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APRIL 2022

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EDITORIAL

On our Facebook page, I came across the notion that the Zero Zero Zero title of our Limited Edition kit is nonsense for the release, as it contains two complete kits only, leading to a perceived incompatibility between name and contents. In my view, this is a question of the angle from which you are looking at this from. For someone who is immersed in the topic of the Zero and its history up to their ears, like we are, the title of the kit makes sense, and a pilot in the Pacific in '42 would not have an issue with it either. In the heat of combat over the Pacific and Indian Oceans, the sudden cry of 'Zero!' was so common and had so many forms that not all of them could be placed on the box. At its height and in all its glory, the Zero was ever present in the far east, and this is the feeling that the title of the kit is designed to convey. When you think about it, there has generally been no deeper meaning attached to the nomenclature of kits in our industry, other than to convey the box contents. If the need to be a little more specific presented itself, then it was usually labeled as "something over something". In this case, the obligatory Zeroes Over the Pacific would have sufficed. In fact, it would have been an excellent choice, at least locally, thanks to the Czech translation of the book Samurai, about Saburo Sakai, to the point of having a distinctly magical flavor. But that would have been a somewhat common road to go down, and we actually do try to put a slightly deeper, more original meaning into the names of our kits. This comes with the risk that an intended meaning of the title might be missed or misunderstood by some. If you pay some attention to the



Limited Edition release Zero Zero Zero, and study the marking options and their descriptions provided therein, they may lead you to the article penned by Jan Bobek, that is an extension of the introductory section of the kit instructions and offers a slightly different perspective of the A6M2 Model 21 than that of the norm. That norm being that the Zero Model 21 is basically an all-grey, boring subject, one that attacked Pearl Harbor and cut like a hot knife through butter from Clark Field to Darwin, only to slam against the wall of its limitations at Midway and over Guadalcanal, to be replaced by more capable and more colorful models of the type, the A6M3 and especially the more popular A6M5. With the release of the kit today, we are trying to illustrate that this is not entirely accurate, that this version of the Zero had a bigger significance than most of us think, that the type remained in service longer than most of us are aware and

provided better results than are generally perceived. In short, for us modelers, this realization leads to the understanding that this aircraft is much more interesting on all levels than we thought. Last, but not least, the stories that these aircraft can tell are far more interesting than can generally be imagined. We will hit on the classic tales in the next issue of our newsletter, when Jan Bobek will carry on from his article into the history of the Model 21 in a two part article about the life of Saburo Sakai.

Model Kits

There are a further three new kits for this month. In the ProfiPack line, we have the later variant of the Spitfire Mk.Vb, also the 1:48 scale F6F-5 Hellcat and the 1:72 scale MiG-15bis, the latter two being Weekend Edition kits. The F6F-5 release signals a return of the 48th scale Hellcat into our range. Besides this Weekend release, there will



ZERO ZE! RO! ZERO



be other kits put together with new marking collections, for which we already have instructions and boxes, and next month we'll see a slightly modified re-edition of the F6F-3.

Besides these new kits, we have four re-editions of previously released kits. The older of these are two ProfiPacks, the 1:72 scale Fokker D.VII (OAW) and the 1:48 scale Bf 109E-1, a kit first introduced ten years ago. The newer kits are the 48th scale F-6D Mustang, and the Limited Edition kit Eagle's Call in the same scale, dedicated to American Spitfire Mk.Vs. When we re-released the 1:72 scale Tornado GR.1 Desert Babe a while back, there was some protest put forth, claiming that re-releasing something under the label Limited Edition was nonsense. This is another question of how you look at it. I agree that if something is, in fact, limited, it cannot be available forever. In some cases with these releases, though, it is tough to calculate the demand for the item, and sometimes, we miss. To my mind, in these instances, it seems a shame to not at least try to satisfy the actual demand. As an example, the first edition of Desert Babe had a run of 3,000 kits, and in the second, after a closer look at the market, 4,000. This week, we packed up the last seventy, and that will be it. But do not expect that every sold out Limited Edition kit will be re-issued. If and when we do, it will only be for those that sell out extremely quickly signaling an initially flawed assessment of the demand, and a reassessment points to further demand for a given product. Instances where this comes about are not many. Generally, we are in the right ballpark with these assessments.

Accessories

Among photoetched sets, I would like to direct your attention to the items designed for Revell's 1:48 scale SR-71 and the IBG Fw 190D in 1:72. Both kits are recent hits on internet forums, and I believe that our

releases for them will be found to be very useful. There are, of course, many more interesting items being offered, such as for the 35th scale M-18 from Tamiya. There are two mask sets for the 1:32 scale Hawk 81-A2 and this suggests that we are also working on photoetched sets for this kit, as well as the whole line of P-40B/Cs. These will be out next month. Very noteworthy are two landing flap sets in the Brassin line, for the Spitfire MkV and the Fw 190A, both sets being in 48th and both printed 3D items. The same goes for the Walter Minor 4 engine for the Z-126 Trener. There are some smaller sets for another recent hit, the P-51B in 1:72 from Arma Hobby. In this case, we are talking about a mix of 3D prints and cast resin, and the 1:48 scale cockpit set for the later version of the F-14A from Tamiya is cast resin. April releases also include a Look set for this kit. This line also includes releases for the OV-10 and the Vampire F.3 in 1:48, for which we offer the alternative Space sets. These Space sets are going through a constant evolution, and the latest offerings are to a very high standard of quality, and offer a very good product at a very competitive price. The Space line even offers up the only new item offered this month for ships, a set of international signal flags in 1:350 scale. As usual, there are also BigEd, BigSin and LookPlus sets to look at, too.

The Mule

If you are interested in the Mule, the lovingly applied label to the Avia S-199, than you will be pleased to learn that the kit is now complete. Or, at least, when it comes to the plastic. The first release, the Limited Edition kit, will be done by April 15, on Good Friday. We will have the Mule, along with other new May releases, in Prostějov for the Prostějov Easter Show. Those attending that show will have an opportunity to purchase the kit, along with other May releases. The whole May range won't be there, but if there is something you want, you have the option

of pre-ordering and we will prepare your order and bring it with us to the show. The preorder timetable will be posted to our Facebook page.

A week later, the Mule and all May releases will be available at Moson in Hungary. After the show at Lingen, which we had the privilege of attending last week, this will be our second show of the year. I firmly believe, it won't be the last. Another which we are planning is 'Panther Cup' on June 18.

Articles

In the following pages, you'll find the aforementioned Jan Bobek article about the Zero Model 21, and the second, concluding, part of the Arizona article. This is a very expansive topic, as was evident from the first part in last month's newsletter. I have to say that I find that ship extremely interesting, and the story behind it branches off in so many ways that we will add another part to the article next month. The third article comes to us from Miro Baric, covering the first two weeks of the air war over Ukraine. This article, too, will see a continuation in May's newsletter, and it would be nice if no further updates would be necessary after that. It likely won't be, but I am hopeful that the war ends soon, and our articles about it turn into historical accounts, if alarming and recent. When the war will end, I cannot say, but I am certain that when the war does come to a close, Ukraine will come out of it stronger and Ukrainians will be respected and valued members of Europe. For the Russians, I hope that they will find it in themselves to call the war a war, and that they end it in such a way as to find themselves back on the road to membership among civilized nations.

I wish all a good read with today's newsletter.

Happy Modeling!
Vladimir Sulc

ZERO

Fighter Type 21

Jan Bobek

The Mitsubishi Zero became the symbol of the Japanese air power during WWII. The nimble and agile fighter had the upper hand over US aircraft at early stages of the war in Pacific theatre, but gradually lost its advantage against newer opponents. During the war, other versions of the Zero came along, but the Type 21, the main fighter plane used by the Imperial Japanese Navy at the beginning of war in the Pacific, remained in combat service until the end of hostilities.

During the 1920s and 1930s the Japanese aircraft industry was oriented towards the production of foreign aircraft built under licenses. However, the armed forces, especially the Navy, with regard to the specifics of the Chinese and Pacific battlefields, came up with requirements that foreign aircraft designs did not offer. Hence, Mitsubishi Heavy Industries developed the Type 96 naval fighter aircraft, better known as the A5M „Claude“. The head of the design team was a young Japanese engineer, Jirō Horikoshi. With an engine that lacked some power, he managed to design a light and fast fighter with a fixed landing gear, which had no comparison in the world regarding maximum speed. In October 1937, Mitsubishi and Nakajima were approached to develop prototype 12-shi Carrier-based Fighter. The requirements were so extreme, and in some cases contradictory, that the two design teams investigated whether they could be less stringent. Nakajima eventually withdrew from the project, while the criteria for the prototype were even raised based on experience on the Chinese battlefield. In the end, Horikoshi's team managed to meet the technical specifications, not only

thanks to the aerodynamic design and a new type of light alloy used for the aircraft's skin, but also thanks to the Nakajima Sakae 11 engine. During the flight tests, the wing surface suffered cracking during overload, and aileron control during high-speed maneuvers had also to be addressed. The new fighter had a powerful armament of two cannons and two machine guns, extremely long range (over 1,800 km) and excellent maneuverability. The new fighter reached top speed of 533 km/h at an altitude of 4,550 m. However, it lacked armor and other protective features and had a structural speed limit of 600 km/h.

Surprising Zero

The new aircraft entered service in 1940 with the 940hp engine Sakae 12 and received the official designation Rei shiki Kanjō sentōki (Type 0 carrier fighter), with the „zero“ being derived from the imperial year 2600 (1940). Japanese pilots usually abbreviated it as „Rei-Sen“. That was also the origin of the name „Zero“ often used by Allied pilots instead of the official code name, derived from the male name „Zeke“. As part of the Navy's system, the new machine was given the type de-

A Mitsubishi A6M2 Zero fighter aircraft "Eli-111" takes off from board of IJMS Zuikaku on April 5, 1942 during attack against Colombo. The plane is probably piloted by Lt. Tadashi Kaneko, 8 victory ace.
(Photo: Kure Maritime Museum via Wikimedia Commons)

signation A6M, where A6 meant that it was the sixth type of carrier fighter to enter service, and M stood for the Mitsubishi company name. Zeros, specifically the A6M2 Type 11, had been successfully deployed on the Chinese battlefield since the summer of 1940, but their existence eluded Western intelligence because no one wanted to believe reports from China that suggested the Japanese had a world-class fighter. Further modifications to its design were made during 1941, creating the A6M2 Type 21. There were several changes, the most visible of them being folding wing tips for easier handling on the decks. With the A6M2 Type 21 modified this way, Japan entered the war against the US and other Western nations. Mitsubishi needed to produce other aircraft in addition to the Zero, so the Nakajima company also began licensed production in late 1941. Total of 740 A6M2 aircraft were produced by Mitsubishi by June 1942 with additional 800 delivered by Nakajima by February 1944. The gun armament was improved and variants with magazines for up to 150 rounds could be used on the Type 21. Such a Zero may have been designated as Type 21a.

The Nakajima company produced 254 A6M2-N „Rufe“ float plane fighters from December 1941 to July 1943. Its prototype flew on December 8, 1941, and the design featured a pylon with a central float, a solution not used in any country up to that time. The A6M2-N fighters were mainly used to defend naval bases.

Several hundred aircraft were also modified from the A6M2 Zero Type 21 and A6M5 Type 52 to

the two-seaters A6M2-K and A6M5-K, produced from January 1943 and May 1944 respectively.

Beginning of the Pacific War

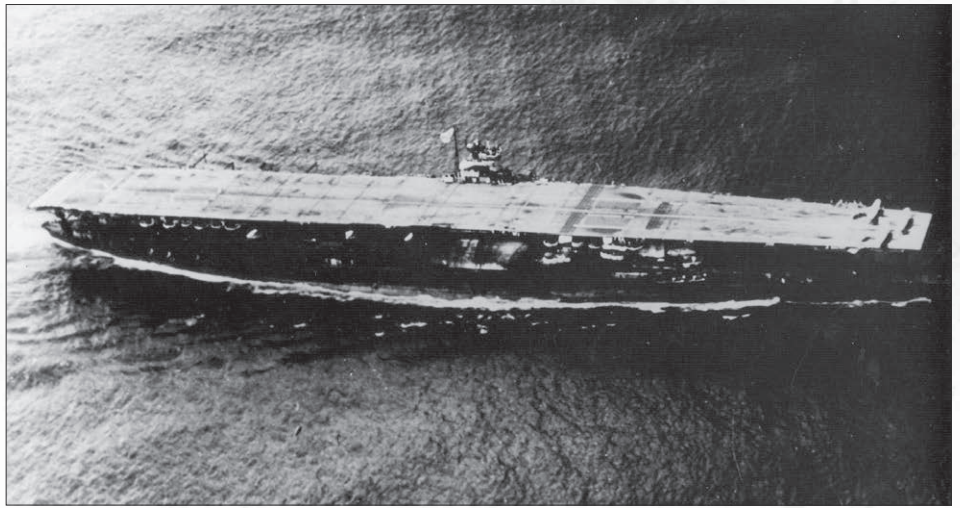
Thanks to the experience gained during the war in China, Japan was able to prepare for a large-scale attack in Indochina, the Philippines and against the American fleet at Hawaii. One of the objectives of the southward campaign was even to land in Australia.

The core of the Striking Force, which was to attack Pearl Harbor, were six aircraft carriers divided into three divisions: 1st Kōkū Sentai with the Akagi and the Kaga, 2nd Kōkū Sentai with the Sōryū and the Hiryū and 5th Kōkū Sentai with the Shōkaku and the Zuikaku. They belonged to the so-called Kidō Butai (Mobile Force) commanded by Vice-Admiral Chūichi Nagumo. He was also the commander of the 1st Kōkū Kantai (Air Fleet), under which the air units aboard the six aircraft carriers were organized. Such a large carrier group had never been deployed in combat in the history of naval operations. Two of the ships, Shōkaku and Zuikaku, were completed just a few months before.

In total 350 machines, out of the 414 available, attacked Hawaii. In the first wave only three Zeros, one D3A and five B5N bombers were lost. In the second wave, six Zeros and fourteen D3As were lost. A total of 74 aircraft returned with damage. Hundreds of American aircraft were destroyed in the raid, but the Japanese left many fuel storage facilities virtually untouched. Of the 79 fighter pilots who took part in both attack waves, only 17 lived to see the end of the war.

The newly organized 3rd and Tainan Kōkūtai with bases in Taiwan were designated to attack the Philippines and Indonesia with A6M2 fighters. Their core was made up of veterans of the disbanded 12th Kōkūtai, which had undergone deployment with the Zeros in China. For the Malayan campaign, a fighter unit was temporarily formed in French Indochina within the 22nd Kōkū-sentai (Air Flotilla), which borrowed airplanes and also personnel from the 3rd Kōkūtai and Tainan Kōkūtai. In this context, the first undamaged Zero fell into enemy hands in November 1941.

During raids on the Philippines on December 8 and 10, 1941, the Japanese naval air force claimed the destruction of about 140 aircraft on the ground and the shooting down of nearly 70



The Japanese aircraft carrier Akagi pictured underway in the summer of 1941. (Photo: U.S. Navy National Museum of Naval Aviation)

machines in the air. The actual losses of the U.S. and Philippine Air Forces, though less, were still severe. The Zero pilots first encountered four-engine B-17 bombers, which they found very difficult to fight. Thanks to rapid advance of ground forces, both Kōkūtai units operating Zeros had bases in the Philippines in late December, and as a result they engaged Dutch airmen over Borneo for the first time.

During the Malaysia campaign in mid-December Zero pilots of 22nd Kōkū-sentai joined the fight for Singapore and by the end of the campaign they had 40 victories for the loss of two planes. Later, fighter squadron of 22nd Kōkū-Sentai briefly operated in Java, Burma, the Indian Ocean area as well as Thailand. Eventually it was taken over by Kanoya Kōkūtai. During February 1942, intense fighting over Java was experienced primarily by the 3rd and Tainan Kōkūtai. Their airmen claimed over 100 victories with the actual loss of only about 10 of their own. At the end of the month, some fighters participated in escorting the bombers that sank the former aircraft carrier USS Langley, converted to a seaplane tender. Zero pilots strafed the deck with dozens of new P-40E fighters stored enroute to Java.

In the early months of the Pacific War, the Americans and their allies realized how much they had underestimated their Japanese adversaries. One of the main symbols of this sobering realization

was the Zero fighter, which had developed a reputation as a nearly invincible adversary early in the war.

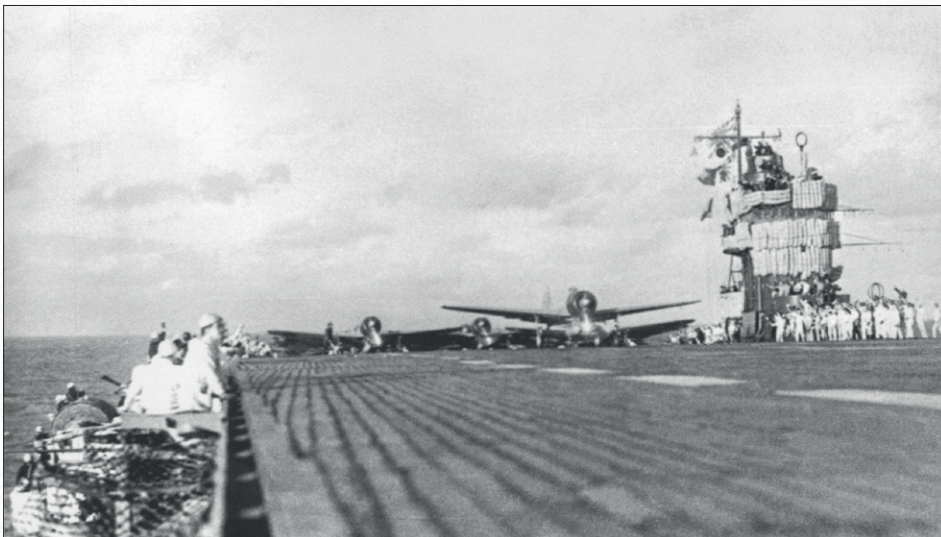
Aircraft carrier operations till the spring of 1942 While the carriers were returning from the attack on Pearl Harbor, news reached Nagumo that the landing at Wake Atoll had been repulsed and a second attempt required carrier support. The Sōryū and Hiryū air units therefore conducted raids on the island on December 21 to 23, 1941. This was the first time that Wildcats and Zeros were engaged in combat.

During the January 20 to 22, 1942 carriers Akagi and Kaga got into action again, this time in raids on Rabaul and the New Guinea airfields. They met essentially only valiant resistance of few Australian crews with Wirraway aircraft. There was growing discontent among Japanese carrier aviation commanders. Unable to get into engagements with American carriers, Nagumo's airmen felt they were being deployed against targets with low significance.

Air units from the ships Akagi, Kaga, Hiryū and Sōryū attacked Darwin Harbour on February 19 and, with the loss of four aircraft, caused what is known as Australia's Pearl Harbor. After an emergency landing, Seaman 1st Class Hajime Toyoshima of the aircraft carrier Hiryū was captured. He became the first living Zero pilot to end up in enemy hands, although his machine was not in a repairable condition after the crash.

Returning to north, aviators from the ships Akagi and Kaga covered the landing at Tjilatjap, Java, on March 5, sinking eight vessels in the process. Kaga then returned to Japan due to minor hull damage.

At the end of March, a task force which core consisted of Akagi, Shōkaku, Zuikaku, Sōryū, and Hiryū sailed for Ceylon. During April 5 to 9, Japanese airmen claimed shooting down of nearly a hundred RAF aircraft, the destruction of a number of ground targets and the sinking of many vessels, including the aircraft carrier HMS Hermes. In doing so, they faced veterans from Britain, Canada, and other Commonwealth countries. One year ago, some of the Allied airmen had participated in the fight against the German battleship Bismarck. British fighter pilots with Hurricanes were able to use hit-and-run tactics with partial success. This approach, already used by other Allied airmen became winning strategy



The second wave of attack aircraft launches from the board of HJMS Akagi against Pearl Harbor, Hawaii on December 7, 1941. (Photo: Mike Wegner via Ron Werneth)



Japanese aircraft carrier Akagi in April, 1942 during the Indian Ocean Raid as seen from an aircraft that has just taken off from her deck. The aircraft on the flight deck preparing for takeoff are "Val" bombers.

(Photo: Kure Maritime Museum via Wikimedia Commons)

against Zeroes for the rest of the war.

Although the Japanese had feared for some time that the Americans would try to attack targets directly in Japan, Doolittle's raid on April 18, 1942, was a huge surprise. Akagi, Sōryū, and Hiryū were just off Taiwan and headed for Japan. Nagumo changed course to the east on April 19 and tried to chase the attackers. However, the USS Enterprise and Hornet were already out of range. The Japanese carriers gave up the search after several days.

Coral Sea, Aleutians and Midway

The next target of the Japanese command was the port of Port Moresby in the southeast of New Guinea. It was to be a base for the planned landings in Australia. At the same time, the Japanese hoped that their invasion force would attract American aircraft carriers and a decisive battle would occur. The aircraft carrier Shōhō covered the landing on Tulagi Island off Guadalcanal during May 3, 1942. She then joined the vessels bound for Port Moresby. But on May 7 the carrier was attacked and sunk by aircraft from the USS Lexington and Yorktown.

Airmen from Shōkaku and Zuikaku were not able to intervene in the battle until the following day. They reported shooting down 64 Allied aircraft and severely damaging both U.S. carriers in their attack on the American task force. The Lexington had to be sunk later. The American airmen damaged the Shōkaku, and during combat air patrol the Japanese fighters reported 40 victories while losing two Zeroes throughout the day. Although the Japanese achieved a tactical advantage in the battle thanks to the sinking of the heavier carrier, they had to cancel the landing at Port Moresby.

The Japanese planned for an early June campaign towards Hawaii, with the target of the forces under Admiral Yamamoto being the American territory on the Aleutians and Midway Atoll. The attack on the Aleutians is often mistakenly described as an operation to divert attention from the attack on Midway. It was, however, one operation conducted in two directions with reserve forces positioned about half the distance between the two task forces. Six carriers participated in the operation, and on board all of them, in addition to their own carrier air units, were Zeroes,

ground personnel, and pilots of the land based 6th Kōkūtai. This unit was to be based at Midway Atoll after its capture. The fighter pilots of the 6th Kōkūtai participated in both the raids on the Aleutians and the fighting during the Battle of Midway. Airmen from the carriers Ryūjō and Junyō conducted attacks against Dutch Harbor on the Aleutians during June 3 and 4, 1942, and scored several victories against amphibious aircraft and P-40 fighters. However, one of the Zeroes crashed on Akutan Island and despite the efforts of the Japanese, neither the machine nor the pilot could be found. The lost airman was PO1c Todayoshi Koga, whose Zero was found by the Americans a month later and put into airworthy condition. As planned, the Japanese established a floatplane base on the American island of Kiska.

Nagumo's task force with core of fleet carriers Akagi, Kaga, Sōryū and Hiryū launched raids on Midway Atoll on June 4. The Americans, however, were prepared for the attack by deciphering Japanese coded communications. They sailed into battle with the aircraft carriers USS Enterprise, Hornet and Yorktown, the latter urgently repaired after the Battle of the Coral Sea. For the engagements of the first attack wave, the Japanese fighters reported 35 shot down USMC airplanes with the loss of one Zero, shot down by AA fire.

However, the Japanese had inaccurate data from reconnaissance crews about enemy vessels. In the critical part of the battle the Japanese aircraft began to come back to their carriers to change their armament in view of the change of targets from carriers to land targets and back to carriers. The Americans made a large number of attacks on the Japanese fleet with Marine Corps, Army Air Forces and Navy aircraft. Japanese fighters made dozens of launches in defense of their carriers and claimed 90 victories with the loss of 13 of their own aircraft, but their efforts were in vain. American attacks were so intensive that the carriers Akagi, Kaga and Sōryū were eventually fatally hit, just as they were replacing armament in their hangars. Deficiencies in the design of Japanese carriers' passive protection and insufficient damage control were fully exposed.

The last vessel able to intervene effectively in the battle was the carrier Hiryū, which sent two waves of bombers against the American carriers.

The raids damaged the USS Yorktown so badly that she eventually had to be sunk. Each of the bomber formations was accompanied by six Zeroes, whose pilots claimed 18 American aircraft while losing five machines.

The Americans eventually hit Hiryū, which was defended by twelve fighters, who could not prevent fatal consequences. Although her propulsion was not hit, the fires could not be brought under control, and she sank on June 5.

The Japanese suffered a crushing defeat that was the turning point of the war in the Pacific. In addition to the four carriers, they lost the one cruiser and several other vessels were damaged. More than 3,000 crewmen were killed. The loss of 23 fighter pilots who died in combat or aboard their ships was not critical. However, the loss of bomber crews and many members of technical personnel had a significant impact.

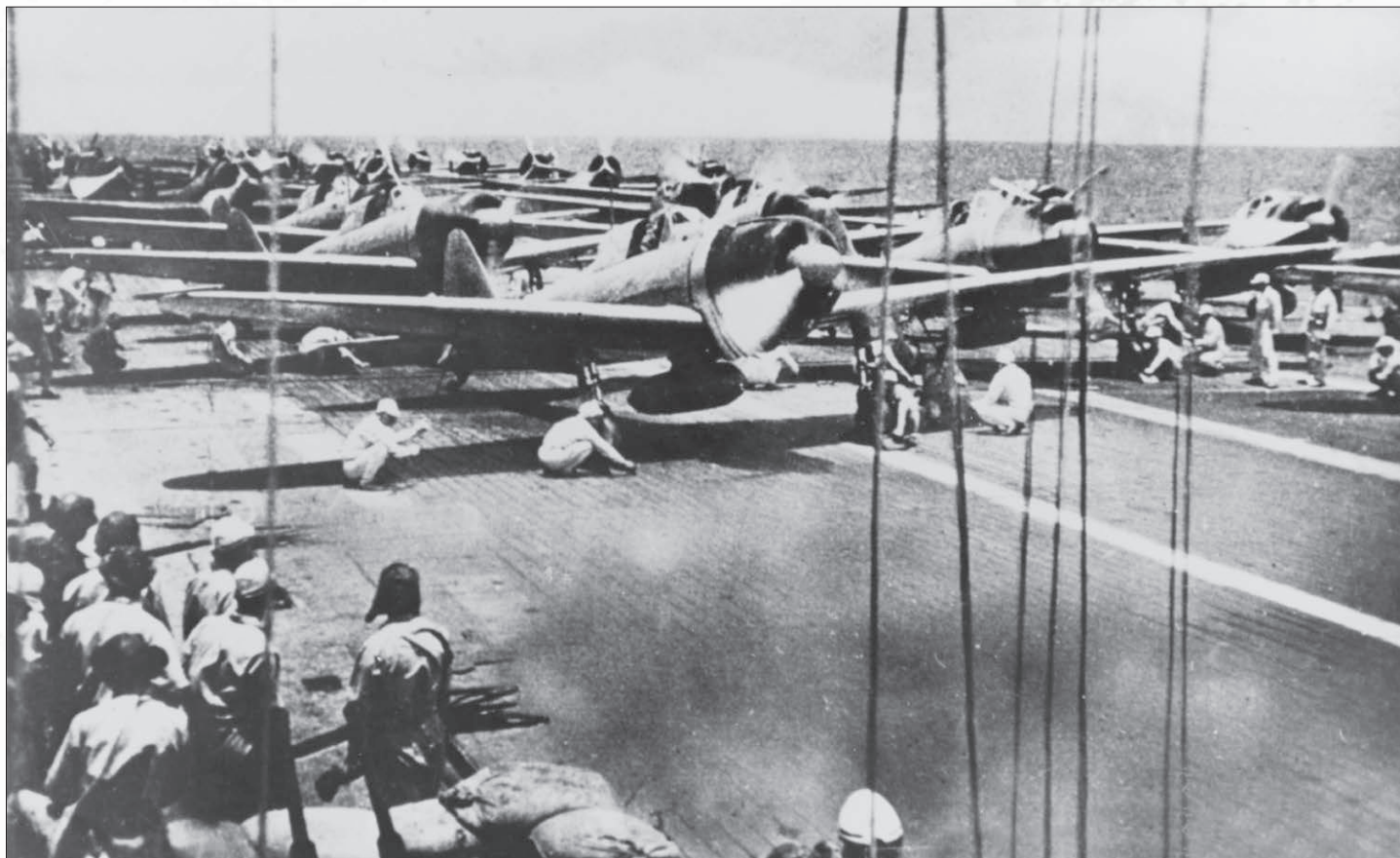
New Guinea and Australia

In early February 1942, the 4th Kōkūtai moved into the newly captured Rabaul, using twin-engine bombers and A5M fighters. From the middle of that month, its fighter squadron began taking over the modern A6M2 fighters brought to Rabaul by the aircraft carrier Shōhō. In early March, 4th Kōkūtai Zeroes moved to Lae, New Guinea, and began escorting bombers over Port Moresby and to Horn Island in northern Australia. In early April, the fighter squadron of 4th Kōkūtai was taken over by Tainan Kōkūtai, which moved into the area. In mid-May, Tainan Kōkūtai took over additional 15 Zero fighters and pilots from the 1st and Chitose Kōkūtai. Their opponents were initially mainly Australian airmen and American bomber crews, but later American fighter units also arrived in Port Moresby. Other fighter units with Zeroes also operated over eastern New Guinea during 1942. But the main battlefield from the middle of the year became Guadalcanal. Fighting over New Guinea intensified again at the end of 1942 and in 1943, during the Allied advance northward. Northwestern Australia began to be the target of frequent Japanese naval air raids from February 1942. Zeroes appeared regularly over Australia from early March, after 3. Kōkūtai (later redesignated the Kōkūtai 202) stationed at Kupang, Indonesia. Until the autumn of 1943, the Japanese



Aircraft are prepared for a morning sortie on the IJMS Zuikaku on May 5, 1942 during the Battle of the Coral Sea. Censor deleted tail markings from the photo, however a patriotic donation text is visible on the fuselage of Zero standing on the right side.

(Photo: Kure Maritime Museum via Wikimedia Commons)



Aircraft prepare to launch from Japanese carrier *Shōkaku* during Battle of the Santa Cruz Islands, October 26, 1942. In the foreground, crewmen are getting ready Zero "El-112".
(Photo: Naval History and Heritage Command)

conducted over 200 reconnaissance and bombing sorties over Australia. Because of their long range, the A6M2 Type 21 continued to be used in these missions. Actual recorded losses were close to 1:10 in favor of the Zeros, with their frequent opponents being Spitfires Mk.V. This result was remarkably different compared to the air battles in the Solomon Islands and Rabaul area.

Guadalcanal

The Japanese started building an air base on Guadalcanal in July 1942, posing a serious threat to shipping between the US and Australia. The Americans therefore landed on Guadalcanal on August 7 and were soon able to begin air operations from the occupied Japanese airfield, and from new ones they subsequently built.

In terms of fighter operations, for the first weeks it was main responsibility of Tainan Kōkūtai. During bomber escort flights to Guadalcanal and convoys patrols, pilots flew from Rabaul, a 1065 km distance. The Japanese command gradually deployed other fighter units in the area, primarily the 2nd Kōkūtai, part of the 3rd Kōkūtai, the 6th Kōkūtai and the Kanoya Kōkūtai. In September 1942, the Japanese managed to get the airfields operational on the islands of Buka and Bougainville, which were closer to Guadalcanal.

In mid-1942, a new version of the Zero designated the A6M3 Type 32 began arriving on the battlefield. It was equipped with the more powerful Sakae 21 engine and had a shortened wingspan. However, it was unsuitable for missions over Guadalcanal due to its shorter range. In late 1942, its production was discontinued and replaced by the A6M3 Type 22 from early 1943. Thanks to the modified design of the fuel tanks and wing, which looked similar to the Model 21, the range of this

newer version was even extended by 160 km. The Type 21 Zeros, however, continued to be the important armament of IJN fighter units engaged in the Solomon Islands, whether at ground bases or on aircraft carriers.

Two naval engagements occurred during the Battle of Guadalcanal, with aircraft carriers deployed on both sides. The first was the Battle of the Eastern Solomons on August 24 and 25. Simultaneously with the Japanese convoy heading for Guadalcanal, a task force with the aircraft carriers *Shōkaku*, *Zuikaku* and *Ryūjō* headed for the same area. The Japanese had no intelligence on the location of the American carriers and therefore conducted a raid on Henderson Airfield on Guadalcanal. Aircraft from the USS *Saratoga* succeeded in sinking the *Ryūjō* and the Japanese later damaged the USS *Enterprise*. Some Zero fighters from the remaining carriers then briefly operated from ground bases.

During October 1942, the Japanese also deployed the carriers *Zuihō*, *Junyō* and *Hiyō* in the Solomon Islands in addition to *Shōkaku* and *Zuikaku*. During October 25 to 27, the Battle of the Santa Cruz Islands occurred, in which only *Hiyō* did not participate. IJN carriers were confronted by the USS *Hornet* and *Enterprise*. American naval aircraft damaged the *Zuihō* and *Shōkaku*, but *Hornet* was lost and *Enterprise* suffered damage. Although the Japanese achieved a tactical victory, their aircrew losses were higher than in the Battle of the Coral Sea. Therefore, even the carriers that were not damaged had to withdraw from the battlefield. The fighter unit of carrier *Hiyō* remained in the area. For almost the next two years, this was the last carrier engagement in the Pacific.

In early November 1942, the designation of naval air units with bases abroad was changed.

They were now designated by a three-digit code that indicated, among other things, their purpose and home naval district in Japan. If the first digit was 2 or 3, it was the Kōkūtai, whose specialty was exclusively fighter aircraft. The Tainan Kōkūtai became Kōkūtai 251, and similarly were designated Kōkūtai 201 (formerly Chitose Kōkūtai), Kōkūtai 202 (formerly 3rd Kū.), Kōkūtai 204 (formerly 6th Kū.), Kōkūtai 252 (formerly Genzan Kū.), and Kōkūtai 253 (formerly Kanoya Kū. Fighter Squadron). The mixed purpose 2nd Kōkūtai was designated Kōkūtai 582 and retained both the single-engine bombers and the fighter unit. The former Tainan Kōkūtai moved to Japan in mid-November to replace losses, to train reinforcements, and to take over new equipment. Guadalcanal, which the Japanese called "Ga Shima", was a high risk target during any long distance flight due to unpredictable weather, possible engine failure, fatigue, or nausea caused by tropical diseases. At the same time, the Japanese faced an enemy that was constantly improving its technology, tactics, logistics, and infrastructure.

In late 1942, the Japanese attempted to open an airfield on Munda Island, just 300 km from Guadalcanal, but Allied air raids made using this base very difficult. In late January 1943, the evacuation of Japanese troops from Guadalcanal was completed. At that time, the fighter unit of the carrier *Zuikaku* began operating from Bougainville and withdrew to Truk after two weeks. A month later, a fighter unit from the carrier *Zuihō* was deployed in a similar way. This practice proved successful for the Navy and was used in the area for the following year.

The Japanese command decided in late March 1943 to achieve air supremacy in the New Guinea and Solomon Islands area. Therefore, the Opera-



Japanese aircraft carrier *Shōhō* under attack by U.S. Navy carrier aircraft in the late morning of May 7, 1942. It was the first Japanese aircraft carrier lost in combat.

(Photo: Official U.S. Navy Photograph, National Archives)

tion "I-gō" was planned, in which raids were conducted between April 7 and 14 against Guadalcanal, Oro Bay, Port Moresby and Milne Bay. More than 200 A6M2 and A6M3 aircraft were available for fighter escort from Kōkūtai 204, 253, and 582 and from the fighter units of the carriers *Zuikaku*, *Zuihō*, *Jun'yō* and *Hiyō*. The result of the action was judged as a great success. However, both sides actually suffered negligible losses. After the operation ended, on April 18, a bomber with Admiral Isoroku Yamamoto on board was shot down over Bougainville Island during an inspection tour. Based on decoded radio intercepts, American P-38 fighters were in the right place at the right time. The commander of the Combined Fleet and one of the architects of the attack on Pearl Harbor died exactly one year after Doolittle's raid on Tokyo. In May 1943, Kōkūtai 251 returned to Rabaul, just in time to join the attacks on Allied forces fighting their way from Guadalcanal farther northwest. The Japanese made a tremendous effort to stop the offensive, but their efforts were futile. The Japanese made their last raid on Guadalcanal on June 16, 1943. Of the 24 dive bombers, 13 crews were lost and the fighter escort of 70 Zeros had to write off 15 aircraft. The Allies suffered minimal losses.

Retreat and defense of Rabaul

In late June 1943, the Allies landed on New Georgia and captured Munda airfield. This was followed by the defensive battles of Vella Lavella in August and Buin during September and October. In this period Zero pilots met F6F Hellcat fighter in combat for the first time. Kōkūtai 201 returned to the battlefield from Japan and naval fighters in the area were reinforced by the carrier-based fighter units of *HIJMS Jun'yō* and *Ryūhō*. The Zero pilots managed to keep their win-loss ratio at a reasonable level in combat with enemy fighters. However, bomber crews were constantly suffering high losses. It was a problem for which the high command had no solution. The „Kate“ and „Val“ bombers were already obsolete, and their design provided little protection against heavily

armed Allied fighters.

At the end of October 1943, the last fighter units withdrew from Bougainville to Rabaul. They began to face a systematic bombing campaign by aviation units of Marine Corps, Air Force and Navy as well as other Allied air forces. The core of the defense of this strategic base was Kōkūtai 201, 204 and 253. At the time, they used A6M fighters Type 22, 52 as well as good old 21. They were briefly supported or resupplied by carrier units. In November, for a short time, fighters arrived from *Zuihō*, *Shōkaku* and *Zuikaku*. In late December 1943 they were followed briefly by Zero pilots from *Hiyō* and *Ryūhō*. From the Japanese point of view, during this period Rabaul could be likened to a meat grinder. In early January Kōkūtai 201 had to be withdrawn. After less than a month exhausted Kōkūtai 204 moved from Rabaul too. Losses were replaced by fighters from the carriers *Jun'yō*, *Hiyō* and *Ryūhō*, who together with Kōkūtai 253 held out for a month in defensive aerial battles. In late February 1944, fighter units began to withdraw from Rabaul to Truk. Although the high command promised to turn the units back, this never happened, and the Allies neutralized the base until the end of the war. With the end of the fighting over Rabaul, the Japanese naval air force lost most of its seasoned fighter veterans.

China, India, and Indonesia

As Allied air raids against targets on the Chinese mainland and Taiwan intensified, the Japanese Navy decided to establish Kōkūtai 254. In October 1943, it began operations in Hong Kong, and detachments later operated from other bases. In February 1944, Kōkūtai 256 was formed in Central China. Their opponents were primarily American bombers. By the end of 1944, both units were deployed in the defense of Taiwan and the Philippines. Due to heavy casualties, their remaining parts were absorbed into another unit in January 1945.

The Japanese Army Air Force had to focus on fighting for northern New Guinea in 1943. Therefore, the Japanese Naval Air Force took over

their area of operations in the Indian Ocean. In July, Kōkūtai 331 was established with this task. The main base was Sabang, north of Sumatra and the unit also used airfields in the Andaman and Nicobar Islands, where it primarily faced the RAF. However, it also operated in Thailand and Burma. For a short time, it was a mixed unit that also used single-engine bombers.

In October 1943, Kōkūtai 381 was formed. Its main task throughout the following year was the defense of the oil refineries in Borneo. With A6M2 Type 21 fighters, Kōkūtai 381 conducted about half of its fighter sorties at night. Phosphorus air-to-air bombs were often used during the interception missions. The Kōkūtai 381 was gradually expanded to include other parts that used twin-engine night fighters and single- and twin-engine bombers. Nevertheless, it retained its designation as an interceptor unit.

Marshall, Caroline, and Mariana Islands

In early 1943, Kōkūtai 201, which had withdrawn from Rabaul, was stationed with its Zeros in the Marshall Islands. After transfer to Japan, this area was taken over in February 1943 by Kōkūtai 252. It had bases primarily on the islands of Kwajalein, Maloelap, Nauru, Roi, and Wake. The Unit mostly encountered American four-engine bombers, but in the fall of 1943, it went through heavy combats with US Navy "Hellcats". Therefore Kōkūtai 281 arrived in November as a reinforcement. During the capture of the Marshall Islands in February 1944, Kōkūtai 281 was completely destroyed, and its last pilots were killed in ground combat. Part of Kōkūtai 252 was evacuated to Japan. At the beginning of 1944 Zero Type 21 began to be used also as fighter-bomber. One of the first units to take over the Zero for this purpose was the bomber Kōkūtai 501. From January 1944, fighter-bomber pilots were trained at Truk. Kōkūtai 201 and 204 also withdrew to this area from Rabaul. However, after fighting with US Navy aircraft, the remnants of these units flew to the Philippines in March or were absorbed by other units. They were replaced by several newly organized Kōkūtais. Some were already to be armed with the new "George" and "Jack" fighters, but all ended up using A6M Zeros, primarily Type 52, partly also Type 21. Prior to the Battle of the Marianas, Kōkūtai 261 was stationed in the area of Saipan and Meleyon, Kōkūtai 263 on Guam, Kōkūtai 343 on Tinian, Kōkūtai 202 on Moen and Truk, and Kōkūtai 253 on Eten.

A major reorganization took place in the carrier units. Within new organization they were divided into three Kōkūtai units. The bombers, fighters, fighter-bombers, and reconnaissance aircraft on the *HIJMS Taihō*, *Shōkaku*, and *Zuikaku* fell under Kōkūtai 601. Kōkūtai 652 operated from the decks of *HIJMS Jun'yō*, *Hiyō*, and *Ryūjō*, and Kōkūtai 653 airmen were assigned to the carriers *Chiyoda*, *Chitose*, and *Zuihō*. Among the new specialties of the carrier units were the fighter-bombers. Their mission was to attack vessels that were protecting enemy carriers. The purpose was to damage or sink them and draw part of the AA fire from bombers. For this purpose, seven of the above vessels had on board squadrons of A6M2 Model 21 fighter-bombers.

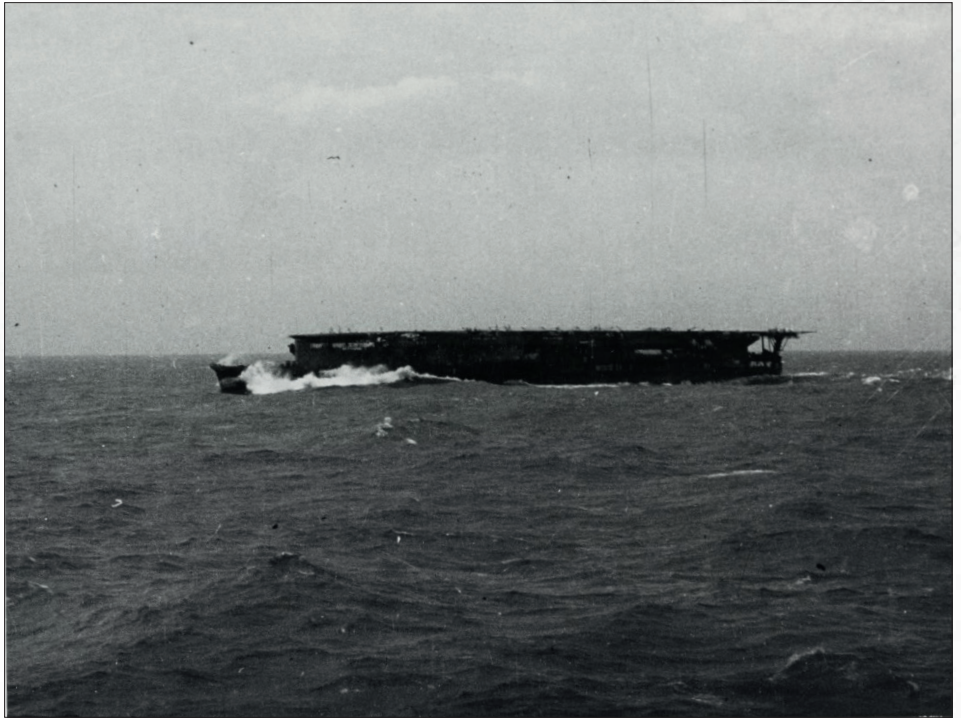
The Battle of the Philippine Sea, which occurred on June 19 and 20, 1944, was the largest carrier engagement in history. A Japanese task force of nine carriers faced fifteen American "flat tops".

It was also the last combat action in which Zero Type 21 was deployed as a carrier embarked air- plane. In a devastating defeat Japanese lost more than 600 aircraft and three carriers. The inadequate experience of the newly trained airmen was on full display. Also contributing to the defeat was the fact that many of the ships' commanding officers were ten years younger in seniority than their predecessors in 1942 battles. A large number of them also had no extensive flying experience.

The Philippines and the defense of Japan

Since early Fall 1944, the Japanese Army and Naval Air Forces faced air raids on the Philippines, culminating in the landing in Leyte on October 20, 1944. At that time, the Japanese command came to a difficult decision that had long been discussed and was intended to help increase the effectiveness of the fight against enemy vessels. The first Kamikaze units were formed, whose airmen were to sacrifice themselves by crashing into enemy ships. All types of aircraft were used for this purpose until the end of the war, including the A6M2-K two seat trainers and A6M2 Model 21 fighters. Kamikaze units were formed from both combat and training Kōkūtai units. Nearly 4,000 Japanese Army and Navy aviators sacrificed their lives in this manner. The Allies were initially surprised by this tactics. Kamikaze pilots caused approximately 80 % of Allied ship losses in the last ten months of the war. They destroyed aircraft carriers USS St. Lo, Ommaney Bay and Bismarck Sea, along with 14 destroyers and about 30 other vessels. Several hundred ships were damaged, some beyond repair. Kamikaze attacks cost the lives of 5,000 Allied crew members and about the same number were injured. Even this ultimate measure, however, did not prevent Japan's defeat.

When Allied troops occupied air bases in Japan after the surrender, they still found among the aircraft from combat units some A6M2 Model 21 fighters. One of these is documented at Kōkūtai 302 with the air victory symbol on the tail. After four years of war in the Pacific, the "twenty-one" faced far more modern enemy aircraft while it kept same design as it had during Pearl Harbor attack.



Aircraft carrier Ryūjō underway at sea in September 1938. At the beginning of the war in the Pacific, her fighter unit was still armed with A5M "Claude" fighters. But during the attack on the Aleutians the fighter unit already had Zeros and one of them fell into the hands of the Allies.

(Photo: U.S. Naval History and Heritage Command)



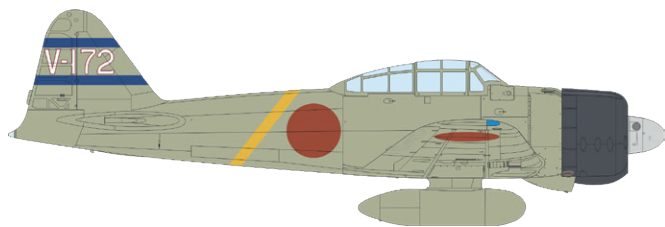
An A6M2 aircraft from the Fighter Squadron of 22nd Kōkū Sentai with improvised camouflage at an airfield in French Indochina.

(Photo: AWM)

Sources:

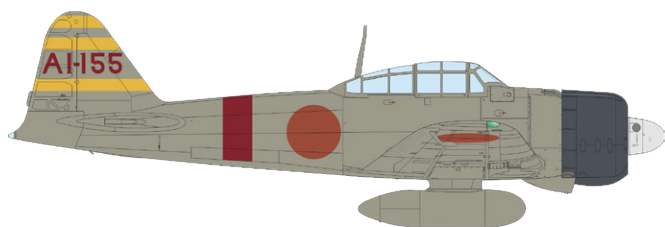
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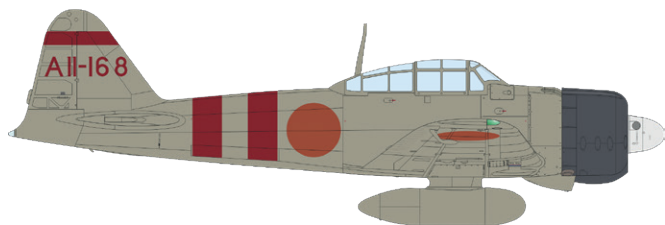
c/n 3372, Lt. Kiku-ichi Inano, Tainan Kōkūtai, Tainan airfield, Taiwan, November 1941

This aircraft, released by Mitsubishi on October 21, 1941, became the first Zero in repairable condition to fall into Allied hands. The legendary Tainan Kōkūtai was established on October 1, 1941, at the Tainan base. Most of the unit participated in combat over the Philippines, Borneo and the Dutch East Indies. A smaller part, under the command of Lt. Kiku-ichi Inano, was transferred to French Indochina in late November and temporarily became part of 22. Kōkū Sentai HQ fighter squadron. The "V-172" fighter was Inano's personal machine. During the transfer to Saigon on November 26, Inano flew aboard a transport aircraft and his Zero was piloted by PO1c Shimezō Inoue. Inoue and his wingman with Zero "V-174" lost their bearings in poor weather and made an emergency landing on the coast of the Leichou Peninsula. Both pilots were taken prisoner by the Chinese. Inoue was repatriated after the war. He returned to his home village with shame over his capture, suffered from depression, and died in a war veterans' hospital. With great effort, the Chinese managed to transport the Zero "V-174" to Liuchow base, where they began repairs. The machine was given Chinese national insignia and number P-5016. It was also tested by pilots of the American 75th FS. In 1943, the aircraft was transported to the USA, where it received the designation EB-2, later EB-200. Lt. Inano returned to Tainan Kōkūtai in July 1942, participated in combat over New Guinea and Guadalcanal. From October 1944 served as Hikōtaichō of Tainan Kōkūtai (II) in Taiwan.



Lt. Cdr. Shigeru Itaya, Akagi Fighter Squadron, Pearl Harbor first attack wave

During the first wave Itaya led 43 Zero fighters, including 9 from Akagi. Itaya's own Akagi formation shot down one sightseeing and three training aircraft. Then, at Hickam and Ewa bases, they destroyed about 25 aircraft and also attacked incoming B-17s. Itaya's wingmen damaged and set fire to a B-17C from 7th BG of Capt. Swenson's crew with one passenger who did not survive the attack. Itaya's wingman, PO1c Hirano, was hit by anti-aircraft over Fort Kamehameha and hit an obstacle while flying low over the ground, killing himself and four American soldiers. Itaya was born in 1909 and graduated from the Naval Academy in 1929. From November 1936, he was the Buntaichō of the Ryūjō Fighter Squadron for one year. He then served with the 15th and 12th Kōkūtai and from January 1940 he was Buntaichō of the Hiryū Fighter Squadron. In November 1940 he took over this position on the aircraft carrier Akagi, in April 1941 he was appointed Hikōtaichō and remained in this position until the Battle of Midway. He was killed on July 24, 1944 in the Kuril Islands, at that time serving as a member of the staff of the Naval 51st Kōkū Sentai. He was flying aboard a G3M bomber towards Paramushir and was accidentally shot down by a Ki-43 fighter.



c/n probably 2236, PO2c Akira Yamamoto, Kaga Fighter Squadron, Pearl Harbor first attack wave

Kaga sent nine Zeros in the first wave of the attack on Pearl Harbor under command of Lt. Yoshio Shiga. His formation destroyed 21 aircraft at Hickam. Six of them were credited to PO2c Yamamoto, who had previously shot down a yellow-painted civilian Piper J-3 on a sightseeing flight. The two men on board were killed. Lt. Shiga lowered Yamamoto's rank one notch and called him an idiot bastard. Yamamoto had served as a fighter pilot since 1934 and had seen combat in China with the aircraft carrier Hōshō and 12th Kōkūtai. During the Battle of Midway, he shot down five bombers. After Kaga was hit, Yamamoto landed aboard Hiryū and while escorting bomber he claimed four fighters including F4F flown by „Jimmy" Thatch, commander of VF-3. In the fall of 1942 he served on the carrier Zuihō and was promoted to the rank of Warrant Officer. In May 1944, he was transferred to the Yokosuka Kōkūtai and participated in the defense of Iwo Jima. He was killed in the defense of Japan on November 24, 1944. After his aircraft was hit by a B-29 gunner, Yamamoto bailed out, but his parachute did not open. He achieved 13 aerial victories and the rank of Lieutenant junior grade.



