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e-magazine FREE ▪ Vol22 ▪ September 2023

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KURFÜRST

Bf 109K-4

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e-magazine FREE ▪ Vol22 ▪ September 2023

163

Editorial and Graphics - Marketing department, Eduard - Model Accessories, Ltd.

SEPTEMBER 2023

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Published by Eduard-Model Accessories, spol. s.r.o.
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EDITORIAL

Dear Friends,

We're back from Texas, hard at work on upcoming projects. As I mentioned in the last editorial, one of the purposes of our trip, in addition to our usual participation at the IPMS USA National convention, was to have a good, close up look at several P-40 examples. That's one of the things we're working on at the moment, and my personal goal is to finish the project early next year and then get the first kits in boxes as soon as possible. Mission successful; we documented two examples, a P-40N in Dallas and a P-40K in Mount Pleasant. I'm especially happy about the P-40K, it's a beautiful machine, as is everything on display at the Mid America Air Museum. Plus, the P-40K isn't often seen in museums, so it was worth the trip. We are still waiting for access to the P-40F, on which we need to confirm the nose shapes. Due to the use of a different engine, it is suspected that there are differences in the cowl shapes, after all, it is common knowledge that there is a different fairing. We have P-40Fs here in Europe, so we won't be that far from one of those, and it won't be as hellishly hot as it was in Texas this summer. Truth be told, scanning an aircraft in 42°C heat is a physically demanding feat and not something we want to do again this too soon!

E-day 2023

But before that happens, we have E-day to look forward to. Yes, ladies and gentlemen, in three weeks, on September 22 and 23, 2023, we will meet in Milovice. E-day will take place according to the established format. Setup will begin on Friday morning, we will open for exhibiting modelers in the afternoon, and the first two seminars will take place in the evening. There will be interesting guests in the discussions. For example, we will talk about the history of Kovozávody Prostějov with Slávek Goldemund and the pilot of one of our best known Su-25Ks, the legendary "Frog" Frogfoot, Colonel František Tabačko, has promised to participate, while his colleague Mr. Seidl has not yet confirmed his participation. Another discussion will be devoted to the introduction of new helicopters into the equipment of the Air Force of the Czech Republic. On Saturday, there will be several workshops and, of course, the traditional Pot Q & A, which will get a new look this year – I and Fredy Riedel from Special Hobby will be at the mike at the same time. We tried this recently at Prosek resulting in no fights and it went well, so we will extend this experience to E-day as well. An in-depth discussion of our plans for the foreseeable future and flight demonstrations are also traditional. This year, the Kuňkadlo, the Z-526 Trenér and, as the highlight of the event, the L-39C Albatros are planned. Contest registration opens early next week, as do club show entries. New building blocks are absolutely essential for the progress of E-day. This year, again, a lineup of new releases has been created taking into account the Czech and Slovak markets. It centers around two Limited Edition kits, the 48th scale Hráb, aka the Su-25K with a publication by Martin Janoušek, and the 72nd scale L-39C Albatros. This is not a new model, but rather a rejuvenated item of the old kit after some mold repairs, supplemented by a newly designed canopy. The latter will be in two versions, closed and open, and I firmly believe that its shapes will satisfy not only critical Czech modelers, who were rightly dissatisfied with the original canopy due to its flatness. But please understand that I would rather hear the praises that the kit still deserves instead of how badly we need a new-tooled, modern standard kit of the type. Although this is increasingly true, the time is not quite right yet. Jumping back to the Su-25K kit, I would like to point out that the entire run of this kit will be released with the publication. After a thorough consideration of all the pros and cons, we abandoned the option of a release without it.

In addition to these two Limited Edition items, the 48th scale Profipack Z-526 and 72nd Weekend Avie S-199 with a bubble rear-sliding canopy will also be premiering at E-day. The only non-Czech item will be the Weekend F4F-3 Wildcat. There will also be a re-release of the F6F-5 Hellcat as a Weekend Edition kit, and the MiG-21PFM in 1:48th will be back on sale at the end of September in the original orange box. We will also have a replenished range of Gunze paints and other modeling accessories at E-day. And with that I would conclude the topic of E-day 2023 for today. See you on the afternoon of Friday, September 22 and on Saturday, September 23 at the Tankodrom (Tank Training Area Museum) in Milovice!

New Releases for September

The new items for September have been on sale since last Friday, so you've definitely had the chance to take note of them. Nevertheless, they are understandably covered here. I will limit myself to just a few of them, especially the new Bf 109K-4, which premieres in September in the form of the Limited Edition release dubbed Kurfürst. I probably don't need to repeat the fact that as opposed to the earlier releases of the F and G versions, that shared detail sprues only and had version specific wing and fuselage components, the K-4 kit has all new sprues across the board. For the K-4, we modified and completely modernized the structure, which we technologically modified according to current standards, and we slightly modified it conceptually as well. So, unlike the older Bf 109G, the K-4 has, for example, transparent position lights or a modified division between the centerplane of the wing and the fuselage, which affects the execution of details in this area. The wheel wells also changed, which, admittedly, would have happened in any case, since these were modified on the real thing as well. Modified are the exhausts, which can be glued from the outside to the already assembled fuselage. Here I also have to apologize for an error in the instruction manual, where the old-fashioned gluing of the exhausts is from the inside. Hell, habits can run deep, and my colleagues somehow missed this. The center plane itself will probably be a controversial issue, because we have it completely different than how it is depicted on all known drawings. The problem with this lot is the lack of documentation. The parts layout of this area for the BF 109K-4 is wrong, someone once having made it easy on themselves by leaving the Bf 109F centreplane intact. Drawings were later based on this with various modifications according to the partial knowledge of the changes that were gradually made during development of the Bf 109G. The problem is that there isn't a good quality photo of this area for confirmation. Until now, anyway, and thanks to Tomáš Poruba (JaPo) we gained access to a photo depicting this detail and adjusted our centreplane accordingly. Unfortunately, in keeping with our agreement with Mr. Poruba, we are not allowed to publish that photo. I understand that it sounds like a gimmick and a rant to defend something that would otherwise be hard to defend, but it really is how this all developed. That photo will appear in some new JaPo book eventually, maybe in the upcoming book on the Bf 109G. So hang in there, you'll be able to check out our work with the aid of this reference at some point in the future. And I, on the other hand, will endure all the criticisms and claims until then and look forward to the satisfaction that will come one day. I hope I live long enough to see it.

The engine cowl and some other features of the fuselage have been also redesigned. The interior is also new, which counts for the wells, since these were all features that were modified on the actual aircraft. Otherwise, the design is based on the original BF 109G design, and most of the design solutions have been retained in principle. This is where the 48th scale

Bf 109K-4 differs from the new 72nd Bf 109F and G. These are actually much newer designs that are at the same time significantly redesigned and incorporate new innovations. That's why it took us so long to release these kits. Fans of 72nd scale can compare the differences between the two builds in real time, as we are also releasing a 72nd scale ProfiPACK Bf 109F-2 in September.

The collaboration with JaPo also had a significant impact in the nine color schemes offered in the kit. Even they do not conform fully to the generally accepted and published interpretations of selected machines. Although we used them when choosing options for the kit, we used the latest findings from Mr. Poruba's research during our own interpretations. You may argue that color interpretations cannot be categorically derived from black and white and even color photographs, but this is generally true across the board. During our own reconstructions, we took into account the newly discovered regulations, information on the production sites of individual aircraft parts and, last but not least, information on paint production, the raw material situation at the time, methods of application, differences between individual paint manufacturers and individual batches of paint and their use in practice by airframe parts manufacturers. From this, for example, the coloring of the wings of all K-4s in RLM 74/75/76 follows, while for the fuselages, produced at different facilities, were either RLM 74/75 or 81/82, depending on the production block. The tail surfaces were then usually RLM 74/75, but from newer paint production lots that were darker than the shades of the older production lots of these colors. For details, see the introductory text in the kit instructions or the historical article in this issue of our newsletter, which is actually more or less the same text.

Along with the release of the Bf 109K-4, several accessory sets for this kit are premiering in September. In addition to the T-Face cockpit mask and the Space set, there are four sets in the Brassin range, to include propellers, wheels, exhausts and, perhaps most importantly, the DB 605D engine. Unlike the other three, this set is not 3D printed, but cast. But in this case, it certainly doesn't detract from its quality, in my opinion, and receives my seal of approval. As for accessories, I will also mention the 3D printed cockpit in the Brassin line for the Bf 109F in 1:72nd scale for the aforementioned Bf 109F-2 kit in the ProfiPACK range.

In the Weekend series, I would like to highlight the 48th scale Bristol Fighter kit, which brings this type back to our range after a long absence. I think it is suitably complemented by another purely military item, the Spitfire Mk.Vc, also released as a Weekend kit. Among other things, it has, in my opinion, one of the most impressive box arts we've ever put to a kit. The final thing I would like to mention here is the re-release as a Weekend kit the MiG-21bis in 1:48 and the return of the 48th scale ProfiPACK Bf 110F to our catalog. It makes its triumphant in the original box and at the original price, and actually, in this case, it's at an even better price than it was back in the good ol' pre-Covid days.

I will leave you to study the new releases for yourself, and you can decide what grabs your own personal attention.

Bundles

Last Friday, we launched a new promotion to kick off the new September releases on our E-shop. We have created two packages for the four new kits, developing the trade name "Bundle". Each Bundle consists of a kit plus an accessory. For the Kurfürst, which is the Bf 109K-4, it is the Brassin Bundle, containing the kit plus the DB 605D Brassin engine, and the Overtrees Bundle, consisting of the kit plus its corresponding Overtrees. The other Bundles are with masks, which we created for the Spitfire Mk.Vc and the MiG-21bis 48th scale Weekends. This is partly in response to a recent discussion about the need and desire of modelers to add masks to our Weekend releases. This is not as easy as the request makes it sound, but these Bundles at least make it happen. These two kits also offer an Overtrees Bundle, and the foursome is rounded out by the Profipack Bf 109F-2, whose two packages are the Overtrees Bundle and the Brassin Bundle, the latter with a 3D printed cockpit. Of course, all packages have a discounted price. After a week of testing this sales model, it looks like there is decent, at times even enthusiastic customer interest, which means we will continue with the concept in the coming months. The promotion will always be related to new products currently being launched and will have an expiration date, usually by the next month's releases, but it will be different in September because of E-day. The offers will end with the start of pre-orders on E-day, which will be September 7. I don't know yet how it will be with the October Bundles, but we will let you know in time.

Articles

In today's issue, we focus on the Bf 109K-4 with a historical-slash-technical article, on which I collaborated with Honza Bobek, and which is essentially identical to the introductory text in the kit instructions. The Bf 109K-4 is also the subject of the build article by Jan Baranec, and the diagram of changes to the Bf 109K-4 compared to the Bf 109G-10. There's also a follow-up on the situation in the air war over Ukraine by Mira Barič, and an article on one of the Zeros from the Weekend A6M3 Model 32 kit in 48th scale, released in August, written by Ryan Toews. Boxart Stories are devoted to the events on the box images of the ProfiPACK Bf 109F-2 in 1:72nd, the Weekend Bristol Fighter 1:48th, and also Weekend Spitfire Mk.Vc , also in 1:48th.

And that's all from me for today. I look forward to seeing you at E-day in Milovice, if possible, on the evening of Friday, September 22. The main guest of the evening will be Slávek Goldemund and we will be reminiscing about the good ol' Kovozávod Prostějov company from Prostějov, and you can bet your bottom dollar that it will be a blast!

Happy Modelling!
Vladimir Sulc

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Messerschmitt Bf 109 K-4

Text: Vladimír Šulc, Jan Bobek

Photo: JaPo

Bf 109 K-4 "White 2" from 9./JG 77 with early camouflage on the upper surfaces. The aircraft was photographed in Neuruppin in November 1944.

No other aircraft is as intimately connected with the rise and fall of the German Luftwaffe in the course of the WWII as the Messerschmitt Bf 109. A very progressive design at the time of its invention, it had plenty of room for further development, which culminated in form of the Kurfürst version.

The history of the Bf 109 began at the end of March 1933, when the Reich Ministry of Aviation formulated specification L. A. 1432/33 for the development of a single-engine monoplane fighter. The competition to supply the new fighter was entered by Arado, Heinkel, Focke-Wulf and Bayerische Flugzeugwerke. The last mentioned included as its technical director Willy Messerschmitt, whose reputation was greatly strengthened by the success of his Bf 108 courier aircraft, completed not long before. Messerschmitt's goal was to create an aircraft with the best possible power to overall weight ratio and to focus on the size of the machine. The result was a low-wing aircraft with subtle aerodynamic shapes and progressive design elements, such as an all-metal structure, retractable landing gear, slots, flaps, a closable canopy and a shell structure making up the fuselage. Thanks to this, Messerschmitt's Bf 109 somewhat surprisingly won the competition over the designs of more renowned competitors.

The first combat deployment of three test Bf 109s took place during the Spanish Civil War in

Photo: JaPo

Bf 109 K-4 WNr. 330 255 "Black Chevron" Stab III/JG 27 at Wunstorf in May 1945 with early style camouflage on the upper surfaces.

Photo: JaPo

Bf 109 K-4 WNr. 332 455 with late style camouflage on upper surfaces at Munich-Schleissheim in May 1945. Note the propeller cone in factory paint without the white spiral.

December 1936. Units of 2.J/88 Legion Condor gradually gained valuable combat and tactical experience with the developmental versions of the Bf 109 B-1 to the E-1, in which the original and problematic Jumo 210 engine was replaced by the modern inverted V twelve-cylinder inline DB 601. Together with the later DB 605, it powered several tens of thousands of produced 109s in more than twenty-five versions and subtypes.

Bf 109 E

Introduced into Luftwaffe service in 1939, the Bf 109 E was fitted with the new Daimler-Benz DB 601 engine, driving a VDM-9 three-blade variable pitch propeller. Production of the E-1 with four 7.9mm machine guns and the E-3 with two of these machine guns and two MG-FF 20mm cannons, ran in unison from the beginning of 1939. Thus, the Luftwaffe entered World War II armed with the most modern and powerful standard single-engine fighter in the world, forming the backbone of its units until the spring of 1941. The invasion of Poland, through the Sitzkrieg on the Western Front, the invasion of Norway, the Battle of France to the Battle of Britain, the Bf 109E ensured the technical and tactical superiority of the Luftwaffe over its opponents. After the Battle of Britain in the autumn of 1940, however, it became increasingly clear that the time was ripe for change.

Bf 109F

This arrived in the form of the Bf 109 F, the development of which began as early as the fall of 1938. It was designed for the new DB 601 E engine with an estimated output of 1,350 hp, compared to 1,100 hp of the DB 601 A engine. As a result of the work of the design team led by chief designer Robert Lusser, it was significantly innovative both technically and visually, and also brought about a change in the concept of installing offensive weapons, when the two MG FF cannons installed in the wing were replaced by a fuselage cannon, located between the engine cylinders and firing through the propeller hub. The first production version, the Bf 109 F-2, powered by the DB 601 N engine and armed with a 15mm MG 151/15 fuselage gun and two 7.92mm MG 17 machine guns above the engine, began to arrive at units in the spring of 1941. The more powerful Bf 109 F-4, powered by a DB 601 E engine and armed with a 20mm MG 151/20 cannon, was introduced into service in the summer of 1941.

Bf 109G

Further development was associated with the new DB 605 A engine with a power output of ,1454 hp, which was the basis of the Bf 109 G series. The first version of the Bf 109 G-2 had only minor technical improvements over the Bf 109 F-4, apart from the more powerful engine, and had the same armament, as did the subsequent Bf 109 G-4, produced from December 1942. The Bf 109 G-2 gradually replaced the Bf 109 F with combat units during the second half of 1942, and in early 1943 they were replaced by the Bf 109 G-4. In following version of the Bf 109 G, the dash 6, the development was represented mainly by an armament upgrade by replacing the MG 17 machine guns with more powerful MG 131 13mm weapons. Thanks to higher engine output, all Bf 109 Gs used under-wing gun pods housing MG 151 cannons. Production of the Bf 109 G-6 began in February 1943 and ended in December 1944. Due to the long production period, there were a number of technical issues with the individual series changes that, among other things, were reflected in the external appearance of the aircraft, mainly by the introduction of a new cockpit canopy and a more efficient higher rudder. The G-6 was followed by the Bf 109 G-14 powered by the DB 605 AM engine, using 100 octane C3 fuel. With the use of the MW 50 system that injected a mixture of methanol and water into the engine cylinders, power output could be boosted to 1,775 hp for a short time. Production of the Bf 109 G-14 began at the Erla works in Leipzig in July 1944 and ended in March 1945.

Bf 109 G-6/AS and G-14/AS

The replacement of the Bf 109 with more modern fighters, anticipated for 1944, did not happen before the end of the war. The Bf 209 under development failed and the project was terminated. The Fw 190 A entered service as early as 1941, but it was complex and expensive to manufacture, so it was always in short supply. Compared to the Bf 109 G, it also had worse performance at higher altitudes. In August 1943, at a meeting at the Reich Ministry of Aviation (RLM), as part of the measures to ensure the defense of the Reich, it was decided to continue the development of the Bf 109 into the Bf 109 K variant. It was assumed that the developed DB 605 D engine would be used to power the K, and a 30mm MK 103 or MK 108 cannon would be its armament. One of the requirements for the new Bf 109 K stipulated the use of wood and steel in the construction of the aircraft.

Photo: JaPo

The wreckage of a Bf 109 K-4 with late-style camouflage at Rheine airbase at the end of the war. Note the lower tail section painted a lighter color, indicating parts delivery from another subcontractor.

However, there were also delays in the development of the Bf 109 K. It was therefore decided to install the DB 605 D engine in the airframe of the Bf 109 G-14, creating the Bf 109 G-10 as a transitional type between the G-14 and the K-4. However, the development of the DB 605 D engine was not immune to delays either, necessitating the use of the DB 605 AS engine as an emergency measure, which followed a similar development path by installing a more powerful compressor. Its integration into the Bf 109 G-6 and G-14 airframes created a powerful machine that ensured a continuous increase in the performance of the Bf 109. The first Bf 109 G-6/AS began to leave the Messerschmitt factory in Regensburg in April 1944, and in July, the Erla company started in Leipzig to produce the Bf 109 G-14/AS. The advantage of these Bf 109 G-6/AS and G-14/AS was the possibility of using older airframes of the Bf 109 G series for conversion to more powerful versions by installing the DB 605 AS engine. As a result, a total of 686 Bf 109 G-6/AS were produced, of which only 226 were new builds, the rest were conversions from the original G-6.

Photo: JaPo

A Bf 109 K-4 "Black 1" with the late style III./JG 51 camouflage pattern at Rønne, Denmark in May 1945. The right side of the engine cowling of this machine used part of the Bf 109 G cowling.

Photo: JaPo

A Bf 109 K-4 from late in the war with a fuselage probably painted in shades of RLM 81 (dark brown) and RLM 82, pictured in Salzburg, Austria. The yellow markings on the rudder and engine cowling were introduced by Luftflotte 4 in March 1945.

Bf 109 G-10

In the summer of 1944, deliveries of the DB 605 D engine with a barometric automatic control system of the compressor speed dictated by altitude began. These engines came in two main versions, the DB 605 DB for the use of 87 octane B4 fuel, and the DB 605 DC, powered by 96 octane C3. The Erla factory in Leipzig had a Bf 109G-10 airframe ready for this engine, which started their production as early as September 1944. Most of the machines built at Erla were of the Bf 109G-10/R-6 version, equipped with a PKS 12 autopilot and additional aids for night and adverse weather flying, and as such, most of them were delivered to single-engine night fighter units operating within the Wilde Sau free pursuit system. The WNF/Diana factory produced the Bf 109 G-10/U4 version from December 1944, armed with the 30mm MK 108 engine mounted cannon. Out of a total of about 2,600 Bf 109 G-10s produced, about 1,700 were by Erla, 800 by WNF/Diana, and only 123 came from Regensburg between October and December 1944. This was because production of the first batch of 386 Bf 109K-4s in the 330xxx series had already started there in August 1944.

Bf 109 K-4

Based on the conclusions of a meeting at the RLM on August 9, 1943, preparatory work was underway on the design of the Bf 109 K-1 and K-3, equipped with a pressurized cockpit, and the Bf 109 K-2, a standard fighter aircraft, powered by the DB 605 D or DB 605 AS engine, armed with a MK 108 engine mounted cannon of 30 mm caliber and two 13mm MG 131 machine guns. After another series of meetings between General Milch and Minister Albert Speer and their teams in March 1944, there was a reassessment of priorities in the development and production of new aircraft. After the resumption of Allied air attacks in February 1944, aircraft production in Germany fell sharply. In response to the new situation, the Jägerstab was created under the leadership of Otto Saur, which had the task of adapting the production of fighter aircraft to the conditions of intensive air attacks on German industrial capacity and infrastructure. A 72-hour work week was introduced, the dispersion of production capacities into forest and underground factories began, and a number of other partial measures were taken to solve the resulting crisis. In June 1944, aircraft production was concentrated only on fighters, and the plan from July 1944 counted on the monthly production of 500 Bf 109s. Production was to focus on the piston engined Fw 190 D, Ta 152 and the jet powered Me 262. However, the start of production of new types was slow and production continued of the proven Bf 109 G-14/AS, G-10 and, from autumn 1944, the Bf 109 K-4. The Jägerstab, whose tasks were taken over by the Technical Department of the Ministry of War Production in August 1944, still under the leadership of Otto Saur, managed to bring aircraft production in Germany to a record level of 3,375 newly produced and another 1,500 refurbished machines in September. It should be mentioned, however, that it was at the cost of the lives of thousands of fully committed workers from occupied countries, concentration camp prisoners and prisoners of war, mainly Soviet. At the same time, September saw the resumption of the Allied bombing offensive against Germany, interrupted in June 1944 due to the involvement of Allied strategic air forces in supporting the Allied landings in Normandy. The escalating bombing offensive

Photo: Jeffrey Ethell Collection

Original color photograph of the wreckage of aircraft at Kaufbeuren Airport, Germany. In the center rear is a Bf 109 K-4 "Black Chevron 1" from Stab III./JG 53. Lt Ernst-Dieter Bernhard crashed this aircraft on April 19, 1945. Note the colors RLM 74 and 75 on the fuselage, the vertical stripe of III. Gruppe and also the black identification band of JG 53. On the left side you can see Bf 109 G-10 "Yellow 2" KG(J) 27 with the white and green checkerboard stripe.

gradually continued to complicate all German war production.

It was under these conditions that the development and start of production of the Bf 109 K-4 took place. As a result of the events described above, further development of the K-1, K-2 and K-3 versions was halted and development, under the leadership of Product Chief Ludwig Bölkow and Chief Designer Richard Bauer, was concentrated exclusively on the newly conceived K-4 version. Negotiations were held on the continuation of its development in the spring of 1944, but the aforementioned circumstances led to the decision to introduce production of the Bf 109 K-4 as a stopgap fighter until the arrival of new types. Even the development of the Bf 109 K-4 was not without problems, leading to the development of the Bf 109 G-14/AS and Bf 109 G-10 as indicated earlier, but one must take into account the extremely complex situation in which these decisions were made and implemented.

The final concept of the type was approved in June 1944. The Bf 109 K-4 was to be powered by a 1,775 hp DB 605 D engine, armed with a 30mm MK 108 cannon and two 13mm MG 131 machine guns. The propeller was a three-bladed, variable pitch VDM-9-12159A. A number of components associated with the engine installation were carried over from the Bf 109 G-10 out of the Regensburg factory, including the large Fö 987 oil cooler and the engine cowling. The use of non-deficit (Ersatz) materials was still considered, but the original idea of an all-wooden wing was abandoned due to the technological limitations of wood, and the wing remained all-metal. The tail part of the fuselage and some small details were made of wood, some of the longitudinal members of the fuselage were made of steel. The layout of the cockpit was revised, which was made more efficient with a new side panel and a new oxygen system. Armor plating was also modified. The sight was the standard Revi 16B, but some later machines apparently received the modern gyroscopic sight EZ 42. A significant change in the wing was the strengthening of the landing gear, the introduction of mechanical landing gear position indicators on the upper surface of the wing, and above all, the retractable outboard landing gear covers which, together with the retractable tailwheel, were supposed to contribute to improvement of the aerodynamics of the aircraft and thereby increase the maximum speed. These covers were closed by the wheel exerting pressure on a mechanical lever when retracted. The tires were sized at 660 × 190 mm, which necessitated the creation of large oblong bulges above the landing gear well, the same as the WNF/Diana production Bf 109 G-10/U4 and some Erla production machines. The right wing also housed oxygen cylinders, while the left wing contained space for the GM-1 pressure bottles that some machines were equipped with. However, the standard equipment was the MW 50 system, the placement of which in the fuselage was adjusted so that the container no longer required the battery to extend into the rear wall of the cockpit and did not require a protruding cover, as with the Bf 109 G-14 and G-10 versions. The radio equipment was identical to the G-10, but the wire antenna in most machines did not have a mast on the cockpit canopy or behind it but was led directly into the fuselage on top of the second fuselage segment. The location of the equipment in the fuselage, the radio itself and related components, including the compass, underwent a change. The inspection hatch on the left side of the fuselage, which was used to access both the radio equipment and the compass, was also relocated.

Due to the rush and the overall critical war situation, the development of the aircraft took place in a nontraditional way. Classic prototypes were not built, and test aircraft were taken right off the already running production line. Thus, some technical issues were identified at a time when they were already in production and the aircraft were delivered with them to combat units. Understandably, difficulties flowed from this setup. For example, there was insufficient rigidity in the locking mechanism of the tailwheel, which tended to loosen on its own when the aircraft was moved, which led to the unexpected retraction of the unit. Therefore, the tailwheel was often locked in the down position and the wells were permanently blanked off. This resulted in cases in where the position of

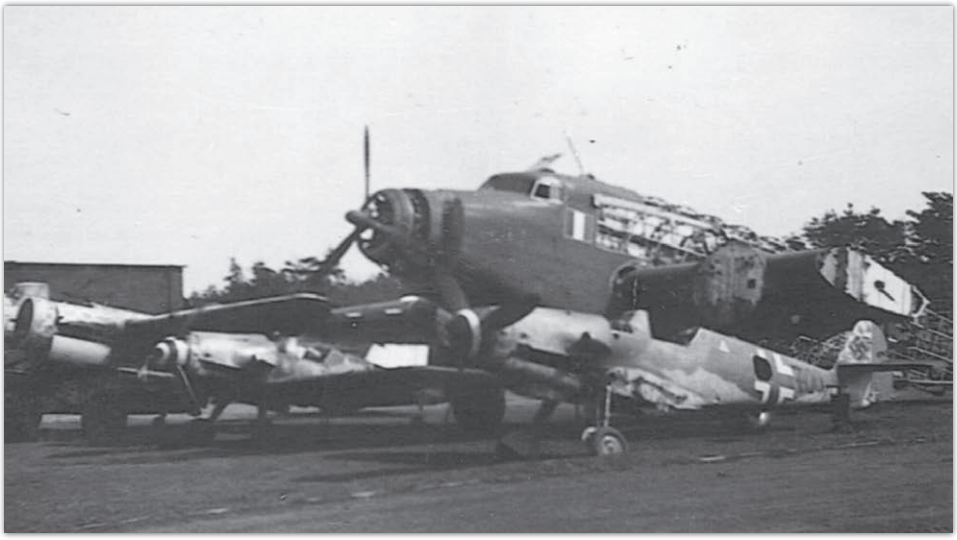

Photo: SDASM

A photograph of Wunstorf airfield from May 1945 showing two Bf 109 K-4s with different camouflage patterns. On the left is WNr. 330 255 "Black Chevron" Stab III./JG 27 with early style camouflage and on the right is WNr. 332 700 with late style camouflage.

the tailwheel differed, and three configurations can be found. There were also problems with the outer covers of the main wheel wells, and they were often removed. This rendered these aerodynamic features useless, and the Bf 109 K-4 reverted to the undercarriage configuration identical to the older versions of the Bf 109. There were also difficulties with the MK 108 cannon operation, which was already an established phenomenon. The cannon carriage, including the mounting points in the fuselage, was therefore designed to allow an alternative installation of the proven MG 151/20 cannon available in sufficient quantity.

Despite the deteriorating supply situation and the pressure of the Allied bombing offensive on production and logistics, the production of the Bf 109 K-4 began more or less successfully during the autumn and winter of 1944, and continued into early 1945, together with the production of other types of fighter aircraft, mainly the Fw 190 of various versions and especially the Me 262. Production continued until March 1945, when under the pressure of Allied advances on all fronts, relentless bombing and the intensifying chaos that it brought with it, the disruption and general lack of material and food, it gradually ground to a stop. The deliveries of fighter jets to combat units continued during April, both from OKL warehouses and from repair companies. It must be added that the Luftwaffe never had a shortage of aircraft during the war, until its final days. The big problem was the gradually increasing shortage of well-trained pilots from about the middle of the war and especially, in the last year, the lack of fuel. Both of these problems were related to the Allied bombing offensive, which from the beginning of 1944 concentrated on the liquidation of the fuel industry and the elimination of communication hubs. By the second half of 1944, this led to a sharp drop in fuel stocks for all armed forces as well as for industry and transport. The destruction of communication hubs, especially large railway stations, further aggravated this problem, and caused interruptions in the supply of all raw materials and semi-finished products from scattered production enterprises to factories and military repair centers, where equipment was assembled. As a result, there was a reduction in fuel supplies for non-combat units, including training centers, which eventually had fatal consequences for the quality of training of new crews of any combat equipment, not only aircraft. Logically, it also had an effect on the operational capabilities of combat units. Nevertheless, the German armed forces remained fully combat-ready until the first days of May 1945. However, it must be remembered that this German tenacity came at the enormous cost of life of both soldiers and civilians in the last year of the war. It is a little known fact that half of all loss of life on the European battlefield between 1939 and 1945 occurred in the last year of the war, from the Allied landings in Normandy to the unconditional surrender of the German armed forces on May 8, 1945. That amounted to millions of human lives lost.

Photo: SDASM

Allied soldiers at Wunstorf in the second half of 1945 in front of a Bf 109 K-4 WNr. 332 700. The machine shows late style camouflage and simplified crosses on the lower wing surfaces. WNr. 330 255 "Black Chevron" from Stab III./JG 27 is seen in the background with early style camouflage and black and white crosses on the lower surfaces.

Bf 109 K-4 Combat Use

Messerschmitt Bf 109 K-4s began to be delivered to combat units in October 1944, and until the end of the year these aircraft were allocated to units on the Western Front. III./JG 27 and III./JG 77 were the first fighter units to upgrade to the new version of the 109. For a number of months, they were the only Jagdgruppe that had Bf 109 K-4 machines in large numbers. In smaller numbers, the K-4 version appeared in II./JG 2, III./JG 3, I., III. and IV./JG 4, II./JG 11, III./JG 26, I. and II./JG 27, II./JG 53 and I./JG 77. These units simultaneously used the Messerschmitt Bf 109 G, often even in several versions. However, few of these were placed under Luftflotte Reich command for the defense of key targets against four-engine bomber formations. Most of them were tasked

Chrudim airport in liberated Czechoslovakia. On the right behind the Fw 190 F fighters are two Bf 109 K-4s from the armament of III./JG 77, which operated from Dolní Benešov in the Hlučín region at the end of the war.

Photo: PhDr. Miroslava Holubová, Memory of the Nation

with combating Allied ground attackers and medium bombers. The new year of 1945 brought heavy losses to the Germans in the Operation Bodenplatte, both in terms of equipment and in the ranks of experienced veterans. Another blow to the Luftwaffe was the Soviet Vistula-Oder operation, which began in mid-January 1945. The German command in the east hastily relocated a number of units, including ones equipped with Bf 109 K-4s. In the following months, K-4s also reached units deployed on the Eastern Front for many years, such as Stab, III. and IV./JG 51, or Stab, I. and III./JG 52 in Silesia. In the last weeks of fighting against the Red Army, the unique Karl version also entered service with II./JG 52 and Stab JG 6.

The only unit that had Messerschmitt Bf 109 K-4s in the Luftflotte Reich (part of the Reichsverteidigung) from the beginning of 1945 was IV./JG 300. Later, its sister unit III./JG 300 also received a few Ks. This version of the Bf 109 also entered the arsenal of bombing units converted to fighter units. These were II./KG(J) 6, II./KG(J) 27 and II./KG(J) 55. If these formations came into contact with the enemy, they usually suffered fairly significant losses.

On the Western Front, from the beginning of 1945, the Bf 109 K-4 gradually came into service with III. and IV./JG 53, while in April 1945, they already represented a significant part of their flight fleet. Rare specimens of the K-4 version also reached the night fighter unit I./NJG 11. The Bf 109 K-4 machines were also part of the equipment of the Sonderkommando Elbe, which was organized for a mass attack against formations of four-engine bombers. The pilots were supposed to crash into enemy aircraft and then take to their chutes. The unit's only deployment took place on April 7, 1945 and did not meet with significant success.

One of the last aerial victories of the Luftwaffe was scored by a pilot of a Bf 109 K-4. After an emergency scramble on May 8, 1945, at 11.00 from the base at Žatec (Saatz) in Bohemia, Uffz. Eugen Maier of 14./JG 300 shot down a low-flying Soviet twin-engine aircraft, probably a Pe-2.

In Foreign Service

It is not known if the Bf 109 K-4 was used by the Royal Hungarian Air Force (MHKL) or the volunteer units of the Russian Liberation Army (ROA). However, they found their way into the air units of two other air forces that stood by Hitler's Germany.

The fighter units of the National Republican Air Force (ANR) in northern Italy were the only Axis units operating fighter aircraft on this battlefield since the autumn. These were I° and II° Gruppo Caccia, which were equipped with the Messerschmitt Bf 109 G-6, G-14 and G-10. Three Bf 109 K-4s at the end of February 1945 were received by I° Gr. C., specifically its 3ª Squadriglia at the base at Malpensa. Another three Bf 109 K-4s were acquired in April by 6ª Sq., which belonged to II° Gr. C. at Maniago Airport. The third fighter unit of the ANR, III° Gr. C., was in the middle of organizing at the end of the war. Before the end of the war, on April 22, the ANR had only three Bf 109 K-4s in service. Two were located at staff headquarters of Io Gr. C. and one was with 6ª Squadriglia. The remaining three machines were lost in combat with American airmen.

A little known fact is that the Bf 109K-4 entered service with the Air Force of the Independent State of Croatia (ZNDH). Even with the approaching end of the war, Germany continued to provide its Croatian ally with aircraft technology, so in February 1945, in addition to ten Bf 109 G-6, G-14 and G-10 airframes, the 2. ZLJ also took over four examples of the Bf 109 K-4. However, two of them were damaged on February 20 when landing in a blizzard at Lučko Airport. Another three K-4s were received by the 2. ZLJ during April. One of them, delivered on April 23, was hidden near Borongaj airport by supporters of Tito's army from among the ZNDH. Croatian aircraft participated in the fighting around Zagreb until May 6, 1945, and ZNDH pilots came into conflict with American and British fighters. The Bf 109 K-4 hidden at Borongaj was tested in the air in mid-May by a Yugoslav pilot, Lt. Boris Cijan. According to his memoirs, the machine was marked with red stars. Apparently another pilot made an emergency landing with the same plane a few days later. There are no records of further post-war use of the Bf 109 K-4 in the Yugoslav Air Force.

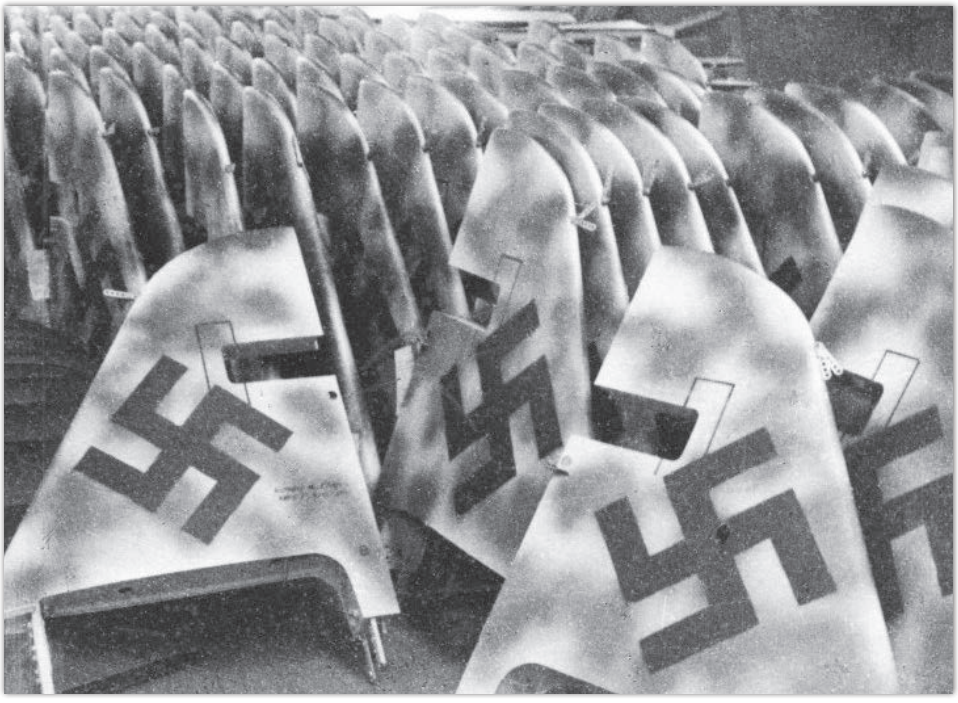

Photo: Goskatalog

A warehouse of parts for the tail surfaces of the G and K versions of the Bf 109, found by the Red Army in Strasbourg, West Prussia, in early 1945. These were produced in the system of the decentralized aircraft industry.

Bf 109K-4 Schemes

The coloring of the Bf 109 K-4 is among the most popular topics among modelers and aviation researchers who deal with the history of the Luftwaffe. Unfortunately, documentation specifying the fields of camouflage colors and the identification of their shades as they pertain to the Bf 109 K-4 has not survived. When reconstructing the coloring of individual machines, it is therefore necessary to start from black-and-white and limited color photographs and also take into consideration the situation the manufacturer and various subcontractors found themselves in at the time.

The vast majority of Bf 109 K-4s were manufactured by Messerschmitt GmbH based in Regensburg. The production of structural assemblies took place at three plants, and their final assembly was carried out in three other locations. Subassemblies were painted with camouflage colors at the subcontractor level, so that a given aircraft could have, for example, a wing colored differently than the fuselage after final assembly.

So far, only one aircraft is known from the small series of Bf 109 K-4 aircraft produced at the Erla factory from the spring of 1945 (WNr. 570xxx). One documented piece probably carried a dark green camouflage on all surfaces and had the engine cowl shape characteristic of the Erla factory Bf 109 with the DB 605 D engine. Due to design differences, this variant is not included in this kit.

The K-4 version from the first two production blocks (WNr. 330xxx and 331xxx) were painted in a similar manner to the Bf 109 G-14, G-14/AS and G-10 aircraft that Messerschmitt Regensburg produced in parallel with the K-4. These Bf 109

Photo: Goskatalog

Among the aircraft that Soviet photographer V. P. Grebnev captured after the occupation of Finow airfield in Germany, was a Bf 109 K-4 "Yellow 4" from III./JG 3. The design of the digit 4 suggests that this could be the aircraft flown by Fw. Hans Strebel of the 11. Staffel.

K-4s are highly likely to have been finished in an RLM 76, 75 and 74 camouflage and had light colored fuselage sides.

The other K-4 blocks (WNr. 332xxx and 333xxx) usually had a camouflage scheme with large fields of dark colors on the fuselage. From the color photographs as well as the color contrast in the black and white photographs, it is evident that a number of these aircraft continued to be camouflaged with RLM 74 and 75 on the upper surfaces.

However, there are also later series aircraft that carried colors similar to the Bf 109 K-4s from the two initial ones. One possible explanation is that the delivery of the subassembly units was delayed for final assembly, and they were allocated a higher serial number.

Bf 109 K-4 aircraft that were painted with a combination of RLM 81 and 82 on the upper surfaces were quite rare. In addition, the RLM 81 was produced in two versions. Simply put, it was a dark brown and dark green variant. The reason was that there were two formulas with a significantly different composition of raw materials, which was related to the critical state of Germany's supplies in the last year of the war.

When the new shades were introduced into production, the aircraft manufacturers were instructed to use up the stocks of old paints, and in the case of the Bf 109 K-4, these were the gray shades of RLM 74 and 75. However, the composition of these colors changed in 1944 thanks to a new formula, so that these shades were darker when compared to 1941 produced paints, for example. So one aircraft could have a fuselage painted with lighter colors made with the older formulas and tail surfaces from another subcontractor could be painted with the darker 1944 shades. RLM 81 and 82 colors were allowed as older paint stocks were used up in combination with other shades. For example, there could have been aircraft painted RLM 81 and 75.

Paint manufacturers worked under extremely complicated conditions, both in terms of logistics and the quality of raw materials. The shades of colors from their production could therefore differ even for the same manufacturer. This can also explain the different variants of the grey-blue color, which is documented in photographs and remains of German aircraft from the end of the war. As a cost saving measure over the final year of the war, paint was gradually omitted on the lower surfaces, aside from the key components that needed to be protected, for example the canvas-covered surfaces continued to be painted with camouflage paint.

When preparing our color schemes for the kit No. 11177, we worked closely with Mr. Tomáš Poruba (JaPo Publishing), and we incorporated the latest findings from research of the development of the Bf 109 K-4 color schemes. When reconstructing the coloring of individual aircraft, we took into account not only their photos, but also photos of other machines of the relevant production series, the approximate time of their production and the customs prevailing at the time in production, relevant regulations and other known facts. We are aware that there are also other interpretations of the coloring of the planes depicted by us. You are certainly free to follow your own research and findings if our presentation does not quite suit you.

We would like to thank Mansur Mustafin and Tomáš Poruba (JaPo) for their invaluable help with the article.

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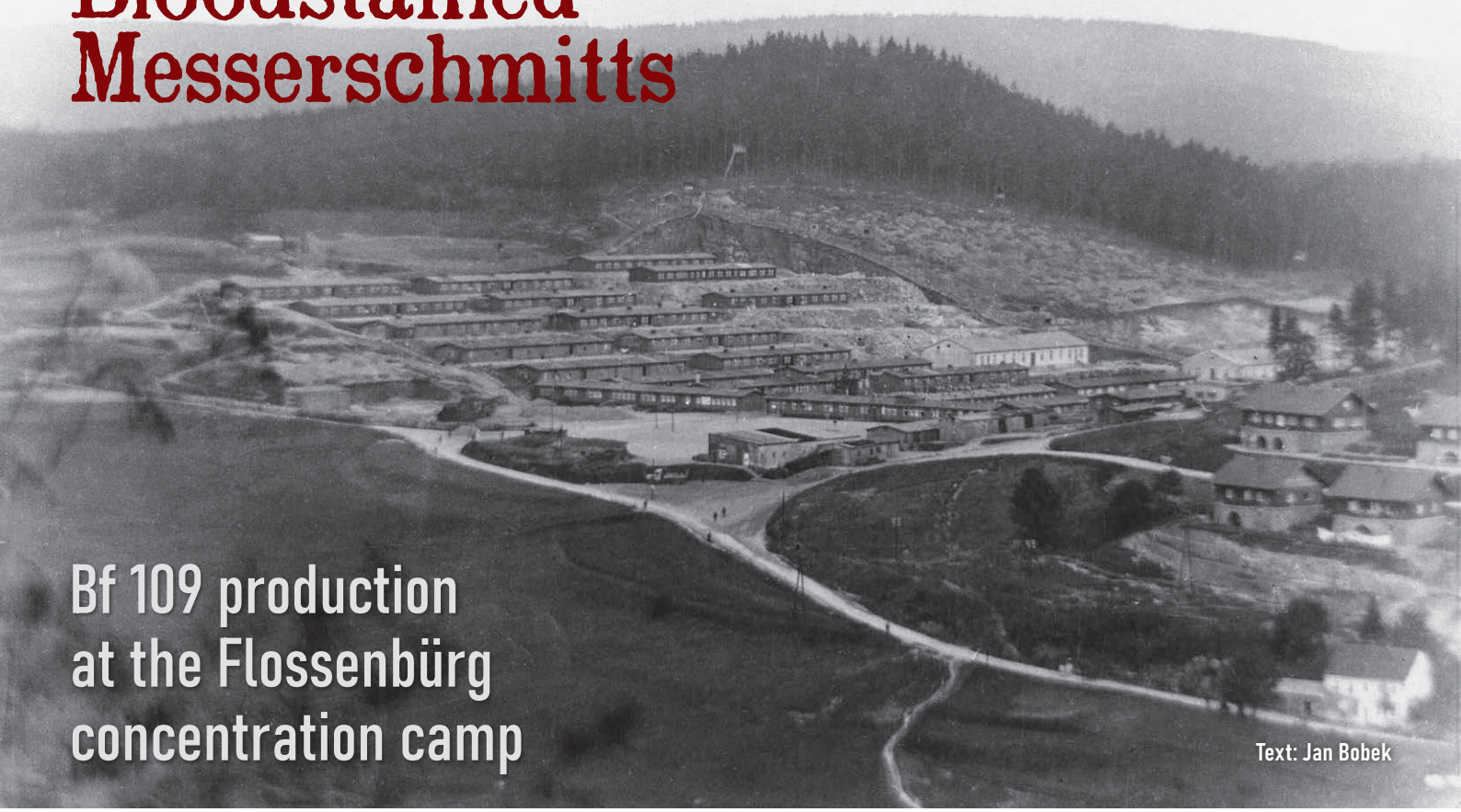
Bloodstained Messerschmitts

Photo: Flossenbürg Memorial



Bf 109 production at the Flossenbürg concentration camp

Text: Jan Bobek

In this 1940 photograph of Flossenbürg, the proximity of the concentration camp quarters to the citizens' homes is clearly visible.

The war industry in the Third Reich did not function only thanks to corporate employees and forced labourers from the occupied territories. A huge part of the production work was provided by prisoners working in slave-like conditions in concentration camps where they died of starvation, exhaustion, hypothermia, disease or were murdered by the Nazis. This criminal machine included the production of Messerschmitt Bf 109 fighters and it is a subject that is neglected by most aviation historians. This article does not aim to cover the entire scope of the Nazi genocide, which gradually targeted political opponents of Hitler's regime, religious groups, physically or mentally disabled people, homosexuals, members of the resistance, Jews, Roma and Sinti, Poles, citizens of the Soviet Union and other Slavs. The article focuses only on the human sacrifices in one part of the supply chain of an aircraft manufacturing plant. More than 70,000 inmates perished in the Flossenbürg concentration camp in the Upper Palatinate Forest and its sub-camps. Their tragic fate was the result of the inhuman exploitation of human beings, which the Nazis called "Vernichtung durch Arbeit", or "extermination through labour".

The first records of the Bavarian village of Flossenbürg date back to the 10th century. The castle was probably completed at the beginning of the 12th century and during the following two centuries it was in the possession of the Bohemian kings.

At the end of the 19th century, several quarries were established in the vicinity of Flossenbürg, where granite was mined. In 1938, the SS leadership decided to make economic use of the concentration camp system, until then, the camps had been used primarily for the internment and oppression of political prisoners. Building materials became a priority for the SS. That is why the Nazis started to build the concentration camp at Flossenbürg in the same year. The work was started by prisoners from the Dachau concentration camp. At the end of 1938, 1,500 prisoners, mostly Germans, were forced to work on its preparation, and over the next two years more than 300 of them died. In 1940, the first Jewish prisoner was assigned to Flossenbürg. From 1944 large numbers of Jewish, Polish and Soviet prisoners began arriving , mainly from the concentration camps at Auschwitz, Gross-Rosen and Plaszow.

At the beginning of the camp's production operation, 2,600 prisoners were exploited in the concentration camp, and the number of deaths was so great that the Nazis set up a crematorium on its premises. Twelve-hour work shifts were held in the quarry, and prisoners lived in oppression and humiliation under the constant threat of death by starvation, exhaustion, cold, injury, illness, or execution. They were given only one thin soup during their work shift. In mid-1939, 850 prisoners worked in the quarry, two years later, the number was already 2,000. Several dozen German civilian

Photo: Niederländisches Institut für Kriegsdokumentation via KZ-Gedenkstätte Flossenbürg

A picture of Flossenbürg inmates waiting for food to be served, the ruins of the castle can be seen in the background. The photograph was taken in approximately 1942. For eight years, the castle became the backdrop for the inhuman suffering and death of thousands of people.

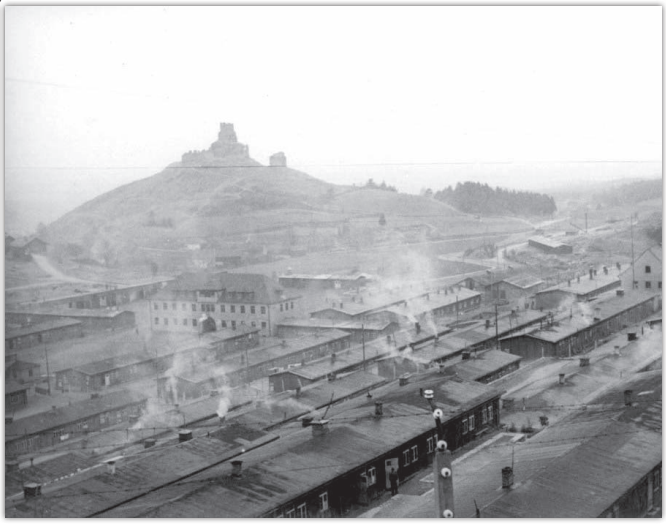


Photo: Amit Jerusalem Yad Vashem

Shot of the Flossenbürg concentration camp quarters with the ruins of the castle in the background.

workers, including construction apprentices, were in daily contact with them.

The command staff of the Flossenbürg concentration camp consisted of about 90 SS members. The SS-Totenkopf guard units numbered about 300 men in the spring of 1940. During the building of the 94 sub-camps that fell under Flossenbürg, their number grew to about 2,500 men and 500 women by 1945. After the beginning of the war, some SS members went to the front, so the command deployed older men, Luftwaffe soldiers, members of other nations and women as guards to the concentration camps. There any attempt to escape was punishable by death, and in 1941 mass executions began to take place.

Between 1938 and 1945, some 84,000 men and 16,000 women from more than 30 countries were imprisoned in the Flossenbürg concentration camp and its sub-camps, most of them Jews from occupied Europe, Soviet prisoners of war, and, after the Warsaw Uprising, a large number of captured Polish Home Army (Armia Krajowa) fighters. During the war, members of the SS were involved in more than 2,500 murders in Flossenbürg and its sub-camps. After the war most SSguards received no or little punishment for their crimes in Flossenbürg , often due to insufficient evidence or lack of direct witnesses to the murders.

The Flossenbürg concentration camp was unfortunately a significant economic factor in the region during the war. A number of local companies became its suppliers, and many of them borrowed prisoners for forced labour, mainly of a craft and agricultural nature. From 1942 onwards, prisoners were used in this way in the weapons industry, and in early 1943 a Messerschmitt factory based in Regensburg set up production facilities right on the concentration camp site. By the end of the war, 5,000 prisoners were already working in

Photo: Niederländisches Institut für Kriegsdokumentation via KZ-Gedenkstätte Flossenbürg

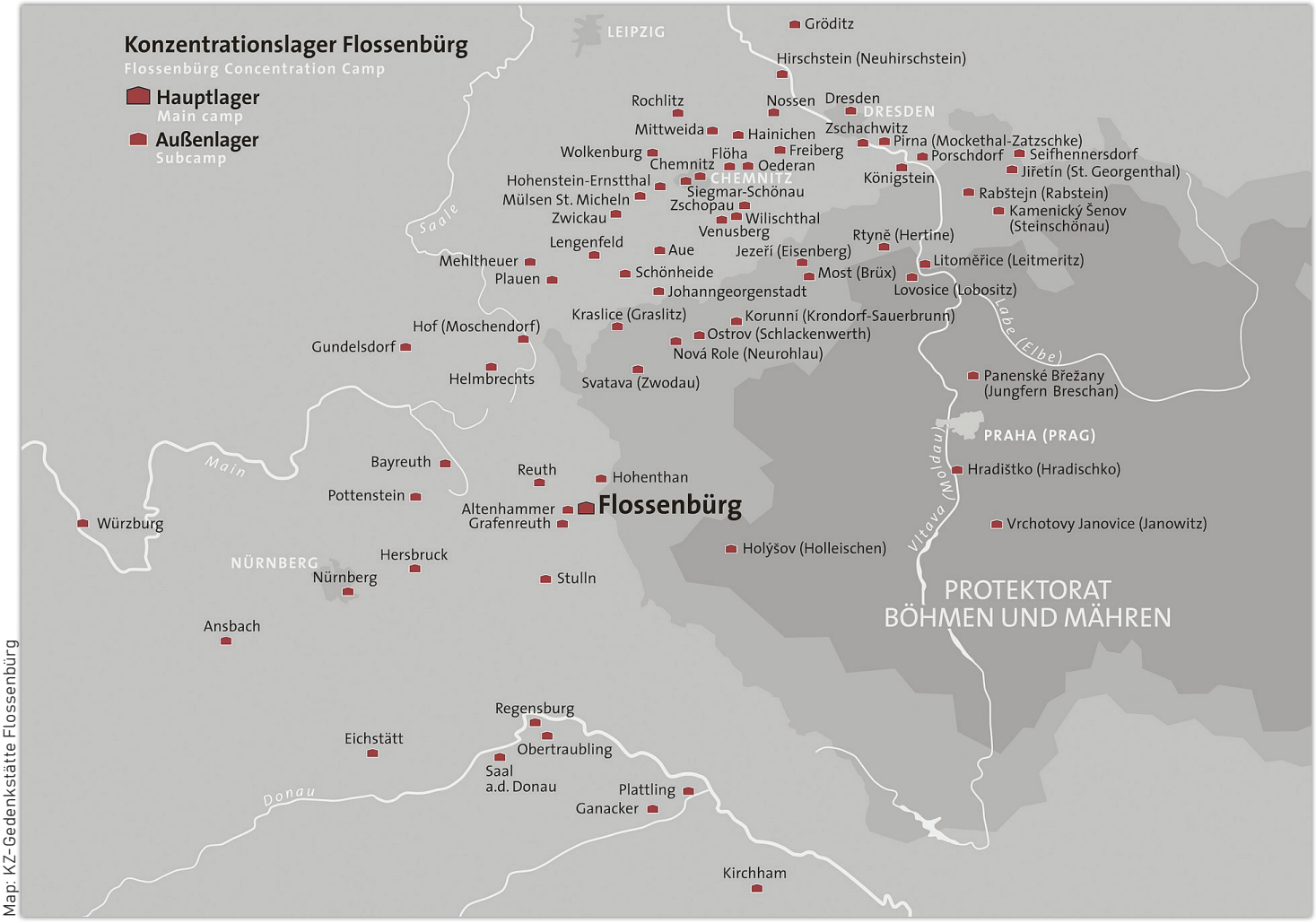
This photograph, probably taken in 1942, shows the slave labour of inmates in the stone quarry on the Flossenbürg site. During twelve-hour shifts in harsh conditions, many lost their lives due to exhaustion, accidents or execution.

In this aerial photograph of Flossenbürg from March 1945, the quarry can be seen on the left, the prison barracks on the right, and the main production hall for Messerschmitt Bf 109 aircraft can be seen in the top centre of the image.

Photo: Flossenbürg Memorial

Photograph of the main production hall at Flossenbürg, taken after liberation. It shows the fuselages of Bf 109 G of various versions and on the right, closest to the lens, is probably a Bf 109 K-4. The image shows that in addition to the production of parts for new machines, repairs were also carried out at Flossenbürg on aircraft that had passed through the air service.

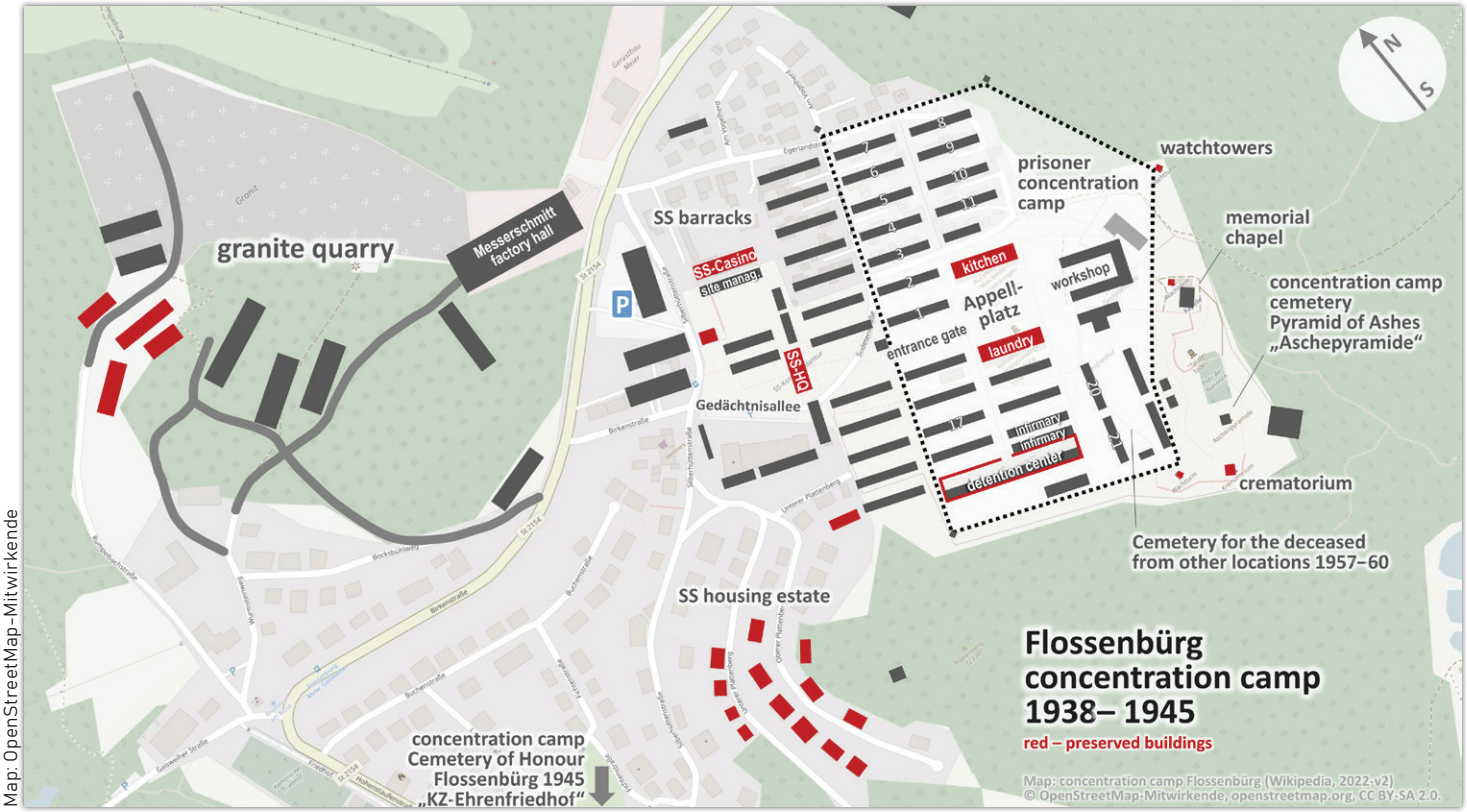
Photo: United States Holocaust Memorial Museum



Map: KZ-Gedenkstätte Flossenbürg

Map of some of the sub-camps of the Flossenbürg concentration camp according to the state of historical research as of September 2019.

Map of the Flossenbürg concentration camp from 2022. The red colour indicates the buildings that still exist.



Map: OpenStreetMap-Mitwirkende

the production process at Flossenbürg and its subsidiary camps, and work in the quarry was then minimised. At Flossenbürg, Messerschmitt produced fuselages and wings for the Bf 109 G and K. Production ran continuously in three eight-hour shifts. The final assembly of sub-deliveries from this concentration camp was carried out in an assembly plant hidden in the woods (Waldwerk) in Vilseck, with test flights and handovers carried out at Amberg-Schafhof airfield.

In mid-1944 due to the Allied advance, the SS began to clear the concentration camps , leading to an increase in mass murders and huge prisoner transports. At Flossenbürg, the number of prisoners gradually increased from 3,300 at the end of 1943 to 8,000 a year later. By the end of the war, nearly 15,000 people were confined there.

The largest number of prisoners at Flossenbürg died in the last year of the war, especially from the winter of 1944 onwards. The prisoners were crammed into quarantine blocks of 1,500 people each, and those who were unable to work for Messerschmitt or other companies in the subsidiary camps were sent to the dying blocks.

By the spring of 1945, the supply situation had deteriorated dramatically due to the disruption in transportation and general chaos in the shrinking territory of the Nazi Third Reich. There was essentially a famine in the concentration camps, which worsened the already dire situation of the prisoners. The Nazi command, which wanted to keep the situation in the camps secret, made no effort to stabilize or improve the supply of prisoners. The consequences of the last months are known from film footage and photographs of malnourished prisoners or their remains, taken by Allied soldiers and reporters in the liberated camps.

At the beginning of April 1945, the Flossenbürg concentration camp and its sub-camps began to be closed down. The SS took 40,000 people from the main camp and the branch camps to cover their tracks. Unfortunately, April 1945 was accompanied by harsh winter weather in this part of Europe. Just before the end of the war, therefore, thousands of prisoners died needlessly in transports, death marches and executions. In the last weeks of the war, Jewish and Christian clergymen, and the former head of the Abwehr, Wilhelm Canaris, also lost their lives in Flossenbürg.

When members of the 3rd Battalion, 358th Infantry Regiment, U.S. 90th Infantry Division arrived at Flossenbürg on April 23, 1945, they found 1,160 prisoners in this horrible place. The unit's diary also mentions the seizure of the Messerschmitt 109 aircraft factory. Of the approximately 100,000 people imprisoned at Flossenbürg and its sub-camps, more than 70,000 did not live to see the end of the war. More than 21,000 prisoners lost their lives at Flossenbürg itself.

Only fifty-one guards and camp staff were indicted after the war, fifteen were sentenced to death and eleven received life imprisonment. Thirteen of the convicts were executed. In other cases, shorter sentences were given, but by 1957 all the convicts were released.

In 2007, the first of several sections of a memorial commemorating the victims of this terrible period of history was opened on the site of the former concentration camp.

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United States Holocaust Memorial Museum

Photo: JaPo

The fuselages of Bf 109 K-4 aircraft photographed by American soldiers at the Flossenbürg train station in April 1945. In the rear right, part of the village behind which the concentration camp was located can be seen, and the ruins of the castle that has dominated the local landscape for centuries can be seen on the horizon.

Photo: US Army Signal Corps

When the first American soldiers arrived in snow-covered Flossenbürg camp on April 23, 1945, they were greeted by this banner.

Photo: Yad Vashem

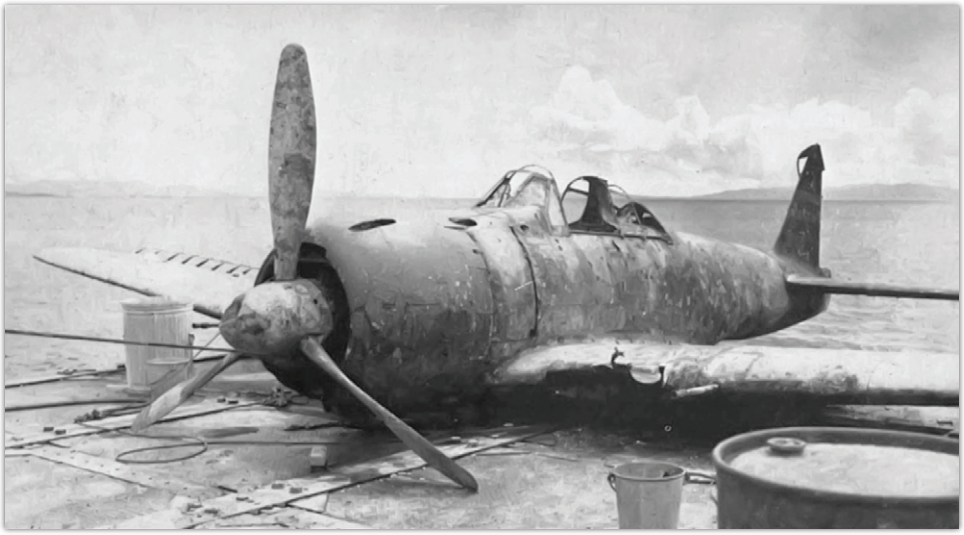
A picture of inmates who were lucky enough to live to see the liberation of Flossenbürg.

Photo: US Army Signal Corps

A photograph taken on May 3, 1945, showing local German civilians exiting the main gate of Flossenbürg concentration camp with the bodies of deceased inmates for burial.

IDENTIFYING A ZERO

A6M3 32 m/n 3305 from 204 Kōkūtai



Text: Ryan Toews

Most of the aircraft lost during the fighting in the Pacific, whether Japanese or Allied, will remain forever in the ocean waters or impenetrable jungles. Some, however, were recovered while the war was still in progress for the purpose of examining enemy technology. One such was Zero with manufacturing number 3305.

In May of 1944 Army-Navy Crash Intelligence, South Pacific Area (ANCISPA) raised a wrecked A6M3 Type 32 from forty feet of water off Kolombangara Island. The report on this salvage operation was primarily concerned with the long-barreled 20mm wing guns found on this aircraft. This was one of the first wrecks recovered with this weapon and the report concluded that Japanese fighters were being equipped with a new high velocity cannon.[1] The salvaged Zero was reported to have the manufacturer number of 3305, which indicates a completion date of approximately 25 November 1942. A translated Japanese document states that from December 1942 half of the Zeros manufactured by Mitsubishi were to be armed with the long-barreled Type 99 Mark 2 20mm wing guns.[2] Thus A6M3 m/n 3305 must have been one of the first Mitsubishi Zeros so equipped.

