schemes that protected them on the ground – green and brown became popular – undersurfaces often remained unpainted due to the lack of resources.

In October 1944, the KTA (Kriegstechnische Abteilung) suggested to paint the aircraft in a base color topped with seasonal field colors that could be removed or changed easily.

To test this concept, three newly manufactured D 3801 were chosen (J-211, J-212, J-213). On two aircraft, the upper surfaces and sides including the red areas of the Swiss cross were coated with a fine mist of white water based mineral paint that could be washed off without damaging the base color.

For winter camouflage two different schemes were applied. On J-211, the dark areas were painted over with irregular white lines that were applied with a brush. J-213 was simply oversprayed with white, leaving the aircraft number and Swiss crosses barely visible. The canopy frames were spared – even so, some maintenance stencils and markings were left visible.

The results were, that from a distance of about 500m the first aircraft, J-211 appeared simply light grey whereas the second all white aircraft, J-213 proved superior against a snowy background. From a distance of 1500m however, both schemes proved equal.

The third aircraft, J-212 was used to test an improved camouflage for spring time after the snow was gone. For this purpose, a fine coat of yellowish-brown removable paint (approx. FS 30266) was misted over the upper surfaces including the Swiss crosses. Over that, streaky clouds were sprayed in an irregular pattern.

This spring scheme proved very effective. However the common problem with all three schemes was that when seen from the air, the aircraft reflected the sunlight due to the semi-gloss appearance of the removable paint. The application of all three schemes was very easy and could be accomplished within one to three hours, however removing the paint was very labor-intensive. To avoid the reflections and to simplify the removal of the temporary camouflage it was decided to use flat nitro based paints.

The conclusion of these trials was that the spring camouflage would become the standard base scheme while for winter periods, large white blotches would be painted over the dark areas. With the end of WWII however, application of the new scheme was skipped, but still influenced the development of new aircraft like the D 3802/3.

References

As a main reference for this decal sheet I studied the remaining D 3800 & D3801 at the Flieger und Flap (AA) Museum in Dübendorf. However I would not have succeeded without the excellent book by Georg Hoch: Farbgebung und Kennzeichen der Schweizer Luftwaffe 1914 – 1959. For more information see: www.georg-hoch.ch

These decals were printed by [Fantasy Printshop](#) in the UK. The Micro Sol / Set system works fine. Other decal softeners should be tested first. As always, to avoid 'the silvering effect', the decals must be applied on a glossy surface.