Fighters from the 3rd Kōkūtai at Kupang airfield, Indonesia in 1942. Note the difference between the light identification stripes and bands as compared to grey color of the aircraft, which appears relatively dark.

(photo: San Diego Air and Space Museum)



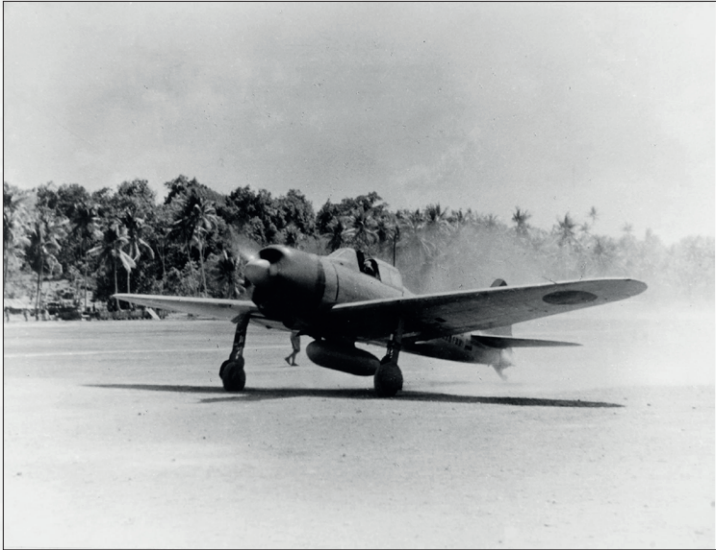
The burning Japanese aircraft carrier Hiryū, photographed after Battle of Midway by a Yokosuka D4Y "Judy" from the carrier Hōshō shortly after sunrise on June 5, 1942. Hiryū sank a few hours later. Flight deck is torn out by the bomb dropped by SBD bomber.

(Photo: U.S. Navy National Museum of Naval Aviation)



Part of Tainan Kōkūtai pilots in Lae, New Guinea in June 1942. Saburō Sakai is in the middle row second from the left, Hiroyoshi Nishizawa is standing to the far left.

(Photo: San Diego Air and Space Museum)



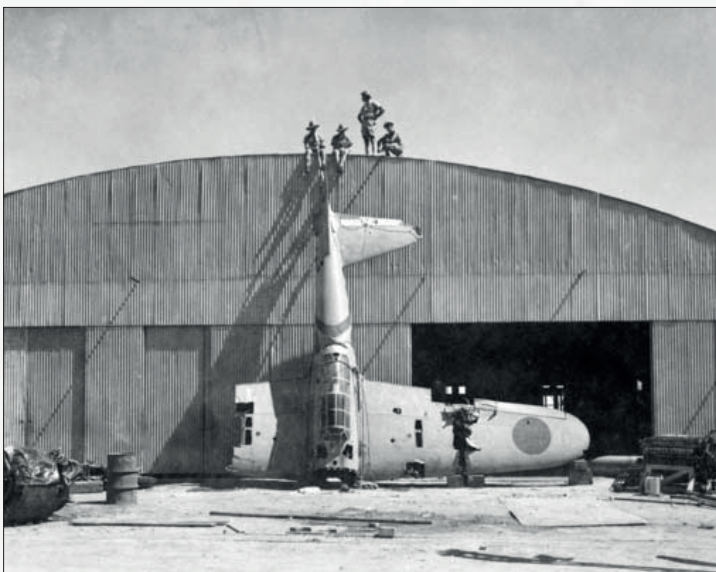
A Zero Fighter Type 21 is about to take off from Rabaul East airfield, New Britain Island. Date and unit are unknown. Note the patriotic Hōkoku donation text on the fuselage.

(Photo: San Diego Air and Space Museum)



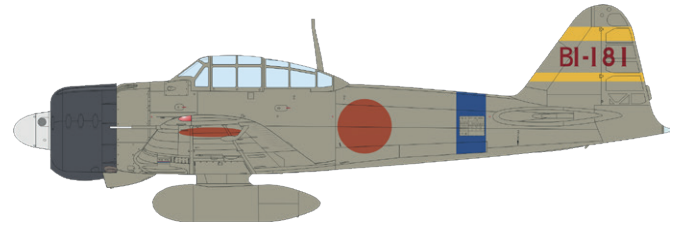
A6M2 fighters from the 3rd Kōkūtai in the spring of 1942, Celebes Island.

(Photo: San Diego Air and Space Museum)



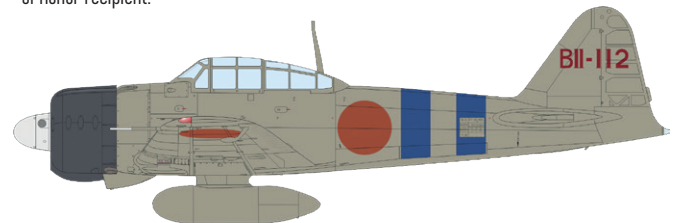
The wreckage of the A6M2 "V-110" from Tainan Kōkūtai after its recovery by Australian soldiers. PO3c Yoshimitsu Maeda crashed with this plane on April 28, 1942 on the southeast coast of New Guinea and was captured.

(Photo: AWM)



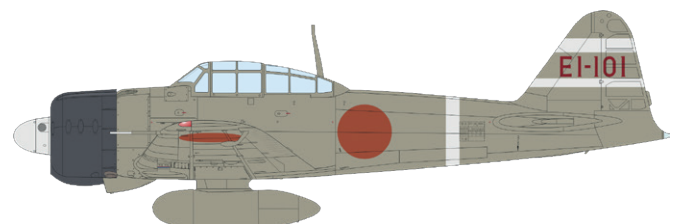
Lt. Masaji Suganami, Sōryū Fighter Squadron, Pearl Harbor first attack wave

In the first wave, eight Zeros from Sōryū, led by Suganami, attacked Wheeler and Ewa airfields. They destroyed 27 aircraft on the ground and shot down five planes in combat. Suganami then lost orientation, so he decided to return over the target and sacrifice himself. However, he encountered other planes and returned to the carrier. After graduating Naval Academy in 1933, he served in 13th and Tsukuba Kōkūtais. He led fighters on the carrier Ryūjō till November 1941, after that Sōryū fighters until June 1942. At the Battle of Midway, in the first attack wave, his formation shot down six American fighters. From July 1942 he served as Hikōtaichō of fighters at Genzan Kōkūtai (later Kōkūtai 252). Suganami went missing on November 14, 1942 while escorting Rear Admiral Tanaka's destroyers off Guadalcanal. Six Zeros under his command provided the 4th CAP. They first attempted to attack a „beautiful formation" of B-17s. After that attack on ten F4Fs from VF-10 brought them four victories. On return Suganami, over the protests of his subordinates, separated from the formation and headed southwesterly. He apparently joined the attack on SBDs from VB-10 and later, before running out of fuel, shot down Lt. Col. „Joe" Bauer, commander of VMF-212 and Medal of Honor recipient.



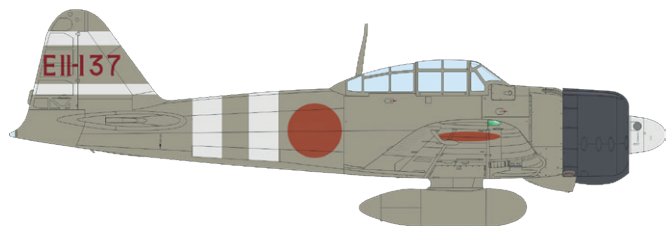
PO1c Kazuo Muranaka, Hiryū Fighter Squadron, Pearl Harbor first attack wave

Hiryū sent in the first wave of the attack on Pearl Harbor six Zeros under command of Lt. Okajima. They set 27 aircraft on fire at Ewa Field. Okajima's first wingman was PO1c Muranaka. He completed his training in August 1938 and after serving with Saeki, Ōita and Ōmura Kōkūtai, he was transferred to the 14th Kōkūtai in August 1939 in China. During December 27, he participated in the unit's first two victories. In August 1941, he was transferred to Suzuka Kōkūtai and in November of that year was assigned aboard Hiryū. During the Battle of Midway, he was sole pilot to escort Hiryū bombers throughout the action. After return he took off on a combat air patrol and shot down three planes. His Zero was hit and he was rescued by destroyer Nowaki. After recovering, Muranaka served on the aircraft carriers Shōkaku and Jun'yō. He fought over Guadalcanal and took part in the Battle of Santa Cruz. In 1944 he served as an instructor in Japan with the Tokushima Kōkūtai and in Singapore with the 11th Kōkūtai. In 1945 he served as Ensign on NIK2-J fighters at Hikōtai 701 as part of the elite Kōkūtai 343. He achieved six certain and three probable victories. After the war he joined the JSDF and attained the rank of Major.



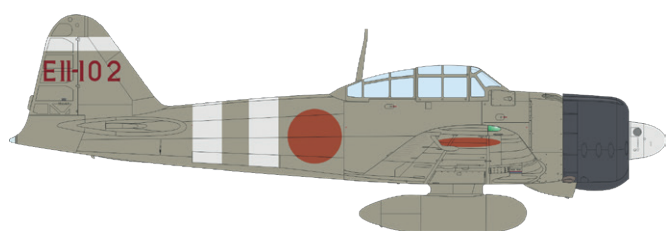
Lt. Tadashi Kaneko, Shōkaku Fighter Squadron, Pearl Harbor first attack wave

The Shōkaku sent in first wave five Zeros under command of Lt. Kaneko. They destroyed 35 aircraft at Kaneohe airfield and hit three others at Bellows. During the 2nd attack wave, fighters from Shōkaku patrolled over the carriers. Kaneko had commanded the fighter Shōtai aboard the aircraft carrier Ryūjō since 1937. He became well known in the Japanese press after his successful attack on the Chinese fighters near Shanghai on August 22, 1937. In the following years he served with the 15th and 12th Kōkūtai, and later with the Ōmura and Mihoro Kōkūtai. In September 1941 he became Buntaichō of the fighters on the Shōkaku. He shot down three Hurricanes during the attack on Trincomalee on April 9, 1942. In May 1942 he was appointed Hikōtaichō of the 6th Kōkūtai, which was to be based at Midway Atoll. During the Battle of Midway, Kaneko and his men were aboard Akagi and engaged in a battle on his own initiative, shooting down two torpedo planes. From October 1942 he fought over Guadalcanal as Hikōtaichō of the aircraft carrier Hiyō's fighters. In early November he was promoted to the rank of Lieutenant Commander. During a patrol on November 11, he shot down three F4Fs from VMF-121. In total he claimed at least eight victories. Kaneko was killed on November 14 in combat with SBDs from VB-10, his Zero was set on fire by gunner ACRM Gordon C. Gardner.



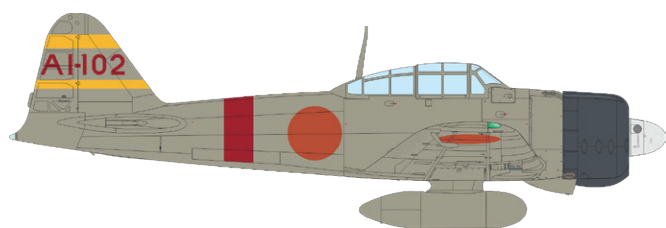
Lt. Masao Satō, Zuikaku Fighter Squadron, Pearl Harbor first attack wave

The aircraft carrier Zuikaku sent in the first wave five Zeros under the command of Lt. Satō. He escorted the bombers in the raid on Kaneohe Naval Air Station. As they met no resistance in the air, his fighter pilots destroyed over 32 aircraft on the ground. During the 2nd attack wave, Zuikaku fighters patrolled the carriers. Satō was a veteran of 12th Kōkūtai in China and served on the board of Akagi. From September 1941 to January 1942, as the so-called Buntaichō, he commanded fighters aboard the Zuikaku, and in May he began serving in that capacity on the aircraft carrier Kaga until her sinking at the Battle of Midway. From June 1942 he took over fighters as Hikōtaichō on the carrier Zuihō. He participated in the Battle of Santa Cruz, and in the 2nd phase Satō's formation shot down four aircraft. In April 1943, Zuihō participated in Operation „I“-go in the New Guinea and Solomon Islands area. Satō was killed during Operation „Ro“-go on November 11, 1943 in aerial combat over Bougainville.



P01c Tetsuzō Iwamoto, Zuikaku Fighter Squadron, patrol during the first attack wave, Pearl Harbor

During the first wave of the attack on Pearl Harbor Zuikaku launched six Zeros to patrol the vicinity of the carriers. P01c Iwamoto led the 2nd shōtai during this mission. At the time, he was the most successful naval fighter ace with 14 victories from combats over China with 12th Kōkūtai. In 1942, he took part in battles in the Indian Ocean and Coral Sea with his plane No. 102. From the summer of 1942 he served as an instructor in Japan. From March 1943, he participated in patrolling in the Kuril Islands with Kōkūtai 281. In November he was transferred to Rabaul to Kōkūtai 204 and later to Kōkūtai 253. In February 1944 he participated from Truk Atoll in the interceptions of B-24 bombers. In June 1944 he was transferred to Japan and from the autumn of that year as member of Kōkūtai 252 he took part in battles from bases in Taiwan and the Philippines. By the end of the war, he was serving with Kōkūtai 203 and participated in the battle for Okinawa. He achieved rank Lieutenant (junior grade) and passed away in 1955. Iwamoto is credited with 80 victories, but in his war diary, there were 202 successful attacks on enemy aircraft recorded by him.



Lt. Saburō Shindō, Akagi Fighter Squadron, Pearl Harbor second attack wave

During the second wave, fighter escort of thirty-six Zeros was led by Lt. Shindō. Nine Akagi Zeros met no resistance in the air and destroyed two aircraft at Hickam. Shindō was born in 1911 and graduated from the Naval Academy in 1929. He was assigned to the Omura Kōkūtai in 1935 and a year later went to the aircraft carrier Kaga. In 1940, he served in China with the 12th Kōkūtai during combat trials of the A6M2 fighter. Under his command, the first combat engagement occurred on September 13, resulting in 27 victories without loss. In November 1940, Shindō was transferred to the 14th Kōkūtai in Hanoi. From April to December 1941 he was the Buntaichō of the Akagi fighters, but had to be hospitalized after the attack on Pearl Harbor. After recovering, he was appointed commander of Tokushima Kōkūtai in April 1942. From November 1942, as Hikōtaichō at Kōkūtai 582, he was involved in the fighting over Guadalcanal. From July 1943, he was Hikōtaichō with the Kōkūtai 204 in the same area. In late 1943 and early 1944, he led fighters of the aircraft carrier Ryūhō and later served with Kōkūtai 653 and 203 in the defense of Taiwan, the Philippines, and Japan. At the end of the war, he was Hikōtaichō at Tsukuba Kōkūtai. Shindō passed away in 2000.



Dramatic photo taken during the Battle of the Eastern Salomons on August 24, 1942 shows a Shōkaku "Val" bomber shot down by anti-aircraft fire directly over the USS Enterprise (CV-6). Censor has deleted radar antenna from the photo.

(Photo: U.S. Navy National Museum of Naval Aviation)



A "Val" dive bomber trails smoke as it dives toward the USS Hornet (CV-8), during the morning of October 26, 1942. This plane struck the ship's stack and then her flight deck. A "Kate" torpedo plane is flying over Hornet after dropping its torpedo, and another "Val" is off her bow. Heavily damaged USS Hornet was later torpedoed by Japanese destroyers and sunk on October 27.

(Photo: US Navy)



Wrecks of A6M2 fighters photographed at Lae airfield, New Guinea, in September 1943. Airplane "F-151" from the 4th Kōkūtai can be seen in the background. In the foreground lies an aircraft that bears the remnants of the markings of several units. These were the Tainan Kōkūtai, the 22nd Kōkū Sentai and Kōkūtai 251. It was apparently left over there in November 1942.

(Photo: Naval History and Heritage Command)



Pilots in their Zeroes prepare for action at Buin Airfield, Bougainville Island in April 1943 during Operation "I-go". In the foreground are Type 21s from the aircraft carrier Zuihō. The field applied green paint varied from unit to unit.

(Photo: San Diego Air and Space Museum)



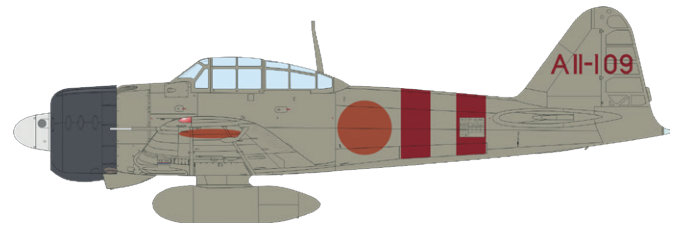
Planes from USS Saratoga and USS Princeton hit shipping at Rabaul on November 5, 1943, including several cruisers. Japanese vessels are standing out of Simpson Harbor into Blanche Bay. The Japanese airmen nicknamed Rabaul the "meat grinder". Fighting in this area in late 1943 and early 1944 deprived the Japanese naval air force of much of its remaining veteran personnel.

(Photo: Naval History and Heritage Command)



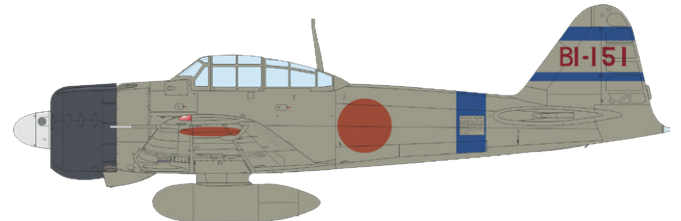
In this October 1945 photo, Japanese and Allied soldiers discuss (at Kavieng airfield?) near the wreck of an A6M2 on the island of New Ireland. Note the green paint applied in field conditions, the white outline of hinomaru on the upper surfaces and the absence of the yellow identification stripe on the leading edge of the wing.

(Photo: AWM)



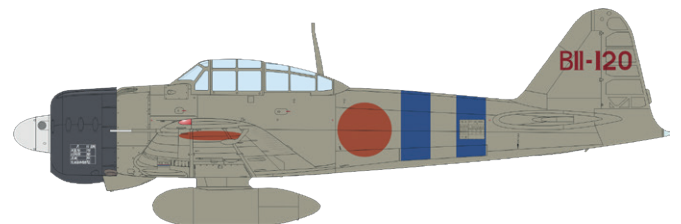
P01c Yoshikazu Nagahama, Kaga Fighter Squadron, Pearl Harbor second attack wave

The nine Zeros of the aircraft carrier Kaga were led in the second wave by Lt. Yasushi Nikaidō and destroyed six and ten aircraft respectively at Hickam and Wheeler field. P01c Nagahama, who had served on Kaga since 1939, took part in the attack. During the raid on Darwin on February 19, 1942 he scored five victories in one combat sortie. As first he shot down a Catalina from Patrol Wing 10. Unable to find his formation, he attacked five P-40s from the 33rd PS alone, shooting down four of them and then setting another flying boat afloat on fire. Other Kaga fighters apparently attacked the same P-40s. During the Battle of Midway, Nagahama took part in the first attack wave, and after his return, he participated in the destruction of the Devastators from the USS Hornet. He took part in the Battle of the Eastern Solomons while aboard Zuikaku. During a patrol on August 26 he shared destruction of Catalina from VP-14 (damaged as well on December 7, 1941). During the Battle of Santa Cruz on October 26 he shared several victories over F4Fs, including Lt. (jg) Paul Landry of VF-72. Nagahama was killed in an accident on September 6, 1943 in Japan while on duty at Tsukiki Kōkūtai. He is credited with 10 (or 13) victories and achieved the rank of Chief Petty Officer.



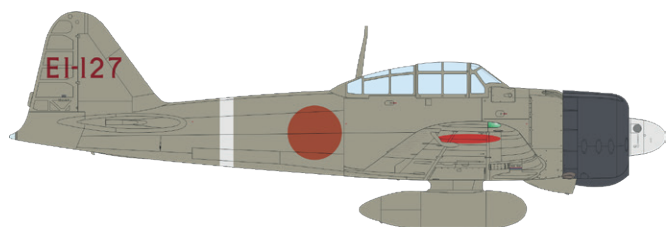
c/n 3277, Lt. Fusata Iida, Sōryū Fighter Squadron, Pearl Harbor second attack wave

In the second attack wave, Sōryū sent nine Zeros under the command of Lt. Fusata Iida against Kaneohe airfield and destroyed six flying boats. On return flight Iida signaled that he was running out of fuel. Because of that he returned and decided to crash his aircraft into a hangar at Kaneohe, but missed the target. Iida's flight hood was returned to his relatives in 1999 by the daughter of Mr. Sam Chun, who took it off from Iida's head after the crash. His body was buried with military honors and he was posthumously promoted two grades. There is also testimony that Iida did not believe in the success of the war against the US and his Zero was not low on fuel. There is now a memorial at the site of the crash. Due to the ground fire and attacks of P-36 pilots from the 45th FS, Iida's formation lost two more Zeros and one suffered serious damage. Two P-36s were shot down. Iida was born on December 2, 1913. He first served as an instructor with the Kasumigaura Kōkūtai, and in September 1940 he was assigned to the 12th Kōkūtai in China, which tested Zero fighters in combat. In a raid on Chengdu on October 26, his formation claimed ten aircraft without loss. Nevertheless, Iida expressed his disapproval of the way the war against China was being conducted. From September 1941, he served as Buntaichō of the aircraft carrier Sōryū's fighters until December 7, 1941.



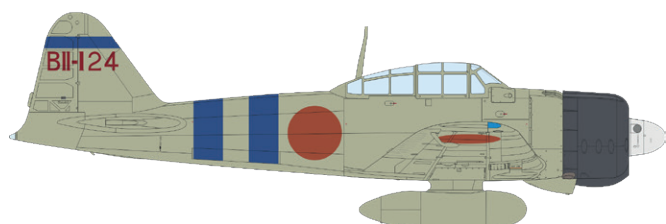
c/n 2266, P01c Shigenori Nishikaichi, Hiryū Fighter Squadron, Pearl Harbor second attack wave

Hiryū sent nine Zeros under the command of Lt. Sumio Nōno. His pilots attacked Kaneohe and Bellows bases, claiming two destroyed aircraft and one car. Zero of P01c Nishikaichi was running low on fuel and he was looking for a rescue submarine off Niihau Island without success. After belly landing he was captured by a Hawaiian native who took his papers and weapon. The pilot persuaded several residents of Japanese descent to cooperate and managed to get free. He dismantled machine gun from the aircraft, set the machine on fire and threatened to kill the natives to force the return of the secret documents. During the December 13, he and a helper captured Mr. Benjamin Kanahale and his wife. A scuffle ensued during which Kanahale was shot three times by the pilot, but became so enraged that he killed him against a wall. The pilot's helper, Mr. Harada, committed suicide. It is known as the Niihau Incident. Mr. Kanahale received the Purple Heart and the Medal of Merit from the President of the United States. Nishikaichi, whose fate was unknown to the Japanese side, was posthumously promoted two grades. Parts of Zero are on display at the Pacific Aviation Museum Pearl Harbor. On the engine cover there was a service plate with the name of the mechanic P03c Akimoto painted.



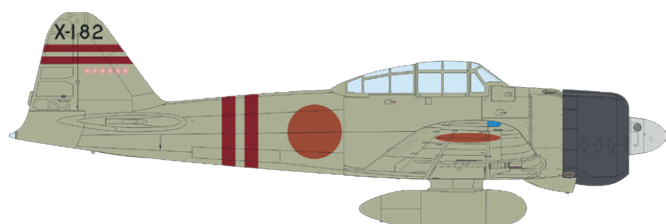
P01c Yokuo Hanzawa, Shōkaku Fighter Squadron, patrol during the second attack wave, Pearl Harbor

Fighters from Shōkaku did not participate in the second attack wave on Pearl Harbor. Instead, 12 aircraft from Shōkaku patrolled successively over the carrier group under the command of Lt. Masao Iizuka. P01c Hanzawa led the 1st shōtai on patrol. At that time, he had nearly three years of operational service under his belt, including a tour of duty with the 12th Kōkūtai in China. Hanzawa gained fame on May 8, 1942 during the Battle of the Coral Sea when he landed on the smoke-covered deck of a damaged carrier without help of arresting wire. He was killed in action at the Battle of Santa Cruz on October 26, 1942 in a duel with Lt. „Ken” Bliss, the Blue 29 section leader of VF-72, USS Hornet. Hanzawa attacked Bliss from behind, severely damaging his Wildcat. Apparently believing that Bliss was bailing out, he pulled up in front of him, but the American shot him down at that moment. Bliss ditched and survived. Hanzawa held the rank of Warrant Officer at that time.



c/n 5379, P01c Tsuguo Matsuyama, Hiryū Fighter Squadron, aircraft carrier Hiryū, December 7, 1941

During second attack against Hawaii the Hiryū aircraft carrier sent nine Zeros under the command of Lt. Sumio Nōno. His pilots attacked Kaneohe and Bellows bases, claiming two destroyed aircraft and one car. Third shōtai was led by P01c Matsuyama, who shot down in cooperation with his wingman P-40s piloted by 2nd Lieutenants George Whiteman and Samuel Bishop of the 44th Pursuit Squadron. Matsuyama had combat missions with the 13th Kōkūtai in China on his account already. On February 25, 1938, as wingman of the legendary Sadaaki Akamatsu, he participated in shooting down four aircraft. During the raids on Ceylon on April 9, 1942, Matsuyama's shōtai shot down a Blenheim Mk.IV, probably of S/Ldr Kenneth Ault's crew, who was leading formation of No. 11 Squadron RAF in an attack on Japanese ships. Matsuyama later served on the aircraft carrier Hiryū and was killed on April 7, 1943 in combat with the Wildcats off Guadalcanal. The airplane BI-124 was shot down on February 19, 1942 during the raid on Darwin. After being hit by anti-aircraft fire, Seaman 1st class Hajime Toyoshima landed on Melville Island and was captured by Aboriginal Matthias Ulungura. Toyoshima was the first captured Zero pilot and used alias „Tadao Minami”. He became one of the organizers of the largest prisoner escape in World War II. On August 5, 1944 at Cowra POW Camp he gave signal to escape. Total of 1,104 POWs attempted to escape, 231 were killed and four Australians lost their lives as well. Toyoshima was mortally wounded, so he lighted a cigarette and committed suicide.



Lt. Zenjirō Miyano, 3. Kōkūtai, Poeleti airfield, Timor, March 1942

This aircraft, manufactured by Mitsubishi, was photographed in April 1942 in Rabaul with partially repainted markings that originally belonged to Lieutenant Miyano. The bands and stripes may have been in dark blue or black color. Zenjirō Miyano served from 1939 with the 12th Kōkūtai in China and was appointed as a Buntaichō with the 3rd Kōkūtai in October 1941. He participated in the campaigns in the Philippines and the Dutch East Indies. During a raid on Broome, Australia, on March 3, 1942, Miyano attacked a Dutch civil DC-3. The pilot was Capt. Ivan Smirnov, a World War I Russian fighter ace. With one engine on fire, he managed to make an emergency landing, but the Zero pilots killed four passengers on the ground. In April 1942 Miyano was transferred to the 6th Kōkūtai, which was to be based at Midway. Part of his unit was on the way to Midway aboard the carrier Jun'yō, which participated in the attack against Dutch Harbor in the Aleutians. Miyano also participated in the raid. His unit was based at Rabaul from August 1942 and was redesignated Kōkūtai 204 in November. From March 1943 Miyano took position of Hikōtaichō. He was one of the innovators of combat tactics and was the first to introduce the finger-four formation in Japanese naval aviation. Miyano achieved a total of 16 victories and was killed on June 16, 1943, over Guadalcanal during escort of dive bombers.



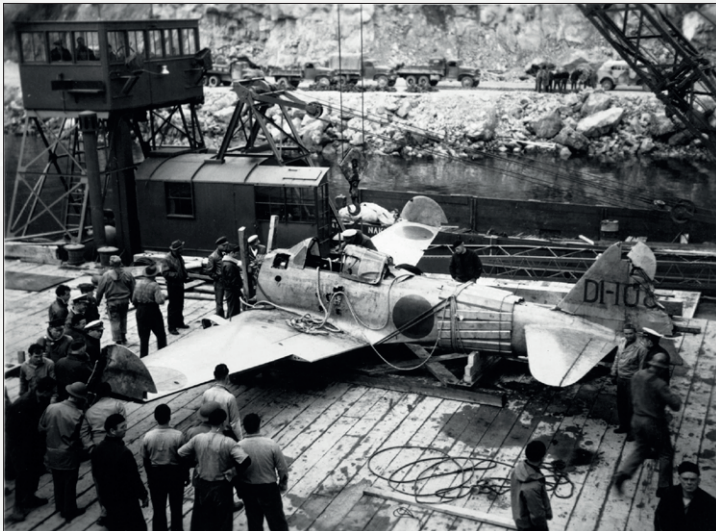
This wrecked A6M2 aircraft found in March 1944 by a reconnaissance patrol on Gasmata airstrip, New Britain was labelled "out of bounds to all troops by order of Commanding General Allied Air Forces" to discourage souvenir hunters. Note the aluminium paint peeling off propeller blade, showing red-brown primer color.

(Photo: AWM)



The armament of Japanese fighters included phosphorus bombs, which were used against bomber formations. This image from the fall of 1944 shows an American B-24 near Iwo Jima under the blast of this weapon.

(Photo: Fold3)



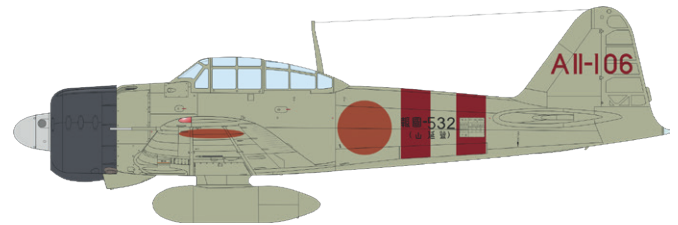
Koga's Zero of carrier Ryujō pictured in Dutch Harbor, Aleutians during transport to the US. The colour of this relatively new aircraft was described by the Americans in a technical report as "glossy grey-green".
(Photo: Naval History and Heritage Command)



Koga's Zero during testing at the NAS San Diego with Lt. Cdr. Eddie Sanders at the controls. During an emergency landing in the Aleutians, the aircraft flipped onto its back, killing its pilot Tadayoshi Koga. The tail unit was repaired, but the antenna mast had to be shortened.
(Photo: San Diego Air and Space Museum)

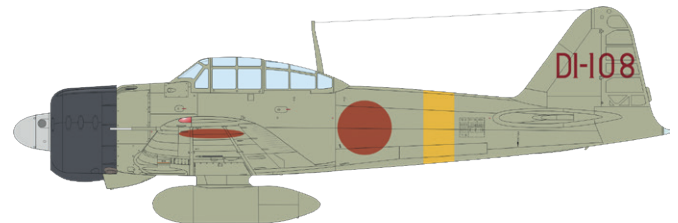
Date	Type	Number	Duration	Class	Pilot	PASSENGERS	REMARKS
28	Zero	1.3	7	Self			San Diego (Local)
29	"	1.1	8	Self			"
29	"	.8	8	Self			"
Total time to date 3813.5							
I certify that the foregoing flight record is correct.							
APPROVED: [Signature]							
U. S. NAVAL AIR STATION Anacostia, D. C.							
Brought forward 3813.5							
Time this month 26.0							
Total time to date 3839.5							
Total time to date 3839.5							

The last pages of Eddie Reuel Sanders' logbook from the tests of Koga's Zero. The tests had a profound effect on the tactics used against the Zeros and on the design of some Allied aircraft. Sanders fought in the Pacific in the second half of the war and retired in the 1950s with the rank of Rear Admiral.
(Photo: San Diego Air and Space Museum)



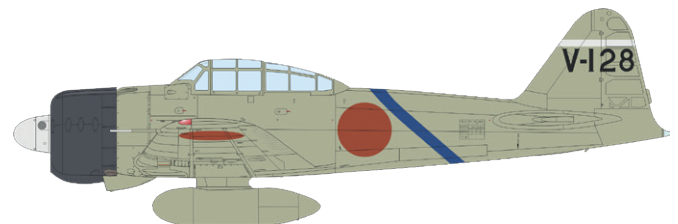
Kaga Fighter Squadron, Kisarazu base, Japan, April 1942

In early 1942, the aircraft carrier Kaga took part in attacks on Rabaul, Kavieng, targets in New Guinea and Port Darwin. In March, her aircraft participated in attacks against ships off Java. Due to hull damage caused by a reef in early February, Kaga was undergoing repairs at Sasebo from March 22, 1942. The Mitsubishi-built "AI-106" was photographed at Kisarazu in April 1942. It bears the patriotic donation inscription (Hōkoku) No. 532 and the name of the donor (Yamanobe-gō). It may be the name of a company or the donor's surname. It is likely that this aircraft participated in the Battle of Midway on June 4, 1942. Nine fighters from Kaga flew in the first attack wave, led by Lt. Izuka. They reported twelve victories. During the exhausting combats to cover their own task force, the Kaga's fighters claimed 32 aircraft destroyed. After the carrier was hit, some of them landed aboard the HJMS Hiryo. Two took part, as escort, in the raid on the USS Yorktown. The Kaga's Fighter Squadron lost six pilots during the battle, four of them during combat air patrol. However, elite ground personnel suffered heavy losses when the ship was sunk. Also aboard the HJMS Kaga were fighter pilots and mechanics from the 6th Kōkūtai, who were to be based at Midway Atoll after its capture. Some of them also took part in the air battle.



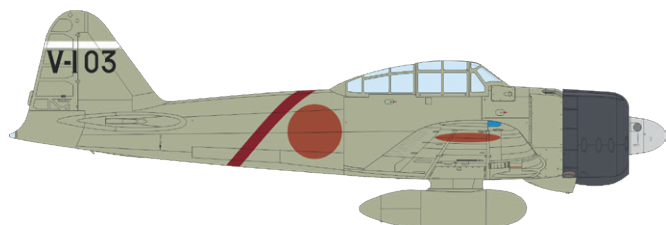
c/n 4593, P01c Tadayoshi Koga, Ryujō Fighter Squadron, June 1942

This aircraft was released by Mitsubishi on February 19, 1942. In late April and early May the Ryujō Fighter Squadron received Zeros instead of older A5M "Claude" aircraft. P01c Koga, a veteran of 12th Kōkūtai in China, piloted "DI-108" on June 4 during the attack on the Aleutians. He was one of the two wingmen of CPO Endō. Near Egg Island they shot down Ens. Albert E. Mitchell's Catalina of VP-42, which was carrying mail to Umnak. The burning aircraft landed on the sea and several airmen managed to get into the dingy. However, they were strafed and killed by the Japanese airmen. Koga's Zero was hit either by defensive fire from Catalina or, moments later, by ground fire. Koga attempted to land on Akutan Island, which was intended for the rescue of the Japanese airmen. The aircraft with retracted undercarriage and stopped engine overturned after touching soft marsh ground and Koga was killed. The Japanese attempted to rescue the pilot but were unable to find him due to bad weather. Five weeks later, the Zero was spotted by the crew of Lt. Williams "Bill" Thies' Catalina. On July 5, a US Navy team reached the plane. The Americans transported the aircraft to NAS North Island in San Diego. The Zero was repaired, given a Hamilton-Standard propeller and registration number TAIC 1. It underwent intensive testing but was apparently scrapped after the war. In memory of the Ens. Mitchell and his crew, the destroyer DE-43 was christened Mitchell.



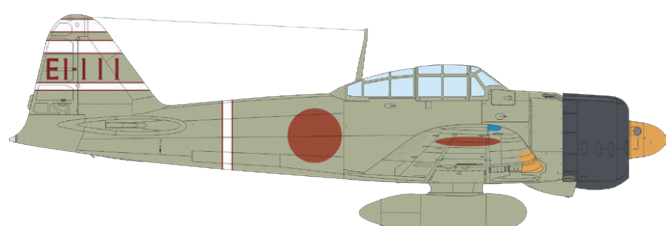
P01c Saburō Sakai, Tainan Kōkūtai, Lakunai airfield, Rabaul, New Britain island, August 1942

Saburō Sakai is best known Japanese fighter pilot, thanks to his memoirs and meetings with Allied airmen after World War II. He was born in 1916 and served from September 1938 with the 12th Kōkūtai in China. In October 1941, he was assigned to the newly organized Tainan Kōkūtai in Taiwan and took part in campaign heading South until he was wounded on August 7, 1942 off Guadalcanal. After recovering, he served as an instructor with Ōmura Kōkūtai, and later, despite bad eyesight, was combat deployed with Yokosuka Kōkūtai on Iwo Jima. At the end of war he served with Kōkūtai 343 (II) and Yokosuka Kōkūtai. He is listed as an ace with 64 victories, but Sakai himself claimed the number of his victories was lower. With the first two units he actually achieved 12 individual victories, 8 shared and 4 probables. The V-128 was also flown by P02c Arita and P01c Hiroyoshi Nishizawa, who is credited with 87 victories. The color of the stripes is chosen from Sakai's recollection, but there are other interpretations, such as a black or yellow stripe on the fuselage. During a fighter escort to Guadalcanal on August 7, Sakai shot down Wildcat "F12" from VF-5 piloted by "Pug" Southerland in an epic dogfight. Sakai was later severely wounded in the face by fire from VB-6 Dauntless near Tulagi Island. After nearly five hours and more than 1,000 km, he managed to land back at Rabaul. Sakai died in 2000 after formal dinner with members of the US Navy.



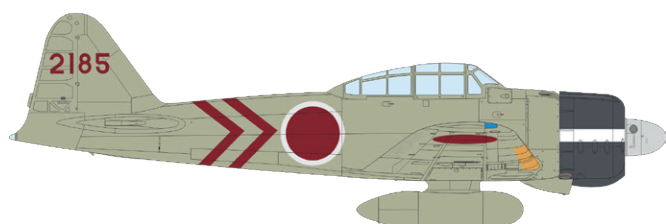
c/n 3647, Warrant Officer Tora-ichi Takatsuka, Tainan Kōkūtai, Lakunai airfield, Rabaul, September 1942

This aircraft was produced by Mitsubishi on March 3, 1942. It was flown in legendary Tainan Kōkūtai by the also famous fighter aces Saburō Sakai and Hiroyoshi Nishizawa. It is believed that with this Zero, on September 13, 1942 over Guadalcanal, Shōtai leader W. O. Takatsuka was shot down in a dogfight with Wildcats from VF-5 and VMF-223. Three of his wingmen were also shot down in the same action. The wreckage of this Zero was found in 1993 in a swamp about five miles east of Henderson Field. Remnants of code and markings remained on some parts. Takatsuka had served in the IJN aviation since 1933. In the 12th Kōkūtai he was one of the fighter pilots who achieved the first victories with Zeros in aviation history on September 13, 1940. He was promoted to Warrant Officer in October 1941 and demobilized. However he was soon called back into service by the IJ Navy and from June 1942 was assigned to Tainan Kōkūtai in Rabaul. He mainly took part in the fighting over New Guinea. In total he was credited with 16 victories including three in China. Fighting with the Wildcats had already nearly proved fatal to him once. During the raid on Guadalcanal on August 7, 1942, although he claimed four victories, he flew in front of one of his opponents and immediately was hit. The victor was Thomas Rhodes of VF-6 (USS Enterprise). Takatsuka's Zero caught fire, but he managed to put it out and escape.



Lt. Hideki Shingō, Shōkaku Fighter Squadron, October 1942

This aircraft manufactured by Mitsubishi carries an unusually large yellow identification stripe. Hideki Shingō (NA, 1931) served from 1934 in the Tateyama Kōkūtai, on the HJMS Ryūjō, he became an instructor in the Yokosuka Kōkūtai, and then held Buntaichō position in the Ōmura Kōkūtai. In the second half of 1937 he fought in China with the Kaga Fighter Squadron. He then served as Buntaichō at Kanoya, Saiki, Kasumigaura, Ōita and 14th Kōkūtai. In October 1941, Shingō became Hikōtaichō in charge of training at Tainan Kōkūtai, Taiwan. He trained primarily the long-range flying. On December 8 he led 44 Zeros in an attack on the Philippine airfields of Iba and Clark Field. From April 1942 he served briefly with the 6th and Genzan Kōkūtai, then in July he became Hikōtaichō of the Shōkaku Fighter Squadron and participated in the Battle of the Eastern Solomons. At the end of August he led a detachment operating from Buka airfield. He was shot down over Guadalcanal but avoided capture. During the Battle of Santa Cruz (October 1942), he led five Zeros in the second attack wave and descended to a lower altitude in order to draw the anti-aircraft fire away from the dive bombers. He was promoted to Lt. Commander in November 1942 and in the following years served as a Hikōtaichō of Tsuiki Kōkūtai in Japan, in Indonesia and Burma with Kōkūtai 331 and Hikōtai 603, and till April 1945 with Kōkūtai 252 in Japan. After the war, he worked in the police, later joined the JSDF, and retired in 1967 with 6,000 hours flying time and rank of Lieutenant General. Shingō-san passed away in 1982.



c/n 1503, Warrant Officer Kan-ichi Kashimura, Kōkūtai 582, Buin airfield, Bougainville Island, March 1943

Nakajima machine built ca August 1942. Its wreckage was found on Pavuvu Island and it is believed that W. O. Kashimura was lost with it on March 6, 1943. He remained missing after an air battle off Russel Island while escorting bombers, probably shot down by S/Sgt Robert H. Bahner, SBD gunner from VMSB-132. American crew described color of Kashimura's Zero as "greenish yellow". Kashimura served successively with Ōmura, Tokosuka and Kanoya Kōkūtai from 1934. In late 1937, he was transferred to 13th Kōkūtai in China. During the battle near Nanchang on December 9, 1937, he shot down one enemy aircraft and collided with another. Kashimura's A5M lost big part of port wing, but he managed to regain control just above the ground. He flew about 600 km back to his base in Shanghai and managed to make an emergency landing. The circumstances of this action were detailed in the Japanese press and his aircraft was displayed in Japan. In March 1938, Kashimura was transferred to the Yokosuka Kōkūtai, but he returned to the Chinese battlefield in late 1939 and served three months with the 12th Kōkūtai. He then returned to the Yokosuka Kōkūtai. During the Doolittle Raid, Kashimura was in the air but mistook a B-25 bomber for a Japanese aircraft. In December 1942, he was transferred to Kōkūtai 582 stationed in Rabaul. He was considered an excellent aviator and theoretician but used very harsh training methods. He had a total of 12 victories including 10 in China.



A large number of A6M2 aircraft served throughout the war in Japan with training units. Pictured here is a Nakajima-built machine serving with the Tsukuba Kōkūtai.

(Photo: San Diego Air and Space Museum)



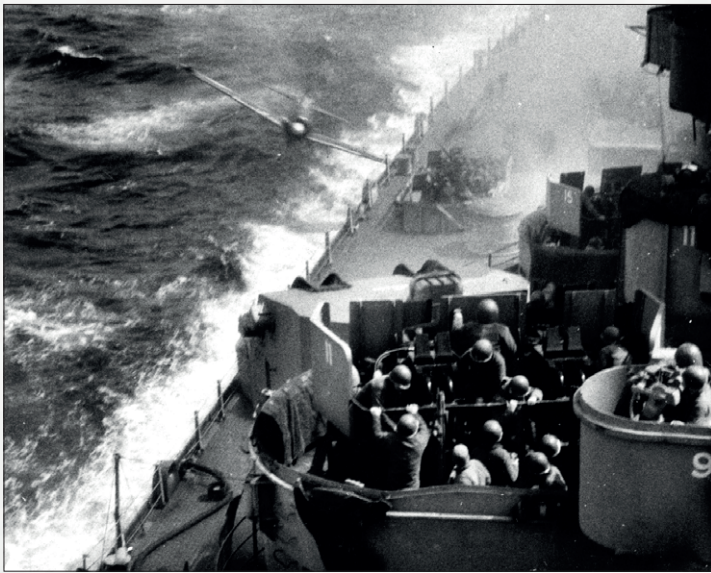
Battle of the Philippine Sea: the Japanese aircraft carrier Zuikaku (center) and the destroyers Akizuki and Wakatsuki maneuvering, while under attack by U.S. Navy carrier aircraft, during the late afternoon of June 20, 1944. "Zui" hit by several bombs during these attacks, but survived. She was sunk in October 1944 as last of the carriers that took part in Pearl Harbor attack.

(Photo: Naval History and Heritage Command)



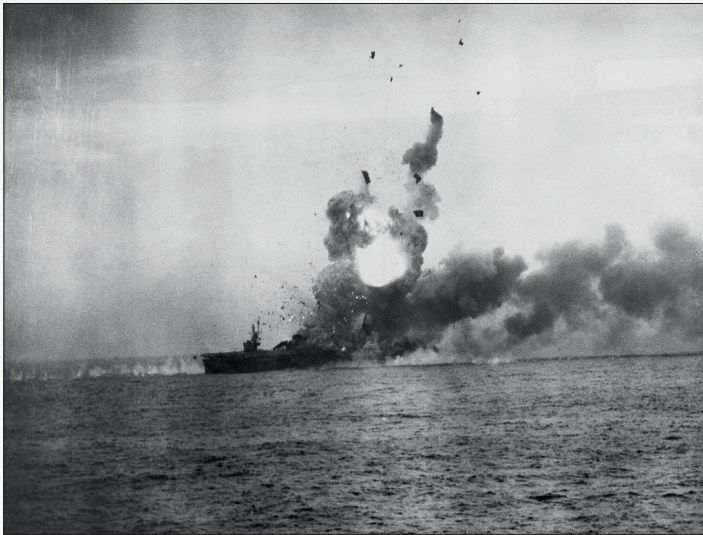
An A6M2 fighter from Kōkūtai 261 photographed at Saipan after U.S. forces occupied the island.

(Photo: Fold3)



USS Missouri (BB-63) about to be hit by a Kamikaze pilot of a A6M Zero, while operating off Okinawa on April 11, 1945.

(Photo: Naval History and Heritage Command)



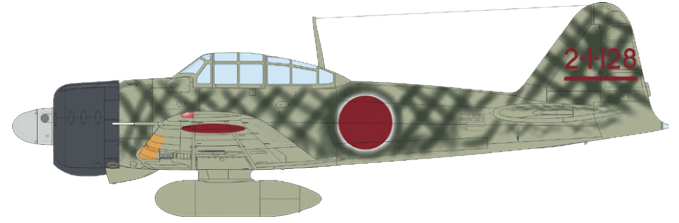
During attack of Kamikaze unit led by Lt. Yukio Seki on October 25, 1944 the first major explosion following the impact of the Zero aircraft on USS St. Lo (CVE-63) has created a fireball that has risen to about 300 feet above the flight deck. The largest object above that fireball is the aft aircraft elevator, which was hurled to a height of about 1,000 feet by this first explosion. In this photo it is about 800 feet high.

(Photo: Naval History and Heritage Command)



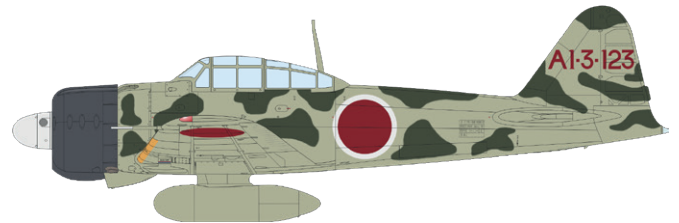
Aerial shot of Mitsubishi's manufacturing plant in Nagoya. The factory faced difficult logistics throughout the war to ship aircraft to factory airfield. Neither river shipping nor transport by rail could be resolved. Disassembled aircraft had to be transported through the narrow streets of the city by ox carts and later by Percheron horses.

(Photo: Fold3)



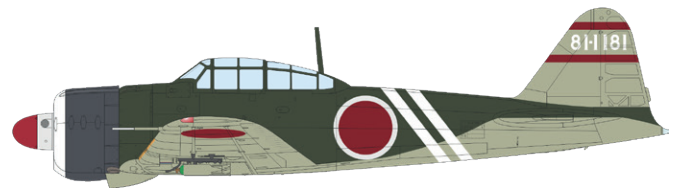
Jun'yō Fighter Squadron, Buin airfield, Bougainville Island, April 1943

This aircraft, manufactured by Nakajima, was photographed in April 1943 during Operation "I-go". The code "2-1" is the designation of the 2nd Carrier Division (Kōkū Sentai), which HJMJ Jun'yō was 1st carrier. The horizontal bar below the code identifies the leader of a Shōtai, which was usually a formation of three machines. In early 1943, an improvised green paint was applied to the Zeros. The colors chosen and the execution of the paint varied from unit to unit. During this period, among the notable fighter pilots of the unit were Buntaichō Lt. Yasuhiro Shigematsu (10 v.), W. O. Tomita Atake (10 v.), and W. O. Shizuo Ishi-i (29 v.). The aircraft carrier Jun'yō was completed in May 1942, whereupon she participated in the attack against the Aleutians, took part in the Battle of Santa Cruz, and escorted army convoys bound for New Guinea. In April 1943 her Air Group operated independently from Rabaul and surrounding bases, including Buin, then withdrew to Truk. From July the Air Group was again based in Buin until September 1, 1943, when its fighter pilots were taken over by the decimated Kōkūtai 204. In November of that year the Jun'yō Air Group was reformed and in January 1944 moved again to Rabaul, where it fought for a month. Jun'yō participated also in the Battle of the Philippine Sea and then remained in Japan until the end of the war. Jun'yō Fighter Squadron scored more than 90 confirmed victories.



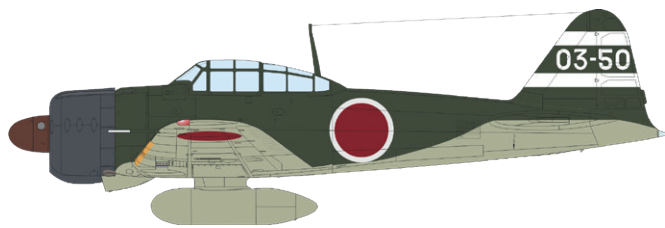
P02c Kōtarō Koyae, Zuihō Fighter Squadron, Rabaul, New Britain island, April 1943

Petty Officer 2nd Class Koyae was born in 1923 in Miyazaki Prefecture and completed his flight training in November 1942. He was then assigned to the fighter unit of the aircraft carrier Zuihō in March 1943. In April, the unit moved to Rabaul and Koyae flew the aircraft during Operation I-go. In this period, green paint was applied to Zeros in field conditions. It was usually painted by hand, the edges of the green fields being softened with thinner sometimes. However, according to the unit log, Koyae did not fly combat sorties in April 1943. In fact he did not encounter the enemy until November 1943 over Rabaul. During the same month he was transferred to Kōkūtai 253 at Rabaul and by early 1944 he was undergoing intense fighting. Upon his return to Japan, he was assigned to the Ōmura Kōkūtai. While on leave, on February 17, 1944, he spotted a Japanese bomber circling in the rain at night over the village of Goda, Miyazaki Prefecture. Koyae, with the help of the villagers, established a navigation signal and after some time he managed to guide the crew to right heading. For this achievement he received a written commendation from commander of Ōmura Kōkūtai. In July 1944, Koyae was assigned to Hikōtai 701 and fought in the defense of the Philippines. After returning to Japan, he was assigned to Hikōtai 701 (II) and served with Ōmura Kōkūtai at the end of the war. After the war he worked as a fireman and published his memories. According to the local press, he achieved 20 victories, but these may be victories achieved by fighter formations in which he took part.