Photos of the recovered Zero are also interesting in that they indicate that this A6M3 Type 32 was manufactured with an adjustable rudder trim tab. This substantiates a listing of production changes in the Zero in *Rekishi Gunzō No. 33*, which states that such a change was implemented beginning with A6M3 Type 32 m/n 3304.[3]

While the ANCISPA report does not mention any markings, photos of this plane can also be found in the collection of Michael Freeman. Freeman was a member of ANCISPA and wrote a memoir about his wartime service. Several of his photos illustrate the recovery of a Zero Type 32 with the tail code of T2 133 that clearly is A6M3 m/n 3305.[4]

The ANCISPA report states that 3305 was believed to have crashed in September 1943, but this date is almost certainly incorrect. The tail code prefix T2 was that of the 204 *Kōkūtai*, used by that unit from 1 November 1942 until about mid-summer of 1943. Furthermore, from about March 1943 the 204 *Kū* began to apply dark green camouflage to their aircraft; T2 133 is in the earlier overall olive-gray paint scheme.

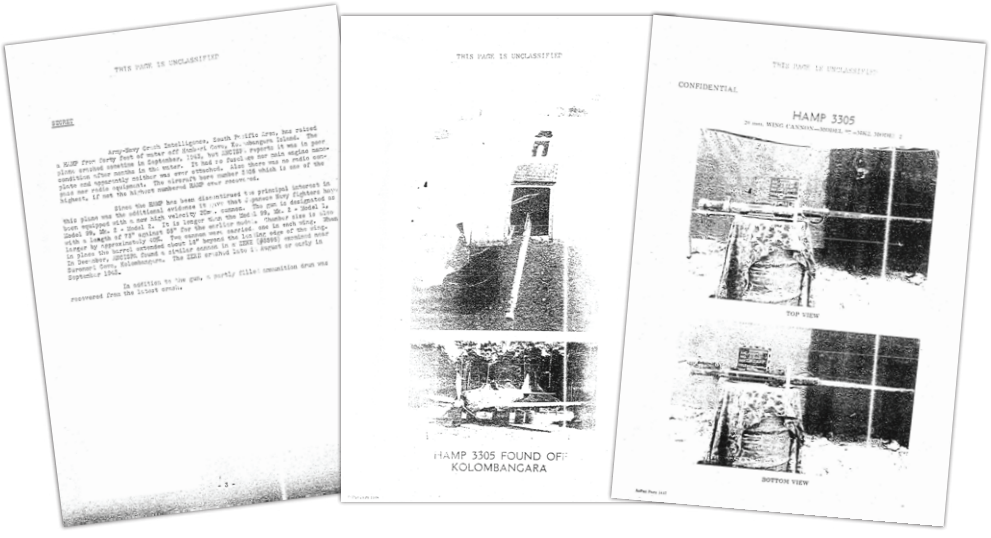
The tail fin also had two horizontal stripes below the tail code which help to point to the identity of its pilot. Markings like these were usually those of a *Chūtaichō*. Such a position was usually filled by an officer or at least a warrant officer. Looking at the pilot losses listed in Hata, Izawa and Shores, the 204 *Kū* only lost two officer pilots in the time from between 1 November 1942 and 31 March 1943: Lt. (jg) Tanoue Tatenoshin lost over Munda on 15 January 1943 and Lt. (jg) Shibuya Kiyoharu lost over Guadalcanal on 23 January 1943.[5]

Fight over the convoy

Lt. Tanoue's loss over Munda would put him in the right location - was he the pilot of T2 133?

It is possible to at least partially reconstruct the 15 January combat. On that day the Japanese put up a *Chūtai* of nine 204 *Kū* Zeros under the command of Lt. Tanoue Tatenoshin as well as about a dozen Oscars from either the 1st or 11th *Sentai* to provide air cover to a Japanese convoy moving northwards up the New Georgia Sound.

The Zeros departed from Buin at 0625 and arrived at their CAP station at 0700. The convoy of ships was the target of fifteen SBD Dauntless



Excerpts from the ANCISPA Report on Hamp 3305.

of VMSB-142 escorted by six USAAF P-39s from the 12th Fighter Squadron and twelve Marine Wildcats from VMF-121 and VMO-251. This Wildcat escort was comprised of two divisions under Capt. Hunter Reinburg and Lt. Herb Long deployed on the left side of the escort formation. A third division under Maj. Joe Renner from VMO-251 was in place on the formation's right.

Contact with the Japanese occurred just off the coast of New Georgia, 140 miles from Henderson Field on Guadalcanal and twenty miles from Vanguna Island. The Marine Wildcats were at an altitude of approximately 16,000 feet when the Japanese Zeros were first spotted at 0705 by Capt. Francis "Effie" Pierce. Pierce radioed a warning to his fellow Wildcat pilots. Capt. Reinburg, to the left and above Pierce, moved to attack. With the sun to his back, Reinburg flew head-on towards the lead Zero. When he opened fire, he observed his "gunfire converge on the Zero's engine and kick off sparks like a grinding wheel does".[6)]

The ensuing melee then moved northwards until combat broke off at 0730. American claims of fifteen Japanese losses far exceeded the actual total. Allowing for the fact that some of the American claims were for Ki-43 Oscars the 204 *Kū* losses were only three Zeros. The six surviving 204 *Kū* Zeros touched down at Munda at 0815, left Munda at 0835 and finally landed at Buin at 0925. US losses were three Wildcats, two P-39s, and two Dauntless dive bombers, one of which ditched off the mouth of Morovo Lagoon.[7)]

Question marks and uncertainties

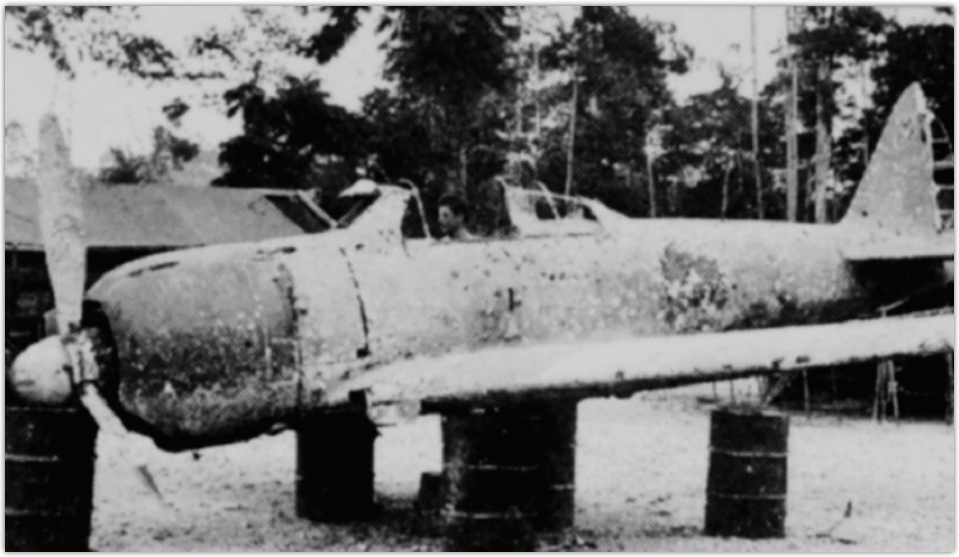
The argument can be made that one of these three downed Zeros was flown by Lt. (jg) Tanoue. However, there are some issues that first need to be resolved. The first is the actual location of Hamberi Cove. Maps show a Hamberi Cove (or more commonly Hambere Cove) on the west coast of Kolombangara Island. But wartime documents also refer to Hamberi Cove as an alternative name for Disappointment Cove, located near Vila on Kolombangara Island and used as a barge anchorage for the new Japanese base at Vila. Additionally, a photo caption in Freeman's article states that T2 133 was "pulled out of the water off New Georgia, across from Munda". It is therefore most likely that this location near to Vila was where T2 133 was found.[8)]

While this location is indeed closer to the action of 15 January than the Hamberi Cove on the west coast of Kolombangara, one must still question why the pilot of this presumably damaged plane tried to ditch in this location instead of the closer airfield at Munda.

Secondly, the loss of only three Zeros argues that all of these were lost at the scene of the air battle. The various American reports claim

Recovery of A6M3 Type 32 Tail Code T2 133 from Hamberi Cove, Kolombangara Island, May 1944.

After its recovery A6M3 Type 32 T2 133 was taken to Munda on New Georgia Island.



to have witnessed the explosion of at least four planes and at least one of these was seen to have then crashed into the sea. While some of these could have been Oscars instead of Zeros, it does seem to indicate that no Zeros were damaged and then lost away from the scene of combat.

The answer may lie in the fact that Hata and Izawa are incorrect in listing Lt. (jg) Shibuya Kiyoharu as being lost over Guadalcanal on 23 January 1943. On that date the *Toa Maru 2,* escorted by the destroyer *Ōshio*, sailed down the New Georgia Sound with the task of evacuating an engineer detachment from Vila on Kolombangara Island. The two ships were provided with a CAP of nine Zeros from the 204 *Kōkūtai* and two F1M2 Petes from 958 *Kū*. A strike force of twelve VMSB-233 Dauntlesses and four VMSB-131 Avengers with an escort of twelve Wildcats from VMO-251 was sortied from Guadalcanal. They intercepted the small convoy at 1815 "mid-channel abeam of central Choiseul" at 7° 22" S / 156° 51" E.

The Japanese Zeros were strung out in a single line as the American Wildcats were led into the attack by Maj. Joe Renner. When Renner opened fire, 1st Lt. Robert Bryson noted one of the Zeros at the front of the Japanese formation began to "sparkle and then start to smoke".

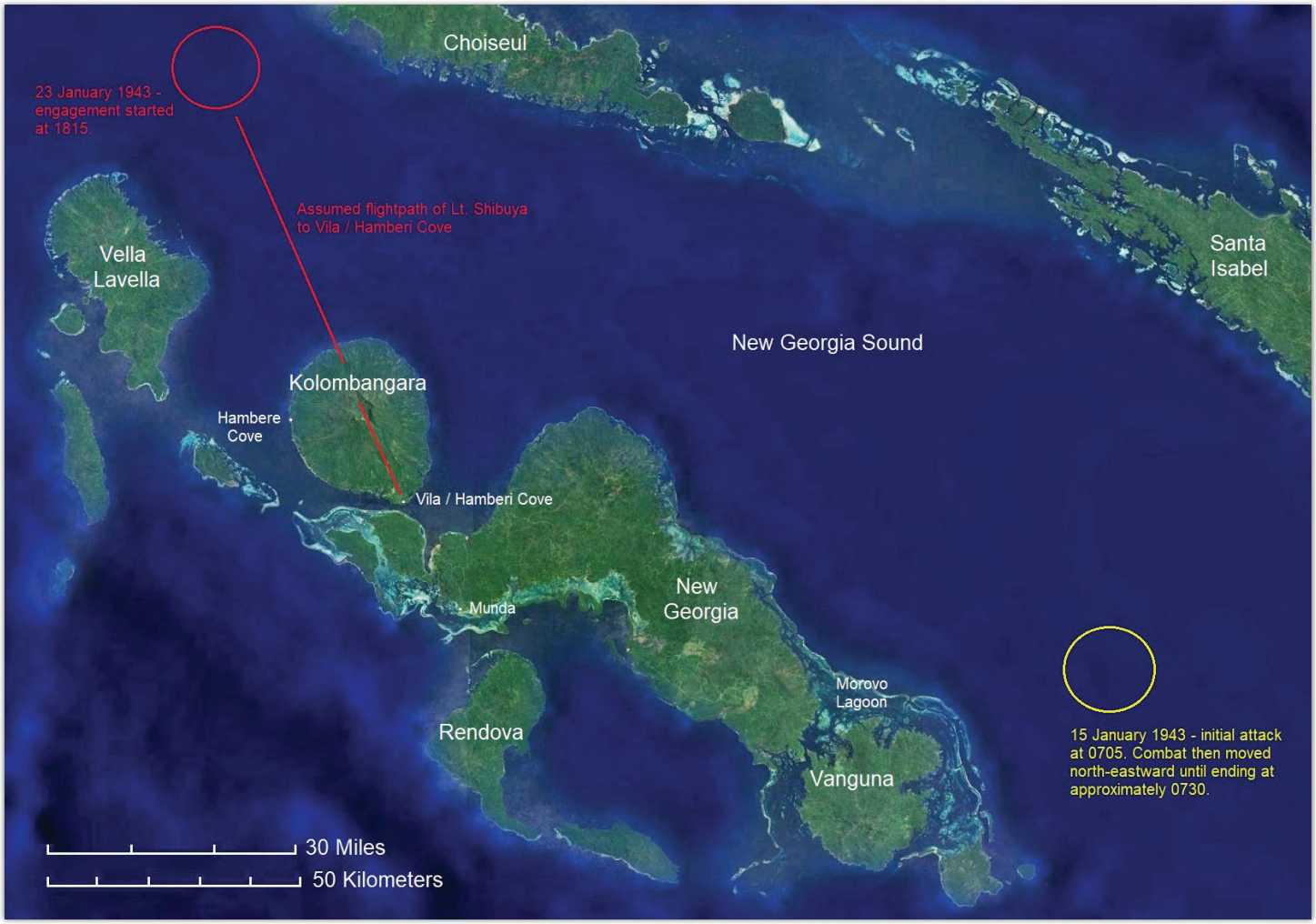
After its inspection by Crash Intelligence T2 133 was heavily souvenired by other troops at Munda.

This is assumed to have been Lt. (jg) Shibuya. A second Zero at the rear of the formation was fired upon by 1st Lt. Glen Loban and was seen to have "chunks come flying off".

The Japanese quickly recovered to engage the attacking Wildcats. In the end the Americans suffered the loss of two Wildcats and were unable to successfully attack the two Japanese ships. In turn the Japanese lost two Zeros and one Pete. These three losses included the Zero flown by Lt. (jg) Shibuya Kiyoharu.[9]

Shibuya Kiyoharu

Given the description of the damage in the initial attack on the Japanese Zeros, as well as the location of the 23 January engagement, it is very likely that T2 133 was flown by Lt. (jg) Shibuya Kiyoharu. It is very possible that a plane that took some hits and started to smoke was still able to have limped towards safety at Japanese-



occupied Hamberi Cove near Vila. Furthermore, it should be noted that Hamberi Cove/Vila is on a direct flightpath to the Japanese airfield at Munda. Finally, as mentioned below, Shibuya is listed as having actually been downed over Kolombangara Island.

Unfortunately, only a basic outline of Lt. Shibuya's background can be found in the available sources. He was born in Kagoshima and graduated in July 1937 as part of the 67th Class of the Etajima Naval Academy. He then went on to complete his flight training in November 1941. As a new Lt. (jg) he was assigned to Tainan Kōkūtai and on 23 February claimed to have shot down a P-40 over Malang in western Java. In April 1942 Shibuya was transferred to Genzan *Kū.* and then at some point later in 1942 was reassigned to 204 *Kū.* Finally, Shibuya is stated to have been lost over Kolombangar a Island.[10)]

Official USMC photograph of Joseph Niel Renner.

Endnotes:

1) Army-Navy Crash Intelligence, South Pacific Area (ANCISPA) Report on Hamp 3305, p. 3

2) Firing Equipment of the Type Zero (Mark 1, Mark 2) Provisional Handling Manual, August 1943, p. 2.

3) Rekishi Gunzou No. 33, (November 1, 2001), p. 171

4) Michael Freeman, Behind Enemy Lines, (1997); Michael Freeman "Behind Japanese Lines", Airpower, Vol. 24, No. 4 (July 1994), pp. 10-23, 44-55.

5) Ikuhiko Hata, Yasuho Izawa, Christopher Shores, Japanese Naval Air Force Fighter Units and Their Aces 1932-1945, (2011), p. 391

6) Hunter Reinburg, Aerial Combat Escapades, A Pilot's Logbook, (1988), p. 50.

7) Roger Letourneau, Dennis Letourneau, Operation KE, The Cactus Air Force and the Japanese Withdrawal from Guadalcanal, (2012), pp. 111-114; Hunter Reinburg, Aerial Combat Escapades, pp. 48-51; Francis (Effie) Pierce, "Ace the Hard Way", in Eric Hammel, Aces in Combat: The American Aces Speak, (1998), p. 41; E-mail from Dennis Letourneau, September 28, 2015

8) Freeman "Behind Japanese Lines", p. 17

9) Letourneau and Letourneau, Operation KE, pp. 93-94; For the most part, however, this account is based on research done by Mr. Brandon Wood. He kindly shared his information with the author in a number of e-mails on 24 and 25 November 2015. Here he stated that he utilized "multiple sources to include war diaries, a couple of articles from newspapers and interviews with Col. Robert Bryson."

10) Brian Cull, Yasuho Izawa, Christopher Shores, Bloody Shambles, Vol. 2: From the Defence of Sumatra to the fall of Burma, (1993), p. 220; Summary of Etajima Graduates.

A6M3 Type 32 T2 133 (m/n 3305) flown by Lt. (jg) Shibuya Kiyoharu of 204 Kōkūtai on 23 January 1943. Profile image courtesy of Dave Douglass.

Air war over Ukraine

Grains in Flames

Text: Miro Barič

Czech MR-2 Viktor systems proved their worth in the fight against suicide drones in Ukraine.

Monday, July 17, was a pivotal date in the period under review in this part of the series. On that day, Ukrainians once again successfully attacked the Kerch Strait Bridge leading to Crimea. At the same time, the agreement on grain trade expired, triggering another wave of Russian air attacks on Ukrainian ports.

Photos: Ukrainian armed forces, social media and other public sources

The Kerch Strait Bridge was rocked by two explosions early on the morning of July 17. The result was damage to at least one lane of the bridge. As a result, only one lane is available for automobile traffic. Coupled with attacks on bridges on the opposite side of Crimea, connecting the peninsula to southern Ukraine, this spells complications and delays for Russian logistics.

The Kerch Strait Bridge was first damaged last year in October. Ukraine did not claim responsibility for it for a long time. For the July attack, the Ukrainian intelligence agency has now claimed responsibility, following several months of preparation. Naval drones equipped with a 750 kg explosive payload were used. They had to cover a distance of 700 km from the Ukrainian coastline, which in itself is a remarkable feat.

On the same day, the agreement regarding grain exports expired, which allowed the export of grain from Ukrainian ports under certain conditions. This was especially crucial for African and Asian countries that relied heavily on Ukrainian supplies to meet a significant portion of their food consumption. Since this date, Russia has been doing everything possible to use food scarcity as a means of coercion on the world stage. As several ships ignored Russian threats of a Black Sea blockade, the Kremlin focused on destroying the infrastructure of Ukrainian ports to prevent these ships from utilizing them. Repeated rockets, glide bombs, and drones strikes targeted Odessa, Mykolaiv, and Chornomorsk. The targets were port buildings and grain storage facilities.

Southern Ukraine doesn't possess as robust an anti-aircraft defense as Kyiv, so a portion of Russian missiles often penetrated. During the night of July 18 to July 19, some 60,000 tons of grain destined for China and African countries went up in flames in Odessa. Some of the missiles missed the port and hit objects in the historical center of the city, which is listed as a UNESCO World Heritage site. The Chinese consulate was hit, and on the night of July 22 to July 23, the largest cathedral in Odessa was severely damaged. The Cathedral of the Transfiguration was consecrated in 1809. In 1939, Stalin ordered its demolition, but in 2003, Ukrainians rebuilt it. The projectile that hit it pierced through the roof, vaults, and floor. It then exploded in the cathedral's basement. The explosion and subsequent fire destroyed the interior of the cathedral.

Russian drones also attacked Ukrainian ports Reni and Izmail, situated on the Danube River. These were considered safe, as across the river lies Romania, a NATO member state. The attacks there also targeted grain storage facilities.

Still from a video showing damage to the Kerch Bridge on July 17, 2023.

Interior of the Transfiguration Cathedral in Odessa after the hit on July 23, 2023.

Grain bunkers damaged in the port of Odessa.

Destroyed grain warehouse in the town of Reni on the Danube.

"Beavers" Attack

Ukrainians are trying to respond within their capabilities. A massive campaign has been underway in Crimea and the southern part of the Zaporizhzhia region, targeting Russian logistics and command centers with HIMARS missiles and Storm Shadow glide bombs. To a lesser extent, systematic attacks are also being carried out deep within Russia, which could be termed disruptive in nature. Ukraine cannot use Western weapons for these attacks, as it has committed to deploying them only on its own territory. Instead, it employs domestically produced drones for these purposes. Several types have been developed, though there is limited information available. The most successful type appears to be the "Bober" (Beaver), named after the animal. It has duck-like wings and a push propeller at the end of the fuselage. Its range is reported to be around 600 to 1,000 km, and it carries a cumulative explosive warhead in the front of its fuselage.

The Bober drones were used in an attack on July 24, when at least two buildings were damaged in Moscow, and one drone crashed onto Komsomolsky Prospekt near the Ministry of Defense. The attacks of the Bobers on July 30 and August 1 can be seen as almost trolling Russian air defense, as the same high-rise building in Moscow's business district was hit repeatedly on two consecutive days. This

Ukrainian Bober drone captured on video over Moscow.

Ukraine developed the Bober drone on its own.

building houses, among other things, the Ministry of Economic Development. According to official statements from Russian authorities, only the glass façade of the building was slightly damaged. However, footage from the interior revealed damaged offices beyond the shattered façade.

Western Weapons on Soviet Technology

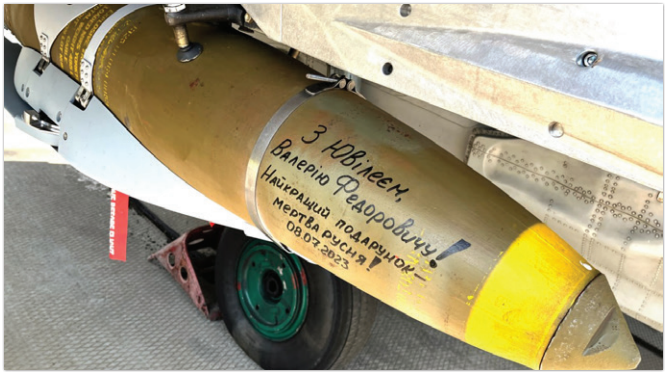
In addition to the mentioned Storm Shadow missiles, more Western weapons are appearing on Ukrainian aircraft and helicopters. The first were AGM-88 HARM missiles, which MiG-29s and Su-27s launch against Russian radars. Attack Su-25 aircraft have started using LAU-10 launchers for four 127 mm (5-inch) Zuni rockets. For Czech readers, the use of M261 launchers for 19 unguided Hydra 70 rockets on Mi-24 helicopters might be interesting. The earliest video documenting their deployment in Ukraine features an originally Czech Mi-24V. During the observed period, Ukraine also released footage of the deployment of guided JDAM-ER bombs, which they received early in the year. MiG-29 fighter jets were modified to carry them, with specially extended internal underwing hardpoints.

JDAM, developed in the 1990s, stands for Joint Direct Attack Munition, a GPS-guided weapon. The term "joint" in the name indicates the involvement of both the U.S. Air Force and Navy in its development. JDAM itself is not a bomb but a kit that converts regular bombs into guided munitions.

JDAM-ER, with "ER" standing for Extended Range, was introduced in Australia in 2006, with Boeing's Australian branch involved in its development. The ER variant includes folding wings, allowing it to glide for up to 70 km. In Ukraine, a photo of a MiG-29 with the mentioned extended hardpoints surfaced first. Later, pictures of JDAM-ER bombs on these hardpoints emerged. The bombs are Mk.82s with a weight of 227 kg. The folding wings are located on the bomb's underside, indicating an Australian version. The American version has the wings on the top.

It's likely that Ukrainians are using them similarly to HARM missiles – all necessary data is entered on the ground, and the fighter jet simply releases the bomb at the designated location. It's also probable that Ukrainian fighter jets cannot approach the frontlines at high altitudes. At such low altitudes, the JDAM-ER would have its greatest reach, but the carrier would be vulnerable to Russian air defenses. Therefore, the Ukrainian MiG-29 approaches at low altitude and only climbs rapidly at the last moment, releasing the JDAM-ER in an arched trajectory along a ballistic curve.

Ukrainian MiG-29 with hangers for JDAM-ER bombs.



JDAM-ER on a pylon under the wing of a MiG-29.

Block M261 with Hydra 70 missiles on a formerly Czech Mi-24V helicopter.

Originally Slovak Mi-17 helicopter with B-8-V20 blocks for 20 unguided missiles of 80 mm calibre. The machine had the Slovak service number 0844 and retained its typical camouflage and the hippopotamus symbol on the port side.

Cluster Munitions

The most significant addition to the Ukrainian arsenal during the observed period is American cluster munitions. The announcement of their delivery sparked controversial reactions. Cluster munitions consist of a large number of submunitions that disperse in the air and cover a wide area. A relatively high percentage of these submunitions, however, fail to detonate immediately. On the ground, they pose a danger to civilians for many years after the war. This led to the creation of the Convention on Cluster Munitions in 2008, which prohibits the use and production of such weapons. To this day, 123 states have signed it, but Russia, the USA, and Ukraine are not among them.

Russia deployed cluster munitions from the first day of the war, and their use against targets such as apartment complexes in Kharkiv is documented not only by numerous videos but also by UN reports. Ukraine likely deployed cluster munitions from old Soviet stocks in a smaller quantity. The country has now committed to using American cluster munitions only on its own territory and solely against military targets, refraining from using them in populated areas. Each use will be documented to aid in locating unexploded submunitions. This is not a problem, considering the densely mined battlefield; demining efforts will be essential once the conflict ends.

Ukraine needs cluster munitions to bridge the gap until it can increase the production and supply of conventional artillery ammunition. One projectile with submunitions can replace a larger number of shots from howitzers or mortars. The USA has several types of cluster munitions for howitzers, rocket launchers, and aircraft. Ukraine received 155 mm howitzer grenades. The M483A1 shell contains 88 submunitions, and the M864 shell with longer range contains 76 submunitions. These are dual-purpose improved conventional munitions (DPICM) that can be effective against both infantry and vehicles. Their development focused primarily on minimizing malfunctions. The munitions were deployed in combat almost immediately and proved highly effective in halting Russian counterattack attempts.

Machine Guns Against Drones

Through the destruction of Russian ammunition depots and the suppression of artillery radars with HARM missiles, Ukraine managed to establish local artillery superiority on the southern front in the Zaporizhzhia region. The Russians are unable to destroy Ukrainian howitzers with retaliatory artillery fire, so they began to address this deficiency by increasing the use of suicide drones like the Lancet. This prompted the deployment of

Turkish SARP Dual system on M113 vehicle.

Czech MR-2 Viktor systems proved their worth in the fight against suicide drones in Ukraine.

Three photos of firing the „Victors".

mobile anti-aircraft units on the Ukrainian side to protect vital heavy equipment, especially self-propelled howitzers and HIMARS rocket launchers.

Among the simplest means are ordinary machine guns mounted on the chassis of off-road vehicles. However, more sophisticated systems have also emerged, such as the Turkish SARP Dual. It is a remotely controlled turret with modular construction and two arms. These arms can accommodate different types of weapons based on the mission, from light machine guns to 40mm grenade launchers. For anti-aircraft purposes, Ukrainians use a 12.7mm caliber machine gun in one arm and a 7.62mm caliber machine gun in the other. The heavy machine gun has 500 rounds available, while the light machine gun has an ammunition supply of 1,500 rounds. In Ukraine, SARP Dual systems have been mounted on Soviet MT-LB tracked vehicles and later on American M113 transporters. In both cases, older equipment is suitable for such auxiliary purposes.

Ukrainians highly praise the Czech MR-2 Viktor systems. These involve a relatively simple combination of a Toyota off-road chassis and a pair of 14.5mm caliber KPVT machine guns. They are equipped with a modern targeting system that allows accurate shooting even at night. The rate of fire is 600 rounds per minute, and the effective range is 2 km. According to Lieutenant General Serhiy Nayev of the Ukrainian Armed Forces, the Viktor systems achieve excellent results in shooting down suicide drones.

In July, there was a lot of talk (once again) about the training of Ukrainian pilots on F-16s, or possibly other Western aircraft. Discussions on this topic had been ongoing for several months. However, tangible results were only achieved in August. Therefore, we will discuss F-16s in more detail in the next part of the series.

Ukrainian Air Force without Losses

July is the first month since the start of the war in which the Ukrainian Air Force did not suffer any losses. On the Russian side, however, there were several confirmed losses. The first two were non-combat related. On Thursday, July 6, a transport aircraft Antonov An-72 with registration RF-46546 and the bort number "blue 46" was damaged during landing at Rostov Airport. The front landing gear and the front part of the aircraft were affected.

On Monday, July 17, a Sukhoi Su-25 crashed into the Sea of Azov during a test flight. The aircraft, with registration RF-94685 and bort number "yellow 08", belonged to the 266th Attack Aviation Regiment. The crash occurred just off the coast near the town of Yeysk,

and many people on the beach witnessed the incident. The pilot, Senior Lieutenant Timur Chismatullin, managed to eject but suffered leg fractures in the process. According to some reports, his rescue vest either did not function or malfunctioned. As a result, he drowned in front of vacationers who preferred to record videos rather than help him. Some even approached on jet skis to get a closer look. By the time someone finally pulled the pilot out of the water, it was too late.

On Tuesday, July 25, members of the Ukrainian 38th Marine Brigade managed to shoot down a Kamov Ka-52 helicopter in the Donetsk region. Both crew members, Colonel Vitaly Tabachnikov and Captain Roman Gavrikov, both from the 112th Separate Helicopter Regiment, died in the wreckage of the aircraft. The number of helicopters of this type lost in Ukraine has now exceeded 40. In July, Ukrainian soldiers also found the wreckage of a Russian Su-24 aircraft near the village of Klyshchyivka, south of Bakhmut. It might be the aircraft that belonged to Wagner Group mercenaries and was shot down on March 29, 2003, or it could be the aircraft with registration RF-93798, which was lost in the same area on December 2, 2022.

A Russian Su-25 with the number "yellow 08" crashed into the Sea of Azov near the town of Yeysk on July 17. The cause of the crash was engine failure.

Pilot Timur Chismatullin was killed in the crash of the Su-25.

Another shot of the MiG-29AS from the rear. The ex-Slovakian aircraft received yellow and blue markings on the directional and elevators and on the aerodynamic slots on the leading edge of the wing.

A Ukrainian Mi-24 lurks in the bushes waiting for its victim.

Originally Slovak MiG-29AS in Ukrainian service. It can be identified by the Rockwell Collins AN/ARC-210(V) digital radio antenna just behind the cockpit and the camouflage of grey and green-grey paint. It carries two R-27ER (Alamo C) and four R-73 (Archer) missiles under its wings.

The Tenacious Adversary

Text: Jan Bobek
Illustration: Antonis Karydis

In the first year of the WW2, Jagdgeschwader 3 was one of several Luftwaffe units led by veterans of the previous war. This was not unusual at the time. In November 1938 the first JG 3 Kommodore was Obstlt. Max Ibel, who had served in the Bavarian Army, had secretly received, before Hitler came to power, fighter pilot training in Lipetsk, Russia. He was not the only officer of JG 3 to undergo this mission in USSR. Among them was a veteran of the First World War, Obstlt. Carl Vieck, who took command of JG 3 in September 1939. Vieck is not known to have been involved in combat activity, but in June 1940, during the fighting over France, his staff officer, Major Theodor Quandt, was killed in air combat. He had achieved 15 victories during the Great War with Jasta 36.

During the Battle of Britain there was a generational change in the leadership of Luftwaffe fighter units and JG 3 was no exception. On 21 August, the twenty-seven-year-old Obstlt. Günther Lützow became the new boss of JG 3. He had previously led the I./JG 3 and was a veteran of the Spanish Civil War. Lützow had fifteen victories to his credit at the time (including five in Spain) and after just five days in his new role scored two kills in combat with Defiant crews. Another Great War veteran, Obstlt. Hasso von Wedel, was assigned to Lützow's Stab in September 1940. He had achieved five victories during World War I and in 1940 was commissioned by the RLM to document the successful campaign against Great Britain. However, this took an unexpected turn when he was shot down in a dogfight on 15 September and became POW. After repatriation, he never returned to combat duty and was killed in Berlin on May 1, 1945.

By the time JG 3 was based on the airfields of occupied Poland in June 1941, ready to attack the Soviet Union, the Geschwader had accumulated nearly 400 victories. On June 22, 1941, elements of JG 3, armed with Messerschmitt Bf 109 Fs, were based at Hostynne and its satellite airfields northwest of Lwów, which had been in Soviet hands since September 1939. JG 3 was subordinated to Luftflotte 4, which supported the advance of ground forces in the invasion of Ukraine and what is now Moldova. The focus of JG 3's activities in the early months of the invasion lay in the area west of Kyiv, which was not captured until late September.

JG 3 victories rapidly increased in the fight with the Soviet airmen. By 31 July, they scored nearly 700 more kills, in which Lützow contributed with 27 claims. The number of victories was probably inflated, either because of the complexity of large air battles or over-claiming. There were significant differences between the parts of JG 3 in this respect. In that period III./JG 3 claimed 300 victories, II./JG 3 reported 201, and I./JG 3 claimed 150. The Germans were very surprised at how tenacious their opponent was, namely the air units of the VVS Kiev Special Military District. Jagdgeschwader 3 lost approximately 50 aircraft, completely destroyed or damaged beyond repair, to various causes in the first five weeks of the campaign. Another 70 or so machines were lightly damaged, but mostly this meant sending the aircraft away for repairs. These numbers corresponded to the loss of equipment of an entire Jagdgeschwader!

In the boxart Antonis Karydis captured the duel between Günther Lützow and a pilot of Polikarpov I-16 of the 89th IAP VVS. This fighter regiment under the command of Major Nikolai M. Yelagin was one of the units that first faced the German attack. In addition to the I-16s, the 89th IAP also had a LaGG-3 type in its armament. The regiment operated from the Lutsk base, which was soon occupied by JG 3. Until early September, when the 89th IAP had to be disbanded due to losses, its pilots had flown 1,550 combat sorties and claimed 27 victories while losing 62 aircraft. During the final phase of the fighting for Kyiv, individual fighters flew seven to nine combat sorties a day. One of the 89th IAP pilots who survived this critical period was Alexei I. Novikov, who by the end of WW2 had gained eight individual victories and completed nearly five hundred combat sorties. Günther Lützow, although he scored more than 100 kills in some 300 combat sorties, did not live to see the end of the war. He died in the cockpit of an Me 262 in combat over Bavaria on April 24, 1945.

Questionable victories

Text: Richard Plos
Illustration: Adam Tooby

The distant sound of an aerial battle echoes through the slowly dissolving fog above the trenches. The machine guns bark, the engines howl at high revs as they come closer and closer. Out of nowhere, just a few meters above the ground, an aircraft heaves into view, desperately zigzagging in a shower of pursuers' bullets. It looks like it's about to land for a while, but suddenly its engine hits full revs and the pilot continues his flight for his life. With a roaring engine, he overflies the German trenches and disappears in a haze of mist towards friendly fields.

According to official statistics, Canadian Andrew Edward McKeever became the most successful fighter pilot on the Bristol F.2B. He is credited with 31 kills, all of which he achieved exclusively on this type of aircraft. His reports state 13 of these as OOC (Out Of Control), which in most cases meant the escape of the pursued pilot. Another 12 aircraft were credited to McKeever as destroyed (witnessed impact on the ground), and six are listed as destroyed in flames, which were aircraft that were already burning in the air. In the case of the "Brisfits" as the F.2B was nicknamed (but after the war only), many of the kills were achieved not by the pilots but by their gunners. The pilots were usually given the total number of kills by the crew, while the gunners were credited only with those they had achieved themselves. The gunners usually had a twin Lewis at their disposal and the effectiveness of their fire was uncomfortably high for German fighters. A well cooperating pilot and gunner pair was thus a mortal danger to even the best German aces. McKeever started the war as an infantryman. He remained in the trenches until November 1916, when he was recruited into the ranks of the RFC and moved from France to the UK for pilot training. From May 28, 1917, he flew with No. 11 Squadron, first the obsolete F.E.2s, then the F.2Bs. His first success came on June 26, 1917, when he scored two Albatrosses D.V. One was stated OOC, the other DES (i.e., destroyed). Successively, McKeever flew with seven different gunners and, together with the last of them, Leslie Powell, they shot down a total of 18 enemies. All of these victories were achieved on "Biff" number A7288, which is depicted on Adam Tooby's boxart for kit No. 8452. The art depicts the last phase of their final and epic battle, which occurred on November 30, 1917. The two airmen were patrolling behind enemy lines that day and spotted a pair of German two-seaters accompanied by seven fighters. McKeever attacked and reportedly shot down one of the two-seater aircraft. He then turned to his lines, but four of the Albatrosses swooped down on him like angry wasps. The experienced Powell hit two of them and shot them down, McKeever then engaged the other two in dogfight and shot one down. Moments later Powell's machine guns jammed and McKeever fled at minimum altitude towards his own positions, pursued by the last enemy, who gave up further pursuit before reaching the British lines. So much for the British report and the British point of view.

The fight occurred south of Cambrai in the section of 17th German army. Three fighter Jagdstaffeln were operating in the area with Albatrosses sporting black markings (as they were described by McKeewer and Powell). Jasta 37 was based at Wynghene in the sector of adjacent 4th Army, about 100 km north of Cambrai, a long way from the scene of the battle. Then there was Jasta 7, also in the 4th Army sector, stationed at Aertrycke and therefore at a similar distance to the combat in question as Jasta 7. And then there was Jasta 12 at Roucourt, in a section of also adjacent 6th Army, which was only 20 km from Cambrai. So, presumably, McKeever and Powell fought fighters from Jasta 12. But this German fighter unit lost just a single pilot that day. He was Johann von Senger und Etterlin, and according to German records he collided east of Cambrai with Lt. G. E. Thomson of No. 46 Sqn RFC. Jasta 37 and Jasta 7 even reported no losses ...

So what happened? McKeever's first kill was a two-seater of unknown type from an unknown unit, its impact was confirmed. The next victims, three Albatrosses, are already very questionable, although they were marked as DES, for destroyed, which required testimony from other crew or ground units. But it was foggy and who knows what the others saw ...

There were no more victories for the pair as they were withdrawn from operational service in January 1918. McKeever subsequently started to work on the birth of the Canadian air force along with W. Bishop and R. Collishaw. He became CO of No. 1 Sqn CAF, which was training for fighting with their Sopwith Dolphins. But the war ended before that could happen. After the war, McKeever became the director of the airfield at Mineola, New York, but before he could start work, he had a car accident in which he suffered a broken leg and died of a cerebral thrombosis on December 24, 1919.

Hunting predators

Text: Richard Plos
Illustration: Piotr Forkasiewicz

The fast German S-Boot (Schnellboot) boats posed a considerable danger to even much larger vessels during World War II. Their two torpedo launchers were powerful weapons, as were their high speed and agility.

At the beginning of the war, the Kriegsmarine was not yet clear on how to use these boats and deployed them for various, sometimes not very appropriate tasks, including escort duties, submarine hunting, fast landing operations and the like. But as the war gathered momentum, the German naval command began to realize their merits, and as a result they were increasingly deployed in operations against enemy vessels. Thus, on May 9 and 10, 1940, four S-Boot were dispatched to make a coordinated attack on British ships in the Skagerrak strait. Although two of them had to withdraw quickly due to heavy defensive fire and the third collided with a destroyer, the last one, S-31 commanded by Oblt.z.S. Opdenhoff, managed to fire two torpedoes and seriously damage HMS Kelly cruiser. During the evacuation from Dunkirk, S-Boots attacked British and French vessels. The French torpedo cruiser Jaguar and the British cruiser HMS Wakeful, carrying 640 British troops, were among the casualties. Two torpedoes ripped HMC Wakeful apart and 638 soldiers and 85 crew members were killed.

In June 1940, the German naval command already had under its control all the Belgian and Dutch ports and also most of the French ones. This allowed them to launch dangerous forays into the Atlantic as well as into the waters of the English Channel as far as to the north-east coast of Great Britain. The S-Boats operated in groups of pairs (Rotten) and attacked individual vessels as well as convoys. During the Battle of Britain, they also served as lifeboats for downed German pilots and in July they penetrated as far as the Thames Estuary, laying mines.

The RAF responded by bombing the S-Boot bases at Ostend and Vlissingen. Two boats were destroyed, five others damaged. By October, the two Flotillas operating S-Boots had only seven of them in operation state, and this number was further reduced by the sinking of S-38, which became a victim of the destroyers HMS Garth and HMS Campbell. Even so, by the end of 1940 the German Navy could be satisfied with the results of their S-Boot units, as they had destroyed 26 freighters and 10 destroyers. Subsequently, all S-Boots were united under one command as Kapitän zur See Hans Bütow was the new "Führer der Torpedoboote". He successfully coordinated activities of his forces with the Luftwaffe or with minesweeper formations, and the danger to Allied vessels from the fast boats increased. The RAF therefore resorted to patrols to seek out and destroy these dangerous predators. The various Squadrons took turns to scour the waters of the Channel, but the S-Boots were no easy prey. They could both maneuver sharply to evade the attacking fighters' fire and return defensive fire. Such a situation was captured by Piotr Forkasiewicz in his painting for kit No. 84192. A Patrol of No. 91 "Nigeria" Squadron is led by S/Ldr Robert Oxspring flying his Spitfire Mk.Vc into an attack against a pair of maneuvering S-Boots.

Bobby Oxspring was born on May 22, 1919, in Sheffield, Yorkshire, his father flew in the Great War as a reconnaissance aviator. Oxspring joined the RAF in March 1938 and by December he was transferred to the same unit his father fought with, i. e., No. 66 Squadron. In its ranks he subsequently took part in the Battle of Britain, during which he scored eight confirmed kills and was awarded the DFC. In April 1941 he was transferred to No. 59 OTU, where he flew as an instructor and began his second operational tour in September 1941 with No. 616 Squadron. However, he was only there for a week, after which he was transferred to No. 41 Squadron, where he led a flight. In January 1942 he took command of No. 91 "Nigeria" Squadron and then in July moved to the same post with No. 72 Squadron. Oxspring achieved five more victories during the early months of 1943, one of his victims being the famed German ace Anton Hafner of JG 51. In March 1944, he began his third tour, already as Wing Leader with No. 24 Wing, flying Spitfires Mk.XIV. During June and July, he shot down five V-1 flying bombs. In September he was transferred to No. 141 Wing and then to Detling Wing. He ended the war with 14 confirmed victories, two probable, 13 damaged enemy aircraft and added five V-1s destroyed.

The Germans built a total of 239 S-Boots of several types between 1930 and 1945. Only 99 survived the war. In service on these boats, 767 men died, 620 were wounded, and 322 were taken prisoner.

HLAVNÍ HOSTÉ · Josef Choreň

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ProfiPACK edition

Bf 109F-2

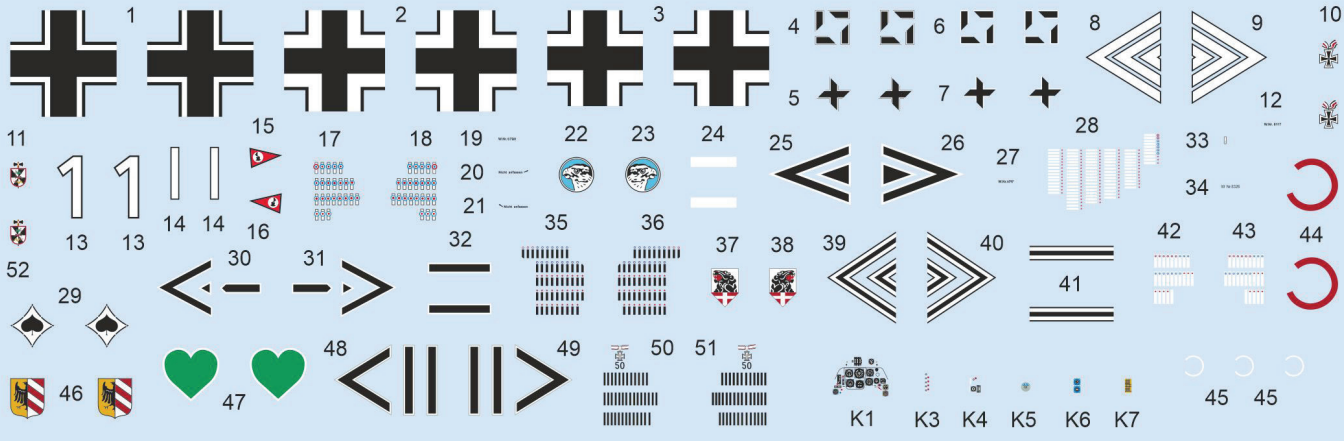
1/72

#70154

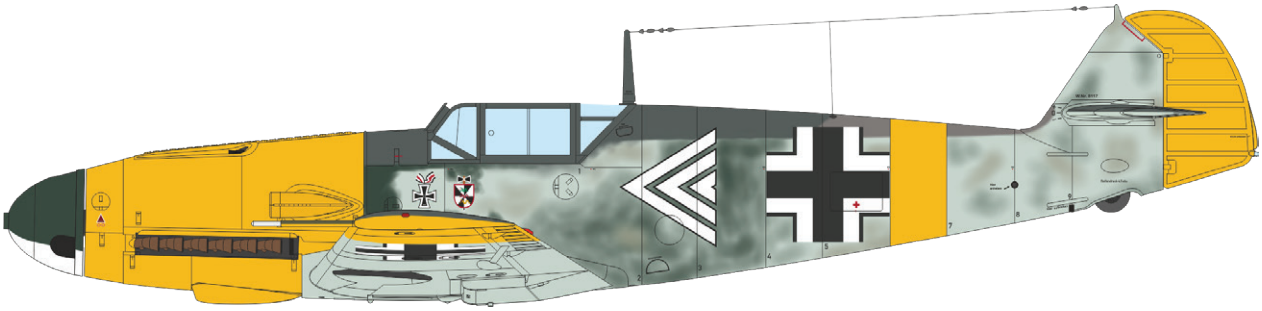
The ProfiPACK edition kit of German WWII fighter plane Bf 109F-2 in 1/72 scale.

- plastic parts: Eduard
- marking options: 6
- decals: Eduard
- PE parts: yes, pre-painted
- painting mask: yes
- resin parts: no

Product page

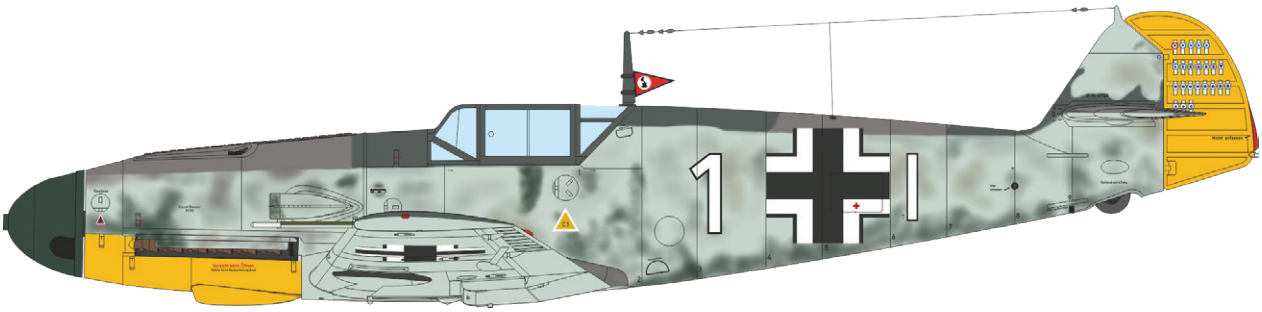


WNr. 8117, Maj. Günther Lützow, CO of JG 3, Polonnoye, The Soviet Union, Summer 1941



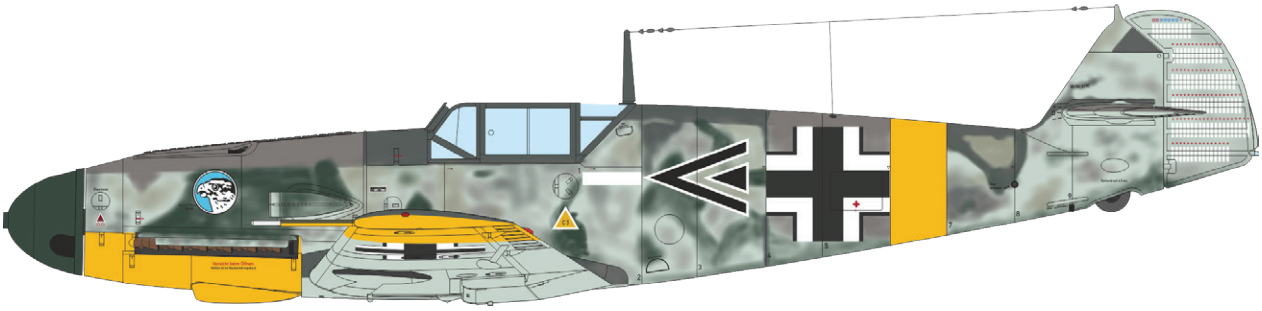
Günther "Franzl" Lützow began his service career in the skies over Spain when, serving in the Legion Condor, he downed five enemy aircraft during the Civil War. His combat victories mounted over the course of the Second World War while serving in the ranks of JG 3, JG 51 and JV 44. He ended up with a total of 110, gained over more than 300 combat flights. His life was ended by Thunderbolts of the 365th FG. The P-47 pilots shot down the Me 262 flown by Lützow, and his damaged Schwalbe crashed into the Danube. For his service, Lützow was awarded the Knight's Cross with Oak Leaves and Swords. This aircraft, wearing the standard scheme composed of RLM 74/75/76 with non-standard Geschwader CO markings, was flown by Günther Lützow in the initial phases of the war against the Soviet Union. The camouflage scheme was supplemented by the usual quick recognition markings carried on the Eastern Front – the yellow rudder, fuselage band, wingtips and engine cowl.

WNr. 6720, Oblt. Egon Mayer, CO of 7./JG 2, St. Pol-Brias, France, September 1941



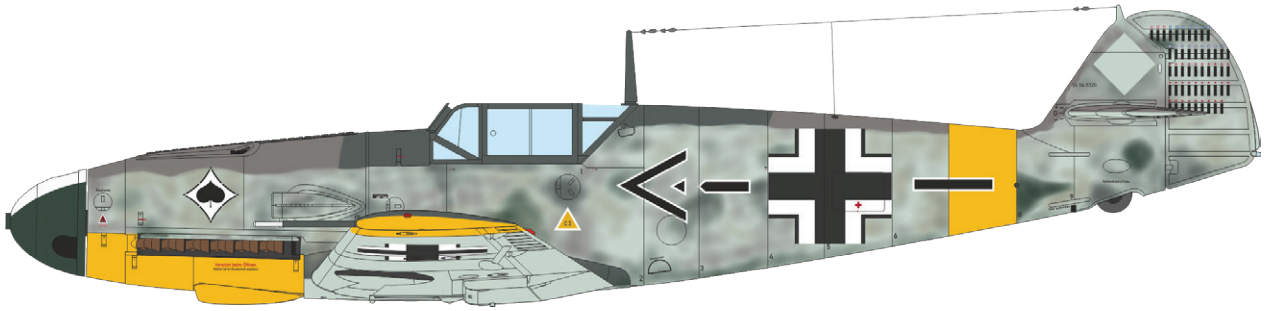
Egon Mayer fought the entire Second World War as a member of the famous JG 2. He began his career as a fighter pilot at the end of 1939 in the Battle of France, continued in the Battle of Britain, and later fought over occupied France until March 2, 1944, when he was shot down by Thunderbolts of the 358th FS while on an escort mission near Montmedy in France. Over the course of 353 combat flights, he achieved 102 victories, all of them at the Western front. He was posthumously awarded the Knight's Cross with Oak Leaves and Swords. The depicted aircraft was flown by Egon Mayer over the second half of 1941 during the defense of occupied French territory against British aerial attacks. This "Friedrich" was painted in RLM 74/75/76, typical for Luftwaffe fighters of the time. With this aircraft Mayer achieved one victory over a Spitfire on September 20, 1941, but he had to belly-land it at Arques due to the damage sustained in combat.

WNr. 6797, Hptm. Hartmann Grasser, CO of II./JG 51, Orel-North, The Soviet Union, Autumn 1942



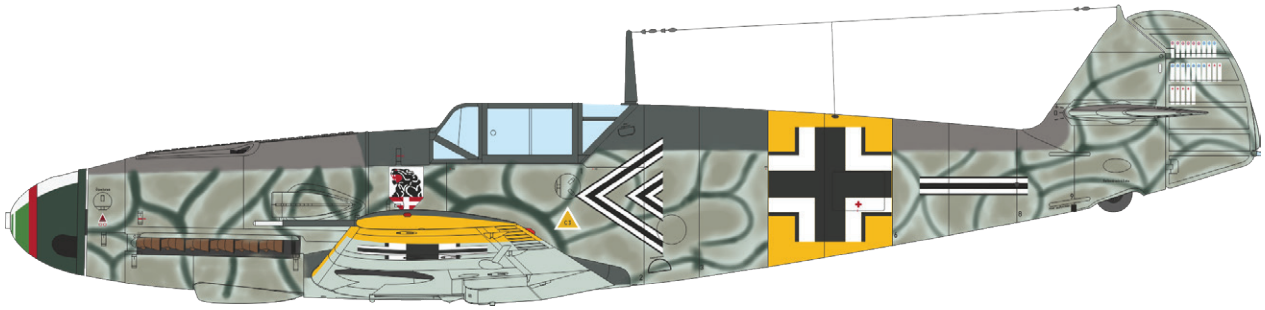
Hartmann Grasser was born on August 23, 1914, in Graz, Austria. For political reasons he left in 1934 to live in Germany and joined the Luftwaffe in 1936. At the beginning of the war in Poland he flew with 3./JGr 152 (3./ZG 2). In mid-September 1939, the unit was moved to the French border and there he shot down a French observation balloon. He shot down his first enemy aircraft, a French Curtiss H75, on September 24, 1939. In the fighting over France and in the Battle of Britain he shot down six more opponents and was assigned to the staff of JG 51 in October 1940. On the first day of Operation Barbarossa, he shot down a Tupolev SB-2 and in the following months the number of Soviet aircraft shot down by him increased. Grasser then became commander of 5./JG 51 in August and the next month he was awarded the Knight's Cross and took command of II./JG 51. After he achieved his 45th kill on January 24, 1942, he was shot down in combat himself and seriously wounded in the eye. He was treated until May 1942 and scored his 50th kill ona May 21. In November 1942 he was transferred with II./JG 51 to Tunisia. At that time, he had 92 kills on his account and added 11 more till the end of the war, as he served in senior staff positions from June 1943. After the war he was a prisoner of war in the USSR until 1949. His Eastern Front aircraft was camouflaged by RLM 74/75/76 shades. On the nose, there was the emblem of JG 51, staff markings and identification elements of the Eastern Front. On the left side of the rudder the kill marks were applied.

WNr. 8326, Maj. Günther von Maltzahn, CO of JG 53, Bila Tserkva, The Soviet Union, July 1941



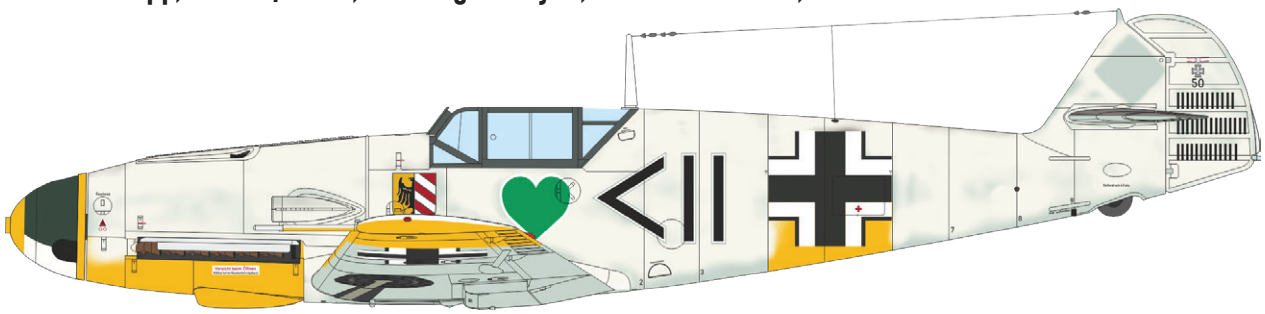
Günther "Henri" von Maltzahn was born on October 20, 1910 in Wodarg, Pomerania. He started his military career in 1931 as a member of a cavalry regiment. In 1935 he was transferred to the Luftwaffe. At the beginning of the war he was in command of II./JG 53 at the rank of Hauptmann. After achieving ten victories, he was promoted to Major and appointed as Kommodore of JG 53 in October 1940. At the end of the year, he was awarded the Knight's Cross. After the attack on the USSR, he achieved his 42nd victory on July 24, 1941 and received the Oak Leaves to the Knight's Cross. From the autumn of 1941 until June 1943, he led Geschwader in the Mediterranean. During aerial combat over Malta, he was shot down off Valletta on May 11, 1942 and was rescued from the sea by the crew of Dornier Do 24. In total, he achieved 68 victories. He had to relinquish command of JG 53 after he contracted malaria and served in senior staff positions in Italy and Germany until the end of the war. He was one of the Luftwaffe's most prominent figures and did not hesitate to be publicly critical of the German command. He died in Düsseldorf in June 1953. His aircraft was camouflaged by RLM 74/75/76 shades. On the nose the emblem of JG 53, staff markings and identification elements of the Eastern Front were applied. On both sides of the rudder the kill marks were applied.

Hptm. Dietrich Hrabak, CO of II./JG 54, Ostrov, The Soviet Union, July 1941



Dietrich Adolf "Dieter" Hrabak was born on December 19, 1914, in Gross-Deuben near Leipzig. He originally served in the navy and joined the Luftwaffe in 1935. At the beginning of the war he commanded 1./JG 76 and was shot down during the Polish campaign on September 3, 1939, but escaped capture. He achieved his first aerial victory on May 13, 1940, when he shot down a French twin-engine reconnaissance Potez 630. In total, he scored six kills in the French campaign. In the Battle of Britain, as the commander of II/JG 54, he scored 10 kills and was awarded the Knight's Cross in October 1940. He flew on the Eastern Front from the first day of the attack on the USSR. This aircraft dates from this period and was camouflaged with RLM 74/75/76 shades, darkened on the sides with RLM 02 patches and RLM 70 stripes. On both sides of the rudder kill marks were painted. Hrabak was appointed Commodore of JG 52 fighting in the southern part of the Eastern Front in November 1942 and achieved his 100th victory on August 2, 1943. He was awarded the Oak Leaf Cluster in November. In October 1944 he became Commodore of JG 54 and at the end of the war he managed to evacuate a significant part of this unit from Kuronsk in the Baltic. In total, he achieved 125 victories. After the war he participated in the formation of the Bundeswehr and retired in 1970 in the rank of Major General as the Gen. der Kampffliegerverbände im Führungsstab der Luftwaffe.

Hptm. Hans Philipp, CO of I./JG 54, Krasnogvardeysk, The Soviet Union, March 1942



Hans "Fips" Philipp, an ace with 206 kills to his credit over the course of some 500 sorties, was born on March 17, 1917, in Meissen. He joined the Luftwaffe in 1936. At the beginning of the Second World War, he served with I./JG 76, redesignated II./JG 54 in July 1940. As a member of this unit, he participated in the fighting over Britain and the Balkans. He also took part in Operation Barbarossa and was appointed CO of JG 1 in April 1943. For his combat success he was awarded the Knight's Cross with Oak Leaves and Swords. Philipp was shot down on October 8, 1943, and did not survive his attempt to bail out. The aircraft flown by Hans Philipp was camouflaged with white color over the upper and side surfaces to better suit the conditions of the winter of 1942 in the vicinity of Leningrad. The Gruppe Commander marking was carried on the fuselage, as were the II. Gruppe and JG 54 (Green Heart) identifiers. Both sides of the rudder carried kill marks. The landing gear covers were removed due to their tendency to pile up snow.

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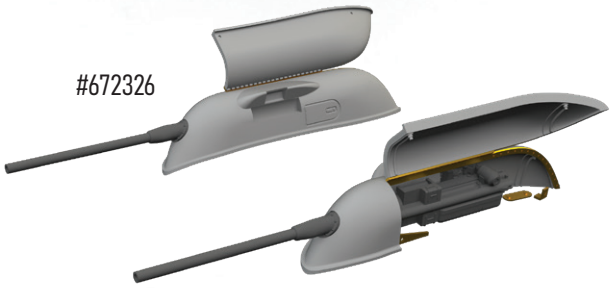

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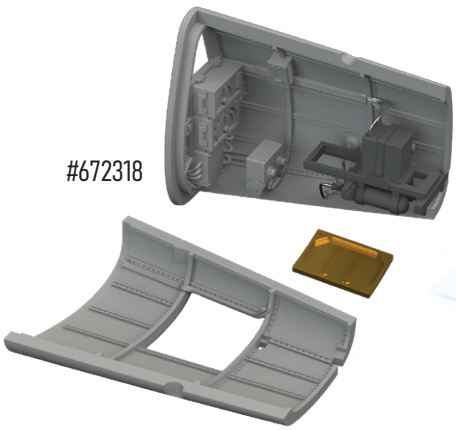

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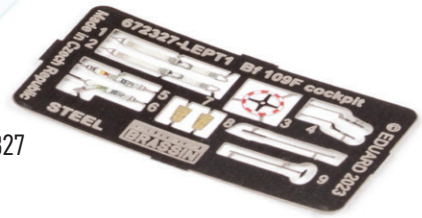

OVERTREES

#70154X Bf 109F-2 1/72

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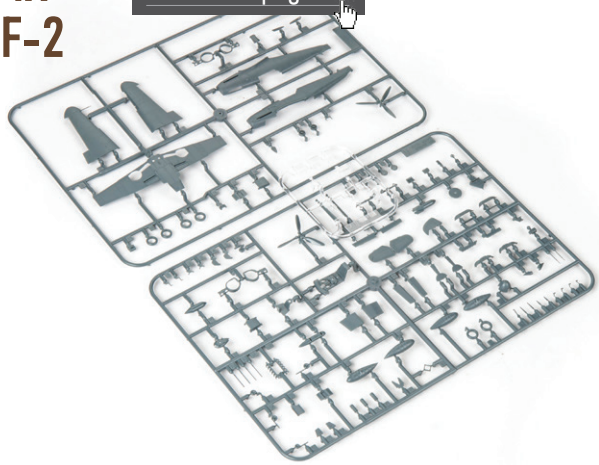

OVERLEPT

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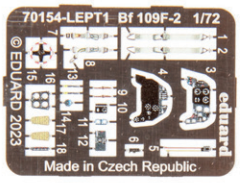

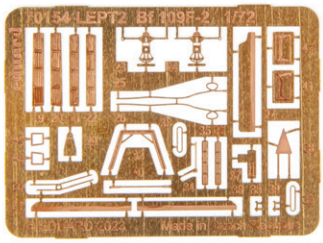

LIMITED

KURFÜRST

1/48

#11177

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- resin parts: no

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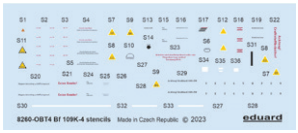
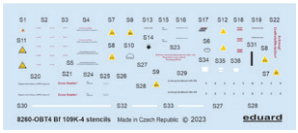
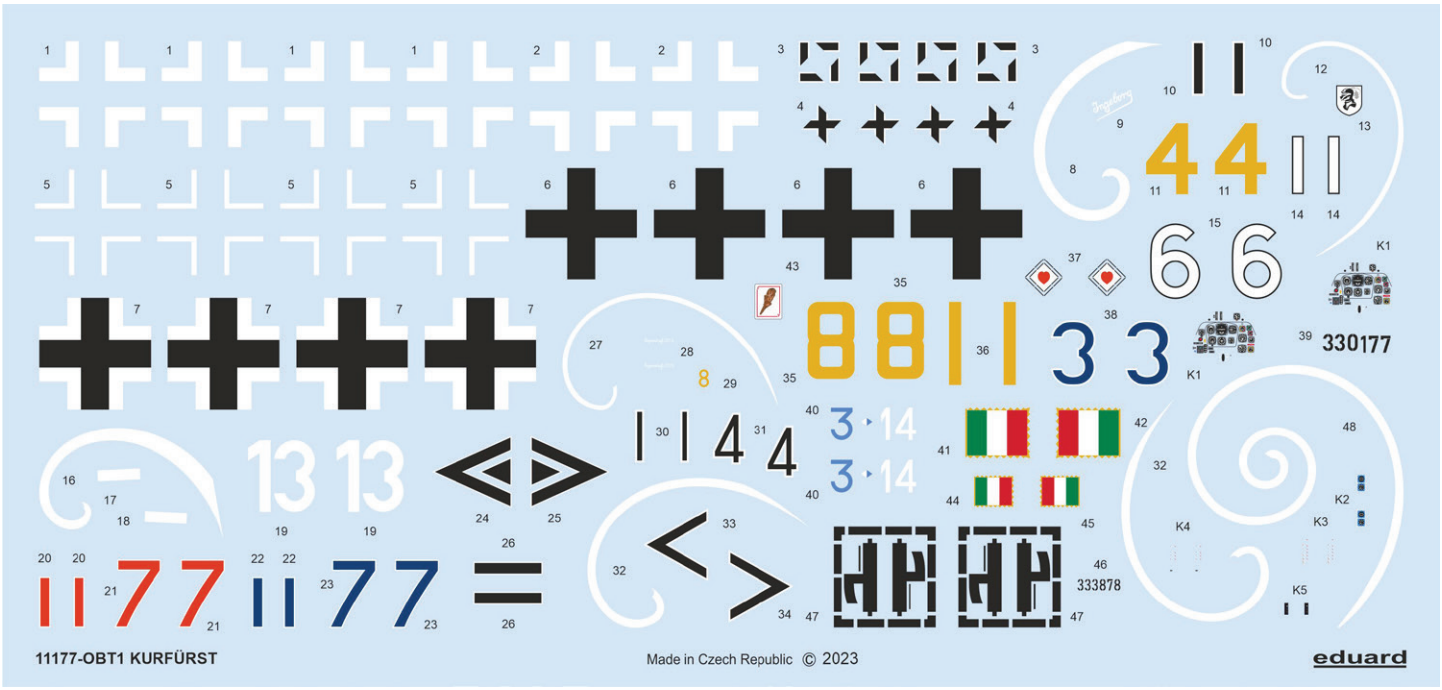
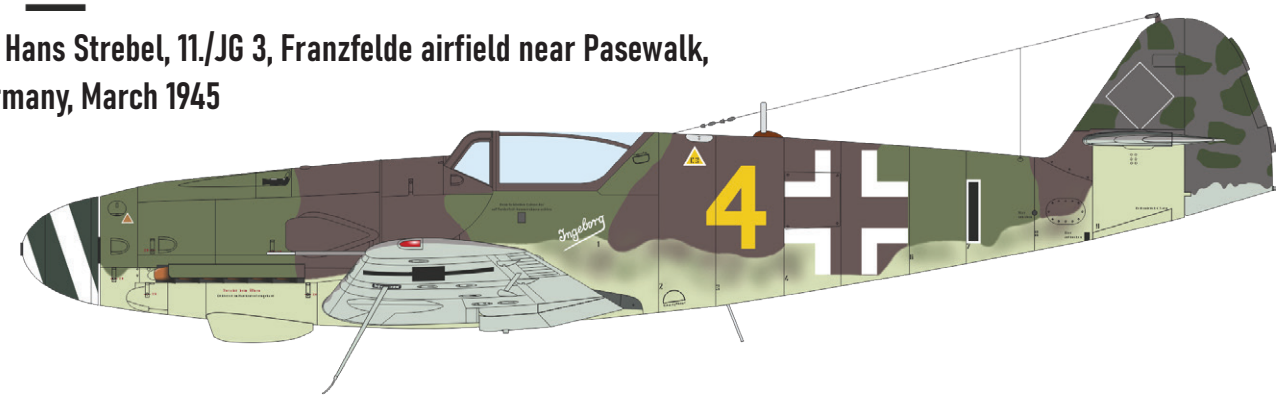




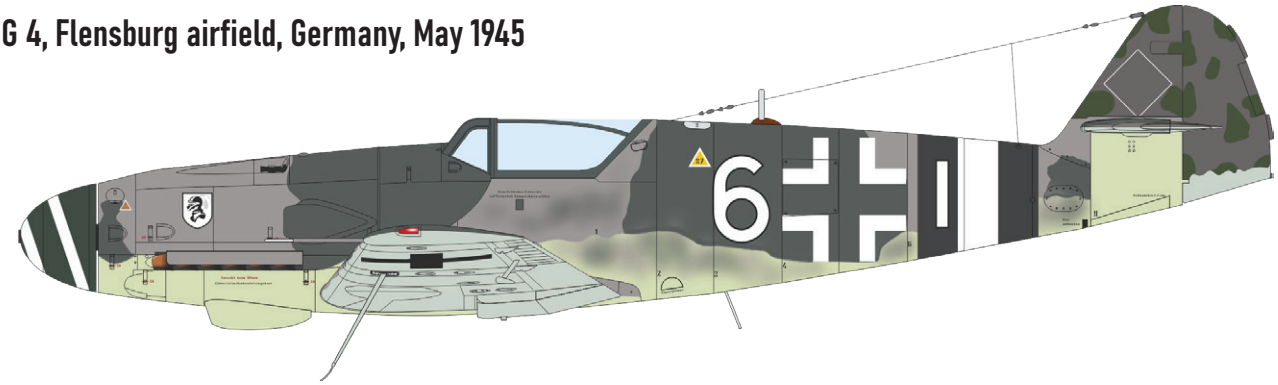


Fw. Hans Strebel, 11./JG 3, Franzfelde airfield near Pasewalk, Germany, March 1945



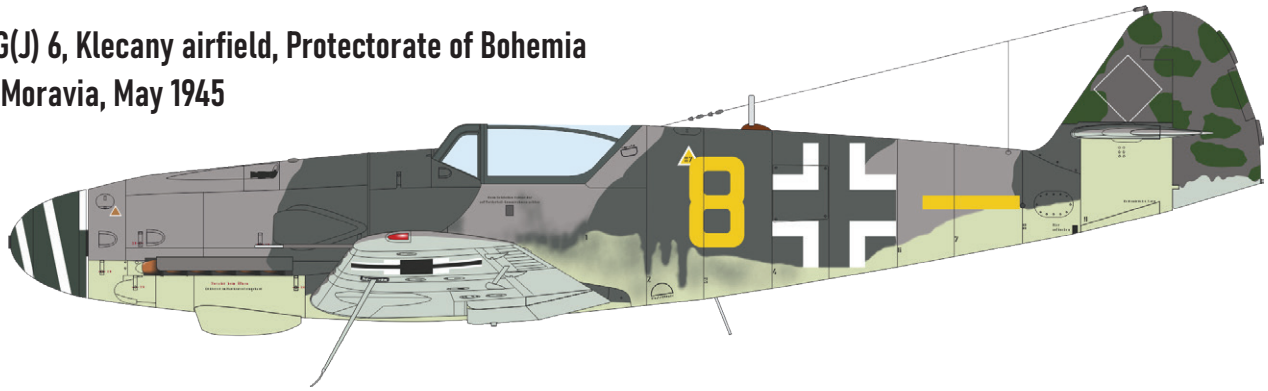
Hans Strebel originally served with 9./JG 3 and achieved his second victory during Operation Bodenplatte. In early 1945 he was transferred to 11./JG 3, which was also part of III./JG 3 Udet. From the end of January 1945, this unit was deployed in combat against the Red Army and by the end of the war had achieved at least 80 victories. Its missions included also attacking supply columns or escorting anti-tank Ju 87s. The last commander of 11./JG 3 was Lt. Rudolf Escherich, who originally served on He 177s with KG 1. In mid-April, 14 pilots of III./JG 3 volunteered for suicide deployment as part of Operation Freiheit. These were attacks by crashing into bridges over the Oder River. Their suicide action scheduled on April 16 ended in failure and the formation under Escherich's command lost six airmen. The C3 label on the fuel tank indicates engine that required 100-octane fuel. At the end of the war, machine with same design of fuselage number was photographed by a Soviet reporter at Finow airfield. Fuselage was probably painted in RLM 81 (dark brown variant) and RLM 82 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

9./JG 4, Flensburg airfield, Germany, May 1945



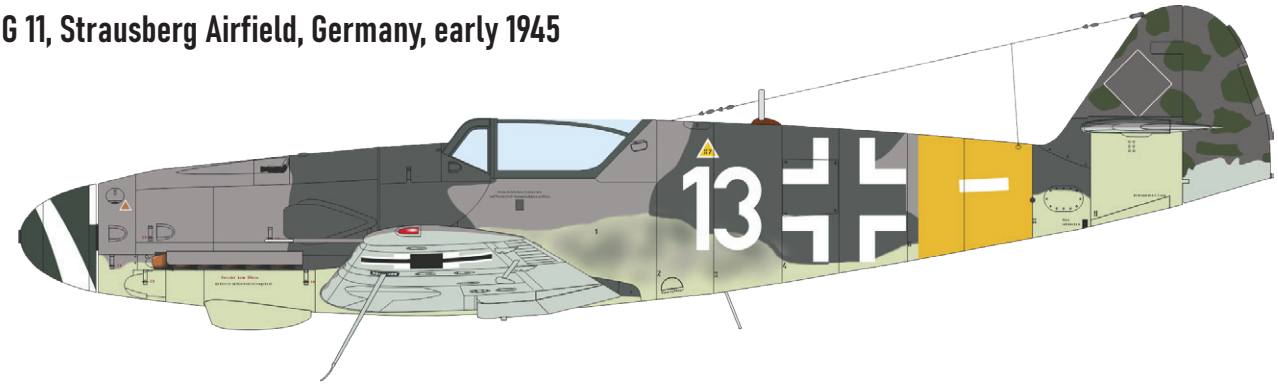
On the cowling is painted the emblem of JG 4 with a knight's helmet. The machine probably belonged to 9. Staffel of III./JG 4. It is possible that its pilot was Fw. Hans Braun, who used the same marked aircraft in late 1944. The Messerschmitt Bf 109K-4s were received by III./JG 4 in October 1944 and used along with the G-14 and G-10 versions. At that time, temporary commander of 9./JG 4 was Lt. Hans Klaffenbach (21 victories), who briefly represented Hptm. Johannes Kaufmann (10 v.). Hans Klaffenbach became commander of JaboG 32 with F-104s in 1964 and led it for eight years. In 1997 he was one of the most prominent guests at the opening of the Museum of the Air Battle over the Ore Mountains in Czech Republic, in which he took part on September 11, 1944. Kaufmann led his unit from the end of January 1945 in battles against the Red Army, and on several occasions his unit escorted airmen in suicide attacks on bridges on the Oder River. His daughter was the famous German actress Christina Kaufmann. Fuselage was probably painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

6./KG(J) 6, Klecany airfield, Protectorate of Bohemia and Moravia, May 1945



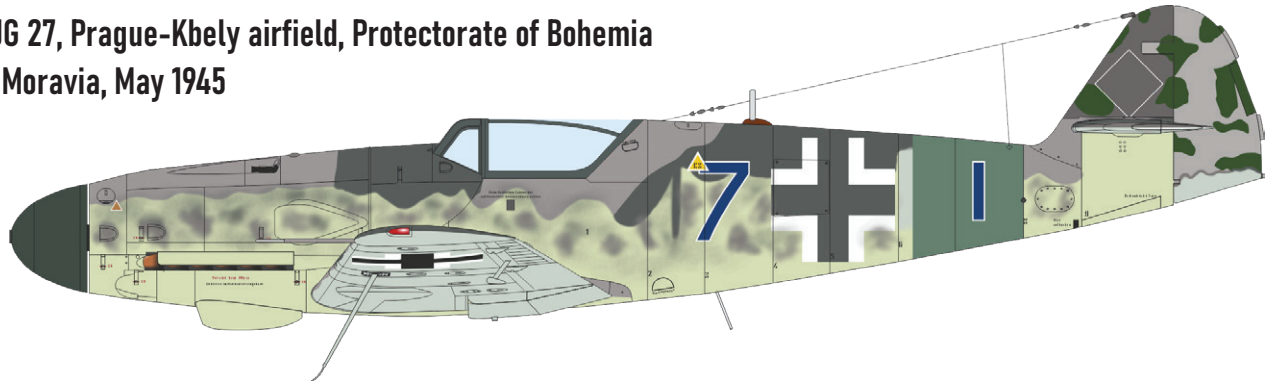
This aircraft, probably produced in the 332xxx series, found at the end of the war, bore signs of damage probably caused by an American air raid. KG(J) 6 was being retrained from bombers to fighter aircraft at bases in and around Prague. Eventually it was to be armed with Me 262 jets, but the retraining was done on single-engine fighters. The I. and II. Gruppe were equipped with Messerschmitt Bf 109G and K. For most of the time II./KG(J) 6 was undergoing retraining for fighters, its commander was Hptm. Hans-Joachim Faulhaber, who had previously served with KG 77 and was awarded the Knight's Cross. In 1942 he escaped night fighter over England and returned with a damaged plane. Faulhaber was replaced at the end of March 1945 by Hptm. Wilhelm Kunze, who had seen combat on the Western Front with KG 2 and was also shot down by a British fighter, in December 1943, during a training flight near Eindhoven. His unit was defeated in aerial combat on March 31, 1945, against Mustangs from the 309th FS, 31st FG. Fuselage was probably painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

5./JG 11, Strausberg Airfield, Germany, early 1945



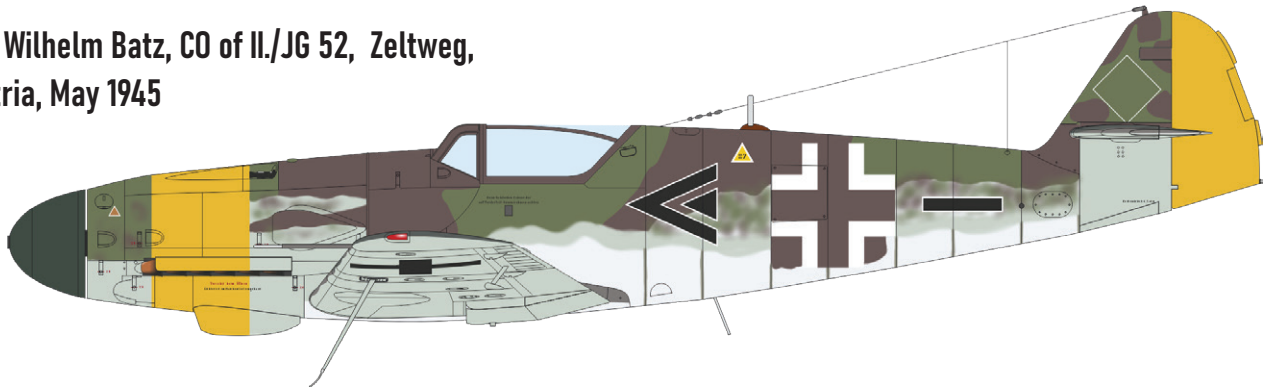
By the end of 1944, II./JG 11 was equipped mainly with Messerschmitts Bf 109G-14/AS. During December this unit lost 42 machines in combat and due to accidents. In the same month first delivery of K-4 version arrived. During Operation Bodenplatte the II./JG 11 lost nine more planes, including the first two K-4s lost in combat. This unit was deployed from late January 1945 to Strausberg air base east of Berlin against the Soviet Air Force. The machine probably carried a yellow band as a quick identification feature of JG 11 among Luftwaffe fighter units. The commander of II./JG 11 from August 1944 until its disbandment in early April 1945 was Hptm. Karl Leonhard. Born in 1913, he served with I./JG 53 at the start of the war and achieved his first victory, Potez 63, on May 26, 1940. His last victories (21st-23rd) were achieved on April 16, 1945, in an Fw 190A against Soviet bombers, as the last commander of I./JG 11. After the war he moved to the USA and died in San Diego in 1995. Fuselage was probably painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

12./JG 27, Prague-Kbely airfield, Protectorate of Bohemia and Moravia, May 1945



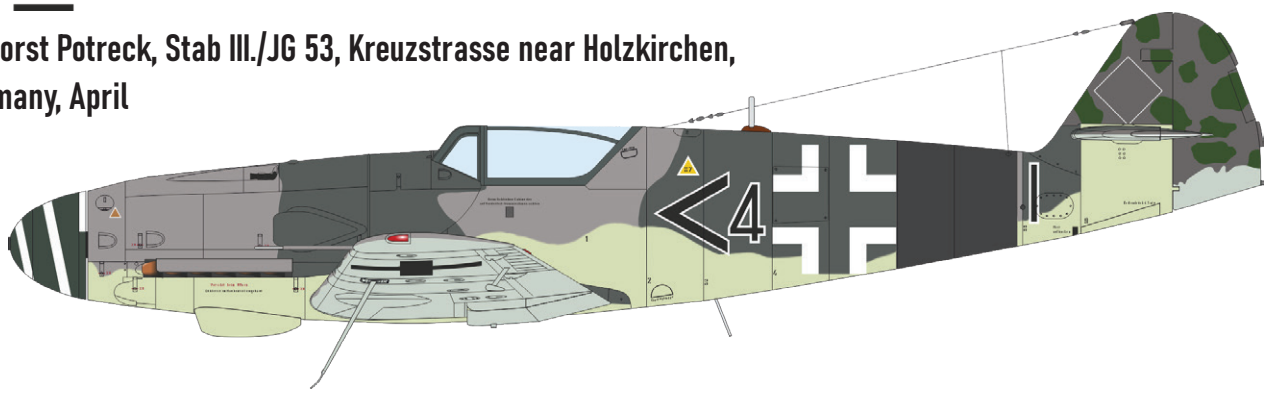
The commander of III./JG 27 from October 1944 until the end of the war was Austrian Hptm. Dr. Peter Werfft (26 victories). During the same month his unit received Bf 109K-4s. From February 1945 his deputy was CO of 12./JG 27, Oblt. Emil Clade (27 victories). While serving in Africa with II./JG 27, Clade and his Schwarm attacked a lone low-flying Bristol Bombay transport from No. 216 Sqn RAF on August 7, 1942 in the Allied rear. He managed to shoot it down and on the ground the machine was destroyed by Uffz. Schneider, who was awarded the victory. The commander of the British Eighth Army, Lt. Gen. W. H. E. Gott was killed on board. In his place was appointed Lt. Gen. Montgomery, for whom Gott's death became a major milestone in his career. Clade led 12./JG 27 from November 1944 during the fighting in western Germany until its disbandment in early April 1945. In the last month of the war, he commanded I./JG 27. After the war, he worked as an airline pilot, took up sport flying, and published a memoir in 1996. Fuselage was probably painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

Maj. Wilhelm Batz, CO of II./JG 52, Zeltweg, Austria, May 1945



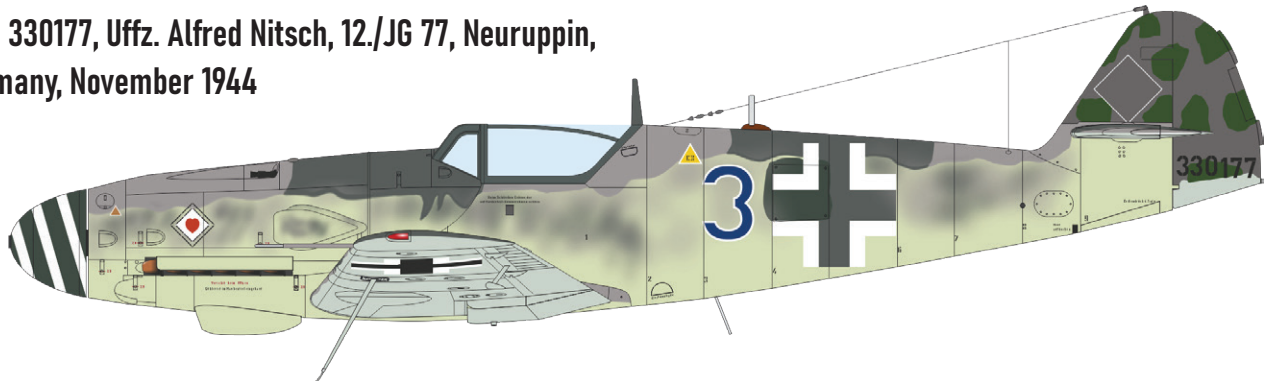
This aircraft (probably 334xxx series) was the personal mount of the CO of II./JG 52, Maj. Wilhelm Batz. In February 1943 he was assigned to the Stab II./JG 52 on the Eastern Front and achieved his first victory on March 11. In May he was appointed CO of 5./JG 52. By March 1944 he had already achieved his 100th victory and in April he was appointed CO of III./JG 52. In early February 1945 he became commander of II./JG 52 in Hungary. He scored his last victory (237th) on April 16, 1945. Five days later he received the Swords to the Knight's Cross with Oak Leaves. Batz and his unit flew from Zeltweg, Austria, to Bad Aibling, Bavaria, on May 8, 1945, to surrender, escorted by a formation of Thunderbolts in the final part of the route. After the war he joined the Bundesluftwaffe and successively commanded Flugzeugführerschule S and Lufttransportgeschwader 63. Yellow markings were introduced by Luftflotte 4 in March 1945. The fuselage and vertical tail were painted with RLM 81 (dark brown variant) and RLM 82. The lower part of the fuselage was left unpainted, the joints were filled. Fuselage sides were sprayed with RLM 76, which is also used on the oil cooler cowling. The wing was camouflaged with RLM 74, 75 and 76.

Lt. Horst Potreck, Stab III./JG 53, Kreuzstrasse near Holzkirchen, Germany, April



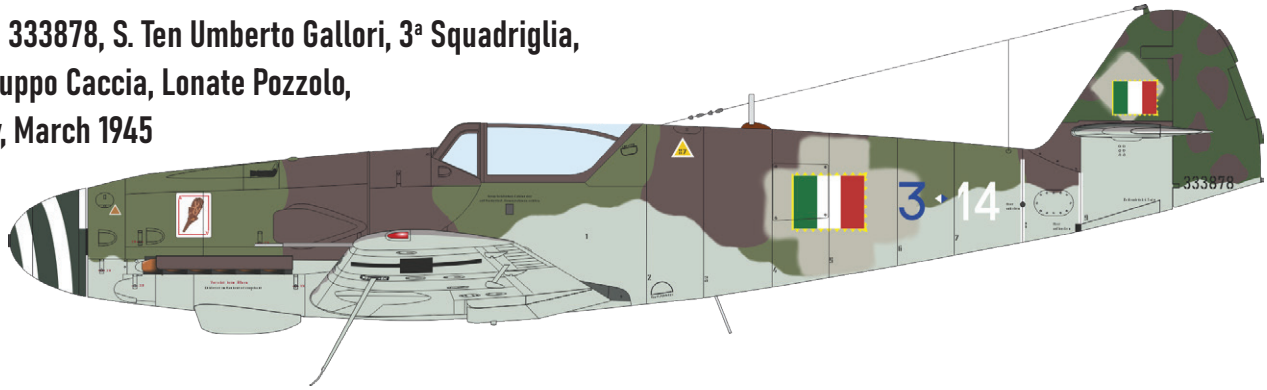
Twenty-year-old Horst Potreck served in the 11./JG 53 in 1944 and later was assigned to Stab III./JG 53. The CO of III./JG 53 at that time was Hptm. Siegfried Luckenbach. In the summer of 1943, at the age of thirty-one, he began serving with Stab III./JG 1 in the Netherlands and scored three victories. A year later, he briefly commanded I./JG 27 on the Western Front. In September 1944 he was reassigned to Stab III./JG 53 and took over 12. Staffel. During Operation Bodenplatte he was shot down by an American fighter but escaped. At the end of January 1945 he became commander of III./JG 53 and scored several more victories. In February he was again shot down in combat with the Americans. His career ended in April accident when Luckenbach unexpectedly stopped after landing and climbed onto the wing. Potreck apparently did not see him, rammed his aircraft and Luckenbach was severely wounded. The wreckage of the machine Chevron 4, probably Potreck's, was found by Allied soldiers after the fighting ended. Fuselage was probably painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

WNr. 330177, Uffz. Alfred Nitsch, 12./JG 77, Neuruppin, Germany, November 1944



In October 1944, III./JG 77 became the first Luftwaffe fighter unit to be completely re-equipped with the Bf 109K-4. They received 68 of these aircraft. Its commander was the experienced JG 77 veteran Major Armin Köhler (40 victories, KC). Uffz. Alfred Nitsch was photographed with the "Blue 3" in November 1944. It is highly likely that the aircraft was serial number 330177. Fw. Hans Rössner (12 victories) was lost in this plane during a dogfight with Thunderbolts on December 23, 1944, near Münstereifel. Although the Germans claimed three P-47s as shot down, 13 Bf 109K-4s were destroyed or damaged. Two pilots were killed and four were wounded. During December 1944, III./JG 77 lost about half of its aircraft. During Operation Bodenplatte, in which III./JG 77 lost a further 11 machines and pilots, again part of its armament was various versions of the Bf 109G. From mid-January 1945 it was deployed on the Eastern Front. At the end of the war this unit fought in Upper Silesia, based at Beneschau in the Hlučín region (today Dolní Benešov, Czech Republic). Fuselage was probably painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.

WNr. 333878, S. Ten Umberto Gallori, 3ª Squadriglia, Iº Gruppo Caccia, Lonate Pozzolo, Italy, March 1945



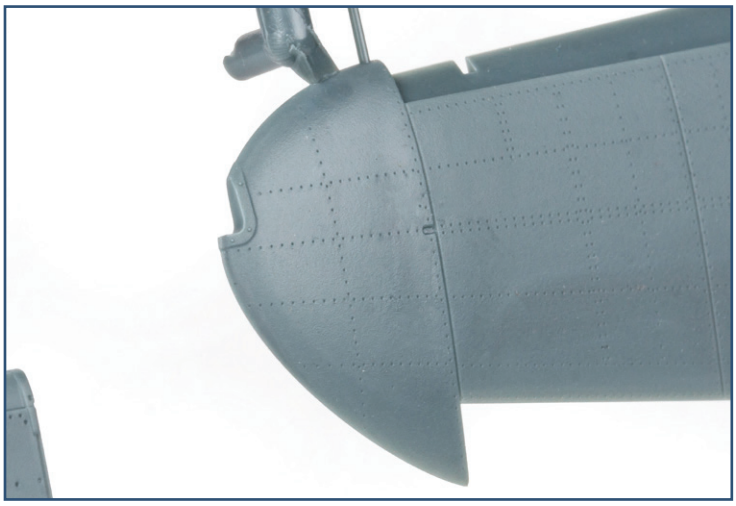
This aircraft, produced in February 1945, was one of six Bf 109K-4s received by the Aeronautica Nazionale Repubblicana in Northern Italy. During February it was assigned to 3ª Squadriglia "Arciere", which was part of Iº Gruppo Caccia "Asso di Bastoni" under the command of Maggiore Adriano Visconti (10 victories). The aircraft, WNr. 333878 "3-14", was damaged in aerial combat on April 10, 1945. In the early morning hours, three Bf 109s from Io Gr. C. were sent against four P-47s from the 65th FS, 57th FG, which were conducting a weather reconnaissance in the Milan-Lago di Como area. In the aerial combat a Bf 109G-14/AS "1-7", piloted by M.llo Veronesi, and a Bf 109K-4 "3-14", piloted by S. Ten Gallori, were damaged. One P-47 was reported damaged by M.llo Forlani. The American pilots did not claim any victories. In late April, the Iº Gr. C. moved to Malpensa and on April 29, after receiving security guarantees, laid down its arms and surrendered. Visconti and his aide, however, were shot dead by Russian bodyguards of resistance commander Aldo Aniasi. Fuselage and vertical tail was probably painted in RLM 81 (dark brown variant) and RLM 82 with yellow-grey version of RLM 76. Wing was painted with colors RLM 74, 75 and 76, the RLM 74 was darker version with tinge of green.

KURFÜRST and its design improvements

The design of the kit has been reworked according to our current technological standards and includes improvements according to the latest development of our kits. We have created a completely new set of molds. There's not a single carry on in the plastic parts. Even if some of them look similar to the ones of our previous kits of the Bf 109s, they have design and technological modifications. The improvements are presented in the photos below.

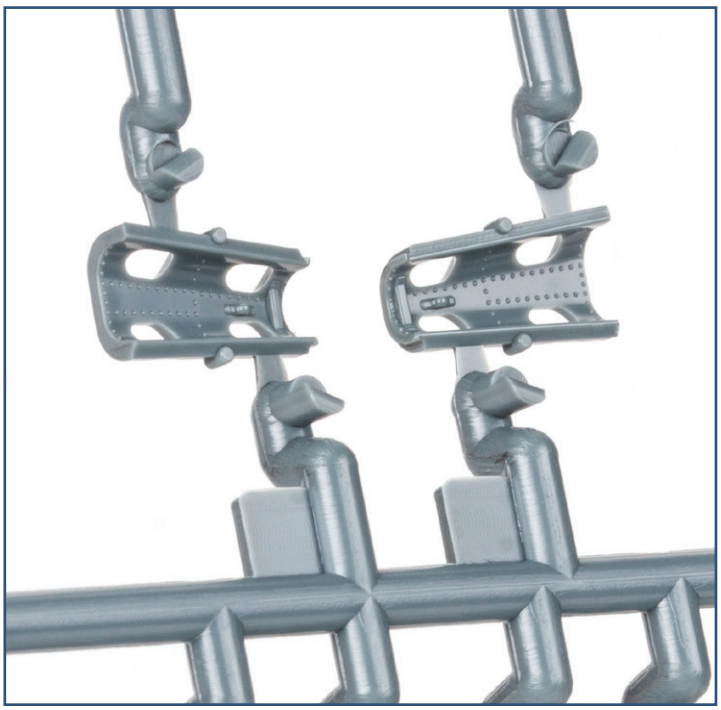
• Position lights

The position lights are molded separately from transparent material.



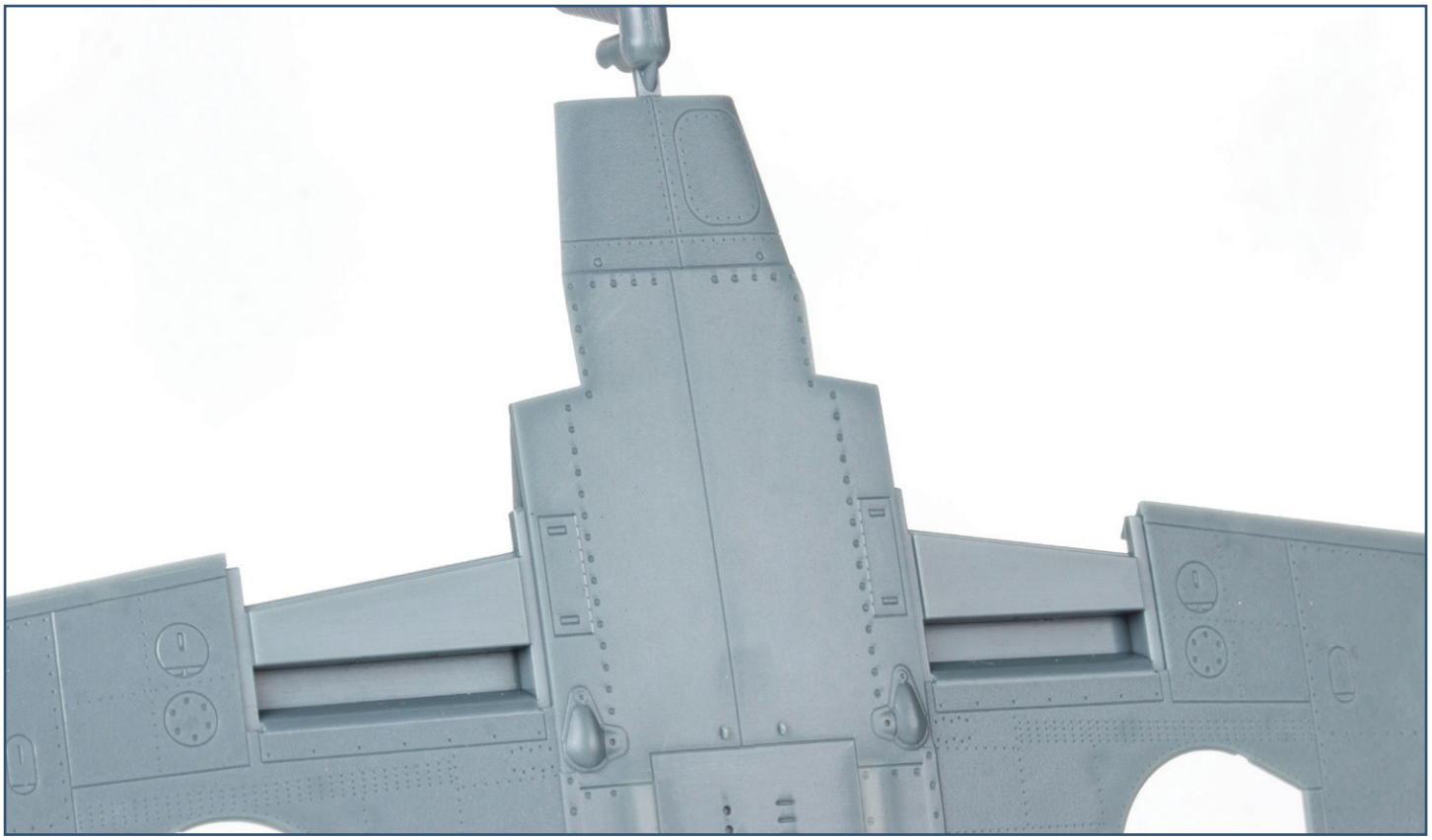
• Wheel bays

The wheel bays have a redesigned section for the landing gear legs. This also includes the perforation of the part.



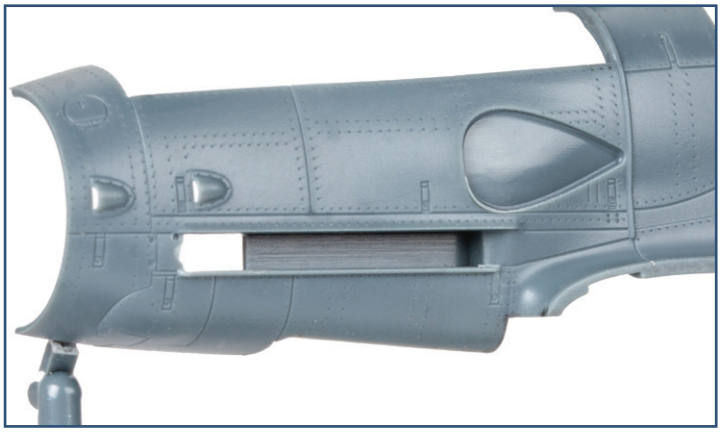
• Fuselage and wing centerplane division

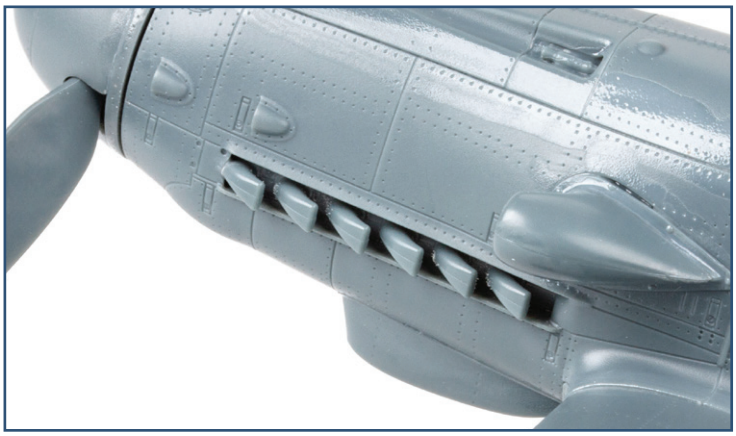
The division between the fuselage and wing centerplane has been moved back, beyond the first fuselage bulkhead. This allows the details on the rear of the centerplane (on the "belly" of the aircraft) to be molded cleanly, especially the large access cap for the water/methanol mixture tank.



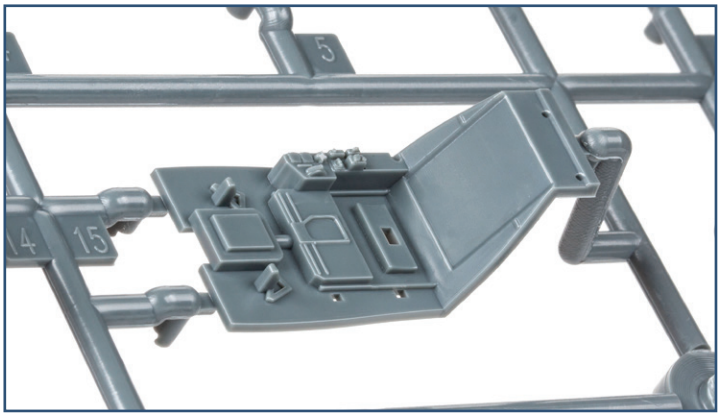
• Exhausts

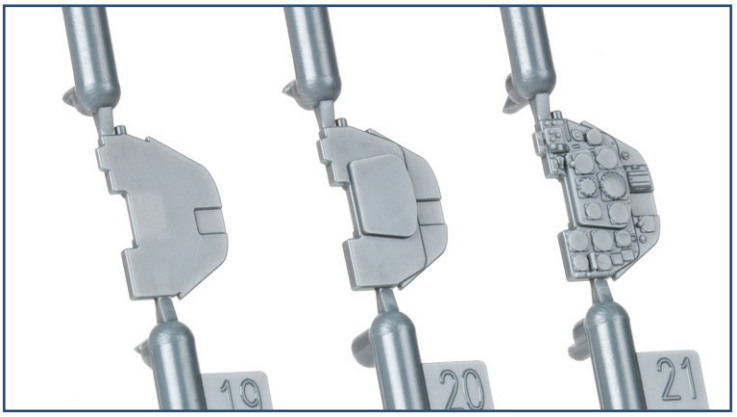
The exhausts are newly designed, they can be glued from the outside at the end of the build.

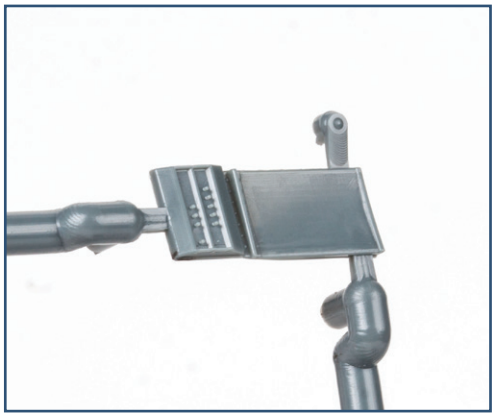


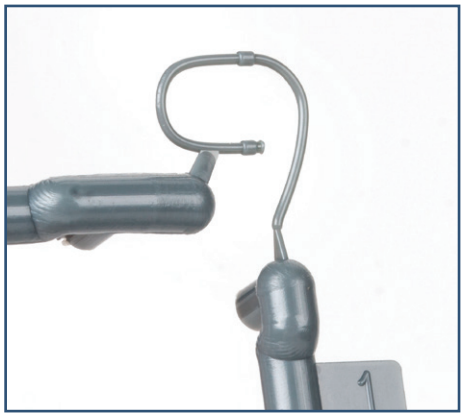


• Cockpit



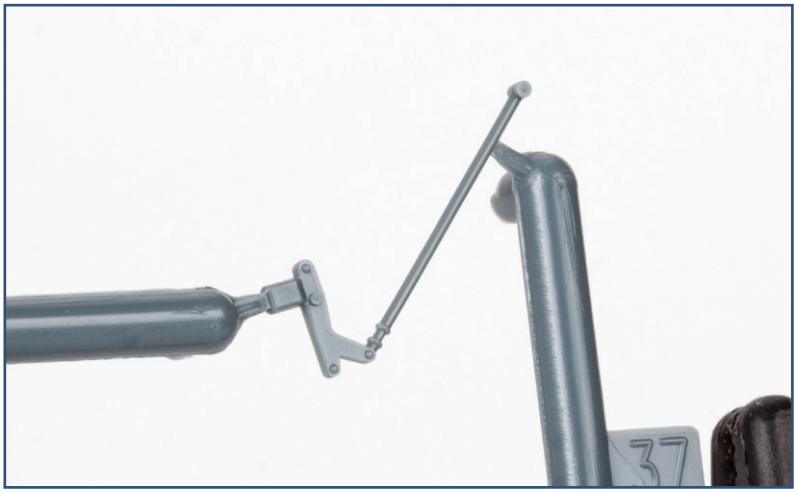






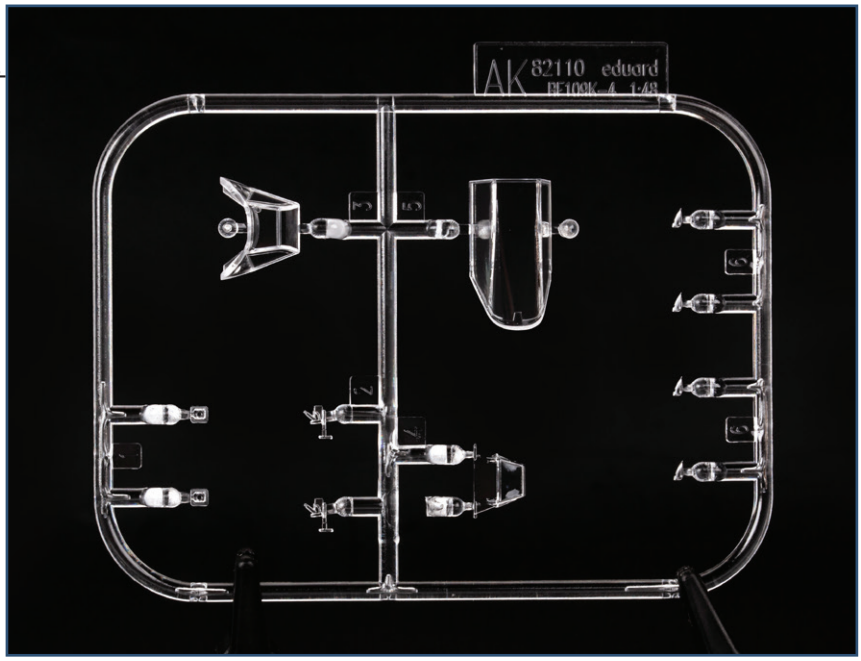
• Tail landing gear

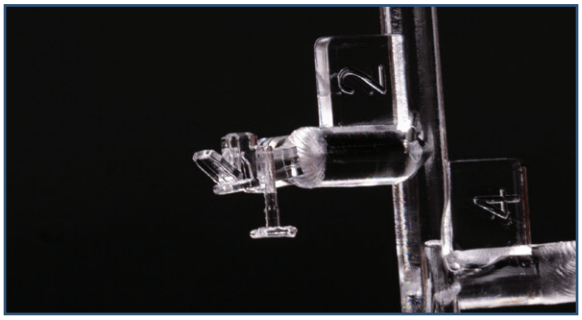
An auxiliary box was designed for the tail landing gear. This allows to glue the part into the fuselage at the end of the build.

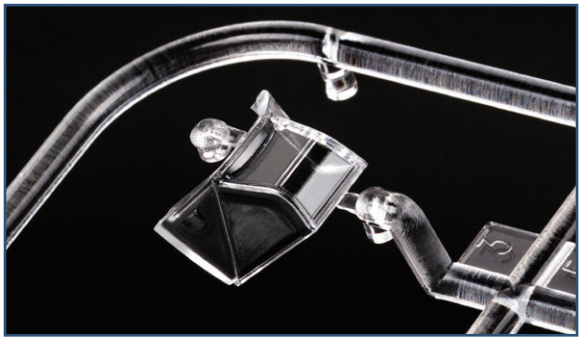


KURFÜRST - Sprues in detail

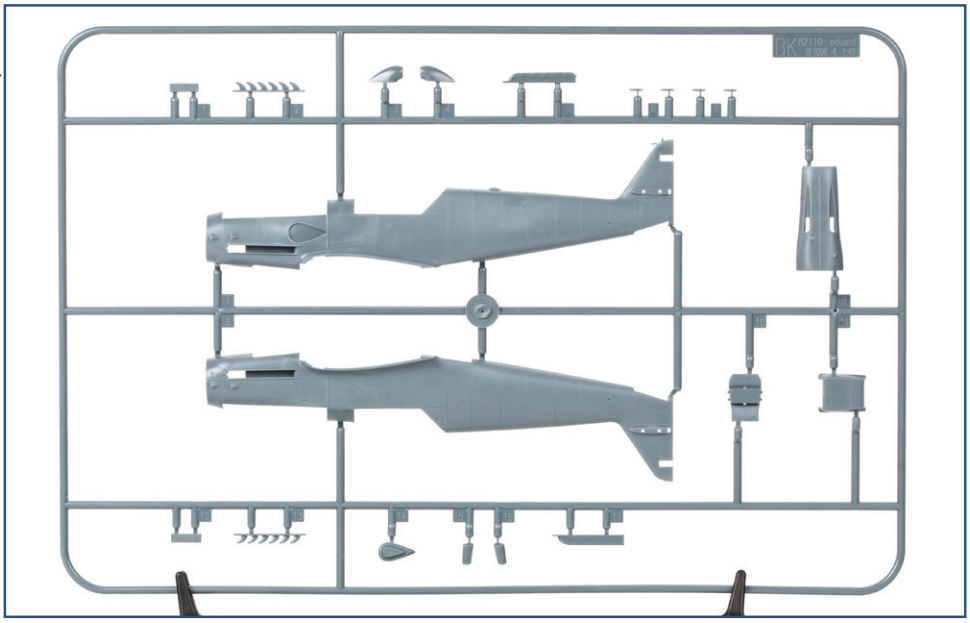
Sprue AK

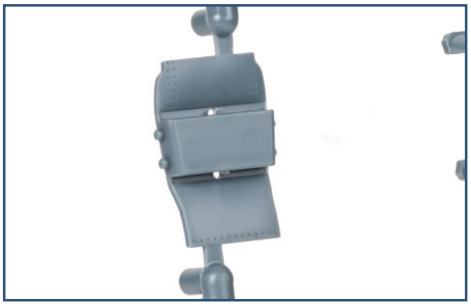


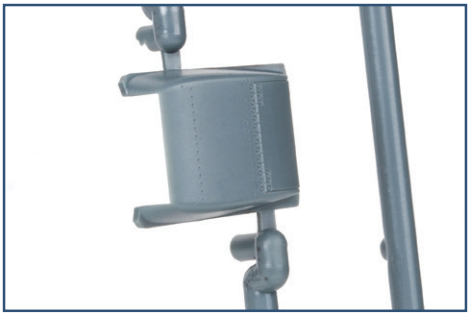


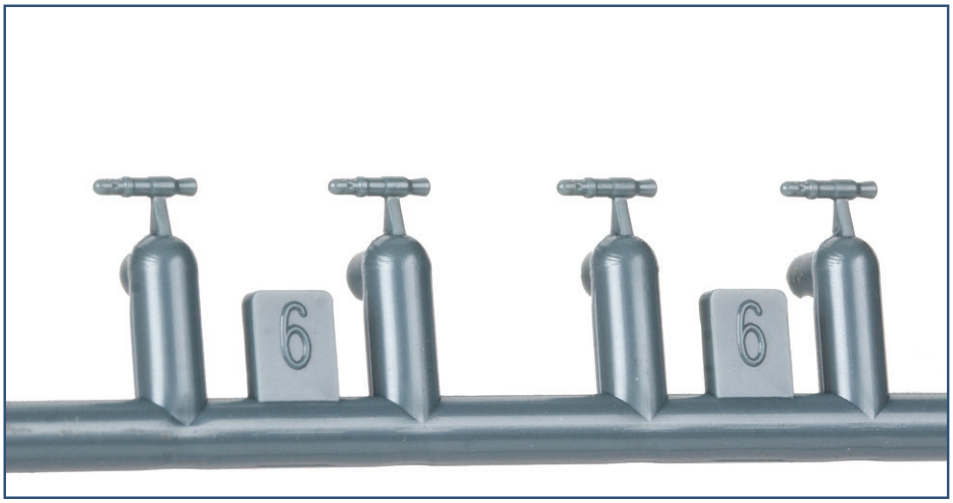


Sprue BK

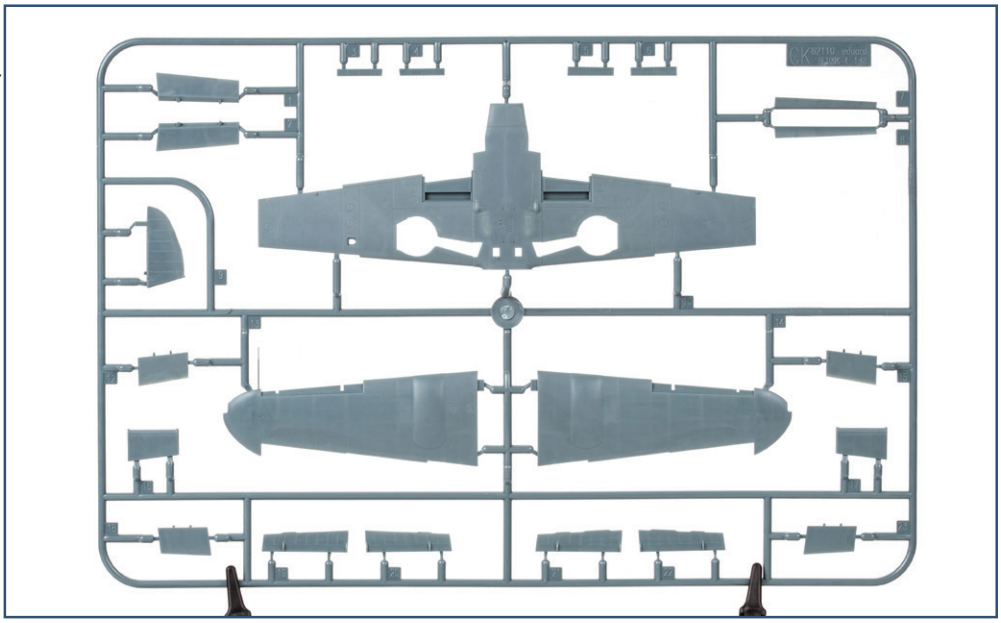


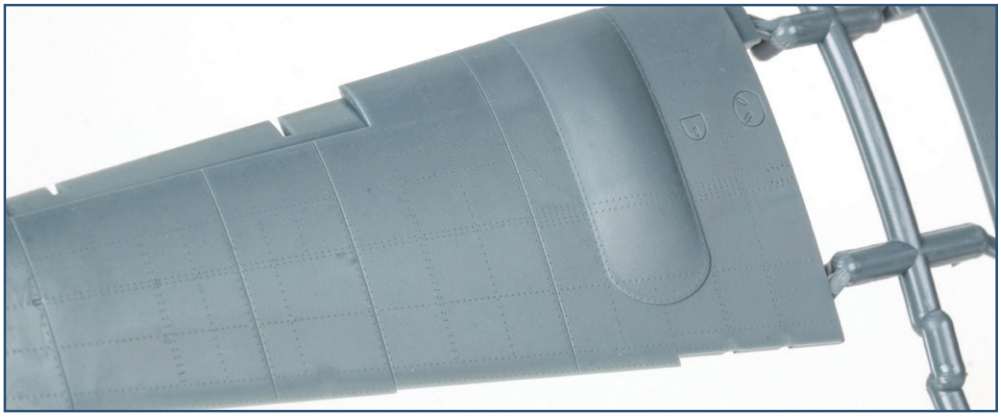




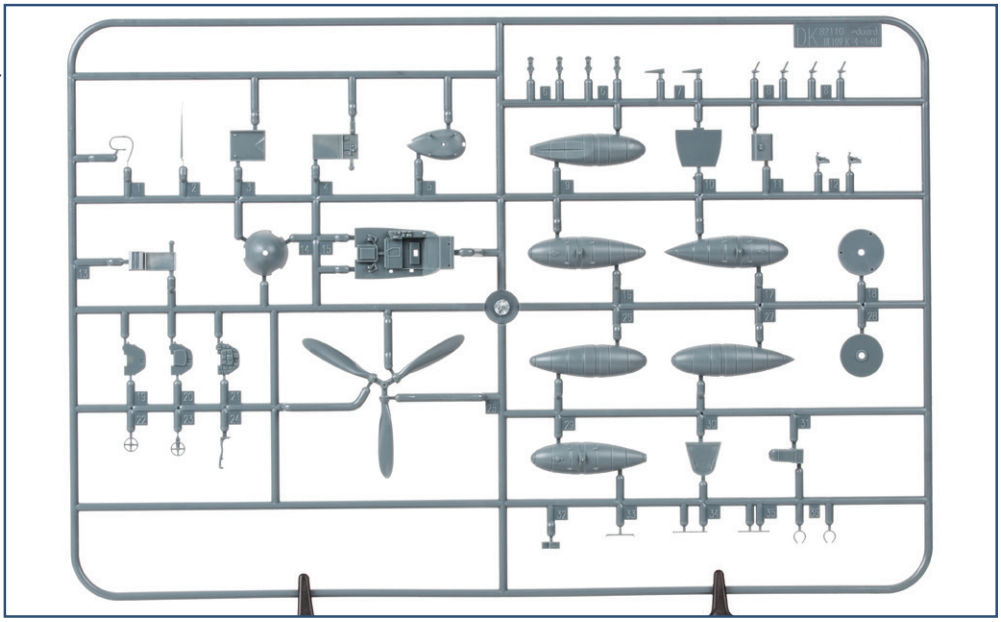


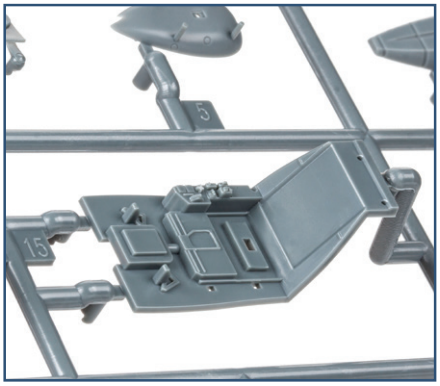
Sprue CK

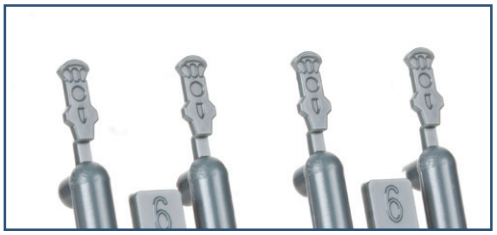


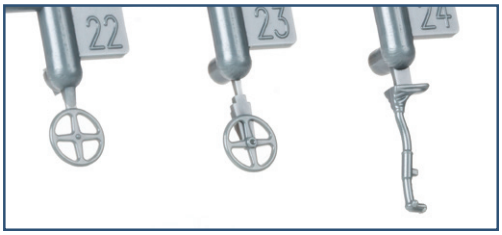


Sprue DK









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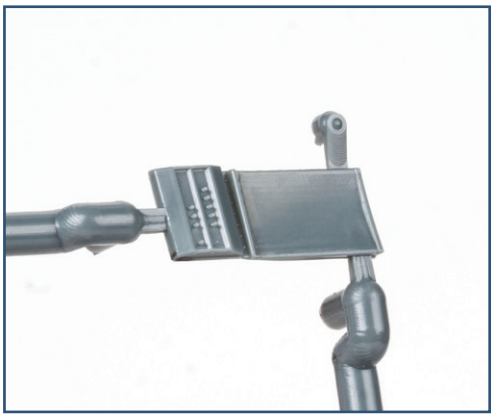
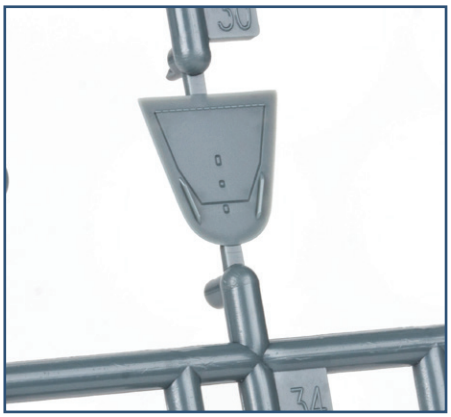
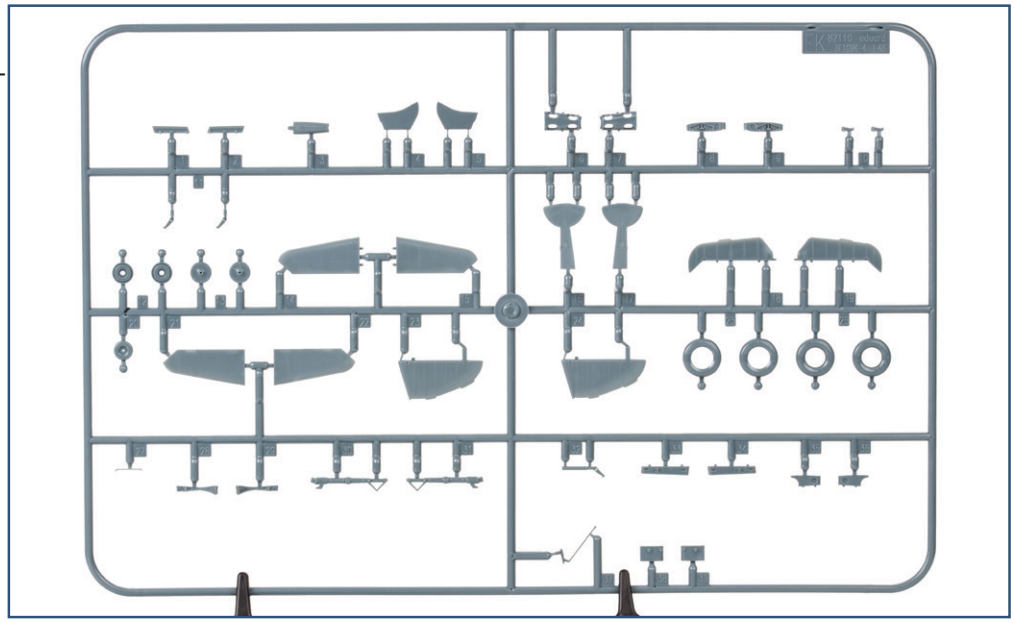
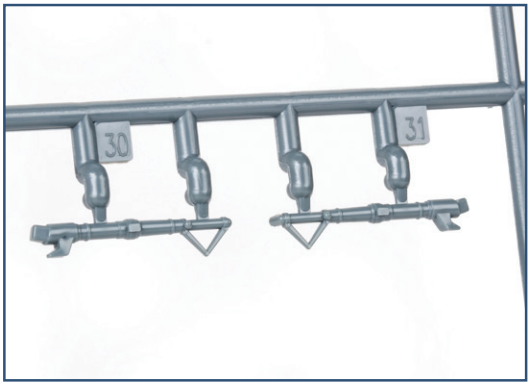




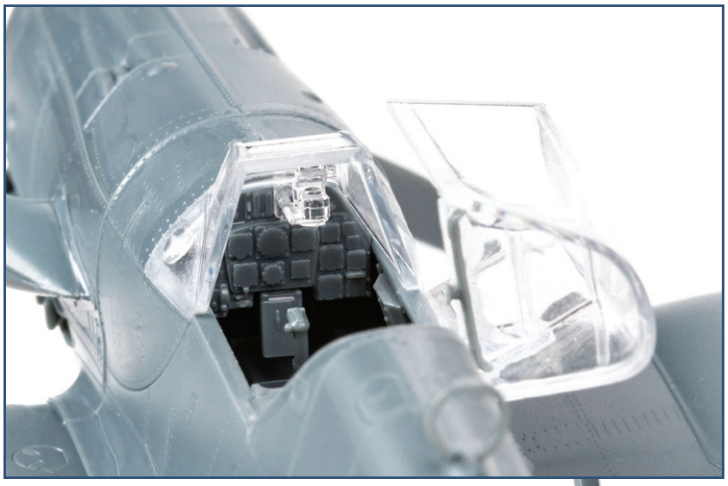
Sprue EK

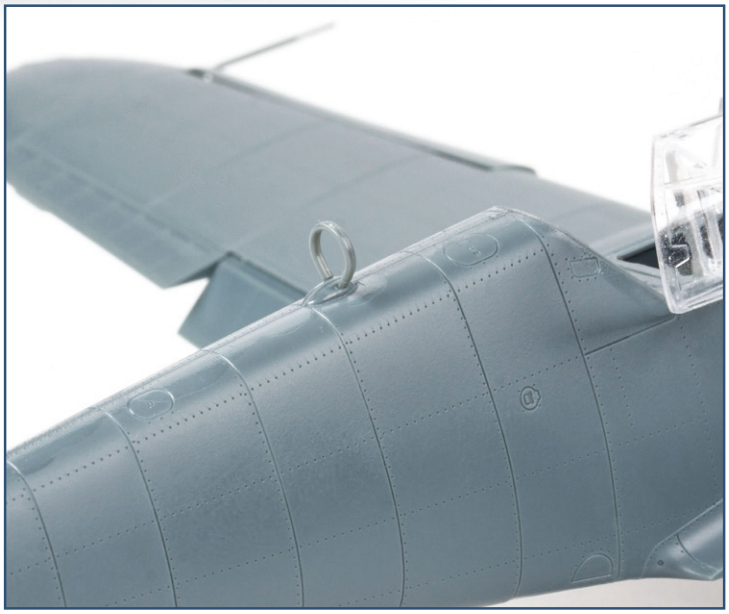


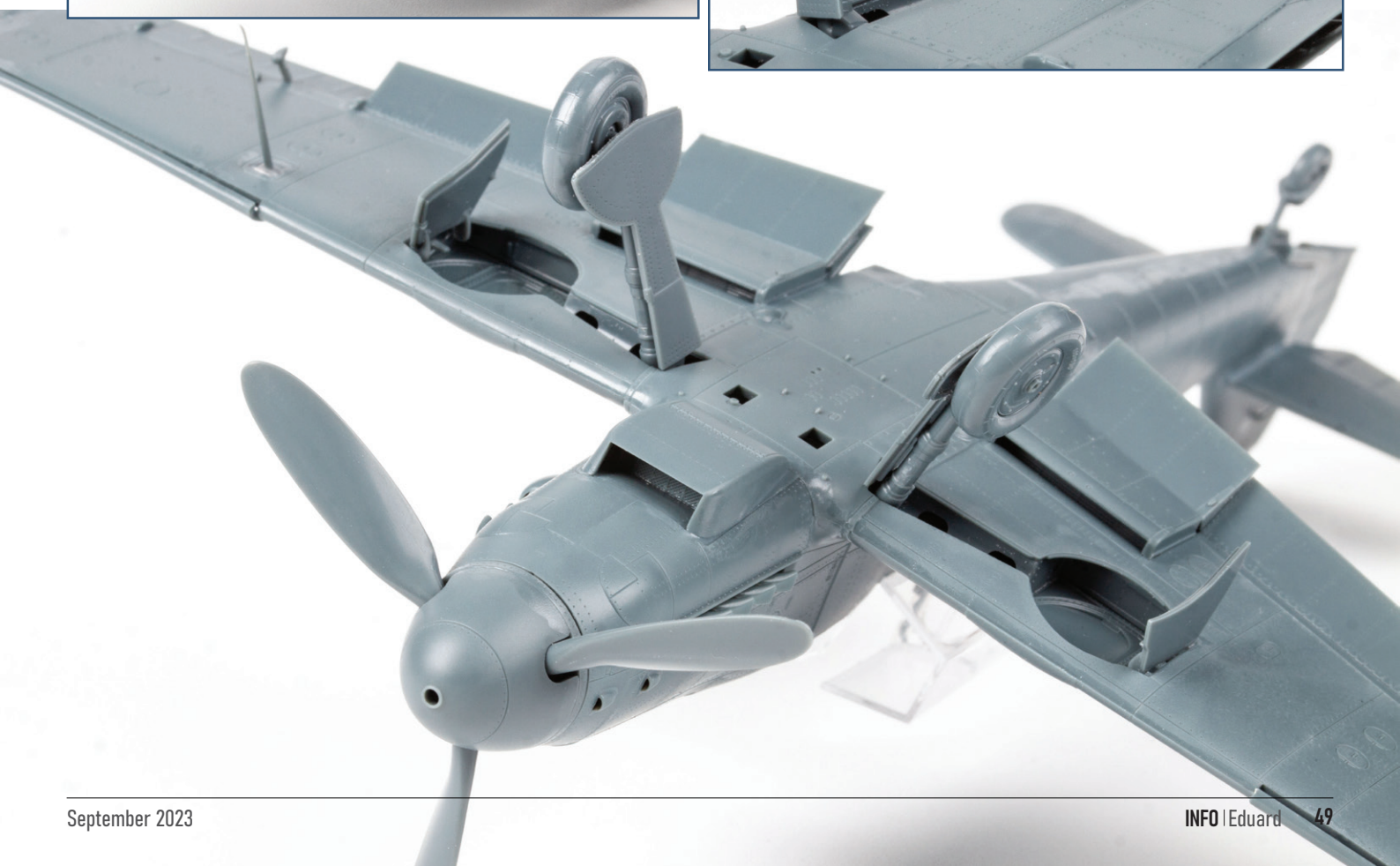


KURFÜRST - TEST BUILT

built by **Jakub Nademlejnský**







STEP BY STEP

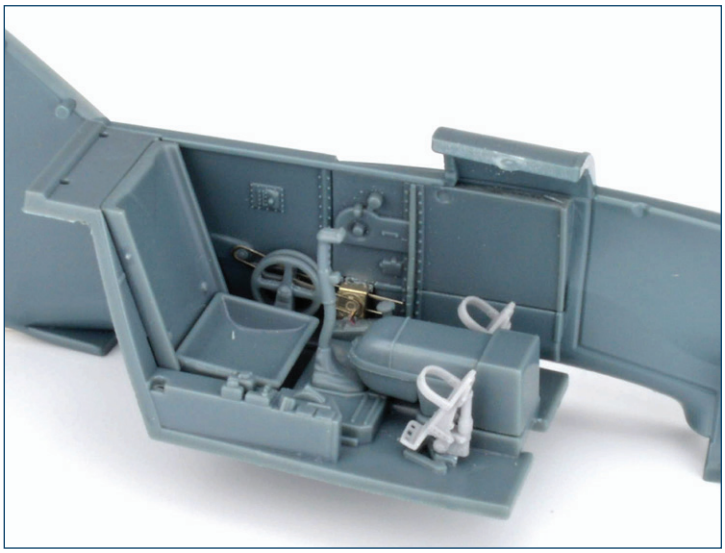
KURFÜRST

1/48

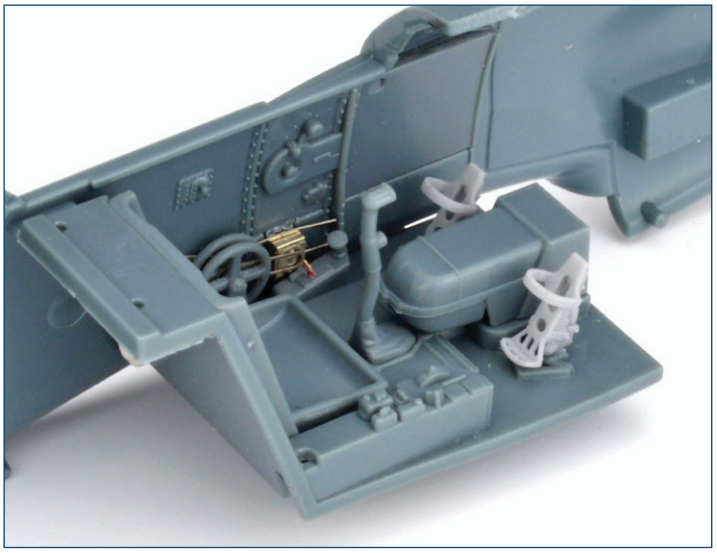
#11177
MARKING A

built by **Jan Baranec**

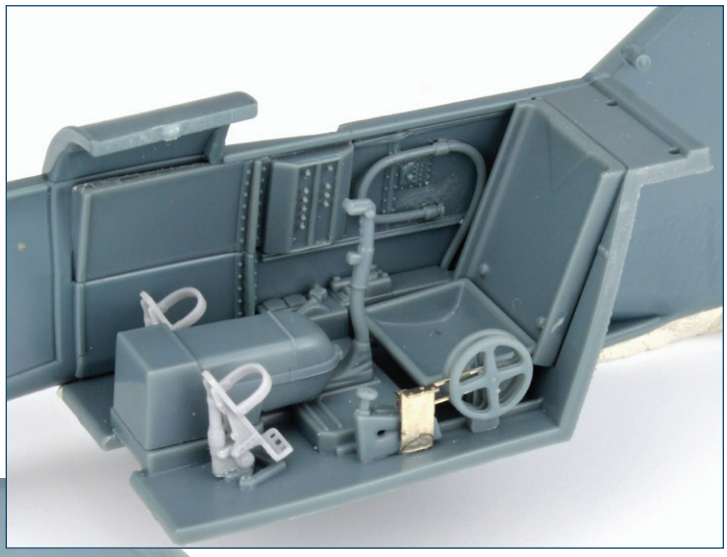
Follow me: https://instagram.com/48_scale_hangar



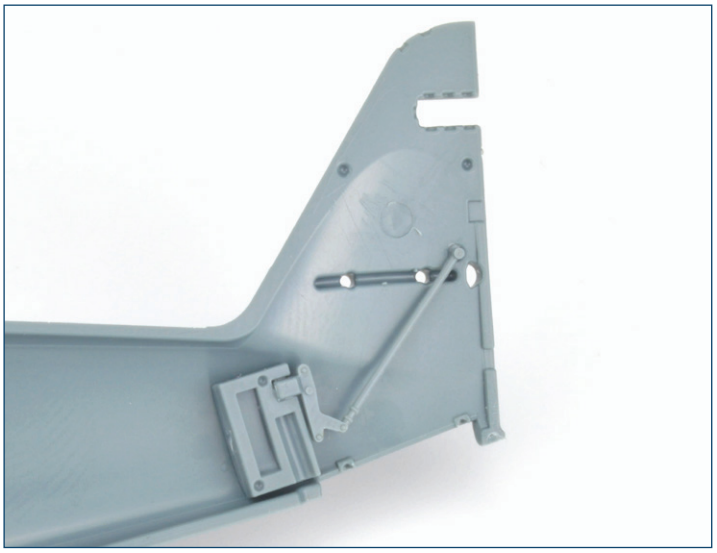
◆ The kit includes an etched fret with parts that improve on the details in the cockpit.