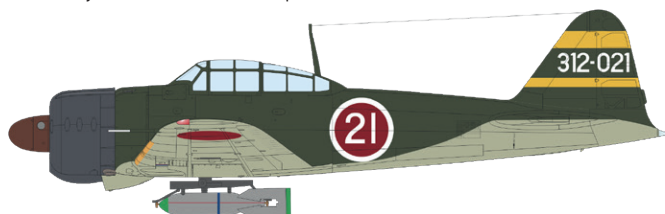
Lt. Kunio Kanzaki, CO of Hikōtai 311 of Kōkūtai 381, Kendari airfield, Celebes island, May 1944

Kōkūtai 381 was established in October 1943 at Kendari Base on the island of Celebes. It was a mixed Kōkūtai with 48 fighter-bombers (Hikōtai 602), 24 night fighters (Hikōtai 902) and 48 fighter aircraft in Hikōtai 311, the latter commanded by Lt. Kanzaki. During the 1944 he operated from bases on islands in Indonesia and the Philippines. Their most frequent opponents were U.S. Army aircraft. Kanzaki's unit used special phosphorus anti-aircraft bombs to attack enemy bombers. Kanzaki's aircraft, manufactured by the Nakajima company, has been reconstructed in the past with various color markings. It is assumed that the vertical tail surfaces and part of the upper wing surfaces were painted the same color like lower surfaces. The front part of the engine may also have been painted grey or yellow. It is not entirely clear from the photograph of the aircraft whether the white stripes on the lower fuselage are joined. It may have been designed to improve the mutual identification of Army and Navy aircraft when fighting Allied fighters. Another reason for this camouflage may have been for easier identification during night fighter flights. For example, Lt. Kanzaki and his wingman shot down a B-24 of the 380th BG over Balikpapan on the night of January 12-13, 1944. Some aircraft of Kōkūtai 331 were also painted in the same upper and tailplane camouflage. Both units operated in one tactical group during part of 1944.



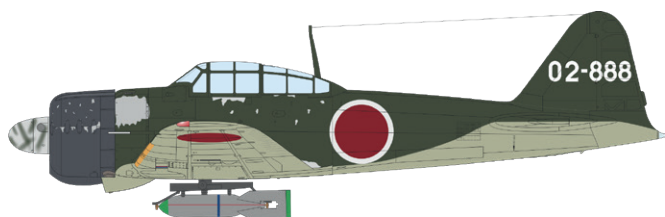
Hikōtai 303, Kōkūtai 203, Musashi airbase, Paramushir Island, Kuril Islands, April 1944

This Nakajima-built aircraft was assigned to one of the formation leaders of Hikōtai 303, part of Kōkūtai 203, established in April 1943 from the training Atsugi Kōkūtai. At that time, this unit was armed with Zeros and "Gekkō" (Irving) night fighters. From April 1944 it defended the northern part of the Kuril Islands. From May, Kōkūtai 203 fighters clashed with American crews of Ventura and Liberator bombers. In some cases, the Americans had to make emergency landings on Soviet territory. Among the experienced aviators of this unit was Japan's most successful naval fighter pilot, Hiroyoshi Nishizawa. He served with Kōkūtai 203 from March 1944 and was assigned to its Hikōtai 303 in July. However, he did not record any victories in the Kuril Islands area. In this period Nishizawa wrote document about air combat basics due to high losses of naval aviation units and the inexperience of the new unit commanders. Since the fall of 1944, Kōkūtai 203 had seen combat at Okinawa, in the Philippines, and in Taiwan. At the time of the fighting in the Philippines, Hikōtai 303 was temporarily assigned to Kōkūtai 201. In 1945, Kōkūtai 203 was deployed in the defense of Japan, and its structure expanded up to five Hikōtais by the end of the war, with a total of 240 fighter aircraft. Kōkūtai 203 was also involved in fighter escorts of Kamikaze formations, including G4M "Betty" bombers with Ōka rocket powered aircraft.



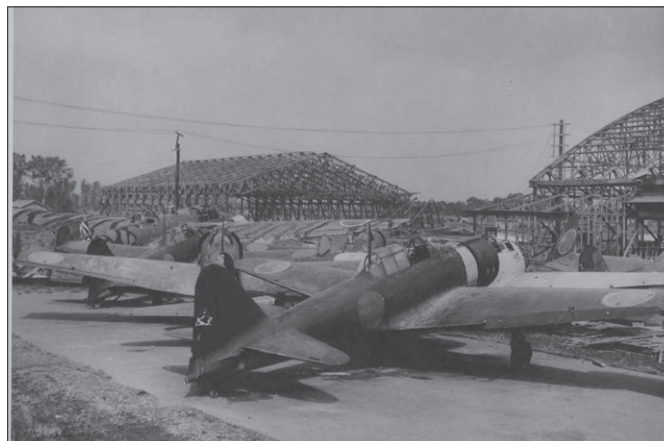
Lt. Toshio Suzuki, Kōkūtai 601 (I), HJMS Zuikaku, Tawi Tawi base, Philippines, June 1944

This Nakajima-built machine was piloted by Lt. Toshio Suzuki. He was in command of a squadron of eleven HJMS Zuikaku A6M2 fighter-bombers. His unit was part of Kōkūtai 601 (I). In mid-1944, the affiliation to the Zuikaku's Carrier Air Group (Hikōkita) was identified by the code 312 on the tail surfaces. The white numbers on the hinomaru were used during training operations and were usually chalk painted. Toshio Suzuki was born in Mitsukaidō in Ibaraki Prefecture and graduated from the Etajima Naval Academy in 1941. As a cadet, he was assigned aboard the cruiser Suzuya. After completing flight training, he was assigned to Kōkūtai 601 (I) in May 1944 and promoted to Lieutenant. Squadrons of Kōkūtai 601 (I) were divided into CAGs on boards of Taihō, Shōkaku and Zuikaku. In addition to Suzuki's fighter-bombers, Zuikaku had 24 A6M5 "Zeke" fighters, a dive-bomber squadron with 18 D4Y "Judy" and three D3A "Val", 14 B6N "Jill" torpedo bombers, and a reconnaissance squadron with several "Judy" and "Val" machines. Kōkūtai 601 (I) engaged in the Battle of the Philippine Sea on June 19 and suffered devastating losses. Lt. Suzuki led a ten-man A6M2 formation in the second wave, along with four A6M5 fighters and four "Jill" bomber crews. However they failed to find their target, and the American fighters shot down one bomber and eight A6M2s, including Suzuki's. Taihō and Shōkaku were sunk after a submarine attack, and Zuikaku was damaged by bombing.



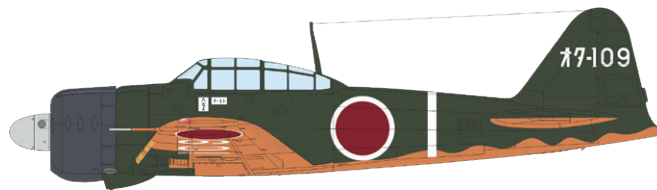
1st Kamikaze Tokubetsu Kōgekita, Shikishima-tai, Mabalacat airfield, Philippines, October 1944

The Nakajima-built "02-888" belonged to first official Kamikaze unit in the history of the Japanese Naval Air Force. As part of the 1st Kamikaze Tokubetsu Kōgekita, a total of nine groups of airmen were organized, mostly from Kōkūtai 201. Their target was Task Force Taffy 3 during the Battle of Leyte Gulf. The Shikishima unit was named after the poetic term used for the island of Yamato (Honshū), or also old Japan. Its commander was Lt. Yukio Seki. He was born in 1921 and graduated from the Naval Academy in 1941. He first served on the battleship Fusō, then experienced the Battle of Midway on the seaplane carrier Chitose. In 1943 he completed basic flight training and later received training on carrier bombers. In September 1944, he was assigned in the Philippines to Kōkūtai 201, which specialized in skip bombing with A6M fighters. The unit suffered heavy losses during September and October. Replacements were taken over in Mabalacat from other units, including Hikōtai 602 (Kōkūtai 381), from which machine "02-888" appears to have originated. On October 25, Lt. Seki led one of seven groups of Zero pilots equipped with bombs who sacrificed themselves in an attack on American vessels. Seki's fighter escort was provided by legendary fighter pilot Hiroyoshi Nishizawa of Kōkūtai 203. Lieutenant Seki or one of his wingmen hit the aircraft carrier USS St. Lo, which sank after 30 minutes. Of the 889 crew members, 113 were killed or missing and about thirty others died of their injuries.



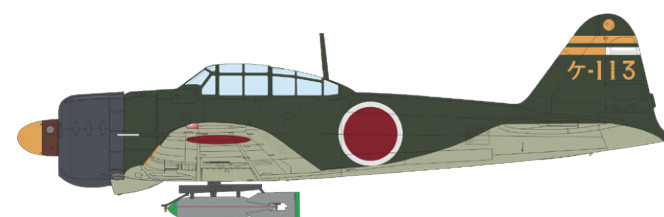
A6M2 Type 21 fighter plane of unknown air unit at Atsugi base photographed after the end of the war. The Zero Type 21 was deployed in combat until the end of the war, including night fighter duties as part of Kōkūtai 302, which was stationed at Atsugi Base.

(Photo: Fold3)



Ōita Kōkūtai, Ōita Airport, Japan, early 1944

This Nakajima-built machine served with the training unit Ōita Kōkūtai. It bore orange paint on the undersurfaces and had a non-standard dark green paint on the undercarriage covers and part of the undersurfaces. The characters in the Katakana "O" and "Ta" are the unit markings. The machine carries warning stencils on both sides of the fuselage. The vertical rectangle reads "87A" as a warning that the aircraft uses 87 octane fuel instead of the 91 octane fuel used in Sakae 12 engines in combat units. In the horizontal rectangle is the warning "būsuto" (boost). It draws attention to the lower boost pressure limit associated with 87 octane fuel. Exceeding it threatened engine damage. The late production A6M2s from Nakajima may have had the engine cowling painted black instead of antiglare blue-black. The outer fuselage sections below the cockpit canopy and canopy frames may have been painted in interior green or camouflage dark green. The Ōita Kōkūtai was established in 1938 and was used for training until March 1944. Many famous aviators passed through its ranks. Combat veterans were also assigned to this unit as instructors, such as Kaneyoshi Mutō, who served with the unit after his combat duty in China and five victories of his total 28.



Lt. Nobuo Miyatake, Kamikaze Tokubetsu Kōgekita, 1. Shichisei-tai, Kanoya airbase, Japan, April 1945

From the April 3, 1945 a total of eight special attack units with the battle name "Shichisei" were organized from the airmen serving in Genzan Kōkūtai (II) and Hikōtai 306 (part of Kōkūtai 721). Lt. Miyatake, who was 24 years old at the time, led the 1st Shichisei-tai in an attack on a convoy off Okinawa on April 6, 1945. During that day, eleven other airmen from Genzan Kōkūtai (II) sacrificed their lives along with him. They took off successively in four formations. Their formation was part of the 524 aircraft of special attack units and escort fighters from IJN and IJA sent against Allied vessels off Okinawa as part of Operation Kikusui 1. The U.S. Navy lost destroyers USS Bush and Colhoun and other ships were severely damaged. "Shichisei" units were sent against ships off Okinawa, Yoronjima, Kikajima, and Tanegashima islands in several missions till May 14. Only one of them returned to base due to bad weather. Lt. Miyatake was born in Kagawa Prefecture and graduated from the Etajima Naval Academy in 1942. Before the mission, he wrote farewell letters to his mother and three sisters. His father was interned in Siberia at the time. Nobuo Miyatake was posthumously promoted to the rank of Commander. His aircraft from Nakajima production is designated "Ke-113".



#82212

A6M2 Zero Type 21

[Product Page](#)

#11155

TORA TORA TORA!

[Product Page](#)


#11158

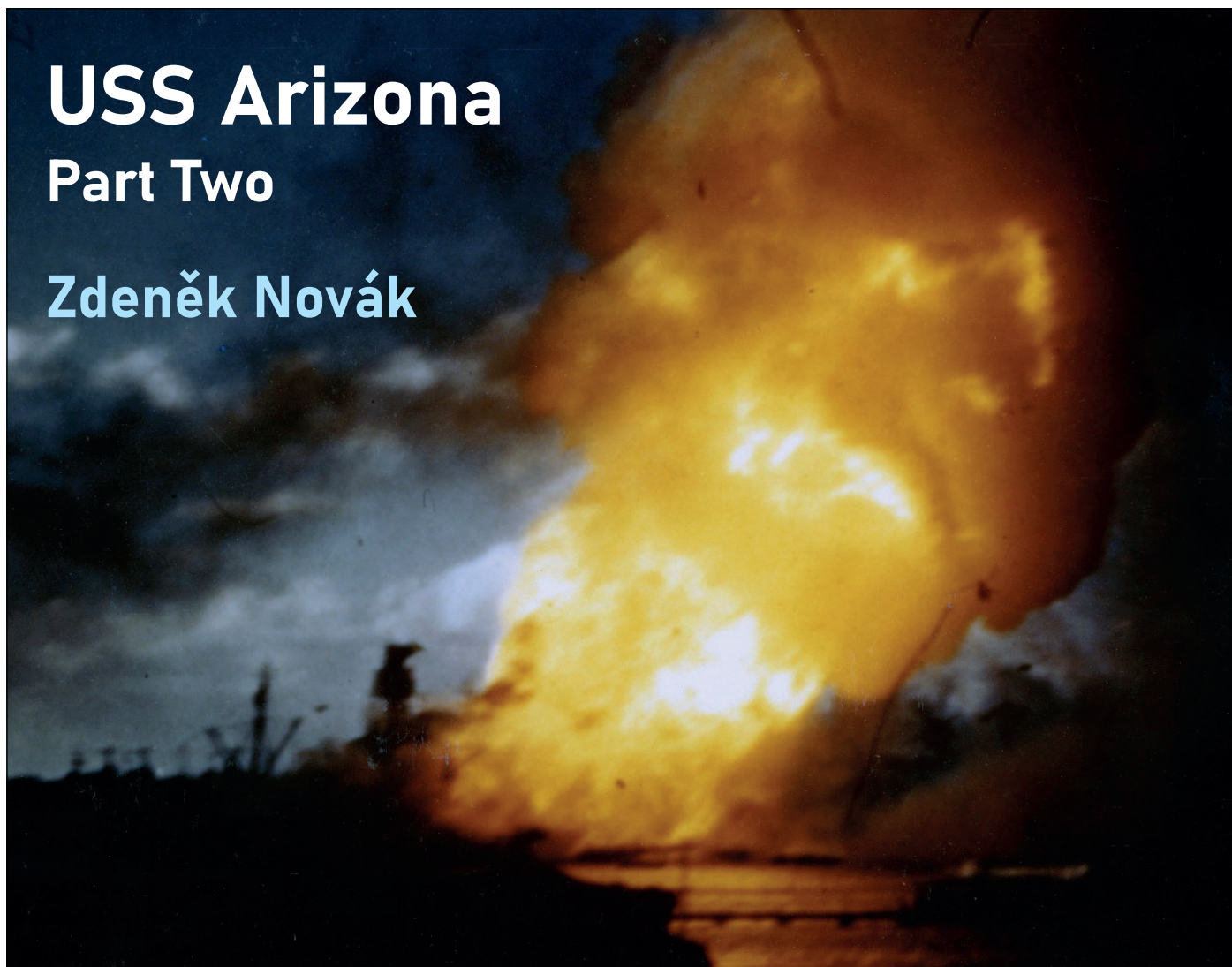
ZERO ZERO ZERO!

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USS Arizona

Part Two

Zdeněk Novák



The Attack on Pearl Harbor has become an infamous theme of discussion among military historians, a theme about which many publications have been written, along with articles too numerous to count. For this reason, we will stick to the essential facts connected specifically to the USS Arizona on that fateful date.

December 7, 1941

The attack began with dive bombers hitting targets at the Naval Air Base on Ford Island at 0755h. The USS Arizona was protected from torpedo attacks from the right by Ford Island itself, and from the left mostly by the adjacent USS Vestal. As a result, the Arizona became a target for ten Nakajima B5N2 Kates, armed with 800kg (1760lb) armor piercing Type 99 bombs. The bomb was built around the 410mm (16.1 inch) artillery shell used by the Japanese naval vessels Nagato and Mutsu, offering good penetrating ability with a comparatively small explosive charge (22.8kg or 50lbs). Release from a height of 2,500m (8,200 ft) was calculated by the Japanese to allow penetration of 150mm (6 inches) of armor plating. The bomb was released in horizontal flight, and only 48 B5N2s were so armed for the first wave of the attack. First, a group of five B5N2s from the Kaga (2nd Chutai, 46th + 47th Shotai commanded by Lt. Hideo Maki) attacked at 0805h. This was followed a minute later by a same number of Kates flying off the Hiryū (1st Chutai, 40th + 48th Shotai, commanded by Frigate Capt. Tadashi Kusumi). Both formations dropped their bombs from about 3,000m

(9,850 ft). This was followed by a catastrophic explosion at 0807h, which destroyed the entire forward section of the ship, including the main superstructure. The first analyses attributed the demise of the Arizona to eight bomb and one or two torpedo hits. The torpedo hits were ruled out by inspection of the wreckage. Eyewitness accounts purporting these apparent torpedo strikes were chalked up (modified?) to bomb hits and subsequent explosions in the water directly adjacent to the ship. The final bomb hit tally was placed at between two and four, while the Japanese airmen claimed three to four. Two bombs hit the ship with certainty. The first successful hit was made by a crew from the Kaga, striking Turret No.4. The bomb slipped below the turret's armor plating towards the rear and penetrated the main deck before exploding. There was a resulting fire that caused no extensive damage. Three other bombs hit the water, and one struck and damaged the repair vessel USS Vestal. The fatal strike came from the carrier Hiryū's aircraft. Three bombs hit the water next to the ship, while a four-

rth hit the Vestal and severely damaged her. The USS Arizona suffered a direct hit to her upper deck at the bow on her starboard side, immediately ahead of the barrette of Turret No.2. In all likelihood, the bomb went off after penetrating the armor plating. The theory that the 4.75 inch (121mm) armored deck withstood the impact of the bomb and that the explosion was the result of a spreading fire through unsealed bulkheads comes across as unlikely. The sirens on the Arizona went off at 0755h, and the crew had enough time to close these passageways, which would have been one of the first things to be done during an emergency. As has been noted, the Type 99 bomb was capable of penetrating 6 inches (150mm) of armor from a height of 8,200ft (2,500m), and being dropped from an actual height of 9,850ft (3,000m), the penetration capability of the bomb has been calculated at around 7 inches (180mm). Attentive readers will recall that the armored deck of the USS Arizona was increased and that the increase was by way of additional plating added to the existing, but the 800kg

Title photo: USS Arizona (BB-39) ablaze, immediately following the explosion of her forward ammunition magazines. Frame clipped from a color motion picture taken from on board USS Solace (AH-5) (photo: National Archives).



The forward magazines of USS Arizona explode after she was hit by a Japanese bomb. Frame clipped from a color motion picture taken from on board USS Solace (AH-5) (photo: National Archives).

bomb would still have been thoroughly adequate in terms of its deck penetration capability. Nevertheless, there is a list of theories explaining exactly what led to the catastrophic explosion on board the Arizona, and an analysis of these is beyond the scope of this article. The fact remains that approximately seven seconds after the bomb's impact, there was an explosion of six 14-inch munitions storage spaces and two others housing 4-inch munitions for a total of over 600 tons of explosives.

The hit is attributed to the lead plane of the formation (flown by Frigate Capt. Tadashi Kusumi, Observer/Bombardier Lt. Shojiro Kondo and Gunner Non-commissioned Officer 1st Class Masao Fukuda). Some sources also suggest two more hits to the mid-section of the ship, one directly striking the smokestack and the other at the fifth port strut of the forward mast. Some sources claim the mid-section damage was the result of flames and subsequent explosions of the 4-inch ammunition stores.

USS Arizona burning furiously, after her forward magazines had exploded when she was hit by a Japanese 800 Kg bomb. At left, men on the stern of USS Tennessee (BB-43) are playing fire hoses on the water to force burning oil away from their ship (photo: National Archives).



The man who sank the Arizona

(Jan Bobek)

Some researchers have suggested that the fatal hit on the battleship Arizona was achieved by the crew of the B5N bomber „Kate“, commanded by P01c Noboru Kanai of the aircraft carrier Hiryū. This aviator was killed during Wake Atoll raid on December 22, 1941 by Wildcat pilot Capt. Herbert C. Freuler of VMF-211. Only recently has Kanai's diary been published, proving that his formation at Pearl Harbor attacked two other vessels. This confirmed the original theory about the identity of the airman who caused the explosion of the Arizona. It was Lt. Cdr. Tadashi Kusumi of the same carrier. His biography has never been published.



The famous Japanese aviator Mitsuo Fuchida remembered Kusumi as a gentle, quiet, polite and sincere man who had a methodical mindset and usually spoke slowly. Tadashi Kusumi was born in Tokyo on July 10, 1907. After studying at Keika Junior & High School, he was admitted to the Etajima Naval Academy and graduated at the end of March 1927 as the 60th student out of 122 graduates in its 57th Class. No records of his service on warships have survived. Every cadet had to undergo training on warships, and Kusumi was promoted to Ensign in December 1930 thento Lieutenant (junior grade) exactly two years later. At the end of 1932 he entered the flight training (23rd Class) and graduated in July the following year. He underwent further training at Tateyama Kōkūtai and in April 1934 was assigned to the aircraft carrier Hōshō's Air Group, which had participated in the so-called Shanghai Incident two years earlier. After a year service aboard that ship, Kusumi was assigned to the Ōmura Kōkūtai in May 1935 and transferred to the Kasumigaura Kōkūtai in October of that year. He probably served as an instructor in both units. In November he was promoted to Lieutenant.

He assumed his first command in November 1936. As the so-called Buntaichō, he

led a squadron of horizontal bombers of the aircraft carrier *Kaga*. From July 1937 his unit participated in the undeclared war against China. At that time it was armed with sixteen Yokosuka B3Y1s and twenty-two Mitsubishi B2M2 bombers. Kusumi commanded one of these squadrons or part of it. *Kaga* also had sixteen Aichi D1A1 „Susie“ dive bombers and sixteen Nakajima A2N1 fighters, which were replaced a month later by modern Mitsubishi A5M „Claude“ monoplanes. In September 1937, Kusumi's squadron rearmed to thirty-two Yokosuka B4Y1 „Jean“ biplanes. It was with these machines that the *Kaga* airmen sank the American river gunboat USS „Panay“ on the Yangtze River on December 12.

After a year and a half of virtually continuous combat deployment in China, Tadashi Kusumi was transferred to Ōita Kōkūtai in December 1938. His task was to pass on experience from the Chinese battlefield, but in mid-January 1939 he was additionally appointed inspector for aircraft division at Hiroshima Arsenal. In November 1939 he was again assigned to Kasumigaura Kōkūtai, but only a month later he was appointed to the post of Hikōtaichō at Yatabe Kōkūtai. This was a training unit that provided flight training under the Sōren program for Navy enlisted men and NCOs.

In November 1940, Kusumi was promoted to the rank of Lieutenant Commander and then served briefly with Iwakuni and Yokosuka Kōkūtai. He returned aboard an aircraft carrier on September 1, 1941. He was appointed to the position of Hikōtaichō of the B5N „Kate“ bomber squadron within the HIJMS Hiryū Air Group. After the attack on Hawaii, the Japanese Navy officially credited Kusumi's crew with the destruction of the battleship *Arizona*. En route to Japan, Tadashi Kusumi led Hiryū bombers during raids on Wake Atoll on December 22 and 23. In the spring of 1942, he commanded bombers during raids on Colombo on April 4, and Trincomalee during April 9.

His last assignment was the position of Hikōtaichō of the B5N „Kate“ bomber squadron of the aircraft carrier *Kaga*, which he assumed on April 20, 1942. He participated in the Battle of Midway, but no records of his involvement in air operations survived. He perished in the cockpit of his aircraft in the ship's hangar, which was hit by Dauntless bombers during the fateful rush to rearm Japanese aircraft. Tadashi Kusumi was posthumously promoted to Commander.

Kusumi's photograph and key information for this biography was kindly provided by Mike Wegner with the support of Ron Werneth. Many thanks to both gentlemen.



View looking down Battleship Row from Ford Island Naval Air Station, shortly after the Japanese attack. USS California (BB-44) is at left, listing to port after receiving two torpedo hits. In the center are USS Maryland (BB-46) with the capsized USS Oklahoma (BB-37) alongside. USS Neosho (AO-23) is at right, backing clear of the area. Most smoke is from USS Arizona (BB-39) (photo: National Archives).

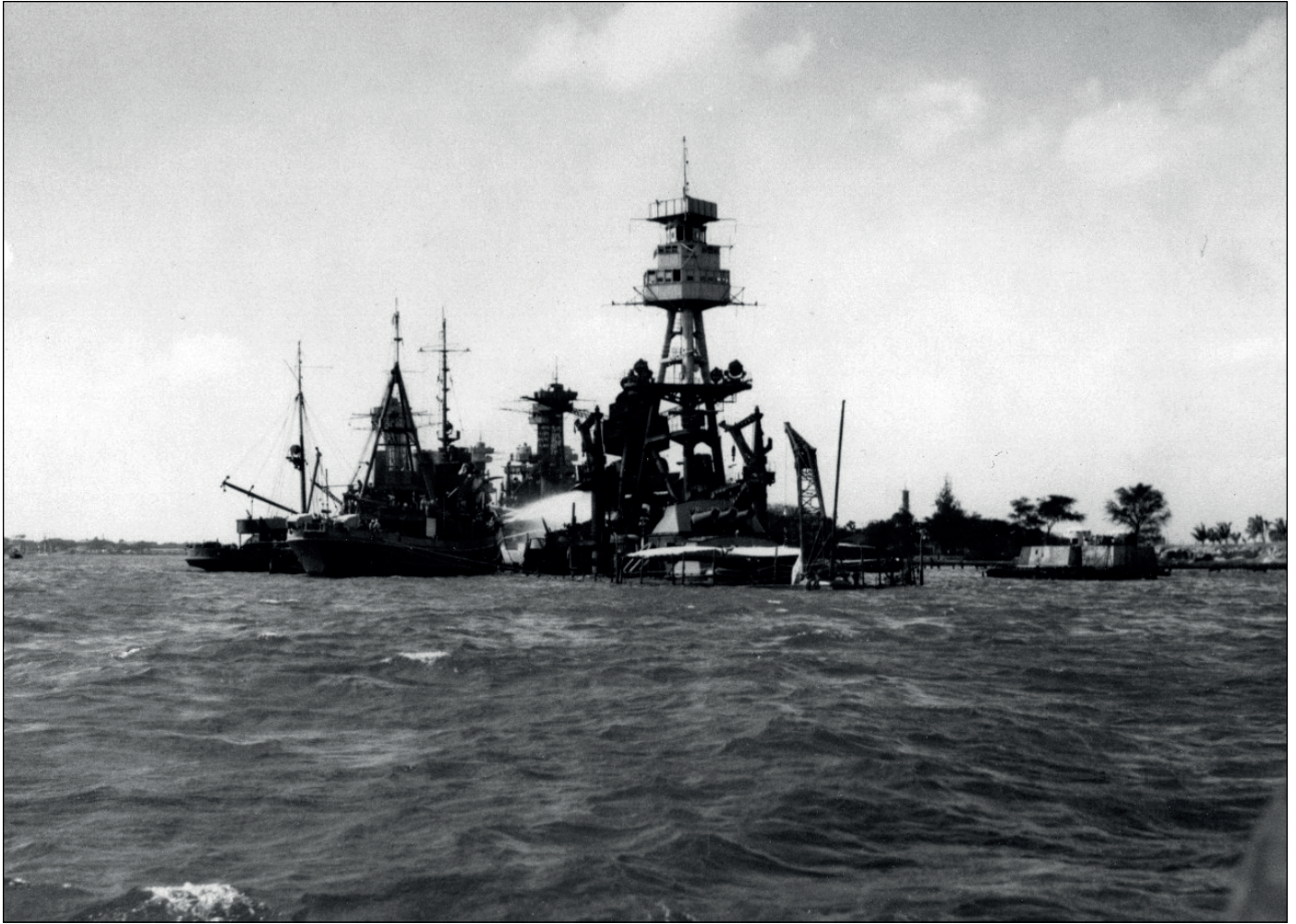
The explosion virtually destroyed the entire structure forward of the front extension to the anchor guides level with the armored deck. Number 1 and 2 turrets fell through to the same level, and the heavily damaged superstructure and front three-legged mast collapsed forward to a 45 degree angle. Fires and resulting explosions destroyed the center section of the ship all the way to the dinghy crane deck. The stern of the ship up to this crane deck took only minor damage. The area surrounding the ship was ablaze due to leaking fuel and it took two days to put the fire out. The loss of life was the heaviest among the ships in Pearl Harbor that day and totaled 1,177 crew killed, including the Captain Van Valkenburg and Rear Admiral Isaac C. Kidd. After an assessment of the damage to the *Arizona*, she was deemed unrepairable. Work began on December 22nd to remove useable weapons, munitions and other salvageable items, and to dismantle the wreck above the waterline. The USS *Arizona* was officially struck from the US Navy registry on December 1, 1942.

Epilogue

Salvage and demolition work on the USS *Arizona* continued to the end of 1943 when they were definitely completed. The remains of less than 200 of her crew were lifted from the surface of the wreck and surrounding areas immediately after the attack. During 1942, divers would retrieve a further 105 bodies, but, despite pressure from the victims' relatives, this recovery effort was halted due to the decomposition of the bodies and dangers faced by

the divers. Of the items that were salvaged, the main caliber weapons are noteworthy. Number 3 and 4 rear turrets were removed, with the intent of placing them as coastal batteries 'Pennsylvania' and 'Arizona' on the Mokapu Peninsula near Kahu Point on Oahu. Only the 'Pennsylvania' was completed in August, 1945, which celebrated the Japanese surrender by way of test firings. Both her and the nearly completed 'Arizona' battery were decommissioned and scrapped shortly after the war. The roof and front of Turret No.2 were removed and the cannon refurbished to be installed in the USS Nevada as replacements for her worn out units. The remaining parts of Turret No.2 and all of Turret No.1 remained in place.

Demolition of the remains of the wreckage were considered through the use of explosives and outright removal from the water, either completely or in part. In 1947, it was decided to leave the wreck in place as the final resting place of the crew. A flag mast was placed over the wreckage in 1950, and the daily tradition of raising and lowering Old Glory at the site was initiated. On March 15, 1958, Congress approved and President Dwight Eisenhower signed into law the establishing of a memorial over the wreck. The construction of the memorial structure across the deck of the wreckage was completed on May 30, 1962, and currently stands in honor of the *Arizona*'s crew, and to all the victims of the attack of December 7, 1941.



USS Arizona sunk at Pearl Harbor, Hawaii, after her fires were out, 9 December 1941. USS Navajo (AT-64) and USS Tern (AM-31) are alongside, spraying water to cool her burned out forward superstructure and midships area. In the left center distance are the masts of USS West Virginia (BB-48) and USS Tennessee (BB-43) (photo: National Archives).

The USS Arizona wreck as it stood on 17 February 1942



USS ARIZONA 2/17/42

Colour Scheme, December 7, 1941

From her last docking in June, 1941, the USS Arizona was likely painted according to the scheme referred to as Measure 1. All surfaces from the waterline on up to the upper edge of the smokestack, including the decks but not the wooden components of them, would have been in Dark Grey (5-D). Above the upper edge of the smokestack, all surfaces would have been Light Grey (5-L). The exhaust portion of the smokestack was in black, as was the waterline. Turret No.s 1, 2 and 4 had their roofs painted red. For No.s 1 and 2, this conformed to identification requirements outlined in Battleship Division 1 guidelines, and in the case of Turret No.4, the red roof identified the USS Arizona as the Divisional Flagship. Below the waterline, the hull was painted in a protective red coating called Antifouling Red Norfolk 65-A. Wooden decks were in weather resistant natural teak wood, though the

question remains as to whether or not this was the case at the time of her ultimate demise.

After a collision between the Arizona and the USS Oklahoma on October 22, 1941 outside of Pearl, both vessels had to undergo repairs in dry dock. The Arizona was the more heavily damaged of the two, and was in Dry Dock No.1 from October 27, and the repairs took almost two weeks to complete. The repairs were to include a complete repaint, and some sources claim the use of Sea Blue (5-S). The last known photographs showing the USS Arizona in dry dock on November 8 clearly show the front superstructure, including the bridge and forward mast, with a visible colour interface (I'd rather use "demarcation") at the level of the top of the smokestack. These are supported by pictures of the wreck, specifically of the intact main mast. If the original camouflage scheme remained unaltered, then this scheme could have followed specs outlined by Measure 11, where the Dark

Grey (5-D) would be replaced by Sea Blue (5-S) on vertical surfaces from the waterline to a level in line with the top of the smokestack. The Dark Grey would have been preserved on all decks and horizontal surfaces. The rest of the colours would have adhered to Measure 1.

In the interest of completeness and to address further speculation put forth, the interface (demarcation) visible in photographs in line with the top of the smokestack would have also satisfied the camouflage scheme Measure 2A. It differed from Measure 1 with the use of Ocean Grey (5-0) on vertical surfaces from the level of the main deck to the top of the smokestack. In the case of the use of this scheme, the dark Grey (5-D) would also have extended to the wooden sections of the deck. The question of the painting of these wooden surfaces, and the horizontal surfaces as a whole including all decks, need to be considered when looking into the use of Measure 11 as well. Here, perhaps even Deck Blue (20-B) may be relevant. So, the

Killed commanders

Rear Admiral Isaac Campbell Kidd
(March 26, 1884 – December 7, 1941)

During the Japanese attack on Pearl Harbor on December 7, 1941, Rear Admiral Kidd was the Commander of Battleship Division One and the Chief of Staff and Aide to the Commander, Battleship Battle Force. At his first knowledge of the attack, he rushed to the bridge of USS Arizona, his flagship, and, following the citation for the Medal of Honor award, "courageously discharged his duties as Senior Officer Present Afloat until Arizona blew up from a magazine explosion and a direct bomb hit on the bridge which resulted in the loss of his life." The highest ranking casualty at Pearl Harbor, he became the first U.S. Navy flag officer killed in action in

World War II as well as the first killed in action against any foreign enemy.

Kidd's body was never recovered and to this day he is considered missing in action. U.S. Navy salvage divers located his Naval Academy ring fused to a bulkhead on Arizona's bridge. A trunk containing his personal memorabilia was found in the wreck and sent to his widow. Rediscovered in the attic by his children, both the trunk and its contents are now displayed in the museum at the USS Arizona Memorial.

He was a posthumous recipient of his nation's highest military honor, the Medal of Honor. A Fletcher-class destroyer, USS Kidd (DD-661), was commissioned in his honor

on April 23, 1943. The second ship named after him, USS Kidd (DDG-993), lead ship of four Kidd-class destroyers, was commissioned on March 27, 1981. An Arleigh Burke-class guided missile destroyer, USS Kidd (DDG-100), was then the third ship named after him and was commissioned on June 9, 2007.

His son, Isaac Campbell Kidd Jr. (August 14, 1919 – June 27, 1999), was a four-star admiral of the US Navy who served as the Supreme Allied Commander of NATO's Atlantic Fleet, and also as commander in chief of the U.S. Atlantic Fleet from 1975 to 1978.

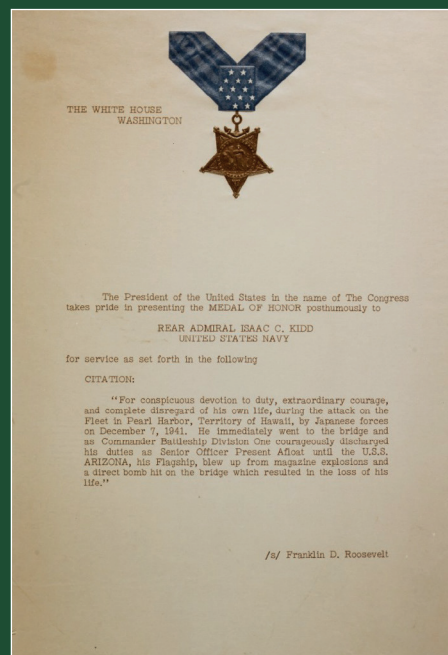
(Vladimír Šulc)



Captain Isaac C. Kidd, USN, photographed on board USS Argonne (AS-10), circa 1931. He was then serving as Chief of Staff to the Commander, Base Force, U.S. Fleet, Rear Admiral Henry H. Hough, USN (photo: U.S. Naval History and Heritage Command).



Captain Isaac C. Kidd, USN, Commanding Officer, USS Arizona (BB-39) photographed on the deck of his ship, circa 1939. Captain Kidd has inscribed the original print: To my able gunnery officer and friend Commander Abercrombie. Sincerely, Isaac Campbell Kidd. Lieutenant Commander Laurence A. Abercrombie was assigned to Arizona during the latter part of Kidd's tour as her Commanding Officer (photo: Donation of Richard C. Beggarly, Jr., June 2000. U.S. Naval History and Heritage Command).



Citation awarded posthumously to Rear Admiral Isaac C. Kidd (photo: U.S. Naval History and Heritage Command).

Captain Franklin Van Valkenburgh
(April 5, 1888 – December 7, 1941)



Navy Captain Franklin Van Valkenburgh became Captain of the Arizona on February 5, 1941, succeeding Captain Harold C. Train.

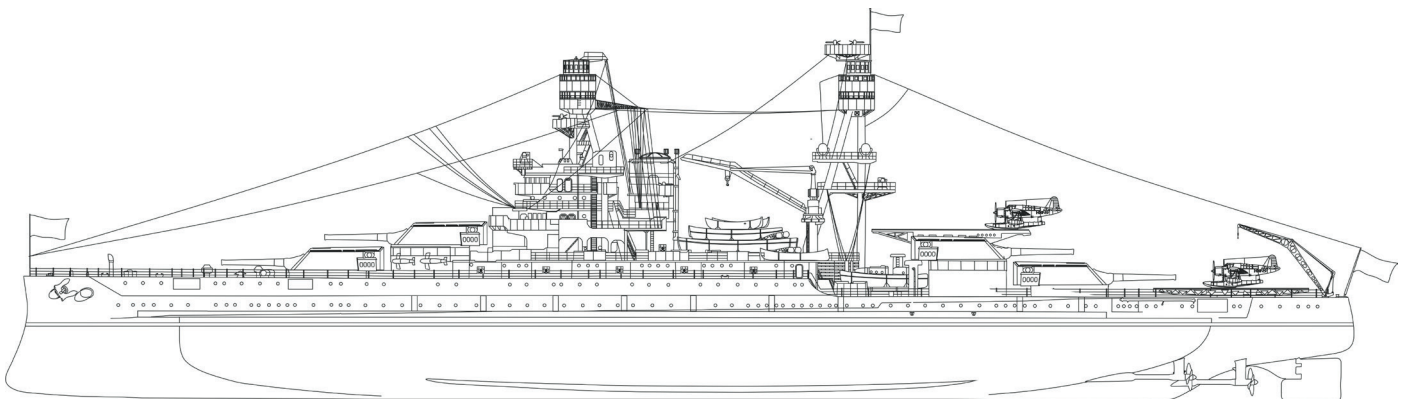
On December 4, USS Arizona sailed under his command with the USS Nevada (BB-36) and USS Oklahoma (BB-37) for night firing exercises, and after completing the exercises, returned to Pearl Harbor on December 6 to moor berth F-7 alongside Ford Island. Captain Van Valkenburgh, as well as the Commander of the 1st Battleship Division, Rear Admiral Isaac C. Kidd, spent Saturday evening of December 6 aboard Arizona. When the alarm was sounded at 0800 on the morning of December 7, he ran from his cabin and reached the navigation bridge, where he immediately began directing the defense of his ship and where he was killed either by the explosion of a Japanese bomb in the bow or by the subsequent fatal explosion of the ammunition magazines. His body, like that of Rear Admiral Kidd and much of the other 1,175 members of the Arizona's crew, was never recovered. As in the case of Rear Admiral Kidd, his Annapolis Naval Academy graduate ring was found during the salvage work.

Captain Van Valkenburgh was posthumously awarded the Medal of Honor. The citation for the Medal of Honor states: "For conspicuous devotion to duty, extraordinary courage and complete disregard of his own life,

during the attack on the Fleet in Pearl Harbor T.H., by Japanese forces on December 7, 1941. As commanding officer of the U.S.S. Arizona, Capt. Van Valkenburgh gallantly fought his ship until the U.S.S. Arizona blew up from magazine explosions and a direct bomb hit on the bridge which resulted in the loss of his life."

The Fletcher-class destroyer USS Van Valkenburgh (DD-656), launched on 19 December 1943 and commissioned on 2 August 1944, was named in his honor. The ship took part in a number of operations against Japanese forces in the Pacific, participated in support of the landings at Iwo Jima and Okinawa, operated in Japanese waters at the end of the war, arrived at Nagasaki, destroyed by atomic bombing, on 15 September, and participated in the repatriation of Allied prisoners of war the following week. After the war, the ship continued in service, participated in the Korean War, and was retired from US Navy service in 1954. She remained in reserve, however, and in 1967 was sold to Turkey, where she served in the Turkish Navy as TCG Izmir (D 341) until the 1980s. She was finally retired from service and scrapped in 1987.

General characteristics	as completed (1916)	final configuration (1941)
length overall	608' 0"	608' 0"
maximum beam	97' 0+1/2"	106' 2+3/4"
max. draft (at full load)	29' 10"	30' 1+3/4"
standard displacement	31,400 tons	32,600 tons
full load displacement	32,567 tons	37,654 tons
machinery	12 x Babcock&Wilcox boilers 8 Parsons-type turbines on four shafts	6 x Bureau-Express boilers 4 Westinghouse geared turbines
shaft horsepower	34,000 SHP, four propellers, 12' 1+1/2" diameter	35,081 SHP, four propellers, 12' 7"
maximum speed	21 knots	20,7 knots
fuel oil capacity	2,332 tons	4,630 tons
reserve boiler feed water	373,5 tons	323 tons
endurance	4,750 nautical miles at 15 knots	13,600 nautical miles at 15 knots
electricity	4 x 300 kW/240 volt turbo-generator sets	4 x 400 kW/120-240 volt turbo-generator sets 2 x auxiliary generators (2 x 88 kW)
complement/accommodations	1,087 total; 56 officers, 1,031 enlisted	2,037 total, 90 officers, 72 chief petty officers, 1,947 enlisted
armor protection	sides: mail belt 13,5" – 8" decks: 120-lb and 40 to 60-lb turrets: face plates 18", sides 9 to 10" conning tower: 16"	same 120 + 70-lb and 40 to 60-lb same same
armament	14 x 14" cal. 45 Mk. 3 (4 x III) 22 x 5" cal. 51 Mk.15 (22 x I) 4 x 4" cal. 50 Mk. 21 (4 x I) 2 x 21" fixed TT Mk. 3 (2 x I) Saluting cannons and practice loading guns not included	14x14" cal. 45 Mk. 12 (4 x III) 10x5" cal. 51 Mk. 15 (10 x I) 8 x 5" cal. 25 Mk.11 (8 x I) 8 x 0,50" Browning M2921A1 (8 x I)

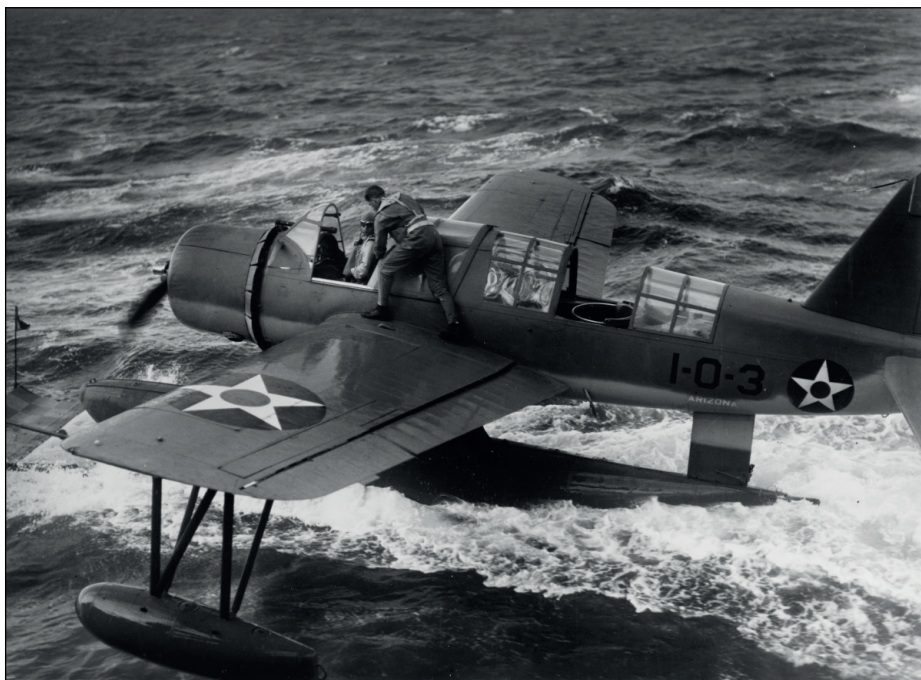


decision needs to be made whether or not the USS Arizona retained her original camouflage scheme after being in dry dock, or to embark down the road of the above noted speculation...

Aircraft on the Deck of the USS Arizona

Besides the fighter aircraft types launched from fixed ramps on top of the ship's turrets mentioned in the first part of this article, the USS Arizona utilized practically every type of observation and reconnaissance aircraft in use with the US Navy. These progressively included the Vought VE-7H, UO-1, FU-1 and O2U Corsair. Prior to modernization, the somewhat bizarre looking Loening OL could also sporadically be spotted. After modernization, the USS Arizona could carry three Vought O3U Corsairs, which were replaced by a same number of SOC Seagulls starting in 1935. These fell under Observation Squadron 1 (VO-1), attached to Battleship Division 1. The SOC Seagull remained with the Arizona until 1940, when the ship returned to Puget Sound Naval Ship Yard for repairs in Bremerton on the west coast of the United States. On her return to Pearl Harbor at the beginning of 1941, she took delivery of three Vought OS2U-1 Kingfishers, allocated to VO-1. At the time of the attack on Pearl, she carried the dash 3 variant of the plane.

For modelers wishing to build the USS Arizona as she would have appeared on December 7, 1941, it may be a disappointment to learn that no Kingfishers were carried during the Japanese attack. This



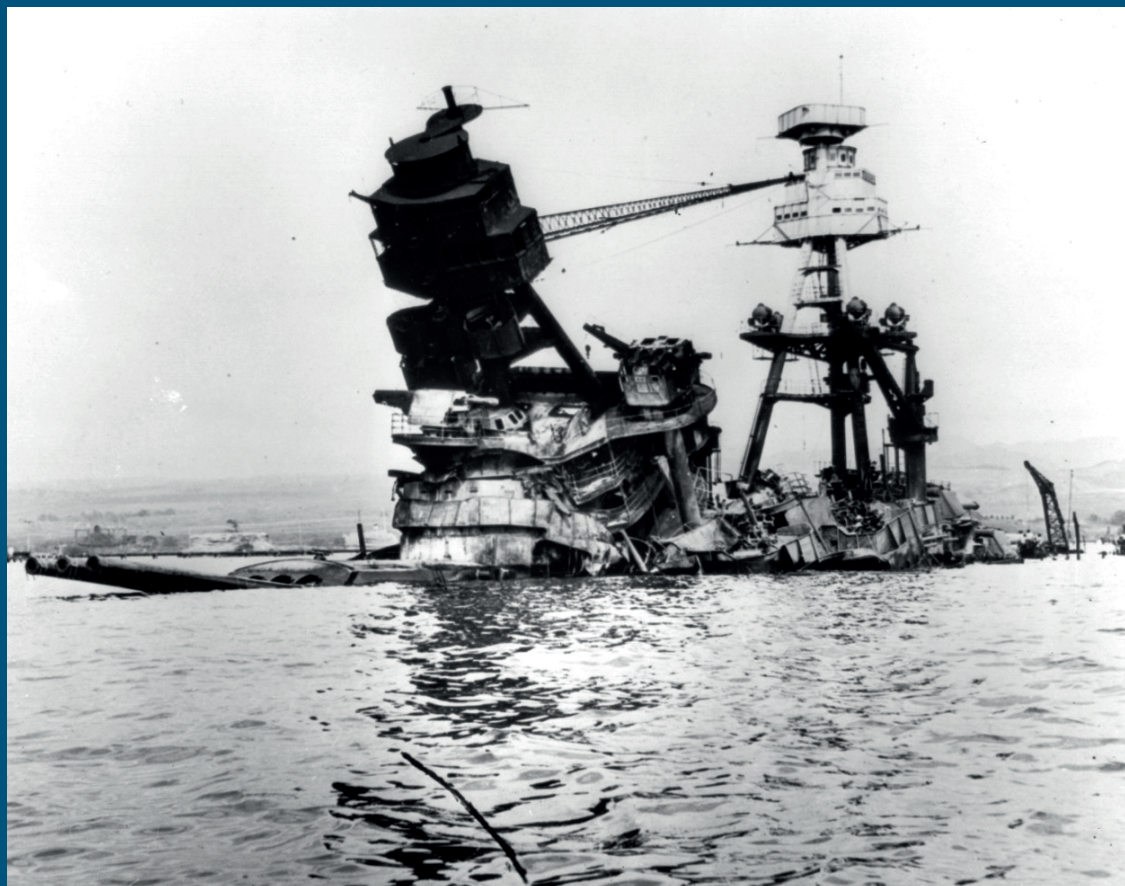
Vought OS2U Kingfisher floatplane, of Observation Squadron One (VO-1) On a seaplane mat towed by USS Arizona (BB-39), while being recovered after a flight in the Hawaiian Operating area on the morning of 6 September 1941. The plane flown by Ensign Lawrence A. Williams. Rear-seat man was Radioman 3rd Class G.H. Lane, who is preparing to hook up the aircraft to the ship's crane for recovery. Note the plane's side number 1-0-3, with the ship's name below it (photo: National Archives).

fact must be accepted, or be satisfied with a model of the Arizona from 'early December, 1941', since the aircraft were

land based after the Arizona's last return to Pearl Harbor.

Salvage

(Vladimír Šulc)



After the fatal explosion of the ammunition magazines Arizona kept burning for hours until late night. The fires were extinguished as late as December 9. The preparations for salvaging the ship began on December 14. In this photograph we can see the wreck's condition after the fires were extinguished and salvage operation started (photo: National Archives).