◆ The 3D printed rudder pedals from set 648778 just need to be separated from their supports and glued in place.



The kit cockpit prior to painting



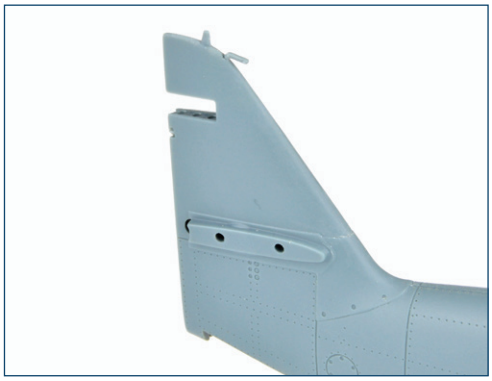
The retraction mechanism for the tail wheel together with the right half of the part for anchoring it in place. Contrary to previous versions of the Bf 109, the tail wheel is glued in place after fuselage assembly.

The left side of the cockpit after painting with Gunze paints. The steel etched seatbelts hail from LööK set 644227 cockpit package.

The details are painted with Vallejo brush paints. The LööK instrument panel from set 644227 fits very precisely.

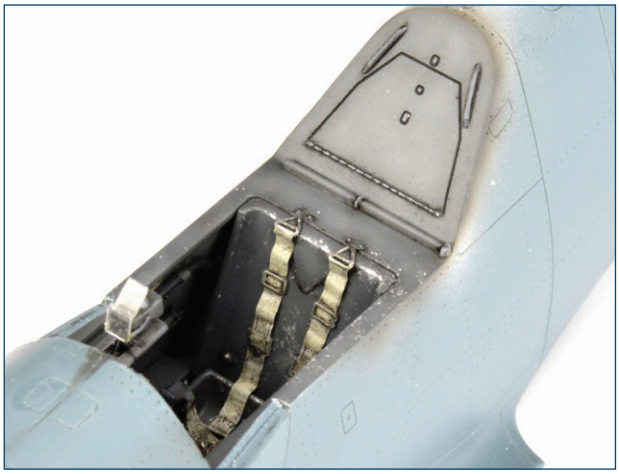
The kit cockpit can be improved with placards and dials, either etched parts or decals. I chose the decal option. Depth and highlights are brought out using oil paints.

◆ Before gluing the fuselage halves together, I recommend slightly "knocking down" the edge of the upper and lower contact surfaces. This, in conjunction with using a thin type of glue, will result in the creation of the join line down the length of the top and bottom fuselage centerlines.

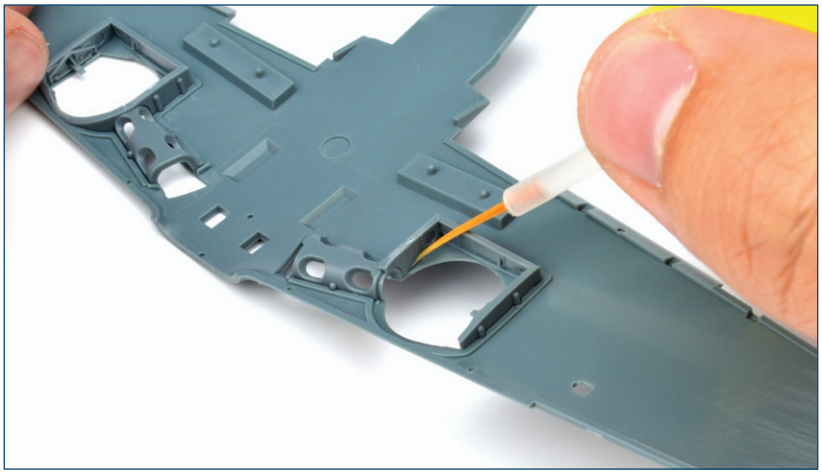


◆ The kit contains two options for attaching the antenna wire to the fin of the aircraft.

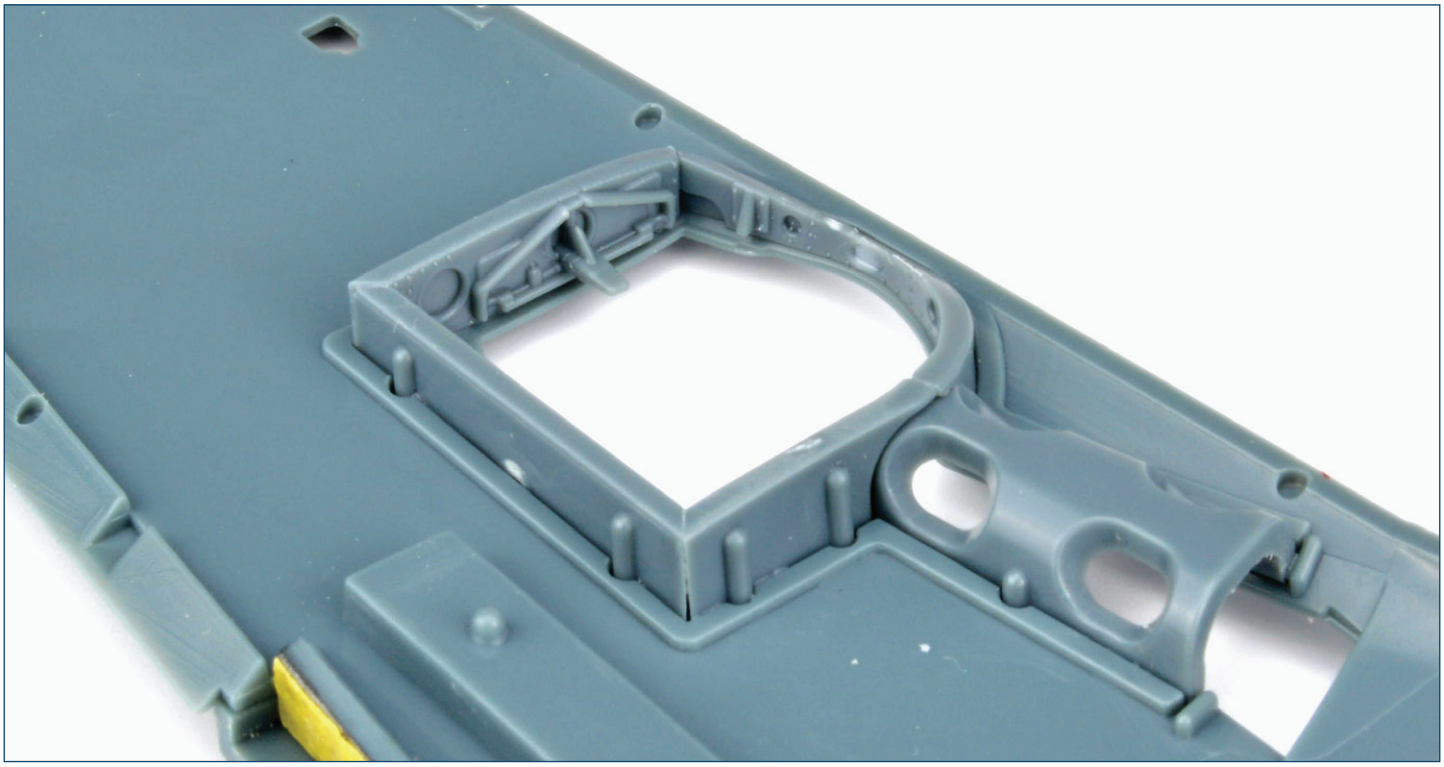
◆ I replaced the thick glass of the kit Revi 16B plastic with thinner ones made of transparent sheet.



◆ The joint between the rear cockpit bulkhead (DK30) and the fuselage was puttied and sanded before painting with RLM 66.



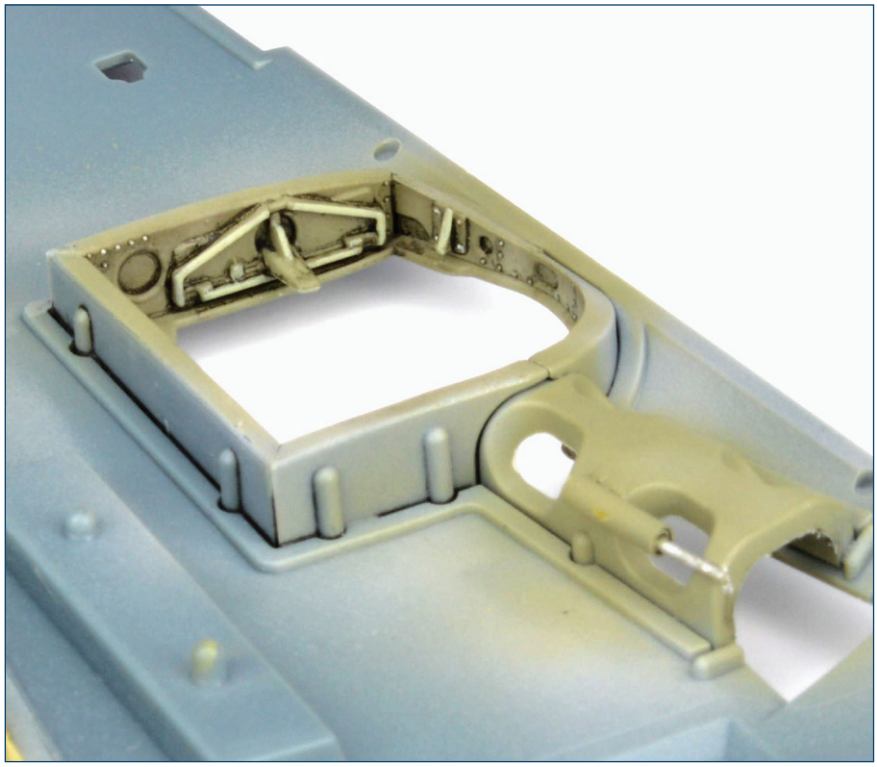
◆ The wheel wells are very detailed, and their fit is a precise affair. Therefore, it is best to use a thin solvent type glue.



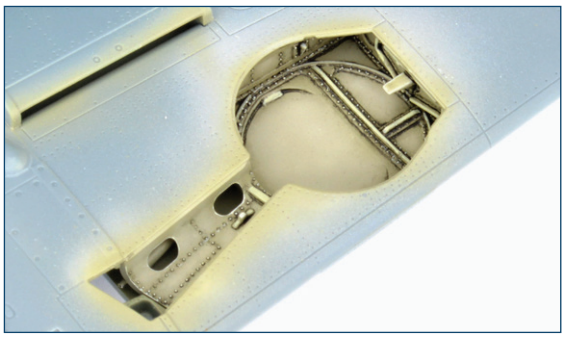
◆ Unlike previous versions of the Bf 109, the rounded section of the wells have four thinned perforations.

◆ The wheel wells after assembly, dry fitted into the wing.

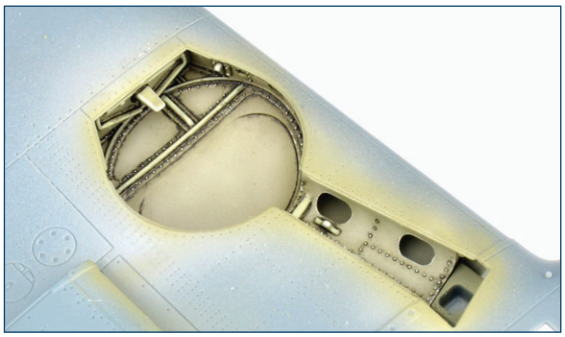
◆ The well ceiling details are molded in the upper half of the wing.



◆ The precise fit of the wheel wells allows them to be painted before the wing halves are joined together. This has the benefit of easy access to paint and weather the beautiful details, bringing them out to great benefit of the final outcome.

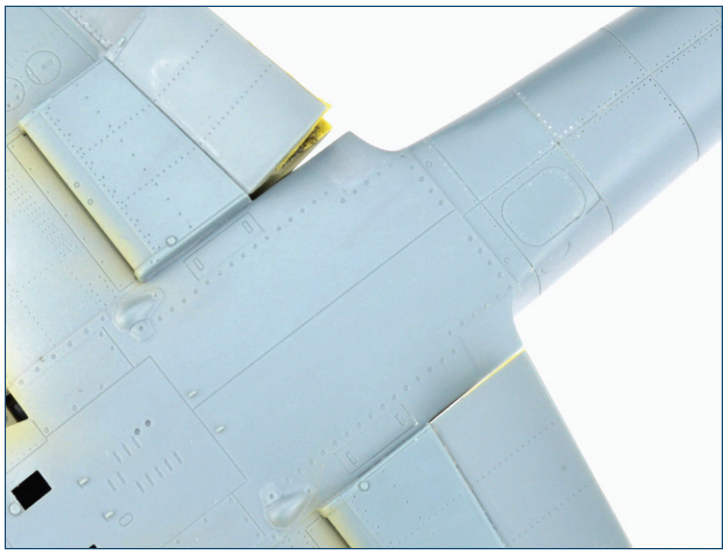


◆ The wheel wells are painted and highlighted with Gunze RLM02 (C60) and Off White (C69).

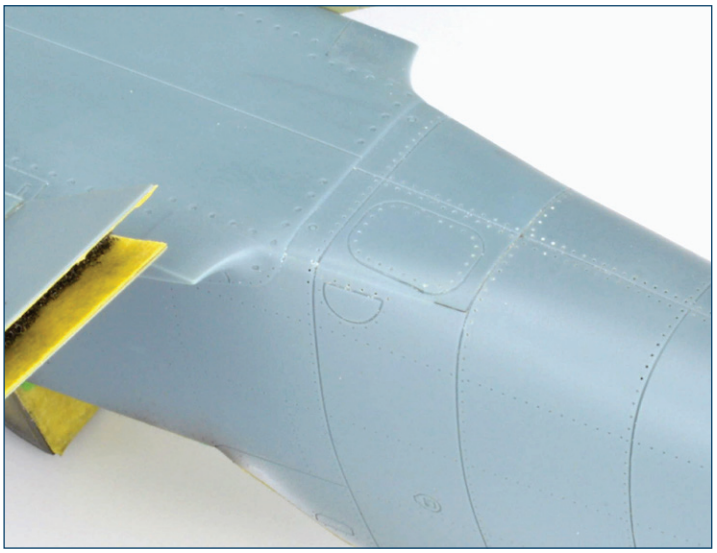


◆ Wash mixed with oil paints beautifully brings out the details of the wells.

◆ I painted the raised details with a lightened shade of RLM 02 applied with a brush.



◆ The joint between the wing bottom and fuselage is a new design concept. Part of the lower wing extends to the third fuselage bulkhead. Therefore, only two L-shaped joints around the screws in the lower part of the wing need to be addressed. The screws are molded quite prominent and deep, so they won't disappear after sanding these joints.



◆ Joints extending into the fuselage must be filled between bulkheads No.1 and No.3. Thanks to this solution, the cover on the bottom of the fuselage is very nicely preserved. With a bit of careful sanding, you won't damage the cover and you don't have to go through the task of rescribing it. The kit also includes a variant of this cover in etched form.

◆ The assembled model before painting. The transition of the wing and the fuselage is a precise fit and no further remedial work is necessary.

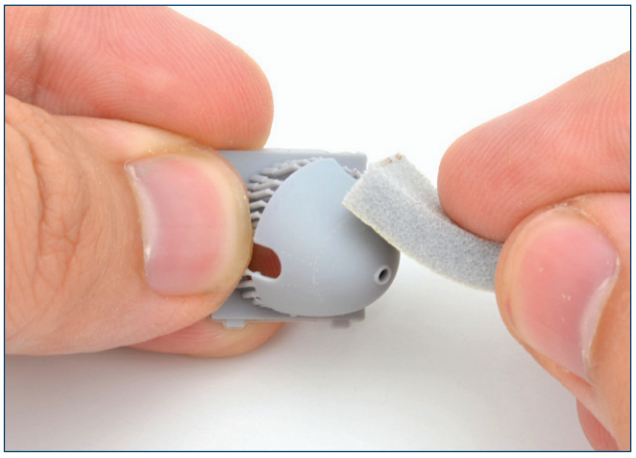
Before painting, I recommend priming the model to improve the adhesion of the camouflage colors to follow.

I chose one of the most colorful schemes offered in the kit and that is the "A" option. I used AK Real Colors and Gunze paints.

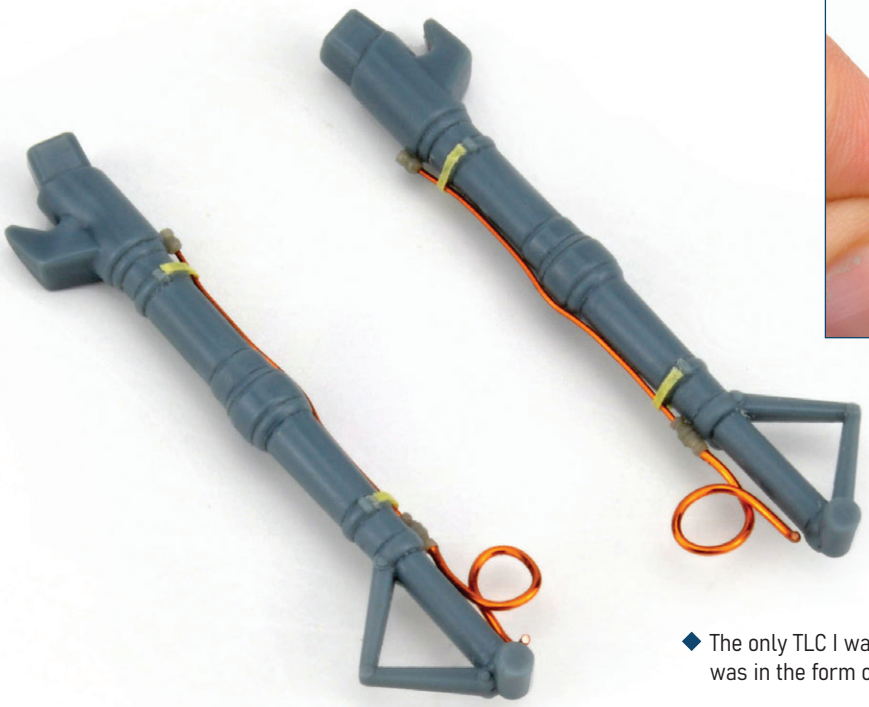
Before applying the decals, I sprayed the model with Gunze gloss varnish.

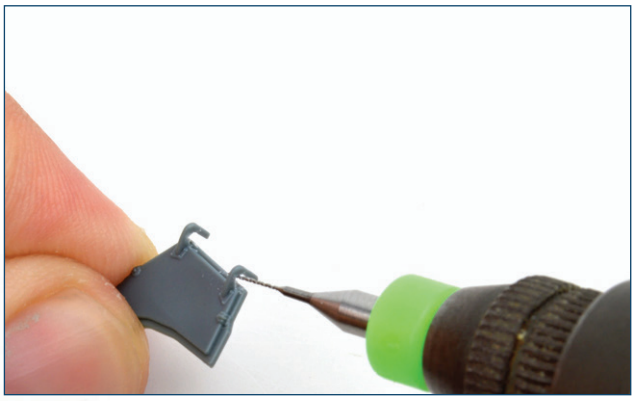
As I normally do, I opted to use the removable carrier film feature of the Eduard decals and carefully rolled off the film with a pointed cotton swab dipped in oil paint thinner.

Propeller from set 648903 before painting.



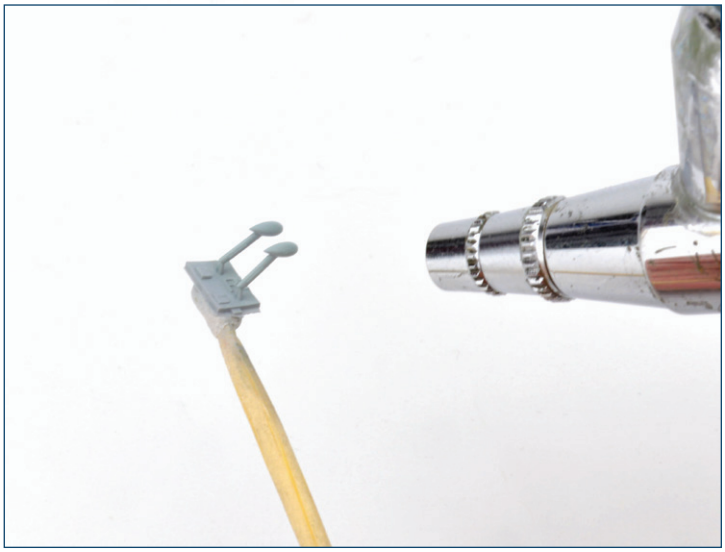
I removed the slight, barely noticeable layering on the spinner from set 648903 using a fine sanding sponge.



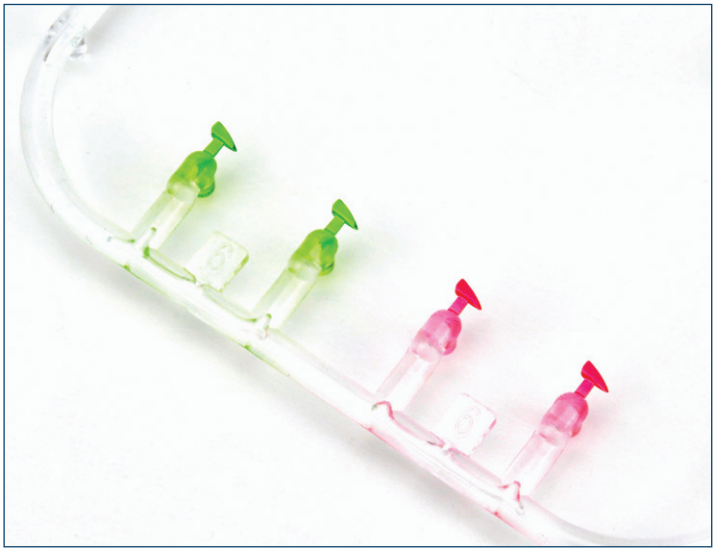


◆ I improved the hinges of the outer well covers using a fine drill bit.

◆ The only TLC I was compelled to add to the undercarriage legs was in the form of brake lines.



◆ The 3D printed aileron mass balances from the set 648894 were only partially removed from the support system and cut from the other parts so that I could paint them separately and glue them in as part of my final assembly.



◆ Eduard also improved the position lights located at the wing tips. There are even two extra parts on the clear sprue in case one boldly goes where no man has gone before. I painted these parts with clear Gunze paints according to the instructions.

◆ Painted and weathered propeller from set 648903. The spiral is sprayed on using template EX512.

◆ Undercarriage legs after spraying with RLM23 red. The lower part with the torque links is brush painted with RLM02. The same application method was used on the black brake lines. The oleo piston was painted Gunze Chrome (SM206).

◆ Virtually completed model before final assembly.

LIMITED

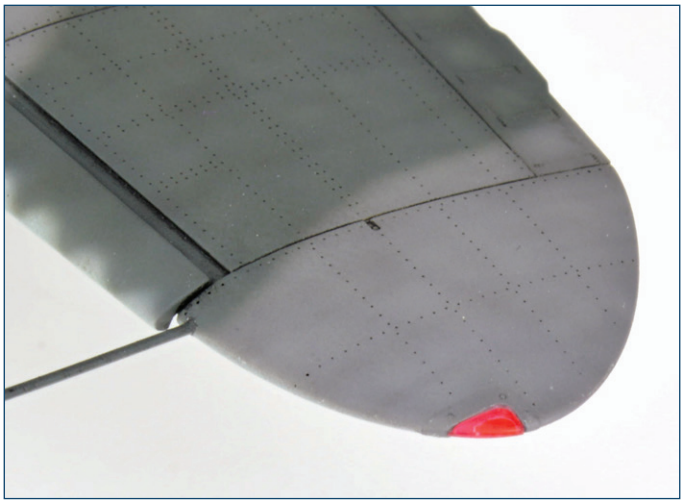
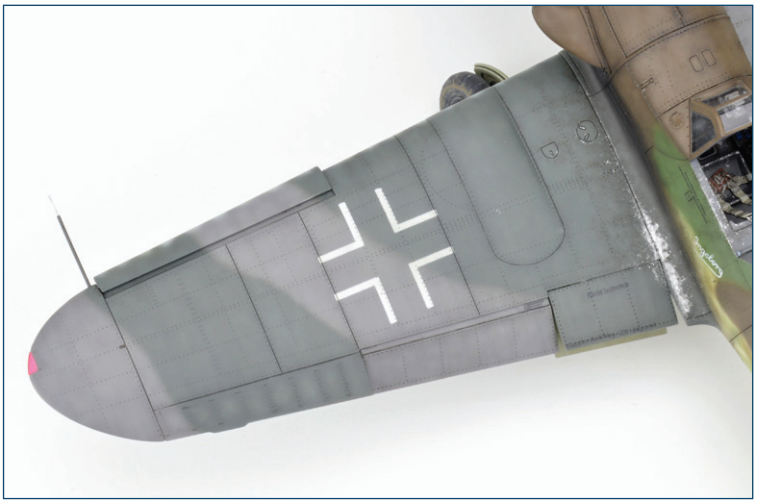
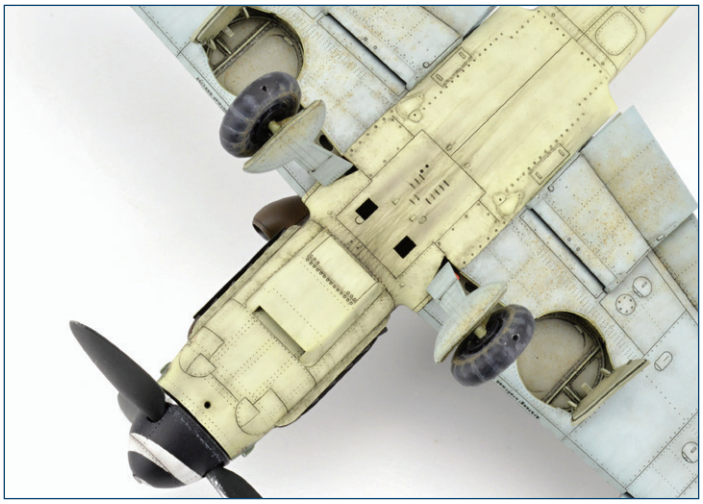
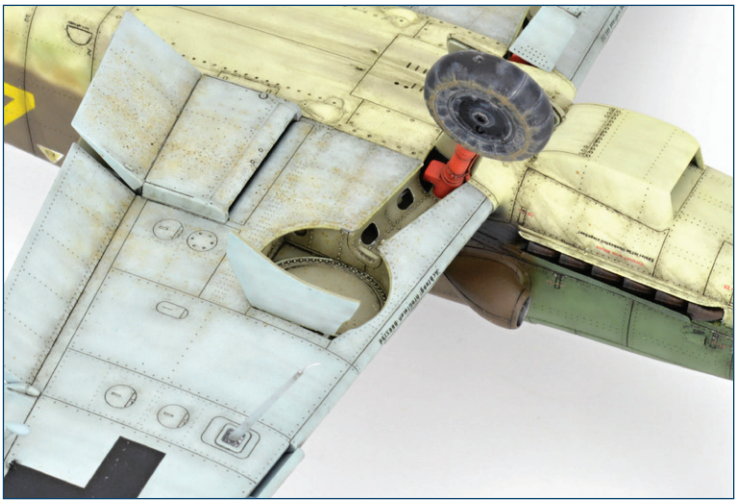
KURFÜRST - BUILT MODEL GALLERY 1/48

stránka produktu

eduard
LIMITED
KURFÜRST
Bf 109K-4
1/48

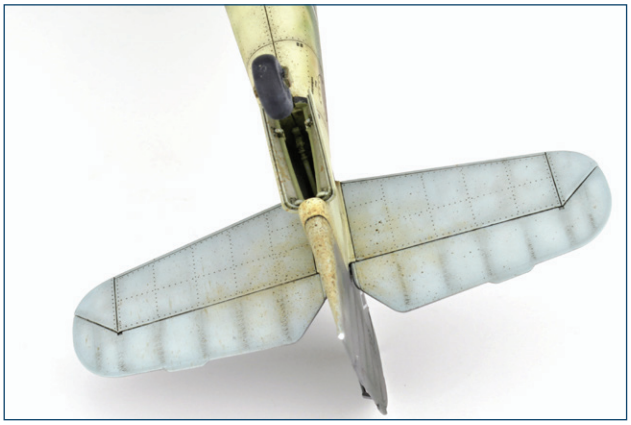


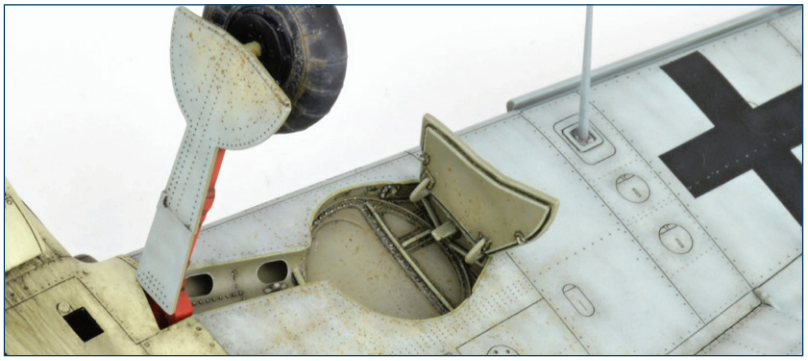


Fw. Hans Strebel, 11./JG 3, Franzfelde airfield near Pasewalk, Germany, March 1945

Hans Strebel originally served with 9./JG 3 and achieved his second victory during Operation Bodenplatte. In early 1945 he was transferred to 11./JG 3, which was also part of III./JG 3 Udet. From the end of January 1945, this unit was deployed in combat against the Red Army and by the end of the war had achieved at least 80 victories. Its missions included also attacking supply columns or escorting anti-tank Ju 87s. The last commander of 11./JG 3 was Lt. Rudolf Escherich, who originally served on He 177s with KG 1. In mid-April, 14 pilots of III./JG 3 volunteered for suicide deployment as part of Operation Freiheit. These were attacks by crashing into bridges over the Oder River. Their suicide action scheduled on April 16 ended in failure and the formation under Escherich's command lost six airmen. The C3 label on the fuel tank indicates engine that required 100-octane fuel. At the end of the war, machine with same design of fuselage number was photographed by a Soviet reporter at Finow airfield. Fuselage was probably painted in RLM 81 (dark brown variant) and RLM 82 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.





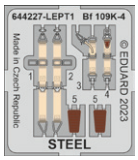
LIMITED

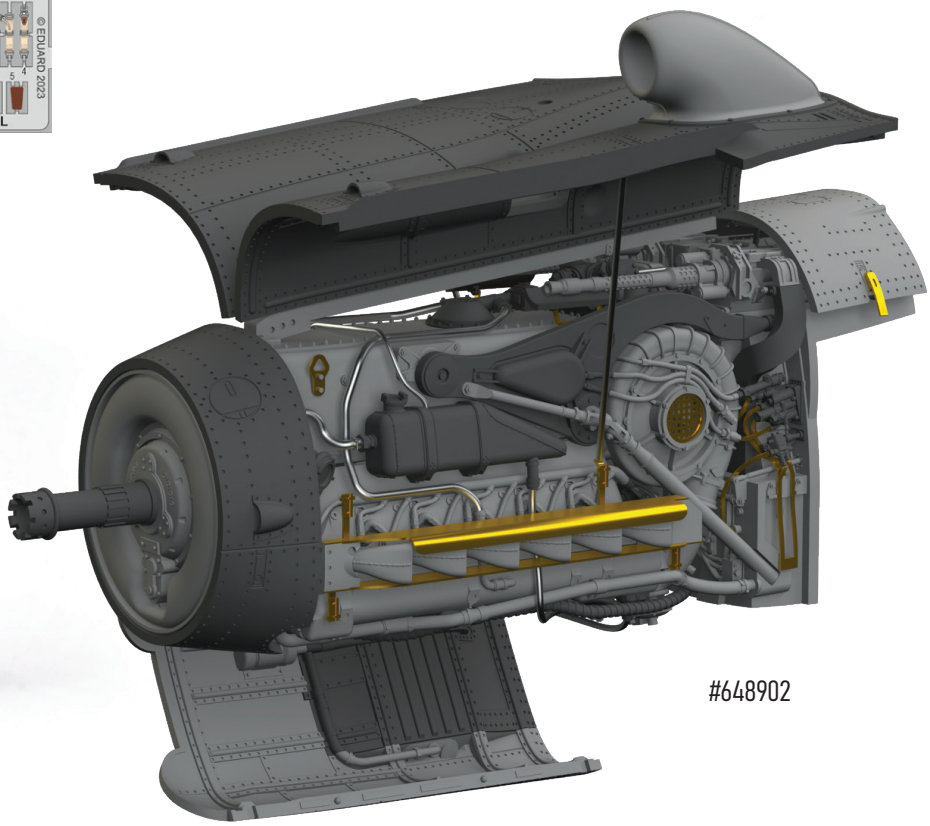
Recommended: for Bf 109K-4 1/48

644227	Bf 109K-4 LöökK (Brassin)
648902	Bf 109K-4 engine (Brassin)
648903	Bf 109K-4 propeller PRINT (Brassin)
648913	Bf 109K-4 exhaust stacks PRINT (Brassin)
648914	Bf 109K-4 wheels (Brassin)
3DL48135	Bf 109K SPACE (3D Decal Set)
EX976	Bf 109K TFace (Mask)

#648903

#644227





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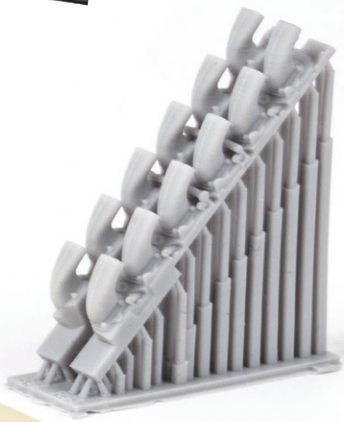
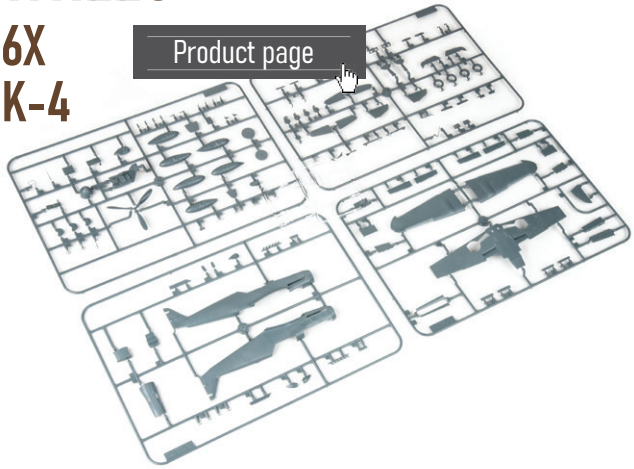


#648913

OVERTREES

#82166X Bf 109K-4 1/48

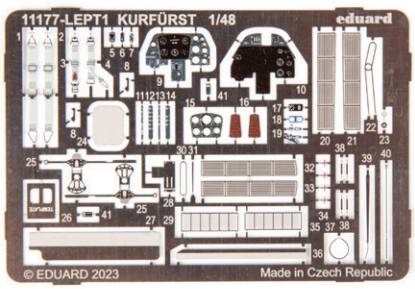
Product page



OVERLEPT

#11177-LEPT KURFÜRST PE-Set 1/48

Product page



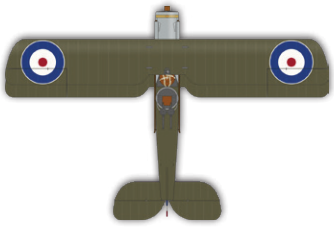
Bristol F.2B Fighter 1/48

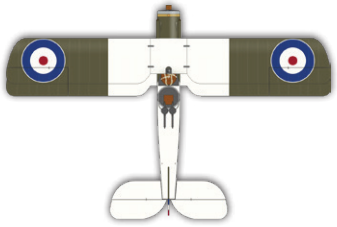
#8452

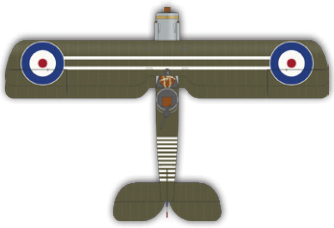
The Weekend edition kit of British WWI two-seat biplane fighter plane Bristol F.2b Fighter in 1/48 scale.

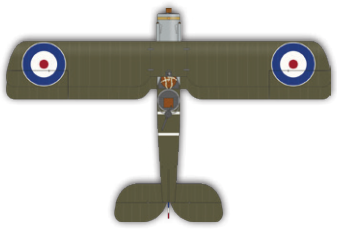
- plastic parts: Eduard
- marking options: 4
- decals: Eduard
- PE parts: no
- painting mask: no
- resin parts: no

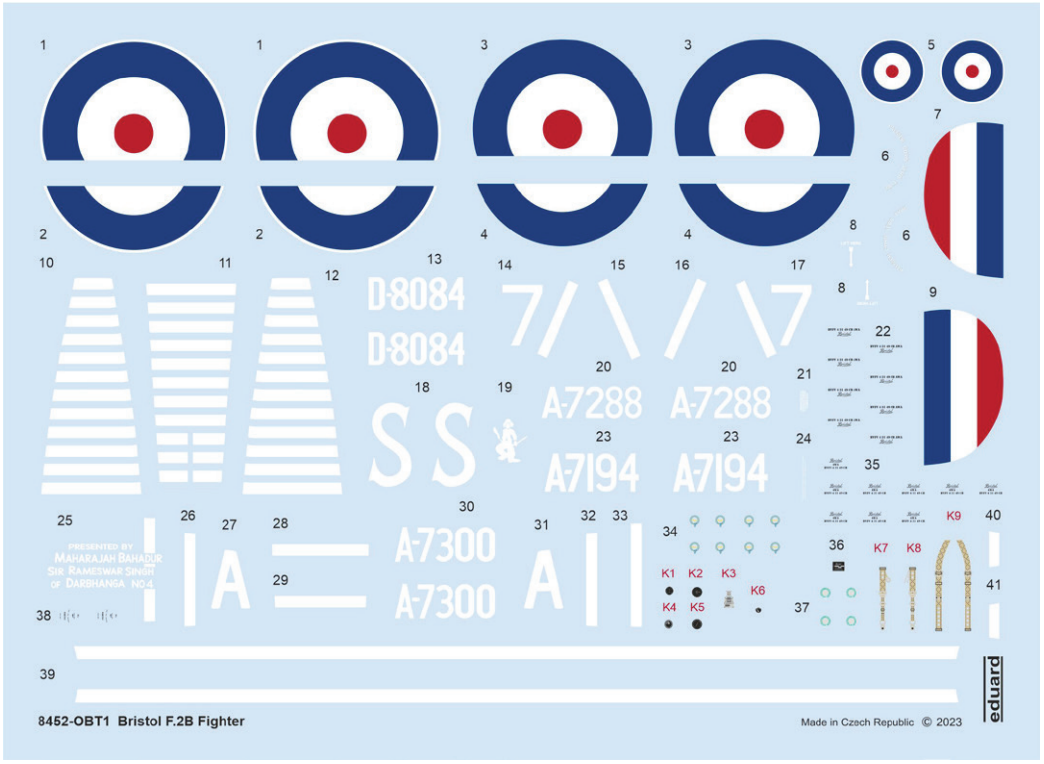
Product page



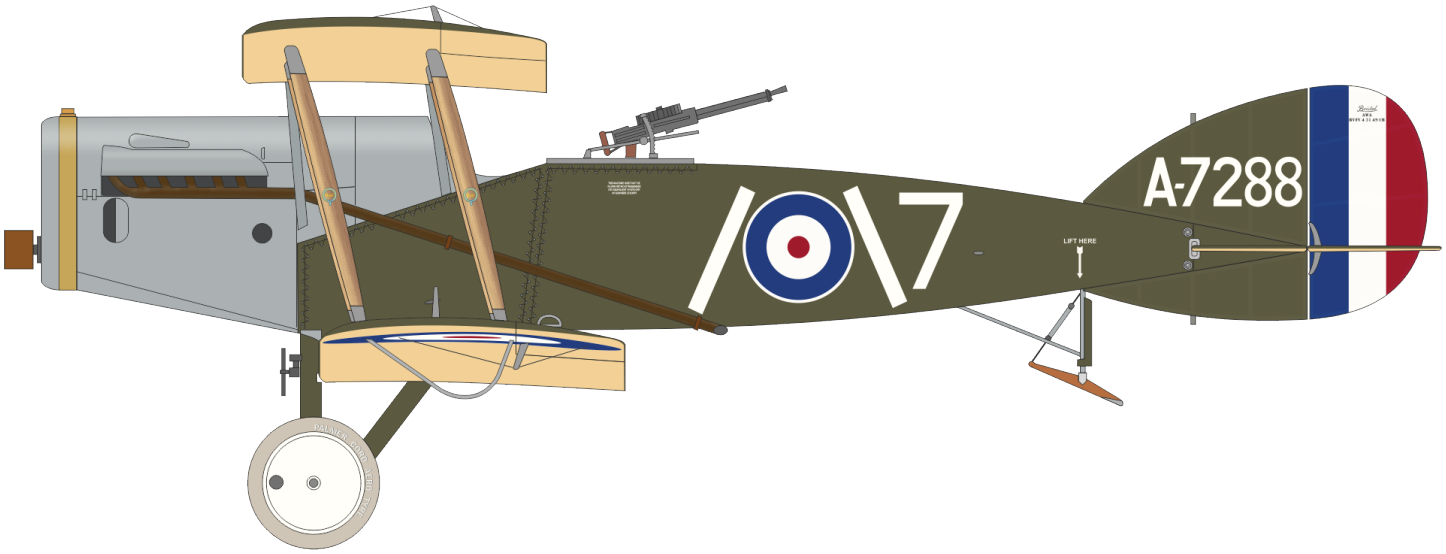






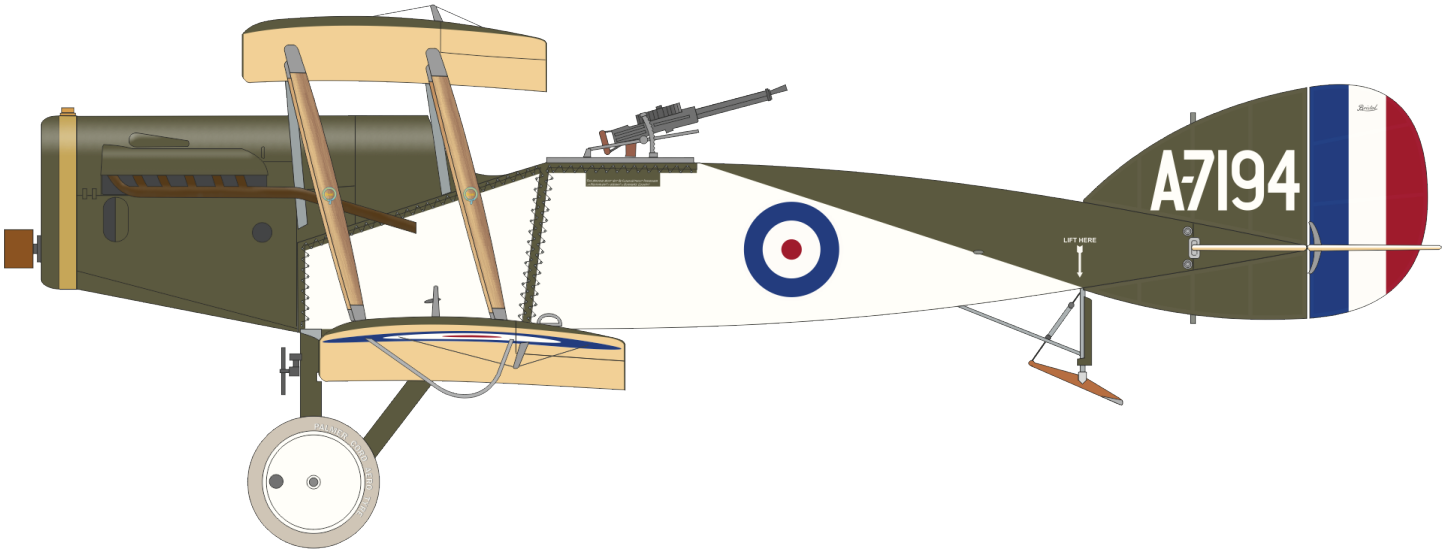


A7288, Capt. Andrew E. McKeever; 2Lt. Leslie A. Powell, No. 11 Squadron, Fére-en-Tardenois, France, November 1917



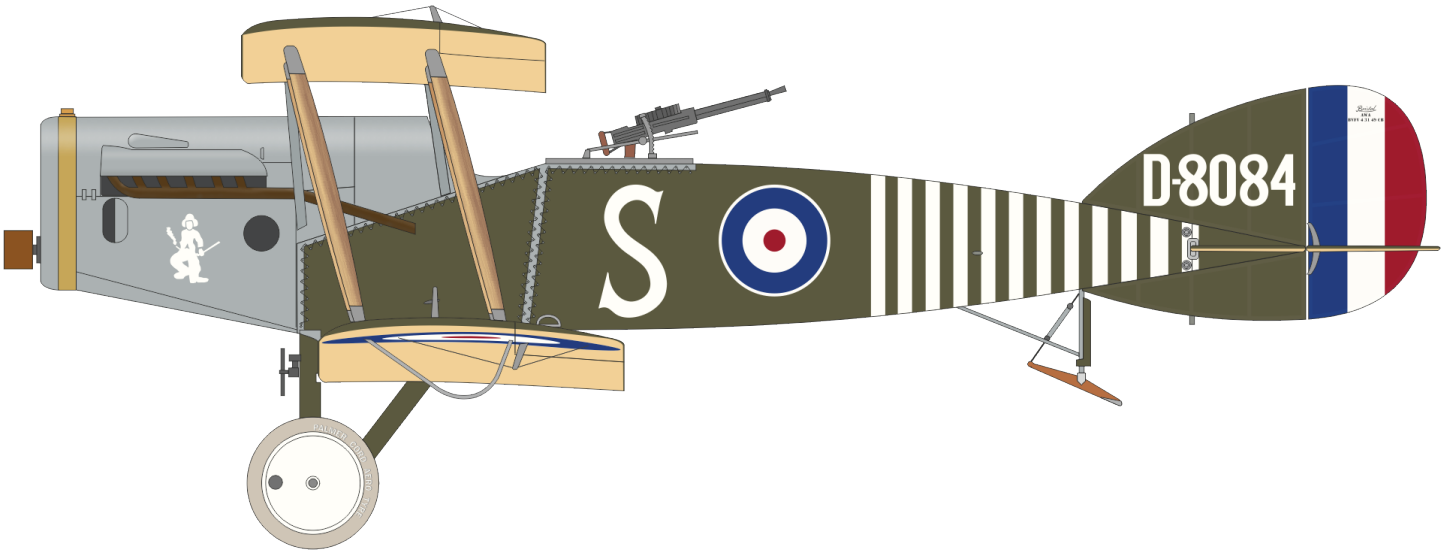
Canadian Andrew Edward McKeever became the most successful fighter pilot on F.2B. He is credited by various sources with as many as 31 kills, but some of these were achieved by his gunners. McKeever joined the army as an infantryman, and remained so until November 1916, when he was recruited into the RFC ranks and moved from France to the UK, where he underwent pilot training. From May 28, 1917, he flew with No. 11 Squadron using the obsolete FE2s, but the unit received the new F.2Bs shortly afterwards. McKeever achieved his first kill on June 26, 1917, when he shot down two Albatroses D.V. Ten days later he was already a fighter ace when he shot down three more D.V.s on July 7. His last success came on November 30, when he and his gunner shot down four of these enemy fighters in a dogfight. McKeever achieved his victories with seven different gunners during his career. With Leslie Powell, they shot down 18 enemies. McKeever was retired from operational service after his last success, and he worked together with W. Bishop and R. Collishaw on the birth of the Canadian military aviation. He became commander of No. 1 Squadron CAF, which was preparing to join fighting with Sopwith Dolphins, but the war ended, and the squadron was disbanded. After the war, McKeever became director of the airport at Mineola, New York. But before he started work, he suffered broken leg in a car accident and died of cerebral thrombosis on December 24, 1919.

A7194, Capt. Arthur H. Peck; Capt. John J. Lloyd-Williams, No. 111 Squadron, Deir el-Balah, Palestine, October 1917



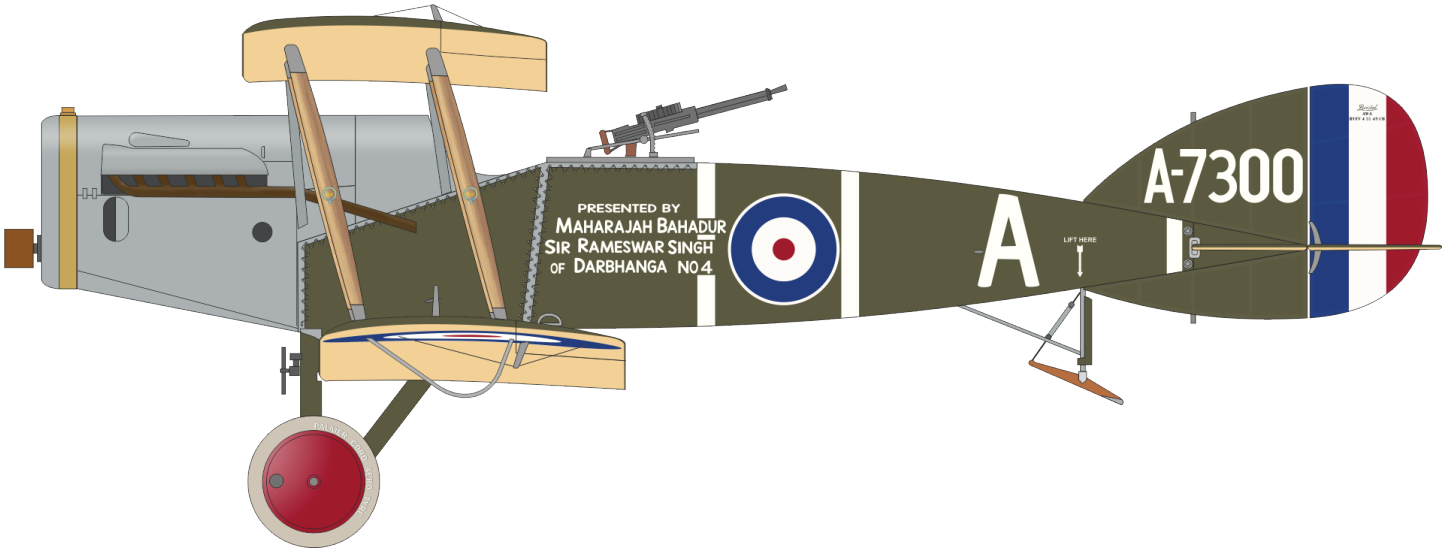
Arthur Hicks Peck was born in India and, after years spent studying in Great Britain, lived in Australia from 1908 to 1914. With the rank of 2nd Lieutenant, he served as an infantryman with the Devonshire Regiment in France from December 7, 1914. After moving to the RFC and pilot training, he rose to the rank of Captain on June 23, 1917 and became a Flight Leader with No. 111 Squadron, which was deployed in Palestine. He achieved his first victory on October 30, 1917, when he shot down an observing plane in crew with Capt. Lloyd-Williams as a gunner. On F.2B, Peck scored one more kill and also forced one aircraft to land on the British side. Thereafter No. 111 Sqn. was equipped with single-seaters SE.5a and on this fighter Peck scored five more victories. After the war he continued in service and was gradually promoted to the rank of Group Captain. During World War II, he served in staff positions before retiring in 1944. He died in February 1975. His "Brisfit" bore the distinctive coloring of aircraft operating in the Middle East region. The PC10 livery was complemented by white paint on the fuselage and wings. There were several schemes of these colors on the different aircraft.

D8084, Capt. Sydney Dalrymple; 2Lt. G. Beagle, No. 139 Squadron, Villaverla, Italy, September 1918



Sydney Dalrymple left his native Australia at the age of 30 in 1915. He headed for the UK, where he joined the ranks of the RFC and underwent pilot training. He was subsequently promoted to the rank of 2nd Lieutenant on January 8, 1916 and on May 22 he reported himself to No. 27 Squadron, which was flying single-seaters Martinsyde G.100, originally intended as long-range fighters, but used as bombers instead in France. With this cumbersome machine he scored his first kill on July 1 when he destroyed a two-seater Roland C. He was subsequently transferred to No. 24 Sqn. and on July 1, 1917, was promoted to the rank of Lieutenant. Another reassignment in mid-1918 took him to Italy to No. 139 Sqn. where he flew with F.2Bs and scored four more kills, earning him ace status. The "Brisfits" of No. 139 Sqn. were, like the Camels of that unit, identified by a black and white striping of the rear fuselage, and possibly a white-black-white stripe on the wing. On some machines, however, the black paint was omitted, which was also the case with the D8084.

A7300, Lt. Sydney A. Oades; Lt. D. N. G. Brampton, No. 22 Sqn., Villeneuve-des-Vertus, France, January 1918



Sydney Arthur Oades enlisted at the age of twenty-five in 1915 with the Royal Engineers and served as a Sapper. He then joined the RFC and was promoted to the rank of Lieutenant on June 22, 1917. At the end of the year, he was transferred to No. 22 Squadron, flying with F.2Bs. He scored his first of eleven victories on October 27, when he shot down a Rumpler reconnaissance aircraft. By the end of the year, he had added two more kills, all of his victims being reconnaissance aircraft. He then achieved his first victory over an enemy fighter on January 6, 1918, when he shot down an Albatros D.V. Oades´ fighter career was ended by a crash on March 13, 1918. He was wounded in the crash and added no further successes to his record afterwards. It was with this aircraft that Oades shot down his first Albatros D.V. on January 6, 1918, with Lt. Brampton as his gunner. Shortly afterwards Oades began flying with 2Lt Stanton William Bunting as his usual crew member. The A7300 was one of the aircraft acquired with funds provided by Maharaja Rameshwar Singh, as the inscription on the fuselage conveyed.

WEEKEND edition

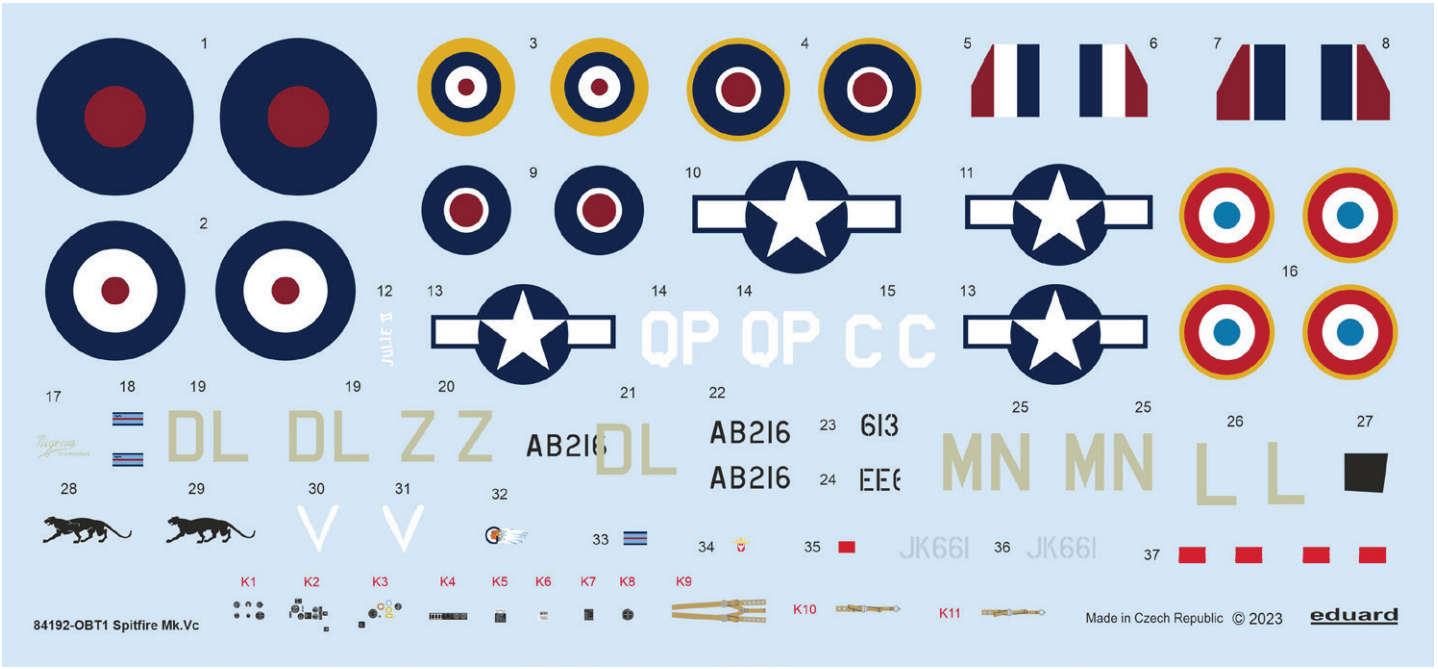
Spitfire Mk.Vc 1/48

#84192

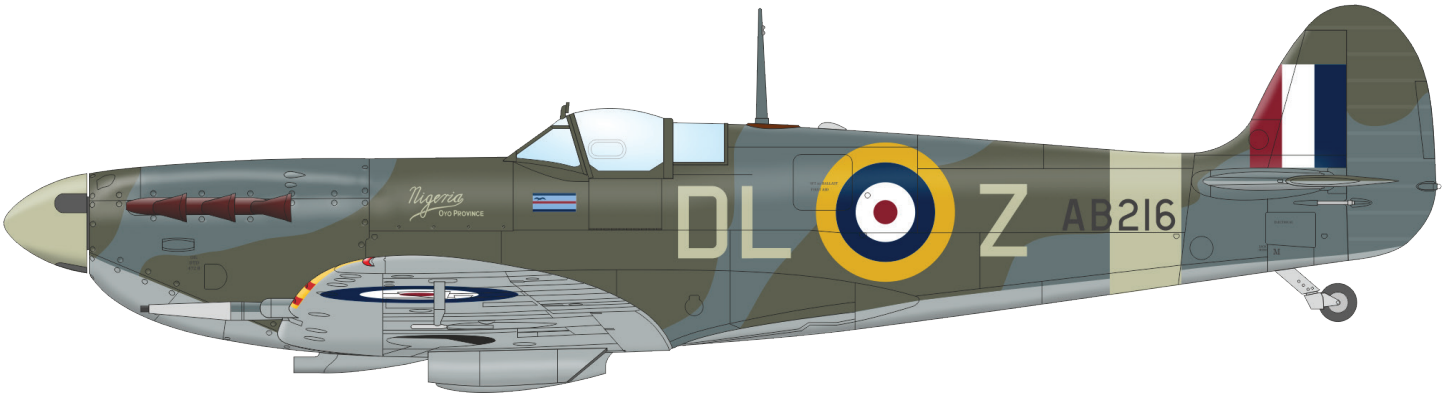
The Weekend edition kit of British WWII fighter plane Spitfire Mk.Vc in 1/48 scale. Kit offers to build Spitfire Mk.Vc flying in RAF, USAAF or Free French Forces.

- plastic parts: Eduard
- marking options: 4
- decals: Eduard
- PE parts: no
- painting mask: no
- resin parts: no

Product page

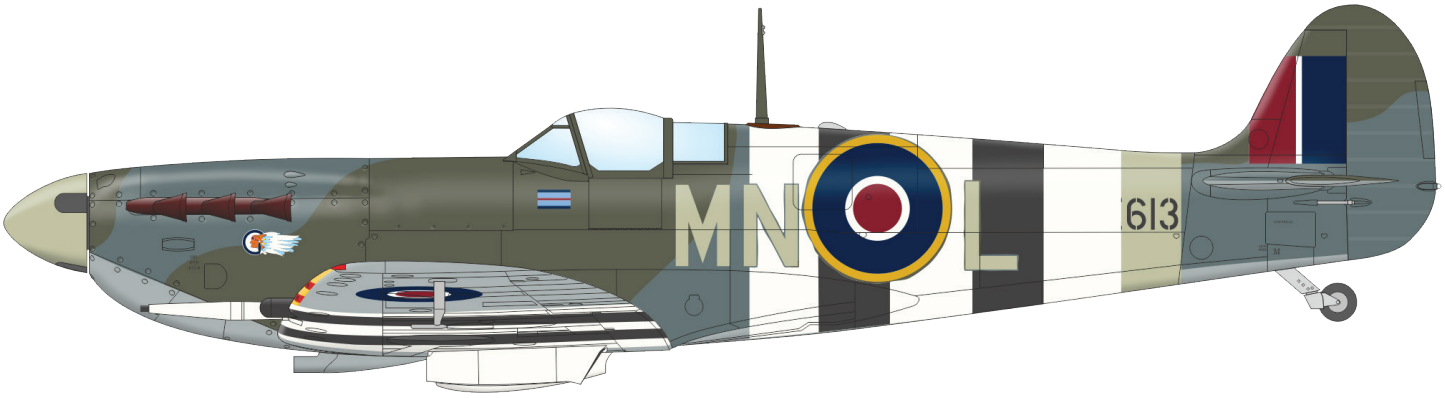


AB216, S/Ldr Robert W. Oxpring, No. 91 "Nigeria" Squadron, RAF Hawkinge, Great Britain, April–June 1942



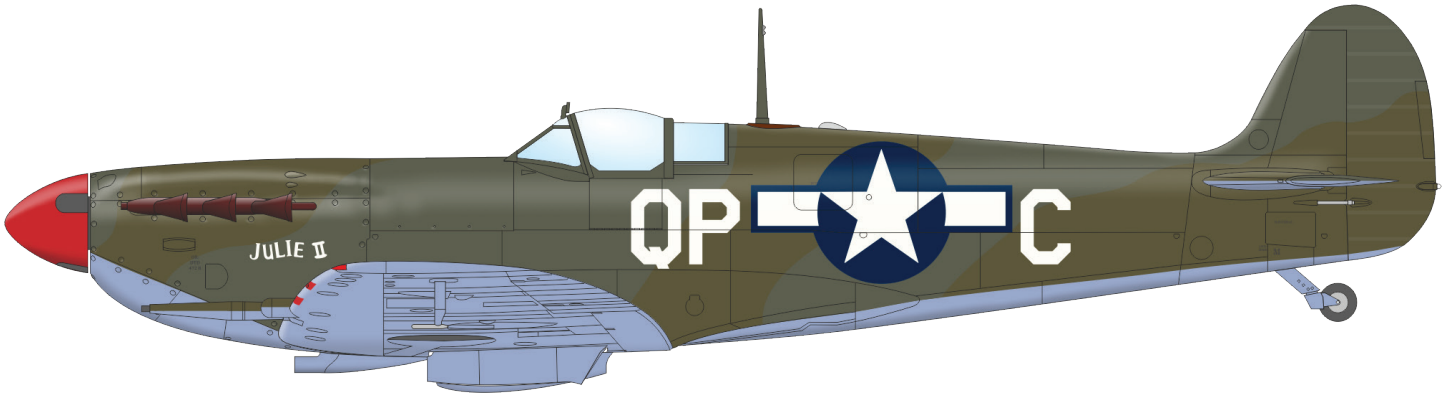
Spitfire serial number AB216 was one of the first Mk.Vc Spitfires manufactured. From the mid-March 1942 it flew with the No. 91 "Nigeria" Squadron where it was a personal mount of S/Ldr Rober Oxpring who saddled it until June 1942. After its service with No. 91 Squadron, Spitfire AB216 was withdrawn from the operational flying and a towing device was installed on the tail wheel. Then it was tested for towing the Hotspur and Horsa gliders. Bobby Oxpring was born on May 22, 1919 in Sheffield, Yorkshire and during the Great War, his father had flown with an air reconnaissance unit. In March 1938, Oxpring joined RAF and as early as in December was transferred to the No. 66 Squadron, the same unit his father had flown with. He flew with this unit during the Battle of Britain where he scored eight confirmed victories a was decorated with DFC. In April 1941 he finished his tour of duty and was transferred to the No. 59 OTU where he flew as an instructor. In September 1941 he started his second tour of duty with the No. 616 Squadron but a week later he was ordered to the No. 41 Squadron where he led a flight. In January 1942 he assumed command of the No. 91 "Nigeria" Squadron and in June the command of the No. 72 Squadron where he was awarded a bar to his DFC. In November 1942 the unit was relocated to the North Africa where it was, as one of the first units, equipped with the new Spitfires Mk.IX. During the first months of 1943, Oxpring scored further five victories and one of his victims was the famous German ace Anton Hafner from JG 51. Having received the second bar to his DFC in the end of April, he finished his second tour of duty and was transferred to the No. 242 Group Headquarters. In the end of the year he returned to Great Britain and was assigned to the Fighter Command Headquarters. In March 1944 he commenced his third tour of duty as a Wing Commander with the No. 24 Wing flying Spitfires Mk.XIV and during June and July he shot down five V-1 flying bombs. In September he was ordered to the No. 141 Wing and then to the Detling Wing. He finished his wartime service with 14 confirmed kills, two probable, 13 aircraft damaged and five V-1 flying bombs destroyed.

EE613, S/Ldr Michel G. B. Donnet, No. 350 Squadron, RAF Friston, Great Britain, June 1944



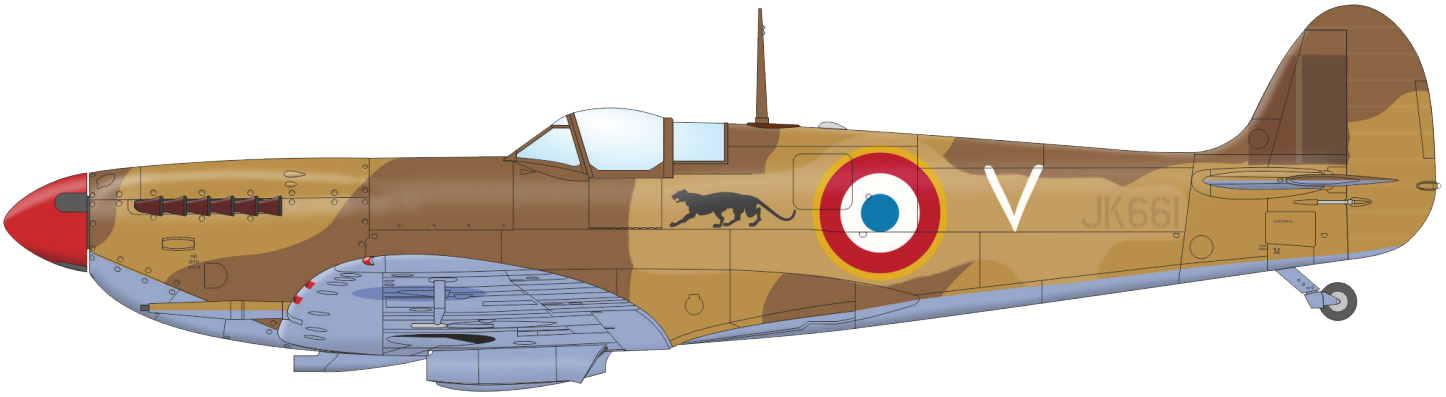
Mike Donnet was born in 1917 in Richmond, Great Britain. On March 1, 1938, he joined the Aviation Militaire Belge. He flew a Renard R.31 reconnaissance airplane with 9/V/1Ae based at Bierset. After the German invasion of Belgium on May 10, 1940, he flew several combat missions. After his country was occupied, he decided to flee and during the night of July 4–5 he managed to reach the Great Britain on a stolen Stampe SV-4b. On July 24, 1941, Michel Gabriel Libert Donnet was admitted to the ranks of the RAF and assigned to the No. 61 OTU to train on Spitfires. In September 1941, he was transferred to the No. 64 Squadron. Flying with this unit he took part in the missions against the Scharnhorst and Gneisenau battle cruisers and in the operation Jubilee at Dieppe. In 1943 he assumed command of the No. 64 Squadron. On March 23, 1944, he assumed command of the No. 340 Squadron and participated in the Normandy landing flying Spitfires Mk.Vc and IX. After the No. 350 Squadron converted to Spitfires Mk.XIV he flew missions against V-1 flying bombs, retreating German ground forces and providing the air cover at Arnhem. He led the unit until October 23, 1944, when he was decorated with DFC and promoted to the Wing Commander. In the beginning of 1945, he assumed command of the Hawkinge and Bentwater Wings flying Mustangs Mk.III. Leading the unit, he provided escort for the Mosquitos attacking the Gestapo Headquarters in Copenhagen. During his wartime career, Donnet flew 375 missions achieving the score of three confirmed kills, one probable and four damaged, all while flying with the No. 64 Squadron. After the war he served at the Belgium Department of Defense and reorganized the Belgium Air Force for the new jet equipment. Then he was given the job as a Chief of Staff of the 2nd Allied Tactical Air Force responsible for the Western Europe AA defense. In 1972 General Lieutenant Donnet was appointed the Belgium Military Attache at NATO. On June 1, 1975, he retired from the Belgium AF with the rank of General Lieutenant having logged 5000 flight hours. In 1968 he published a book about his many famous adventures titled "J'ai volé la liberté" (a Flight to Freedom).

Lt. Robert C. Curtis, 2nd FS, 52nd FG, 12th AF, Corsica, December 1943



Spitfire Mk.Vc carrying a white inscription Julie II on the starboard engine cowling featured the clipped wings and according to the memoirs of its pilot, Bob Curtis, it sported a non-standard camouflage of two shades of green, probably Dark Green and Olive Drab, on the upper surfaces. On February 19, 1944, Bob Curtis at its controls, shot down a Bf 109 and his opponent was most probably Oblt. Klippigen from 7./JG 53. Several days later he lost his Spitfire when the target he was attacking exploded and damaged his aircraft. After the 52nd FG converted to P-51 Mustangs, Curtis shot down another 13 enemy airplanes. After the war, until 1950, he served with USAF Reserves as a Meteorological Officer.

JK661, Cne. Georges Valentin, No. 326 Squadron (GC.II/7), Armée de l'Air, Corsica, September 1943



Georges Valentin was born on May 19, 1908, in La Ville, France. Since the early childhood he was a passionate aviation fan and won a scholarship enabling him to attend the courses at the Richard Aviation School where on February 6, 1927 he obtained his pilot's licence. During that month, as a soldier he joined the 2nd group of the aviation workers in Istres. In the end of May he was attached to the 6e Escadrille 3e Regiment D'Aviation Mixte in Thionville. In November 1927 he was accepted to the professional warrant officers ranks. On April 1, 1933, he was promoted to S/C rank and in January 1936 he joined GC II/7. When on September 3, 1939, France declared war on Germany, Adj/Chef Valetin served as a pilot with 3. escadrille GC II/7 at the Luxeuil base equipped with MS.406. During the French campaign sous lieutenant Valentin flew 27 combat missions during which he scored eight confirmed victories and one probable. One of his victims was a Do 17 from Stab./KG 77 with a KG 77 commander, Gen. Maj. Wolff von Stutterheim on board, who succumbed to his wounds. After the armistice Valentin remained with the unit. After the Anglo-American landing and surrender of the French troops in Africa (operation "Torch") his unit converted to Spitfires Mk.V a was renamed GC 2/7 "Nice". In April 1943 the unit participated the final stage of the Tunisian campaign and then liberation of Corsica. During these battles, in the fall of 1943, lieutenant Valentin scored three victories. On June 1, 1944, he was promoted to Capitaine and on June 6 he assumed command of the 1 escadrille GC 2/7 "Nice". In the beginning of September, the unit was relocated to France to support the Allied troops. On Friday September 8, 1944, around 5:20 pm, flying his 328th combat mission at a very low altitude, in Dijon sector, Capitaine Georges Valentin was shot down by a German AA fire. His Spitfire burst in flames and hit a house on Rue Auguste-Brulle nr. 12 in Dijon. Georges Valentin was a recipient of the Knight of Honorary Legion and Croix de Guerre decorated with seven palm trees and five stars. He flew 328 combat missions having logged 2,902 flight hours and was credited with eleven victories and two probable kills.

Recommended: Spitfire Mk.Vc 1/48

481065	Spitfire Mk.V landing flaps (PE-Set)
FE1380	Spitfire Mk.Vc Weekend (PE-Set)
644113	Spitfire Mk.V LööK (Brassin)
648640	Spitfire Mk.V engine (Brassin)
648663	Spitfire Mk.V cockpit (Brassin)
648664	Spitfire Mk.V wheels (Brassin)
648666	Spitfire Mk.Vc gun bays (Brassin)
648667	Spitfire Mk.V three-stacks exhausts rounded (Brassin)
648668	Spitfire Mk.V three-stacks exhausts fishtail (Brassin)
648669	Spitfire Mk.V six-stacks exhausts fishtail (Brassin)
648671	Spitfire Mk.Vc undercarriage legs BRONZE (Brassin)
648738	Spitfire Mk.V landing flaps PRINT (Brassin)
3DL48031	Spitfire Mk.V SPACE (3D Decal Set)
D48088	Spitfire Mk.V stencils (Decal Set)
D48101	Spitfire Mk.V national insignia (Decal Set)
EX914	Spitfire Mk.V TFace (Mask)
EX977	Spitfire Mk.Vc Weekend (Mask)

Czechoslovak Wing Commanders on Spitfire Mark Vc

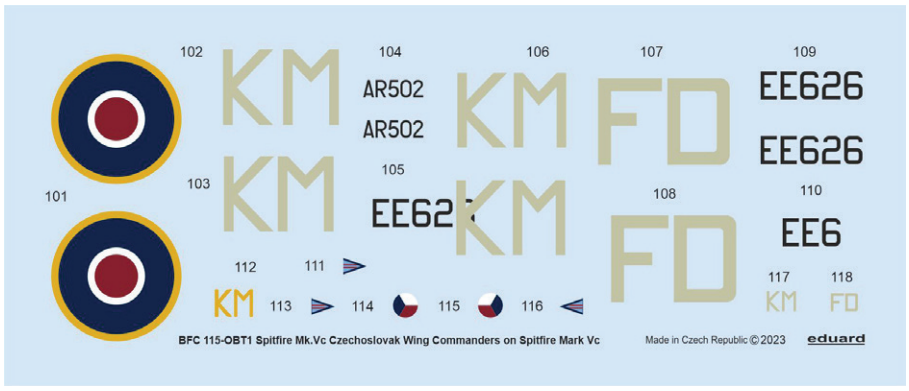
1/48

#BFC115

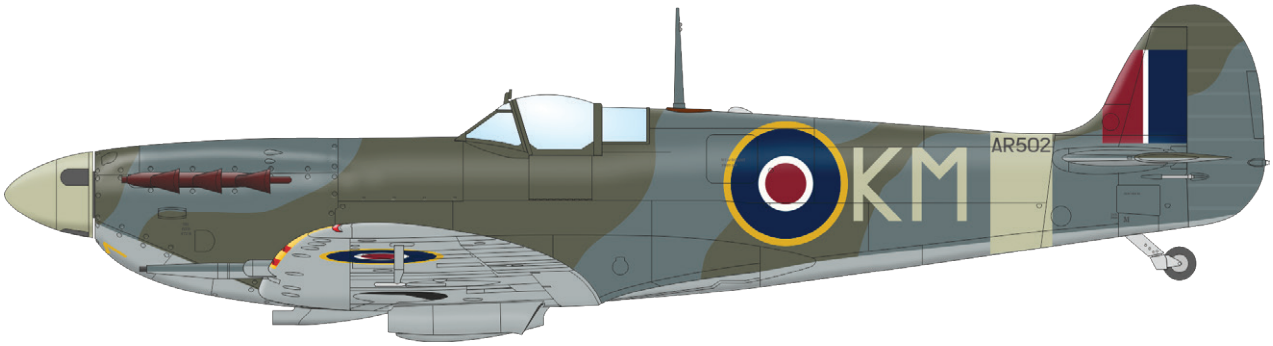
The Weekend edition kit of British WWII fighter plane Spitfire Mk.Vc in 1/48 scale.
Kit offers to build Spitfire Mk.Vc flying in RAF, USAAF or Free French Forces.
Bonus decals are for Spitfires of the Czechoslovak Wig Commanders, W/Cdr Karel Mrázek and W/Cdr František Doležal.

- plastic parts: Eduard
- marking options: 4 + 3
- decals: Eduard
- PE parts: no
- painting mask: no
- resin parts: no

Product page

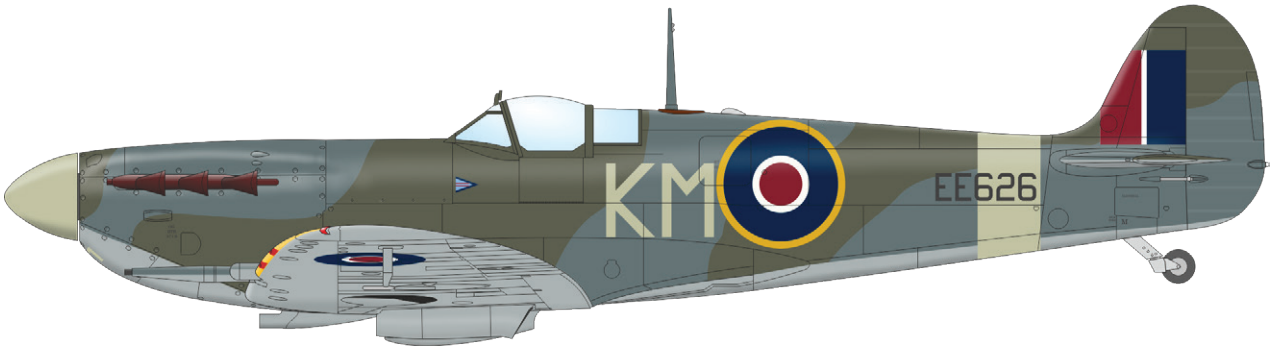


AR502, W/Cdr Karel Mrázek,CO of Exeter (Czechoslovak) Wing, Great Britain, July–October 1942



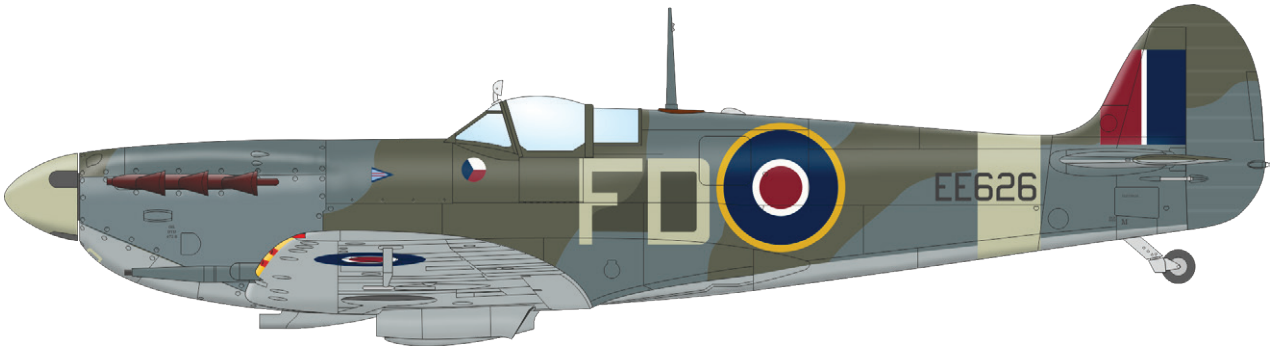
Second Mrázek's "Wing Commander" Spitfire is, thanks to the survived film archive, fairly well documented. He flew his new Spitfire Mk.Vc s/n AR502 from the end of July till October 1942. On August 28, at its controls he achieved his last combat success when, in the cooperation with S/Ldr František Doležal, No. 310 Squadron commander, he shot down a Bf 109F-4 from the 1.(F)124 reconnaissance unit. Same as his predecessor, this personal aircraft carried the pilot's initials, "KM" painted on both sides of the fuselage, between the fuselage cockade and Sky S fuselage band sprayed in front of the tails surfaces. The letters "KM" were also painted in yellow on the lower part of the engine cowling.

EE626, W/Cdr Karel Mrázek, CO of Exeter (Czechoslovak) Wing, Great Britain, October 1942–January 1943



In October "Charlie" Mrázek was assigned a new "C" model serial number EE626 with which he flew 16 combat missions. Also In this case, thanks to the film archive, the appearance of this aircraft can be fairly well documented. Besides the standard camouflage of Dark Green/Ocean Grey/Medium Sea Grey the code letters "KM" were this time painted in Sky on both sides of the fuselage in front of the fuselage cockade and in the smaller size on the lower part of the engine cowling. Under the windshield, on the port side, a Wing Commander pennant was painted as a new marking. Unlike all Mrazek's previous Spitfires, this aircraft featured de Havilland propeller with the short spinner. EE626 flew with No. 310 Squadron until February 3, 1943, when it was rammed be a No. 307 Squadron's Mosquito. It was repaired at the Air Service Training and the repair included the wind modification consisting of removing the wingtips and thus shortening the wingspan to 9.93 meters. A circular rear mirror was installed as well. During the months of October and November 1943, such modified EE626 flew as a personal mount of Mrázek's deputy, W/Cdr František Doležal who had it marked by his initials "FD". EE626 remained in the No. 310 Squadron inventory until December 24, 1943, when it was handed over to the Polish No. 316 Squadron. The service with No. 63 and No. 587 Squadrons followed and on August 14, 1945, the aircraft was officially struck off charge.

EE626, W/Cdr František Doležal, CO of Ibsley (Czechoslovak) Wing, Great Britain, October–November 1943



The first pilot of EE626 was W/Cdr Karel Mrázek, commander of the Exeter (Czechoslovak) Wing who flew it from October to November 1943. On February 3, 1943, in Exeter, the aircraft was rammed by a Mosquito from the No. 307 Squadron. The airplane was repaired by the Air Service Training and the job included the wing modification consisting of removing the wingtips and thus shortening the wingspan to 9.93 meters. A circular rear mirror was also installed. During the months of October and November 1943, such modified EE626 flew as a personal mount of Mrázek's deputy, W/Cdr František Doležal who had it marked with his initials "FD" painted in Sky color on both sides of the fuselage in front of the fuselage cockade and in smaller size in black on the lower part of the engine cowling. Under the "FD" fuselage code letters the original Mrázek's initials "KM" can still be recognized having been repainted in Dark Green. Under the windshield, on both sides, a Czechoslovak national insignia and a Wing Commander pennant, moved to the fuel tank access panel, were painted. The port engine cowling shows a fresh repaint on the entire surface, most likely in Ocean Grey.

MiG-21bis

1/48

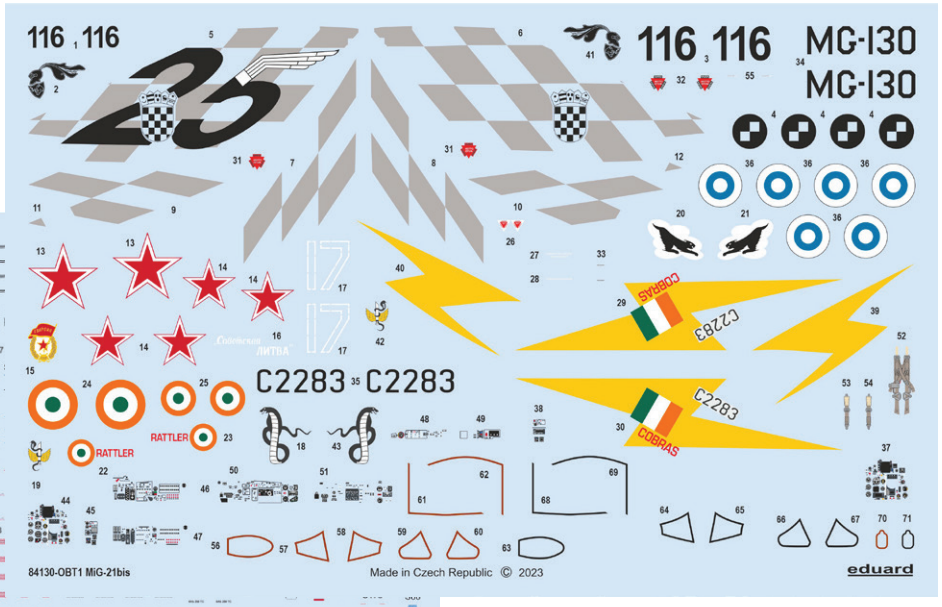
#84130

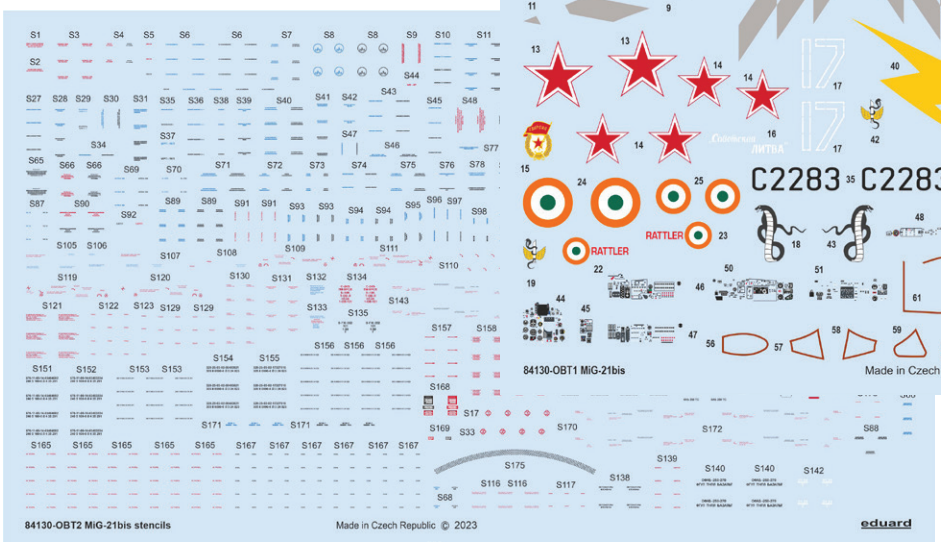
The Weekend edition kit of Soviet Cold War jet fighter MiG-21bis in 1/48 scale.

Re-release

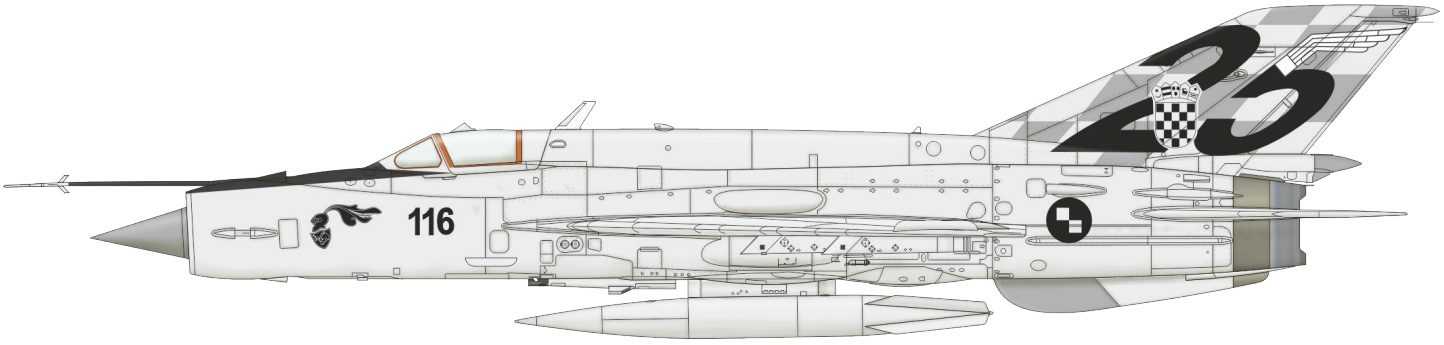
- plastic parts: Eduard
- marking options: 4
- decals: Eduard
- PE parts: no
- painting mask: no
- resin parts: yes, antennae

Product page



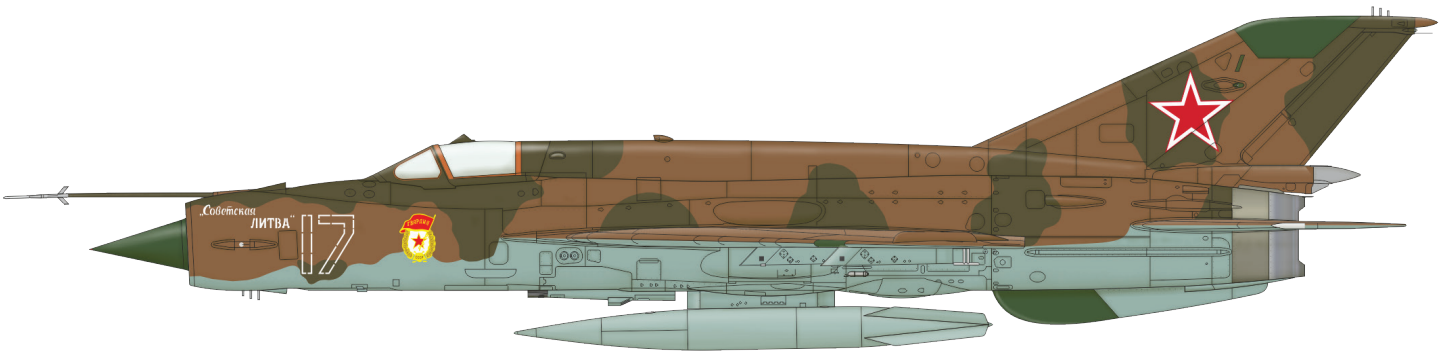


MiG-21bisD, Eskadrila borbenih aviona, HRZ i PZO, Zagreb – Pleso, Croatia, December 2016



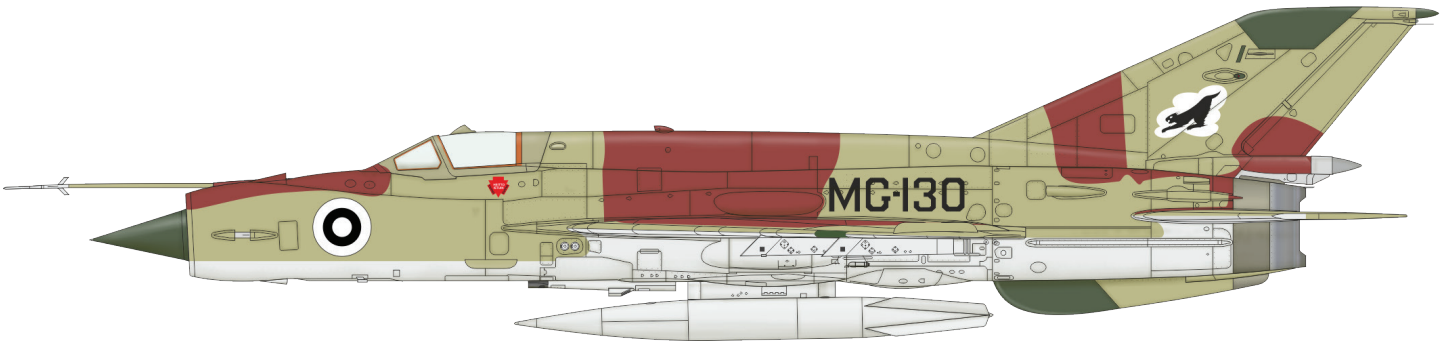
The Croatian Air Force purchased forty MiG-21bis fighters and MiG-21UM trainers from Ukraine in 1995. In 2003, eight MiG-21bis aircraft were modernized to bisD standard in Romania. The modernization program included upgrade of the navigation, communication and IFF equipment. In 2014, another modernization took place involving seven Croat MiG-21bisD/UMD aircraft, along with a purchase of another five aircraft from repair facility in Odessa. The modernized aircraft received an all-grey camouflage scheme. Aircraft coded 116 received a stylized "25" on the left side of the fin to commemorate 25th anniversary of the Croatian Air Force.

MiG-21bis, 115th GIAP, Soviet VVS, Bagram Air Base, Afghanistan, 1980



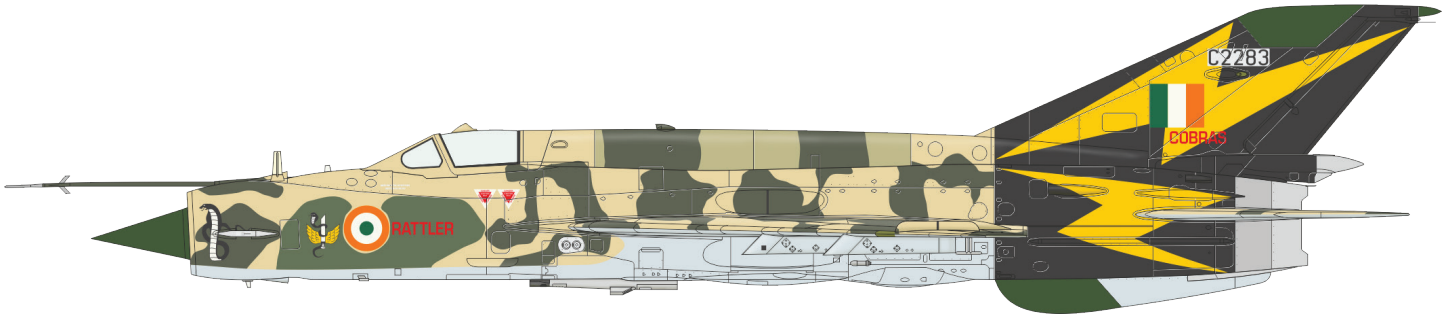
Fighter cover duties during the Soviet invasion of Afghanistan were conducted by the 115th Guards' Regiment at the end of 1979. The unit was equipped with the MiG-21bis and was based at Kokaity in Uzbekistan, a Soviet Socialist State at the time. Three days after the invasion beginning, the 1st Squadron moved to Bagram Air Base, followed by a second Squadron on January 23, 1980. Due to the lack of any enemy fighters, the 115th GIAP became involved in ground support duties together with the 136th APIB. MiG-21bis aircraft of the 115th GIAP used in Afghanistan were painted in green and brown on the upper surfaces at the beginning of the war, with lower surfaces in a blue-grey tone.

MiG-21BIS, HävLLv 31, Suomen ilmavoimat, Kuopio-Rissala AB, Finland, 1980



The newest version of the MiG-21, the "bis", was purchased to the tune of twenty-six pieces by the Finnish Air Force in the latter half of the seventies. The first aircraft were delivered in 1978, and at the beginning of the eighties, these aircraft began to be westernized. The process included a new instrument panel and radio equipment compatible with those of west European aircraft. The aircraft coded MG-130 was delivered to Finland on July 17th, 1980, and its westernization was conducted during 1982. It made its last flight on March 7th, 1998, and it can currently be seen on the roof terrace of the Verkkokauppa Oy Shopping Center in Helsinki. At the beginning of the eighties, MG-130 carried the camouflage scheme in which it was delivered from the Soviet Union, i.e. brown and green on the upper and side surfaces, while the lower surfaces in light grey.

MiG-21bis, C2283, No.3 Squadron „Cobras“, Pathankot AB, India, early ´90s

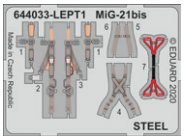


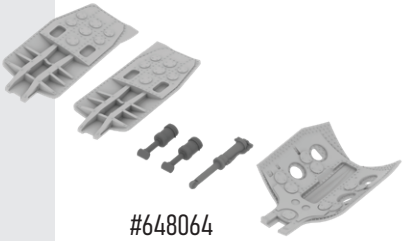
C2283 displays a unique combination of camouflage scheme and colorful ID markings. The unit personnel named their aircraft after snakes, among which “Rattler”, “Mamba” and “Cobra” are known. The dorsal section of the fuselage was taken from another MiG-21bis, probably from a “Mamba”. The history of No.3 Squadron goes back to October 1941, when the unit was activated in Peshawar, equipped with the Hawker Audax. During the second half of the Twentieth Century, the unit took part in every conflict that India was involved in with neighboring states. The No.3 Squadron used the MiG-21bis from July 1980 to 2002, when it was re-equipped with the modernized MiG-21 “Bison”.

Recommended:
for MiG-21bis 1/48

48704	MiG-21 ladder (PE-Set)
48994	MiG-21 surface panels (PE-Set)
48999	MiG-21bis exterior (PE-Set)
49065	MiG-21 KM-1 seatbelts FABRIC (PE-Set)
49110	MiG-21 seatbelts STEEL (PE-Set)
491036	MiG-21bis interior (PE-Set)
FE1149	MiG-21bis Weekend (PE-Set)
644033	MiG-21bis LööK (Brassin)
648025	Rocket launcher UB-16 and UB-32 (Brassin)
648026	MiG-21 wheels (Brassin)
648030	MiG-21 seat late (Brassin)
648049	MiG-21 wheel wells (Brassin)
648050	MiG-21BIS interior (Brassin)
648051	MiG-21BIS exhaust nozzle (Brassin)
648064	MiG-21 late airbrakes (Brassin)
648080	MiG-21 undercarriage legs BRONZE (Brassin)
648082	R-60 / AA-8 Aphid (Brassin)
648125	R-3S / AA-2 Atoll-A (Brassin)
648126	OFAB-100 Soviet bombs (Brassin)
648127	OFAB-250 Soviet bombs (Brassin)
648136	S-24 rocket (Brassin)
648173	UB-16 rocket launcher (2 pcs) (Brassin)
648424	FAB-500 M54 bombs (Brassin)
648445	R-13M missiles Brassin)
648490	MiG-21 F.O.D (Brassin)
3DL48026	MiG-21bis SPACE (3D Decal Set)
EX751	MiG-21bis Weekend (Mask)


#644033

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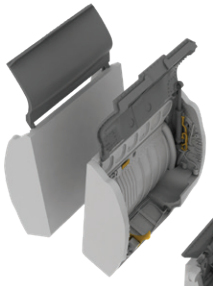
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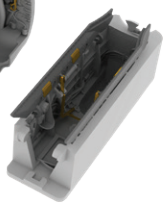

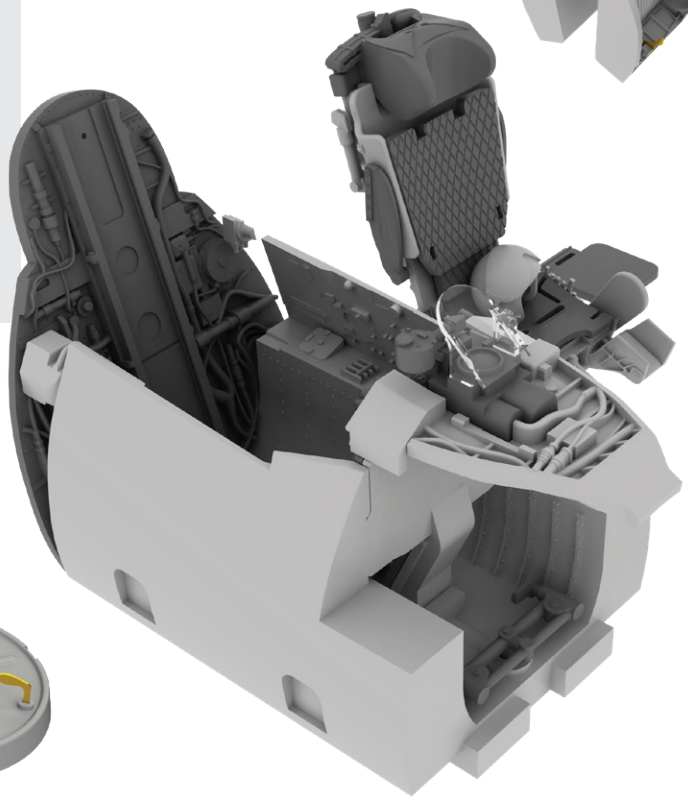
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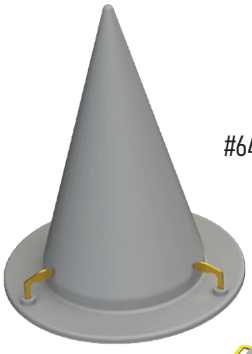
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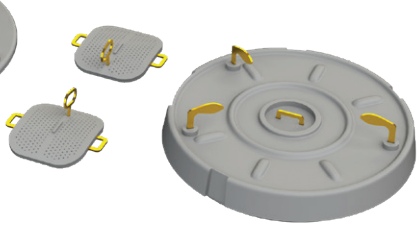


644224

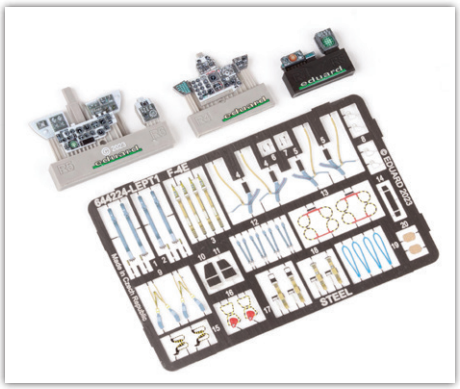
F-4E LööK

1/48 Meng

LööK set - Brassin pre-painted dashboards and STEEL seatbelts for F-4E in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Meng

Set contains:
- resin: 5 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no.

Product page



644225

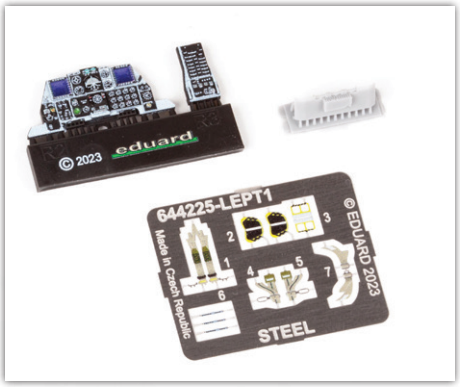
A-10C LööK

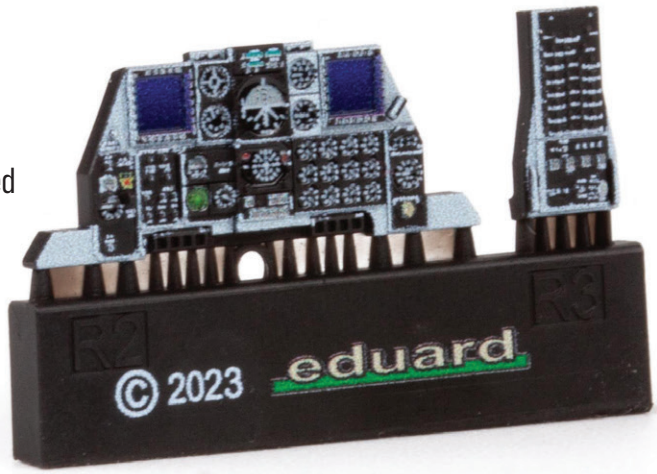
1/48 Academy

LööK set - Brassin pre-painted dashboard and STEEL seatbelts for A-10C in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Academy

Set contains:
- resin: 2 parts
- 3D print: 1 part
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no

Product page





644227

Bf 109K-4 LööK

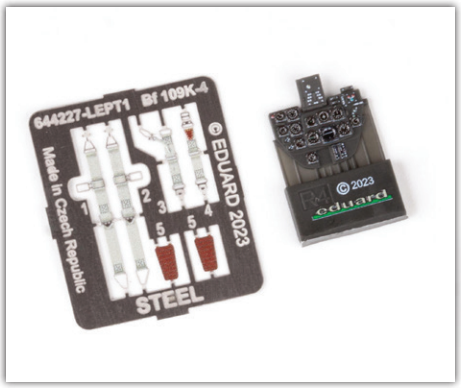
1/48 Eduard

Löök

LööK set - Brassin pre-painted dashboard and STEEL seatbelts for Bf 109K-4 in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Eduard

Set contains:
- resin: 1 part
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

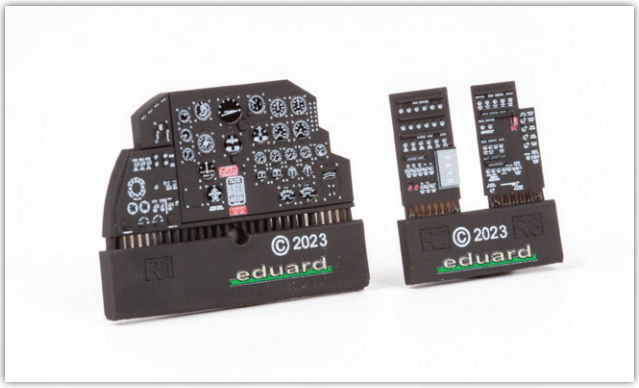
Product page



634041

A-20G LööKplus

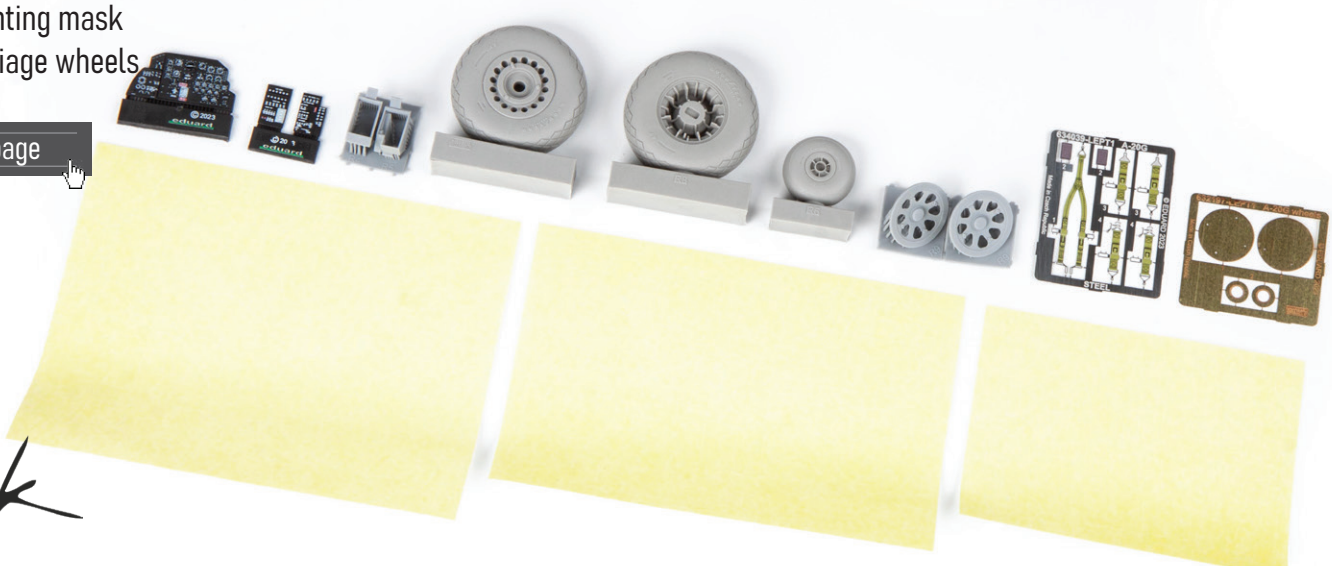
1/32 HKM



Collection of 3 sets for A-20G in 1/32 scale.
Recommended kit: HKM

- LööK set (pre-painted Brassin dashboards & Steelbelts)
- TFace painting mask
- undercarriage wheels

Product page



Löök

644226

FM-2 LööKplus

1/32 Eduard

Collection of 4 sets for FM-2 in 1/48 scale.
Recommended kit: Eduard

- LööK set (pre-painted Brassin dashboards & Steelbelts)
- TFace painting mask
- undercarriage wheels
- gun barrels

Product page

Löökt

635035

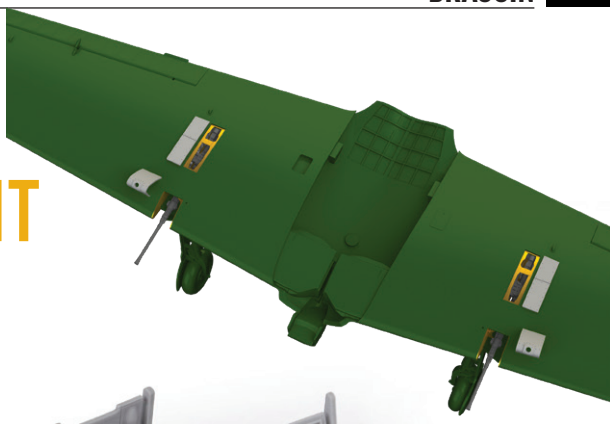
Sd.Kfz. 251/1 Ausf. C radio equipment dark yellow PRINT

1/35 Academy

Brassin set - radio equipment for Sd.Kfz. 251/1 Ausf. C
in 1/35 scale. Made by direct 3D printing.
Recommended kit: Academy

Set contains:
- 3D print: 14 parts
- resin: 1 part
- decals: yes
- photo-etched details: yes
- painting mask: no

Product page



648884

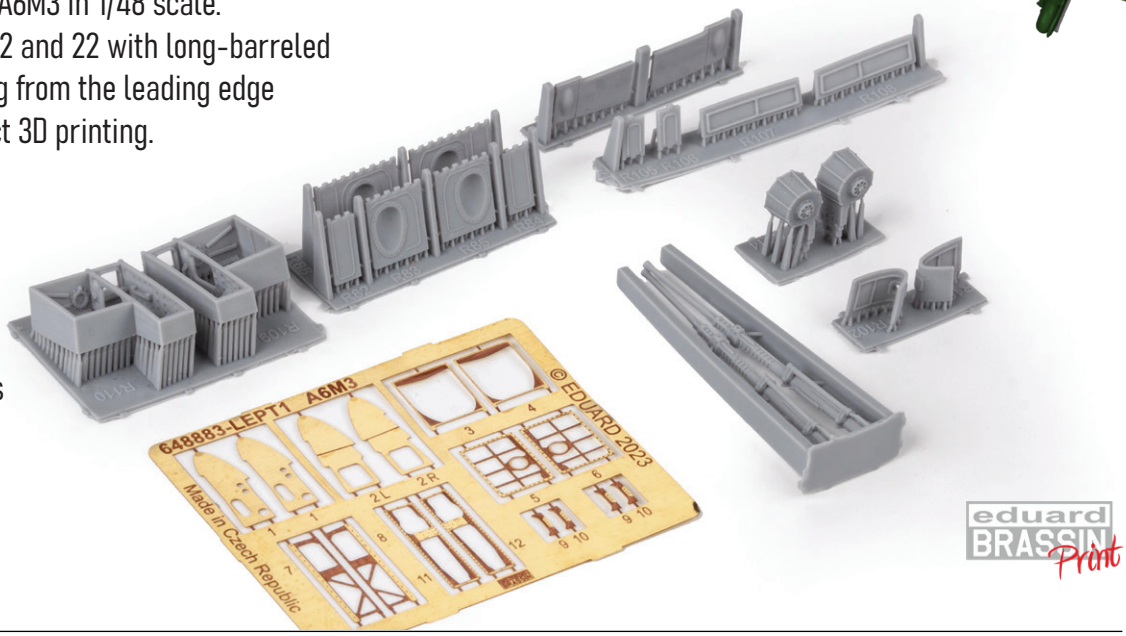
A6M3 gun bays long barrel PRINT

1/48 Eduard

Brassin set - gun bays for A6M3 in 1/48 scale.
Designed for Zeroes Type 32 and 22 with long-barreled wing guns (guns protruding from the leading edge of the wing). Made by direct 3D printing.
Recommended kit: Eduard

Set contains:
- 3D print: 18 parts
- decals: no
- photo-etched details: yes
- painting mask: no

Product page



648893

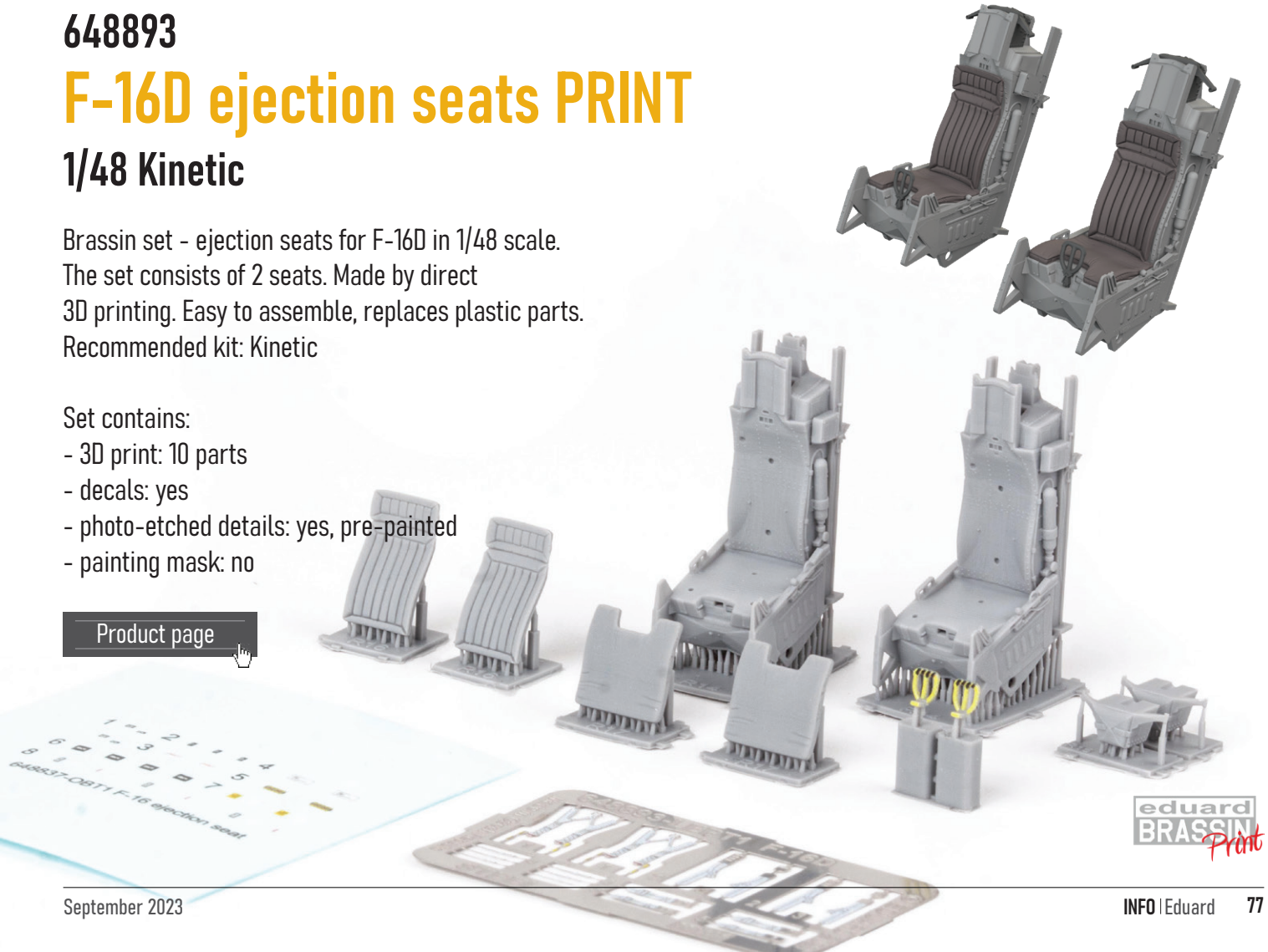
F-16D ejection seats PRINT

1/48 Kinetic

Brassin set - ejection seats for F-16D in 1/48 scale.
The set consists of 2 seats. Made by direct 3D printing. Easy to assemble, replaces plastic parts.
Recommended kit: Kinetic

Set contains:
- 3D print: 10 parts
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no

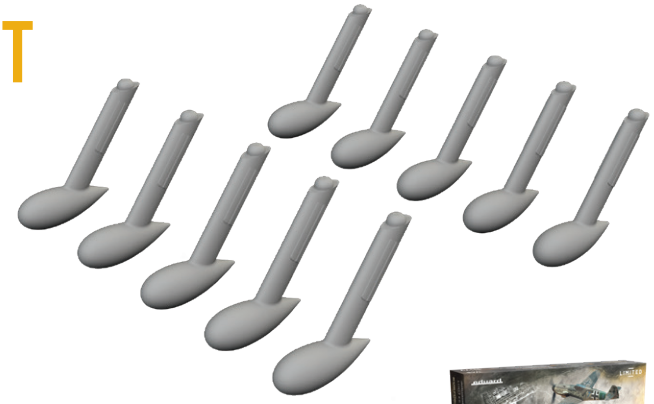
Product page



648894

Bf 109 balance weights PRINT

1/48 Eduard



Brassin set - wing balance weights for Bf 109 in 1/48 scale. The set consists of 10 balance weights. Easy to assemble, replaces plastic parts. Made by direct 3D printing.
Recommended kit: Eduard

Set contains:
- 3D print: 10 parts
- decals: no
- photo-etched details: no
- painting mask: no

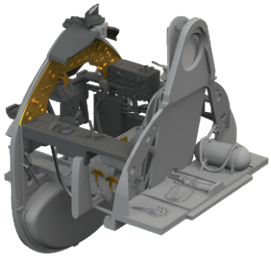
Product page

eduard BRASSIN Print

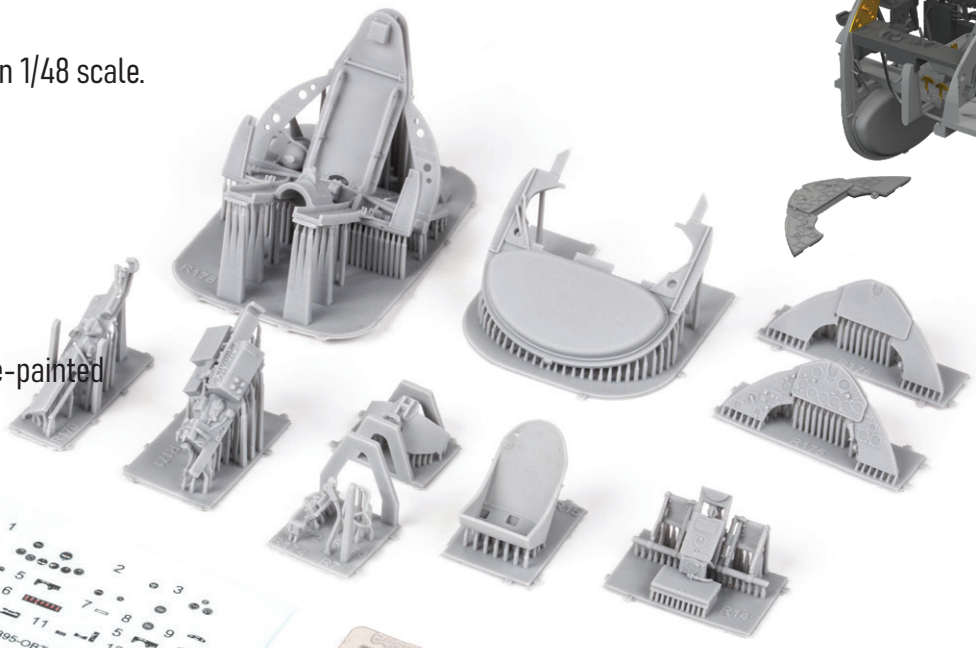
648896

FM-2 cockpit w/ armoured headrest PRINT

1/48 Eduard

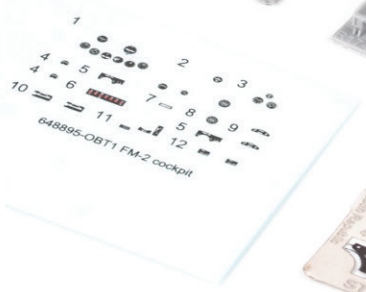


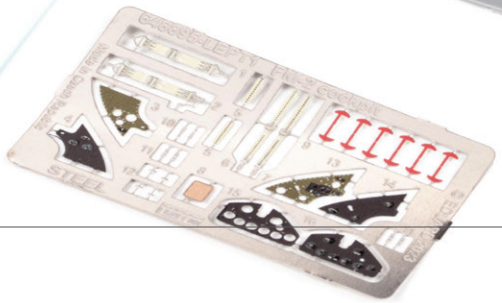
Brassin set - cockpit for FM-2 in 1/48 scale.
Made by direct 3D printing.
Recommended kit: Eduard



Set contains:
- 3D print: 13 parts
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no
- SPACE 3D decals: no

Product page





eduard BRASSIN Print

648897

Hurricane Mk.I wheels

1/48 Hobby Boss

Brassin set - the undercarriage wheels for Hurricane Mk.I in 1/48 scale. The set consists of the main wheels and a tail wheel. Easy to assemble, replaces plastic parts. Recommended kit: Hobby Boss

Set contains:
- resin: 3 parts
- decals: no
- photo-etched details: no
- painting mask: yes

Product page

648898

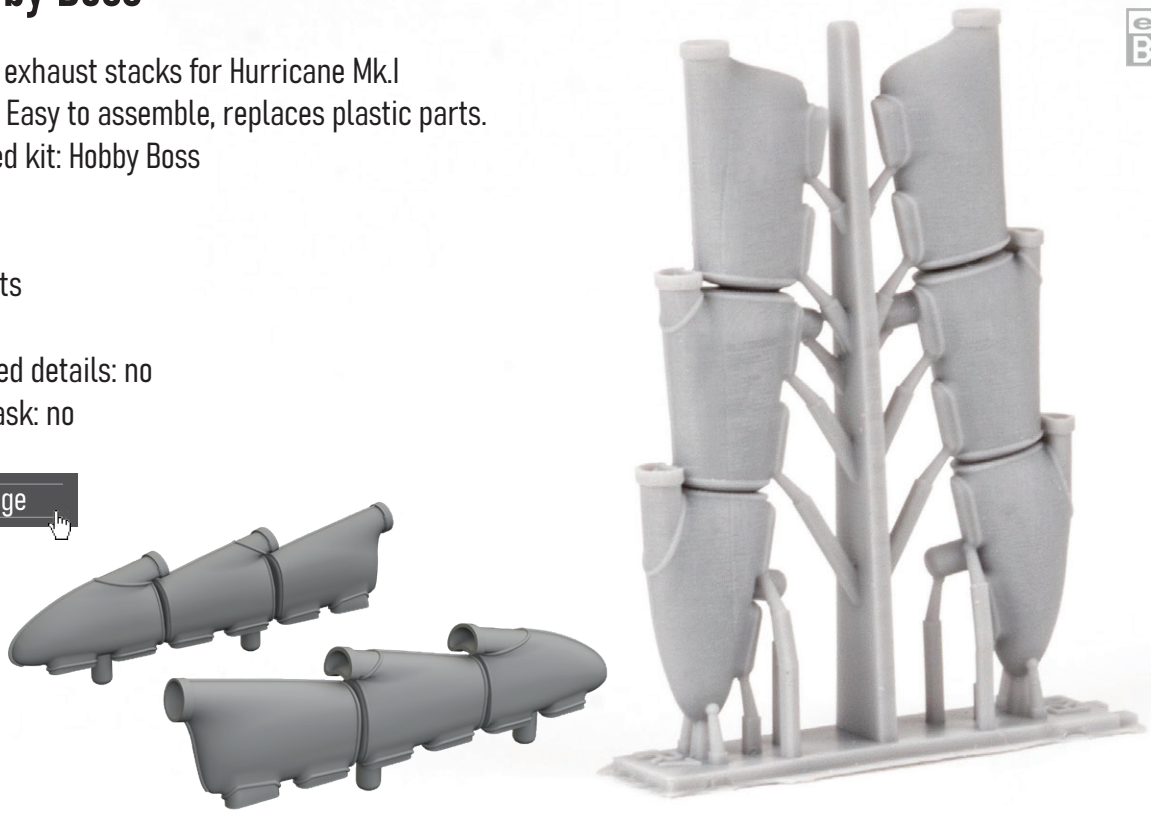
Hurricane Mk.I exhaust stacks PRINT

1/48 Hobby Boss

Brassin set - exhaust stacks for Hurricane Mk.I in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Hobby Boss

Set contains:
- resin: 2 parts
- decals: no
- photo-etched details: no
- painting mask: no

Product page



648899

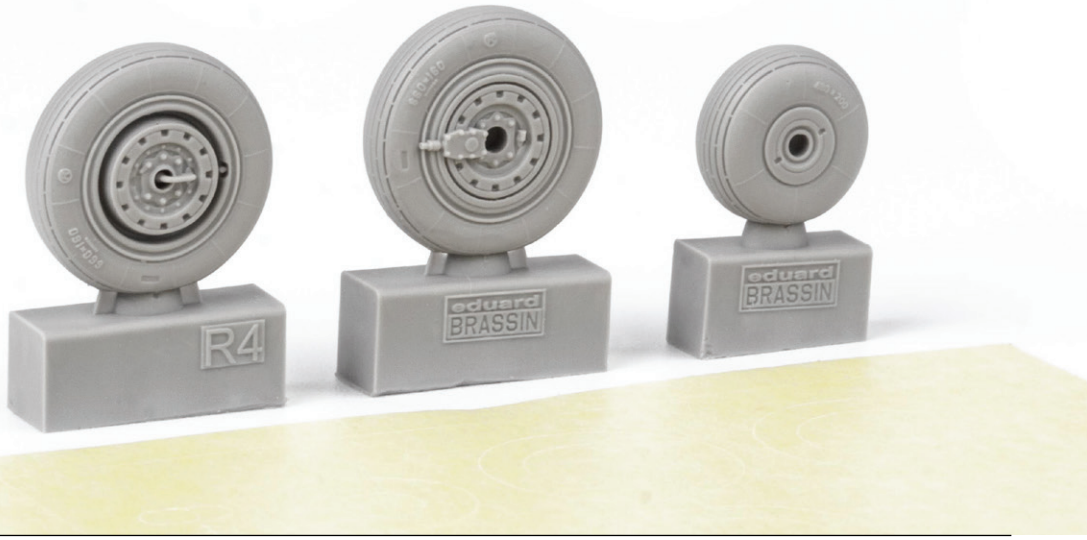
MiG-17 wheels

1/48 AMMO

Brassin set - the undercarriage wheels for MiG-17 in 1/48 scale. The set consists of the main wheels and a nose wheel. Easy to assemble, replaces plastic parts.
Recommended kit: AMMO

Set contains:
- resin: 3 parts
- decals: no
- photo-etched details: no
- painting mask: yes