Aerial view of Battleship Row moorings on the southern side of Ford Island, 10 December 1941, showing damage from the Japanese raid three days earlier. In upper left is the sunken USS California (BB-44), with smaller vessels clustered around her. Diagonally, from left center to lower right are: USS Maryland (BB-46), lightly damaged, with the capsized USS Oklahoma (BB-37) outboard. A barge is alongside Oklahoma, supporting rescue efforts. USS Tennessee (BB-43), lightly damaged, with the sunken USS West Virginia (BB-48) outboard. USS Arizona (BB-39), sunk, with her hull shattered by the explosion of the magazines below the two forward turrets. Note dark oil streaks on the harbor surface, originating from the sunken battleships (photo: National Archives).



At the first stage of salvage operations the destroyed superstructures were removed. The photograph dated February 17, 1942 shows the superstructure under the forward mast twisted on the gun turret No.2. (photo: Naval History and Heritage Command)



On May 6, 1942, the upper section of the forward mast was cut off the bottom section and removed. The floating gantry crane YD-25, capable of lifting 150 tons, used for dismantling the heavy ship components, served at Pearl Harbor since 1903 (photo: Digital Archives of Hawai'i).

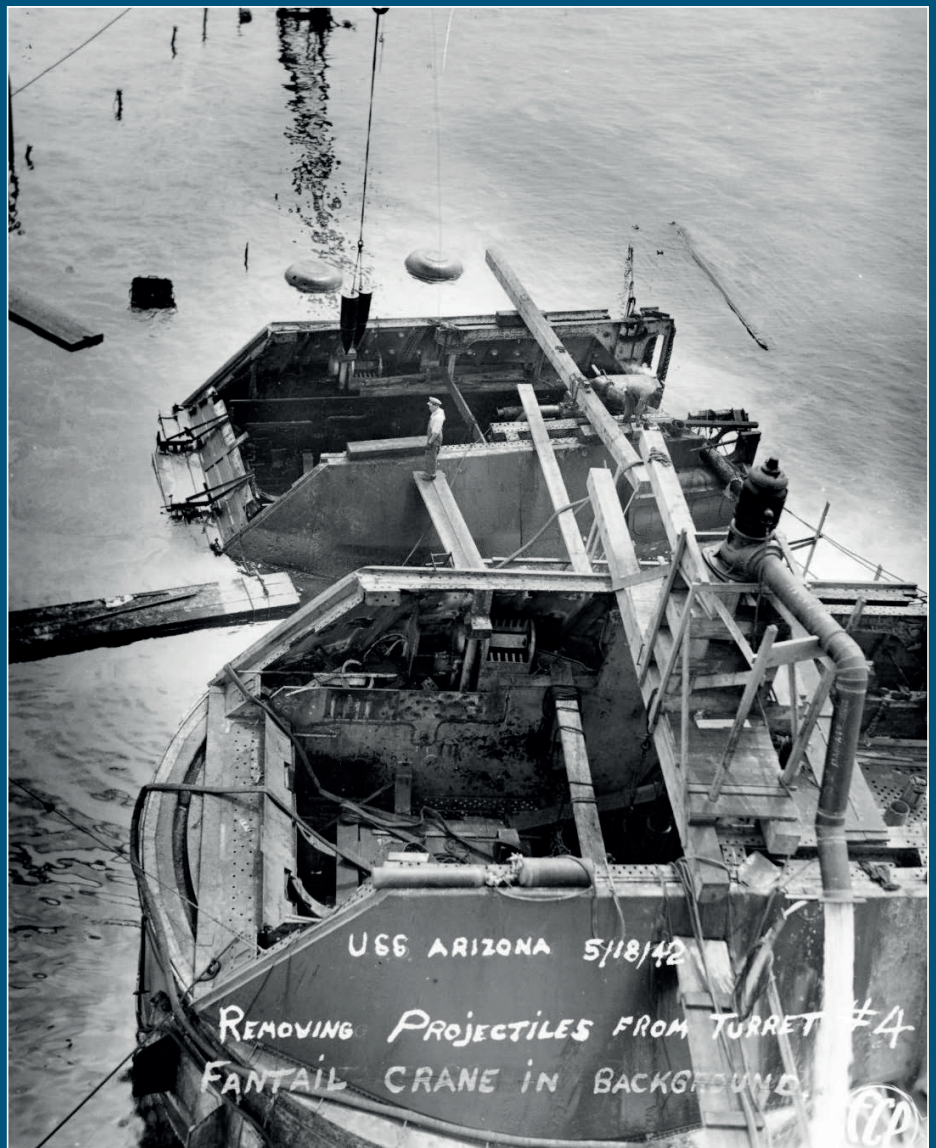


The picture dated May 18, 1942 shows the ship's bow whose center, after the fatal ammunition magazines explosion, collapsed between gun turrets No. 1 and 2 and sank. The forward mast remnants, partially sunken gun turret No. 2 and bow sticking out of the water can be seen (photo: Digital Archives of Hawaii).



During February 1942 the turrets No. 3 and 4 were removed (photo: National Archives).

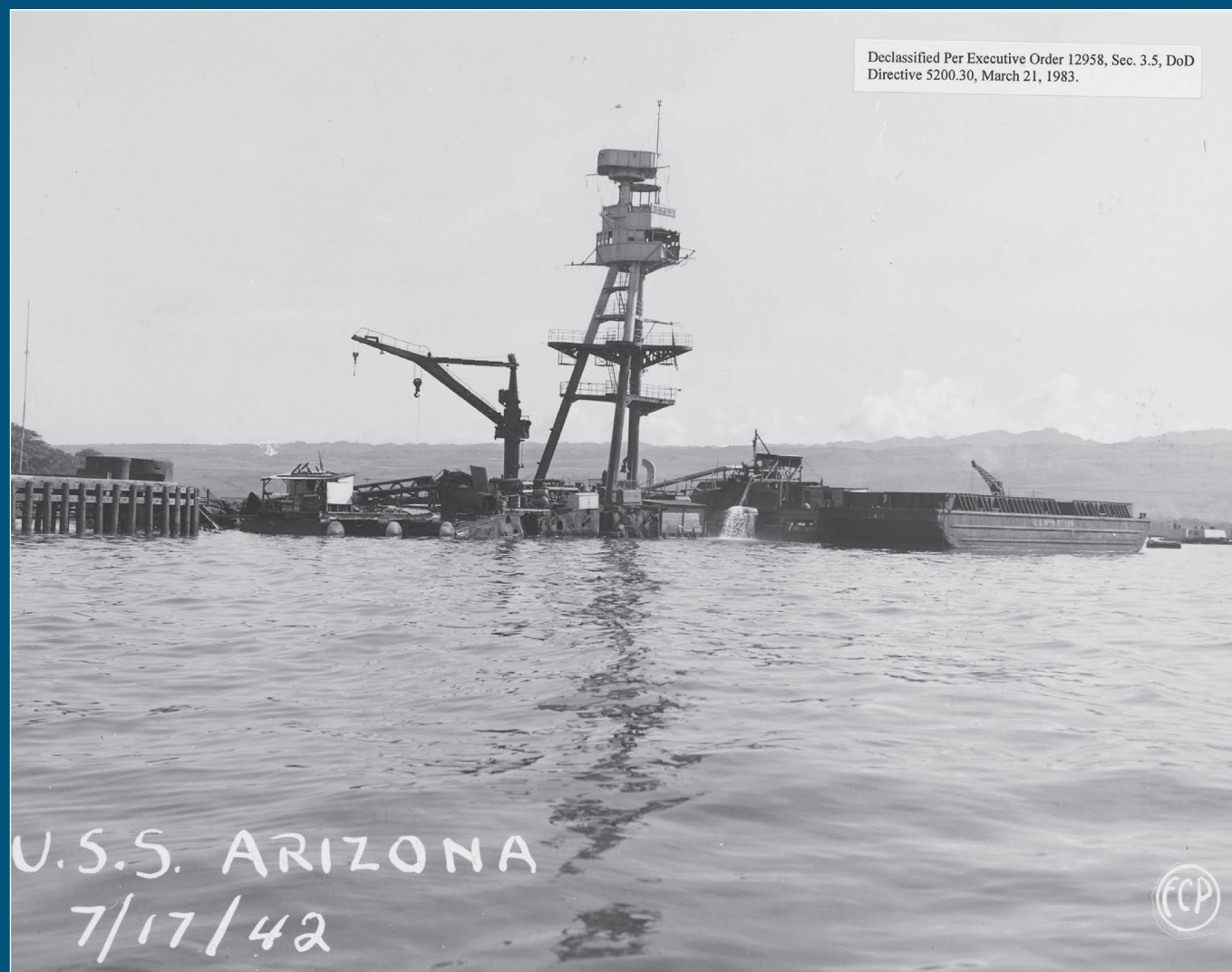
Ammunition removal and clean up of turrets No. 3 and 4 mounts before turrets' removal which lasted until summer 1942. In the picture dated May 18, 1942 we can see the opened turrets and in the picture upper part the pumps discharging the water from the turrets' locations (photo: National Archives).



Removal of the ammunition remnants was difficult and dangerous job. There were still fire fumes under the deck presenting the danger of gas poisoning. In this photograph dated October 5, 1942 we can see the process of ammunition magazines clean up on 1st and 2nd deck below gun turret No. 3 (photo: Digital Archives of Hawai'i).



Declassified Per Executive Order 12958, Sec. 3.5, DoD Directive 5200.30, March 21, 1983.



Photograph dated July 17, 1942 shows the wreck's condition in summer 1942. The rear mast, as opposed to the front one, survived the the ship's demise in good condition and was preserved until the present time (foto: National Archives).

In November 1942 the removal of the forward gun turret No.2 started. In the picture dated December 11, 1942 we can see the gun turret No.2 ceiling removed as well as extent of its flooding (photo: Digital Archives of Hawai'i).



Picture dated March 21, 1943 shows the wreck's condition after the removal of destroyed superstructures, gun turrets nr.3 and 4, masts and majority of the deck's installations. Gun turret nr.2 is still on its mount. The salvaging work on USS Arizona wreck continued until the end of 1943 (foto: National Archives).



Condition of the wreck in the 1950s
(photo: U.S. Navy National
Museum of Naval Aviation).



The final wreck appearance after salvage work was completed and her condition in the end of 1950s before the USS Arizona memorial construction started can be seen in this aerial picture taken on Memorial Day, May 31, 1958. USS Bennington (CVA-20) passes the wreck of USS Arizona in Pearl Harbor, Hawaii, on Memorial Day, 31 May 1958. Bennington's crew formed the name Arizona on the flight deck in a tribute to ship's crewmen lost during the Japanese attack on Pearl Harbor. Note the outline of Arizona's hull and oil spillage from her fuel tanks (photo: National Archives).



Story of 356 mm caliber main guns

(Jiří Fiala)



USS Nevada (BB-36) bombarding Iwo Jima, 19 February 1945. A North Carolina class battleship (probably USS Washington, BB-56) is in the left distance (photo: Naval History and Heritage Command).

the guns from the turret nr.2 and in the fall of 1944 had them carefully cleaned up, overhauled and re-bored for the more modern ammunition. In New York shipyards they were mounted on USS Nevada (BB-36) battleship which during the Pearl Harbor attack had also suffered the heavy damage however, not as fatal as Arizona and was returned to service after a general overhaul. The turret nr.2 remnants and severely damaged turret no. 1 were left on the wreck. So ultimately Arizona guns did fire in anger when Nevada was part of the fleet supporting with heavy guns fire the landing on Iwo Jima and Okinawa during the spring months of 1945.

Some components, which could be, after repair, re-used as military material were salvaged from the ship's wreck. The most important were the massive, 14 inch (356 mm) caliber main guns Mk.3 L/45. Twelve of them were mounted on Arizona. Due to the fatal bomb hits concentrated on the ship's bow, the rear gun turrets nos. 3 and 4 remained practically intact. The Navy picked them up and after necessary cleaning and overhaul intended to mount them as a coastal gun batteries „Pennsylvania“ on the Northeast of the island of Oahu on Mokapu peninsula and „Arizona“ on the West coast of the island, near the cape Kahu Point. In the end the full installation was not completed, only the battery „Pennsylvania“, which was the most advanced in terms of construction and mounting, in August 1945 performed the training gunnery exercise and with its fire celebrated the Japan's surrender. Shortly

after the war both batteries were decommissioned and dismantled.

Nowadays only some landscaping and concrete barbette for one of the turrets can be recognized on the hill above the cape Kahu Point. There is a communal garbage dump nearby this area. The turret barbette (including the safety mesh to prevent falls) and the support building ruins were preserved on Mokapu peninsula, fairly well accessible from the small adjacent township. One of the guns of Arizona's main battery is now on display at the Wesley Bolin Memorial Plaza in Phoenix, Arizona.

The Arizona's forward gun turrets (nr. 1 and 2) remained on the wreck until the final stage of the salvage operations in 1943. The Navy, after the careful analysis and consideration of all options, decided to remove



USS Nevada (BB-36) Operating off Okinawa, circa March-May 1945. She is wearing Camouflage Measure 31a, Design 6B (photo: Naval History and Heritage Command).

14-inch gun formerly on USS Arizona, displayed at Wesley Bolin Memorial Plaza near the Arizona State House, Phoenix, Arizona (photo: Wikimedia Commons).



USS Arizona Memorial

(Jiří Fiala)



After salvaging all reusable components and removal of the dangerous ones sticking out about the water surface, the Navy's concern was what to do with the battleship's wreck. Some US Navy personnel suggested the wreck's demolition with explosives followed by the partial or full recovery and scrapping. The voices for leaving the wreck where it sank and create of it the memorial to all victims of the Pearl Harbor attack were growing stronger. Among the strongest supporters of the memorial was at that time very popular cartoonist, radio anchor, traveler, and influential entrepreneur LeRoy Robert Ripley (1890–1949) who in 1942, for the first time personally visited Pearl Harbor and places which were attacked. In 1948 he visited Pearl Harbor for the second time but this time with his popular radio show „Believe it or not“ when he contacted Department of Navy representatives. He wrote couple of letters to Rear Admiral J. J. Manning from the Bureau of Yards and Docks where he skillfully presented his desire of the permanent memorial to Arizona casualties.

After the initial intellectual encounters between Robert Ripley and the Navy, in the end USN took over the initiative and in 1949 created the Pacific War Memorial Commission which was tasked with completion of the permanent memorial. In 1950 a mast was reinstalled on the wreck and the Pacific Fleet Commander Admiral Arthur W. Radford hoisted the United States flag on Arizona again. Since then, the daily morning flag

raising and its evening lowering became the tradition. The same year the temporary memorial was built above the raised portion of the ship's deck. During 1951–1952 Admiral Radford tried to raise more funds from the Navy to built a permanent memorial however he was not successful due to the high cost of the Korean War operations.

Only on December 7, 1955, the Navy placed the first permanent memorial on the deck in the form of almost 3 meters tall black marble stone with memorial plaque. In 1958, President Dwight D. Eisenhower approved the construction of the national memorial

with the budget of 200,000 US dollars. The remaining 300,000 USD needed for the project were raised from private gifts and funds. Some of the more interesting contributions is 64,000 USD revenue from Elvis Presley beneficial concert and 40,000 USD in sales of the USS Arizona plastic models in cooperation with Fleet Reserve Association and Revell Model Company.

The contemporary memorial was designed by the Hawaiian architect Alfred Preis who led very colorful life as he was, at the beginning of WWII, interned on Sand Island as a potential enemy of the state since he





hailed from Austria. The memorial, whose construction began in 1962, was designed as a bridge floating across the ship's wreck, 184 feet long (56 meters) with the capacity of 200 visitors. In the central section there is an opening in the floor through which the wreck's deck can be observed and the me-

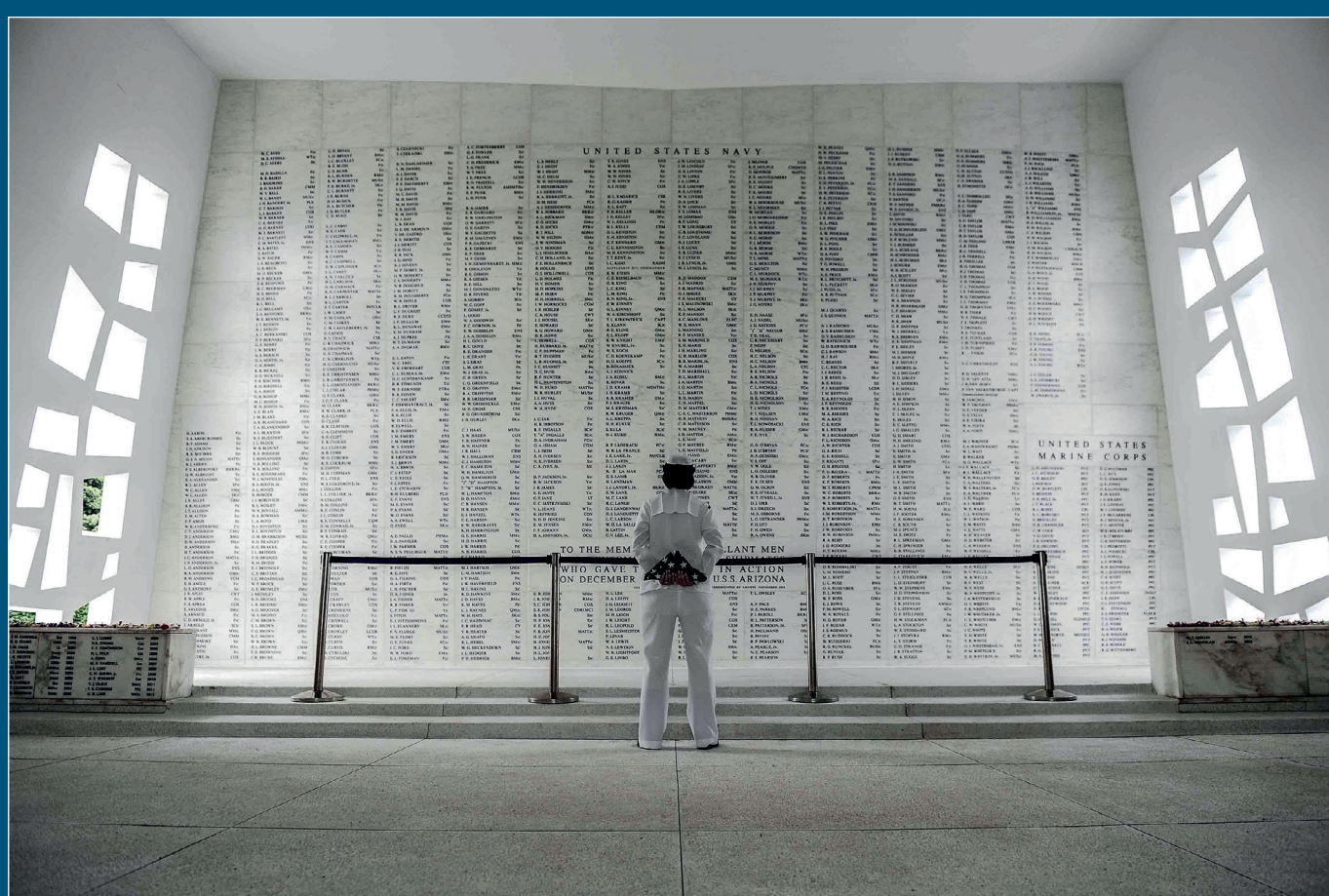
mory of the fallen sailors can be honored by dropping the flower wrath in the harbor waters. Part of the memorial is a place for reflections with the marble plaque listing all fallen sailors. One of the three main Arizona's impressive 19,585 lbs (8,884 kilos) anchors is exhibited at the entrance to the

visitors' center on Ford Island. Also, one of the ship's bells is exhibited in the visitors' center.

On October 15, 1966 the USS Arizona memorial was officially entered in the registry of the United States historic sites and on May 5, 1989 the Arizona wreck was declared the national cultural site. Currently the memorial and the visitors' center, which is the part of the Pearl Harbor National Memorial, is visited by more than 2 million people annually.

A serious problem pertaining to the wreck since its sinking is the persistent leakage of the residual bunker oil from the fuel tanks, known as the „Tears of Arizona“, at a rate of approximately 2.5 liters per day. The Navy

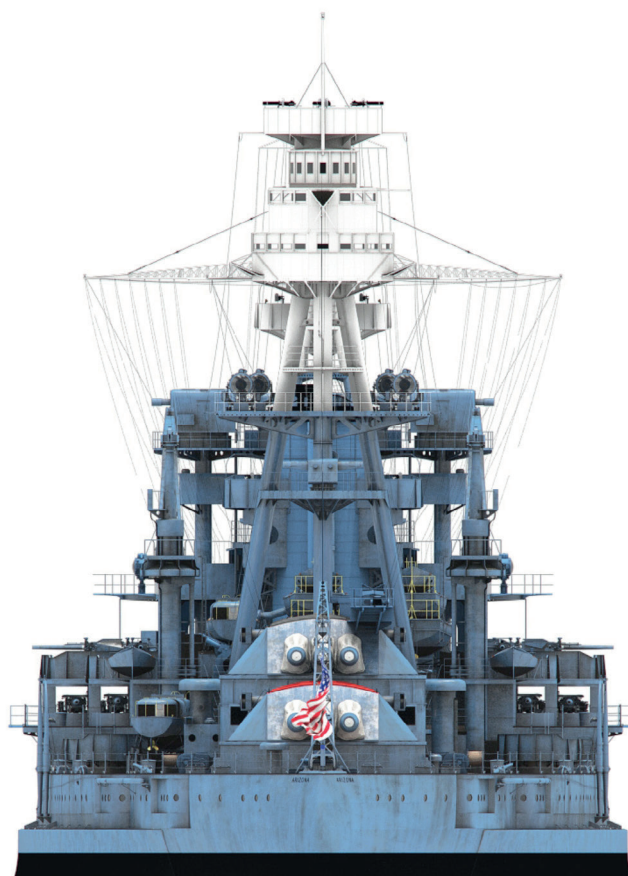




has been constantly looking for ways how to gently, without serious interference with the ship's hull as a war grave, drain

the remaining fuel and relieve the already strained environmental situation at Pearl Harbor.

(To Be Continued)



Air war over Ukraine

First three weeks



TEXT: MIRO BARIČ

Kamov Ka-52 shot down on the first day of the war during an attack on Hostomel airfield.

On Thursday, February 24, 2022 the world woke up into a nightmare. At 5 am, Eastern European time, a war, not witnessed since 1945, erupted. The first shots were fired by the air force when the whole Ukrainian territory was targeted by the air and missile attacks. We will focus on this air combat in the following text.

Until the deadline of this INFO Eduard issue we managed to cover the events from the moment the attack was launched until Wednesday, March 16, which is exactly 21 days. If you, in the text, come across the words "until now" or "until today" it corresponds to the March 16 date. It also needs to be stressed out from the very beginning that the information verification at the time of an ongoing war is rather complicated, to say the least. In the case of ground combat a lot of photographs and video records are available which can confirm or dismiss the claims of either warring side. In the case of air combat, it's even more difficult. If the long range missile hit was claimed and the shot down airplane crashed on the enemy's territory the kill is practically impossible to confirm by the photograph – unless done by the adversary. This is rather improbable as far as Russia is concerned. The official Russian sources keep rather tight lips about enemy casualties not speaking about their own. And Ukrainians, in order to boost morale, mostly report the Russian losses and very rarely their own.

According to the latest official information, published on March 13, Russian forces destroyed 99 Ukrainian aircraft. The number obviously includes decommissioned aircraft destroyed on the ground about which we will talk later. Nevertheless, the photographs, videos and other sources confirm only 9 Ukrainian aircraft, four drones and one helicopter destroyed. The ratio of claims to confirmed kills is therefore 99:14. As of March 16, Ukrainians reported 84 Russian aircraft, 11 drones and 108 helicopters destroyed. Other sources confirm 15 Russian aircraft, 8 drones and 32 helicopters lost which represents the ratio 203:55. It's obvious that neither number is accurate. Since the beginning of mankind each warring side exaggerated its successes to boost their troops' morale. On the other hand we cannot expect to document each and every loss therefore the actual losses are higher than those photographically documented. So far only the aforementioned numbers are available.

The struggle for air superiority

The first days of the Russian invasion were dedicated to air superiority. Despite Moscow's significant air supremacy and bold claim to have destroyed the Ukrainian anti-aircraft defenses it turned out to be just another Kremlin's propaganda. During the first days of the conflict the Russian missiles did hit almost all major Ukrainian military airports, including the bases at Luck and Ivano-Frankivsk in the west of the country. The large radar bases were destroyed as well. At the local and regional level however the batteries of the anti-aircraft missiles and medium range radars remained largely intact which was, in the coming days, very much felt by the Russian airmen. On the very first day of the attack Russians claimed to have shot down four Ukrainian airplanes, four drones and one helicopter. Only one Su-27 is confirmed destroyed on the ground, one Mig-29 shot down in the air and one practically defenseless transport aircraft An-26 shot down in the Kiev area with five crew members lost. Report of four drones destroyed is remarkable. They were supposed to be the Bayraktar TB2 crafts Ukraine bought from Turkey. They were ordered in 2019 and the number of them gradually increased to more than 60. It remains unclear how many of them Ukraine received but the last batch arrived shortly before the outbreak of the war and reportedly even afterwards. The-



Detail of the damage on the left side of the Ka-52.



Russian Mi-8 helicopter shot down on March 5.



Russian Mi-35 shot down on March 5.



Russian Su-30 shot down on March 5.

refore Ukraine managed to deploy more than 20 of them successfully against the Russian columns. Bayraktar means flag bearer. The aircraft span is 12 meters and is 6.5 meters long. Maximum speed is 220 kph and control station range is 150 km. The ordnance of guided bombs and rockets can be carried on four racks. The maximum take off weight is 650 kilos out of which 150 kilos is the weapons load. The Ukrainians kept deploying them with such success

that the song about them was composed. It is possibly the first song about the armed drone in the world and is extremely catchy. You were warned in case you decide to look it up on Youtube!

Death of the giants

The Russian paratroopers' offensive operations dominated the first days of the war. They attacked Hostomel airport north of Kiev which belongs to the Antonov com-

pany and was the largest cargo airport in Ukraine. The intention was clear - secure the airport for aircraft carrying troops earmarked for the direct attack on the Ukrainian capital. However, this mission failed. The first wave of troops deployed from approximately 30 helicopters were annihilated by the Ukrainian military. Next day the second wave arrived, this time aboard 200 helicopters. They managed to recapture the airport but fierce fighting continued in the surrounding areas for several more days. At this time the frontline runs near the city. The attack of Russian paratroopers deployed from the helicopters on Kharkiv also failed. During the battle of Hostomel Antonov An-225 Mrija, the largest aircraft in the world, was completely destroyed. Its loss was reported on February 27. Later the photographs showed that it had burnt in the hangar. Mrija's wingspan was 88.4 meters and it was 84 meters long. The maximum take off weight was 640 tons with the payload of 254 tons of cargo. The length of the cargo compartment was 43 meters which is more than Wright brothers' first flight, 36 meters!



Russian Su-25 shot down on Mar 4.

The first day of war the Ukrainians reported seven Russian aircraft and four helicopters shot down. There is photographic evidence of one Russian Su-25 shot down on February 24. One transport An-26 crashed on Russian territory near the Ukrainian border. The cause of the crash remains unknown. Ukrainians claim to have hit several helicopters attacking Hostomel. At least one was supposed to crash into the Dnieper river. One Ka-52 attack helicopter escorting the transport Mi-8s carrying the paratroopers, was hit by a heat-seeking portable missile. It aimed at the helicopter's port engine but struck the weapons' pylon on the port side. The missile explosion tore off the end of the pylon with the third attachment point and a lot of fragments hit the port engine. The crew performed the emergency landing and attempted to flee. Both airmen however were killed by the Ukrainian troops. The damaged helicopter is well documented by photographs. All national markings are overpainted on the both sides and the fuselage is marked with hastily painted letter V which according to the unconfirmed information is supposed to identify the Russian Marines.

Claims of two Il-76 airplanes shot down during the paratrooper operations remain unconfirmed. The first one was supposed to be shot down by the Ukrainian Su-27 fighter during the night of February 25th and 26th near Vasytkiv 40 kilometers south of Kiev. It was announced by the Ukrainian Headquarters stating that the number of paratroopers on board is unknown. Il-76 can carry 125 paratroopers or 140 regular infantrymen. There is an airport in Vasytkiv that Russians may have intended to capture. Later, during February 26, the Ukrainians reported another Il-76 shot down near the city of Bila Cerkva 80 kilometers south of Kiev. Both kills were supposedly achieved over the territory controlled by the Ukrainian troops however no photographs of the wreckage surfaced. Therefore, the veracity of these reports is questionable.

A hero and an urban legend

Meanwhile the urban legend about a heroic Mig-29 fighter pilot nicknamed Ghost of Kiev spread around the Ukrainian capital. He supposedly shot down seven Russian airplanes in two days of defending the capital and became the first fighter ace of the 21st century. Later he was supposed to raise his score to ten Russian airplanes and despite being shot down himself he successfully ejected and continued to fight in another plane. The existence of Ghost of Kiev, whose real identity remains unknown, was to be confirmed by the videos of the fighter flying low over the Kiev apartment buildings. Most likely this is an urban legend in order to boost morale. At the time of crisis people need a superhero. In fact Ukraine did lose one hero during



An-225 destroyed at Hostomel airfield.



Ukrainian pilot Oleksandr Oksanenko and the wreckage of his Su-27.



Burning Russian helicopters at an airfield near Kherson on March 15.



Russian Su-25 that managed to land after being hit by a Stinger in the right engine.



Detail of the damage of the Su-25.

those days. On the night of February 25, during the sortie against the enemy aircraft over Kiev, Col. Oleksandr Oksanchenko was shot down.

His Su-27 fighter was hit by the Russian S-400 missile system. During 2013-2018 Oksanchenko, nicknamed Gray Wolf, was a Ukrainian AF Su-27 display pilot. In 2013 and 2016 he demonstrated his skills at SIAF air shows at Sliac in Slovakia and for his second show was awarded for the best performance. In 2018 he was declared the best pilot at the CIAF air show in Hradec Kralove. He retired the same year. When the Russian invasion commenced he volunteered for service and was consequently killed while defending his homeland.

On Friday, February 25, the Ukrainians launched the successful counter-attack. At least symbolically they brought the fighting to the enemy's territory when their

ballistic missiles Tochka-U hit the military airport Millerovo near Rostov on Don. The city is located 16 kilometers from the Luhansk region border. Ukraine inherited Tochka-U missiles after the collapse of the Soviet Union. Their range is 120 kilometers. At least one Su-30 aircraft and several buildings burnt down. Within 48 hours of the beginning of the attack the Russians claimed similar success. They published the photographs of the airport where their Kalibr missile launched from the ship destroyed at least six Ukrainian fighters Mig-29. Older satellite images however showed that this group of Migs had been parked there for several years without movement. Russians wasted their ammunition on decommissioned and unusable aircraft.

Civilian targets

In the following days the Russian activities switched from the attacks on the airports and radar bases to support of their attacking ground troops. Those however succeeded to advance in the southern Ukraine only, got bogged down at Kiev and Kharkiv. There are several reasons for it—low morale and unexpectedly fierce Ukrainian resistance, enormous logistics problems as well as communication problems when the Russian soldiers are forced to use the

ordinary radios or even mobile phones and their uncoded chat can be monitored without problems. The short blitzkrieg envisioned by Russians got transformed into the carpet shelling of the Ukrainian cities in an effort to break the spirit of their population. In comparison to this chaos the Russian AF operates in a relatively organized way. Sure, they too participate in the air attacks against civilian targets including the hospitals, however, as stated by the expert on contemporary military aviation, Tom Cooper, the majority of pilots don't really know what they are attacking. Before the mission they receive the coordinates of the target they are to attack without knowing what exactly is located there. This is confirmed by the notes found on the shot down pilots. Therefore, the Russian command, both military and political leadership, is undeniably responsible for the campaign against civilian targets which was also executed in Chechnya and Syria. The higher ranking pilots can represent an exception having more accurate information but the ordinary pilots are only given the coordinates and are possibly told by their commanders that there is, for example, the headquarters or the Ukrainian "neonazis".

The Russian AF operations are controlled by Beriev A-50 AWACS airplanes. There are at least two airborne all the time, one over Belarus and the second one in the east near Rostov on Don.

They fly 70 to 100 kilometers from the Russian border, outside of the range of the Ukrainian AA system S-300. A-50 aircraft gather information from the reconnaissance aircraft, drones and ground observers. Based on this data they determine potential targets and assign priority to them. Then two to three waves of Russian air attacks follow on a daily basis.

It seems that Russian pilots don't rush into the attacks. There are several specific reasons for it. Poor communication of the ground units creates fear of friendly fire. There were suspiciously many cases where the shot down Russian pilot ejected but his parachute did not open. That certainly doesn't contribute to other pilots' confidence. Despite the official reports the Ukrainian AA defense in various areas is still pretty



Major Krasnoyartsev's Su-34 was shot down on March 5. The pilot was wounded and fell into captivity.

active. Therefore, the Russian pilots prefer to fly at very low altitudes to avoid being targeted. Regardless, they are targeted by the short range portable rocket systems. There is another reason why they fly within the range of these portable missiles. More frequently they use the "dumb" bombs requiring the optical aiming and therefore they cannot hide in the clouds but have to fly underneath them. The Ukrainians who had received at least 2000 Stingers are not shy to use them and once they have a Russian aircraft in their range they launch 5-6 missiles at the same time. It must be a real "joy" for Russian pilots to fly in such an environment.

As per Pentagon's estimate dated March 11 the Russian pilots fly around 200 sorties daily.

Many times though, afraid of the Ukrainian AA defense, they don't even enter the Ukrainian airspace and launch the cruise missiles from the Russian side of the border. No surprise that even Russians need to boost their morale. Maj. Viktor Dudin, shurman of the fighter squadron, was awarded Hero of Russia for shooting down three Ukrainian Su-27 fighters. It was supposed to happen on February 24, 28 and March 1. Only two losses of the Ukrainian Su-27 are photographically documented and neither corresponds, based on the timeframe and circumstances, to Dudin's claims. Besides these three kills (some sources credit him with the fourth one, another Su-27) on February 26 he was supposed to destroy the Ukrainian AA system Buk. Allegedly he hit it with the missile launched from his low

flying fighter. Another decorated soldier is Captain. Alexei Pankratov, commander of the AA missile division. On February 28 he supposedly shot down a Ukrainian Su-25 and three Bayraktar drones. Next day he was to increase his score by another two Bayraktars shot down. Again, neither of these claims could be confirmed.

Obviously the Russian AF has achieved confirmed successes. On Thursday, March 3, the unique encounter in the open sea took place. The Ukrainian patrol boat Slovyansk was conducting a reconnaissance mission south of the port of Odessa when it was hit by an air-to-ground missile launched from a Russian aircraft. The boat sank and the whole crew of 16 sailors is MIA. Slovyansk's original name was USCGC Cushing belonging to the Island class. In the 1980s there were 49 built for the US Coast Guard. The USA donated four of them to Ukraine. Slovyansk entered service for the new owner in 2019. Its length was 34 meters and displacement 170 tons. The armament consisted of one 25 mm cannon and two 12.7 mm machine guns.

"Black Friday" of the Russian AF

From March 4 to 6 the Russian AF suffered exceptionally bad luck. On March 5 only the Ukrainians claimed 10 Russian aircraft destroyed. Not all of these claims have been confirmed but in the course of three days the Russians altogether lost 6 aircraft, 6 helicopters and one reconnaissance drone. First, on Friday March 3, they lost two ground attack Su-25, one transport helicopter Mi-8 and one attack helicopter Mi-28. The hard luck continued on Saturday with the loss of two Su-34 and one Su-



Wreckage of the Su-34 that was shot down on March 6.



A Ukrainian Bayraktar TB2 drone of Turkish manufacture.

30, another Mi-8 and two attack Mi-24/35. The Orlan-10 drone was destroyed as well. On Sunday the Ukrainian score was increased by another Su-34 and Mi-24.

One of the Su-34 aircraft, shot down on Saturday, was piloted by Maj. Krasnoyartsev who had participated in the Russian bombing campaign in Syria. Together with the second crew member he ejected from the stricken bomber and once on the ground they attempted to escape. The second pilot was killed and Maj. Krasnoyartsev wounded and captured. His wounds were not life threatening and Ukrainians stated they

want to bring him to the International Criminal Court for his war crimes.

Supposedly during the interrogation he confessed the he knew he was bombing civilian targets which is to be corroborated by the flight plan found in his possession. Question is if the plan only contained the targets' coordinates or he, as a higher ranking officer knew what he was attacking.

Airports are targeted again

According to the Pentagon estimates, as of March 11 the Ukrainian AF still had 56 combat ready military aircraft. Despite flying

a limited number of missions, in comparison to the Russian opponent, it still needs to be considered a front line power. This is indirectly confirmed by the change of Russian tactics. On Friday, March 11, the military airports Ivano-Frankivsk and Luck in the west of the country became the targets of the missile attacks. The aero engine military repair factory in Luck was bombed. For the first time during the hostilities the airport in the city of Dnipro, in the middle of Eastern Ukraine, was bombed. The Ivano-Frankivsk airport was the target for the missiles on Sunday, March 13.

It's not only the aggressor troops that successfully attack the airports. The Russians deployed a large helicopter unit on the base near occupied Kherson. It became the target of the Ukrainian missile attack on March 7. Kiev maintained to have destroyed 30 Russian helicopters, satellite images however showed that only six were hit and damaged. The Russians did not learn the lesson from this warning and still left at the airport the large number of unprotected helicopters parked tightly one to another. On March 15 the punishment arrived in the form of a new, much better prepared Ukrainian missile attack. At least 16 helicopters were hit out of which 15 were completely destroyed and one damaged. The large number of military vehicles burnt within the base perimeter. At this point the only conclusion to be made is that the intense air combat continues and losses on both sides mount. We can only wish that until the next INFO Eduard release this madness will have stopped.



Ukrainian An-26 shot down on the first day of the war in the Kiev area.



Black night over Gwaksan

On the boxart of the kit Cat. No. 7461 by Adam Toby the scene depicts the Hot to Go seconds after the attack and just moments before the explosion. Karelin inherited his MiG-15bis No. 325 from 196th IAP commander Evgenyi Pepelyaev, who scored 18 kills flying it. Karelin added two more victories on the night of June 10-11, 1952, making the aircraft the second most successful MiG-15 in history, behind the aircraft serial number 121032, with which Captain N. V. Sutyagin scored all of his 22 kills.

TEXT: RICHARD PLOS

The June 10, 1952 was a black day for the 19th Bombardment Wing. Or night, better to say. Two B-29As were lost in a raid on a railroad bridge near Gwaksan, another was badly damaged. Altogether 27 men never returned to base, 26 of them were killed.

The two losses that night were B-29A Miss Jackie The Rebel (44-61967) of the 30th Bomb Squadron and Hot to Go (44-62183) of the 28th Bomb Squadron. While some sources attribute the downing of the former B-29 to anti-aircraft fighters, this is not likely. Both aircraft are believed to be victims of Soviet fighters. It's just a question which ones shot them down...

Miss Jackie The Rebel

The Superfortresses took off from Kadena Base in Okinawa late at night. As they approached their target on the northwestern Korean peninsula, four MiG-15s took off against them. They were piloted by Lt. Col. Mikhail I. Studilin, commander of the 147 GIAP (Guard's Fighter Air Regiment), his deputy, Major Bykovets, the navigator of the 351 IAP (Fighter Air Regiment), Captain Anatoly M. Karelin, and Lieutenant Commander Ikansangaliyev. According to the book *Soviet MiG-15 Aces of the Korean War* by Leonid Krylov and Yuri Tepsurkayev, the first to attack was Studilin, who took aim at B-29A caught in the searchlights. The hits after the second attack set it on fire and the crippled bomber curled up over the sea and descended faster and faster. According to Igor Sejdov's book *Sovjetskie asy korejskoj vojny* (Soviet Aces of the Korean War), it was the Hot to Go, with a subsequent emergency landing at Kimpo Base (K-15). But that is an easily refutable fallacy. The Hot to Go did not return to the base, it was shot down and its wreckage landed near Sinmi-do Island. It was B-29A (44-61902) named Apache which made an emergency landing at Kimpo. A number of other sources credit Studilin with shooting down Miss Jackie the Rebel. The fact is that she crashed into the sea at about 0315 local time about 20 km off the coast. All 14 crew members were declared missing in action (MIA), then finally declared dead on December 31, 1953 when it was confirmed that none of the crew were among the captives. On board of her was also the Squadron Commander, Major George Allen Hadley, who had been visited by his family in Okinawa shortly before.

After the tragedy, one of the squadron officers was assigned to the family to help devastated Mrs. Hadley with return to the United States. It's worth noting that the two later married...

The problem with Miss Jackie the Rebel is that, according to Igor Sejdov, she was supposed to be the victim of Anatoly Karelin that night. The same author attributes the downing of 44-86433, named Peace Maker, to him. However, the latter was written off by USAF only in August 1954 and is not listed as damaged anywhere else in the action of 10-11 June.

The Crew of B-29A (44-61727) Miss Jackie the Rebel

Maj. George Allen Hadley
Captain Marvin Jr. Cessna
1st Lt William Sidney Earns
1st Lt Richard Melvin Friedman
1st Lt Wilbur Eugene Lewis
1st Lt John Richard Miller
1st Lt Preston Skinner
S/Sgt John Harrison Errington
S/Sgt Elwood John Thompson
A2c Douglas Earl Attinger
A2c Westervelt Charles Staggs Jr.
A1c Buddy Joe Bonney
A1c John Francis Flaherty
A1c Carl August Jenkins

Hot to Go

According to Krylov and Tepsurkayev, Karelin made his first attack on the B-29A illuminated by radar-controlled ground searchlights and opened fire from a distance of 300-400 meters. The bomber began to burn after the hit and moments later broke into three pieces after the explosion. These sections hit the ground about 15 km southeast of Sonchon near Sinmi-do Island. As it later turned out, the debris from the explosion of the American bomber hit Karelin's Mig and damaged its left wing. This ill-fated machine was almost certainly (and the reports from the American side are consistent with this) a Hot to Go aircraft. According to the testimony of sixteen other Superfortress crew members, no parachutes were seen, and so it seemed impossible that

anyone on board had survived. However, fortune was very much in Captain Anton Brom's favor that night and he managed to escape the fiery inferno and save himself. He was captured and repatriated in 1953 as a part of Operation Big Switch. Interestingly, USAF casualty records indicate a missile hit in the Hot to Go case, but this is almost certainly a mistake, due to the huge explosion of the aircraft after the Karelin's attack.

On the morning of June 11, the area of the Hot to Go wreckage was surveyed by Soviet troops. The 64 IAK (Air Fighter Wing) staff operational summary of that day (No. 00163) states, "On the night to 11 June, a search team found the wreckage of a B-29 and eight bodies west of the Kakusan area. Further, Korean and Chinese comrades reported seeing one B-29 fall into the sea and explode in an area 20 km southeast of Sinmi-do Island." That was almost certainly Miss Jackie the Rebel. According to USAF casualty records, she was last seen at 39°41' N latitude and 125°04' E longitude. The last positive radio transmission was made on VHF at control point 38°15' N and 124°51' E. However, no distress signal was sent by the crew (source: Status of POW/MIA negotiations with North Korea, June 20, 1996).

The Crew of B-29A (44-62183) Hot to Go

Captain Louis Paul Gorrell
Captain Anton Brom Jr.
1st Lt John Howard Adams
1st Lt Robert Black Baumer
1st Lt Harold Ray Holmes
1st Lt Robert Edward Hudson
1st Lt David Mandell
S/Sgt William Alfred Canning
A2c Paul Kenneth Kellstrom
A2c Thomas J. Pettit
A2c Robert Lewis Ross
A1c Edgar Foy Barrington
A1c Elbert Josephus Reid Jr.

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NEW



NEW

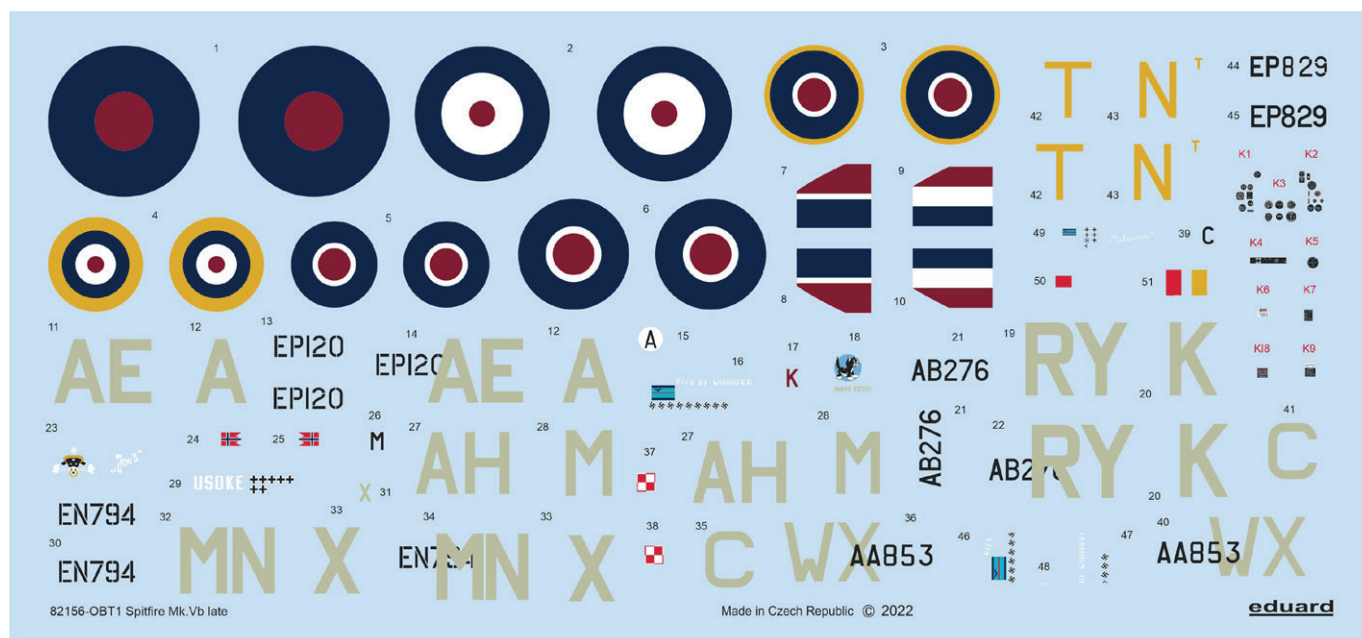
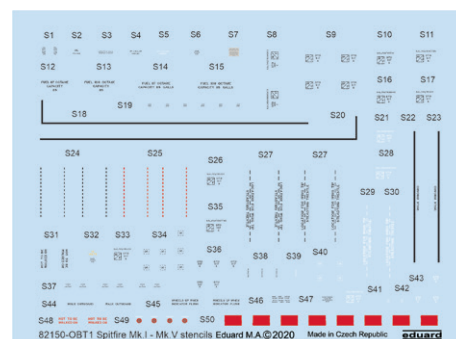


Spitfire Mk.Vb late 1/48

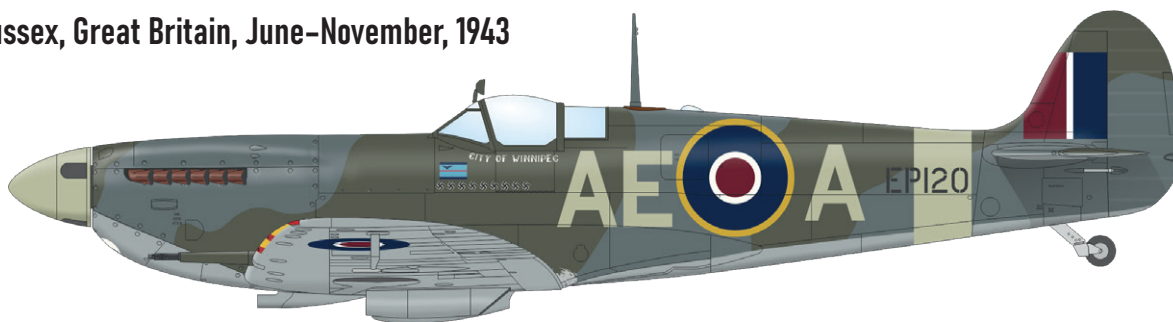
#82156

ProfiPACK edition kit of British fighter plane Spitfire Mk.Vb in 1/48 scale.
All the Spitfires are of the later version, with integrated armor glass in the windshield and with the asymmetrical bulges on the wings undersurface.

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

[Product page](#)


■ **Spitfire Mk.Vb, EP120, S/Ldr Geoffrey W. Northcott, CO of No. 402 Squadron RCAF, RAF Merston, West Sussex, Great Britain, June–November, 1943**

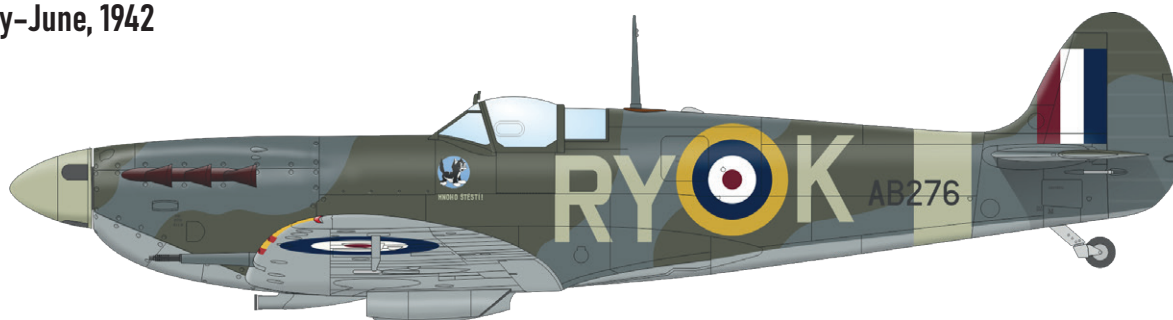


Canadian Geoffrey Wilson Northcott was born in Rapid City, Manitoba, in 1920. Prior to joining the RCAF in June of 1940, he worked on the family farm. On completing basic training in January, 1941, he was moved to Britain and underwent operational training with No. 52 OTU in Debden. This was followed by assignment to No. 401 Squadron RCAF. At the beginning of May, 1942, he boarded the USS Wasp and headed off to Malta, where he arrived together with his Spitfire on the 9th of the month. He was assigned to No. 603

Squadron and soon made a name for himself in combat. After the unit was decommissioned in August, he was transferred to No. 229 Squadron, but did not stay for long, as by the end of the month, he was back in England with No. 53 OTU. In May, 1943, he was named CO of No. 416 Squadron RCAF, but was then reassigned to No. 402 "City of Winnipeg" Squadron RCAF, which he led from June, 1943, to July, 1944. In January, 1945, he would become the CO of the elite No.126 (RCAF) Wing, and remained in that post through to March,

1946. In 1949, he went into the Reserves, and finally left the RCAF in 1955. Over the course of the Second World War, he was awarded the DFC with Bars and the DSO for nine confirmed kills, one probable and eight damaged aircraft. Six of the kills (four Bf 109s and a pair of Fw 190s) were gained while flying his personal Spitfire EP120

■ **Spitfire Mk.Vb, AB276, F/Lt Václav Hájek, No. 313 (Czechoslovak) Squadron, RAF Hornchurch, Great Britain, January–June, 1942**

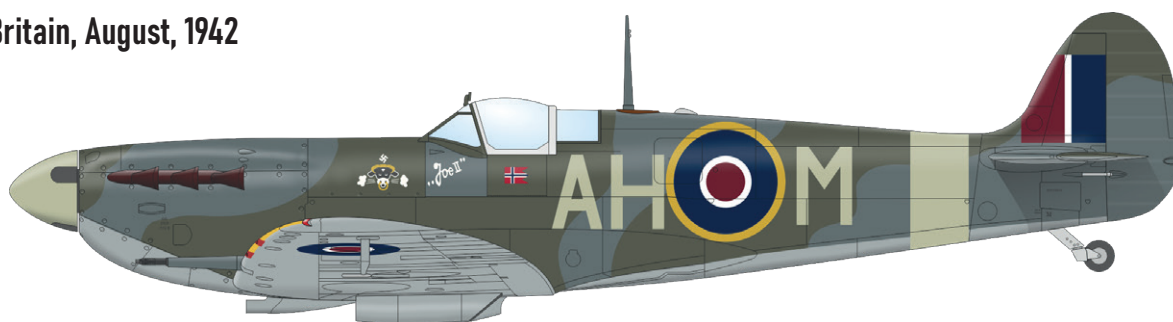


Spitfire Mk.Vb AB276 served operationally with No.313 (Czechoslovak) Squadron from January 13, 1942 to June 8 of the same year. It was most often flown by F/Lt Václav Hájek, who on April 10, 1942 likely shot down a I./JG 26 Fw 190 south of Gravelines. Other pilots who flew missions in AB276 were Sgt. K. Pavlík, Sgt. F. Bönisch and P/O V. Michálek. No. 313 (Czecho-

slovak) Squadron Spitfires are known for their carrying Walt Disney characters through the first half of 1942, when the unit was a component of Hornchurch Wing. The author of the artwork was Sgt. Karel Pavlík, who put his talents as a graphic artist to good use and applied the characters below the windscreen of individual aircraft according to the wishes of the

pilots. The rendering of the kitten "Figaro" with the inscription "Mnoho Štěstí" (Best of Luck) is probably the most recognized because of a photograph of it, in which Sgt. Pavlík is shown during its creation. Its likeness also appears on a granite monument near to where Sgt. Pavlík crashed, not far from the town of Dranouter, Belgium.

■ **Spitfire Mk.Vb, AB184, Sgt. Olav Dionne, No. 332 (Norwegian) Squadron, RAF North Weald, Essex, Great Britain, August, 1942**

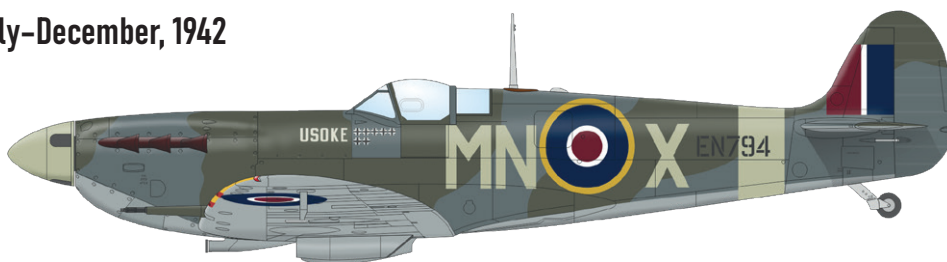


Norwegian pilot Olav Dionne served with No. 332 (Norwegian) Squadron through 1942–1943. His first kill was gained during combat over Dieppe on August 19th, 1942, when he downed a Do 217 flying this aircraft. In 1943, he was made an officer, and flying

Spitfire Mk.IXs, he recorded another four confirmed kills. After the war, he entered the Norwegian civil aviation scene, and was killed in 1946, a mishap while piloting a Ju 52. Spitfire AB184, which Dionne flew in August, 1942, was one of the most striking aircraft

to fly with No. 332 (Norwegian) Squadron. The cockpit door bore the Norwegian flag, an inscription "Joe II" appeared below the windscreen, and the fuel tank cover carried artwork of a snorting bull, above which was a swastika, denoting the kill over Dieppe.

■ Spitfire Mk.Vb, EN794, S/Ldr Yvan du Monceau de Bergendal, No.350 (Belgian) Squadron, RAF Redhill, Surrey, Great Britain, July–December, 1942

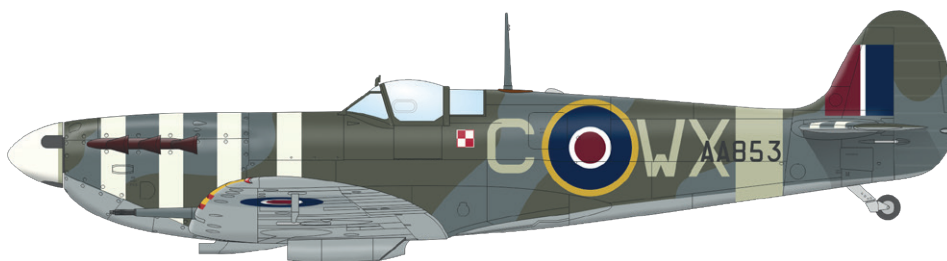


The most successful Belgian fighter ace, Yvan du Monceau de Bergendal was born on December 10th, 1915 in Fullham. He underwent training at Sutton Bridge with No.56 OTU, and his first combat assignment was with No. 253 Squadron. In April, 1941, he was transferred to No. 609 Squadron, where he would claim his first aerial victory. In March, 1942, he became a Flight Leader with No. 350 (Belgian) Squadron, and in June, 1943, he was named CO of No. 349 (Belgian) Squadron.

After the completion of his combat tour in June, 1944, he was sent to North America and in 1945, he returned to Europe as a Staff Member of the Belgian Section of the RAF. Over the course of his military career, he is credited with eight confirmed kills, three probables and six damaged, giving him a ratio of 3:1:2 respectively while flying Spitfire Mk.Vb EN794. The Spitfire serialled EN794, flown by "Duke" (he did hold the title) as B Flight Leader of No. 350 (Belgian) Squadron, showed

signs of camouflage touchups on the engine cowling as a result of the removal of the white identification stripes that were applied for Operation Rutter in July, 1942. The change also affected the tally of kills under the windscreen. The presentation inscription USOKE is in honor of the inhabitants of the Belgian Congo, which came together for the purchase of sixteen Spitfires for Belgian pilots fighting in the ranks of No. 350 (Belgian) Squadron.

■ Spitfire Mk.Vb, AA853, W/Cdr Stefan Witorzenc, No. 1 Polish Fighter Wing, RAF Heston, Great Britain, Beginning of July, 1942

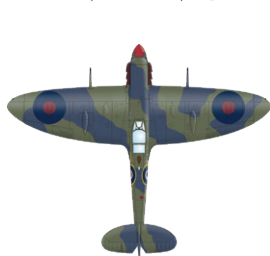


Stefan Witorzenc was born in 1908, and joined the Polish Air Force in the 1930's. After the defeat of his country, he fled to England, where between August and September, 1940 he achieved five kills while with No. 501 Squadron, the unit with which he served out the Battle of Britain. On November 22, 1940, he was reassigned to No. 306 (Polish) Squadron, where he served in the function of Flight Leader, and in May, 1941, he was given command of No.302 (Polish)

Squadron. In February, 1942, he took command of No. 1 Polish Fighter Wing in Kirton-in-Lindsey and he was awarded the DFC in June, 1942. His combat tour concluded in September, when he was assigned to the General Staff of No. 11 Group and then to Air Command as Polish Liaison Officer. In April, 1944, he took command of No. 61 OTU and held this post through to the end of the war. Spitfire AA853, which Witorzenc flew at the beginning of July, 1942, carried four

white quick-identification bands around the nose, which were used as such by Fighter Command during Operation Rutter between July 4 and 7, 1942. Besides these bands, the spinner was also painted white (instead of the usual Sky) and two white bands were applied to the upper surfaces of the horizontal tails. Operation Rutter was called off for inclement weather and also other factors and was later replaced by the well-known Operation Jubilee.

■ Spitfire Mk.Vb, EP829, S/Ldr John J. Lynch, No.249 Squadron, RAF Krendi, Malta, April–May, 1943



John Joseph Lynch was born on February 3, 1918 in Alhambra, California. In 1941, he joined the RAF and his first assignment was with No. 232 Squadron. The following month, he was attached to No. 121 "Eagle" Squadron. This was followed by a stint with No. 71 "Eagle" Squadron, during which he shared in the destruction of a Ju 88 on April 17, 1942. In November, 1942, he was transferred to Malta and assigned to No. 249 Squadron, with which he actively participated in its defense. At the beginning of 1943, he was promo-

ted to Commander of the unit, and recorded a number of victories over Axis transport aircraft supplying Tunisia. The Ju 52 kill came about on April 28, being the 1,000th kill recorded by the defenders of Malta. In July 1943, he was reassigned to the USAAF, but saw no combat with the service. Spitfire EP829, with which Lynch flew from February to May, 1943 as a member of No. 249 Squadron, was a part of Operation "Train", and represented the final shipment of Spitfires to the defenders of Malta, delivered by an aircraft carrier.

EP829 initially had clipped wings, and later flew with the standard span wings. The main fuel tank cover carried the Squadron Commander marking and seven kill markings that were recorded up to April 28, 1943. Below the windscreen, there was an inscription "Malta's 1000", in honor of that kill over Malta. Over his combat career, Lynch recorded 17 kills (ten individual and seven shared), along with a single probable and two damaged enemy aircraft.

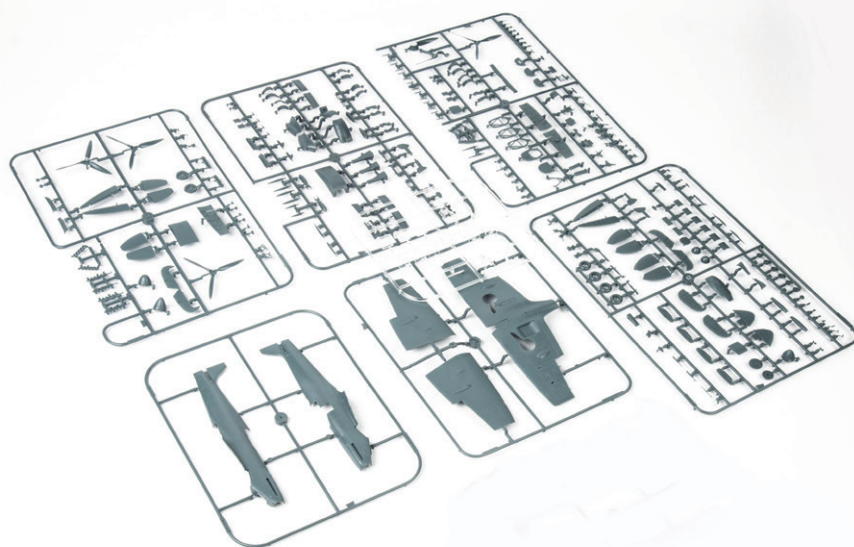
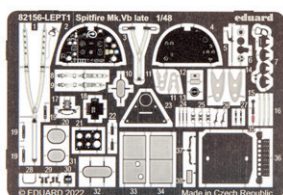
OVERTREES

#82156X Spitfire Mk.Vb late 1/48

[Product page](#)

OVERLEPT

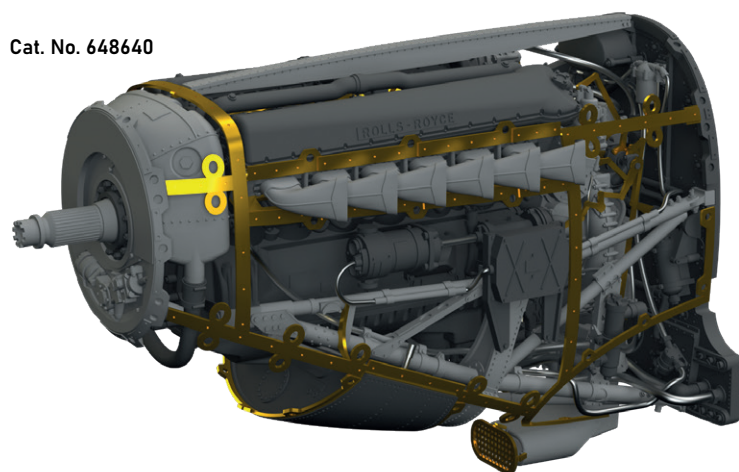
#82156-LEPT Spitfire Mk.Vb late 1/48

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Recommended: for Spitfire Mk.Vb late 1/48

FE1207	Spitfire Mk.V seatbelts STEEL (PE-Set)	648666	Spitfire Mk.Vc gun bays (Brassin)
481065	Spitfire Mk.V landing flaps (PE-Set)	648667	Spitfire Mk.V three-stacks exhausts rounded (Brassin)
644113	Spitfire Mk.V LööK (Brassin)	648668	Spitfire Mk.V three-stacks exhausts fishtail (Brassin)
648098	Spitfire wheels - 5 spoke (Brassin)	648669	Spitfire Mk.V six-stacks exhausts fishtail (Brassin)
648119	Spitfire wheels - 5 spoke, smooth tire (Brassin)	648670	Spitfire Mk.Va/b undercarriage legs BRONZE (Brassin)
648640	Spitfire Mk.V engine (Brassin)	648671	Spitfire Mk.Vc undercarriage legs BRONZE (Brassin)
648663	Spitfire Mk.V cockpit (Brassin)	648738	Spitfire Mk.V landing flaps PRINT (Brassin)
648664	Spitfire Mk.V wheels (Brassin)	D48088	Spitfire Mk.V stencils (Decal Set)
648665	Spitfire Mk.Vb gun bays (Brassin)		

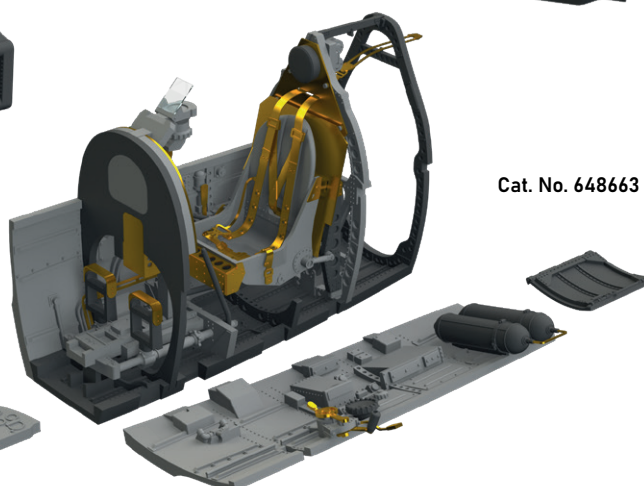
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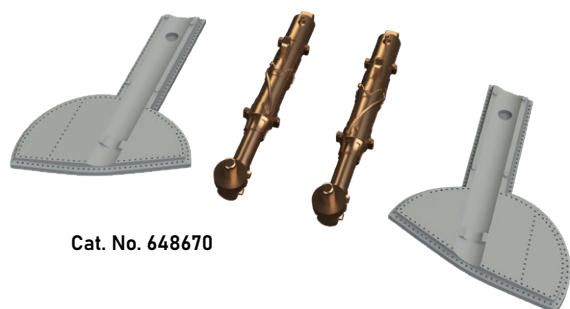
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Cat. No. 648670

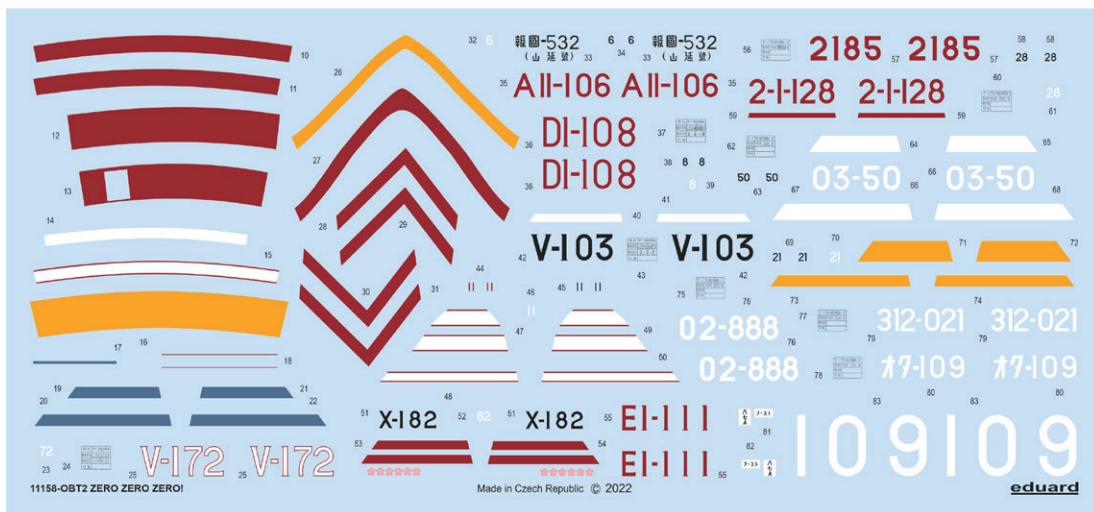
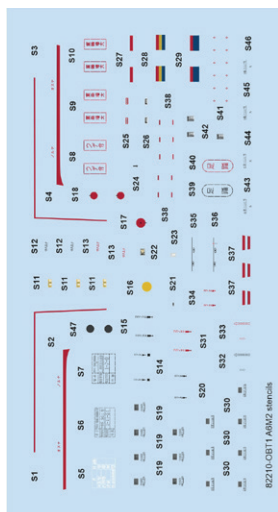
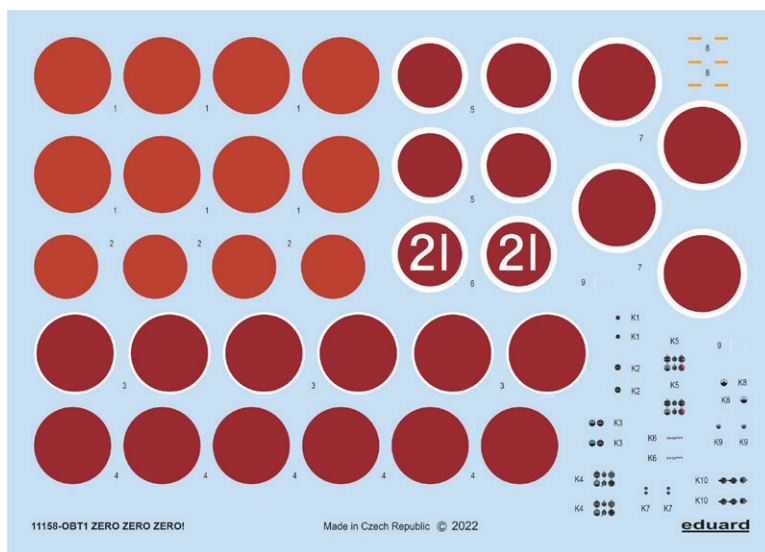
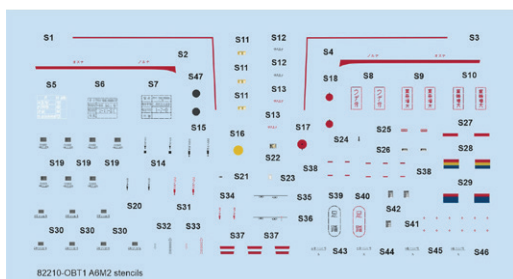


ZERO ZERO ZERO! 1/48 DUAL COMBO

#11158

Limited edition kit of Japanese WWII naval fighter plane A6M2 Zero Type 21 in 1/48 scale. The kit presents aircraft during their service in World War II.

- plastic parts: Eduard
- marking options: 12
- decals: Eduard
- PE parts: yes, pre-painted
- painting mask: yes
- resin parts: no

[Product page](#)


■ c/n 3372, cf. Kiku-ichi Inano, Tainan Kōkūtai, Tainan airfield, Taiwan, November 1941

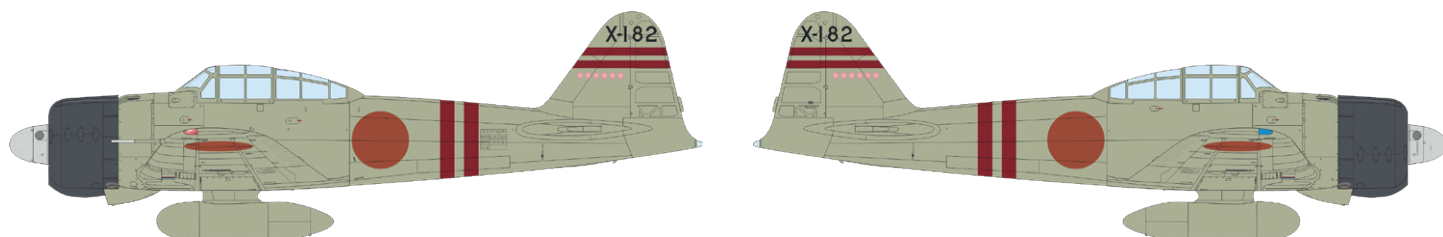


This aircraft, released by Mitsubishi on October 21, 1941, became the first Zero in repairable condition to fall into Allied hands. The legendary Tainan Kōkūtai was established on October 1, 1941, at the Tainan base. Most of the unit participated in combat over the Philippines, Borneo and the Dutch East Indies. A smaller part, under the command of Lt. Kiku-ichi Inano, was transferred to French Indochina in late November and temporarily became part of 22. Kōkū Sentai HQ fighter squadron. The "V-172" fighter was Inano's personal

machine. During the transfer to Saigon on November 26, Inano flew aboard a transport aircraft and his Zero was piloted by PO1c Shimezō Inoue. Inoue and his wingman with Zero "V-174" lost their bearings in poor weather and made an emergency landing on the coast of the Leichou Peninsula. Both pilots were taken prisoner by the Chinese. Inoue was repatriated after the war. He returned to his home village with shame over his capture, suffered from depression, and died in a war veterans' hospital. With great effort, the Chinese

managed to transport the Zero "V-174" to Liuchow base, where they began repairs. The machine was given Chinese national insignia and number P-5016. It was also tested by pilots of the American 75th FS. In 1943, the aircraft was transported to the USA, where it received the designation EB-2, later EB-200. Lt. Inano returned to Tainan Kōkūtai in July 1942, participated in combat over New Guinea and Guadalcanal. From October 1944 served as Hikōtaichō of Tainan Kōkūtai (II) in Taiwan.

■ Lt. Zenjirō Miyano, 3. Kōkūtai, Poeleti airfield, Timor, March 1942



This aircraft, manufactured by Mitsubishi, was photographed in April 1942 in Rabaul with partially repainted markings that originally belonged to Lieutenant Miyano. The bands and stripes may have been in dark blue or black color. Zenjirō Miyano served from 1939 with the 12th Kōkūtai in China and was appointed as a Buntaichō with the 3rd Kōkūtai in October 1941. He participated in the campaigns in the Philippines and the Dutch East Indies. During a raid on Broome, Australia, on March 3, 1942, Miyano attacked a Dutch

civil DC-3. The pilot was Capt. Ivan Smirnov, a World War I Russian fighter ace. With one engine on fire, he managed to make an emergency landing, but the Zero pilots killed four passengers on the ground. In April 1942 Miyano was transferred to the 6th Kōkūtai, which was to be based at Midway. Part of his unit was on the way to Midway aboard the carrier Jun'yō, which participated in the attack against Dutch Harbor in the Aleutians. Miyano also participated in the raid. His unit was based at Rabaul from August 1942

and was redesignated Kōkūtai 204 in November. From March 1943 Miyano took position of Hikōtaichō. He was one of the innovators of combat tactics and was the first to introduce the finger-four formation in Japanese naval aviation. Miyano achieved a total of 16 victories and was killed on June 16, 1943, over Guadalcanal during escort of dive bombers.

■ Kaga Fighter Squadron, Kisarazu base, Japan, April 1942



In early 1942, the aircraft carrier Kaga took part in attacks on Rabaul, Kavieng, targets in New Guinea and Port Darwin. In March, her aircraft participated in attacks against ships off Java. Due to hull damage caused by a reef in early February, Kaga was undergoing repairs at Sasebo from March 22, 1942. The Mitsubishi-built "AII-106" was photographed at Kisarazu in April 1942. It bears the patriotic donation inscription (Hōkoku) No. 532 and the name of the do-

nor (Yamanobe-gō). It may be the name of a company or the donor's surname. It is likely that this aircraft participated in the Battle of Midway on June 4, 1942. Nine fighters from Kaga flew in the first attack wave, led by Lt. Iizuka. They reported twelve victories. During the exhausting combats to cover their own task force, the Kaga's fighters claimed 32 aircraft destroyed. After the carrier was hit, some of them landed aboard the HIJMS Hiriyū. Two took part, as escort,

in the raid on the USS Yorktown. The Kaga's Fighter Squadron lost six pilots during the battle, four of them during combat air patrol. However, elite ground personnel suffered heavy losses when the ship was sunk. Also aboard the HIJMS Kaga were fighter pilots and mechanics from the 6th Kōkūtai, who were to be based at Midway Atoll after its capture. Some of them also took part in the air battle.

■ c/n 4593, P01c Todayoshi Koga, Ryūjō Fighter Squadron, June 1942



This aircraft was released by Mitsubishi on February 19, 1942. In late April and early May the Ryūjō Fighter Squadron received Zeros instead of older A5M „Claude“ aircraft. P01c Koga, a veteran of 12th Kōkūtai in China, piloted “DI-108” on June 4 during the attack on the Aleutians. He was one of the two wingmen of CPO Endō. Near Egg Island they shot down Ens. Albert E. Mitchell’s Catalina of VP-42, which was carrying mail to Umnak. The burning aircraft landed on the sea and several airmen managed to get into

the dingy. However, they were strafed and killed by the Japanese airmen. Koga’s Zero was hit either by defensive fire from Catalina or, moments later, by ground fire. Koga attempted to land on Akutan Island, which was intended for the rescue of the Japanese airmen. The aircraft with retracted undercarriage and stopped engine overturned after touching soft marsh ground and Koga was killed. The Japanese attempted to rescue the pilot but were unable to find him due to bad weather. Five weeks later, the

Zero was spotted by the crew of Lt. Williams “Bill” Thies’ Catalina. On July 5, a US Navy team reached the plane. The Americans transported the aircraft to NAS North Island in San Diego. The Zero was repaired, given a Hamilton-Standard propeller and registration number TAIC 1. It underwent intensive testing but was apparently scrapped after the war. In memory of the Ens. Mitchell and his crew, the destroyer DE-43 was christened Mitchell.

■ c/n 3647, Warrant Officer Tora-ichi Takatsuka, Tainan Kōkūtai, Lakunai airfield, Rabaul, September 1942

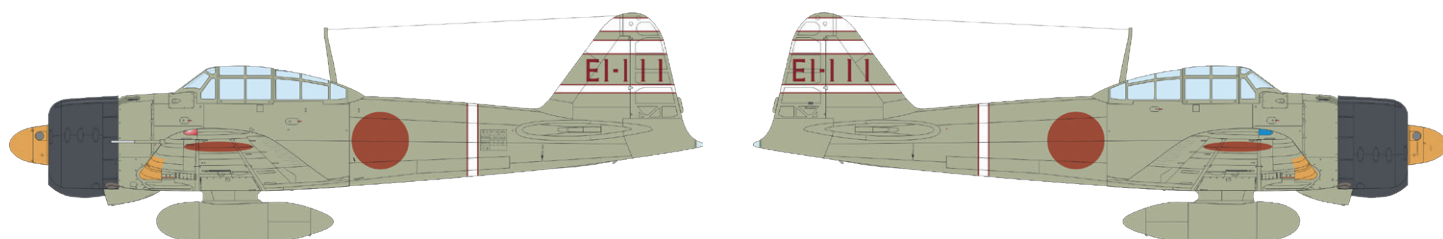


This aircraft was produced by Mitsubishi on March 3, 1942. It was flown in legendary Tainan Kōkūtai by the also famous fighter aces Saburō Sakai and Hiroyoshi Nishizawa. It is believed that with this Zero, on September 13, 1942 over Guadalcanal, Shōtai leader W. O. Takatsuka was shot down in a dogfight with Wildcats from VF-5 and VMF-223. Three of his wingmen were also shot down in the same action. The wreckage of this Zero was found in 1993 in a swamp about five miles

east of Henderson Field. Remnants of code and markings remained on some parts. Takatsuka had served in the IJN aviation since 1933. In the 12th Kōkūtai he was one of the fighter pilots who achieved the first victories with Zeros in aviation history on September 13, 1940. He was promoted to Warrant Officer in October 1941 and demobilized. However he was soon called back into service by the IJ Navy and from June 1942 was assigned to Tainan Kōkūtai in Rabaul. He mainly

took part in the fighting over New Guinea. In total he was credited with 16 victories including three in China. Fighting with the Wildcats had already nearly proved fatal to him once. During the raid on Guadalcanal on August 7, 1942, although he claimed four victories, he flew in front of one of his opponents and immediately was hit. The victor was Thomas Rhodes of VF-6 (USS Enterprise). Takatsuka’s Zero caught fire, but he managed to put it out and escape.

■ Lt. Hideki Shingō, Shōkaku Fighter Squadron, October 1942

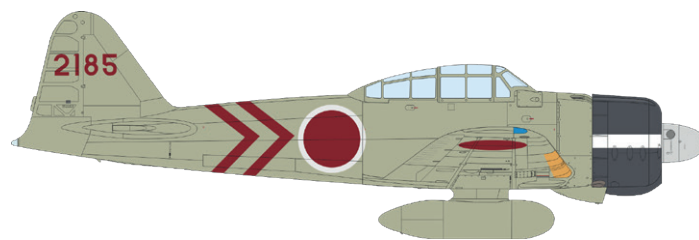
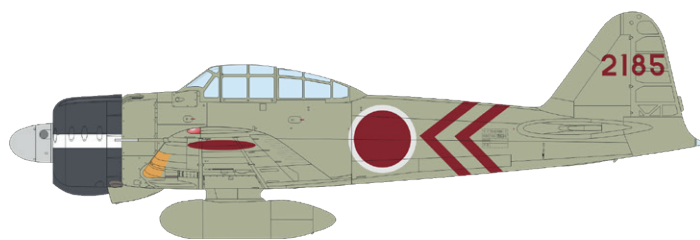


This aircraft manufactured by Mitsubishi carries an unusually large yellow identification stripe. Hideki Shingō (NA, 1931) served from 1934 in the Tateyama Kōkūtai, on the HIJMS Ryūjō, he became an instructor in the Yokosuka Kōkūtai, and then held Buntaichō position in the Ōmura Kōkūtai. In the second half of 1937 he fought in China with the Kaga Fighter Squadron. He then served as Buntaichō at Kanoya, Saiki, Kasumigaura, Ōita and 14th Kōkūtai. In October 1941, Shingō became Hikōtaichō in charge of training at Tainan Kōkūtai,

Taiwan. He trained primarily the long-range flying. On December 8 he led 44 Zeros in an attack on the Philippine airfields of Iba and Clark Field. From April 1942 he served briefly with the 6th and Genzan Kōkūtai, then in July he became Hikōtaichō of the Shōkaku Fighter Squadron and participated in the Battle of the Eastern Solomons. At the end of August he led a detachment operating from Buka airfield. He was shot down over Guadalcanal but avoided capture. During the Battle of Santa Cruz (October 1942), he led five Zeros in the

second attack wave and descended to a lower altitude in order to draw the anti-aircraft fire away from the dive bombers. He was promoted to Lt. Commander in November 1942 and in the following years served as a Hikōtaichō of Tsuiki Kōkūtai in Japan, in Indonesia and Burma with Kōkūtai 331 and Hikōtai 603, and till April 1945 with Kōkūtai 252 in Japan. After the war, he worked in the police, later joined the JSDAF, and retired in 1967 with 6,000 hours flying time and rank of Lieutenant General. Shingō-san passed away in 1982.

■ c/n 1503, Warrant Officer Kan-ichi Kashimura, Kōkūtai 582, Buin airfield, Bougainville Island, March 1943

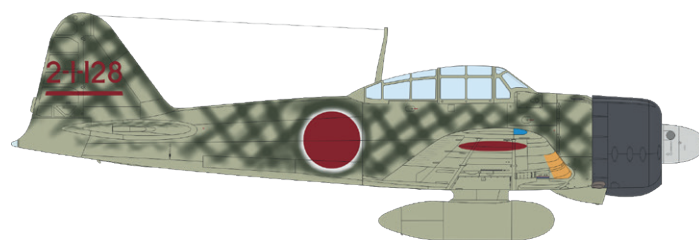
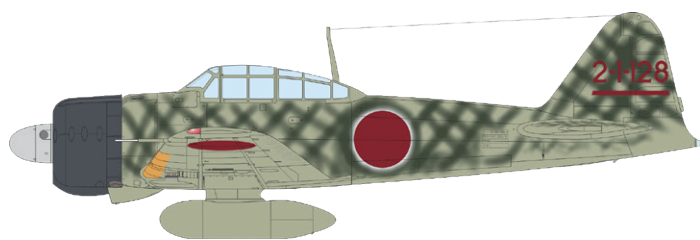


Nakajima machine built ca August 1942. Its wreckage was found on Pavuvu Island and it is believed that W. O. Kashimura was lost with it on March 6, 1943. He remained missing after an air battle off Russell Island while escorting bombers, probably shot down by S/Sgt Robert H. Bahner, SBD gunner from VMSB-132. American crew described color of Kashimura's Zero as "greenish yellow". Kashimura served successively with Ōmura, Tokosuka and Kanoya Kōkūtai from 1934. In late 1937, he was transferred to 13th

Kōkūtai in China. During the battle near Nanchang on December 9, 1937, he shot down one enemy aircraft and collided with another. Kashimura's A5M lost big part of port wing, but he managed to regain control just above the ground. He flew about 600 km back to his base in Shanghai and managed to make an emergency landing. The circumstances of this action were detailed in the Japanese press and his aircraft was displayed in Japan. In March 1938, Kashimura was transferred to the Yokosuka Kōkūtai, but he

returned to the Chinese battlefield in late 1939 and served three months with the 12th Kōkūtai. He then returned to the Yokosuka Kōkūtai. During the Doolittle Raid, Kashimura was in the air but mistook a B-25 bomber for a Japanese aircraft. In December 1942, he was transferred to Kōkūtai 582 stationed in Rabaul. He was considered an excellent aviator and theoretician but used very harsh training methods. He had a total of 12 victories including 10 in China.

■ Jun'yō Fighter Squadron, Buin airfield, Bougainville Island, April 1943

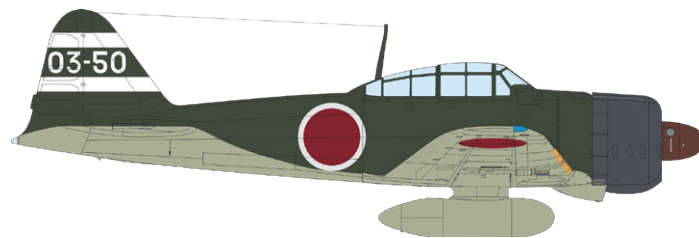
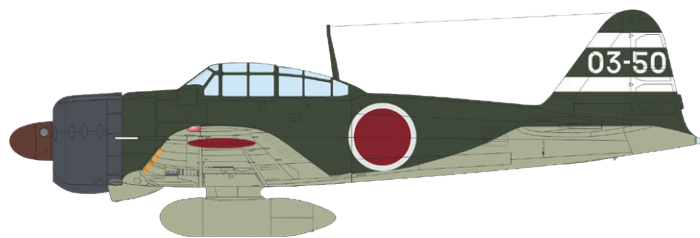


This aircraft, manufactured by Nakajima, was photographed in April 1943 during Operation "I-go". The code "2-1" is the designation of the 2nd Carrier Division (Kōkū Sentai), which HIJMS Jun'yō was 1st carrier. The horizontal bar below the code identifies the leader of a Shōtai, which was usually a formation of three machines. In early 1943, an improvised green paint was applied to the Zeros. The colors chosen and the execution of the paint varied from unit to unit. During

this period, among the notable fighter pilots of the unit were Buntaichō Lt. Yasuhiro Shigematsu (10 v.), W. O. Tomita Atake (10 v.), and W. O. Shizuo Ishi-i (29 v.). The aircraft carrier Jun'yō was completed in May 1942, whereupon she participated in the attack against the Aleutians, took part in the Battle of Santa Cruz, and escorted army convoys bound for New Guinea. In April 1943 her Air Group operated independently from Rabaul and surrounding bases, including Buin, then

withdrew to Truk. From July the Air Group was again based in Buin until September 1, 1943, when its fighter pilots were taken over by the decimated Kōkūtai 204. In November of that year the Jun'yō Air Group was reformed and in January 1944 moved again to Rabaul, where it fought for a month. Jun'yō participated also in the Battle of the Philippine Sea and then remained in Japan until the end of the war. Jun'yō Fighter Squadron scored more than 90 confirmed victories.

■ Hikōtai 303, Kōkūtai 203, Musashi airbase, Paramushir Island, Kuril Islands, April 1944

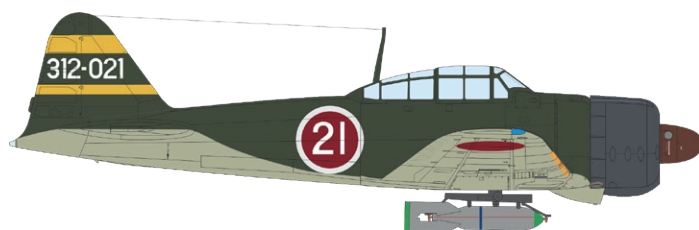
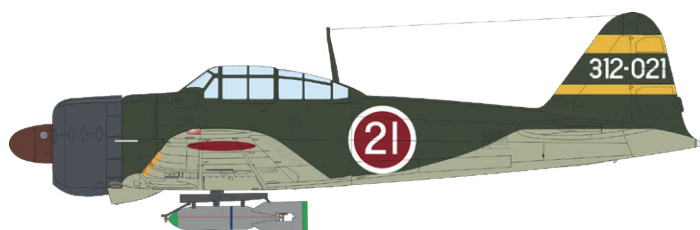


This Nakajima-built aircraft was assigned to one of the formation leaders of Hikōtai 303, part of Kōkūtai 203, established in April 1943 from the training Atsugi Kōkūtai. At that time, this unit was armed with Zeros and "Gekkō" (Irving) night fighters. From April 1944 it defended the northern part of the Kuril Islands. From May, Kōkūtai 203 fighters clashed with American crews of Ventura and Liberator bombers. In some cases, the Americans had to make emergency landings on So-

viet territory. Among the experienced aviators of this unit was Japan's most successful naval fighter pilot, Hiroyoshi Nishizawa. He served with Kōkūtai 203 from March 1944 and was assigned to its Hikōtai 303 in July. However, he did not record any victories in the Kuril Islands area. In this period Nishizawa wrote document about air combat basics due to high losses of naval aviation units and the inexperience of the new unit commanders. Since the fall of 1944, Kōkūtai 203 had seen

combat at Okinawa, in the Philippines, and in Taiwan. At the time of the fighting in the Philippines, Hikōtai 303 was temporarily assigned to Kōkūtai 201. In 1945, Kōkūtai 203 was deployed in the defense of Japan, and its structure expanded up to five Hikōtais by the end of the war, with a total of 240 fighter aircraft. Kōkūtai 203 was also involved in fighter escorts of Kamikaze formations, including G4M "Betty" bombers with Ōka rocket powered aircraft.

■ Lt. Toshio Suzuki, Kōkūtai 601(I), HIJMS Zuikaku, Tawi Tawi base, Philippines, June 1944

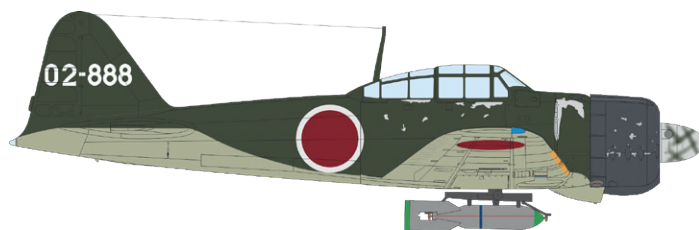
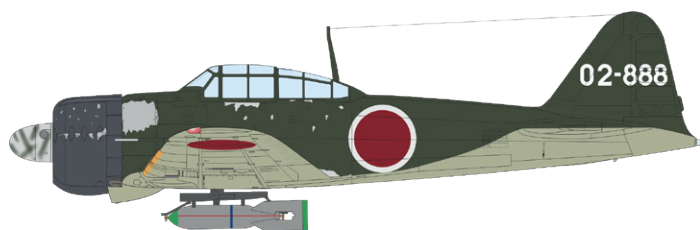


This Nakajima-built machine was piloted by Lt. Toshio Suzuki. He was in command of a squadron of eleven HIJMS Zuikaku A6M2 fighter-bombers. His unit was part of Kōkūtai 601(I). In mid-1944, the affiliation to the Zuikaku's Carrier Air Group (Hikōkitai) was identified by the code 312 on the tail surfaces. The white numbers on the hinomaru were used during training operations and were usually chalk painted. Toshio Suzuki was born in Mitsukaidō in Ibaraki Prefecture and graduated from the Etajima Naval

Academy in 1941. As a cadet, he was assigned aboard the cruiser Suzuya. After completing flight training, he was assigned to Kōkūtai 601(I) in May 1944 and promoted to Lieutenant. Squadrons of Kōkūtai 601(I) were divided into CAGs on boards of Taihō, Shōkaku and Zuikaku. In addition to Suzuki's fighter-bombers, Zuikaku had 24 A6M5 "Zeke" fighters, a dive-bomber squadron with 18 D4Y "Judy" and three D3A "Val", 14 B6N "Jill" torpedo bombers, and a reconnaissance squadron with several "Judy" and "Val" machines.

Kōkūtai 601(I) engaged in the Battle of the Philippine Sea on June 19 and suffered devastating losses. Lt. Suzuki led a ten-man A6M2 formation in the second wave, along with four A6M5 fighters and four "Jill" bomber crews. However they failed to find their target, and the American fighters shot down one bomber and eight A6M2s, including Suzuki's. Taihō and Shōkaku were sunk after a submarine attack, and Zuikaku was damaged by bombing.

■ 1st Kamikaze Tokubetsu Kōgekital, Shikishima-tai, Mabalacat airfield, Philippines, October 1944

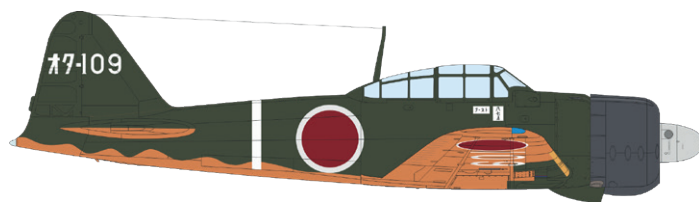
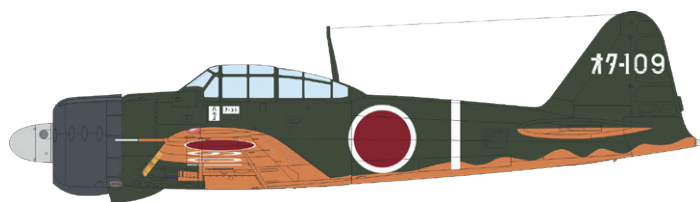


The Nakajima-built "02-888" belonged to first official Kamikaze unit in the history of the Japanese Naval Air Force. As part of the 1st Kamikaze Tokubetsu Kōgekital, a total of nine groups of airmen were organized, mostly from Kōkūtai 201. Their target was Task Force Taffy 3 during the Battle of Leyte Gulf. The Shikishima unit was named after the poetic term used for the island of Yamato (Honshū), or also old Japan. Its commander was Lt. Yukio Seki. He was born in 1921 and graduated from the Naval Academy in 1941. He

first served on the battleship Fusō, then experienced the Battle of Midway on the seaplane carrier Chitose. In 1943 he completed basic flight training and later received training on carrier bombers. In September 1944, he was assigned in the Philippines to Kōkūtai 201, which specialized in skip bombing with A6M fighters. The unit suffered heavy losses during September and October. Replacements were taken over in Mabalacat from other units, including Hikōtai 602 (Kōkūtai 381), from which machine "02-888" appears

to have originated. On October 25, Lt. Seki led one of seven groups of Zero pilots equipped with bombs who sacrificed themselves in an attack on American vessels. Seki's fighter escort was provided by legendary fighter pilot Hiroyoshi Nishizawa of Kōkūtai 203. Lieutenant Seki or one of his wingmen hit the aircraft carrier USS St. Lo, which sank after 30 minutes. Of the 889 crew members, 113 were killed or missing and about thirty others died of their injuries.

■ Ōita Kōkūtai, Ōita Airport, Japan, early 1944



This Nakajima-built machine served with the training unit Ōita Kōkūtai. It bore orange paint on the undersides and had a non-standard dark green paint on the undercarriage covers and part of the undersides. The characters in the Katakana "Ō" and "Ta" are the unit markings. The machine carries warning stencils on both sides of the fuselage. The vertical rectangle reads "87A" as a warning that the aircraft uses 87 octane fuel instead of the 91 octane

fuel used in Sakae 12 engines in combat units. In the horizontal rectangle is the warning "būsuto" (boost). It draws attention to the lower boost pressure limit associated with 87 octane fuel. Exceeding it threatened engine damage. The late production A6M2s from Nakajima may have had the engine cowling painted black instead of antiglare blue-black. The outer fuselage sections below the cockpit canopy and canopy frames may have been painted in interior green or

camouflage dark green. The Ōita Kōkūtai was established in 1938 and was used for training until March 1944. Many famous aviators passed through its ranks. Combat veterans were also assigned to this unit as instructors, such as Kaneyoshi Mutō, who served with the unit after his combat duty in China and five victories of his total 28.

OVERTREES

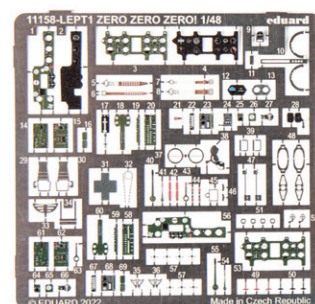
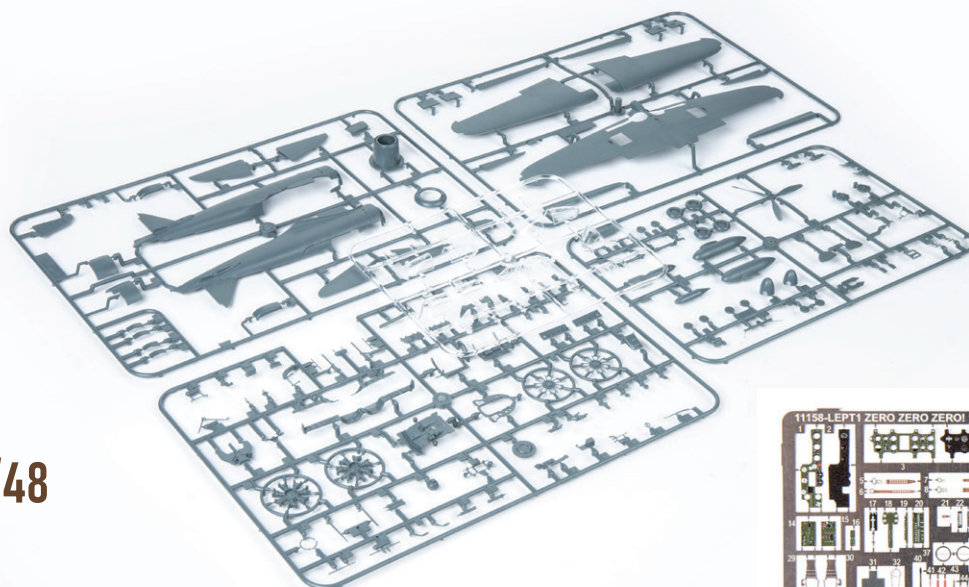
#82211X A6M2 1/48

Product page

OVERLEPT

#11158-LEPT
ZERO ZERO ZERO! 1/48

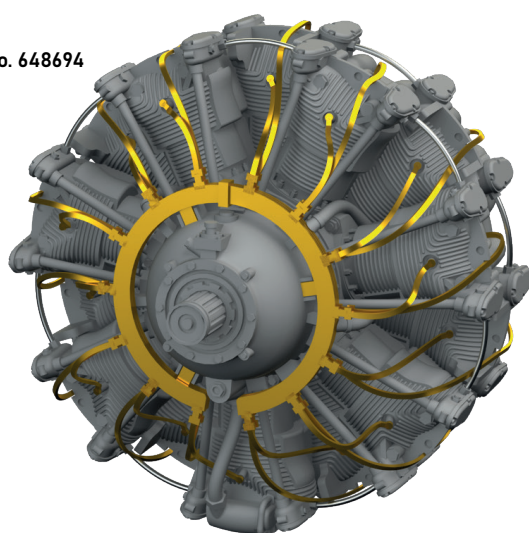
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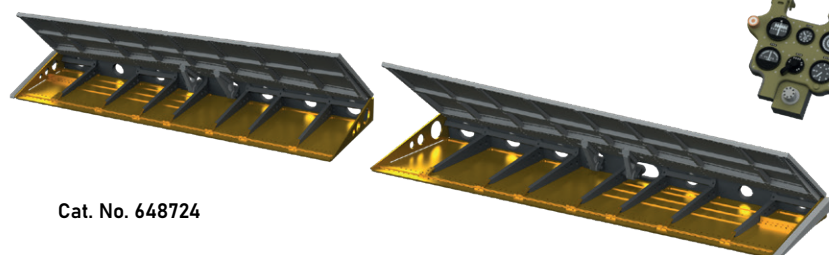
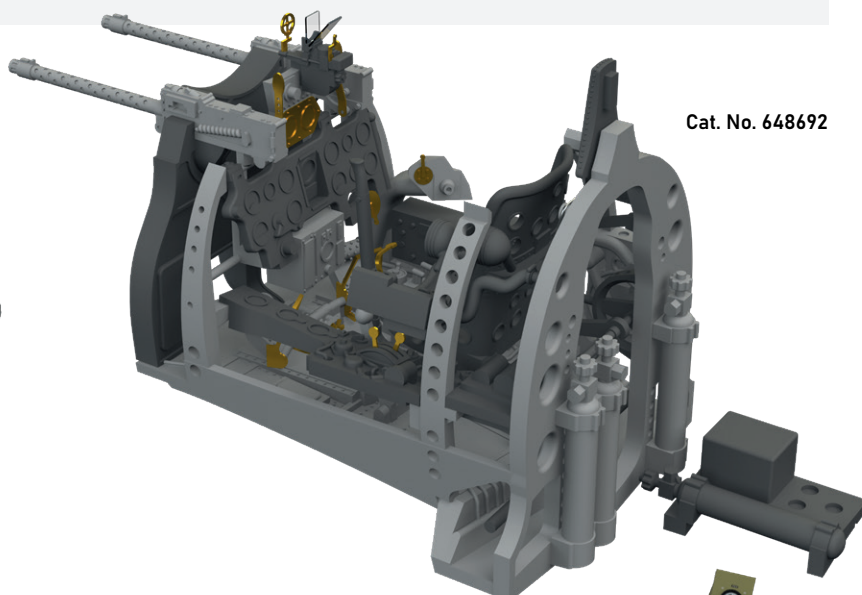
Recommended: for A6M2 Zero Type 21 1/48

481076	A6M2 landing flaps (PE-Set)	648722	A6M2 exhausts PRINT (Brassin)
FE1238	A6M2 seatbelts STEEL (PE-Set)	648723	A6M2 cannon barrels & cockpit guns PRINT (Brassin)
644128	A6M2 LööK (Brassin)	648724	A6M2 landing flaps PRINT (Brassin)
648692	A6M2 Zero Model 21 cockpit PRINT (Brassin)	648731	A6M2 Zero Model 21 folding wingtips PRINT (Brassin)
648693	A6M2 wheels (Brassin)	3DL48050	A6M2 SPACE (3D Decal Set)
648694	A6M2 engine PRINT (Brassin)	D48098	A6M2 stencils (Decal Set)
648695	A6M undercarriage legs BRONZE (Brassin)	EX821	A6M2 TFace (Mask)
648698	A6M2 seat PRINT (Brassin)		

Cat. No. 648694



Cat. No. 648692



Cat. No. 648724

Cat. No. 644128

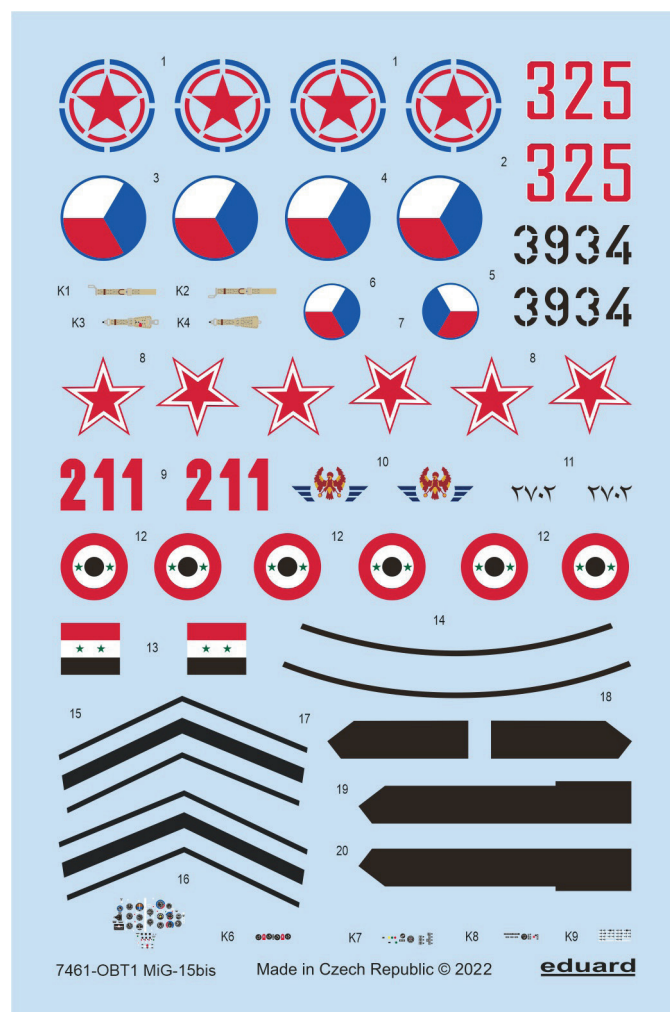
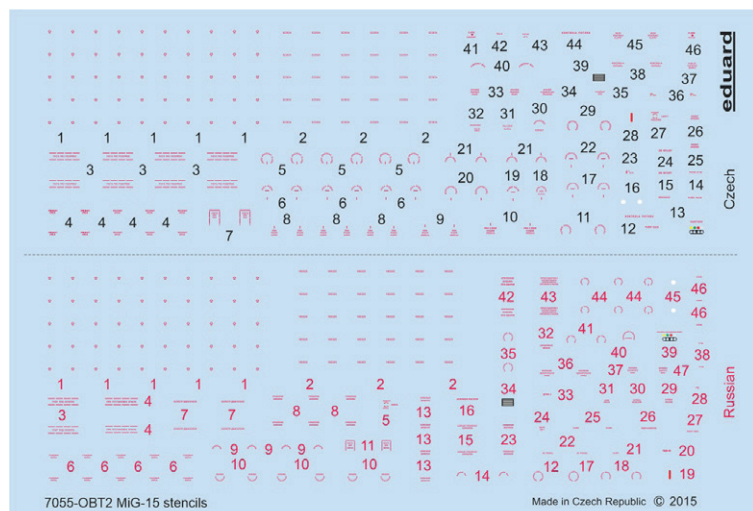


MiG-15bis 1/72

#7461

Weekend edition kit of Soviet
Cold War jet fighter plane
MiG-15bis in 1/72 scale.