Product page



648900

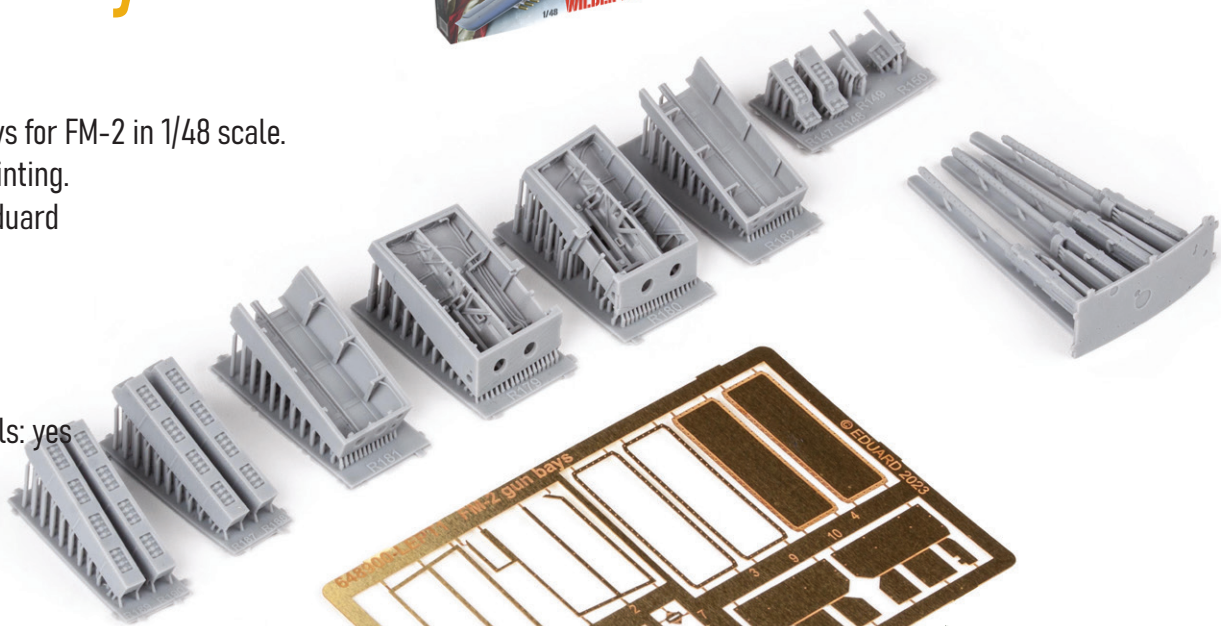
FM-2 gun bays PRINT

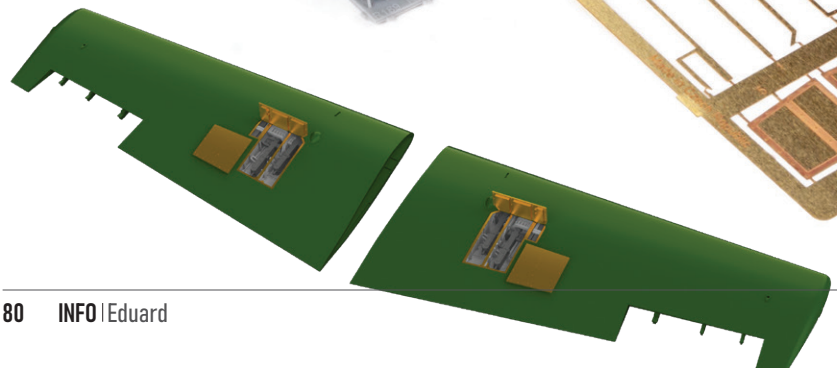
1/48 Eduard

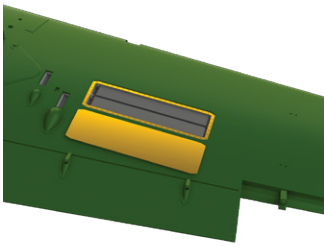
Brassin set - gun bays for FM-2 in 1/48 scale.
Made by direct 3D printing.
Recommended kit: Eduard

Set contains:
- 3D print: 16 parts
- decals: no
- photo-etched details: yes
- painting mask: no

Product page



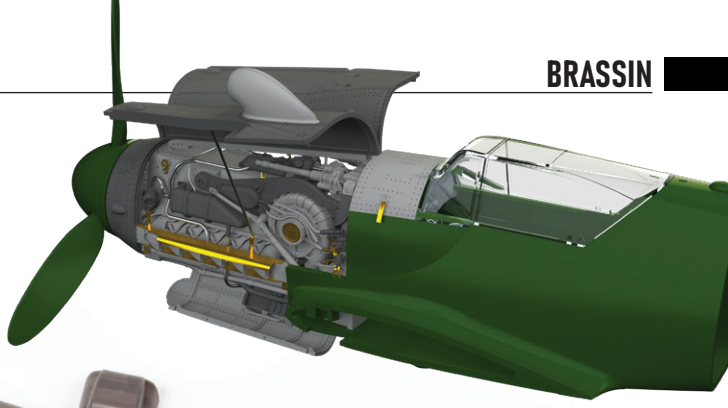




648902

Bf 109K-4 engine

1/48 Eduard



Brassin set - the engine for Bf 109K-4 in 1/48 scale. The cowling are included.
Recommended kit: Eduard

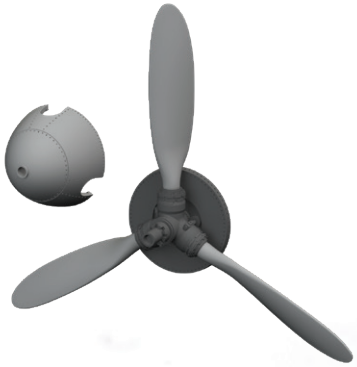
Set contains:
- resin: 72 parts
- decals: yes
- photo-etched details: yes
- painting mask: no

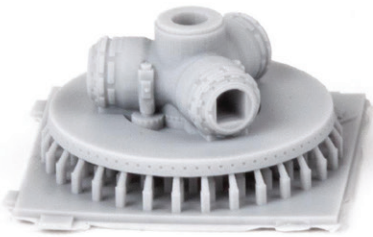
Product page

648903

Bf 109K-4 propeller PRINT

1/48 Eduard





Brassin set - the propeller for Bf 109K-4 in 1/48 scale.
The spinner could be removed. Made by direct 3D printing.
Recommended kit: Eduard

Set contains:
- 3D print: 2 parts
- resin: 4 parts
- decals: no
- photo-etched details: no
- painting mask: no

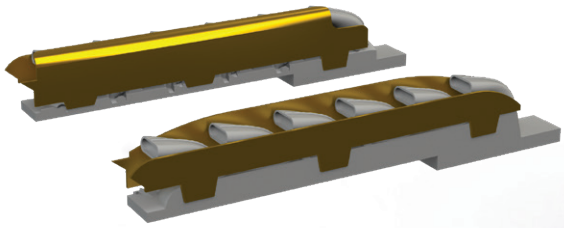
Product page

648913

Bf 109K-4 exhaust stacks PRINT

1/48 Eduard

Brassin set - exhaust stacks for Bf 109K-4 in 1/48 scale. Made by direct 3D printing. Easy to assemble, replaces plastic parts. Recommended kit: Eduard



Set contains:
- 3D print: 2 parts
- decals: no
- photo-etched details: yes
- painting mask: no

Product page

648914

Bf 109K-4 wheels

1/48 Eduard

Brassin set - the undercarriage wheels for Bf 109K-4 in 1/48 scale. The set consists of the main wheels and a tail wheel (two versions). Easy to assemble, replaces plastic parts.
Recommended kit: Eduard

Set contains:
- resin: 4 parts
- decals: no
- photo-etched details: no
- painting mask: yes

Product page

672327

Bf 109F cockpit PRINT

1/72 Eduard

Brassin set - cockpit for Bf 109F in 1/72 scale.
Made by direct 3D printing.
Recommended kit: Eduard

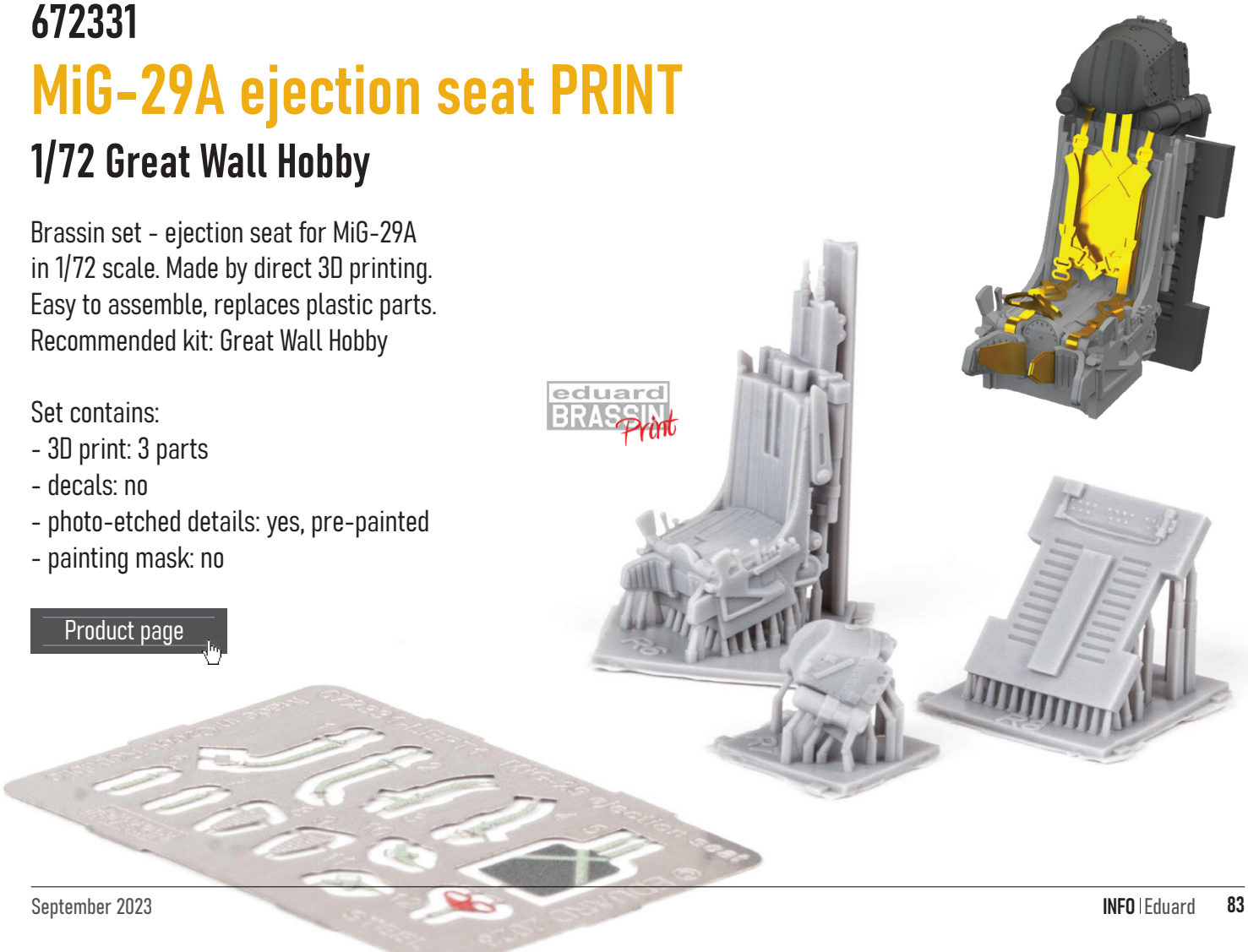
Set contains:
- 3D print: 9 parts
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no
- SPACE 3D decals: no

Product page

672331

MiG-29A ejection seat PRINT

1/72 Great Wall Hobby



Brassin set - ejection seat for MiG-29A
in 1/72 scale. Made by direct 3D printing.
Easy to assemble, replaces plastic parts.
Recommended kit: Great Wall Hobby

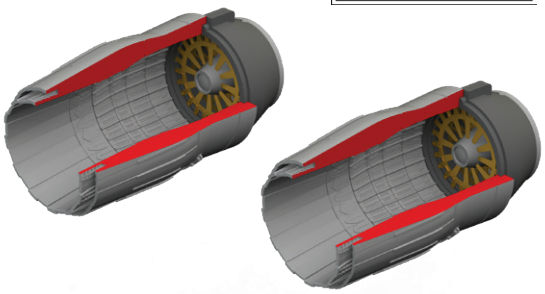
Set contains:
- 3D print: 3 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

Product page

672332

MiG-29 exhaust nozzles PRINT

1/72 Great Wall Hobby



Brassin set - exhaust nozzles for MiG-29 in 1/72 scale.
Made by direct 3D printing. Easy to assemble,
replaces plastic parts. Recommended kit: Great Wall Hobby

Set contains:
- 3D print: 6 parts
- decals: no
- photo-etched details: yes
- painting mask: no

Product page

SMČR

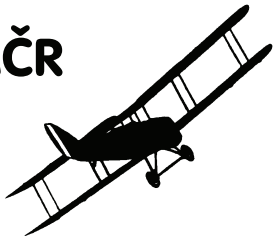
SPL

IPMS CZE CZECH REPUBLIC

Mistrovství ČR seniorů v plastikovém modelářství pro rok 2023

Bodovací soutěž dle pravidel KSPIM SMČR

9. září 2023



propozice na stránkách IPMSCZE.cz nebo Modelforum.cz

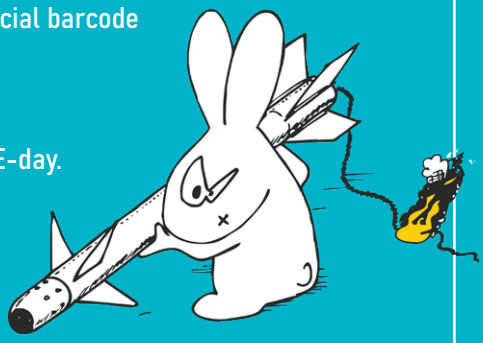
budova Krajské vědecké knihovny Liberec, Rumjancevova 1362/1, velký sál

BUNNY FIGHTER CLUB

Eduard's special membership club for all modeling enthusiasts!

- 15% Permanent Club discount at Eduard Store – you will receive permanent 15% discount on all Eduard products and also discount on various other non-Eduard products. Fixed, permanent, forever!
- Unique valuable Club kits and accessories – you will gain access to unique and nowhere else to be sold products, specially made for BFC members.
- Even better prices at Eduard events stand – do you know that Eduard usually has huge discounts on their products at fairs and events all over the world? BFC members will have even higher discount at these events.
- Club T-shirt – you will receive fancy BFC T-shirt with unique design and special barcode (used for event discounts). This exclusive T-shirt will be only available to the members of BFC.
- Free entry fee on E-day – you will not have to pay a penny to visit Eduard's E-day. That means lot of fun at E-day for two days and entry kit, absolutely free!

  * E-day - INTERNATIONAL SCALE KIT EXHIBITION - IPMS Czech Republic Championship

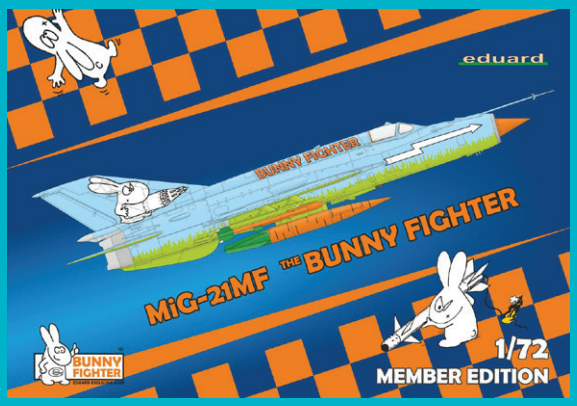


How to become a member of BFC?

Simply by purchasing the Activation product. You will be given 15% discount on (almost) every Eduard product in your shopping cart. To apply this discount, the Activation product has to be in your shopping cart. Activation product is excluded from this calculation.

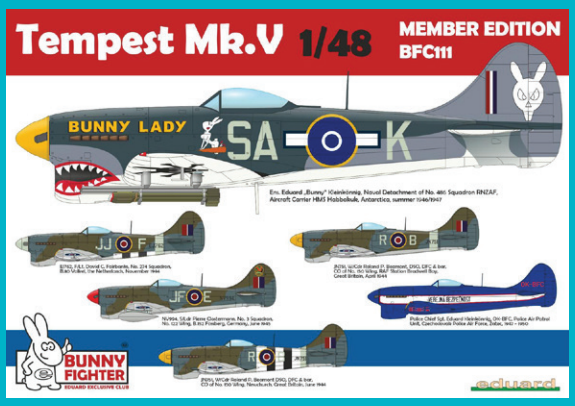
Activation products:

MiG-21MF + T-shirt 1/72



BOX CONTENT:
Plastic parts, Marking options 4, Decal Set, PE parts, Maska, Brassin parts (undercarriage wheels, cockpit, exhaust nozzle, FOD).

Tempest Mk. V + T-shirt 1/48



BOX CONTENT:
Plastic parts, Marking options 6, Decal Set, PE parts, Maska, Brassin parts (two different types of wheels, landing flaps, dust filter with eyelid, intake ring and RP-3 60lb rockets), 3D decals for main and si-dewalk instrument and control panels with photo-etched details and seat belts.

BUNNY FIGHTER
EDUARD EXCLUSIVE CLUB

www.eduard.com/bfc

SIN648110

Anson Mk.I

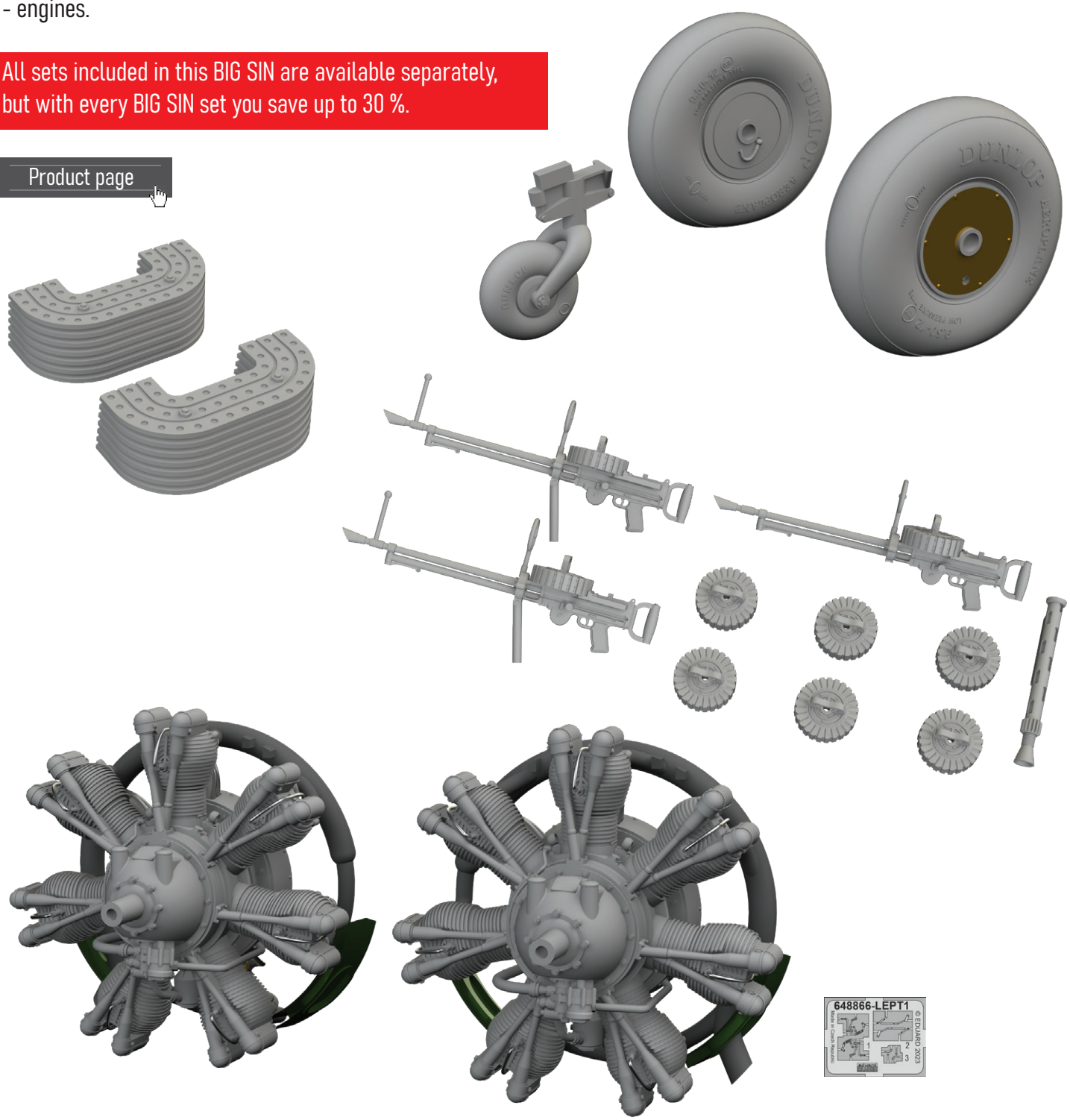
1/48 Airfix

Collection of 4 sets for Anson Mk.I in 1/48 scale.
Recommended kit: Airfix

- undercarriage wheels,
- radiators,,
- guns,
- engines.

All sets included in this BIG SIN are available separately, but with every BIG SIN set you save up to 30 %.

Product page



SIN648111

A-10C armament

1/48 Academy

Collection of 9 sets for A-10C in 1/48 scale.
Recommended kit: Academy

- AGM-65 Maverick
- TER
- LAU-3/A
- GBU-10 Paveway II
- AIM-9M/L Sidewinder
- Mk.82 bombs w/airbrake early
- GBU-12 bomb
- Sniper ATP
- AN/ALQ-131 (deep) ECM pod

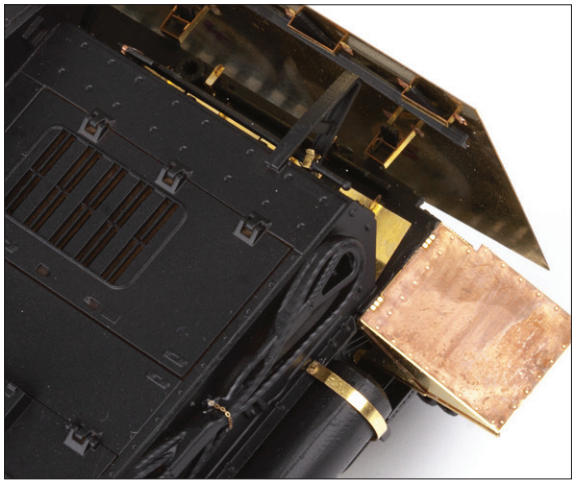
All sets included in this BIG SIN are available separately, but with every BIG SIN set you save up to 30 %.

Product page

StuG IV (Sd.Kfz. 167)

1/35 Zvezda

36504



StuG IV (Sd.Kfz. 167)

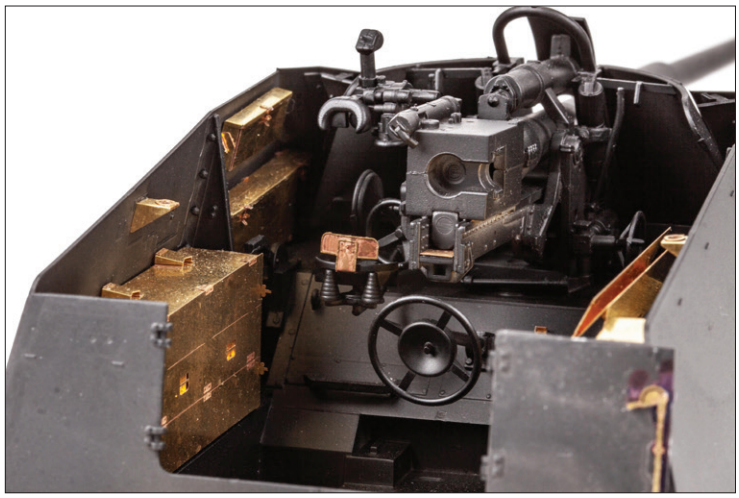
schurzen

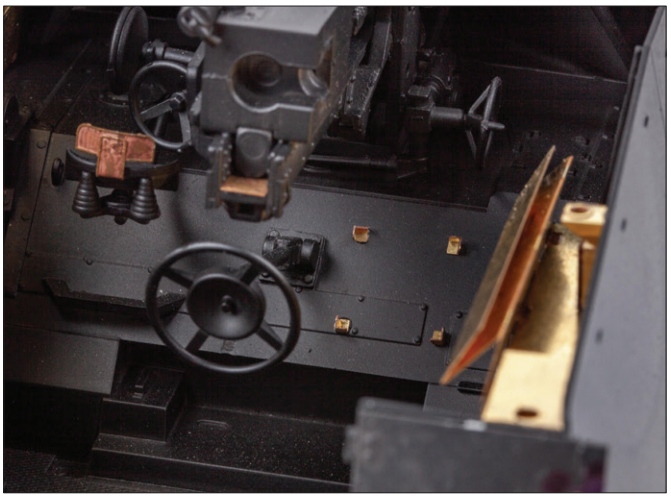
36505

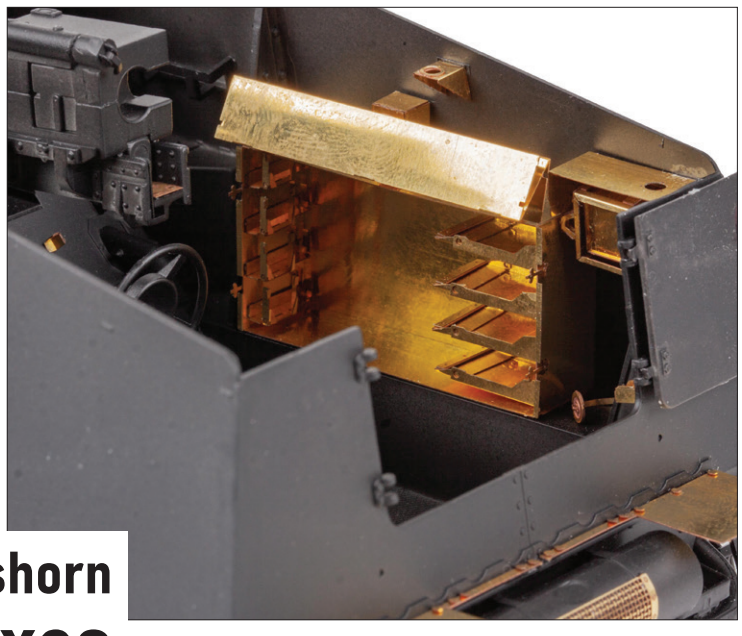
Sd.Kfz. 164 Nashorn

1/35 BORDER MODEL

36506







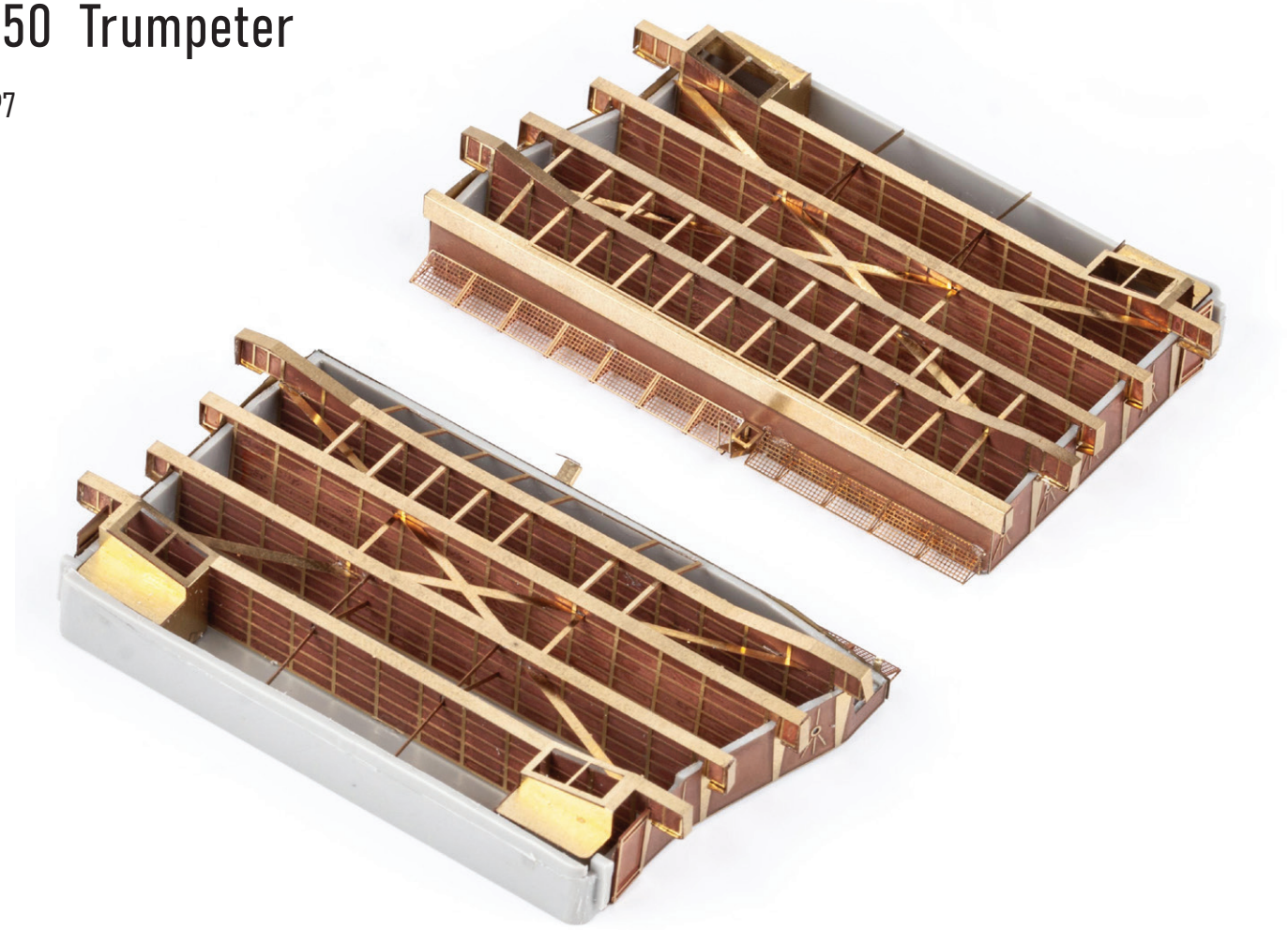
Sd.Kfz. 164 Nashorn ammo boxes

36507

USS Nimitz CVN-68 part 3

1/350 Trumpeter

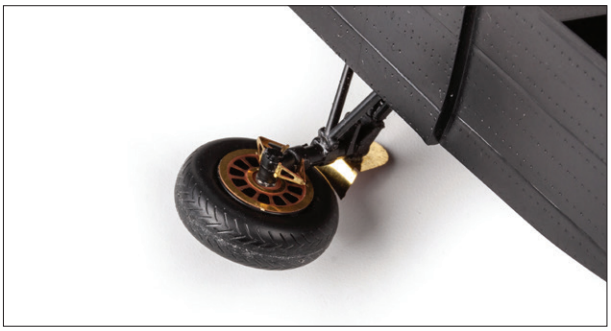
53297

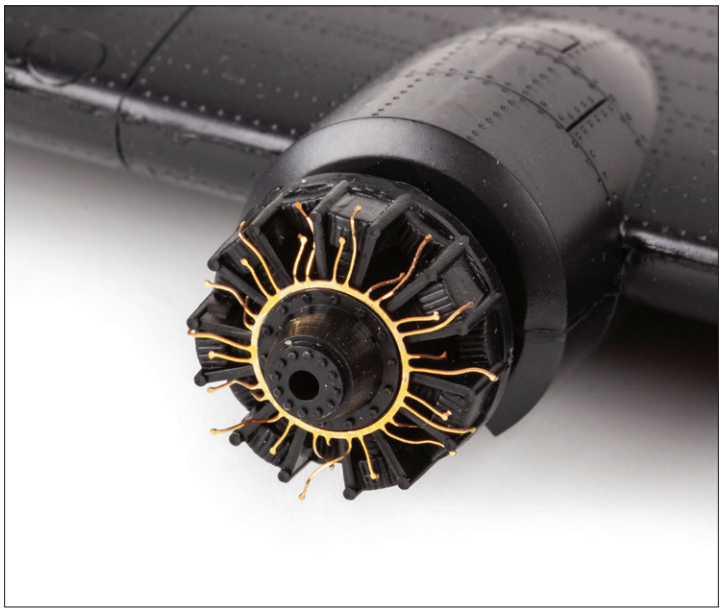


PBY-5A exterior

1/72 HOBBY 2000 / Academy

72731

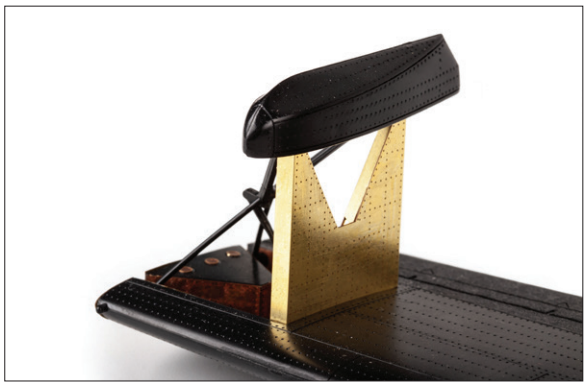




PBY-5A exterior

1/72 HOBBY 2000 / Academy

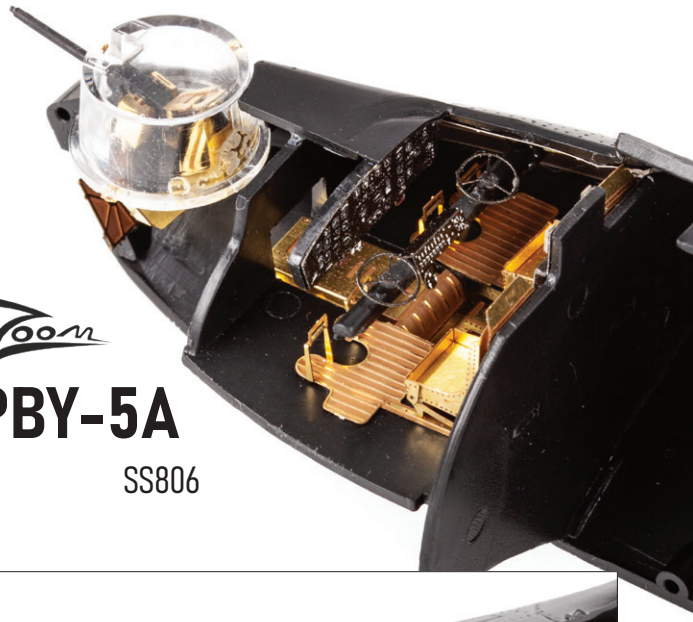
72731



PBY-5A

1/72 HOBBY 2000 / Academy

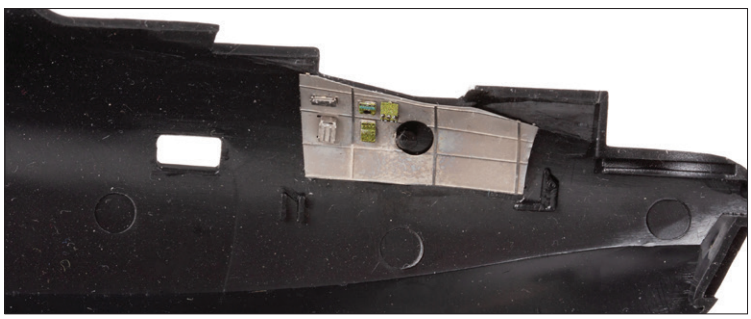
73806



Zoom

PBY-5A

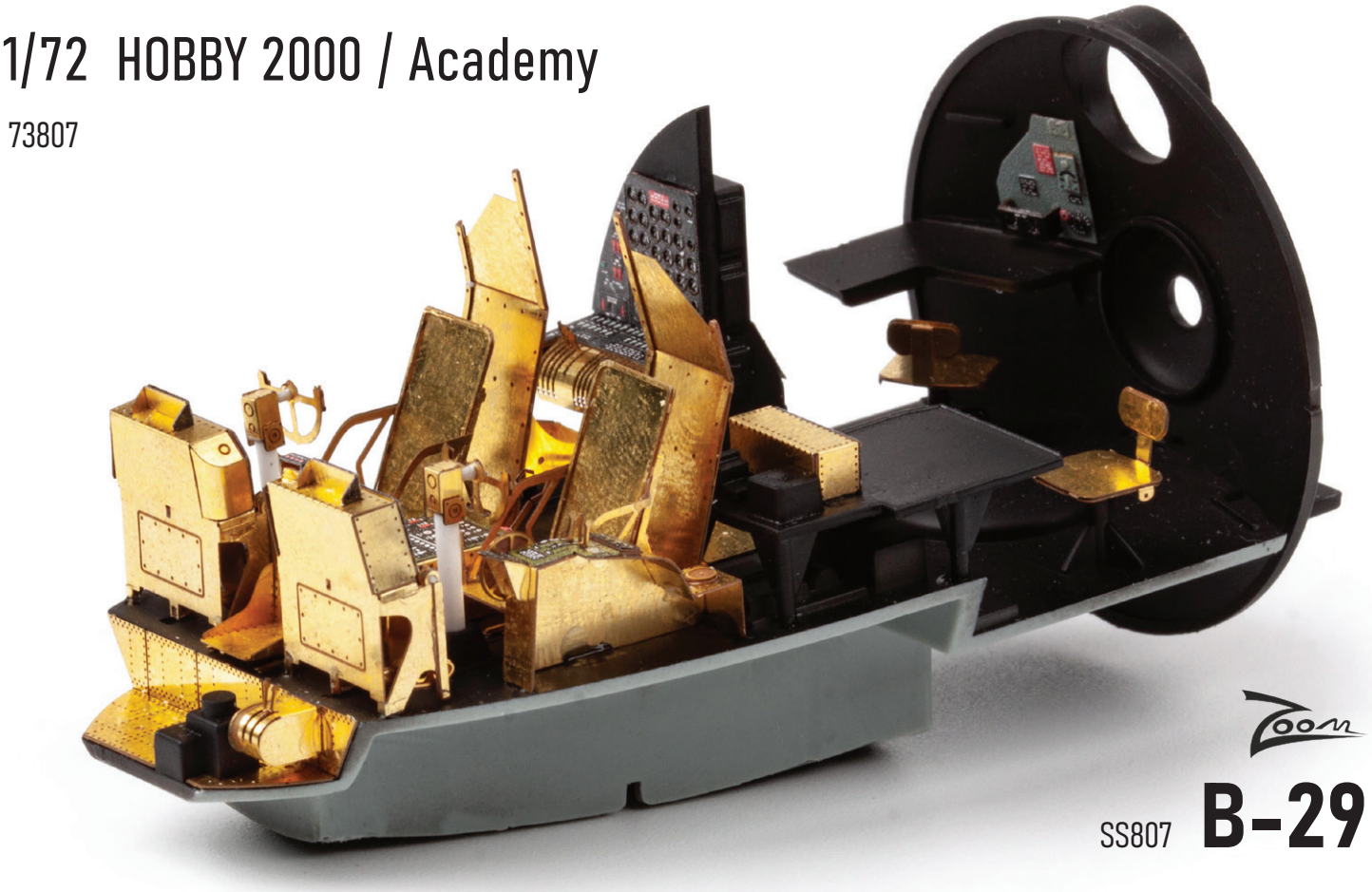
SS806



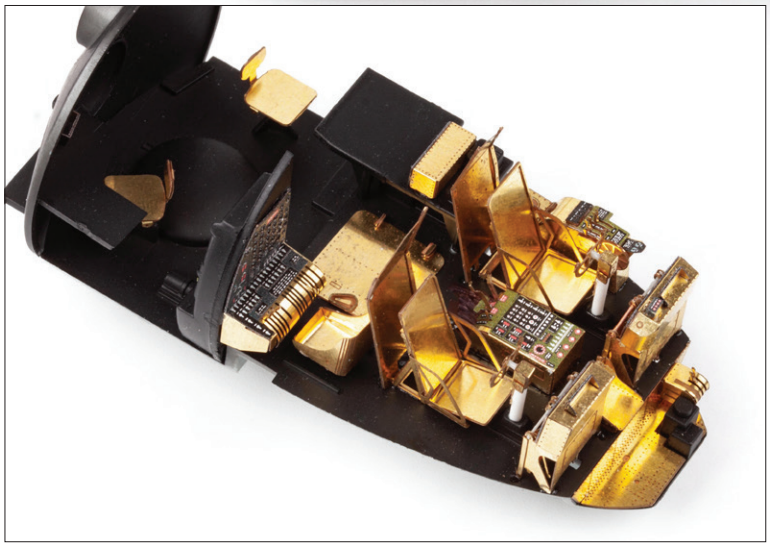
B-29 interior

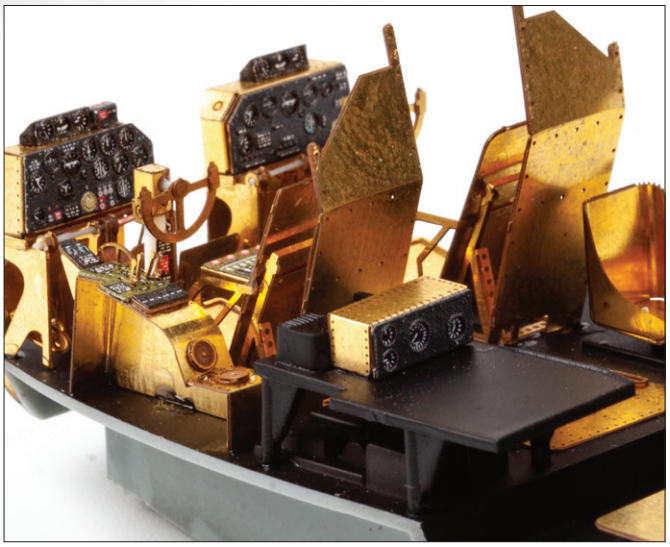
1/72 HOBBY 2000 / Academy

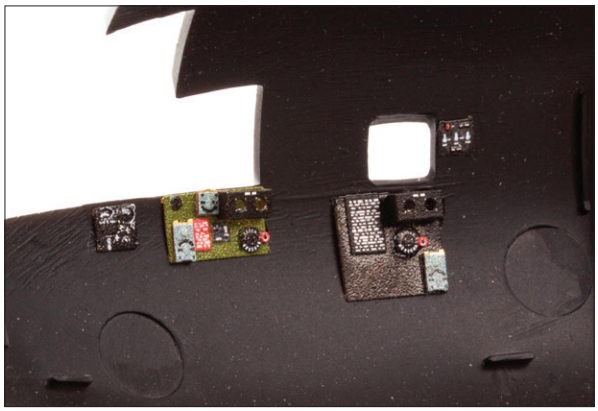
73807



SS807 **B-29**







ARTWORK PRINTS

Bristol F.2B Fighter

8452-ART

UV stable printing on white vinyl 160g/m2.

Packed in hard envelope.

70154-ART

Bf 109F-2

84192-ART

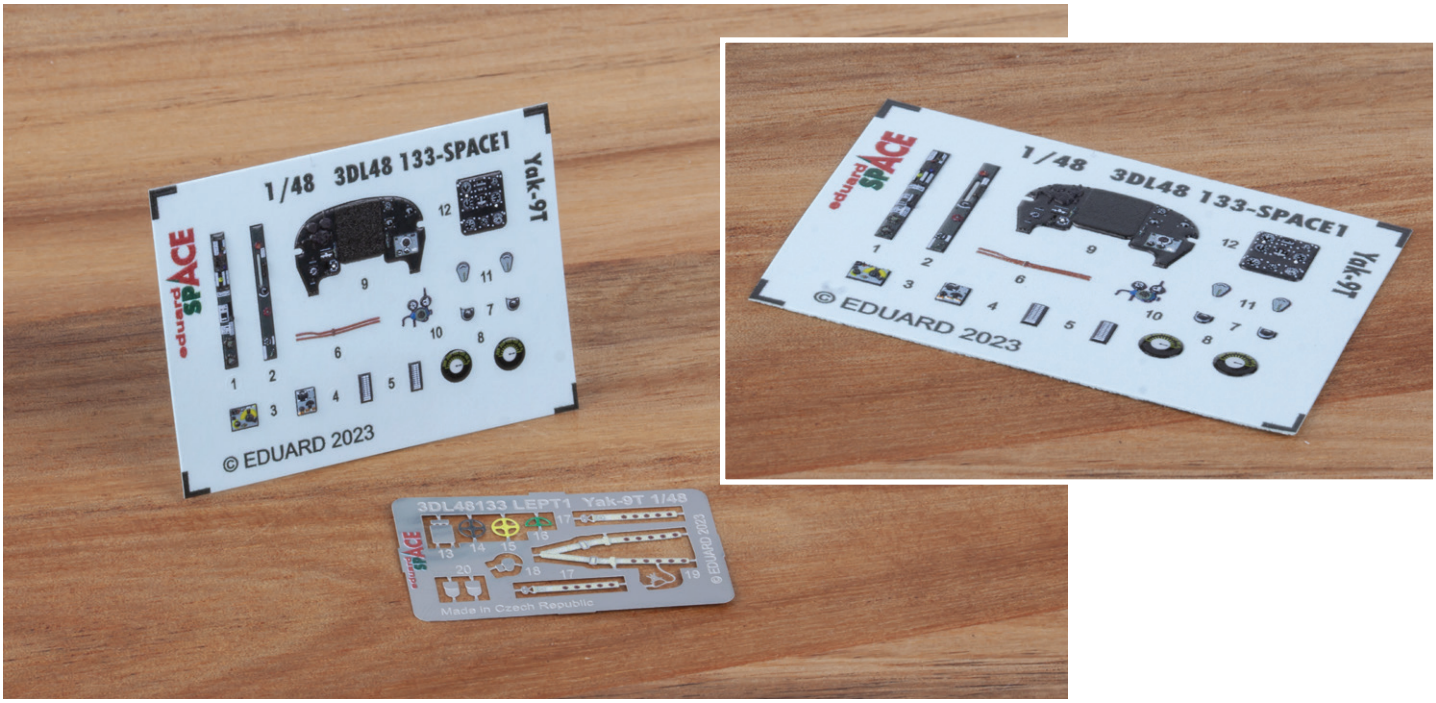
Spitfire Mk.Vc

www.eduard.com only

EASY APPLICATION

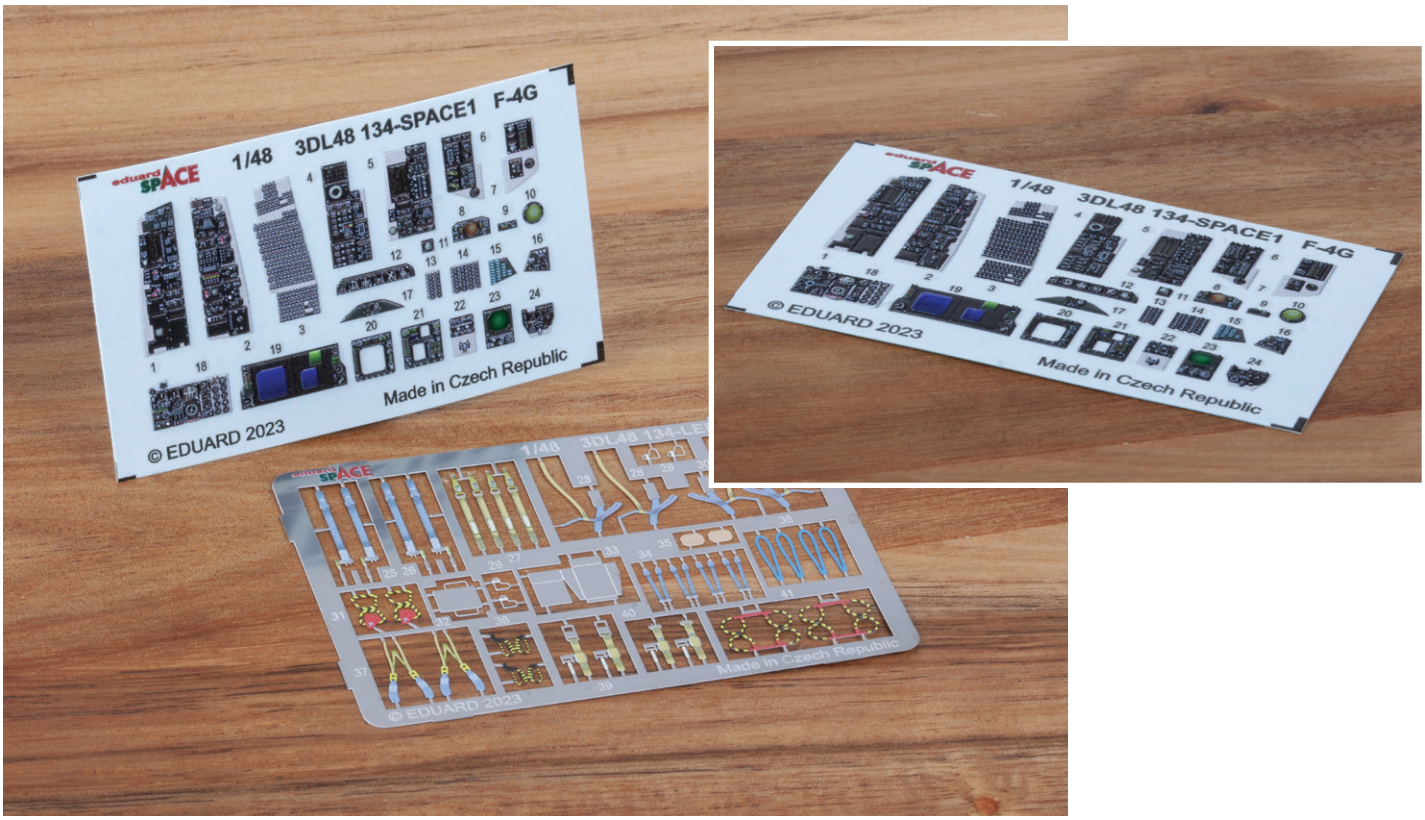
3DL48133 Yak-9T SPACE 1/48 Zvezda

Product page



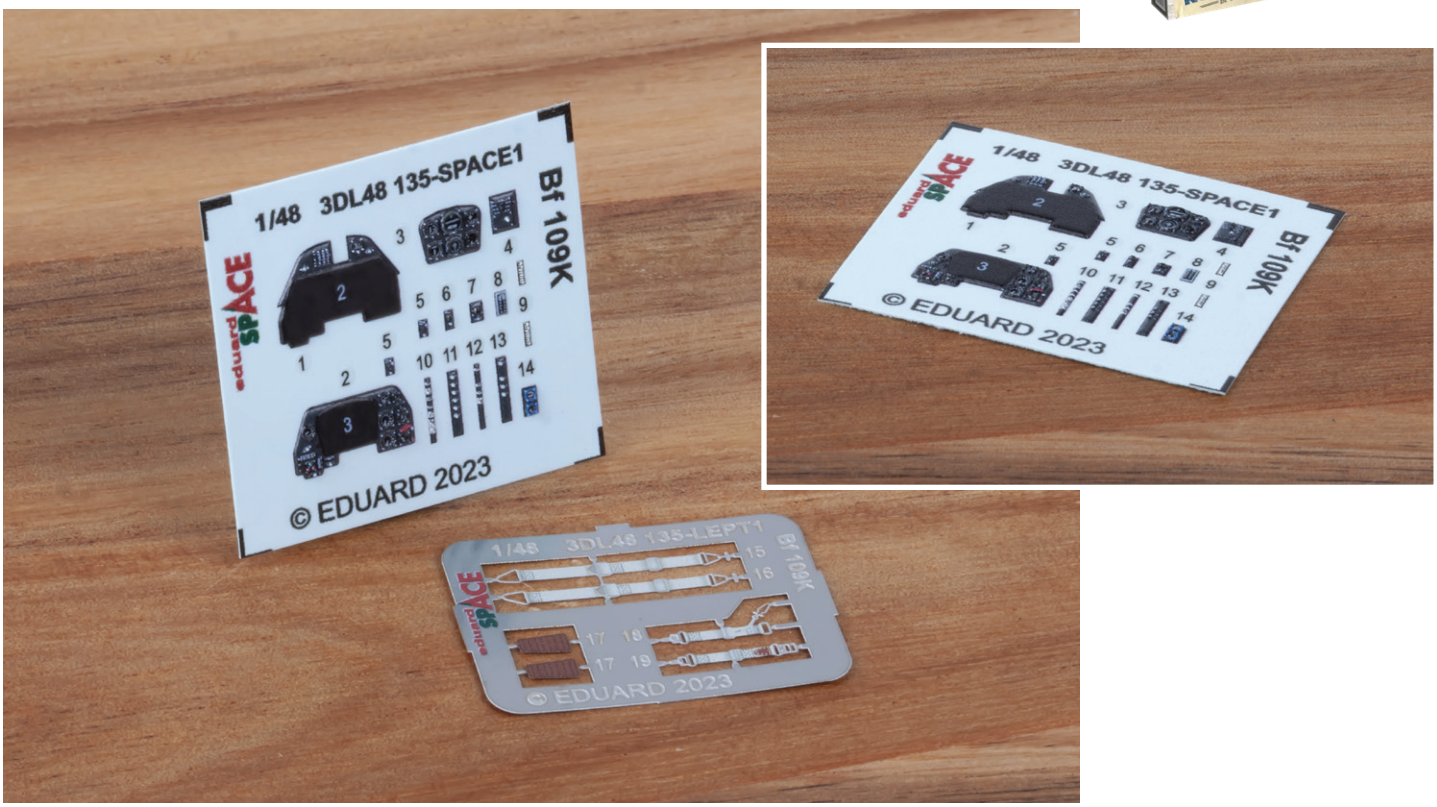
3DL48134 F-4G SPACE 1/48 Meng

Product page



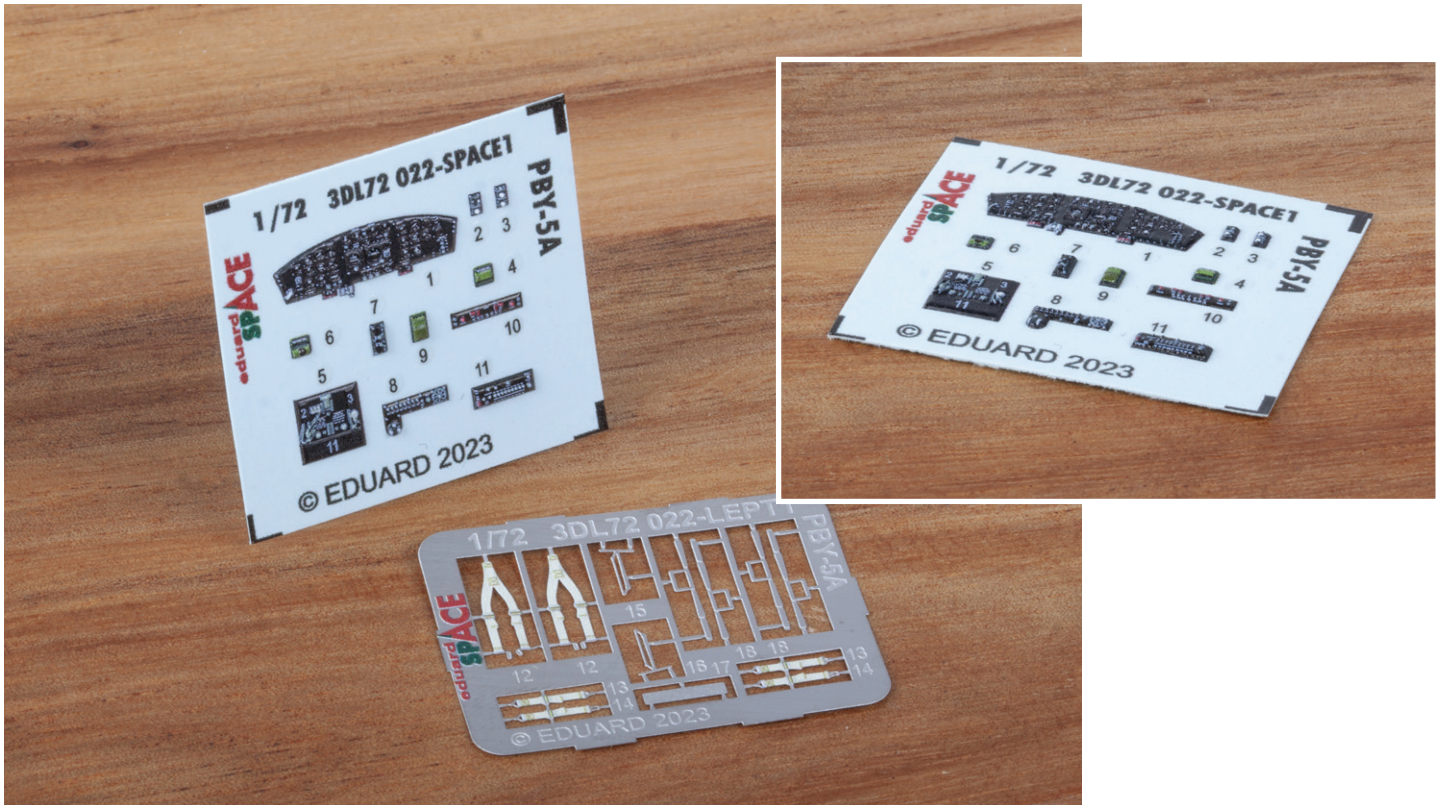
3DL48135 Bf 109K SPACE 1/48 Eduard

Product page



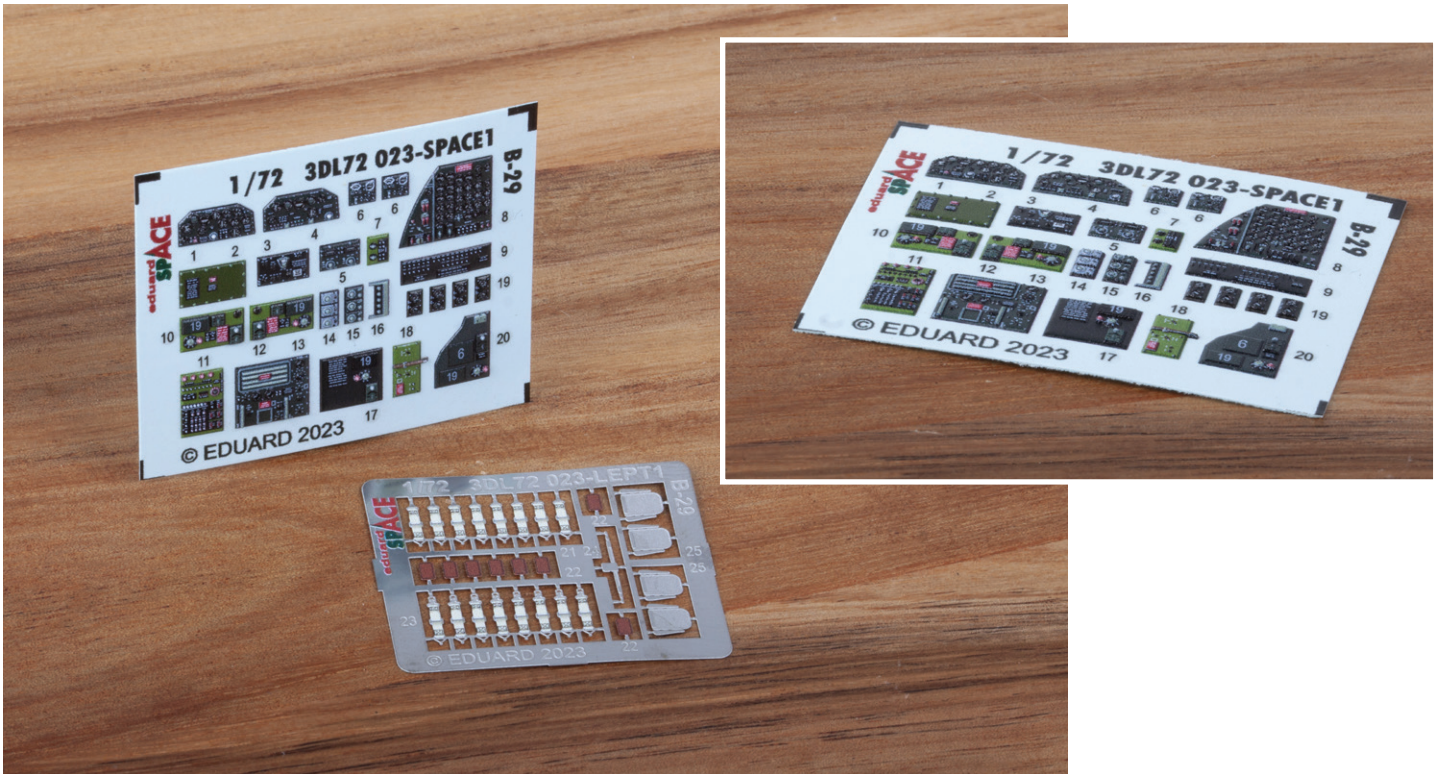
3DL72022 PBY-5A SPACE 1/72 HOBBY 2000 / Academy

Product page



3DL72023 B-29 SPACE 1/72 Hobby 2000/Academy

Product page



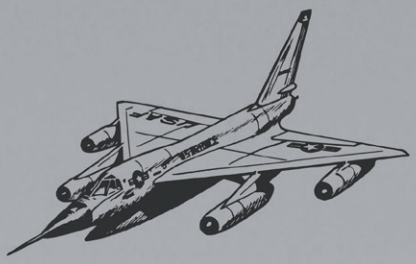
SMČR

SPC

IPMS CZE CZECH REPUBLIC

Mistrovství ČR v plastikovém modelářství

9. 9. 2023



Propozice na stránkách IPMSCZE.cz nebo na www.modelforum.cz

Místo konání: Krajská vědecká knihovna v Liberci, Rumjancevova 1362/1 Velký sál

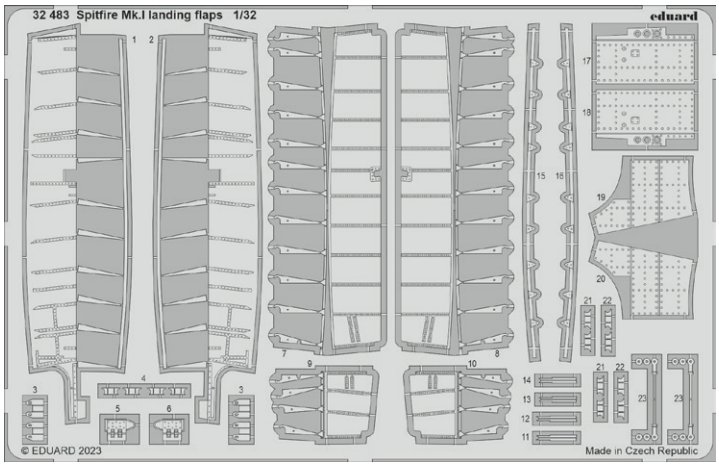
BIG ED

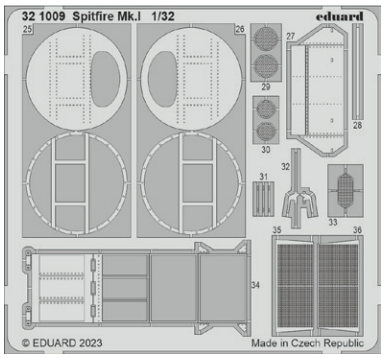
All sets included in this BIG ED are available separately, but with every BIG ED set you save up to 30%.

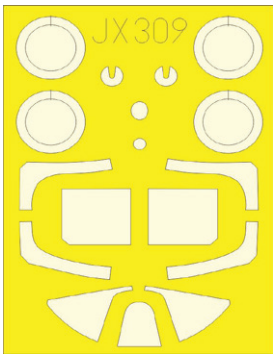
BIG33153 Spitfire Mk.I 1/32 Kotare

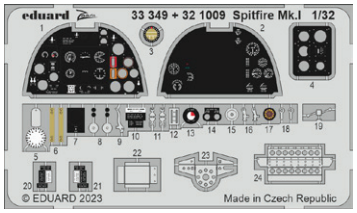
Product page

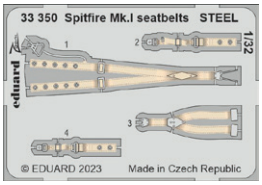
32483 Spitfire Mk.I landing flaps 1/32
321009 Spitfire Mk.I 1/32
33350 Spitfire Mk.I seatbelts STEEL 1/32
JX309 Spitfire Mk.I 1/32







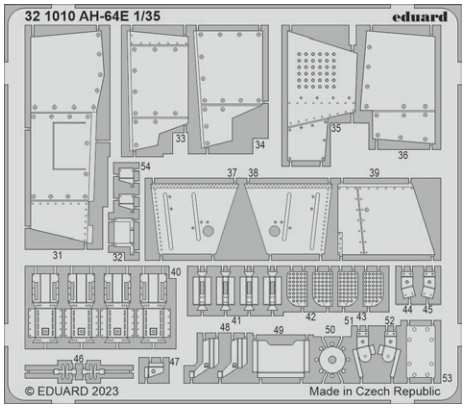


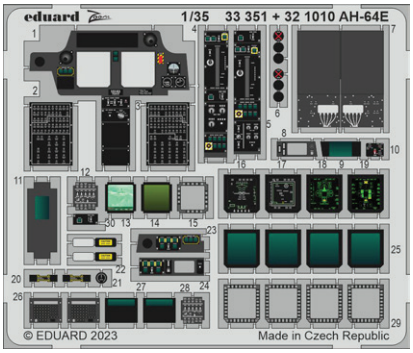


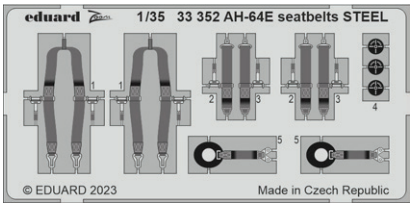
BIG33154 AH-64E 1/35 Takom

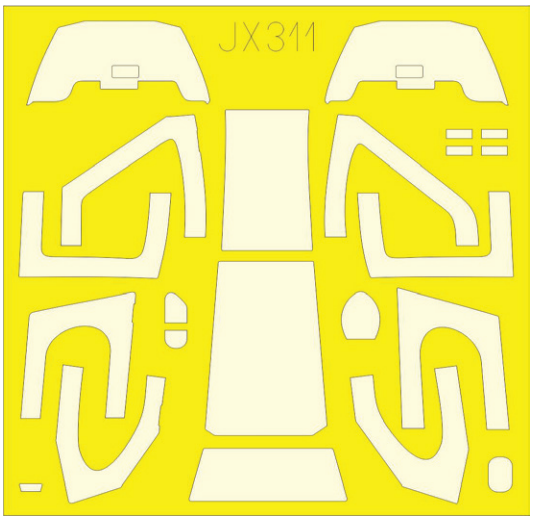
Product page

321010 AH-64E 1/35
33352 AH-64E seatbelts STEEL 1/35
JX311 AH-64E 1/35







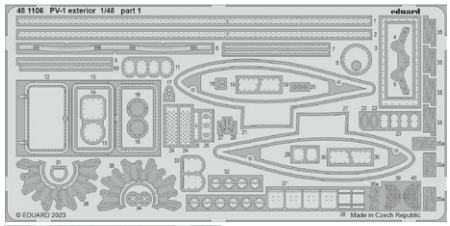
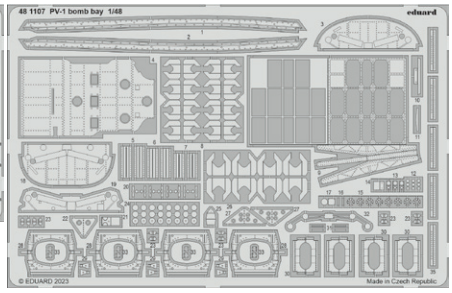
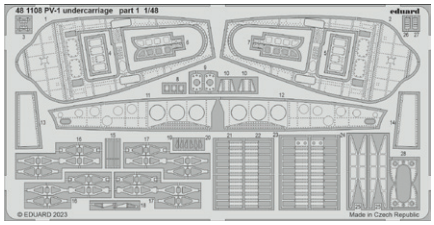
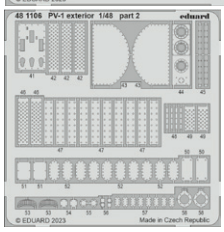
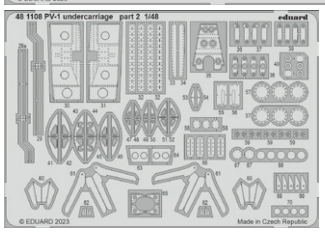


All sets included in this BIG ED are available separately, but with every BIG ED set you save up to 30%.