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

[Product page](#)


■ MiG-15bis, No. 129, Maj. A. M. Karelin, 351 IAP, 106 IAD, Anshan, China, July 1952



Anatoly Michailovich Karelin was born on July 16th, 1922. He attended flight school in Krasnodar in 1941, and from December 31, 1944, he flew combat missions as a pilot of the 203 Independent Air Reconnaissance Regiment. In October, 1946, he was named Section CO with the 89 Guards Fighter Regiment (GIAP) and in April, 1948, he was reassigned to the 304 IAP in the Far East. On June 9, 1951, he was named Deputy Commander of the 351 IAP (106 IAD, 64 IAK). By this time, he was actively engaged in combat over Korea and remained

there until February, 1953. He flew some fifty missions and saw combat on ten occasions, shooting down six aircraft and damaging two in the process. His victims were solely B-29 and RB-29 aircraft. For his accomplishments, Karelin was awarded the Hero of the Soviet Union medal on July 14, 1953. On his return from China, he held several high-profile posts, the last of which was commander of the 14 Air Defence Division. He retired in March, 1970, and died three years later in St. Petersburg. His MiG-15bis, coded 325, was inherited

from the commander of the 196 IAP, E. G. Pepelyayev, who used it to achieve eighteen confirmed kills. Karelin added another pair on the night of 9/10 July, 1952, when he shot down two B-29s. By this time, the MiG had the red nose paint removed (though its remnants were evident). The red outlined in white code number was preserved, as was oversprayed by irregular pattern of grey color as well as the insignia. It is possible the patches were of more colors (green, sand and brown possibly).

■ MiG-15bis, No. 3934, 20 slp (Fighter Air Regiment), Čáslav, Czechoslovakia, 1957–1958

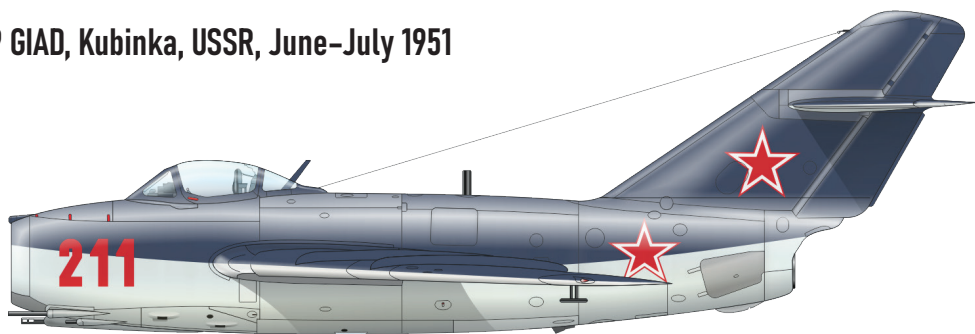


This aircraft was produced in December, 1956 and on January 11, 1957 was delivered to the 18 slp in Pardubice, only to be passed on to the 2 lšp (Training Air Regiment) for use during the "A-105" operation, which was a training of Egyptian pilots onto the type. On March 21, the aircraft was damaged by Lt. Samir Abed Elrazek in a taxiing mishap involving a collision with MiG-15UTI coded 2045. At the end of the year (probably), the aircraft was transferred to the

20 slp. The standard guise of the Czechoslovak MiGs was in this case supplemented by blue bands on 3934 sometime in 1958. These were used to identify the aircraft as a foe during military exercises. The aircraft was retired in 1972, flying with the 30 sbolp (Fighter-Bomber Regiment) in Hradec Kralove at the end of its service. However, it was never brought to the attack MiG-15bisSB standard suited to the regiment's function. After its retirement, the airpla-

ne was displayed in the Josefodol village, and was later bought privately in Chotusice town. There, the airplane gradually degraded until it was picked up by a collector in Znojmo. Currently, the aircraft is on display there in the local transportation museum, but with a non-original code of 4393. Apparently, the previous owner painted this code on the aircraft, but no MiG-15 or MiG-15bis served in the Czechoslovak Air Force coded 4393.

■ MiG-15bis, Maj. V. Fokin, 234 GIAP, 9 GIAD, Kubinka, USSR, June–July 1951

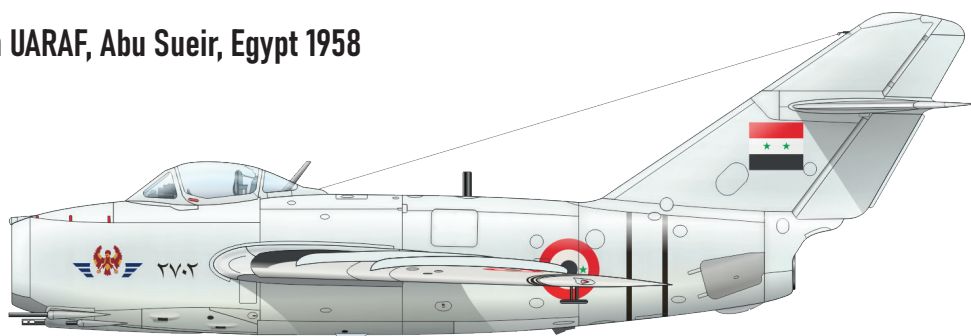


Several display teams flew in the former Soviet Union, which tended to show off formation flying rather than aerobatics. Most of the teams weren't even named. A team from Kubinka, manned by pilots of the 234 Guards Fighter Regiment (Special Pilotage Unit), was one of the exceptions. This group was named in honor of a display team flying red I-16s that was known as the "Red Five" in 1930's. At the time when it flew MiG-15s, it was also known as the "Babayev Group", named after its then commander, Col. A. I. Babayev. But the

blue upper and side colored aircraft did not belong to the group, and it was actually one of two aircraft that were used for displays being flown by Maj. V. S. Lapshin and Maj. V. M. Fokin. Lapshin generally soloed first, showing off the airplane's aerobatic capabilities, but for the program for Soviet Aviation Day festivities held at Tushino in 1950, he had prepared a duo display with E. G. Pepelyayev, a future Korean War ace. However, the display could not be held due to inclement weather, and a year later, the duo display was realized with Fo-

kin, as Pepelyayev was already in China with the 196 IAP. This pair would fly together until 1953. The codes on the aircraft changed, and during displays in 1951, Lapshin's plane was coded 11 and had red upper surfaces, while Fokin's 211 was dark blue on the topsides. A year later, they led three-plane formations each at Tushino (Fokin led the blue group and Lapshin the red one), that demonstrated precision formation flying interspaced with group aerobatics.

■ MiG-15bis, No. 272, No. 18 Squadron UARAF, Abu Sueir, Egypt 1958



Besides the war in Korea, the MiG-15 would see a lot of action in the Middle East. Egypt purchased a total of 110 MiG-15bis of Czechoslovak manufacture (originally, the number was to have been 80), as part of the A-105 operation. The first eighty plane delivery reached Egypt at the end of 1955 on board the merchant vessel "Stalingrad", and the Egyptians first used them operationally during the Suez Crisis of 1956. In all, six squadrons used the MiG-15 (Nos. 1, 5,

18, 20, 24 and 30). By the end of the year, 108 aircraft were delivered, but only about sixty were airworthy at the time. During the Suez Crisis, the Egyptians lost some sixteen aircraft, several others were lost to accidents, and some were taken out of service due to technical issues. The majority of the remaining Egyptian MiG-15bis aircraft were destroyed on the ground during the Six Days War with Israel in 1967. In 1958, there was a unification of Egypt and Syria,

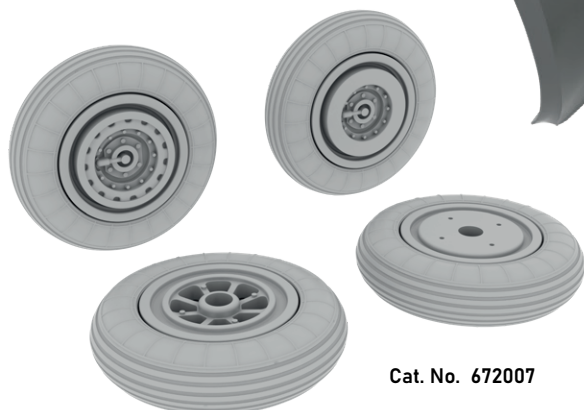
coming together as the United Arab Republic, and this brought about a renaming of the combined air force as the United Arab Republic Air Force. The national markings went from green and white to black, red, and white, and the air assets gained new Arabic numerals, apparently governed by the last four digits of the serial number. The nose of the aircraft carried the No. 18 Squadron emblem on both sides. The ID stripes around the fuselage and wings were black.

Recommended: for MiG-15bis 1/72

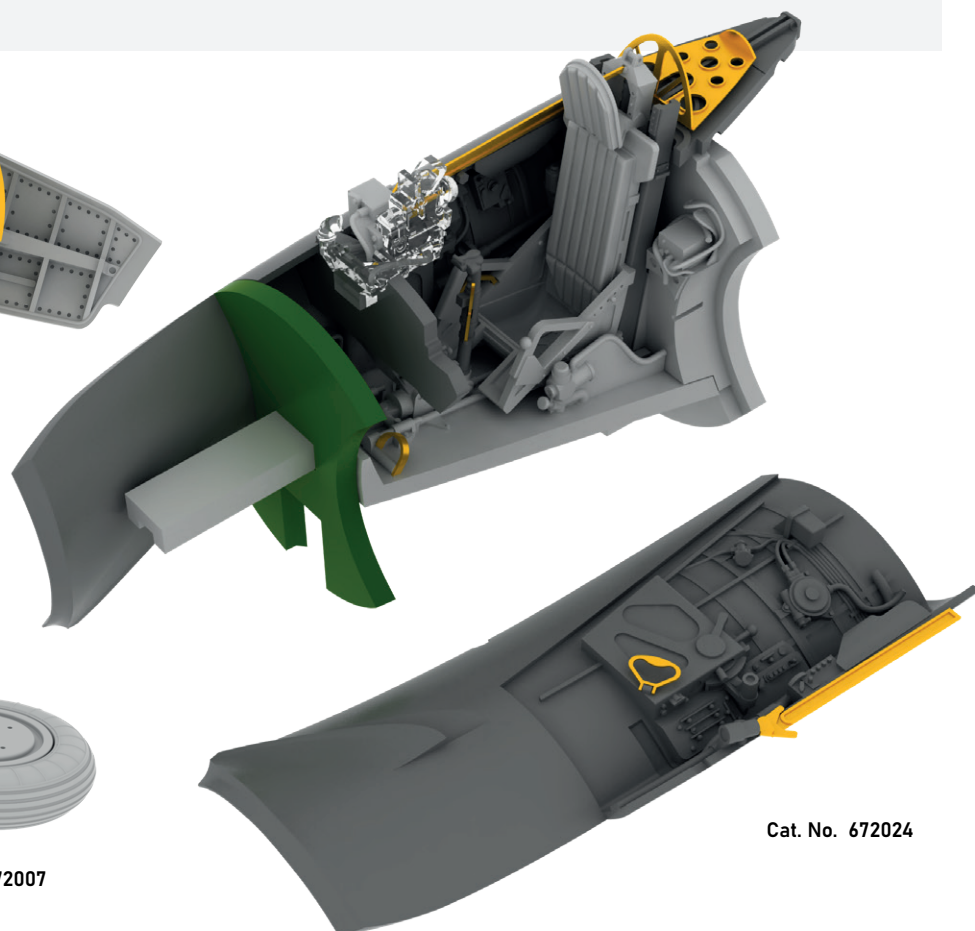
72574 MiG-15 landing flaps (PE-Set)
72575 MiG-15/MiG-15bis exterior (PE-Set)
672007 MiG-15 wheels (Brassin)
672008 MiG-15 ejection seat (Brassin)

672020 MiG-15bis airbrakes (Brassin)
672024 MiG-15bis cockpit (Brassin)
D72007 MiG-15/MiG-15bis stencils (Decal Set)

Cat. No. 672020



Cat. No. 672007



Cat. No. 672024

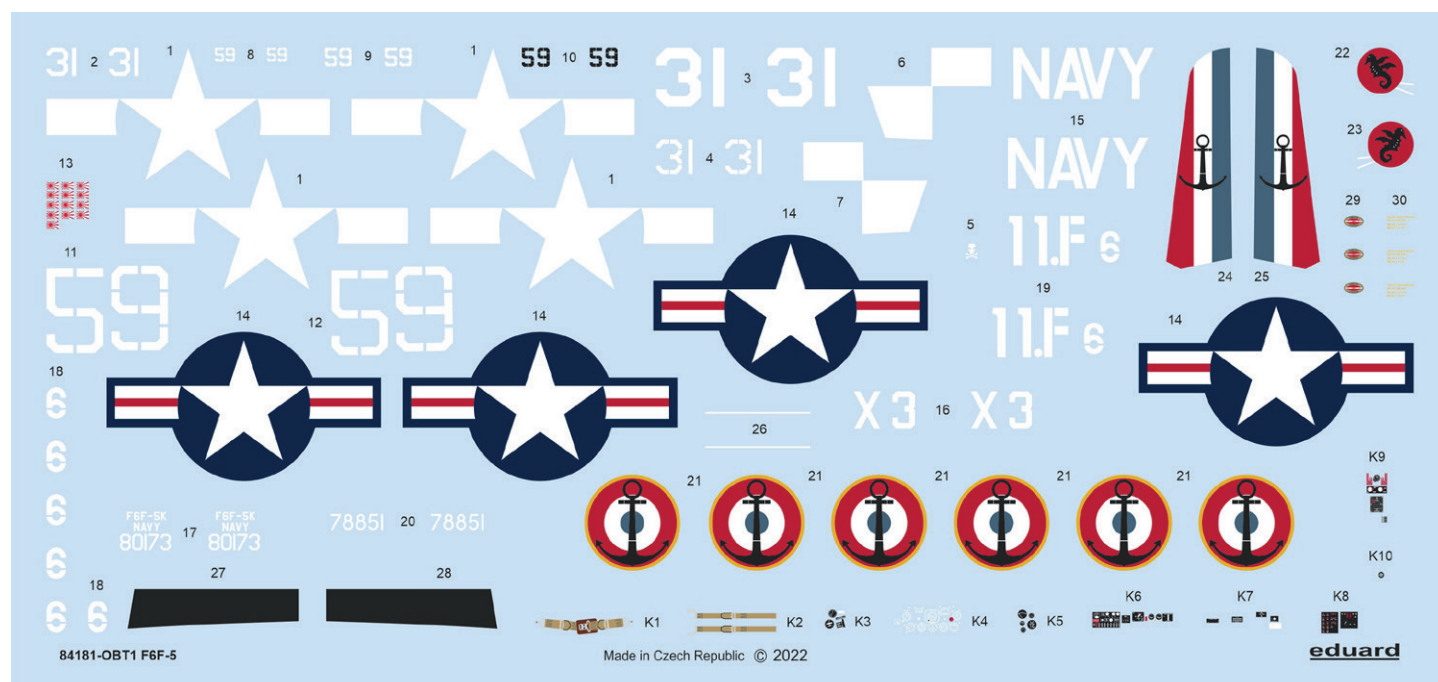
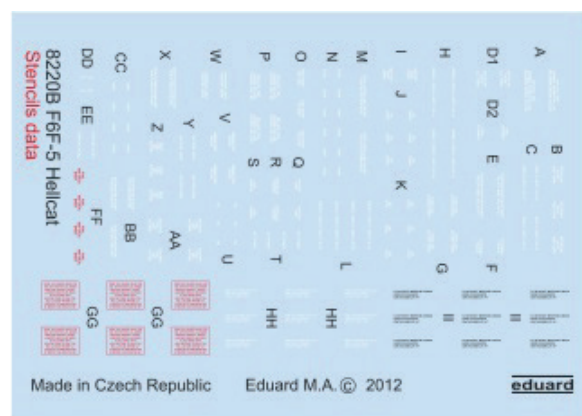
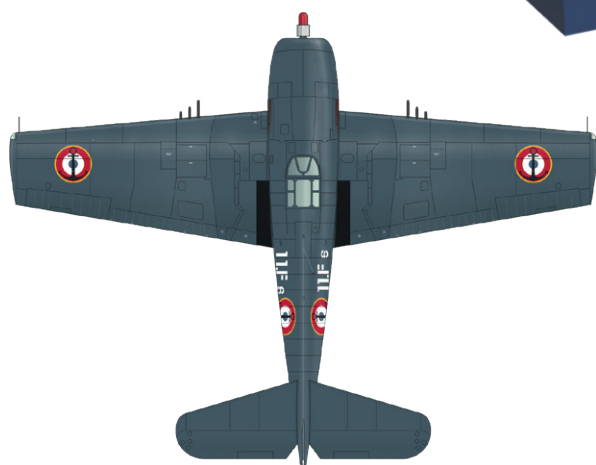
F6F-5 1/48

#84181

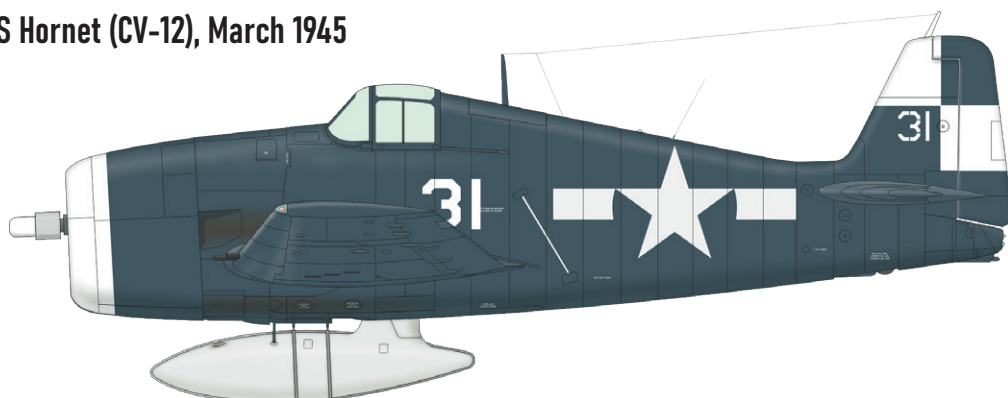
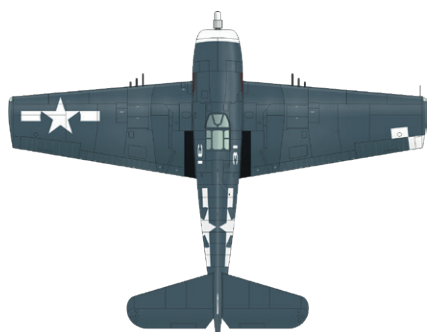
Weekend edition kit of US naval fighter aircraft F6F-5 in 1/48 scale.

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

Product page



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

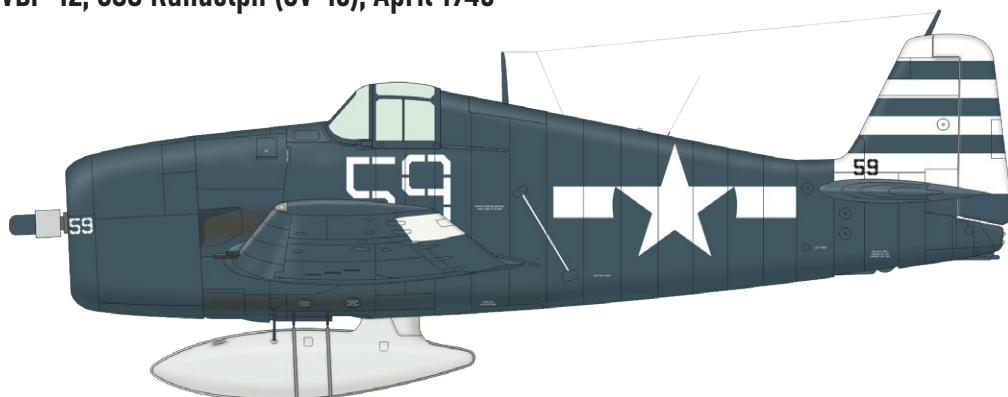
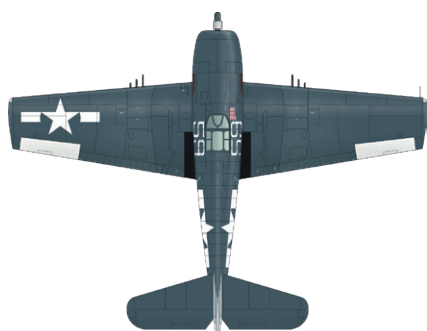


Before the planned landing of the American units on Okinawa (Operation Iceberg, April 1, 1945) on March 19, 1945 the USN airplanes attacked the enemy air bases located on the islands of Kyūshū, Shikoku and southern Honshū and the naval bases Kure and Kobe. The mission was to destroy the Japanese ships and aircraft and prevent them from any action against the invasion forces.

One of the units that were to participate in this strike was VBF-17 based on the aircraft carrier USS Hornet (CV-12). In the formation of twenty Hellcats, with which VBF-17 was equipped, flew Lt. Prinz and Lt. Karr. Kōkūtai 343 equipped with N1K2-J fighters was launched against the approaching enemy. The dogfight took place over the ocean. During the surprise attack on two American

pilots Lt. Karr was shot down while Lt. Prinz's Hellcat was damaged and the unit's commander was destroyed after the collision with one of the attackers, Kiku-ichi Ishikawa. Prinz managed to nurse the damaged aircraft back to Hornet where he landed. Hellcats participating in these missions were marked by white-painted noses for the better recognition of the friendly aircraft.

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

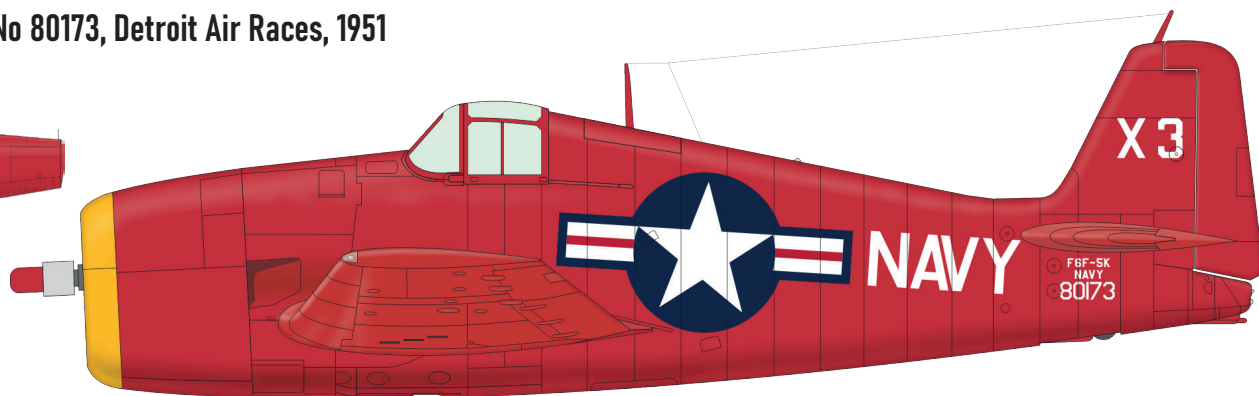
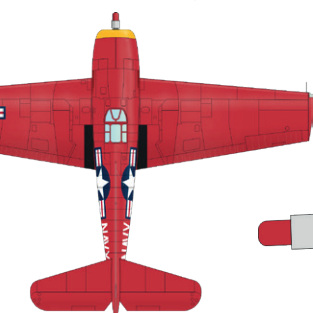


Washington D.C. native, Daniel Archibald Carmichael finished his Bachelor's studies in the architecture at Princeton University in 1941. He commenced his pilot's training with the US Navy in the spring of the following year finishing it in March 1943. After completing the advanced training he was assigned to VF-2 from June

1943 to October 1944 flying from USS Enterprise (CV-6) and USS Hornet (CV-12). During his VF-2 deployment Lt. Carmichael shot down nine enemy aircraft. His next assignment was the USS Randolph (CV-15) air carrier flight deck from which he flew from January to May 1945 within the ranks of VBF-12 achieving another 4

victories over the Japanese aircraft. During his VBF-12 deployment Lt. Carmichael flew overal blue Hellcat nr.59 which carried the white markings of the aircraft belonging to USS Randolph, on the vertical tail surface, rudder and the ailerons, his scoreboard was marked under the windshield.

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

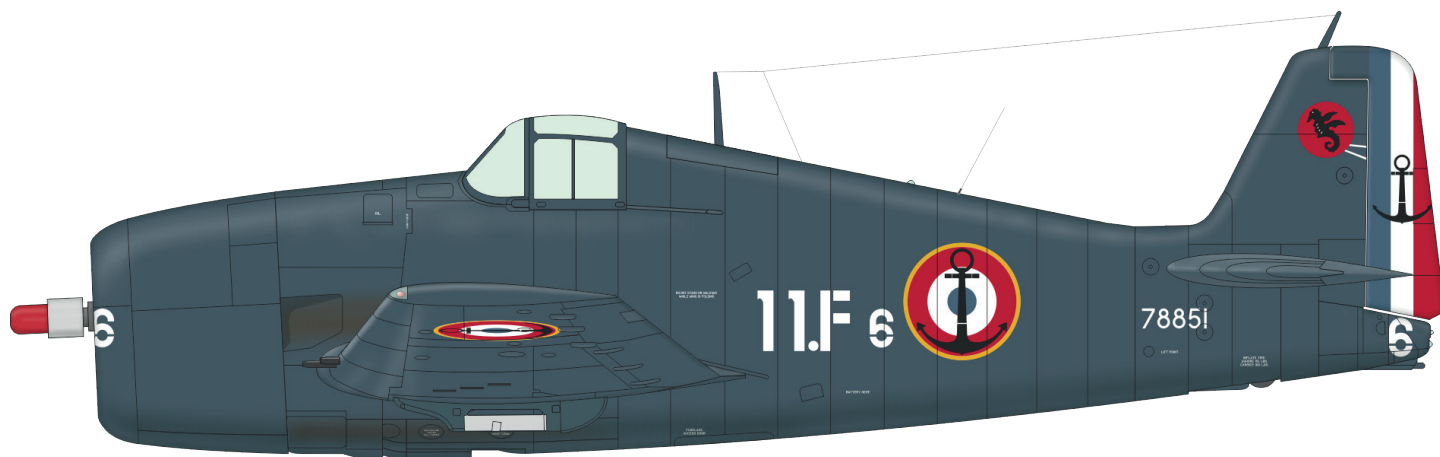


After WWII all Hellcats were replaced by the more modern type made by Grumman, F8F Bearcat fighters. Hellcats were gradually transferred to the second line units and reserve squadrons. During 1949-1957 the significant number was converted

to radio-controlled drones. The flight instruments were retained for flights between the bases however the aircraft were stripped of the armaments and arrestor hooks for aircraft carrier landings. One of the Hellcats rebuilt to the drone standard was the

airframe BuNo 80173 which in 1951 appeared at the Detroit Air Races. It did not participate in the racing however its unusual coloration attracted the interest of the aviation fans.

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



After WWII France attempted to reinstate its pre-war colony in South East Asia. They were opposed by the communists led by Ho Chi Minh. Vietnamese National Army together with the French Army fought Viet Minh (Vietnamese People's Army) until August 1954. The last big clash was the Battle of Dien Bien Phu

where the French Naval Air Forces took part, as they did in the prior battles. In this case it was Flottile 3F equipped with the SB2C bombers and Flottile 11F equipped with Hellcats. Hellcats led by LV Castelbajac flew close air support missions and were armed not only with machine guns but also with unguided

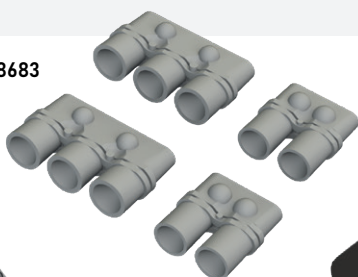
missiles and bombs. On March 19, 1954 the unit commander crashed this Hellcat near Cat Bi airport (nowadays the Haiphong International Airport). The aircraft was written off but the pilot survived.

Recommended: for F6F-5 1/48

48585 F6F undercarriage (PE-Set)
48588 F6F gun bay (PE-Set)
FE454 F6F-5 Weekend (PE-Set)
FE1065 F6F-5 seatbelts STEEL (PE-Set)
644012 F6F-5 LööK (Brassin)

648086 US 250lb bombs (2 pcs) (Brassin)
648102 F6F wheels (Brassin)
648683 F6F exhaust stacks (Brassin)
D48059 F6F-5 stencils (Decal Set)
EX539 F6F-5/5N (Mask)

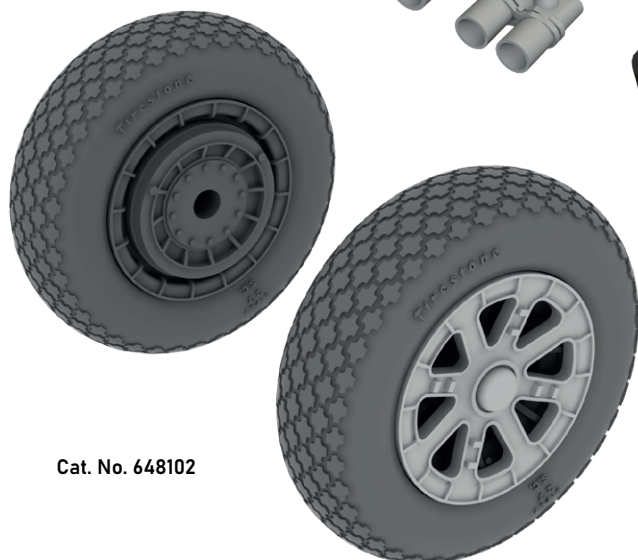
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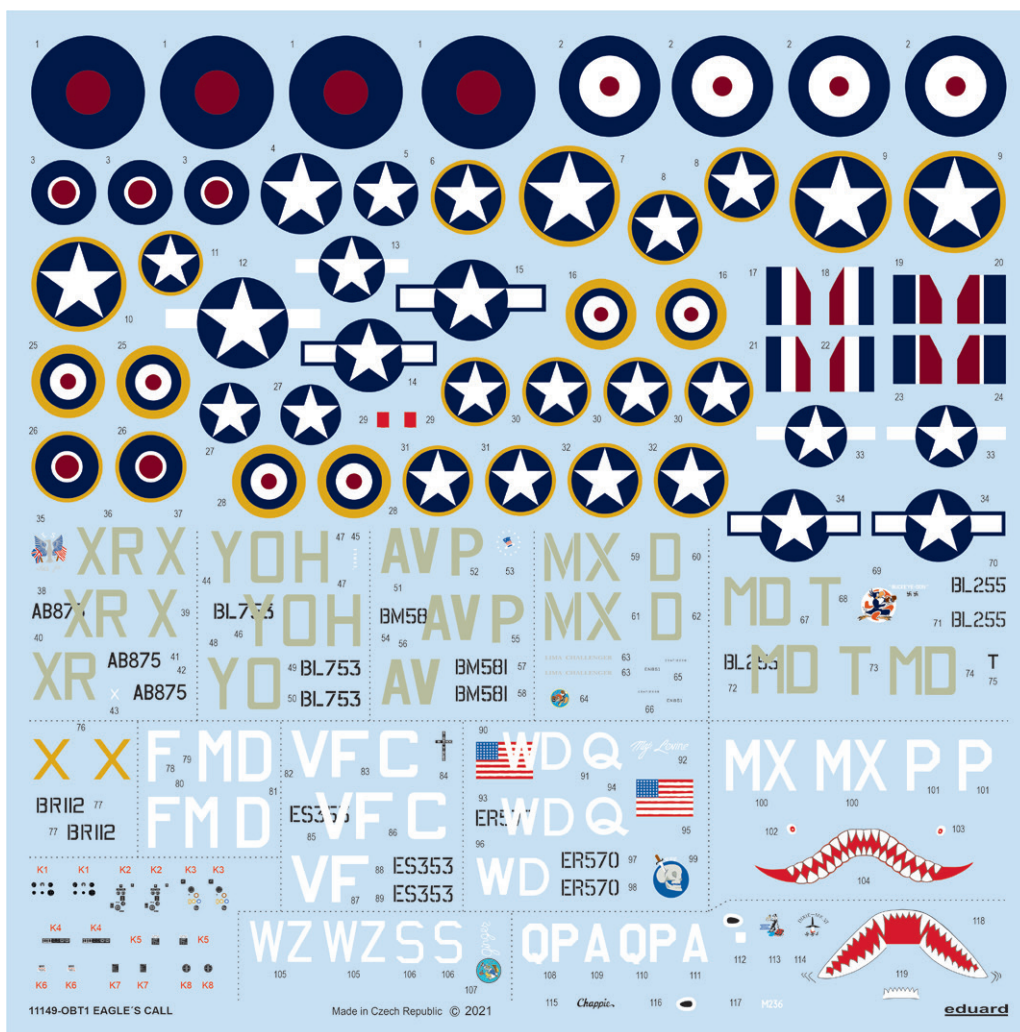
Cat. No. 644012



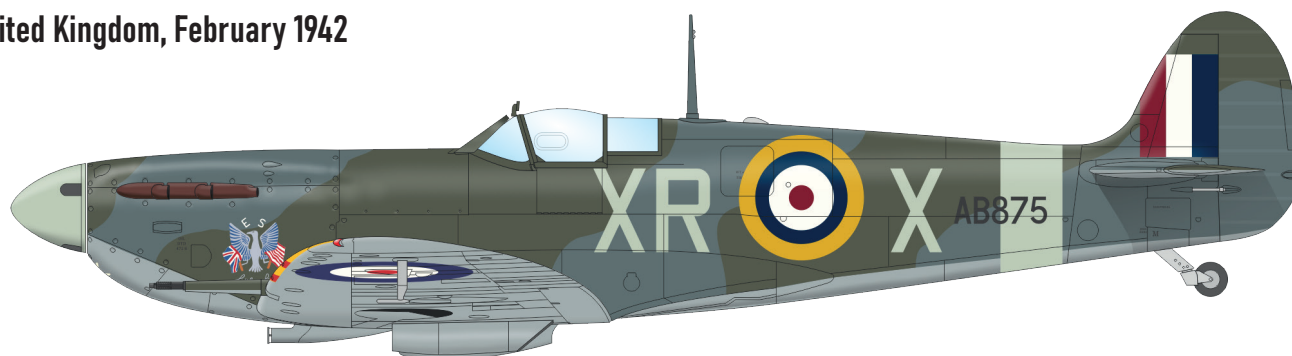
Cat. No. 648102



Re-release



■ Spitfire Mk.Vb, AB875, P/O Joseph M. Kelly, No. 71 (Eagle) Squadron, RAF Martlesham Heath, Suffolk, United Kingdom, February 1942



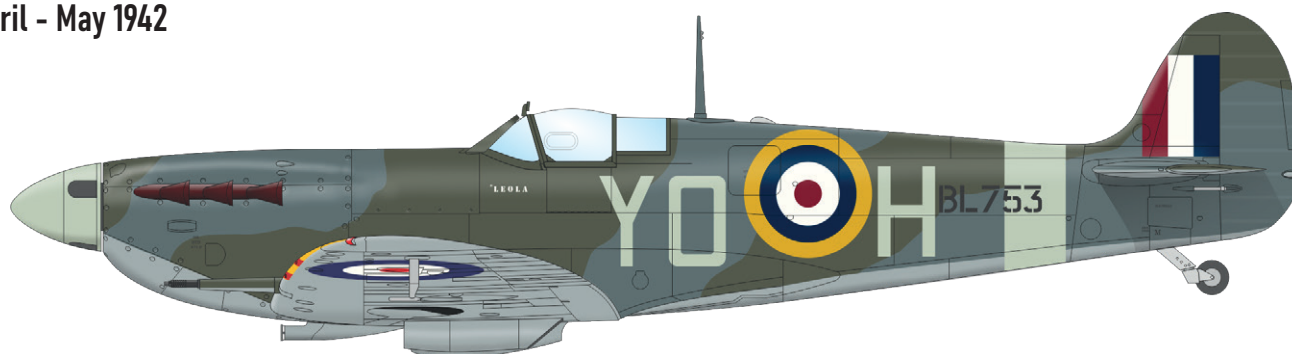
No. 71 (Eagle) Squadron was formed out of the American volunteers at RAF airbase Church Fenton on September 19, 1940. It was equipped with the American Brewster Buffalo replaced by Hurricanes in November 1940. On February 1941, at Kirton in Lindsey airbase the unit was declared operational and in April started to fly combat out of RAF airbase Martlesham

Heath in Suffolk. In August 1941 it was re-equipped with Spitfires Mk.IIa, in a short time replaced by more powerful Spitfires Mk.Vb.

In May 1942, the unit was relocated to Debden where, at the end of October 1942, was designated 334th FS and became part of the 4th FG of the 8th AF. This Spitfire Mk.Vb was usually flown by California native

P/O Joe Kelly. After he finished his tour of duty, he requested the transfer to the Mediterranean to where he set sail in the middle of April 1942. He served with RAF until the end of the year and then transferred to the USAAF.

■ Spitfire Mk.Vb, BL753, P/O Donald J. M. Blakeslee, No. 401 Squadron RCAF, RAF Gravesend, Kent, United Kingdom, April - May 1942

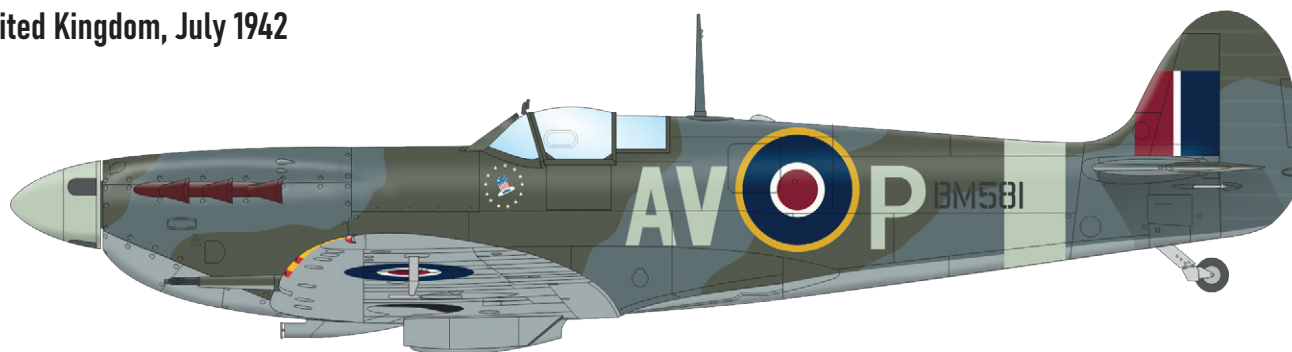


Donald Blakeslee, the future fighter ace and commander of the 4th FG USAAF landed in England on May 15, 1941, having completed the pilot training in Canada and was assigned to No. 401 Squadron RCAF, part of the Biggin Hill Wing. On November 22 he was credited with the first kill, Bf 109 over Desvres. Initially, Blakeslee was reluctant to serve in the American Eagle squadrons, but after he completed his tour of

duty with No. 401 Squadron, he joined No. 133 (Eagle) Squadron as it was the only possibility to continue combat flying. After the 4th FG was established within 8th AF USAAF at the end of September 1942, he was appointed to command 335th FS (ex No. 121 Squadron RAF) and on February 1 he became the commander of the whole 4th FG. On March 15, 1943, he scored his first kill with 4th FG flying P-47D Thunder-

bolt and on July 28 he led 4th FG over Germany for the first time. In February 1944 4th FG under his command became one of the first 8th AF fighter groups to be re-equipped with P-51B Mustang. In November 1944 Don Blakeslee retired from the operational service with 15.5 kills, 500 combat flights and more than thousand operational hours to his credit.

■ Spitfire Mk.Vb, BM581, P/O William P. Kelly, No. 121 (Eagle) Squadron, RAF Southend, Essex, United Kingdom, July 1942

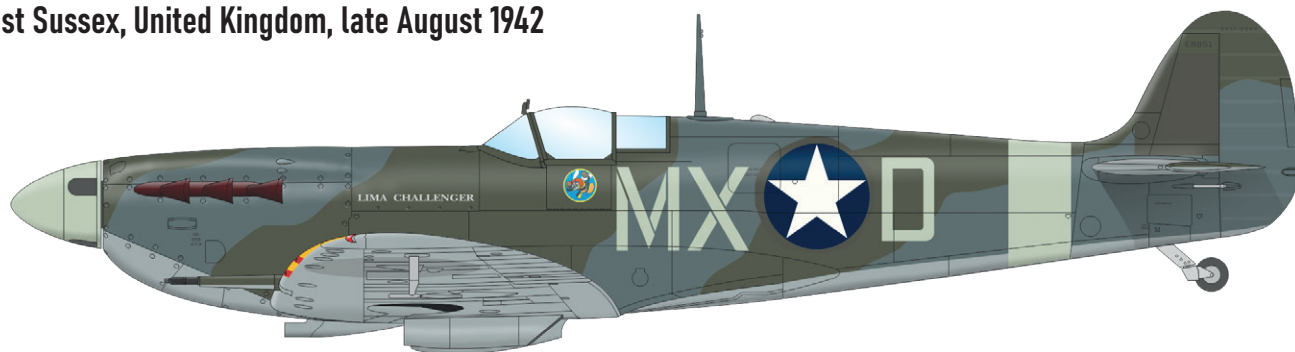


The second Eagle squadron, 121st, was established in May 1941 at RAF airbase Kirton in Lindsey. In November 1941 it transitioned from Hurricanes to new Spitfires Mk.Vb. In December it replaced No. 71 (Eagle) Squadron at RAF airbase North Weald and joined the offensive operations over occupied Europe. On

July 21, 1942, Spitfire BM581 was damaged by Flak fire during the sweep over the Netherlands. After repair, it was returned to the unit where it served as AV-K even though on September 29 the unit became 335th FS, 4th FG, 8th AF. In April 1943 after the 4th FG re-equipped to new P-47D Thunderbolt, this

aircraft was returned to RAF. William Kelly, as well as the whole unit, was transferred under the USAAF command. In February 1943 he lost his life during the sortie as one of the last 4th FG pilots who were killed in combat when flying Spitfires.

■ Spitfire Mk.Vb, EN851, Lt. Roland F. Wooten, 307th FS, 31st FG, 8th AF, RAF Merston, West Sussex, United Kingdom, late August 1942

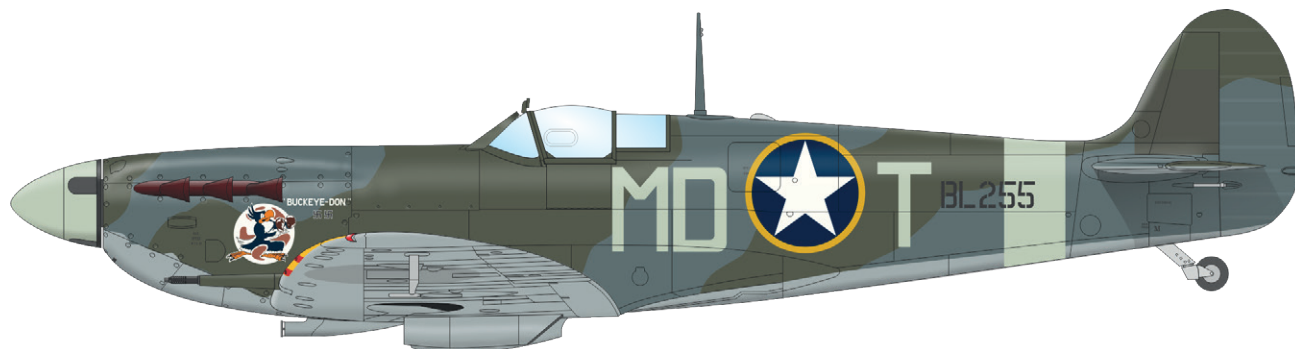


The 31st FG arrived in the Great Britain in June 1942. It received Spitfires of various versions at RAF airbases Atcham and High Ercall and commenced the training. EN851 is a good example of the coloration and markings of the American Spitfires on the eve of the USAAF operations in Europe. The aircraft remained in the standard British camouflage (Day

Fighter Scheme) including the recognition stripe on the tail. British insignia were overpainted at the unit level and replaced with the American white stars in the blue circle. The insignia on the vertical tail, left lower wing and right upper wing insignia were just oversprayed with the camouflage color. As of October 1, 1942, the yellow outlines of the national insignia

were introduced. On July 18 31st FG flew its first combat mission. On August 19 it was the only USAAF fighter unit deployed in the Dieppe landing. The 31st FG was transferred to the newly established 12th AF in October. In Gibraltar it was re-equipped with Spitfires Mk.Vb Trop and readied to be deployed in the Operation Torch, the Allied landing in North Africa.

■ Spitfire Mk.Vb, BL255, Lt. Dominic S. Gentile, 336th FS, 4th FG, 8th AF, Debden, Essex, United Kingdom, August 1942

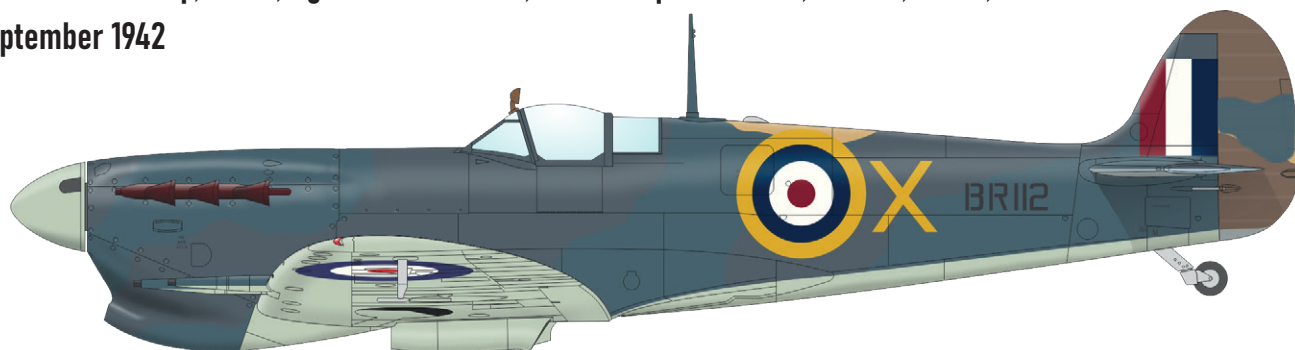


The third and last Eagle squadron, 133rd formed in July 1941 at RAF airbase Coltishall, was in 1942 the first American squadron re-equipped with Spitfires Mk.IX. However, the unit lost its twelve „Nines“ in only three days before Eagle squadron was transferred under the USAAF command, during the B-17 escort over Morlaix.