BIG49377 PV-1 PART II 1/48 Academy

Product page

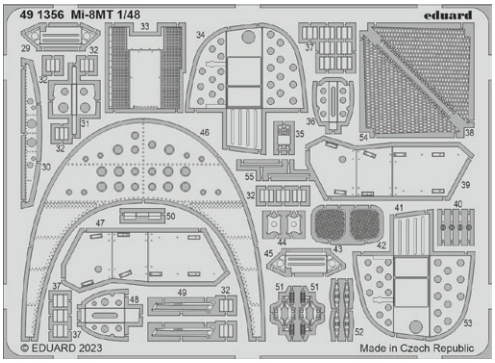
481106 PV-1 exterior 1/48
481107 PV-1 bomb bay 1/48
481108 PV-1 undercarriage 1/48

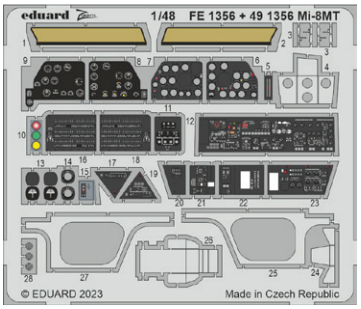






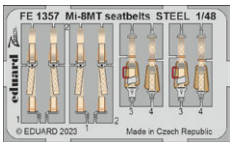
BIG49378 Mi-8MT 1/48 Trumpeter

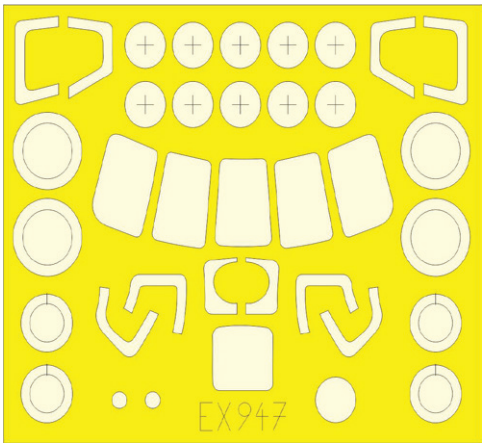
stránka produktu

491356 Mi-8MT 1/48
FE1357 Mi-8MT seatbelts STEEL 1/48
EX947 Mi-8MT 1/48





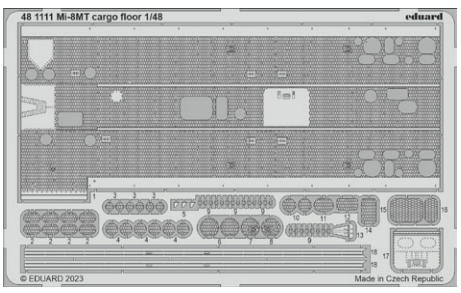


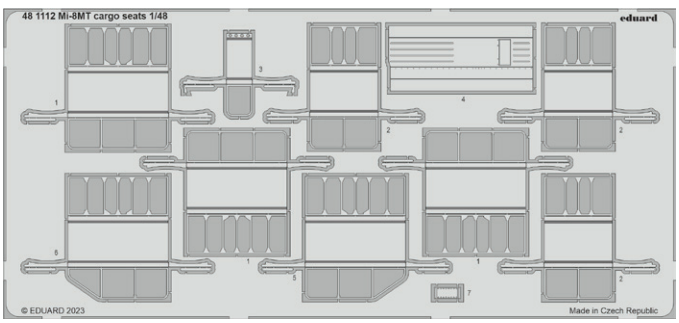


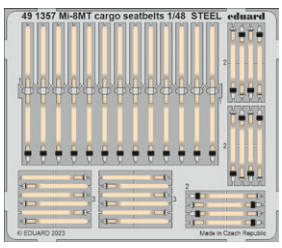
BIG49379 Mi-8MT CARGO INTERIOR 1/48 Trumpeter

Product page

481111 Mi-8MT cargo floor 1/48
481112 Mi-8MT cargo seats 1/48
491357 Mi-8MT cargo seatbelts STEEL 1/48







MASKS

IT FITS!

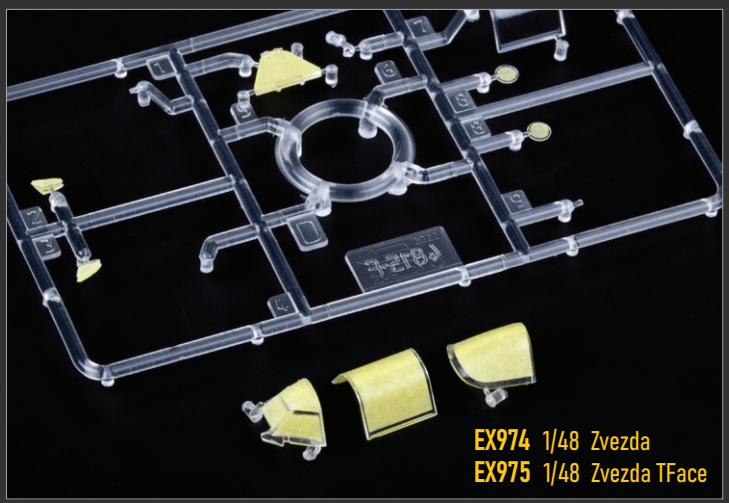
EX971 FM-2 US national insignia
1/48 Eduard
EX972 F-4G
1/48 Meng
EX973 F-4G TFace
1/48 Meng
EX974 Yak-9T
1/48 Zvezda
EX975 Yak-9T TFace
1/48 Zvezda
EX976 Bf 109K TFace
1/48 Eduard
EX977 Spitfire Mk.Vc Weekend
1/48 Eduard
EX978 F-4G surface panels
1/48 Meng
EX979 F-4G wheel bays
1/48 Meng

EX972 F-4G
EX973 F-4G TFace

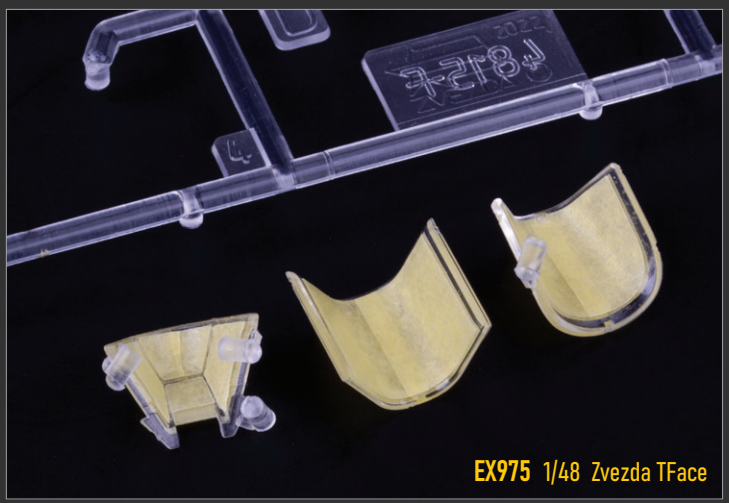
EX973 F-4G TFace

EX972 F-4G
EX973 F-4G TFace

EX973 F-4G TFace



EX974 1/48 Zvezda
EX975 1/48 Zvezda TFace



EX975 1/48 Zvezda TFace

EX974 1/48 Zvezda
EX975 1/48 Zvezda TFace

VÝSTAVA PLASTIKOVÝCH A PAPÍROVÝCH MODELŮ

22. MEMORIÁL JAROSLAVA URBANCE

11.11. 2023 kulturní dům Telnice

Telnice 168E 50°43'38.1"N 13°57'48.5"E

PMK95

Speciální ocenění:

- Memoriál Jaroslava Urbance (nejlepší model letadla)
- Cena starosty Telnice (nejlepší model záchranářské techniky)
- Cena Pavla Brümera (nejlepší model z české historie do r. 1945)
- Cena klubové stavby 2023 (50 let od Yom Kippurské války - arabsko-židovské války)
- Stars & stripes (nejlepší model s US označením)
- All Quiet on the Western Front (nejlepší model s tematikou WWI)

20 klasických kategorií

letadla dle měřítek, technika dle měřítek, automobily, lodě, figury, dioramata, papírove modely a další...

Žákovské kategorie

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OBEC TELNICE

SDH TELNICE

VOJENSKÝ FOND SOLIDARITY

KITS

70154	Bf 109F-2	1/72	ProfiPACK
11177	KURFÜRST	1/48	Limited
8452	Bristol F.2B Fighter	1/48	Weekend
84192	Spitfire Mk.Vc	1/48	Weekend
84130	MiG-21bis Re-releasae	1/48	ProfiPACK

PE-SETS

53296	USS Nimitz CVN-68 part 2	1/350	Trumpeter
53297	USS Nimitz CVN-68 part 3	1/350	Trumpeter
36504	StuG IV (Sd.Kfz. 167)	1/35	Zvezda
36505	StuG IV (Sd.Kfz. 167) schurzen	1/35	Zvezda
36506	Sd.Kfz. 164 Nashorn	1/35	Border Model
36507	Sd.Kfz. 164 Nashorn ammo boxes	1/35	Border Model
481121	F-4G reinforcement straps & formation lights	1/48	Meng
491376	Yak-9T	1/48	Zvezda
491378	F-4G	1/48	Meng
72731	PBY-5A exterior	1/72	Hobby 2000/Academy
73806	PBY-5A	1/72	Hobby 2000/Academy
73807	B-29 interior	1/72	Hobby 2000/Academy

ZOOMS

FE1376	Yak-9T	1/48	Zvezda
FE1377	Yak-9T seatbelts STEEL	1/48	Zvezda
FE1378	F-4G	1/48	Meng
FE1379	F-4G seatbelts STEEL	1/48	Meng
FE1380	Spitfire Mk.Vc Weekend	1/48	Eduard
FE1381	Bristol F.2B Fighter Weekend	1/48	Eduard
SS806	PBY-5A	1/72	Hobby 2000/Academy
SS807	B-29	1/72	Hobby 2000/Academy

MASKS

EX971	FM-2 US national insignia	1/48	Eduard
EX972	F-4G	1/48	Meng
EX973	F-4G TFace	1/48	Meng
EX974	Yak-9T	1/48	Zvezda
EX975	Yak-9T TFace	1/48	Zvezda
EX976	Bf 109K TFace	1/48	Eduard
EX977	Spitfire Mk.Vc Weekend	1/48	Eduard
EX978	F-4G surface panels	1/48	Meng
EX979	F-4G wheel bays	1/48	Meng

BIG ED

BIG33152	CH-54A	1/35	ICM
BIG49373	B-24D PART II	1/48	Revell
BIG49374	Mi-17	1/48	AMK
BIG49375	F-86D	1/48	Revell
BIG49376	PV-1 PART I	1/48	Academy

BRASSIN

644224	F-4E LööK	1/48	Meng
644225	A-10C LööK	1/48	Academy
644227	Bf 109K-4 LööK	1/48	Eduard
635035	Sd.Kfz. 251/1 Ausf. C radio equipment dark yellow PRINT	1/35	Academy
648884	A6M3 gun bays long barrel PRINT	1/48	Eduard
648893	F-16D ejection seats PRINT	1/48	Kinetic
648894	Bf 109 balance weights PRINT	1/48	Eduard
648896	FM-2 cockpit w/ armoured headrest PRINT	1/48	Eduard
648897	Hurricane Mk.I wheels	1/48	Hobby Boss
648898	Hurricane Mk.I exhaust stacks PRINT	1/48	Hobby Boss
648899	MiG-17 wheels	1/48	AMMO
648900	FM-2 gun bays PRINT	1/48	Eduard
648902	Bf 109K-4 engine	1/48	Eduard
648903	Bf 109K-4 propeller PRINT	1/48	Eduard
648913	Bf 109K-4 exhaust stacks PRINT	1/48	Eduard
648914	Bf 109K-4 wheels	1/48	Eduard
672327	Bf 109F cockpit PRINT	1/72	Eduard
672331	MiG-29A ejection seat PRINT	1/72	Great Wall Hobby
672332	MiG-29 exhaust nozzles PRINT	1/72	Great Wall Hobby

LöökPLUS

634041	A-20G LööKplus	1/32	HKM
644226	FM-2 LööKplus	1/48	Eduard

BIG SIN

SIN648110	Anson Mk.I	1/48	Airfix
SIN648111	A-10C armament	1/48	Academy

SPACE

3DL48133	Yak-9T SPACE	1/48	Zvezda
3DL48134	F-4G SPACE	1/48	Meng
3DL48135	Bf 109K SPACE	1/48	Eduard
3DL72022	PBY-5A SPACE	1/72	Hobby 2000/Academy
3DL72023	B-29 SPACE	1/72	Hobby 2000/Academy

1/48

Sopwith 2F.1 Camel

Camo scheme by author´s own masking.

Accessories used:

648659	Sopwith Camel seat PRINT (Brassin)
648660	Sopwith Camel Vickers Mk.I gun (Brassin)
648674	Sopwith Camel Rotherham air pumps PRINT (Brassin)
648677	Sopwith Camel Bentley engine PRINT (Brassin)
648725	Sopwith Camel 2F.1 Lewis gun PRINT (Brassin)
3DL48038	Sopwith Camel SPACE (3D Decal Set)

#82173
built by **Frank Barkhofen**

Product page


N6818

Bf 109G-6 early version

1/48

Aftermarket decals used.

#82113
built by **Oliver Peissl**

Accessories used:

648247	Bf 109G exhaust stacks (Brassin)
EX510	Bf 109G camo scheme - Erla (Mask)
EX512	Bf 109G spinner spirals (Mask)
EX582	Bf 109G classic canopy TFace (Mask)

1/48

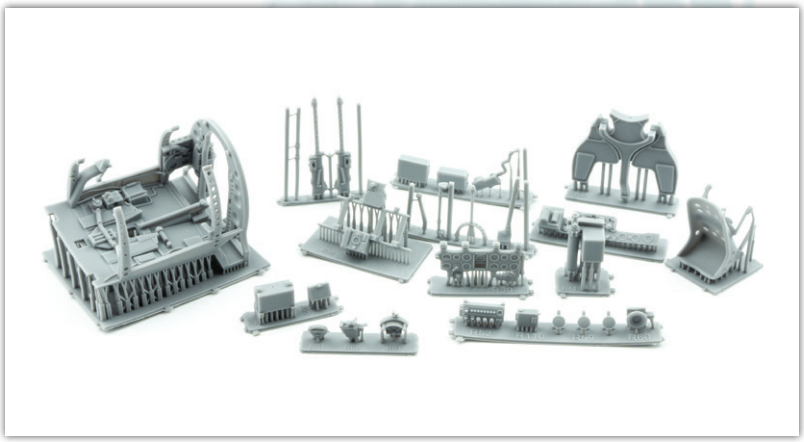
Rufe

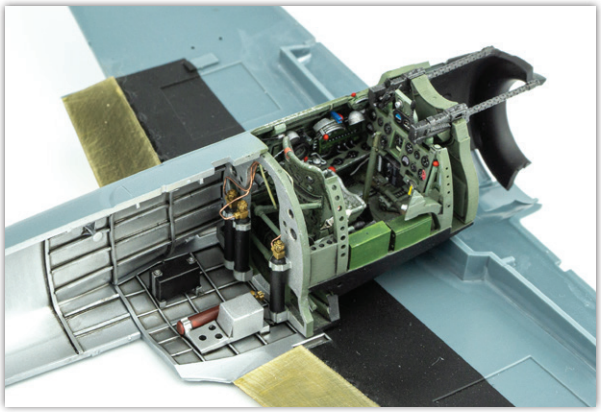
#11171
MARKING D
built by **Josef Blažek**

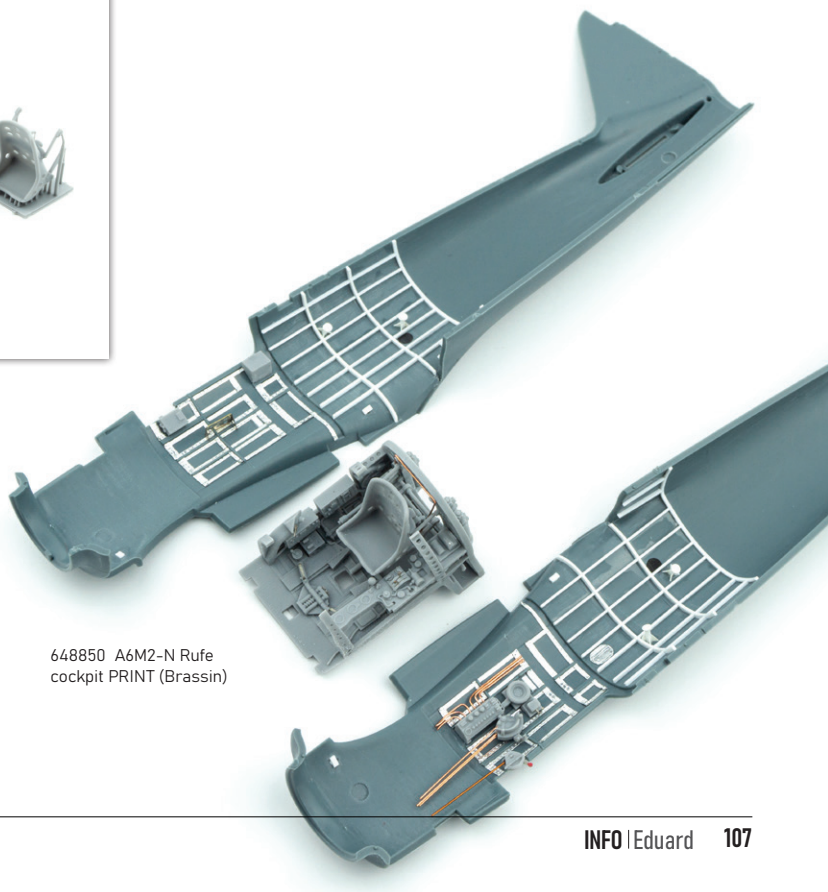
Product page

Accessories used:

481109	A6M2-N Rufe landing flaps (PE-Set)
648850	A6M2-N Rufe cockpit PRINT (Brassin)
648852	A6M2-N Rufe engine complete PRINT (Brassin)

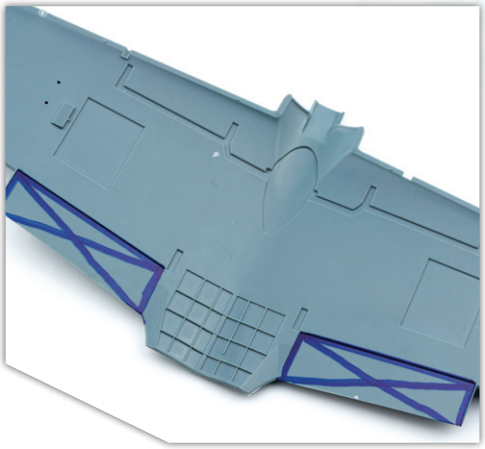


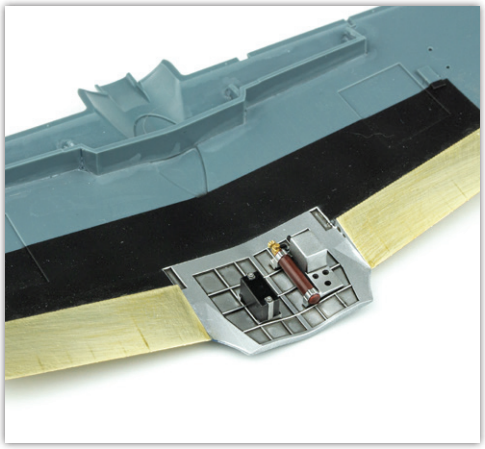




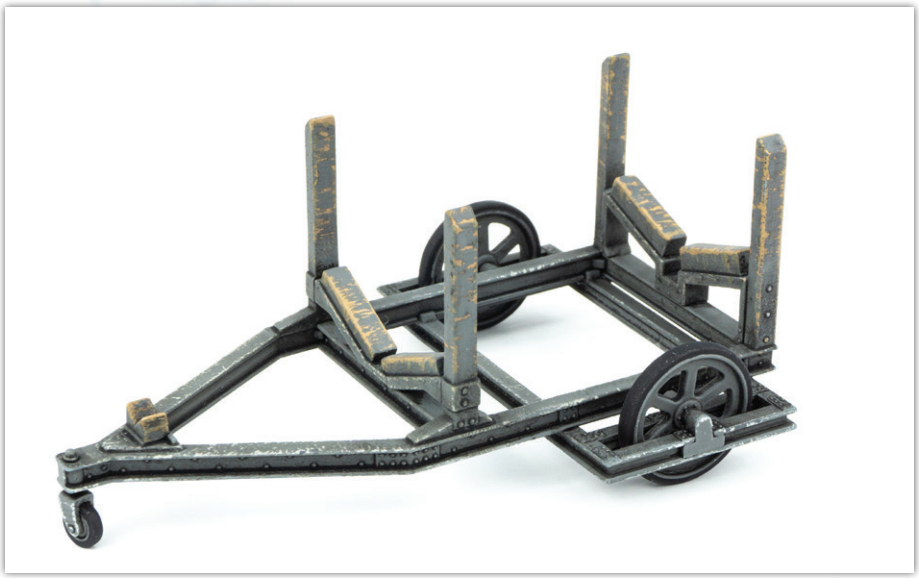
648850 A6M2-N Rufe cockpit PRINT (Brassin)

481109 A6M2-N Rufe landing flaps (PE-Set)



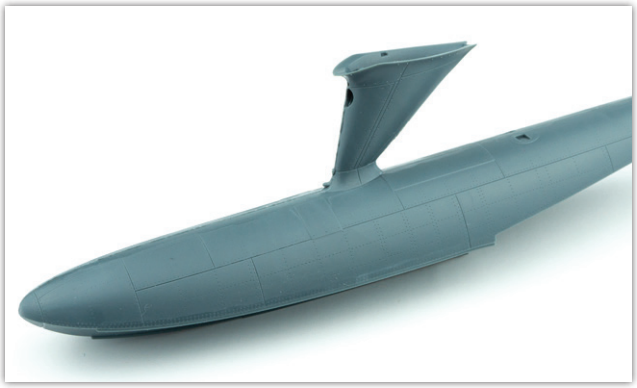


648852 A6M2-N Rufe engine complete PRINT (Brassin)



Kōkūtai 802, Faisi-Poporang base, Shortland Islands, February 1943

This aircraft was among the new ones that Kōkūtai 802 took over in Japan during December 1942. The top of the main float did not have purge system cover. At the unit level, the aircraft received a dark green paint, but the upper part of tail surfaces was left in original color. The aircraft probably had a late production stencil on the fuselage. The rudder sported a victory mark and there was also a horizontal red stripe on the vertical tail surfaces, which was probably the unit's identifying marking. It is likely that the aircraft took part in the aerial combat on February 13 and 14 in the defense of the Shortland Islands and Buin, in which the American units suffered fairly significant losses.



BEST BRASS AROUND

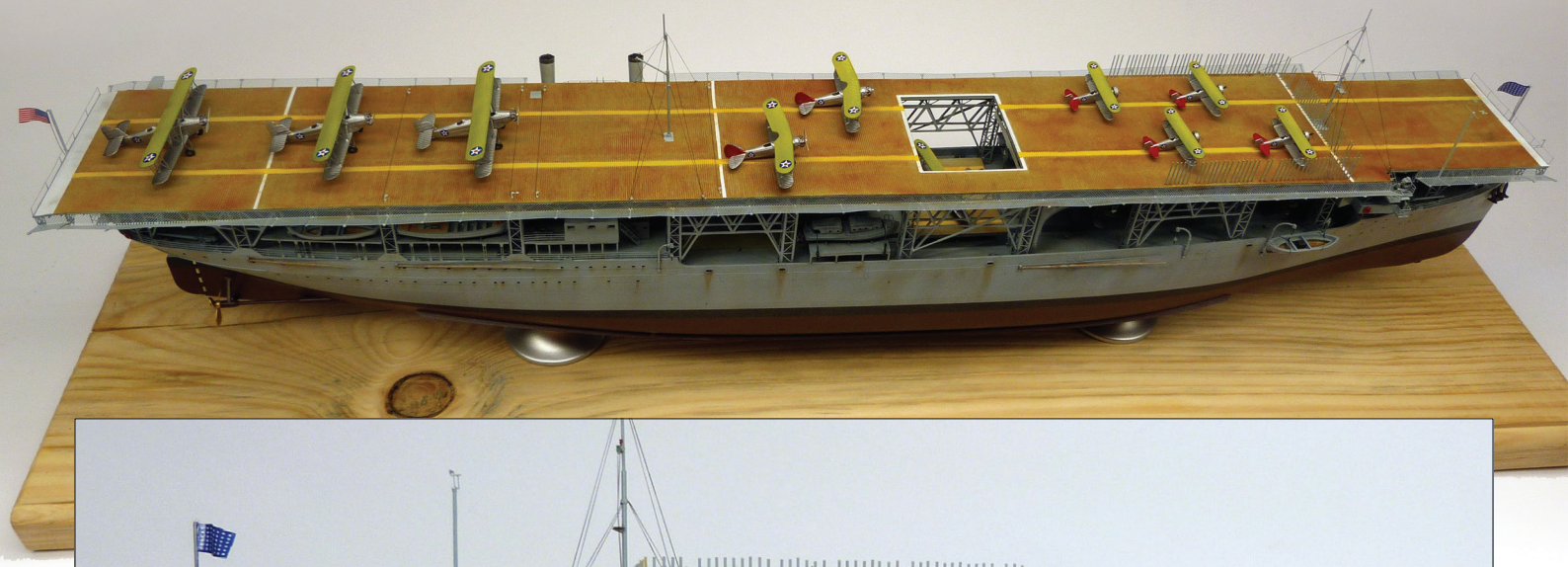
LANGLEY CV-1

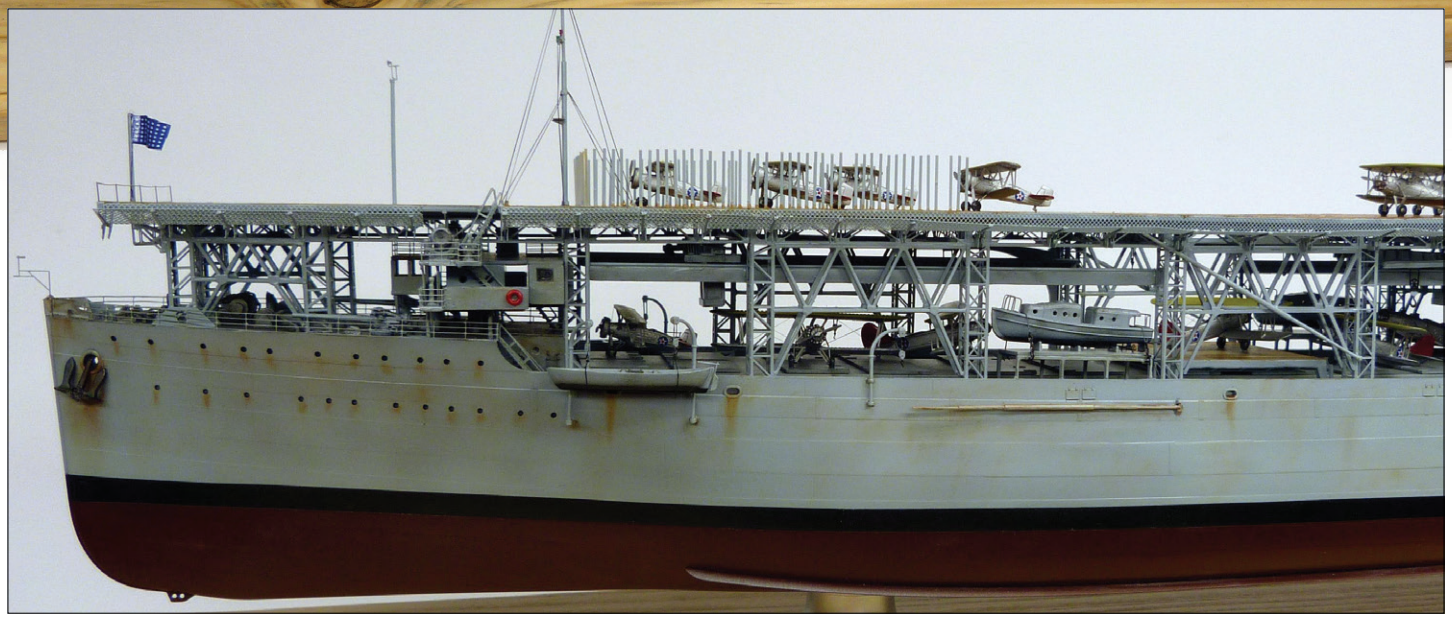
1/350 TRUMPETER

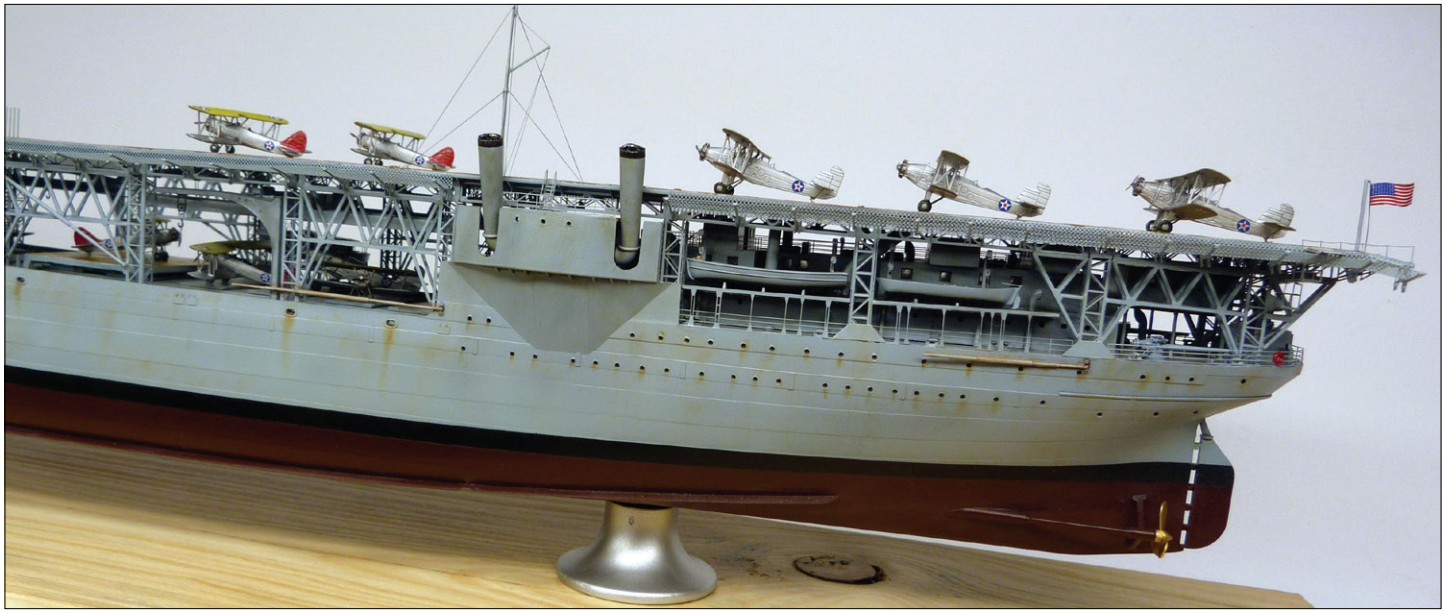
built by Pavel Zimandl

Accessories used:

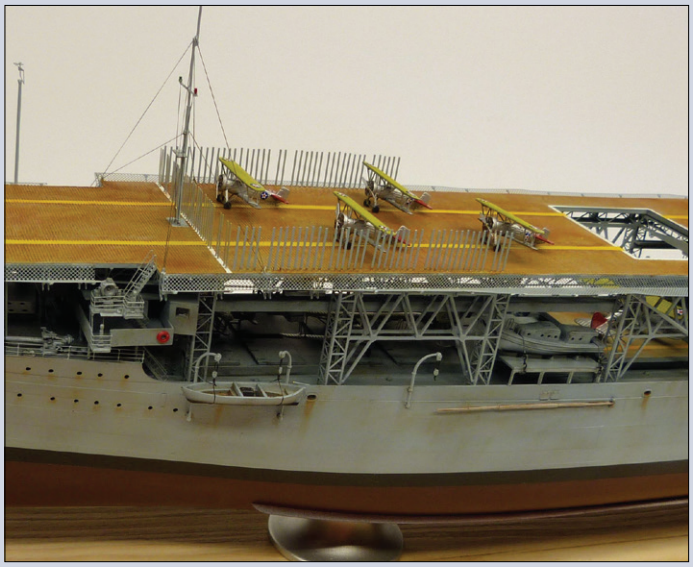
53254	Langley CV-1 (PE-Set)
53255	Langley CV-1 safety nets (PE-Set)

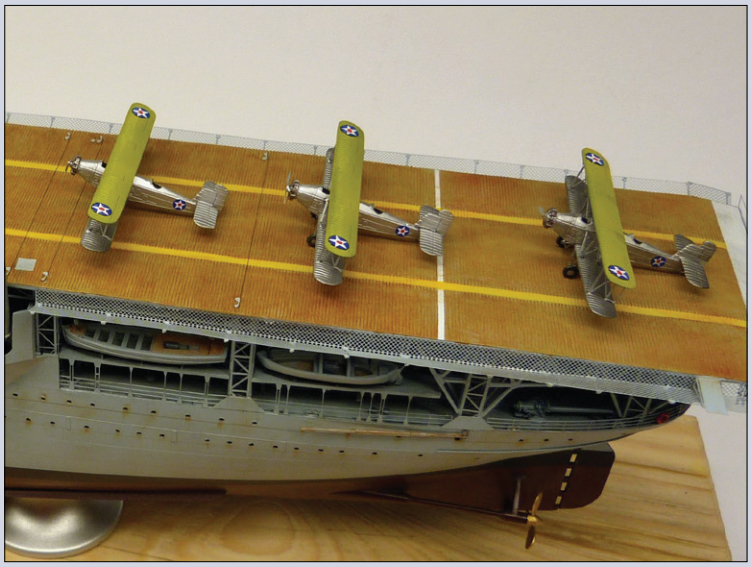


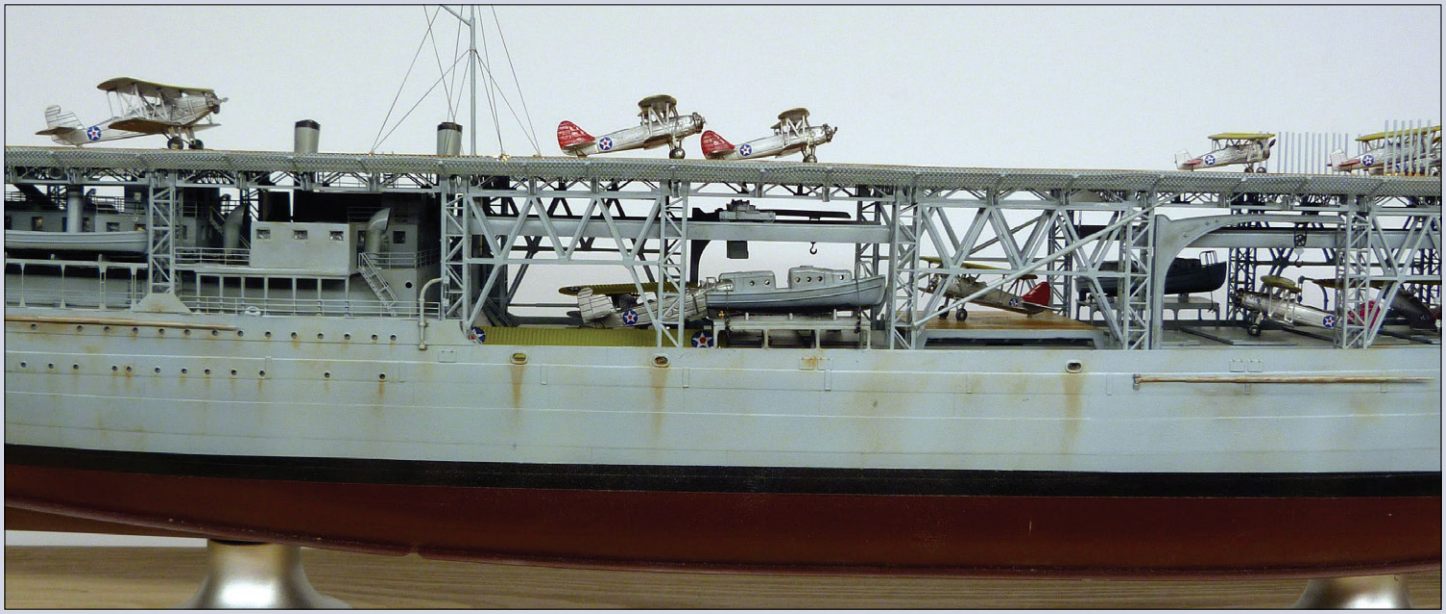


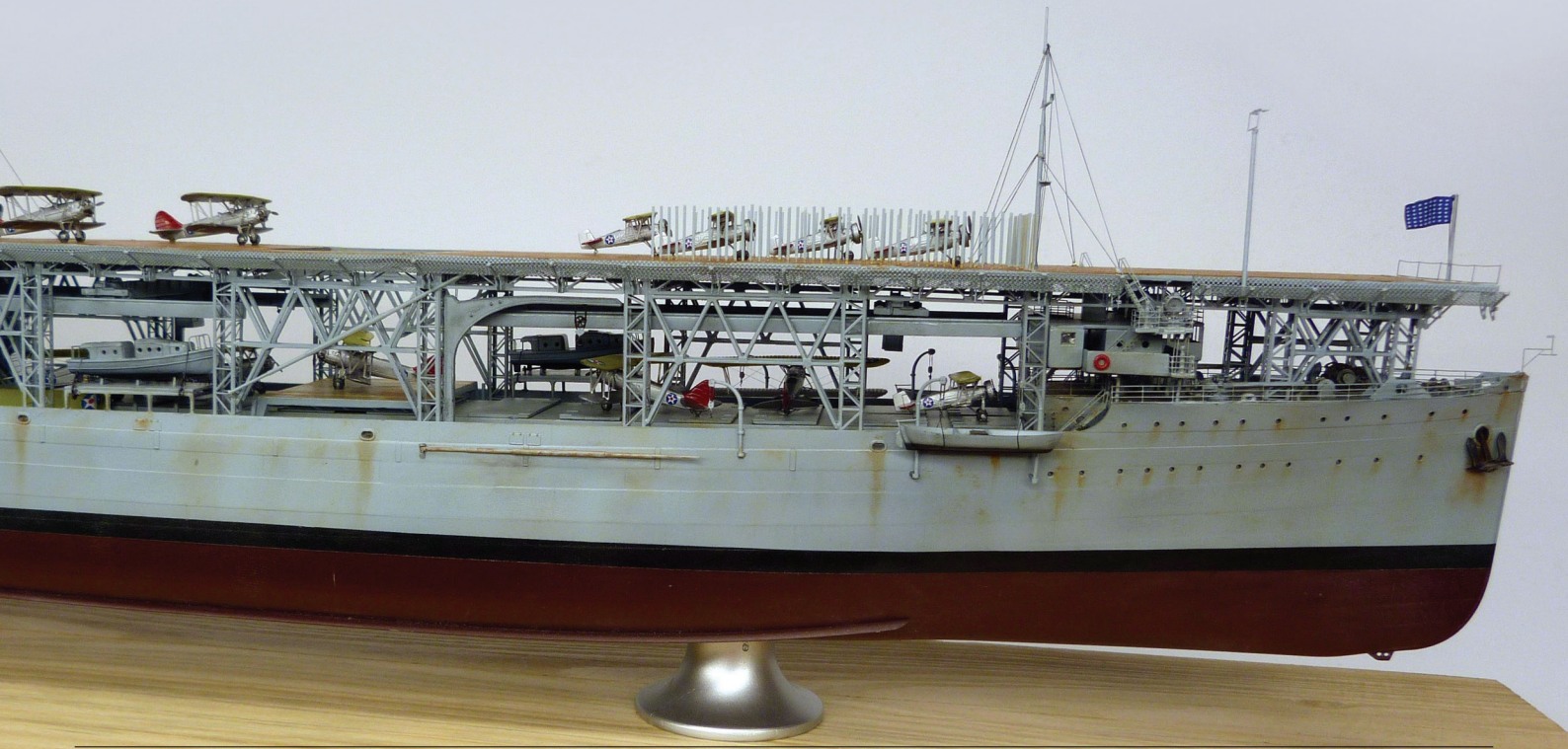


BEST BRASS AROUND









BIG ED (October)

BIG33155	F-35A 1/32 Trumpeter
BIG49380	Hurricane Mk.I 1/48 Hobby Boss
BIG49381	Mi-4A 1/48 Trumpeter
BIG49382	F-4E 1/48 Meng
BIG49383	MiG-17F 1/48 AMMO
BIG5368	USS Missouri BB-63 1/350 Hobby Boss

BRASSIN (October)

634042	AH-64E LööK 1/35 Takom
644228	F-16D Block 30 LööK 1/48 Kinetic
644231	Hurricane Mk.II LööK 1/48 Arma Hobby
635036	WWII German NbKWrf39 smoke launcher PRINT 1/35
648901	FM-2 exhausts PRINT 1/48 Meng
648907	F-4E airbrakes PRINT 1/48 Meng
648908	F-4E exhaust nozzles PRINT 1/48 Meng
648909	F-4E FOD covers PRINT 1/48 Meng
648911	F-4E refuelling boom PRINT 1/48 Meng
648912	F-4E tail hook PRINT 1/48 Meng
648915	F-16 exhaust nozzle GE F110 PRINT 1/48 Kinetic
648916	Hurricane Mk.II exhaust fishtail PRINT 1/48 Arma Hobby
648917	Hurricane Mk.II exhaust rounded PRINT 1/48 Arma Hobby
648918	Hurricane Mk.II wheels 1/48 Arma Hobby
648919	A-10C rotary gun flash suppressor PRINT 1/48 Academy
648920	A-10C airbrakes PRINT 1/48 Academy
648921	A-10C ejection seat PRINT 1/48 Academy
648922	A-10C refuelling bay PRINT 1/48 Academy
648923	A-10C wheels 1/48 Academy
648924	Hurricane Mk.II seat PRINT 1/48 Arma Hobby
648925	Hurricane Mk.IIc gun barrels PRINT 1/48 Arma Hobby
648926	Bf 109G-10 cockpit PRINT 1/48 Eduard
672328	Bf 109F cockpit w/ early seat PRINT 1/72 Eduard

LöökPlus (October)

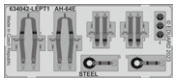
644232	F-4E LööKplus 1/48 Meng
644233	Bf 109K-4 LööKplus 1/48 Eduard

BIGSIN (October)

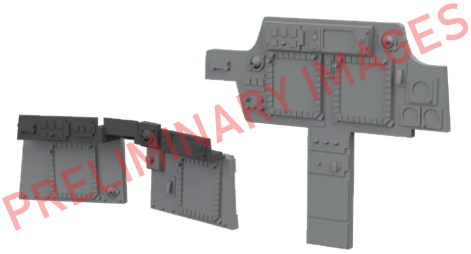
SIN648112	F4F-4 ADVANCED 1/48 Eduard
SIN67221	Bf 109F 1/72 Eduard

634042
AH-64E Löök
1/35 Takom

LööK set - Brassin pre-painted dashboard and STEEL seatbelts for AH-64E in 1/35 scale. Easy to assemble, replaces plastic parts. Recommended kit: Takom



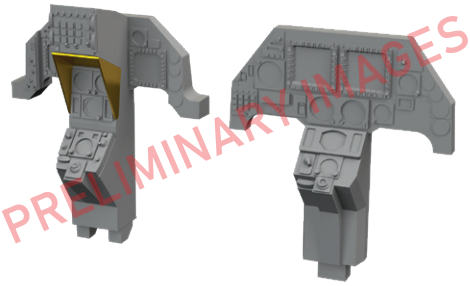
Set contains:
- resin: 3 parts
- 3D print: 1 part
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no



644228
F-16D Block 30 LööK
1/48 Kinetic

LööK set - Brassin pre-painted dashboards and STEEL seatbelts for F-16D in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Kinetic

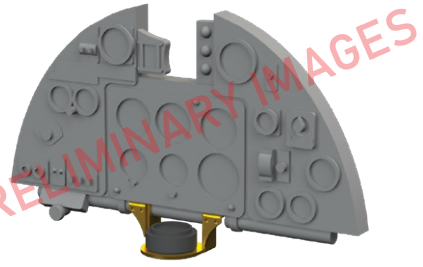
Set contains:
- resin: 5 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no



644231
Hurricane Mk.II LööK
1/48 Arma Hobby

LööK set - Brassin pre-painted dashboard and STEEL seatbelts for Hurricane Mk.II in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Arma Hobby

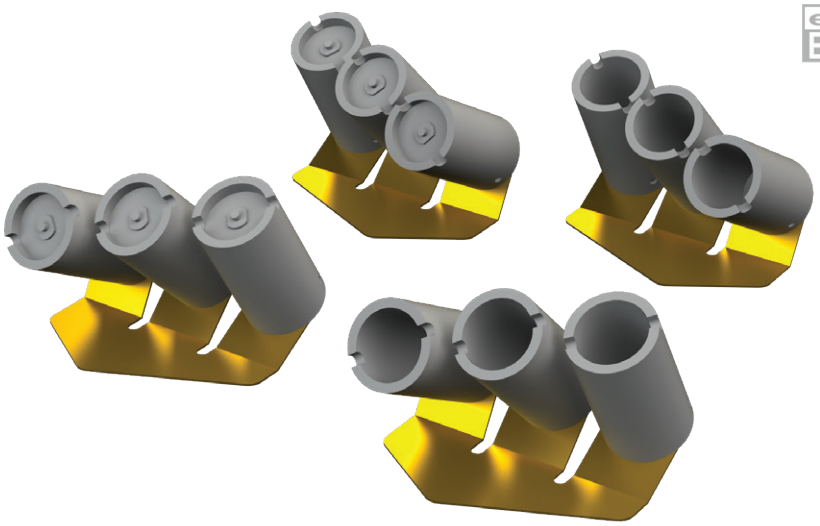
Set contains:
- resin: 2 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no



635036
WWII German NbKWrf39 smoke launcher PRINT
1/35

Brassin set - smoke launchers for German WWII AFV in 1/35 scale. Set consists of 12 launchers of two types. Made by direct 3D printing.

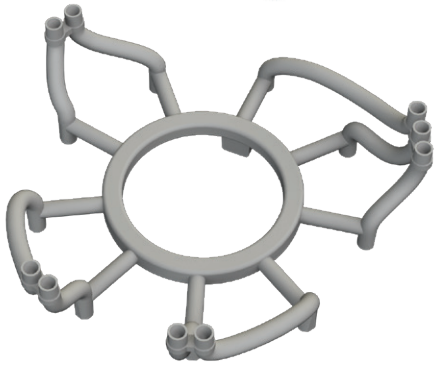
Set contains:
- 3D print: 12 parts
- decals: no
- photo-etched details: yes
- painting mask: no



648901
FM-2 exhausts PRINT
1/48 Eduard

Brassin set - exhaust pipes for FM-2 in 1/48 scale. Made by direct 3D printing.
Recommended kit: Eduard

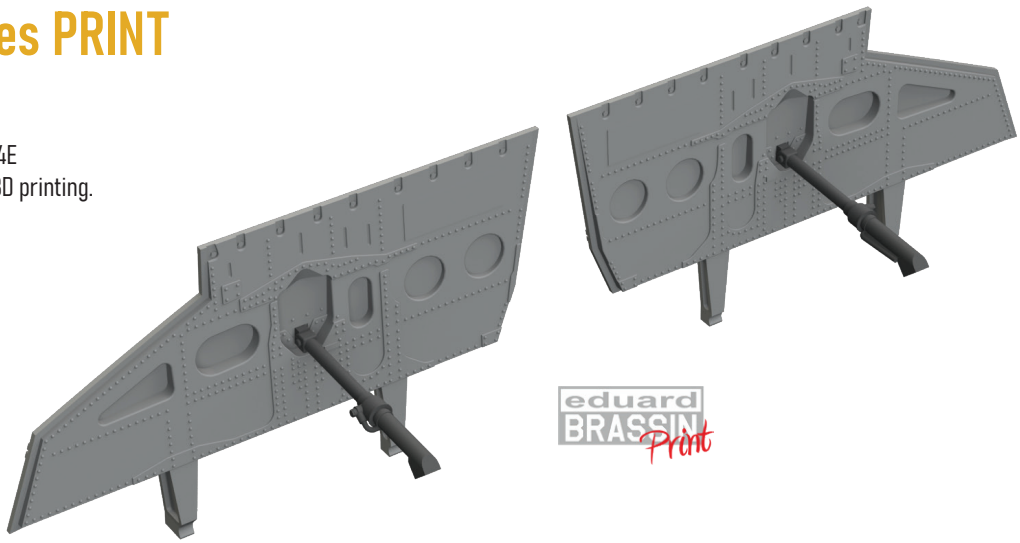
Set contains:
- 3D print: 1 part
- decals: no
- photo-etched details: no
- painting mask: no



648907
F-4E airbrakes PRINT
1/48 Meng

Brassin set - airbrakes for F-4E in 1/48 scale. Made by direct 3D printing.
Recommended kit: Meng

Set contains:
- 3D print: 4 parts
- decals: yes
- photo-etched details: no
- painting mask: no



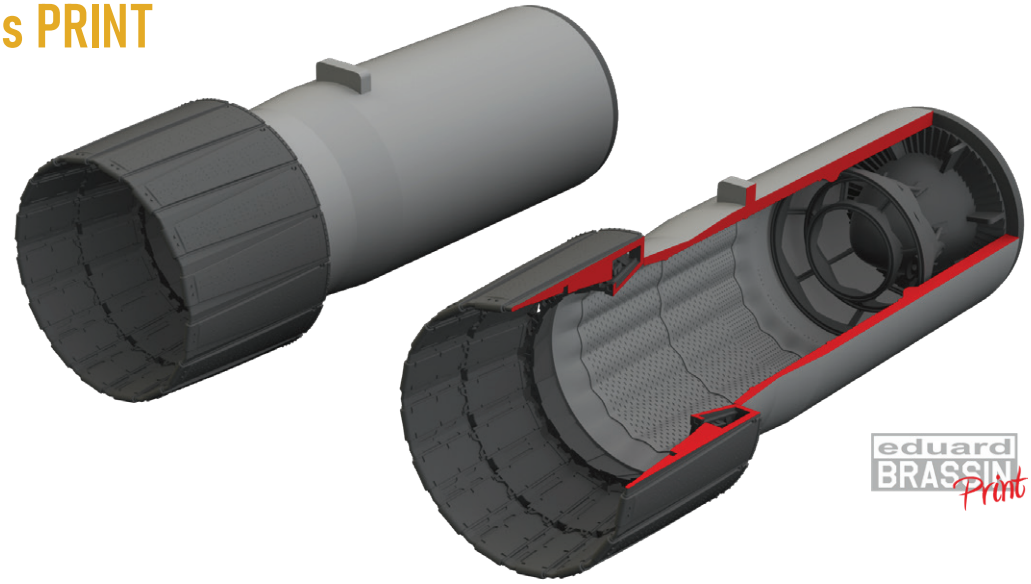
648908

F-4E exhaust nozzles PRINT

1/48 Meng

Brassin set - exhaust nozzles for F-4E
in 1/48 scale. Made by direct 3D printing.
Recommended kit: Meng

Set contains:
- 3D print: 6 parts
- decals: no
- photo-etched details: no
- painting mask: no



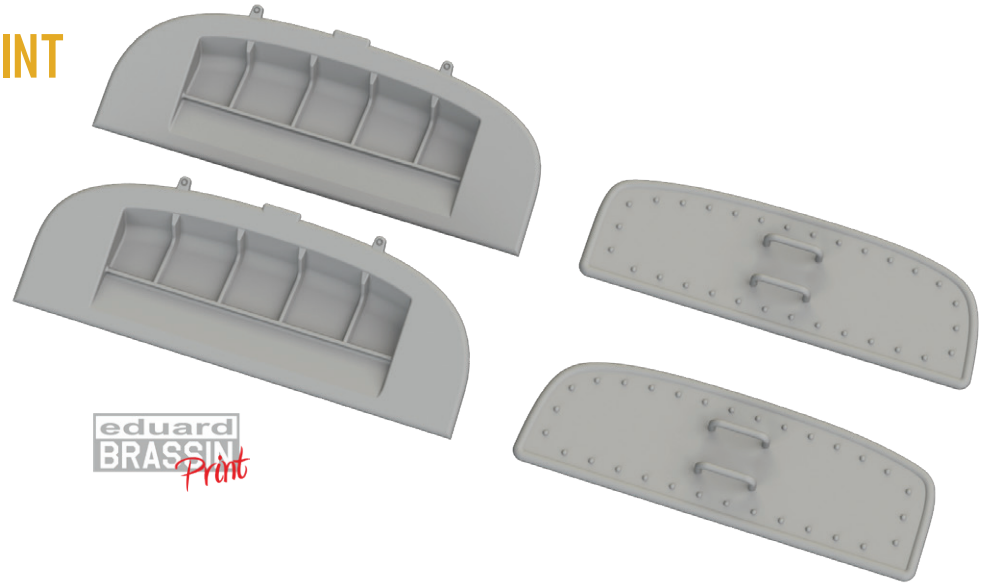
648909

F-4E FOD covers PRINT

1/48 Meng

Brassin set - FOD covers for F-4E
in 1/48 scale. Made by direct 3D printing.
Recommended kit: Meng

Set contains:
- 3D print: 4 parts
- decals: yes
- photo-etched details: no
- painting mask: no



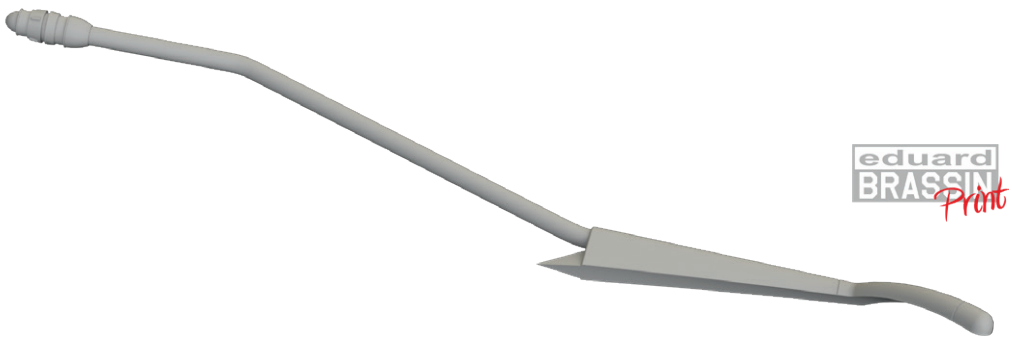
648911

F-4E refuelling boom PRINT

1/48 Meng

Brassin set - refuelling boom for F-4E
in 1/48 scale. Made by direct 3D printing.
Recommended kit: Meng

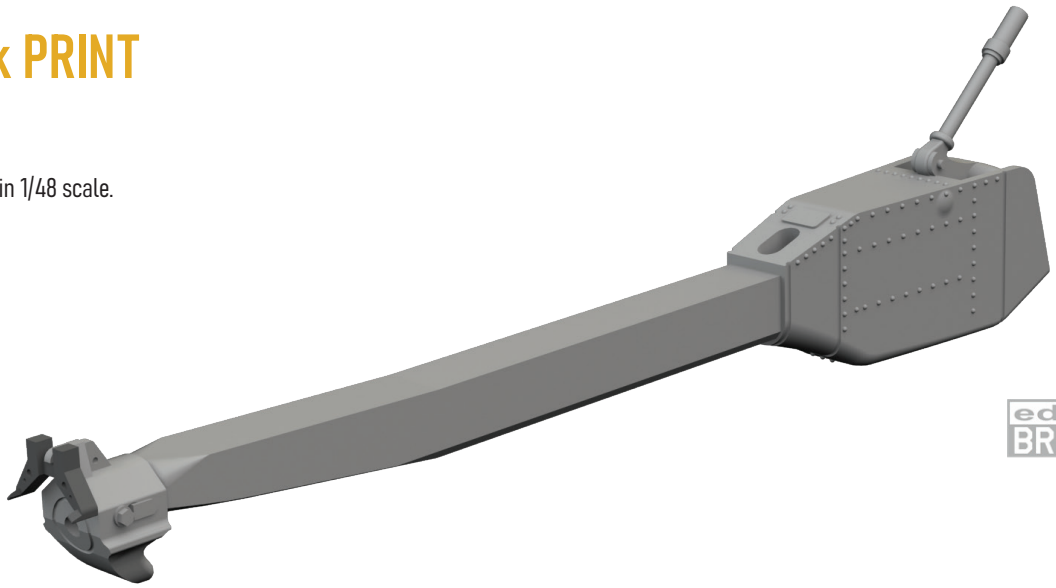
Set contains:
- 3D print: 1 part
- decals: no
- photo-etched details: no
- painting mask: no



648912
F-4E tail hook PRINT
1/48 Meng

Brassin set -tail hook for F-4E in 1/48 scale.
Made by direct 3D printing.
Recommended kit: Meng

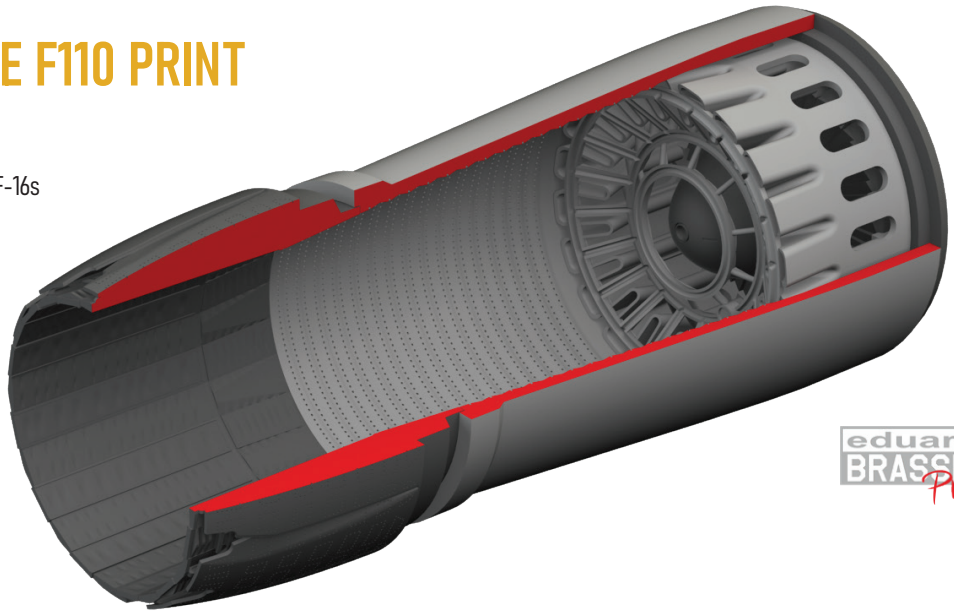
Set contains:
- 3D print: 2 parts
- decals: no
- photo-etched details: no
- painting mask: no



648915
F-16 exhaust nozzle GE F110 PRINT
1/48 Kinetic

Brassin set - exhaust nozzle for GE F110 powered F-16s in 1/48 scale. Made by direct 3D print.

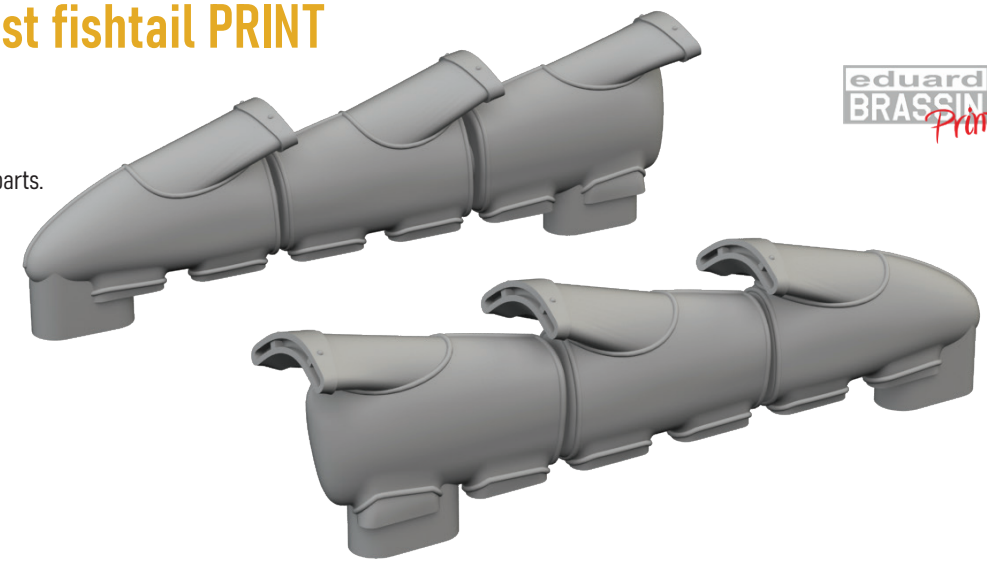
Set contains:
- 3D print: 4 parts
- decals: no
- photo-etched details: no
- painting mask: no



648916
Hurricane Mk.II exhaust fishtail PRINT
1/48 Arma Hobby

Brassin set - exhaust stacks for Hurricane Mk.II in 1/48 scale. Easy to assemble, replaces plastic parts.
Recommended kit: Arma Hobby

Set contains:
- resin: 2 parts
- decals: no
- photo-etched details: no
- painting mask: no



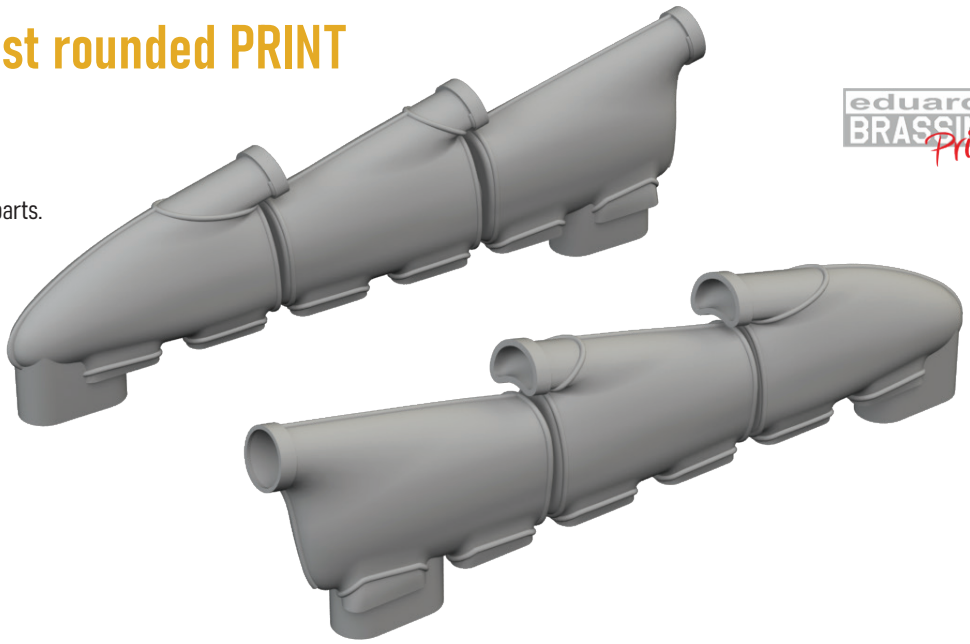
648917

Hurricane Mk.II exhaust rounded PRINT

1/48 Arma Hobby

Brassin set - exhaust stacks for Hurricane Mk.II in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Arma Hobby

Set contains:
- resin: 2 parts
- decals: no
- photo-etched details: no
- painting mask: no



648918

Hurricane Mk.II wheels

1/48 Arma Hobby

Brassin set - the undercarriage wheels for Hurricane Mk.II in 1/48 scale. The set consists of the main wheels and a tail wheel. Easy to assemble, replaces plastic parts. Recommended kit: Arma Hobby

Set contains:
- resin: 5 parts
- decals: no
- photo-etched details: no
- painting mask: yes

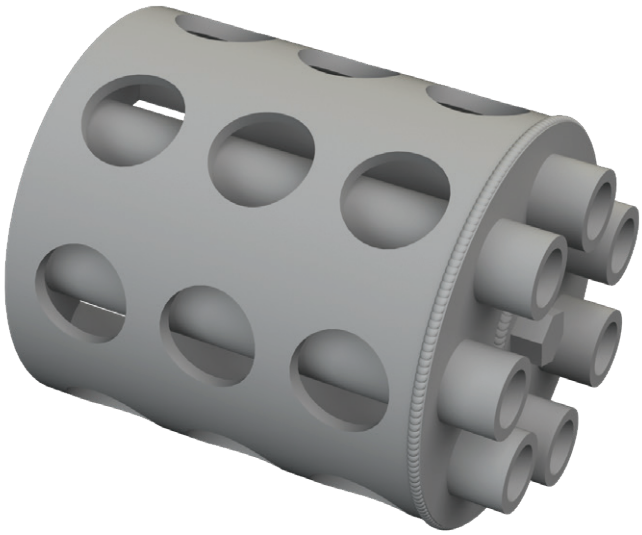
648919

A-10C gun nozzles PRINT

1/48 Academy

Brassin set - gun barrels for A-10C in 1/48 scale. Made by direct 3D printing. Easy to assemble, replaces plastic parts. Recommended kit: Academy

Set contains:
- 3D print: 1 part
- decals: no
- photo-etched details: no
- painting mask: no



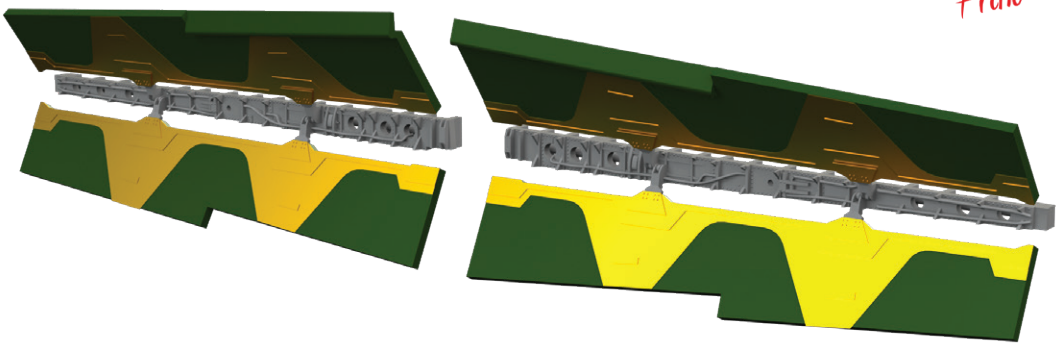
648920

A-10C airbrakes PRINT

1/48 Academy

Brassin set - airbrakes for A-10C in 1/48 scale.
Made by direct 3D printing. Easy to assemble,
replaces plastic parts.
Recommended kit: Academy

Set contains:
- 3D print: 2 parts
- decals: no
- photo-etched details: yes
- painting mask: no



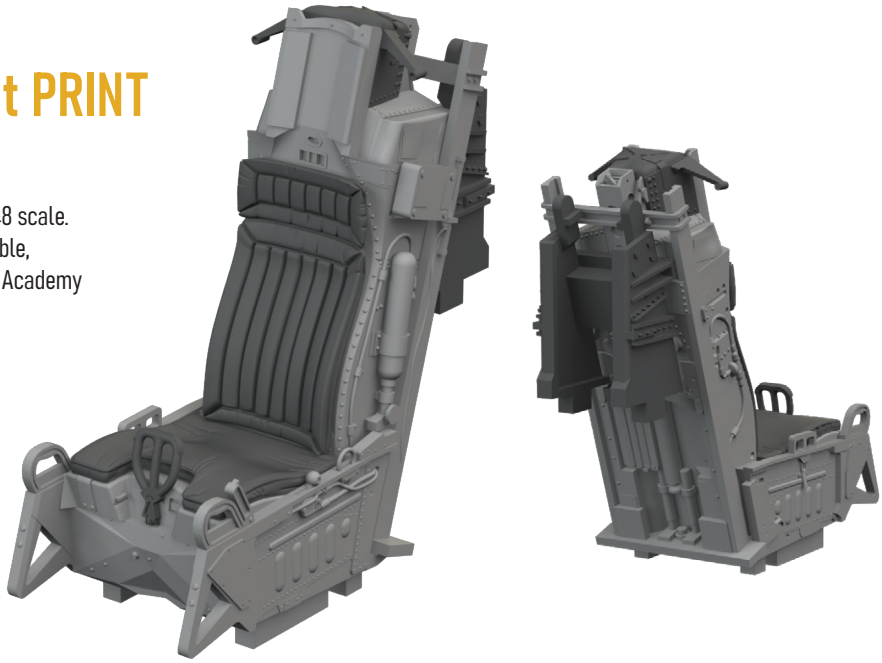
648921

A-10C ejection seat PRINT

1/48 Academy

Brassin set - ejection seat for A-10C in 1/48 scale.
Made by direct 3D printing. Easy to assemble,
replaces plastic parts. Recommended kit: Academy

Set contains:
- 3D print: 6 parts
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no



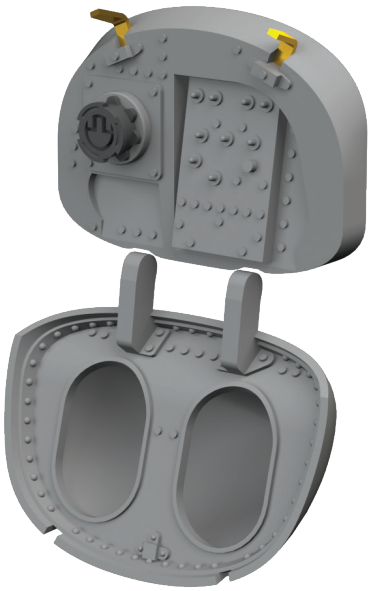
648922

A-10C refuelling bay PRINT

1/48 Academy

Brassin set - refueling bay for A-10C in 1/48 scale.
Made by direct 3D printing. Recommended kit: Academy

Set contains:
- 3D print: 2 parts
- resin: 1 part (pre-painted)
- decals: no
- photo-etched details: yes
- painting mask: no



648923
A-10C wheels
1/48 Academy

Brassin set - the undercarriage wheels for A-10C in 1/48 scale. The set consists of the main wheels and nose wheel. Easy to assemble, replaces plastic parts. Recommended kit: Academy

Set contains:
- resin: 3 parts
- decals: no
- photo-etched details: no
- painting mask: yes

648924
Hurricane Mk.II seat PRINT
1/48 Arma Hobby

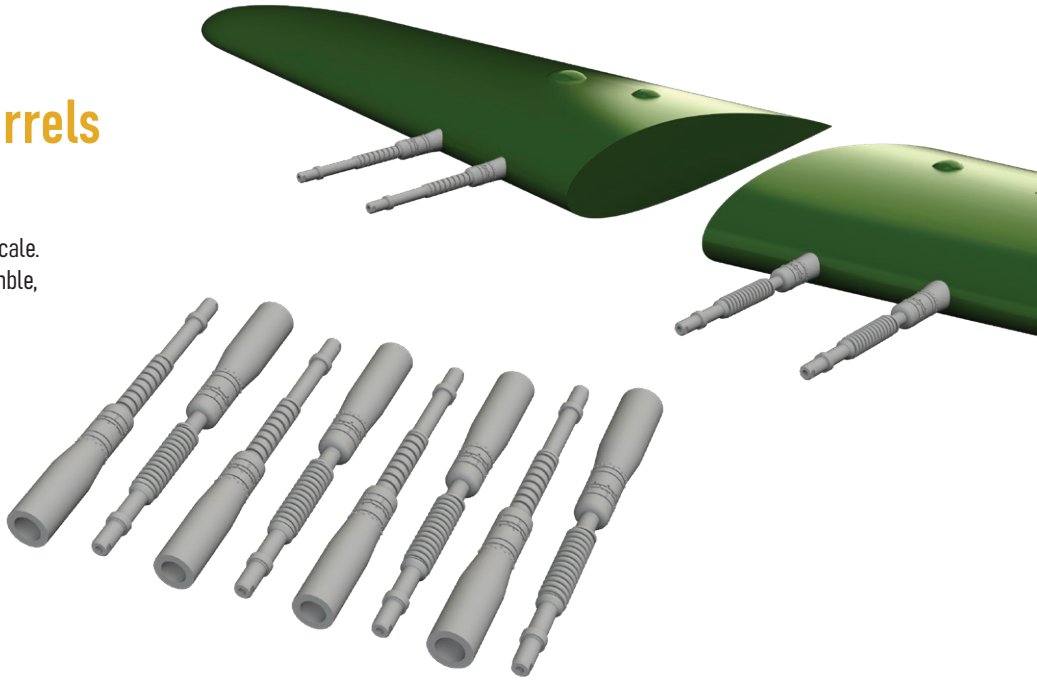
Brassin set - seat for Hurricane Mk.II in 1/48 scale. Easy to assemble, replaces plastic parts. Made by direct 3D printing. Recommended kit: Arma Hobby

Set contains:
- 3D print: 1 part
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

648925
Hurricane Mk.IIc gun barrels
1/48 Arma Hobby

Brassin set -gun barrels for Hurricane Mk.IIc in 1/48 scale. Set consists of two types of the barrels. Easy to assemble, replaces plastic parts. Made by direct 3D printing. Recommended kit: Arma Hobby

Set contains:
- 3D print: 8 parts
- decals: no
- photo-etched details: no
- painting mask: no



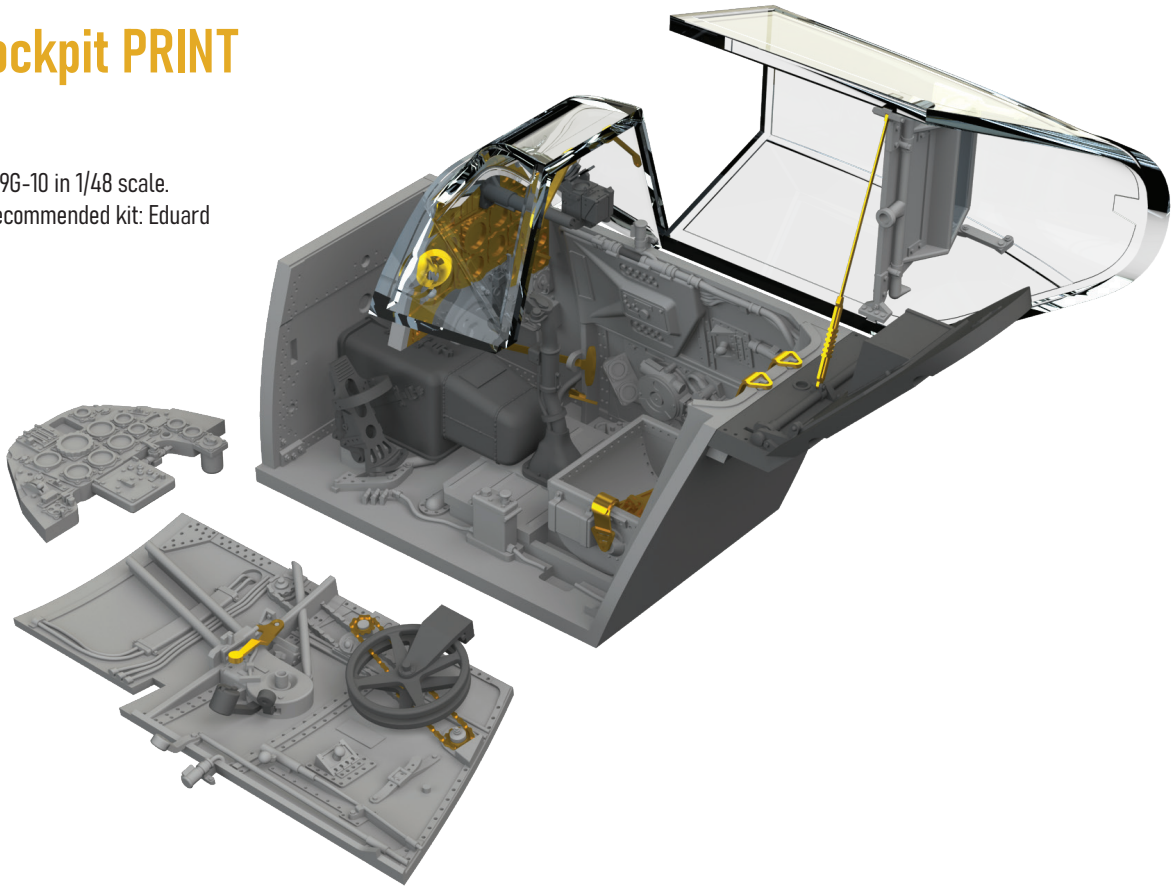
648926

Bf 109G-10 cockpit PRINT

1/48 Eduard

Brassin set - cockpit for Bf 109G-10 in 1/48 scale.
Made by direct 3D printing. Recommended kit: Eduard

Set contains:
- 3D print: 15 parts
- resin: 1 part
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no



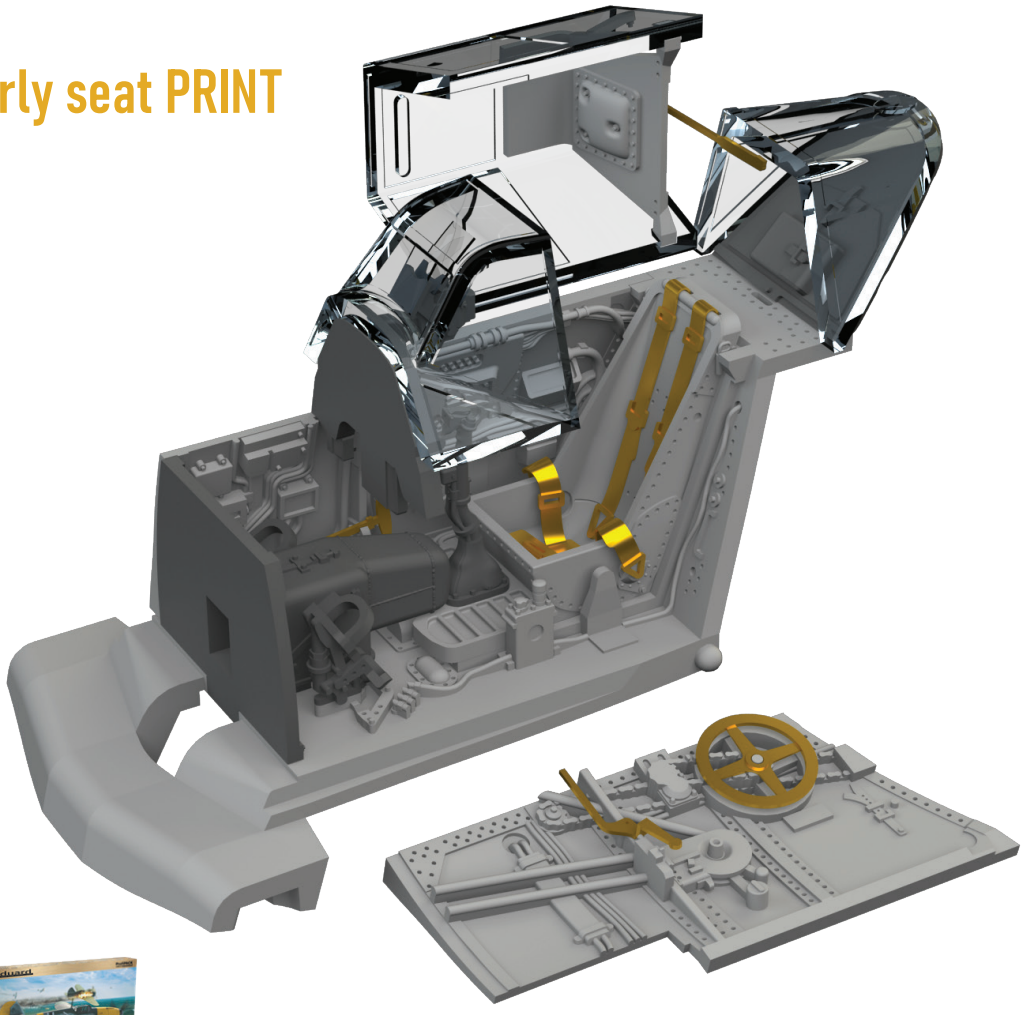
672328

Bf 109F cockpit w/ early seat PRINT

1/72 Eduard

Brassin set - cockpit for Bf 109F
in 1/72 scale. Made by direct 3D printing.
Recommended kit: Eduard

Set contains:
- 3D print: 9 parts
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no



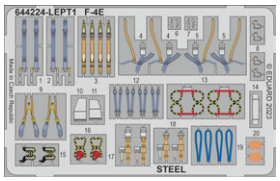
644232

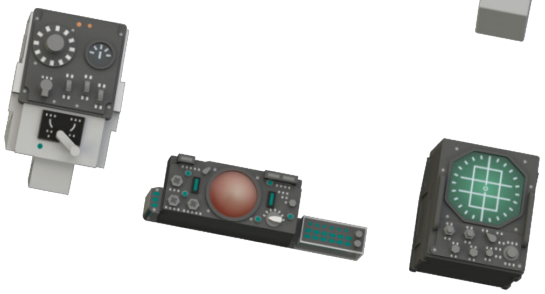
F-4E LöökPlus

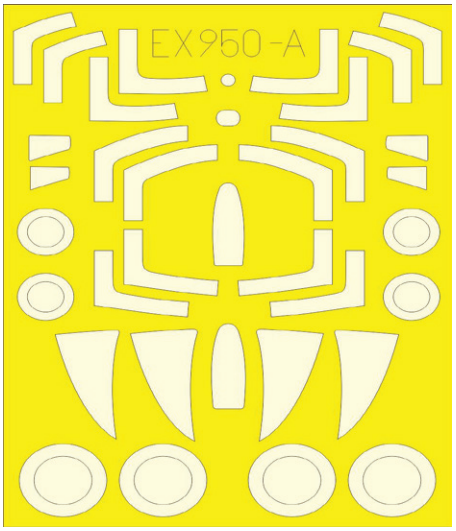
1/48 Meng

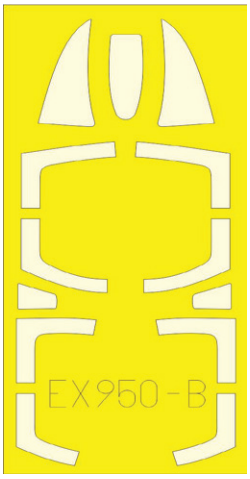
Collection of 3 sets for F-4E in 1/48 scale.
Recommended kit: Meng

- LöökK set (pre-painted Brassin dashboards & Steelbelts)
- TFace painting mask
- undercarriage wheels









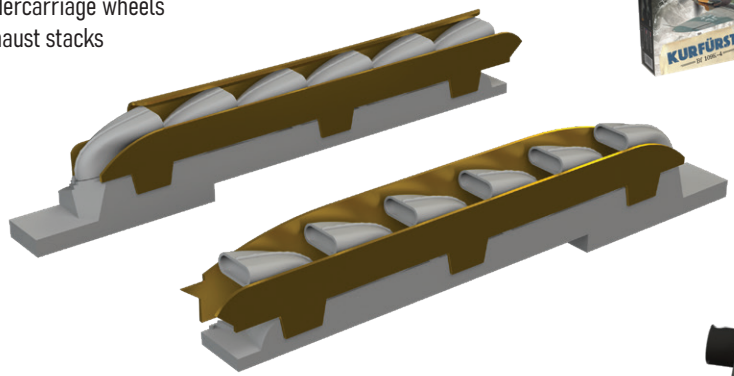
644233

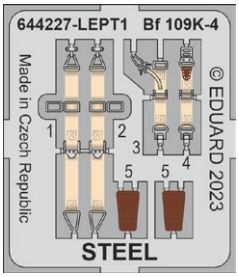
Bf 109K-4 LööKplus

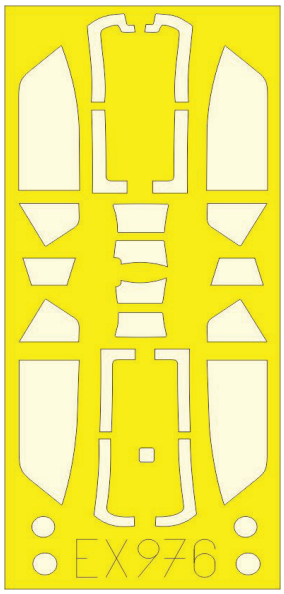
1/48 Eduard

Collection of 4 sets for Bf 109K-4 in 1/48 scale.
Recommended kit: Eduard

- LööK set (pre-painted Brassin dashboards & Steelbelts)
- TFace painting mask
- undercarriage wheels
- exhaust stacks







SIN648112

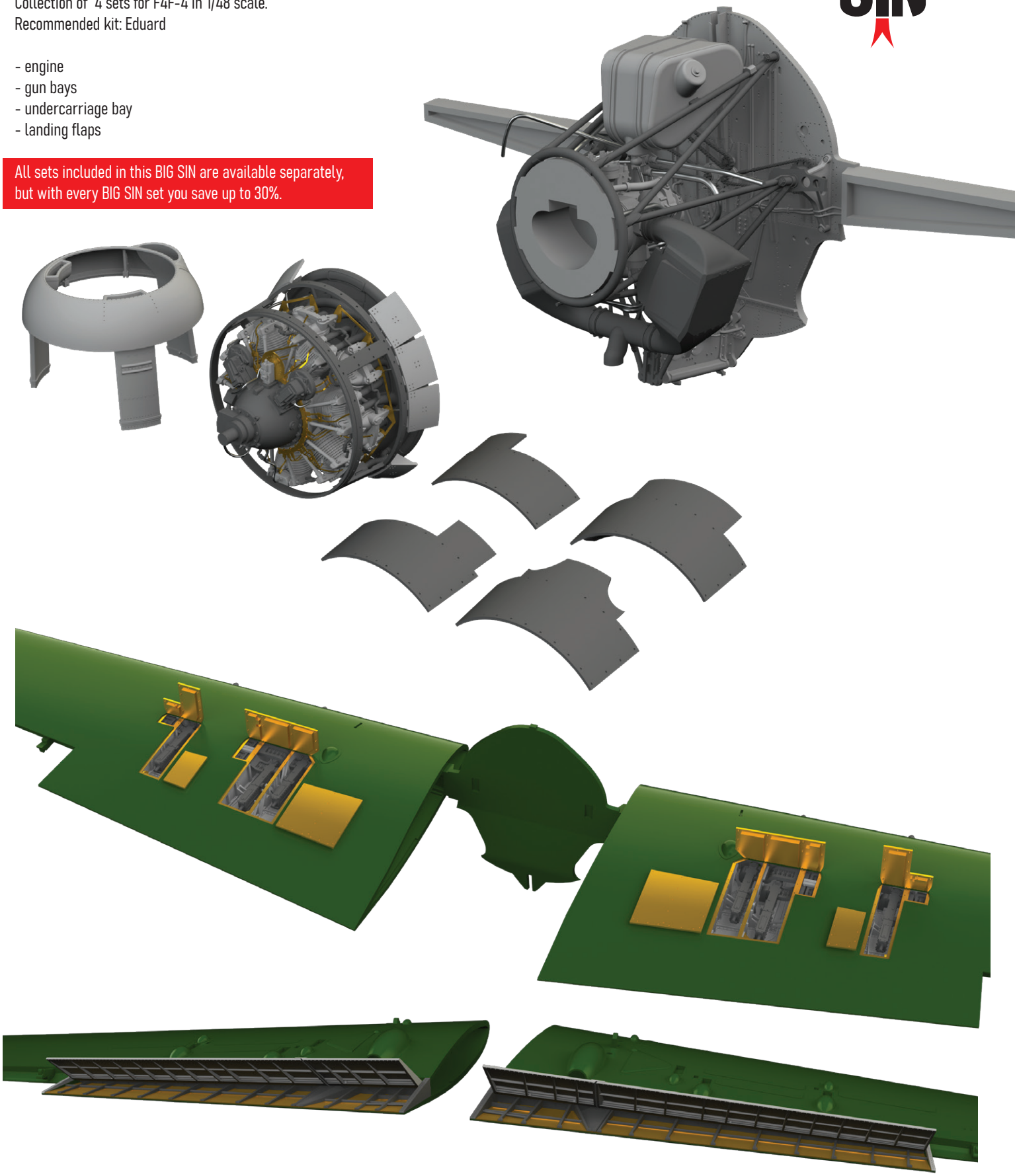
F4F-4 ADVANCED

1/48 Eduard

Collection of 4 sets for F4F-4 in 1/48 scale.
Recommended kit: Eduard

- engine
- gun bays
- undercarriage bay
- landing flaps

All sets included in this BIG SIN are available separately, but with every BIG SIN set you save up to 30%.



SIN67221

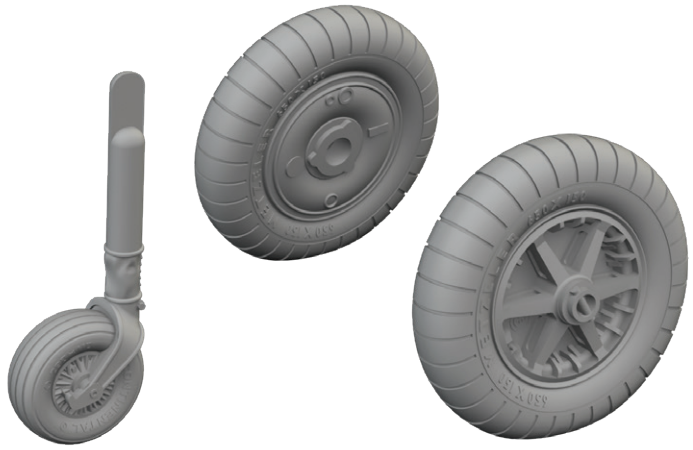
Bf 109F

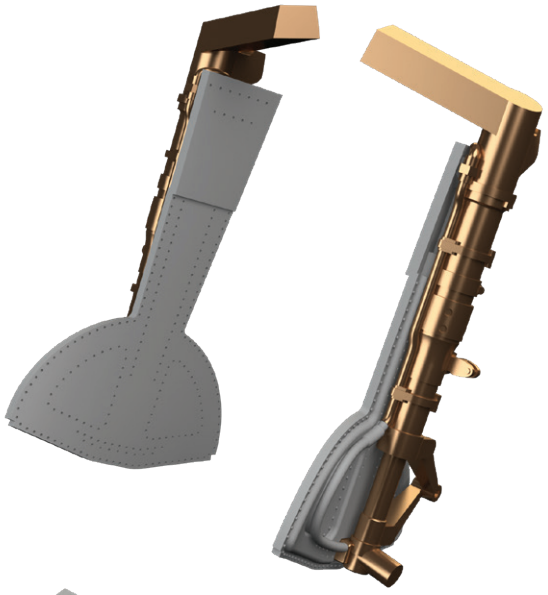
1/72 Eduard

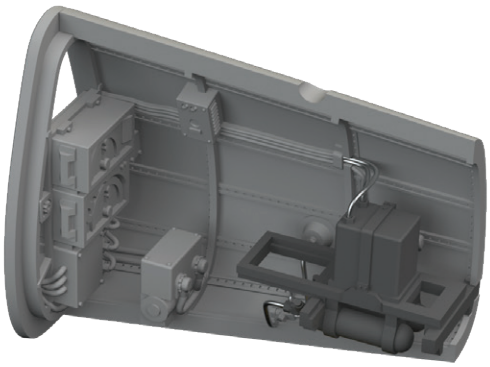
Collection of 6 sets for Bf 109F in 1/72 scale.
Recommended kit: Eduard

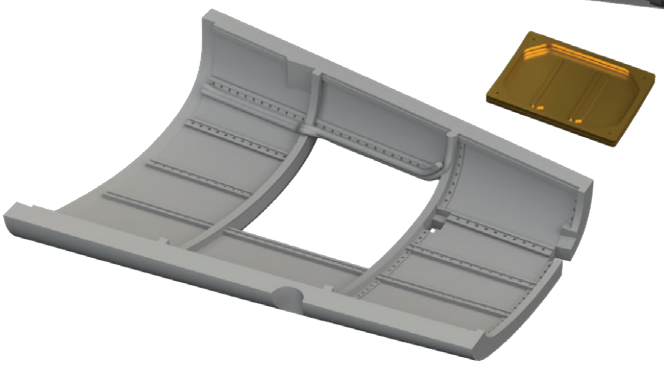
- cockpit
- radio compartment
- wheels
- gun barrels
- undercarriage legs BRONZE
- exhaust stack

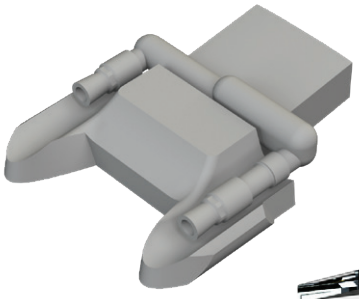
All sets included in this BIG SIN are available separately, but with every BIG SIN set you save up to 30 %.

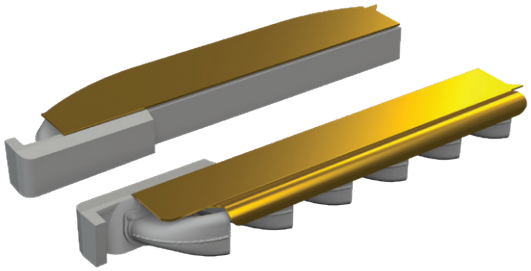


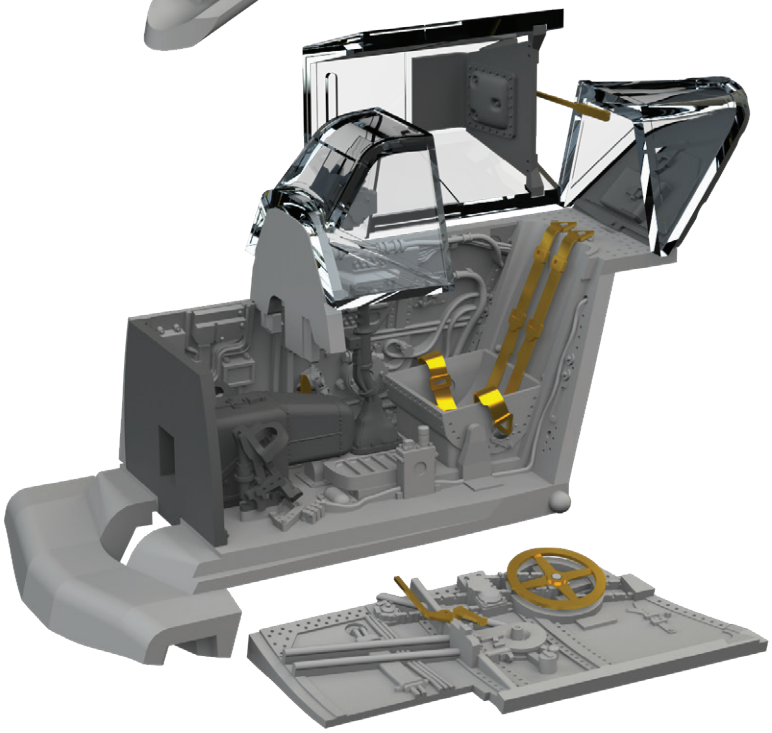












PE-SETS

53298	USS Nimitz CVN-68 part 4	1/350	Trumpeter
36508	SU-76M	1/35	Zvezda
36509	SU-76M fenders	1/35	Zvezda
481122	Hunter FGA.9 landing flaps	1/48	Airfix
481123	Hunter FR.10 landing flaps	1/48	Airfix
481124	Hunter GA.11 landing flaps	1/48	Airfix
491382	Hurricane Mk.IIc	1/48	Arma Hobby
491384	Vampire FB.5	1/48	Airfix
491385	Vampire FB.9	1/48	Airfix
491388	Hunter FGA.9	1/48	Airfix
491389	Hunter FR.10	1/48	Airfix
491390	Hunter GA.11	1/48	Airfix
72732	B-29 exterior	1/72	Hobby 2000/Academy
72733	B-29 bomb bay	1/72	Hobby 2000/Academy
73808	F-35A	1/72	Tamiya
73811	AC-130J interior	1/72	Zvezda

ZOOMS

FE1382	Hurricane Mk.IIc	1/48	Arma Hobby
FE1383	Hurricane Mk.IIc seatbelts STEEL	1/48	Arma Hobby
FE1384	Vampire FB.5	1/48	Airfix
FE1385	Vampire FB.9	1/48	Airfix
FE1386	Vampire FB.5/9 seatbelts STEEL	1/48	Airfix
FE1387	F4F-3 Weekend	1/48	Eduard
FE1388	Hunter FGA.9	1/48	Airfix
FE1389	Hunter FR.10	1/48	Airfix
FE1390	Hunter GA.11	1/48	Airfix
FE1391	Hunter FGA.9/FR.10/GA.11 seatbelts STEEL	1/48	Airfix
SS809	B-29 seatbelts STEEL	1/72	Hobby 2000/Academy
SS810	S-199 bubble canopy Weekend	1/72	Eduard
SS811	AC-130J	1/72	Zvezda

MASKS

EX980	Hurricane Mk.IIc TFace	1/48	Arma Hobby
EX981	Vampire FB.5/9	1/48	Airfix
EX982	Vampire FB.5/9 TFace	1/48	Airfix
EX983	Z-526 Trenér Master TFace	1/48	Eduard
EX984	F4F-3 Weekend	1/48	Eduard
EX985	Bf 109K national insignia	1/48	Eduard
EX986	Hunter FGA.9/FR.10/GA.11	1/48	Airfix
EX987	Hunter FGA.9/FR.10/GA.11 TFace	1/48	Airfix
CX651	F-35A	1/72	Tamiya
CX652	S-199 bubble canopy Weekend	1/72	Eduard
CX653	AC-130J	1/72	Zvezda

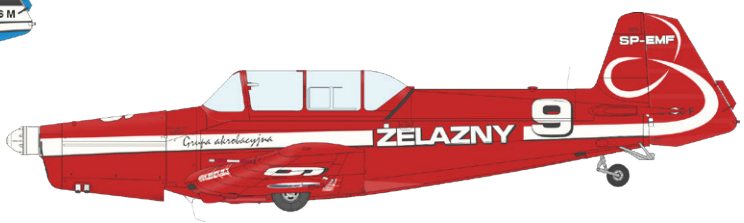
SPACE

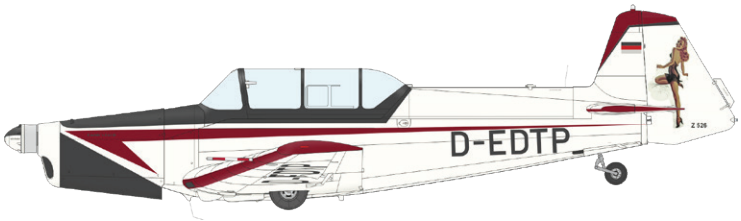
3DL48136	Hurricane Mk.IIc SPACE	1/48	Arma Hobby
3DL48137	Vampire FB.5 SPACE	1/48	Airfix
3DL48138	Vampire FB.9 SPACE	1/48	Airfix
3DL48139	Z-526 Trenér Master SPACE	1/48	Eduard
3DL72021	Fw 190A-5 SPACE	1/72	Eduard
3DL72024	F-35A SPACE	1/72	Tamiya

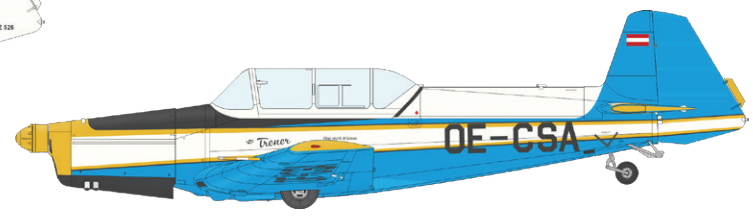
SPACE

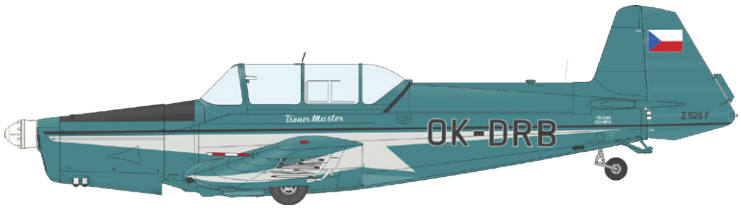
ER32002	Double riveting rows	1/32	
ER48007	Double riveting rows	1/48	
ER72002	Double riveting rows	1/72	

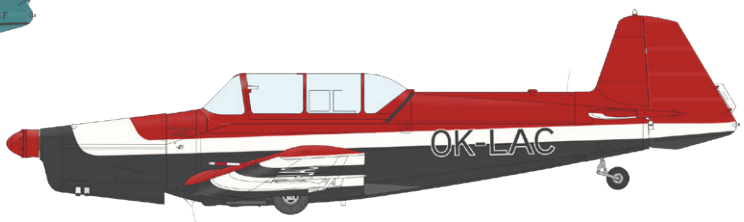
Z-526 Trenér Master #82185 1/48



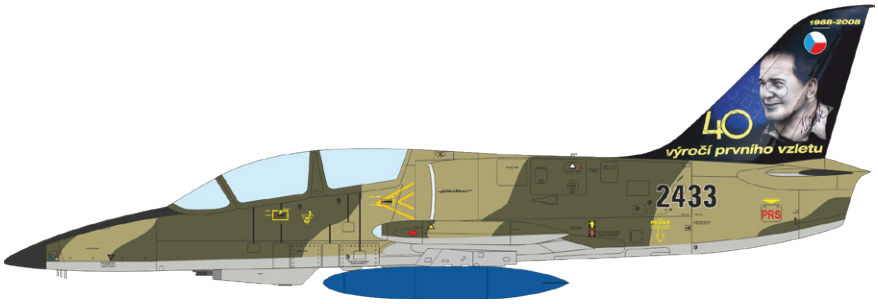




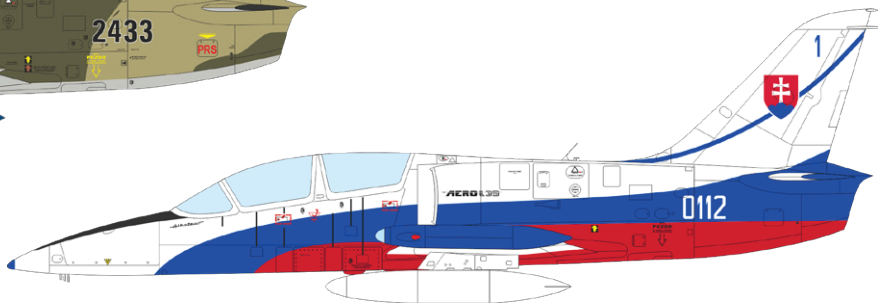




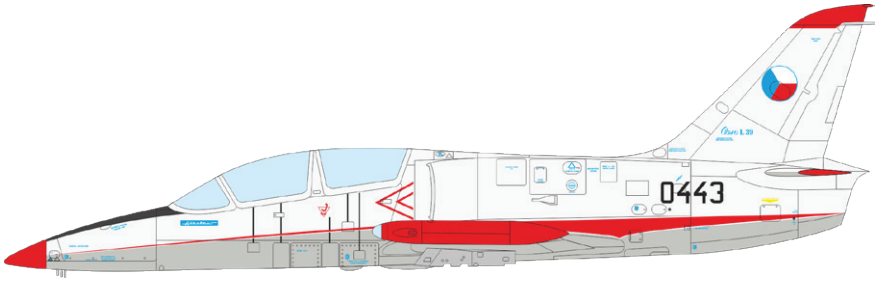
ALBATROS DUAL COMBO #2109 1/72



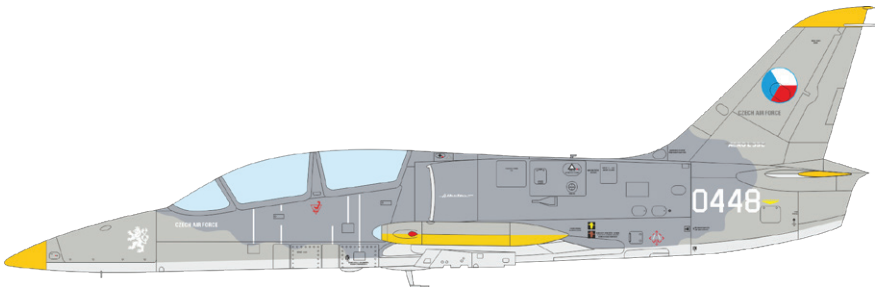
L-39ZA, s/n 232433, 222 Training Squadron, Náměšť nad Oslavou AFB, Czech Air Force, Czech Republic, 2008-2010



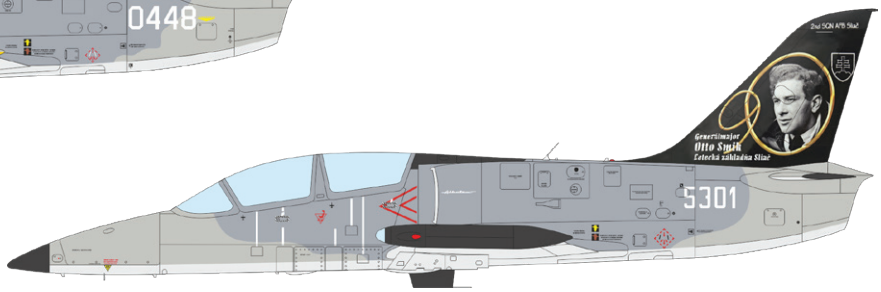
L-39C, pplk. Ing. Ivan Chvojka, Sliač AFB, Slovak Air Force, Slovakia, 1991-2004



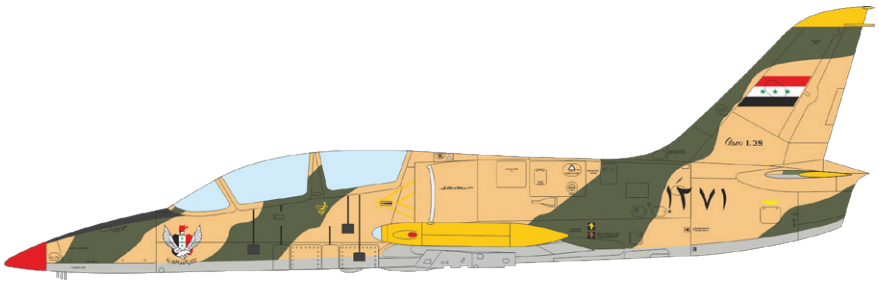
L-39C, s/n 530443, High Military Aviation School, Košice AB, Czechoslovak Air Force, Czechoslovakia, 1974



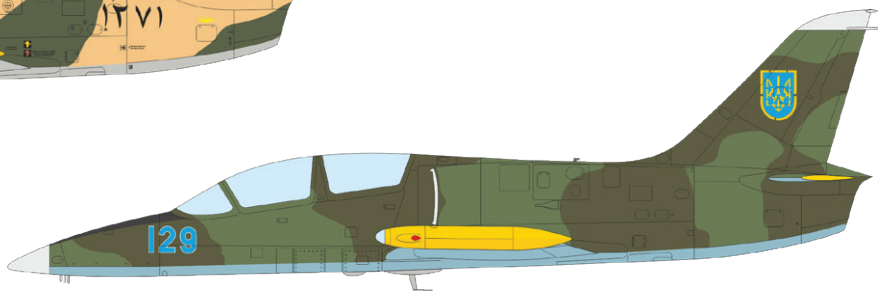
L-39C, No. 0448, 1st Tactical Squadron, 4th Special Forces, Czech Air Force, Čáslav, Czech Republic, 2002



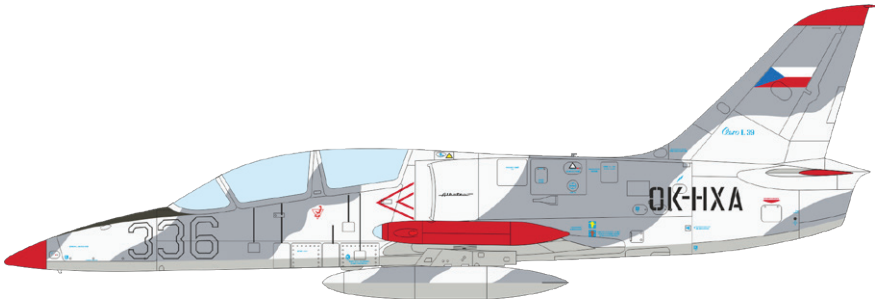
L-39CM, s/n 915301, 2 Fighter Squadron, 31 Fighter Wing, Vzdušné sily Ozbrojených síl Slovenskej republiky, letiště Sliač, Slovakia, 2012



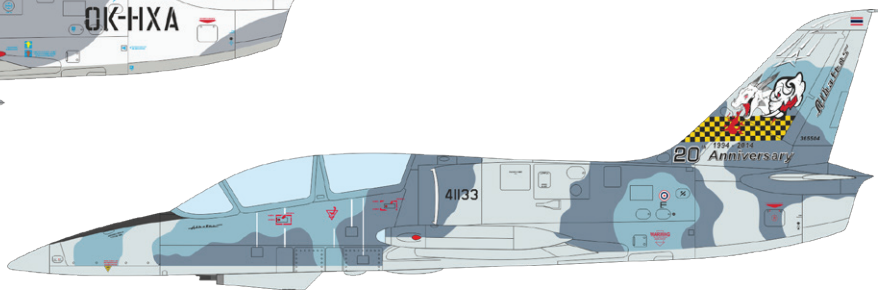
L-39C, Iraq Air Force, Iraq, 1986



L-39C, s/n 533229, No. 129, Ukrainian Air Force, Vasilkov AB, Ukraine, 2008



L-39X-11, Aerosalon Paris, France, 1977



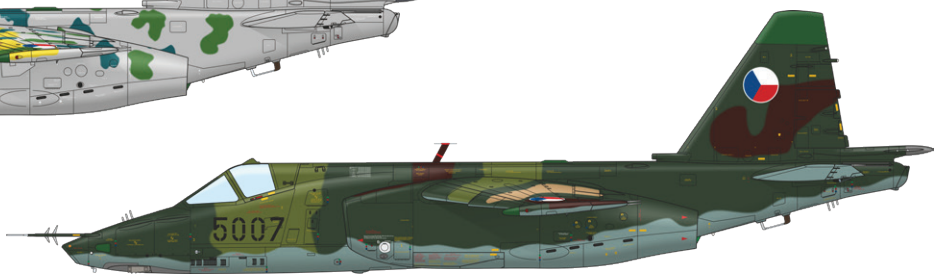
L-39ZA/ART, s/n 365504, Chiang Mai AB, Royal Thai Air Force, Thailand, 2014

L-39ZO, s/n 831135, Lt. László Goron, 59th Szentgyörgyi Dezsö Airbase, Kecskemet, Hungary, August 2007

HRÁBĚ #11176

1/48

9013, 322 Tactical Squadron,
32 Tactical Air Force Base,
Náměšť nad Oslavou, Czech Republic,
summer 1996



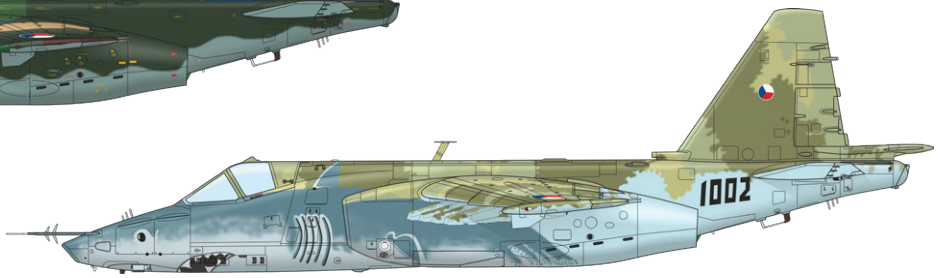
5007, 30 Fighter Bomber Regiment,
Hradec Králové, Czechoslovakia, April 1984

6019, 30 Attack Aviation Regiment,
Pardubice, Czechoslovakia, August 1988

1002, 30 Attack Aviation Regiment,
Pardubice, Czech Republic, May 1993

1002, 30 Attack Aviation Regiment,
Pardubice, Czech Republic,
June 1994

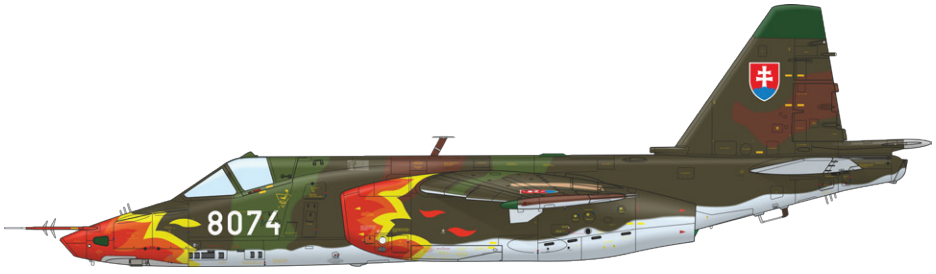
1002, 30 Attack Aviation Regiment,
Pardubice, Czech Republic, August 1994



1002, 322 Tactical Squadron, 32 Tactical Air
Base Náměšť and Oslavou, Czech Republic,
May 1996

8076, 322 Tactical Squadron,
32 Tactical Air Base Náměšť nad Oslavou,
Czech Republic, May 1996

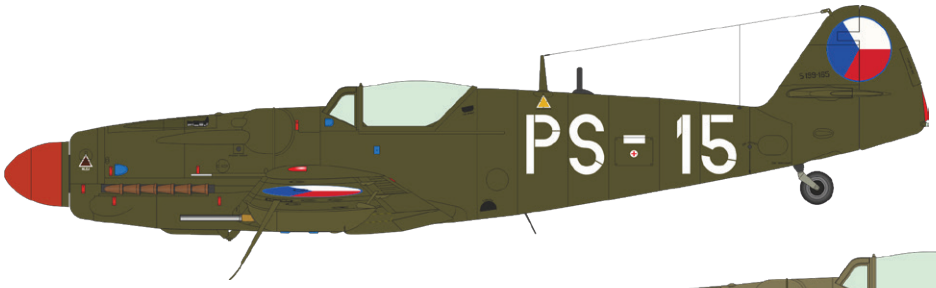
8080, 322 Tactical Squadron,
32 Tactical Air Base Náměšť nad Oslavou,
Czech Republic, 1997



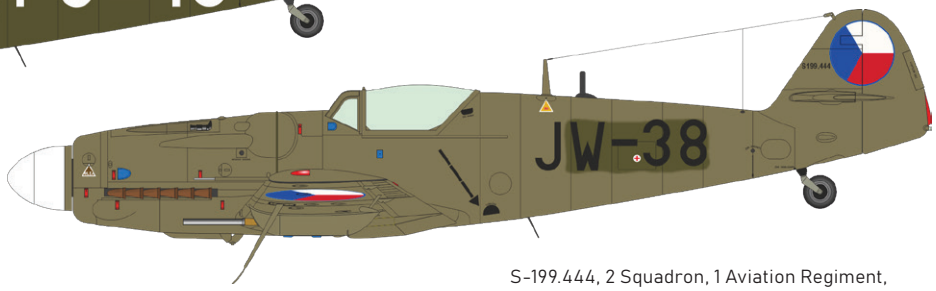
8074, 2 Squadron, 33 Fighter Bomber Wing,
Air Base Kuchyňa, Slovakia, April 1997

1027, 3 Fighter Bomber Regiment, Trenčín airfield, Slovakia, August 1994

S-199 bubble canopy #7471 1/72



S-199.165, 1 Squadron, 18 Aviation Regiment, Plzeň-Skvrňany, Czechoslovakia, July 1952

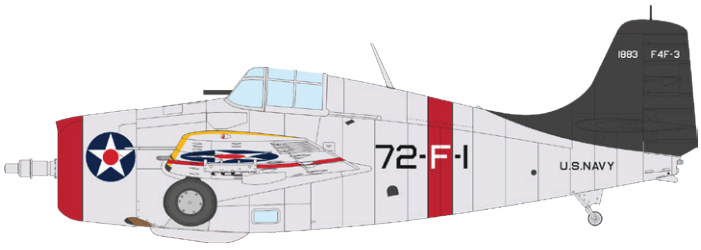


S-199.444, 2 Squadron, 1 Aviation Regiment, 3 Air Division, Praha-Kbely, Czechoslovakia, April 1951

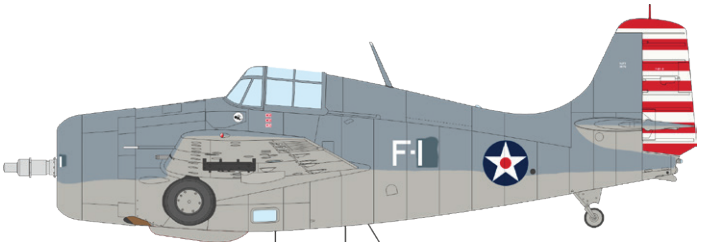
S-199.156, 3 Squadron, Air Regiment 8, 3 Air Division, Brno-Černovice, Czechoslovakia, June 1949

Police Air Patrol, Brno/Olomouc, Czechoslovakia, 1949

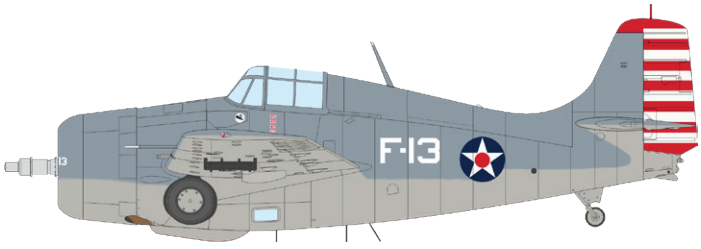
F4F-3 Wildcat #84193 1/48



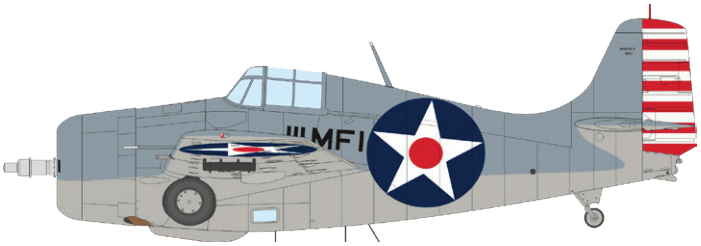
BuNo. 1883, VF-72, USS Wasp (CV-7), December 1940



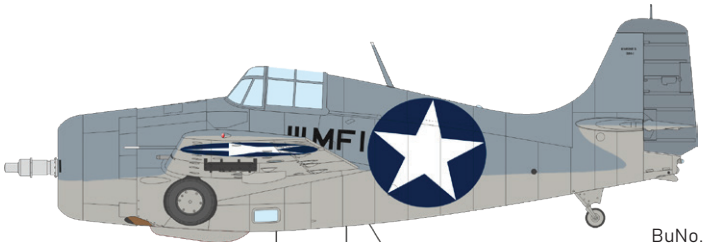
BuNo. 3976, Lt. Cdr. John S. Thach, CO of VF-3, USS Lexington (CV-2), April 1942



BuNo. 3986, Lt. Cdr. Edward H. O'Hare, VF-3, USS Lexington (CV-2), April 1942



BuNo. 3991, VMF-111 Samoa, 1942



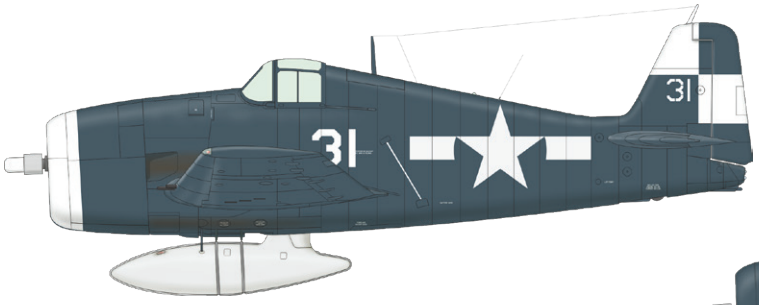
BuNo. 3991, VMF-111 Samoa, 1942

F6F-5

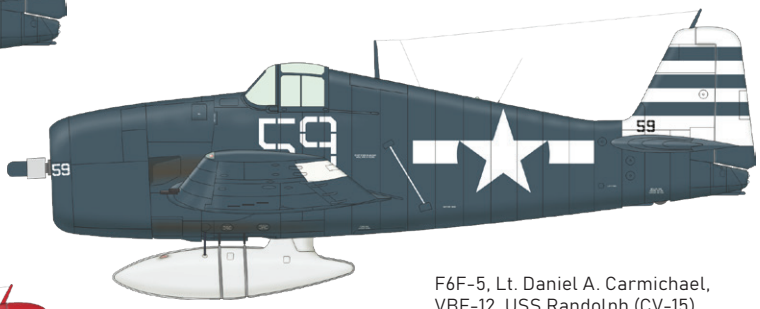
1/48

Re-release #84181

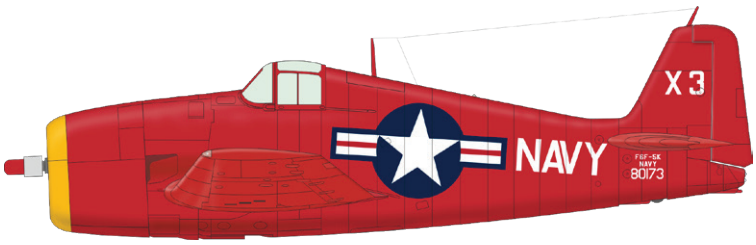
WEEKEND edition



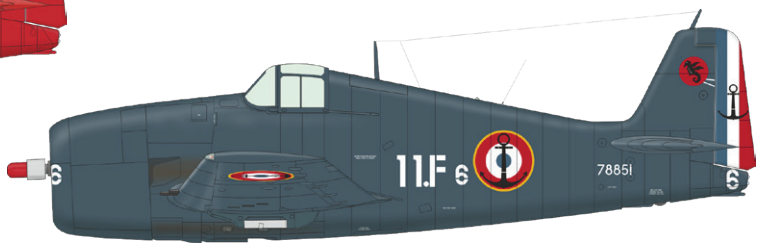
F6F-5, Lt. Fred Prinz, VBF-17,
USS Hornet (CV-12), March 1945



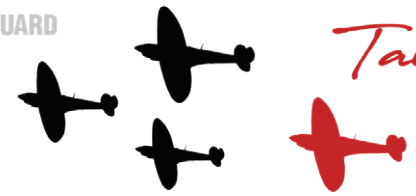
F6F-5, Lt. Daniel A. Carmichael,
VBF-12, USS Randolph (CV-15),
April 1945



F6F-5K, BuNo 80173, Detroit Air Races, 1951



F6F-5, LV Gérard de Castelbajac, Flottile 11F, Haiphong Cat Bi,
Indochina, March 1954



Tail End Charlie

A WHOLE WORLD OF WRONG COLORS

Text: Richard Plos

Recently on one Czech discussion modeling forum there was a short debate about the coloring of Finnish MiG-21BIS. One of the discussing guys sort of "knocked us over the head" with the coloring of the Finnish scheme, saying that we got it wrong and should fix it. I did a bit of research on this subject some time ago, although I am not the author of the scheme of the kit in question, so I took up the controversy. I was further reassured by the words "I know of hundreds of photos of Finnish MiG-21bis aircraft, but in none of them the aircraft sports the original large cockades and green-brown camouflage." An exchange of a few posts with photos followed, the last one I argued with showing without any doubt the aircraft in brown-green livery with large markings ... Thus, the debate fizzled out and with it, unfortunately, a bit of a final conclusion, which is that the opponent of our livery, although I have no doubt he knows a lot, was simply wrong in this case and Eduard got the camouflage right. The special thing was that the author of the original photographs that we have, which in many cases have not been published anywhere, wrote to me himself about it: "When the first edition of Eduard's BIS appeared, someone immediately started to question the Finnish coloration. This was quite amusing to me, because I had verified these colors personally and directly on aircraft in active service!"

The opponent of our color scheme of the Finnish "BIS" argued that some of the submitted photographs were distorted due to the lighting conditions, which is certainly a very relevant comment in general, but this too has its rules. Light is not selective and if it affects colors, it affects all of them, not just one. One could write a scientific treatise on the subject (not that a few scientists haven't already written a few, Richard Feynman not excluded). If I take it to the absurd, colors as such don't actually exist. There is light, and what we see is fundamentally dependent on it. The limit of this "function" is a state where there is no light. Then there are no colors either ... Dive just 15 meters deep in the sea and all that remains of the colorful coral "gardens" and other fauna is a blue-grey dullness, because the water has gradually filtered out most of the color spectrum of daylight. The red is the first to take its toll, then the other components follow. Climate, time of day or season, geographical location or even altitude can do similar things to colors, albeit to a lesser extent and intensity. Well, then we can add to that the different characteristics of photographic material (this is what photography was done on before the digital age, in case some of the younger ones didn't know; today the white balance can be a problem on digital cameras), the different quality of reproduction, scanners, the color characteristics of displays and individual image viewers, and suddenly we have an equation of twenty or so unknowns, the solution of which would lead us to that one absolutely correct and accurate shade of color. However, unlike aerodynamics, where the international standard atmosphere is used to achieve comparable measurement results, it is difficult to convert something to some kind of "international standard lighting conditions". Yes, we could agree to take pictures only at 6,000 K, but we probably won't be able to do anything about it in the photos we have already taken ... I prefer not to go into the topic of reading colors from black and white photos. However, for those interested in this subject I would recommend the book Jasta Colors Vol. 1 (Aeronaut Books; 2020) by Bruno Schmäling and our excellent collaborator Jörn Leckscheid, who discusses the types of black and white photographic materials and their different color renditions in depth.

When looking for the "right" colors for our models, we usually have no choice but to use our imagination, extrapolate already known facts, add a little bit of feeling and perhaps some tolerance when judging finished models of other modellers. After all, we don"t all have the same color sense either. For example, a friend of mine from my paragliding days kept his colorblindness a secret for a time. We only discovered it on a trip to the woods, where we came across a place thickly covered with strawberries in full crop. "That's a lot of strawberry!" we exclaimed, happily munching away, while Alex, the man in question, stood unhappily right over the bounty, and finally got out "Where are they?" He just didn't see red color ...

Color chips! I can hear the die-hard modelers, clamoring for the one and only right shade no matter what. Yes, chips ... Like the ones of the ANA 623 Glossy Sea Blue shade for example. The production "recipe" for this color was changed in 1967/1968 because the original paint degraded quickly and had to be made from different components to make it more durable. The US Navy then, sometime in the 1960s, made surplus samples of this paint available to modelers and aviation historians, with some getting the original 1944 samples while others had 1948 samples. And the basis of the controversy over the one and only correct ANA 623 was born, because these two chips did not match each other! So, of course, changes in recipes and components used in production, however forced, could also have affected the final appearance of the colors used on aircraft. In my cheerful relativizing of our ability to find the most correct camouflage colors, I have not even come close to name all the stakeholders. In our hobby, for example, scale effect and related scale lightening of colors (of which I am a proponent myself) come into play, and of course the aspect of availability of the right shade from your favorite paint manufacturer. Here, by the way, my colleagues and I occasionally get into a tight spot when creating the color schemes, most often in the case of colors for the pre-war Czechoslovak air force and most of all when preparing kits of civilian machines, in our case mainly the Trenér line. Our office is then scented with Gunze C series, and more and more colors are occupying my desk as I try to find the ones that could be used to mix the blue I see on the display. Which brings us back to the point. I may have a graphic calibrated one, but what good is it if the photos I'm working from each show a different color? Probably the biggest nut for me was the Z-326M with registration OK-OTP. I shot it in the hangar at the Točná aifield, then we took it outside and I shot it in daylight. And then again, outside again, but later, after flying. Then, on the display I got three completely different colors of one aircraft in one day. And mix the right color then!

All the discussion regarding the coloring of Finnish MiGs-21BIS was therefore, in my opinion, instructive for at least two reasons. Firstly, I think that claiming anything about the color shades as an unquestionable reality is pretty "waxy". Then, too, it's important to realize that an individual cannot know everything, and thus it never hurts to have a little humility and the ability to admit that my fixed idea may not be correct (you know that saying about the benefit of doubting everything in life at least once, even the fact that one plus one are two, right?) And in the spirit of these last words, we asked the aforementioned Finnish colleague to share his knowledge and photos regarding Finnish MiGs-21BIS. So, you can look forward to his article(s) in some of the future issues of Info magazine. So, all hail the colors, especially the right ones in the right light!