After its inclusion into 8th AF USAAF on September 29, 1942, it continued flying the good old Spitfires Mk.Vb as it was transformed from No. 133 (Eagle) Squadron RAF into 336th FS, 4th FG. The BL255 Spitfire, nicknamed „Buckeye Don“, was the personal aircraft of Don Gentile, the future most successful fighter pilot of the 8th AF with 19

kills, 3 damaged and 6 on the ground destroyed enemy aircraft. He was credited with two more kills during the combat over Dieppe on August 19, 1942, while he was still serving with RAF. The same nose art as on BL255 was later sported on the famous P-51B Shangri La and it was also incorporated into 334th FS insignia.

■ Spitfire Mk.Vc Trop, BR112, Sgt. Claude Weaver, No. 185 Squadron RAF, Hal Far, Malta, September 1942

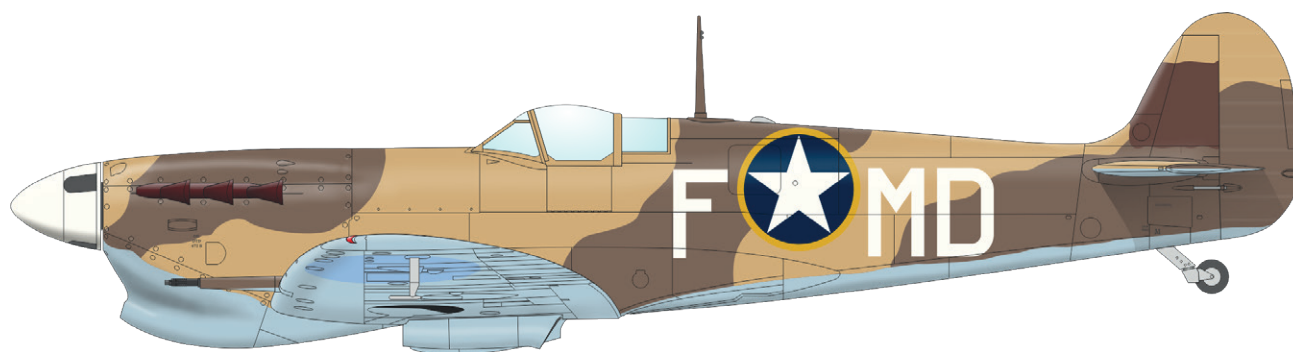


Spitfire Mk.Vc Trop BR112, armed with four cannons, arrived in Malta on April 20, 1942, on board of USS Wasp air carrier during the Operation Calendar. It was probably camouflaged in RAF Mediterranean Desert Scheme, Dark Earth and Mid Stone on the upper surfaces and Azure Blue on the lower surfaces, upper surfaces were oversprayed with dark blue paint. This was supposedly done while still on

board of USS Wasp. The propeller spinner was apparently in Sky, overspraying with dark blue paint cannot be excluded though. There are some patches of different color on the vertical tail surfaces and fuselage spine, possibly Dark Earth. On September 8, 1942, BR112 was shot down during the dogfight with Macchi C.202 from 352a Squadriglia over Sicily. The American pilot, Sgt. Claude Weaver, an ace with 10.5

kills, made an emergency landing on the beach in Scoglitti and became POW. Sgt. Weaver was one of the Americans serving with RAF who after finishing his tour of duty volunteered for the service in the Mediterranean. At the time BR112 was shot down, it probably carried only two cannons in the outer weapon wells.

■ Spitfire Mk.Vb Trop, ER200 (probably), Lt. Col. Fred M. Dean, CO of 31st FG, Korba, Tunisia, May 1943

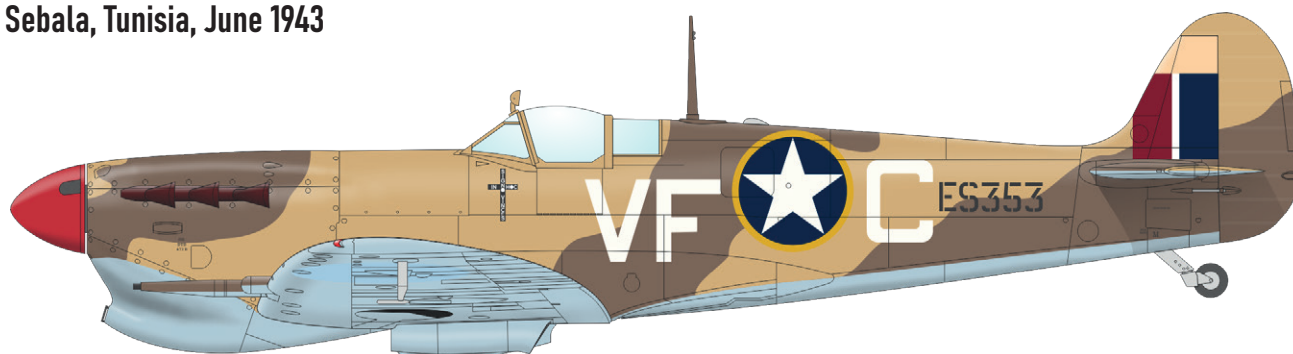


The personal aircraft of Col. Fred Dean is the good sample of the camouflage and markings of the American Spitfires in North Africa. The camouflage consists of the patterns of Dark Earth and Middle Stone on the upper surfaces and Azure Blue on the lower surfaces. The propeller spinner was white. The national insignia featured yellow outlines and code

letters were white. The aircraft depicts the aircraft as it appeared in May 1943, just after the fighting in Tunisia ceased. Shortly afterwards, on June 28, the change of insignia took place as white rectangles on the sides and red outlines were added. Fred Dean commanded 31st FG for eight months since December 5, 1942. In July 1943 he handed over the leadership to

Lt. Col. Frank Hill, who up until then was commanding 309th FS as a Major. Frank Hill was one of 31st FS aces, credited with 6.5 individual kills, 3 shared and 4 probables. After he handed over the command Fred Dean returned to the United States and joined General Arnold's staff. On May 31, 1943, he was decorated with Silver Star.

■ Spitfire Mk.Vc Trop, ES353, Capt. Jerome S. McCabe, 5th FS, 52nd FG, Mediterranean Allied Coastal Air Force (MACAF), La Sebala, Tunisia, June 1943

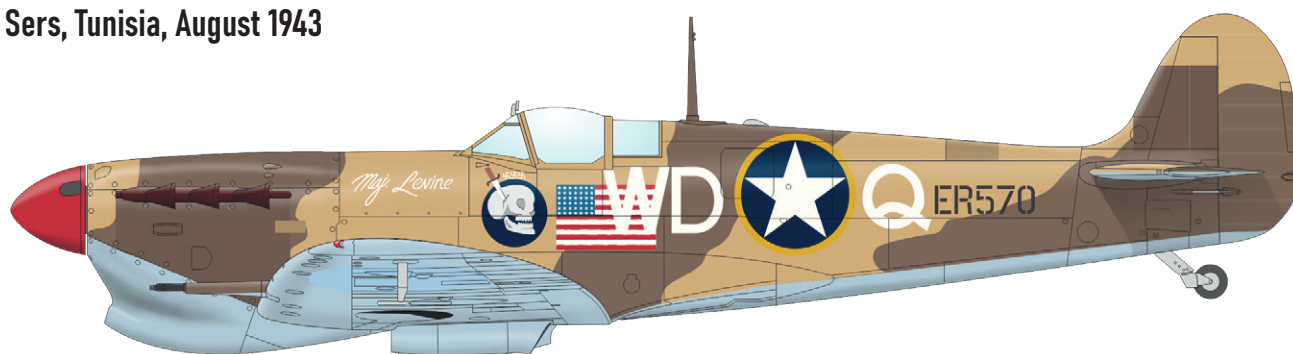


Same as the majority of 5th FS Spitfires, this Mk.Vc ES353 sported the RAF tail cockade on its vertical tail surfaces. Worth of notice is the unusual combination of dark, apparently red propeller spinner and yellow outlined national insignia. The red spinners were in-

troduced in the Mediterranean only in the end of 1943 while yellow outlined national insignia were replaced by red outlined ones with side rectangles as early as June 28, 1943. Capt. McCabe's personal insignia was painted under the canopy in the form of Christ's

cross with motto in Latin: IN HOC SIGNO VINCES (In this sign thou shalt conquer). This symbolism reminds us of the Battle of Milvian bridge between emperors Constantine I and Maxentius in 312. By the way, this motto is part of the city of Pilsen coat of arms.

■ Spitfire Mk.Vb Trop, ER570, Maj. Robert Levine, 4th FS, 52nd FG, Mediterranean Allied Coastal Air Force (MACAF), La Sers, Tunisia, August 1943

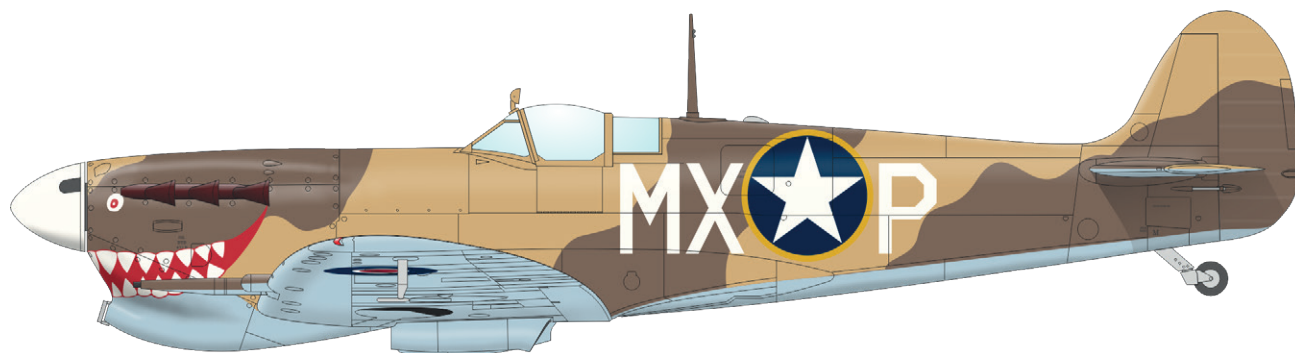


Spitfire Mk.Vb ER570 flown by 4th FS commander Maj. Robert Levine sported the hand-painted American flag on both sides of the fuselage. This was to ensure that local population can better recognize it belonged to the American air force. Unlike the French, the local population was friendly towards the Americans.

These markings were carried until August 1943 when 52nd FG was already part of MACAF. The overpainted British tail cockade is clearly visible on the vertical tail surfaces. Levine was credited with three victories, all achieved on Spitfires. Among those was a Fw 190 shot down on January 8, 1943. On December 28, 1943,

Levine led the first 52nd FG dive bombing mission. In February 1944, already a Colonel, he became the commander of the whole 52nd FG replacing Lt. Col. McNickle. In April 1944, the 52nd FG under his command was re-equipped with P-51B and was integrated into the 15th AF USAAF.

■ Spitfire Mk.Vc Trop, 307th FS, 31st FG, 12th AF, La Senia, Algier, end of 1942

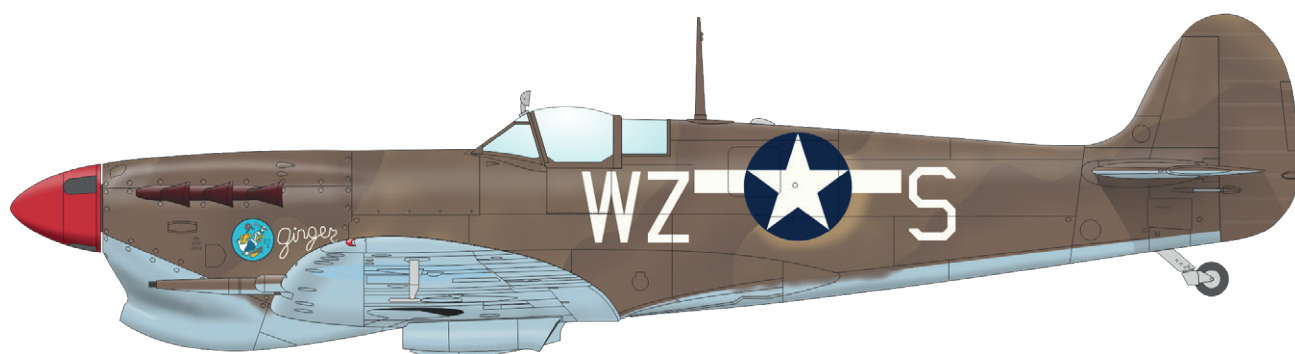


Teethed Spitfire Mk.Vc of the 307th FS received its smiling mouth probably at La Senia airbase in December 1942, when the inclement weather restricted the air traffic but offered enough time for detailed maintenance as well as nose art artistic creativity. Camouflage consisted of Dark Earth/Middle Sto-

ne patterns on the upper surfaces, Azure Blue on the lower surfaces, white propeller spinner, yellow outlined national insignia and white code letters all corresponding to the end of 1942 standard. In the photographs the machine gun muzzles feature very visible patches in the light color. Another thing worth

noticing are little eyes, the smaller version of the fuselage ones, painted on the cannon muzzles cloth patches. The aircraft is usually assigned the serial ER180, but it seems to be an error because ER180 was a Spitfire Mk.Vb. The serial of our teeth-adorned aircraft remains unknown then.

■ Spitfire Mk.Vc Trop, Lt. George G. Loving, 309th FS, 31st FG, 12th AF, Pommigliano, Italy, December 1943

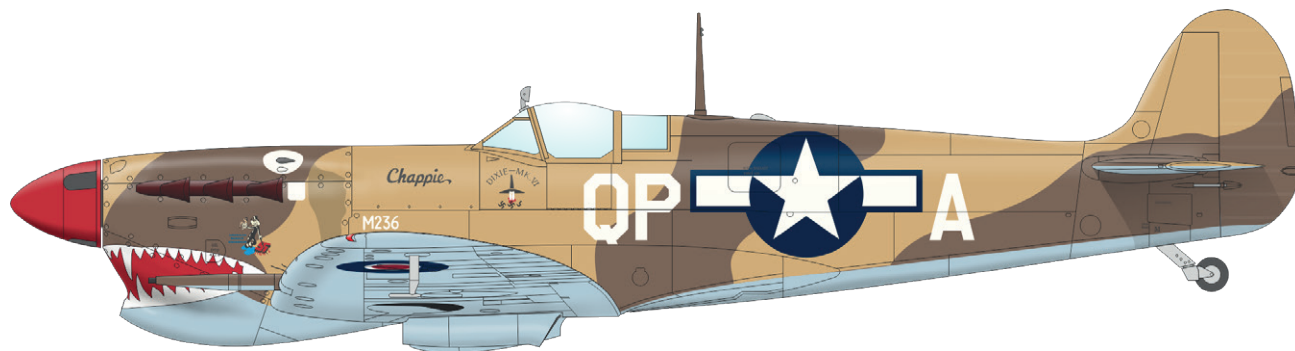


Spitfire Mk.Vc flown by Lt. Loving represents the final appearance of 31st FG Spitfires at the end of their career. The aircraft were oversprayed with green paint on the upper and side surfaces, probably US Olive Drab while the original colors were still showing through. The camouflage therefore seemed to have

consisted of two green shades. The national insignia outlines were over painted as well, as long as they had been carried. The paint around the insignia appears in the lighter shade. The propeller spinner is red and the code letters white. At that time 309th FS aircraft sported the red stripes on the wing tips.

In November and December 1943 31st FG squadrons were escorting the light and medium bombers, such as A-36 Apache, A-20 Havoc and B-25 Mitchell to Rome and Monte Cassino.

■ Spitfire Mk.Vc Trop, Lt. Richard Alexander, 2nd FS, 52nd FG, 12th AF, Borgo, Corsica, early 1944



Richard Alexander was one of the original Eagle Squadron pilots and his service fairly reflects the story of all Americans fighting on Spitfires. His teethed QP-A was one of the last "Fives" finishing their service with 2nd FS at Borgo airport in Corsica, still in the beginning of 1944. In June 1943, when 2nd FS was still stationed at

La Sebala airport in Tunisia, its members gave the unit the nickname "American Beagle Squadron", a play with words on the account of the more famous Eagle squadrons. The American Beagle Squadron marking was painted on several 2nd FS Spitfires and was also carried on Alexander's aircraft together with some other

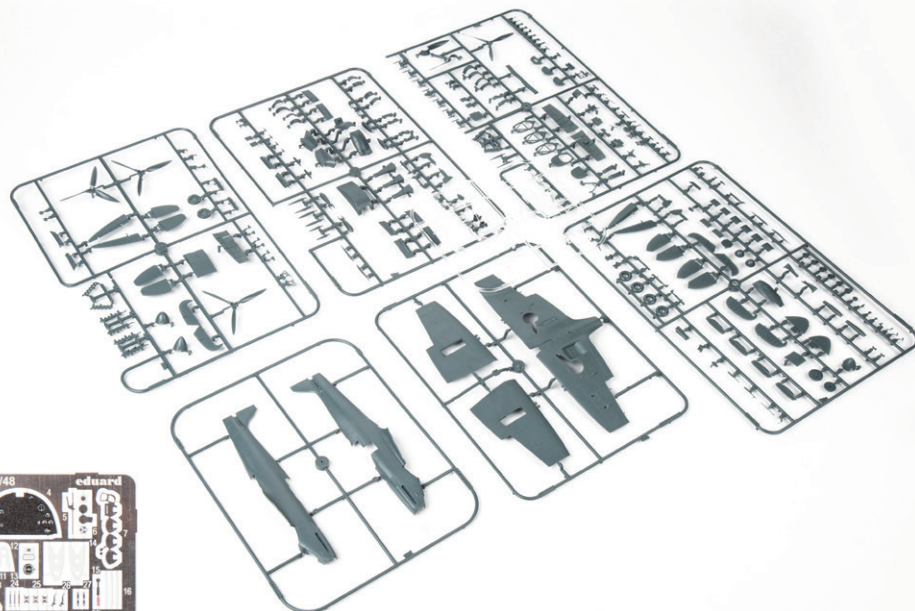
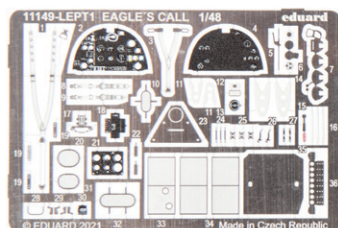
emblems on various locations of the fuselage. It needs to be stated, that the achievements of the whole 52nd FG on both Spitfires as well as Mustangs after the integration into 15th AF, did not fall short of achievements of their more famous colleagues from 8th AF and made its mark in the history of the American aviation.

OVERTREES 1/48 #82157X Spitfire Mk.Vb Trop

Product page

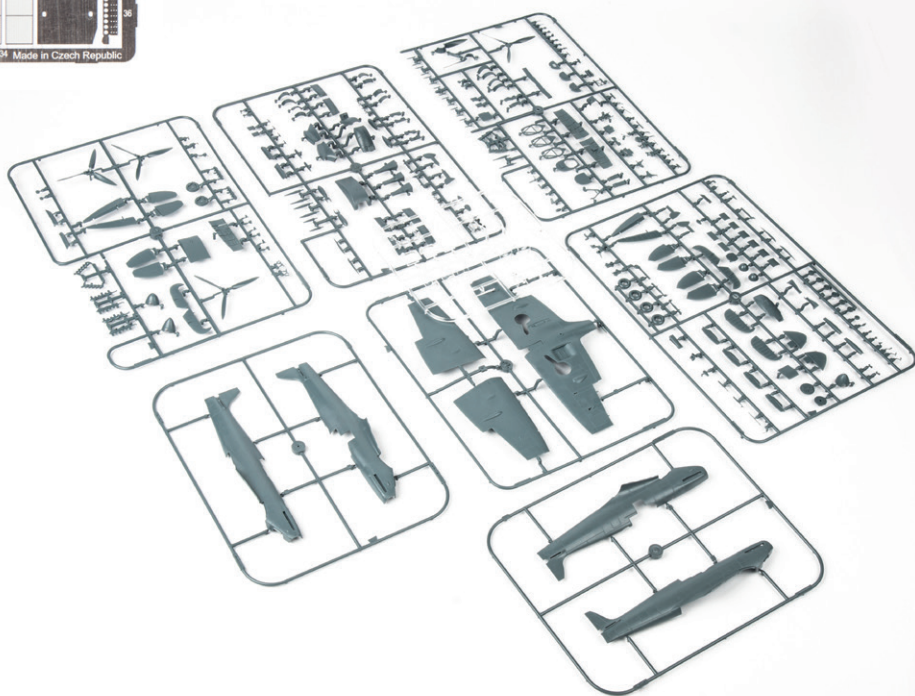
OVERLEPT #11149-LEPT EAGLE'S CALL 1/48

Product page



OVERTREES 1/48 #82158X Spitfire Mk.Vc/Vc Trop

Product page



Recommended: for EAGLE'S CALL 1/48

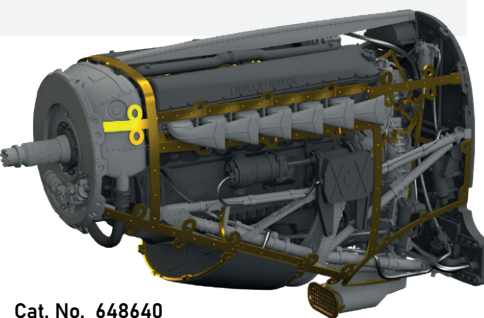
- 481065 Spitfire Mk.V landing flaps (PE-Set)
- FE1207 Spitfire Mk.V seatbelts STEEL (PE-Set)
- 644113 Spitfire Mk.V LööK (Brassin)
- 648098 Spitfire wheels - 5 spoke (Brassin)
- 648119 Spitfire wheels - 5 spoke, smooth tire (Brassin)
- 648640 Spitfire Mk.V engine (Brassin)
- 648663 Spitfire Mk.V cockpit (Brassin)
- 648664 Spitfire Mk.V wheels (Brassin)
- 648665 Spitfire Mk.Vb gun bays (Brassin)

- 648666 Spitfire Mk.Vc gun bays (Brassin)
- 648667 Spitfire Mk.V three-stacks exhausts rounded (Brassin)
- 648669 Spitfire Mk.V six-stacks exhausts fishtail (Brassin)
- 648668 Spitfire Mk.V three-stacks exhausts fishtail (Brassin)
- 648670 Spitfire Mk.Va/b undercarriage legs BRONZE (Brassin)
- 648671 Spitfire Mk.Vc undercarriage legs BRONZE (Brassin)
- 648738 Spitfire Mk.V landing flaps PRINT (Brassin)
- D48088 Spitfire Mk.V stencils (Decal Set)

Cat. No. 644113



Cat. No. 648671



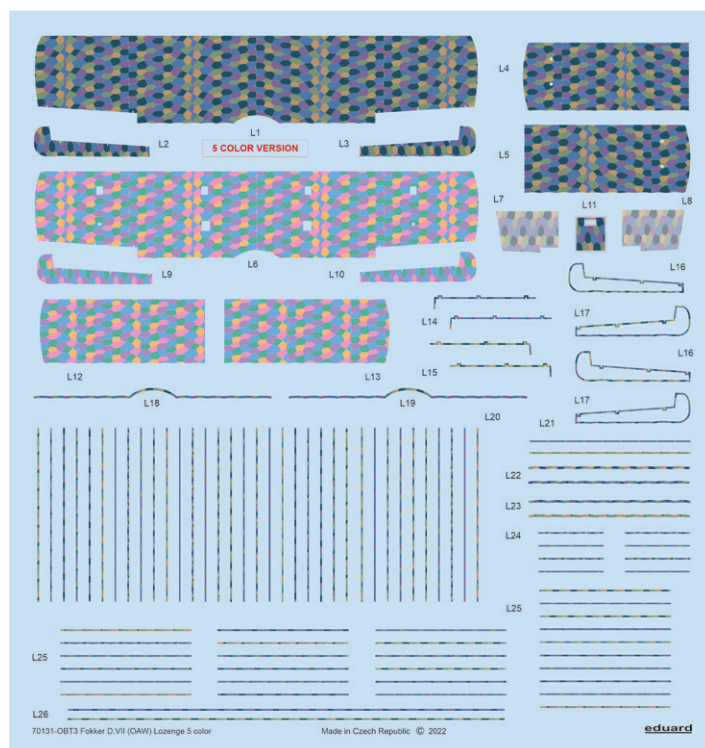
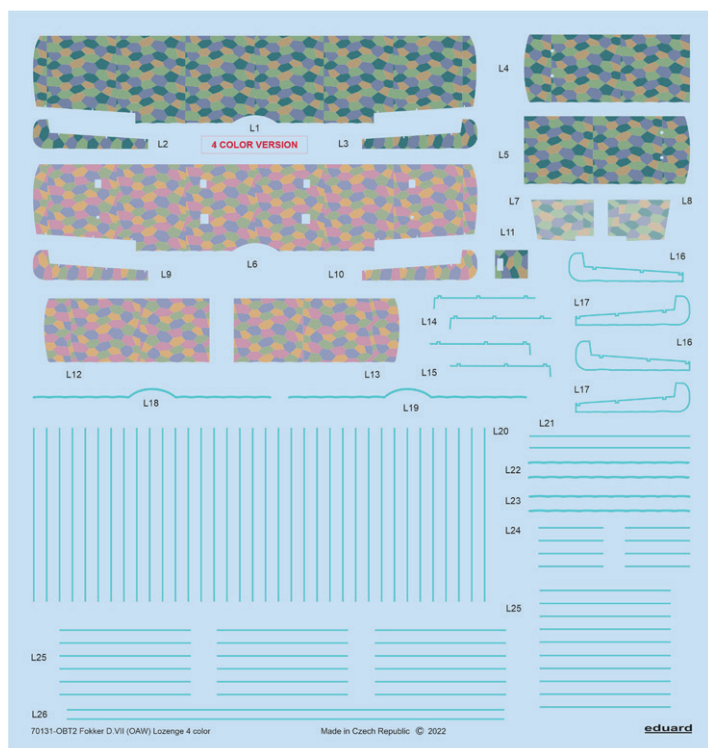
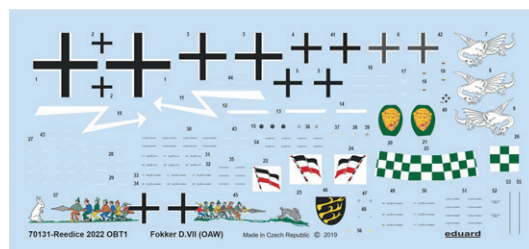
Cat. No. 648640

Fokker D.VII (OAW) 1/72 Re-release

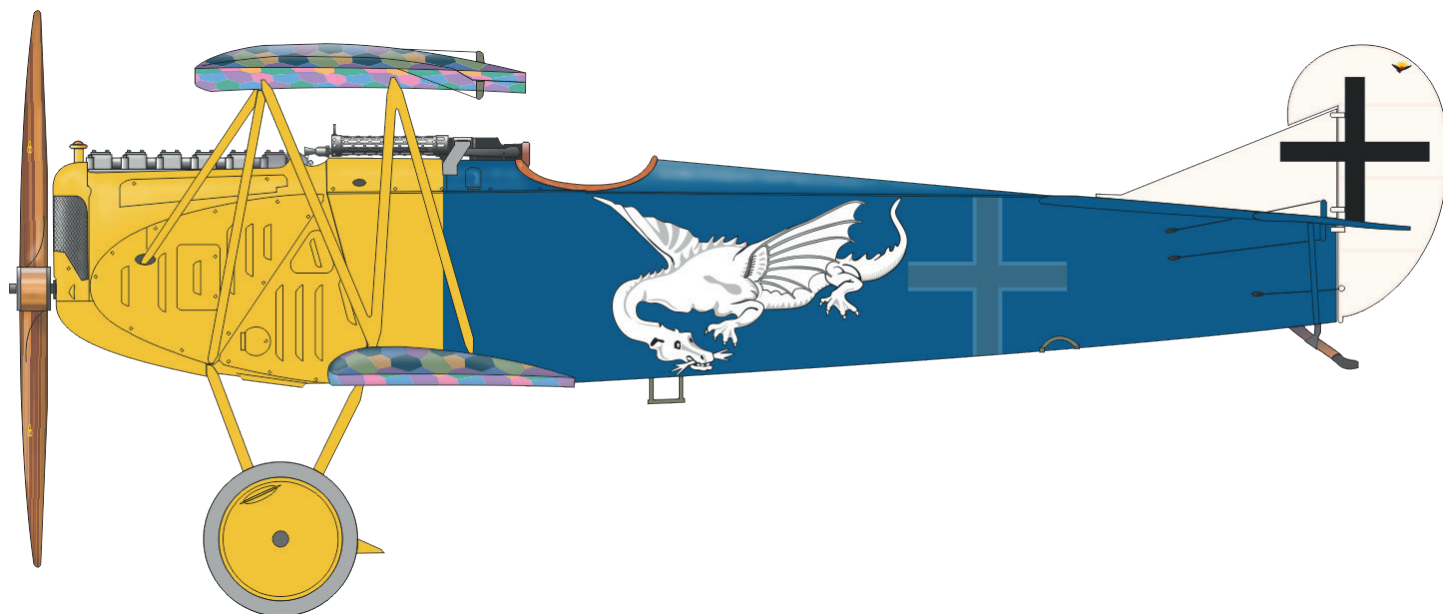
#70131

ProfiPACK edition kit of German WWI fighter aircraft Fokker D.VII in 1/72 scale. The kit is focused on aircraft built by OAW factory.

- plastic parts: Eduard
- No. of decal options: 5
- decals: Eduard
- PE parts: yes, pre-painted
- painting mask: yes
- resin parts: no

[Product page](#)


■ Lt. Wilhelm Leusch, CO of Jasta 19, Florenville, Luxembourg, October 1918

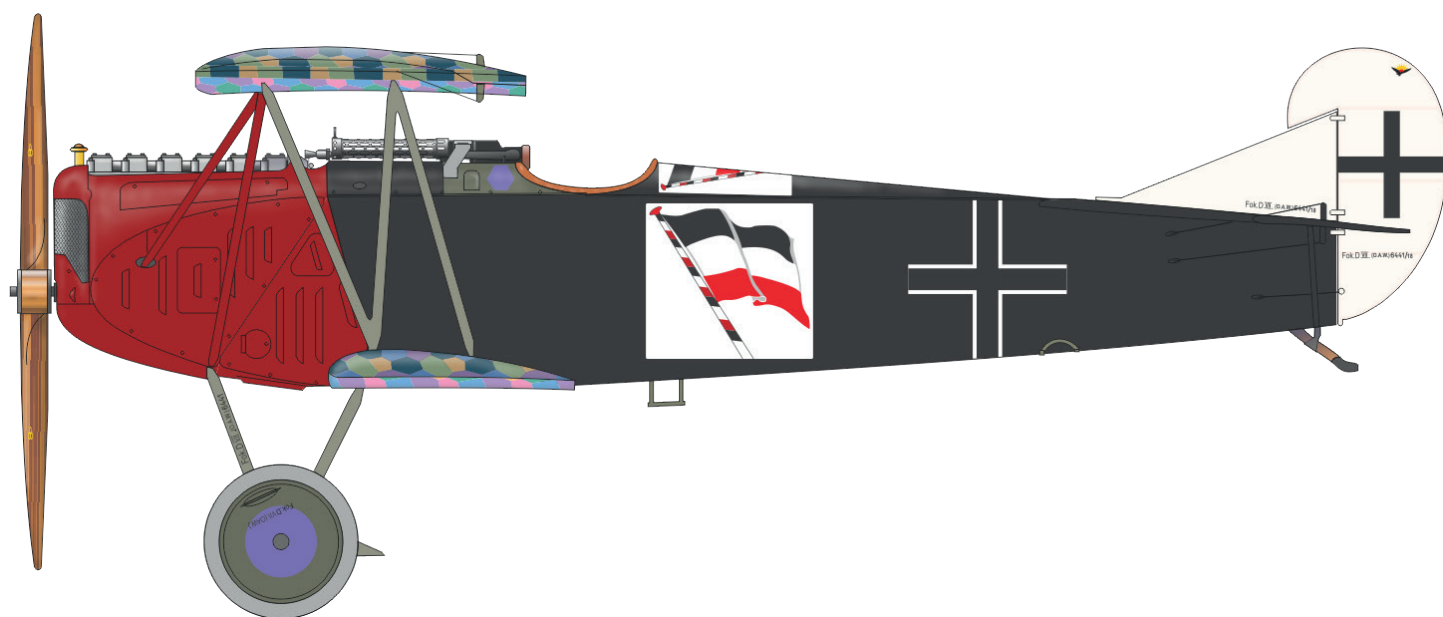


Wilhelm Leusch, a native of Neuss near Düsseldorf, was born on October 15, 1892, and joined the Luftstreitkräfte (Imperial German Flying Corps) in October 1914. He was flying two-seat aircraft at FFA Metz and FFA 19 before he was transferred to Jasta 13 in November 1916. Five months later he moved to Jasta 19 where he scored all of his five aerial victories and replaced seriously injured von Beaulieu-Marconay as CO of the unit on October 18, 1918. Wilhelm Leusch

survived the Great War, but died on August 14, 1921, in a gliding accident. Leusch was using this late production D.VII (DAW) in the closing stages of Great War. When photographed after armistice, the aircraft had the rudder painted white, but it was blue during October 1918 and had a rear view mirror mounted on the upper wing center section. The white dragon, personal Leusch's emblem was inspired by an advertising for the Unterberg & Helmle company, producer of

engine ignition systems. The Jasta 19 unit markings consisted of blue fuselage with yellow nose. The fuselage cross was oversprayed with blue but was still faintly visible underneath. It is not known whether the dragon was painted on the right side of the fuselage as well. We provide the decal for both sides and the decision is up to the modeler.

■ No. 64441/18, Lt. Max Näther, Jasta 62, Preutin-Higny, France, October 1918

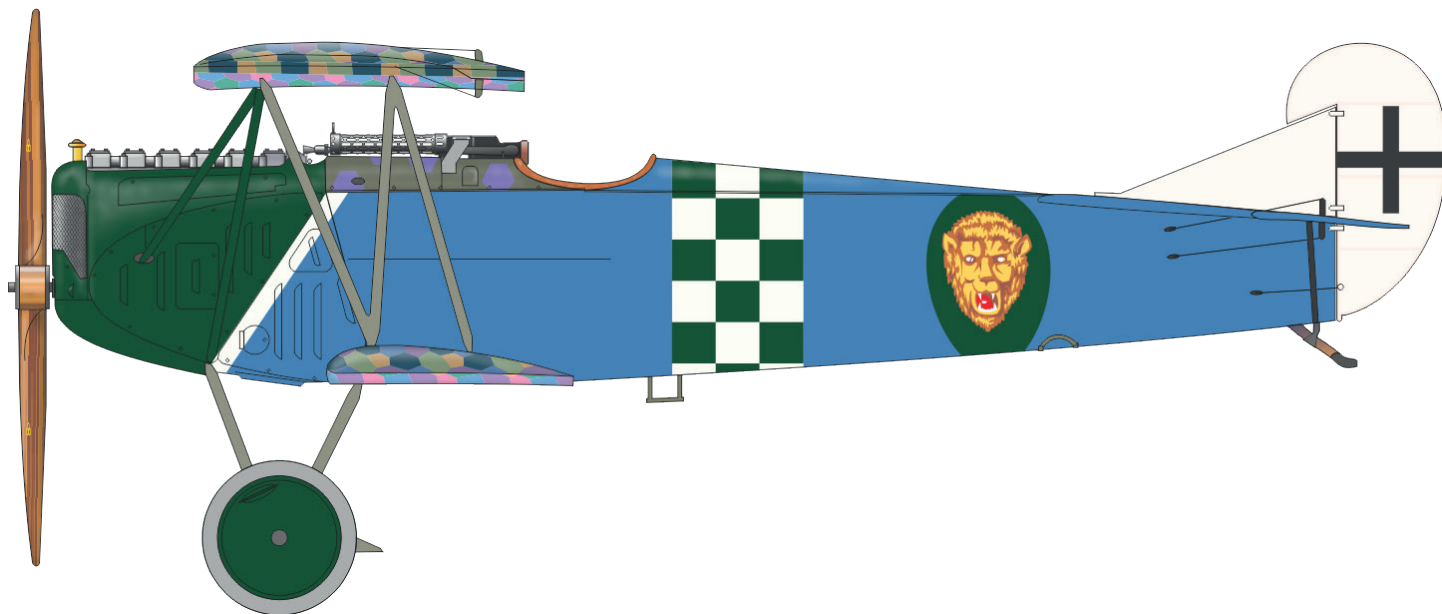


Max Näther was born on August 24, 1899, in Tepliwoda (currently Cieptowody in Poland) and he joined the German military at the age of fifteen. In the summer of 1917, he was by his own request assigned to the Luftstreitkräfte. After training he was assigned to Jasta 62 in March 1918, where he became CO of the

unit on July 7, 1918. He held that post until the end of the war. Within six months he achieved 26 victories and at the end of the war was nominated for the Pour le Mérite. Max Näther continued his military career after the armistice and took part in fighting over the German - Polish border. There, he was shot down

and killed by Polish insurgents over the town of Kolmar (today's Chodzież in Poland) on January 8, 1919. The fuselage of Jasta 62 aircraft were painted black with a red nose section and wings left in factory five-color Flugzeugstoff finish. The Imperial German flag was Näther's personal marking.

■ Lt. Franz Büchner, CO of Jasta 13, Trier, Germany, October 1918

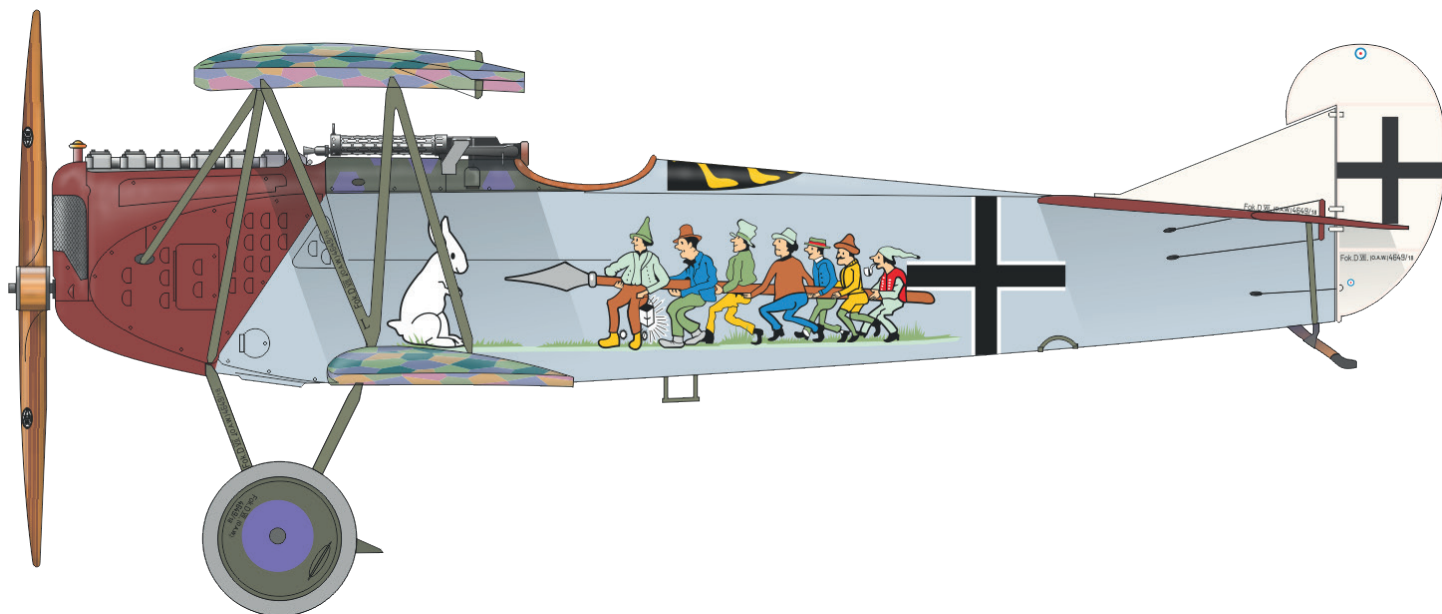


Franz Büchner, the son of successful businessman was born in Leipzig on January 2, 1898 and volunteered for the army at the age of sixteen. After being wounded in combat on April 3, 1916 in France, he applied for the service in the ranks of Luftstreitkräfte. He flew two-seaters after his training with FFA 270 but was transferred to Jasta 9 in March 1917. There he scored his first victory prior to another

move in September, when he was assigned to Jasta 13. There he stayed until the end of the war and became its CO on June 15, 1918. He was not ace at this time, with only four victories on his account, but it was to change and finally he accumulated 40 victories, which makes him the 11th most successful German fighter ace. In October 1918 he was awarded the Pour le Mérite. Büchner was killed on March 18,

1920, during civil unrest in Germany when fighting against Communists. He was shot down close to the town he was born. Jasta 13 aircraft were easily identified thanks to the blue color of the fuselage and green nose of their aircraft. Büchner's personal marking was a werewolf head on a green background. The wings were covered in a five-color Flugzeugstoff.

■ Uffz Alfred Bäder, Jasta 65, Tichémont, France, November 1918

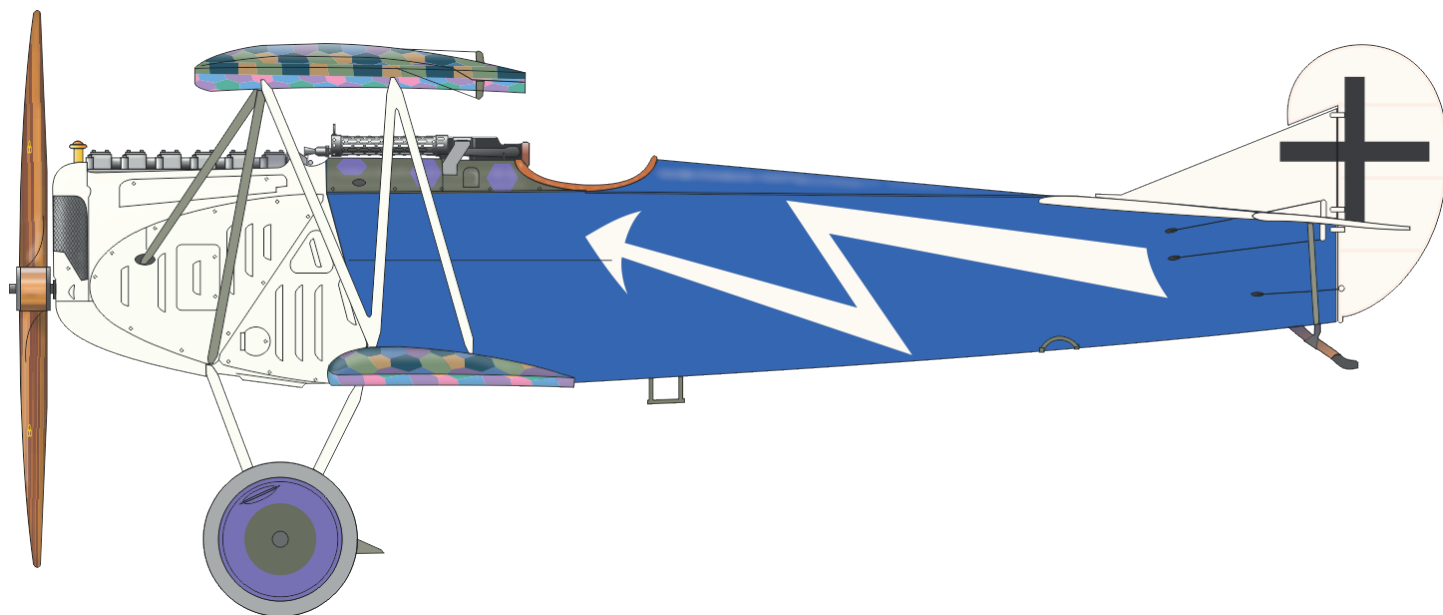


Alfred Bäder was born on September 20, 1893 in Tübingen, Württemberg. After an injury sustained in summer 1916 with Infanterie Regiment Nr. 180, he went through pilot training and subsequent fighter pilot training at Jastaschule II, being finally assigned to Jasta 65 on August 31, 1918. Less than a week later he was shot down by a Salmson 2A2 of 91st Aero Squadron flown by 1Lt Victor H. Strahm and Capt. James E. Wallis near Rembercourt. He even-

tually shot down two USAAC Salmsons in a kind of revenge. The first one belonged to 99th Aero Squadron and was shot down on October 2. The second one was from 91st Aero Squadron and Bäder sent it down on November 8, 1918. His wartime Fokker D.VII from early OAW production sported a very colorful and complex illustration of Seven Schwabians, the group of villagers from a medieval fairy tale collected by the Grimm brothers. The story makes fun of the

people from the then Duchy of Swabia, the villagers portrayed in the tale are foolish and so they all die finally. The illustration was painted on both sides of the fuselage and differed from each other. Bäder sent a photograph of this aircraft as a postcard to his injured colleague Wilhelm Scheutzel, to whom this aircraft was wrongly attributed for many years.

■ Lt. Alfred Greven, Jasta 12, Carignan, France, October 1918



A native of Elbfeld (today a part of Wuppertal city), Alfred Greven was born in 1897, and after completing high school, he volunteered for the army in September 1914. Greven suffered serious injuries in trenches and after recovering from wounds, he was transferred to the Luftstreitkräfte, in July 1917 he started to earn his spurs as a fighter pilot within JG II. As the Great War drew to its conclusion, he was assigned to Jasta 12, where he earned four victories during the last three months of the war. After the Armistice he

started to work in the film industry and joined the Nazi party in 1931. In 1940, he was named head of the newly established company "Continental Film" in occupied France and also founded the SOGEC company running the network of cinemas (mostly confiscated from Jews) and the ACE, the subsidiary of UFA company (he led UFA as well). He continued in movie industry after the World War II, but he had to face the burden of his past several times. Finally, he founded his own company Alfred Greven Film GmbH in 1953

and produced 10 post-war movies. One of them was the promotional documentary NATO movie Alarm in the Mediterranean. Altogether he produced 60 movies, mostly comedies. He died on February 9, 1973, in Cologne. The fuselage of Greven's aircraft sported the typical Jasta 12 colors of blue fuselage and white nose. The white lightning flash was Greven's personal marking.

OVERTREES

#70131X Fokker D.VII (OAW) 1/72

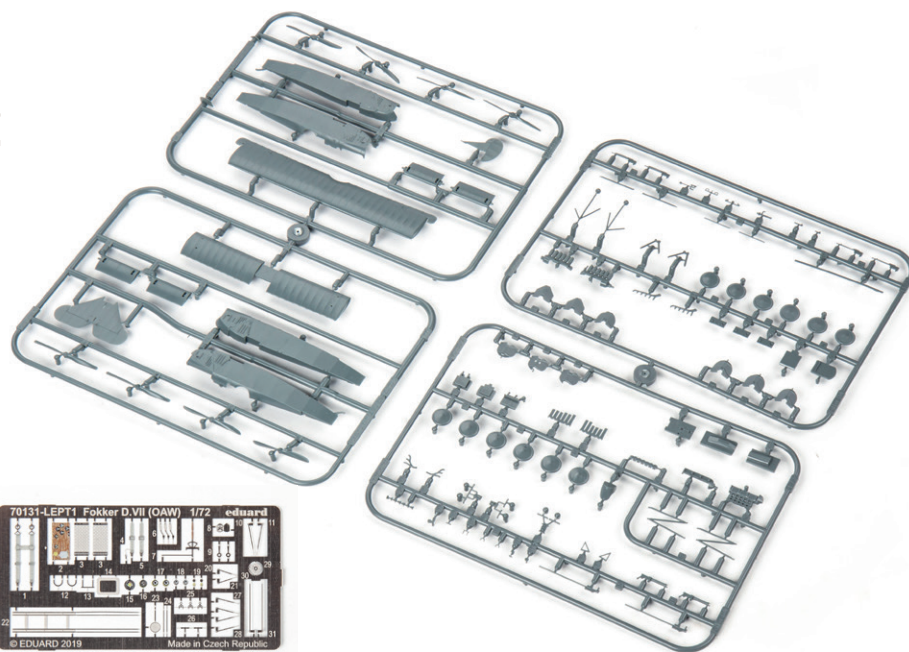
Product page

OVERLEPT

#70131-LEPT
Fokker D.VII (OAW) 1/72

Product page

Recommended:
for Fokker D.VII (OAW) 1/72



CX599 Fokker D.VII (OAW) Weekend (Mask)
672223 Fokker D.VII (OAW) engine/Mercedes D.III (Brassin)
D72019 Fokker D.VII rib tapes 4color lozenge (Decal Set)
D72020 Fokker D.VII rib tapes 5color lozenge (Decal Set)
D72021 Fokker D.VII rib tapes blue (Decal Set)

D72022 Fokker D.VII rib tapes pink (Decal Set)
D72023 Fokker D.VII rib tapes linen (Decal Set)
D72024 Fokker D.VII 4color lozenge (Decal Set)
D72025 Fokker D.VII 5color lozenge (Decal Set)

Bf 109E-1 1/48

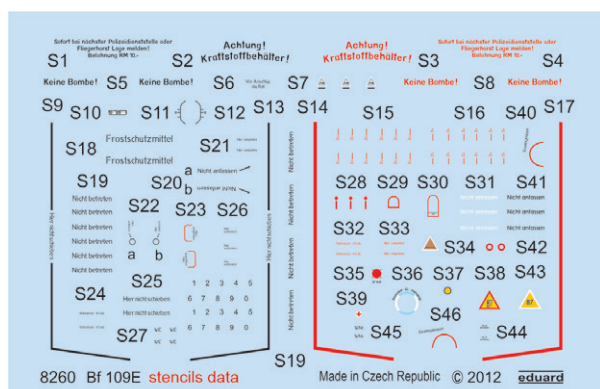
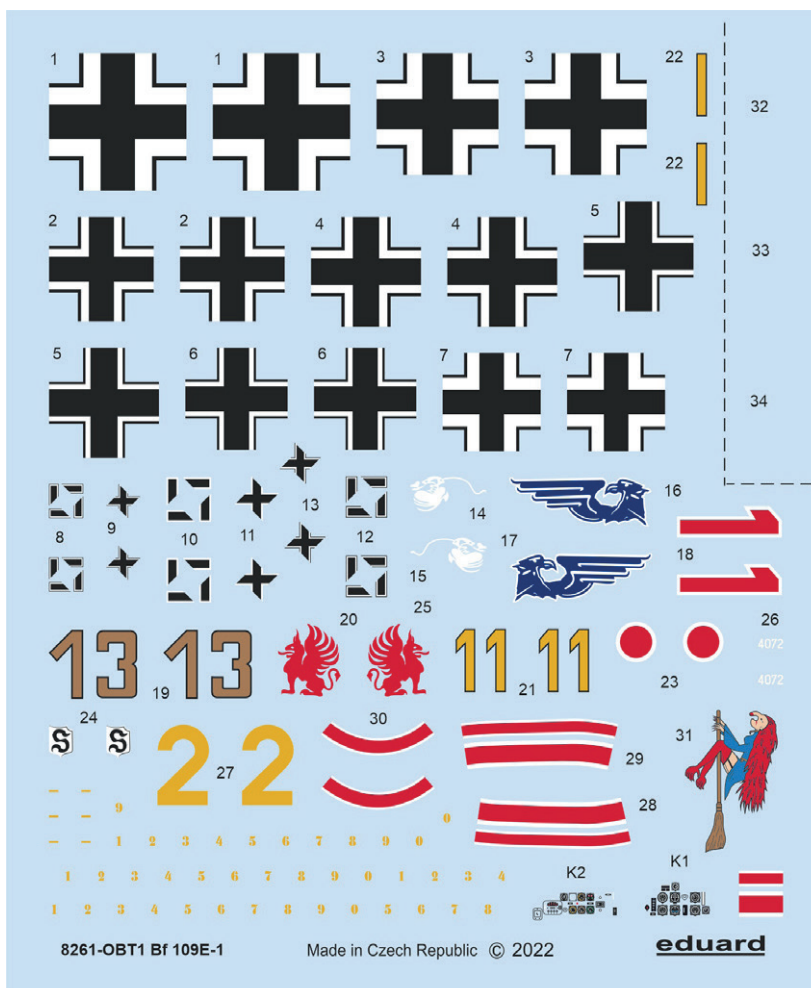
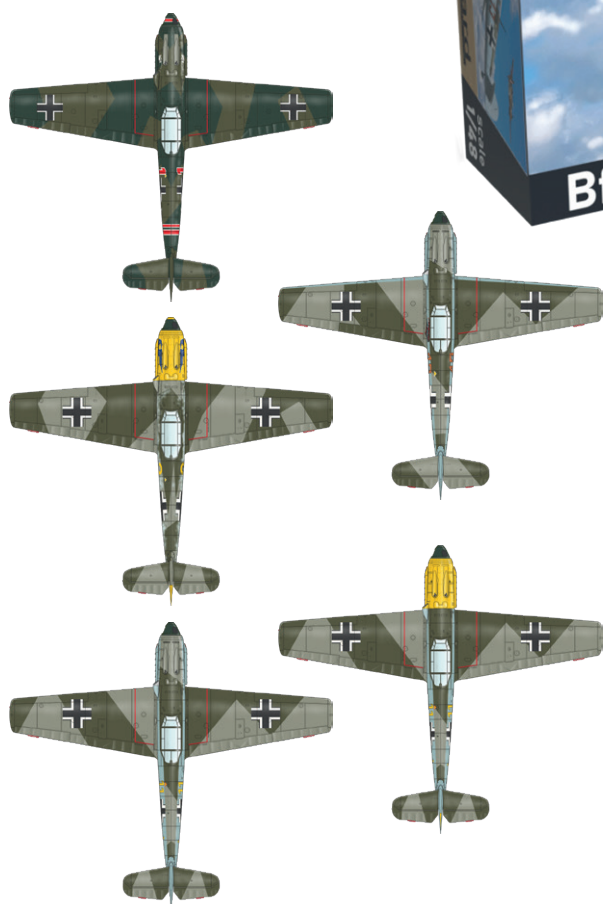
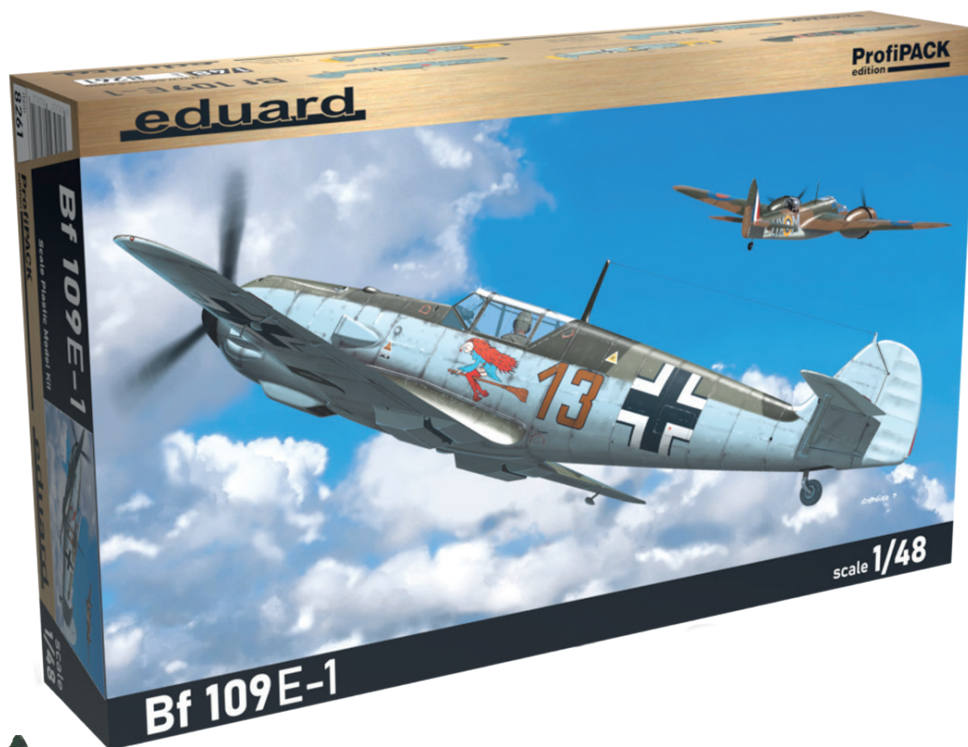
Re-release

#8261

ProfiPACK edition kit of German WWII
fighter aircraft Bf 109E-1 in 1/48 scale.

- plastic parts: Eduard
- marking options: 5
- decals: Eduard
- PE parts: yes, pre-painted
- painting mask: yes
- resin parts: no

Product page



Hptm. Hannes Trautloft, 2./JG 77, Juliusburg, Germany, September 1939

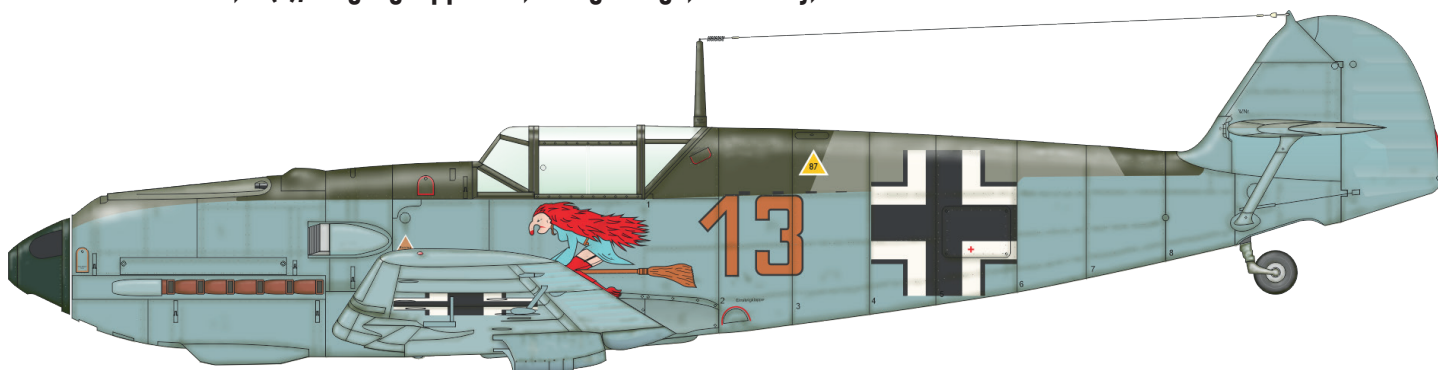


The red "1" Bf 109E-1 was flown by veteran of the Spanish Civil War Hptm. Hannes Trautloft, later a fighter ace (58 victories), Knight's Cross recipient, Kommodore of JG 54 and also a malcontent. With this aircraft, sporting the oldest camouflage scheme used on the E-1, Trautloft led his Staffel during the Polish

campaign. The upper surfaces were painted with standard irregular pattern of two dark greens RLM 70/71. The boundary between upper colors and light blue RLM 65 on the undersurfaces was very low on the fuselage. Upper surface colors also extended to the bottom surfaces on the leading edge of the wing

with undulated boundary. Distinct red markings were sign of service with 2. Staffel and the old shoe emblem was symbol of I./JG 77, which originated from IV./JG 132 unit.

Ofw. Kurt Ubben, 6.(J)/Trägergruppe 186, Wangerooze, Germany, March 1940

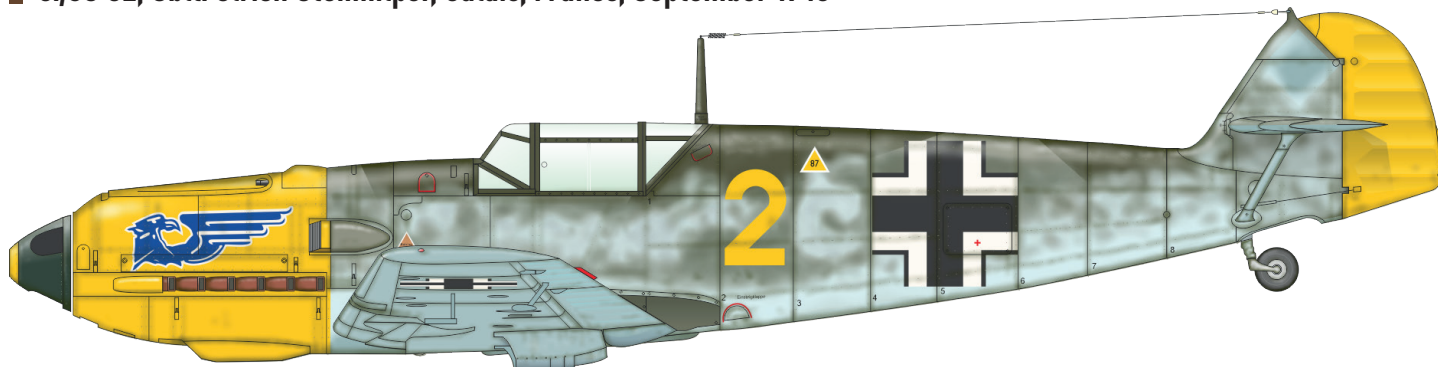


Aircraft of the 6.(J)/Trägergruppe 186 (the unit intended to operate from future German aircraft carriers) sported a very distinctive witch emblem painted on their fuselages. The Brown "13" was no exception. It carried a standard camouflage scheme of RLM 71/02/65 with RLM 65 applied on fuselage sides. The

factory paint scheme was slightly modified by unit, as the color line between the upper/side and lower surfaces was repositioned when oversprayed by Stammkennzeichen (factory code). Prior to the spring of 1940, the aircraft received a later style insignia. The recessed firing channels in the engine cover were

painted RLM 02 color. In this guise, the aircraft took part in the defense against the first RAF raids on Germany during fall and winter of 1939-1940. Ubben achieved 111 victories and was awarded the Knight's Cross with an Oak Leaves. He was killed in action in April 1944 as a Kommodore of JG 2.

6./JG 52, Oblt. Ulrich Steinhilper, Calais, France, September 1940

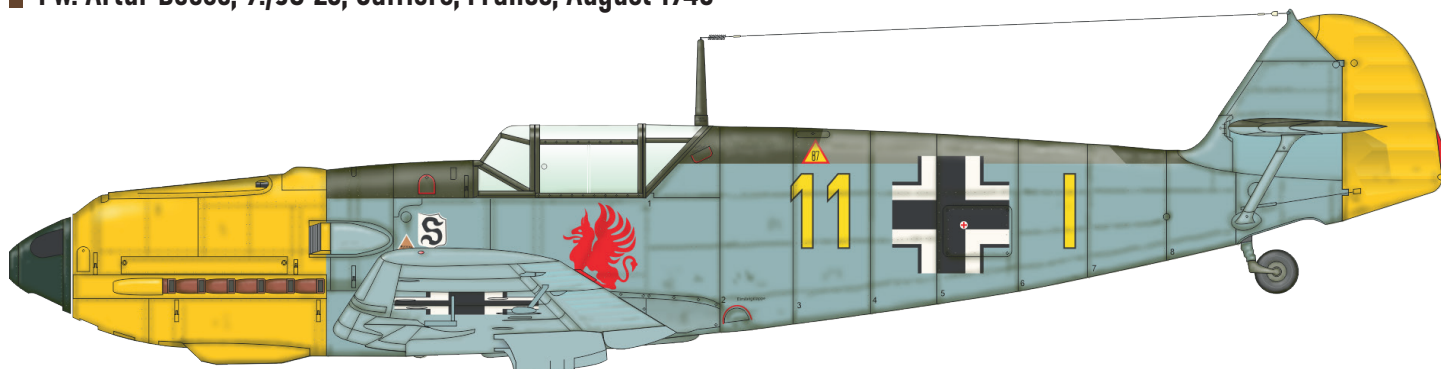


The camouflage scheme of the Yellow "2" underwent several interesting changes in an attempt to adapt it to different requirements from the Polish campaign to the Battle of Britain. The original upper surface scheme consisting of RLM 70/71 was oversprayed with the undersurface RLM 65 color on the sides of the fuselage in a fashion similar to the scheme corresponding to the winter/spring 1940 period. Consequently, irregular

pattern of the upper surfaces colors was oversprayed on the fuselage sides. It cannot be ruled out the RLM 02 color was used in this process. The eagle emblem was a marking of 6. Staffel/JG 52. Oblt. Steinhilper flipped this machine in September 1940 during landing. He ran out of luck on October 27, 1940, when he was shot down over Canterbury by either S/Ldr McKellar or Sgt. Skinner of No. 74 Sqn. Steinhilper bailed out from Bf

109E-1 but was captured and sent to a prisoner of war camp in Canada. From there he attempted to escape five times, each time unsuccessfully. He returned to Germany in 1945, where he died in Stuttgart on October 20, 2009. Ulrich Steinhilper achieved a total of five victories and wrote the books "Spitfire On My Tail", "Full circle: The long way home from Canada" and "Ten Minutes To Buffalo" after the war.

■ Fw. Artur Beese, 9./JG 26, Caffiers, France, August 1940

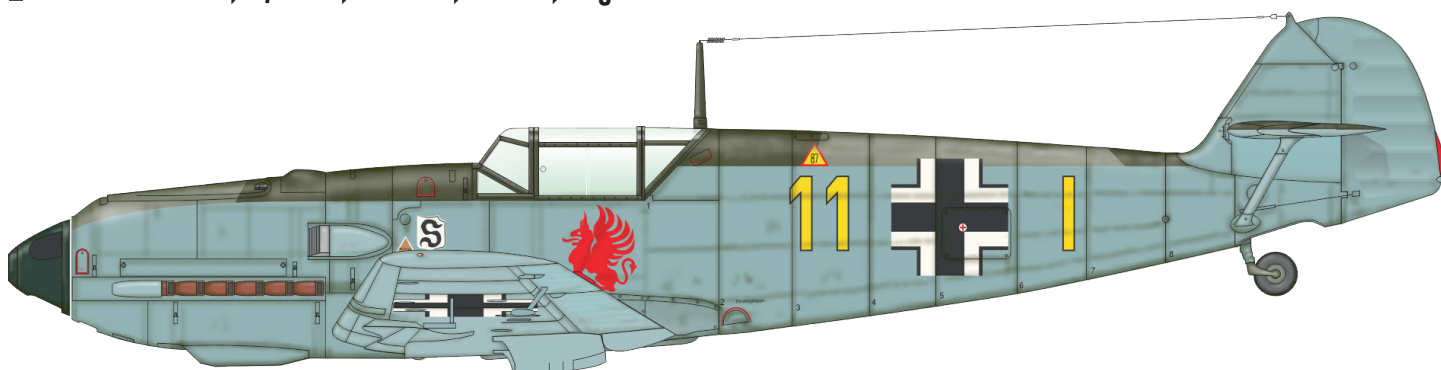


Arthur Beese was forced to belly-land this aircraft after a "dispute" with RAF fighters near Calais on August 24, 1940. The aircraft carried the camouflage scheme typical for the summer 1940 period, comprising RLM 02 and RLM 71 on the upper surfaces. Undersurfaces and

fuselage sides were painted in RLM 65. This scheme is an example of the unusually high and relatively sharp demarcation line of the upper fuselage colors. The octane marker stencil next to the filler cap is unusual in being a yellow triangle with a red outline. Beese had been shot

down and captured during the French campaign in the spring of 1940, then released after France fell. In all, he scored 22 victories, including seven Soviet aircraft and six American four-engine bombers. He was killed in combat with American fighters in February 1944.

■ Fw. Artur Beese, 9./JG 26, Caffiers, France, August 1940



This is the same aircraft flown by Arthur Beese as in marking option D but in different camouflage option. Beese's Bf 109E-1 is usually portrayed with a

yellow cowl and rudder as in option D, but photographs taken at the crash site indicate that the aircraft was destroyed before the yellow color on rudder and

cowlings could be applied.

OVERTREES

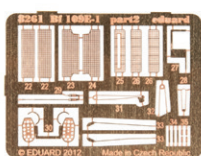
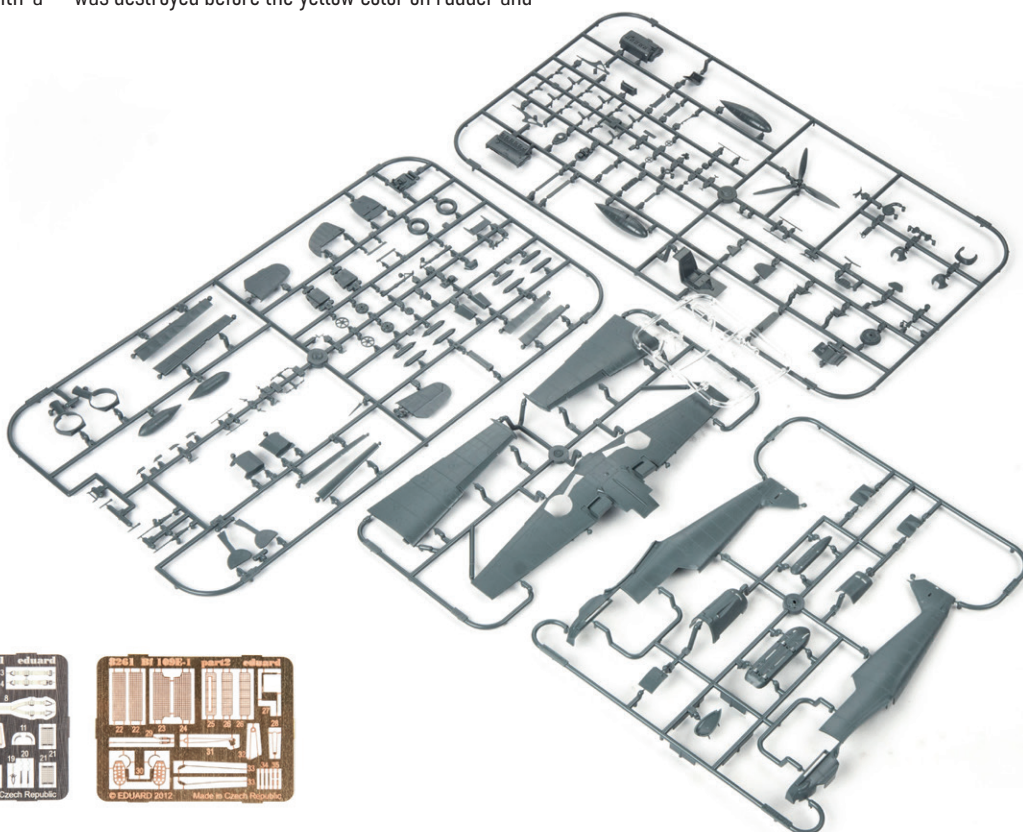
#8271X Bf 109E-1 1/48

Product page

OVERLEPT

#8261-LEPT Bf 109E-1 1/48

Product page

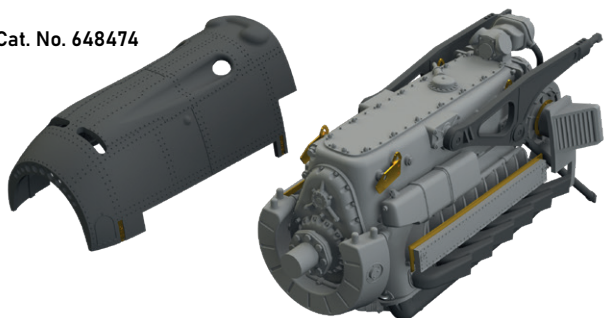


Recommended: for Bf 109E-1 1/48

49651 Bf 109E Weekend (PE-Set)
FE1071 Bf 109E-1 Weekend (PE-Set)
644024 Bf 109E LööK (Brassin)
648058 Bf 109E wheels (Brassin)

648472 Bf 109E cockpit & radio compartment (Brassin)
648473 Bf 109E fuselage guns (Brassin)
648474 Bf 109E engine (Brassin)
EX439 Bf 109E-1/E-3 (Mask)

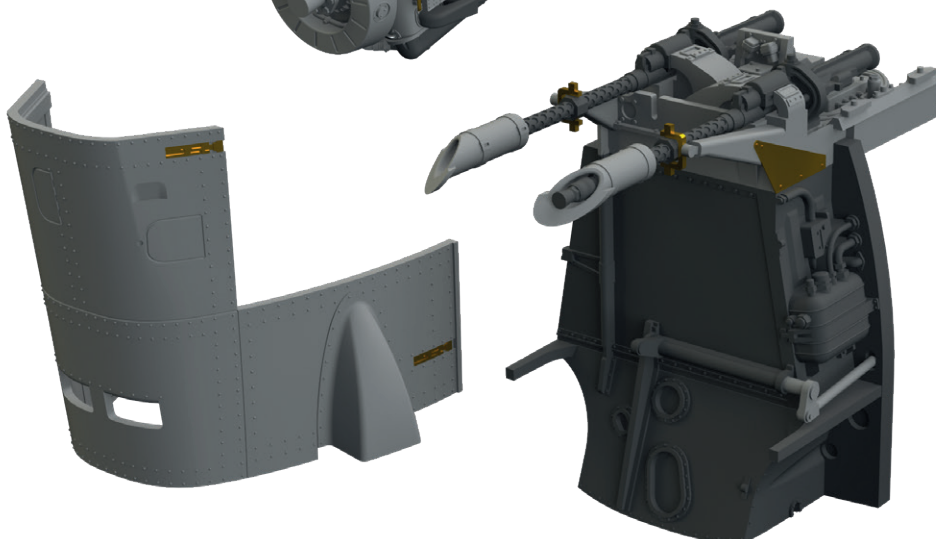
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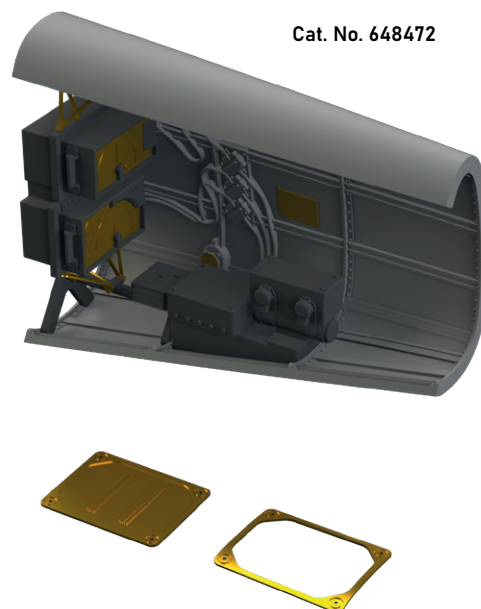
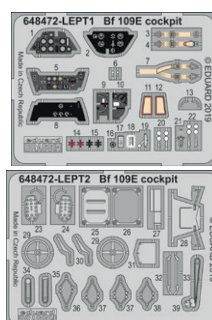
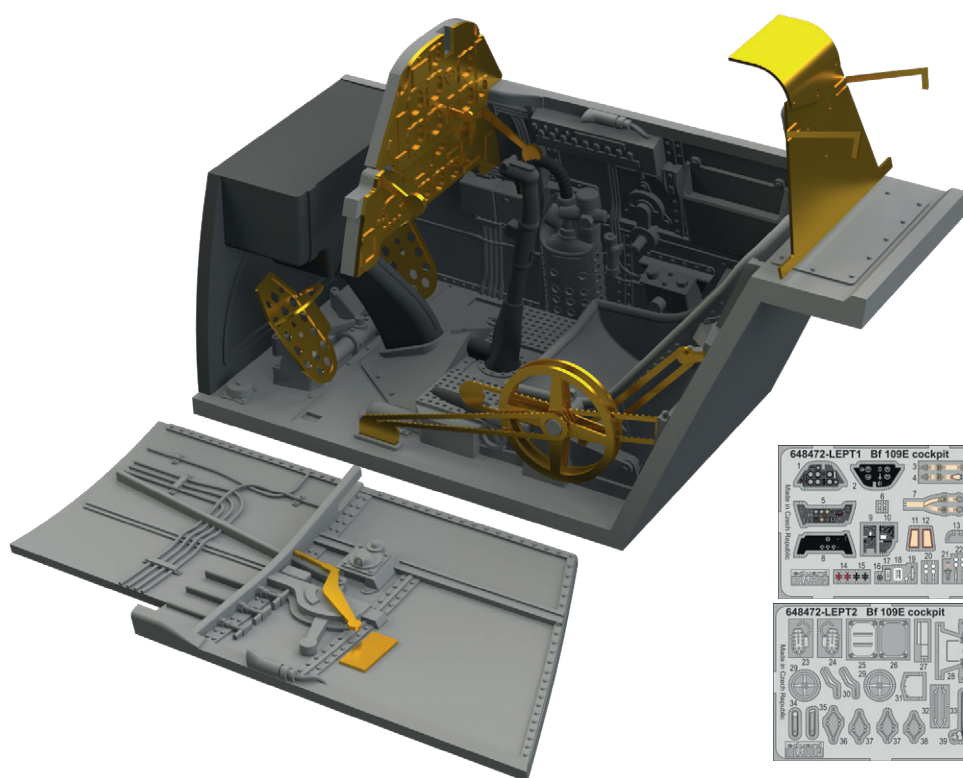
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Cat. No. 648473



Cat. No. 648472



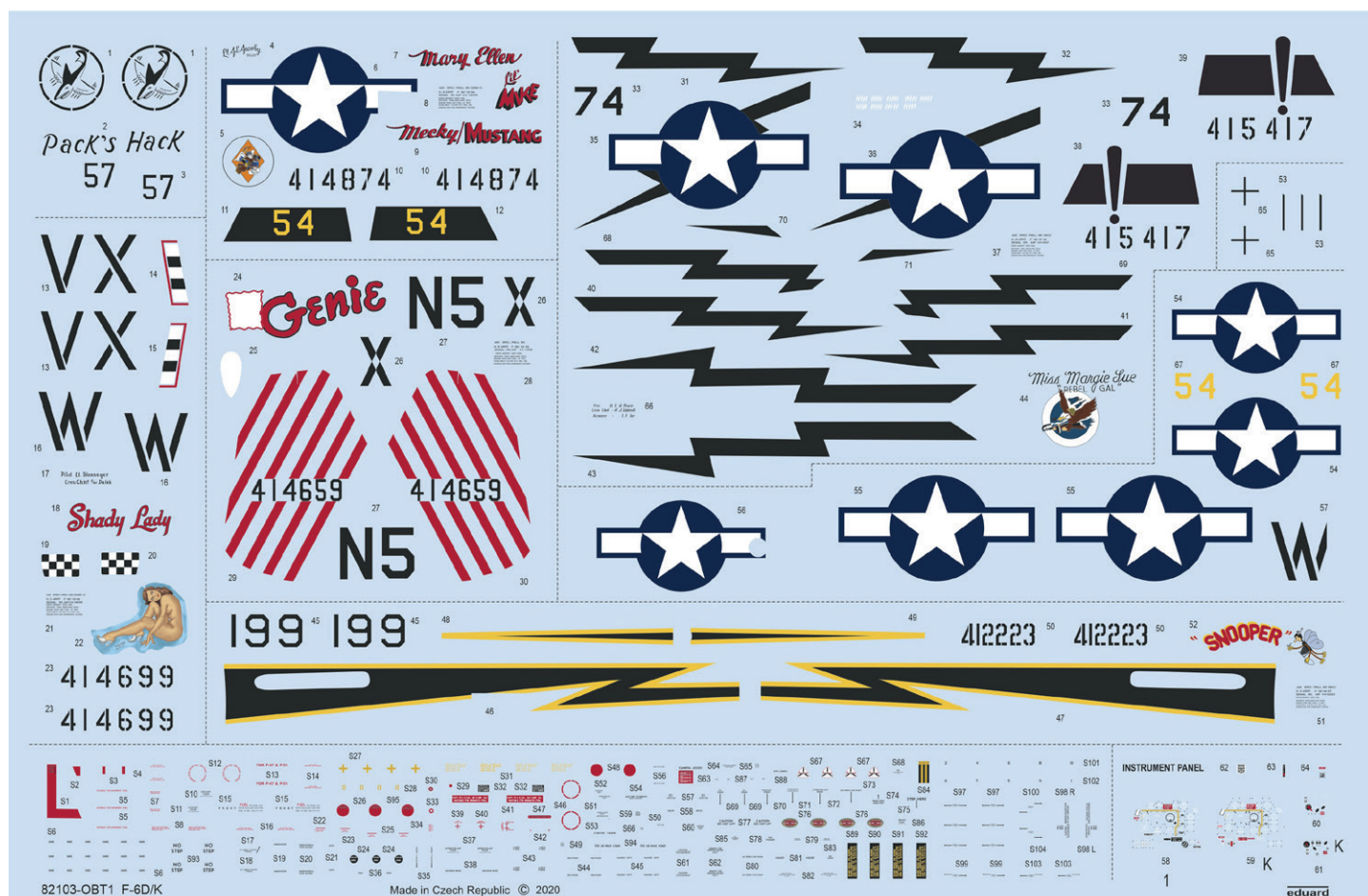
F-6D/K 1/48

Re-release

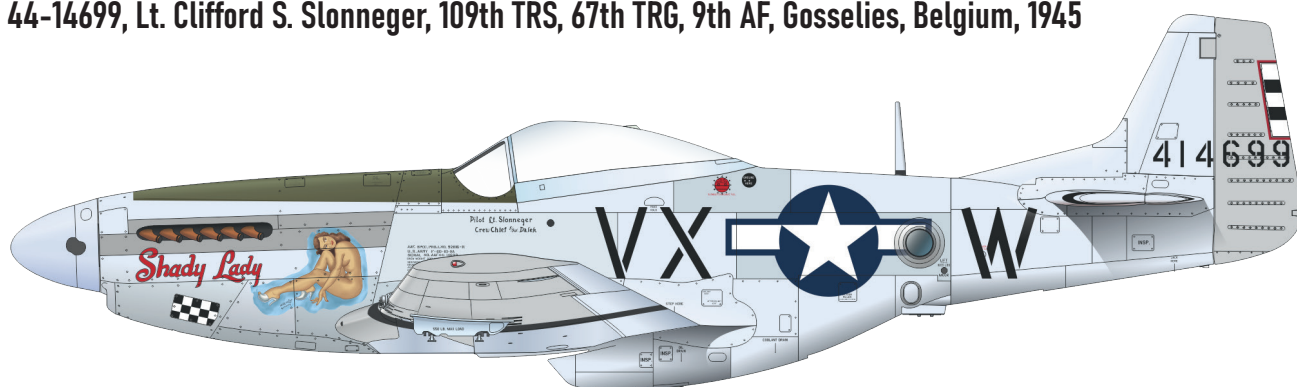
#82103

ProfiPACK edition kit of US WWII fighter aircraft P-51D Mustang in photo reconnaissance version F-6D/K in 1/48 scale.

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

[Product page](#)


F-6D-10, 44-14699, Lt. Clifford S. Slonneger, 109th TRS, 67th TRG, 9th AF, Gosselies, Belgium, 1945

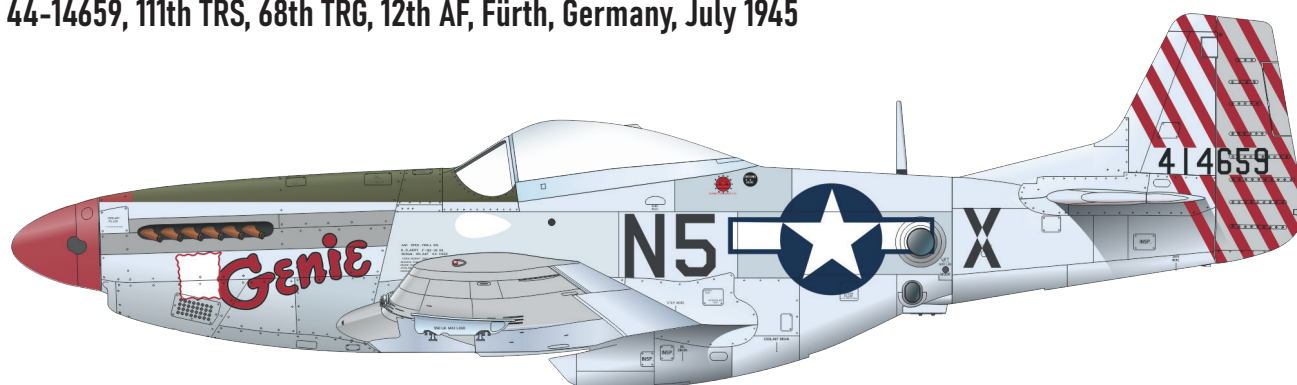


The story of the 67th TRG began in September 1941, when it was formed in Louisiana as an Observation Group. It was tasked with anti-submarine patrols alongside the United States East Coast, service it carried out until March 1942. Move to Great Britain followed in August 1942, where training continued. The unit was transfe-

rred under the 9th Air Force command in October 1943 and renamed 67th Tactical Reconnaissance Group. Both squadrons under its command, 107th TRS and 109th TRS, were equipped with F-6 Mustangs. Lt. Slonneger flew 54 missions with 109th TRS, the unit operated this type on photo-reconnaissance sorties until the end of hostilities.

After the War, the unit was transferred back to the United States in August 1945 and disbanded in March the following year. F-6D from this unit had the oval window on the side of the fuselage often covered. It is highly probable that it was the case of the aircraft named Shady Lady as well.

F-6D-10, 44-14659, 111th TRS, 68th TRG, 12th AF, Fürth, Germany, July 1945

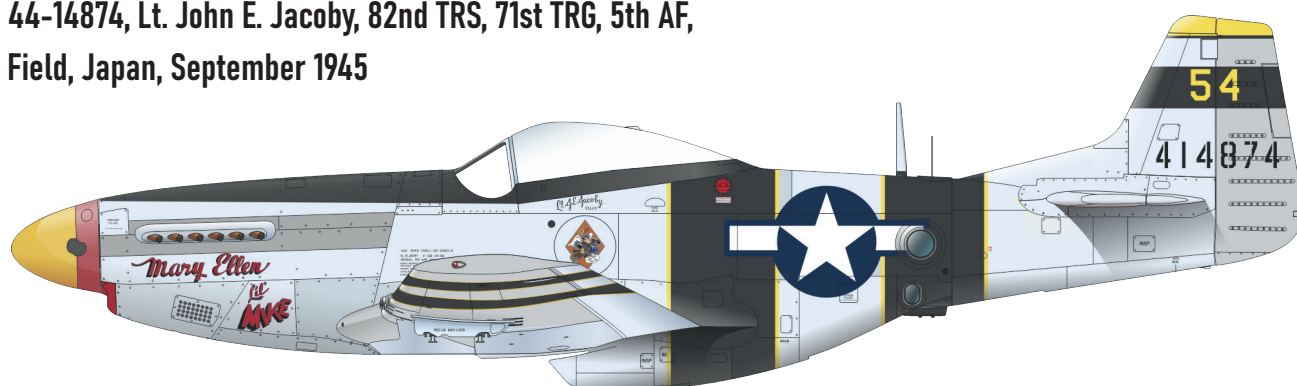


After the attack on Pearl Harbor, the 111th Observation Squadron, part of the Texas Air National Guard, was sent to the south of USA to guard the Mexican border. The unit was transferred under 68th OG command as soon as February 1942 and started its preparations for service in Europe. In 1942 the unit relocated to Great Britain with

its P-39s as part of the organization of the invasion of Algiers (Algiers is the city, Algeria is the country and it wasn't the only country that Allied Forces had to invade (Morocco, Tunisia...) so I would rather say "of the invasion of North Africa" or "of Operation Torch"). In 1943 the unit was renamed 111th TRS and equipped with F-6A and B aircraft.

It participated in the Operation Husky (invasion of Sicily), Operation Dragoon (invasion of Southern France) and further campaigns of the ground forces through the Southern Europe. After the end of the War the unit returned into the ranks of the Texas Air National Guard. It is still active nowadays equipped with MQ-1B Predator.

F-6D-15, 44-14874, Lt. John E. Jacoby, 82nd TRS, 71st TRG, 5th AF, Johnson Field, Japan, September 1945

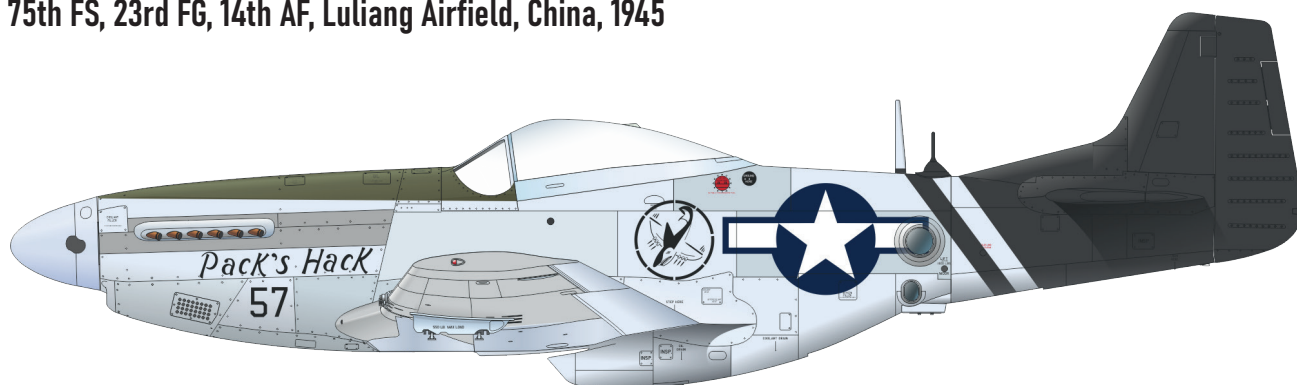


Since November 1944, 82nd Tactical Reconnaissance Squadron, part of the 71st TRG, participated in reconnaissance missions over Philippines island of Luzon and also conducted close air support or photographing and bombing of the airports on Formosa and China. Its next base was the island of Ieshima from where pilots flew sorties over the Japanese island of Kyūshū. Since the deployment over the Philippines until the middle of June 1945 the

unit was commanded by Capt. William Shomo, probably the most famous F-6D pilot. At the end of hostilities, the unit was transferred to Irumagawa airbase on the Tokyo outskirts. The aircraft No. 54 was deployed from the very beginning of the fighting on Philippines, and she remained in the unit inventory even after the end of the War as it served with occupying forces on Japanese territory. This aircraft appearance changed significantly during her

service. At the beginning she carried only number 54 on the vertical tail surface, later the black stripes were added to the fuselage and wings. Anti-glare panel was repainted black, and the propeller spinner sported several variants of coloration. Inscriptions on the fuselage nose are also documented in two different layouts. There is an 82nd TRS marking on the port side of the fuselage, most probably applied after the end of War.

■ F-6K-15, 75th FS, 23rd FG, 14th AF, Luliang Airfield, China, 1945

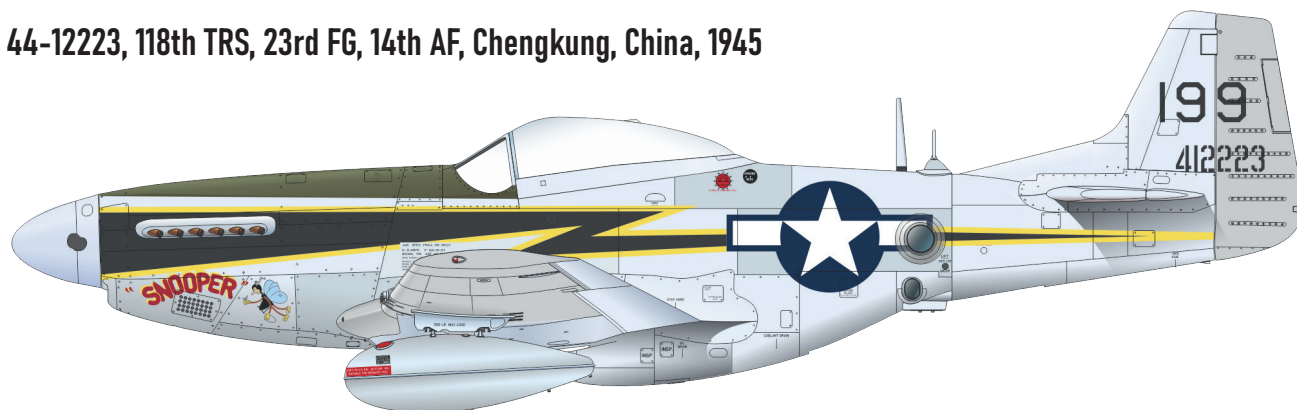


After disbandment of the American Volunteer Group, the famous "Flying Tigers" fighting with their P-40s over the Chinese territory, most of its pilots joined 75th FS ranks. Same as its sister 118th TRS, also under 23rd FG command, 75th FS, equipped with P-51Ds engaged in close air support, attacks on the

traffic centers, warehouses, troops gathering points, airports, and other targets. To verify the results of such combat missions 23rd FG squadrons were equipped with a few reconnaissance F-6. Reconnaissance F-6K christened Pack's Hack had the rear part of the fuselage including the tail surfaces painted black

like all the aircraft of the 75th FS. The simplified single-color black unit marking was sprayed on both sides of the fuselage under the canopy on the metal surface.

■ F-6K-10, 44-12223, 118th TRS, 23rd FG, 14th AF, Chengkung, China, 1945

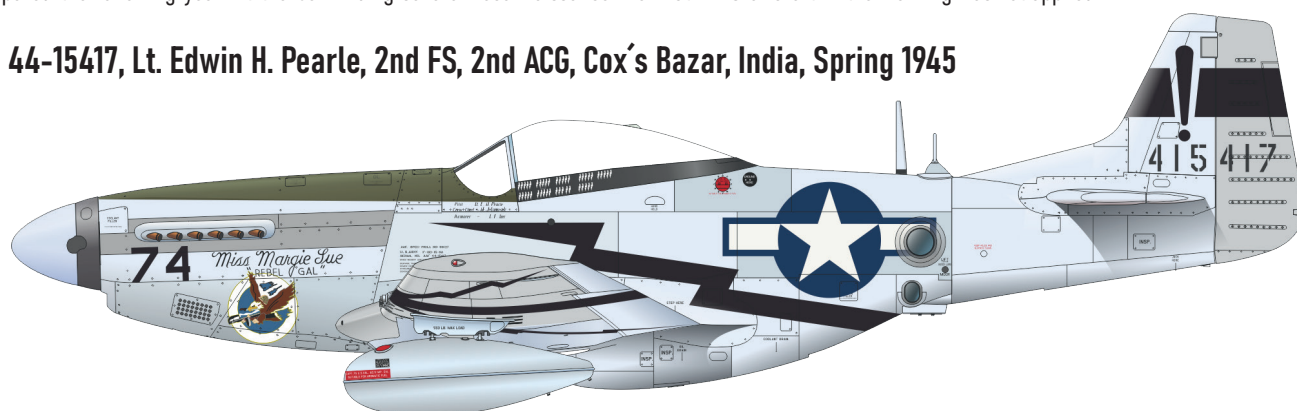


118th Squadron was activated in March 1941 at Jacksonville airbase, Florida from where it flew anti-submarine sorties. In August 1942, it was relieved from these duties and started the preparations for overseas service. It was redesignated 118th TRS and assigned to China-Burma-India theatre for which specifics it prepared the following year. At the be-

ginning of the 1944 the unit was transferred from the USA to India. Between May and June 1944 this unit supported the ground units, attacked the traffic centers, warehouses, troops gathering points, airports, and other ground targets. Initially the unit was equipped with P-40s, later it received P-51Ds including several reconnaissance F-6. 118th TRS aircraft

recognition marking was a black lightning outlined in yellow, which was painted on both sides of the P-51 fuselage. Downsized, these markings were also applied on the wing tips, vertical and horizontal tail surfaces. The aircraft christened SNOOPER carried the lightnings on the fuselage sides only, the rest of the marking was not applied.

■ F-6D-15, 44-15417, Lt. Edwin H. Pearle, 2nd FS, 2nd ACG, Cox's Bazar, India, Spring 1945



2nd Air Commando Group, equipped with P-51, C-47 and L-5 aircraft moved from the United States to India during the fall 1944. The main task of the group was support of the ground units operating on the territory of China and Burma, including resupplying these units with armament, equipment, and troops. Two fighter squadrons, 1st FS and 2nd FS, were also part of the group. Each one was equipped with 22 P-

-51D fighters and three reconnaissance F-6s. Both 2nd ACG fighter squadrons were mainly used for close air support tasks, but in the spring 1945 their pilots organized several extremely long distance attacks against the Japanese air bases. They claimed 60 enemy aircraft destroyed and 40 probably destroyed or damaged during these raids. Lt. Pearle contributed with one damaged bomber to this score. The

main recognition marking of 2nd FS was black propeller spinner with natural metal tip. The Rebel Gal carried, like several other airplanes from this unit, its marking on the fuselage nose in form of an eagle grasping machine gun in his claws. The fuselage and wing sported lightnings, the marking of 2nd ACG.

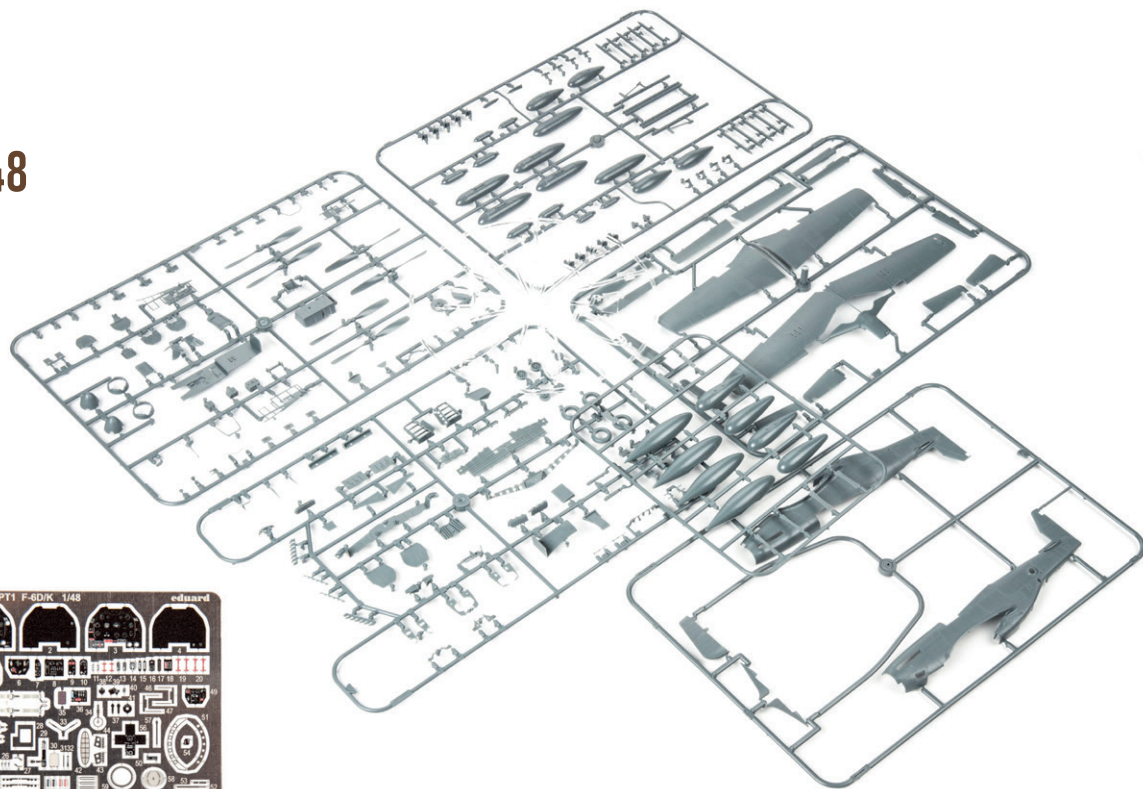
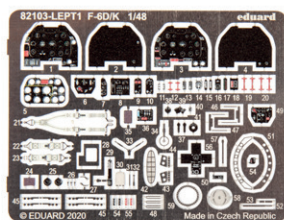
OVERTREES

#82103X F-6D/K 1/48

[Product page](#)

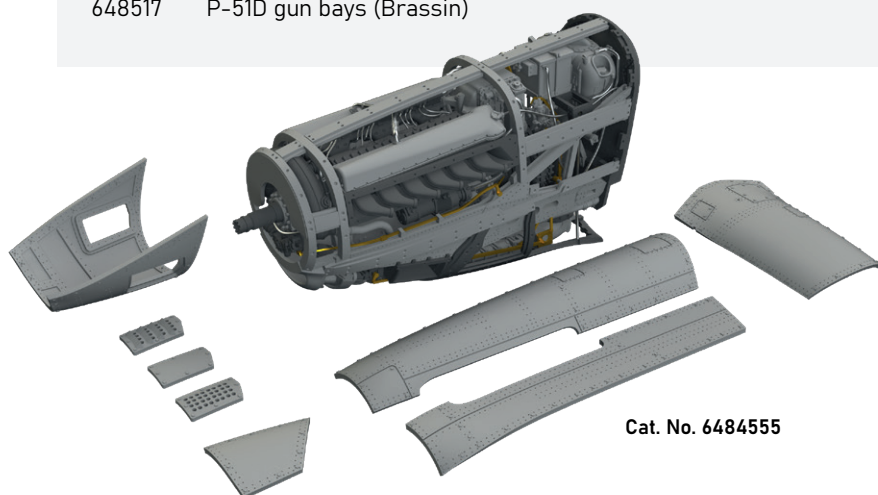
OVERLEPT

#82103-LEPT F-6D/K 1/48

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Recommended: for F-6D/K 1/48

FE1021	P-51D seatbelts STEEL (Brassin)	648522	P-51D cockpit (Brassin)
FE1214	P-51K seatbelts STEEL (Brassin)	648555	P-51D engine (Brassin)
648485	P-51D exhaust stacks (Brassin)	648570	P-51D gun sights (Brassin)
648486	P-51D exhaust stacks w/ fairing (Brassin)	648571	P-51D 75gal drop tanks (Brassin)
648487	P-51D Hamilton Standard propeller (Brassin)	648572	P-51D 108gal drop tanks (Brassin)
648494	P-51D wheels diamond tread (Brassin)	648599	F-6D cameras (Brassin)
648495	P-51D undercarriage legs BRONZE (Brassin)	648600	F-6D cockpit (Brassin)
648503	P-51D wheels oval tread (Brassin)	SIN64865	P-51D ESSENTIAL (Brassin)
648504	P-51D wheels cross tread (Brassin)	SIN64869	P-51D ADVANCED (Brassin)
648505	P-51D wheels block tread (Brassin)	3DL48036	P-51K-5 SPACE (Brassin)
648511	P-51D wheels diamond tread 2 (Brassin)	3DL48037	P-51K-10 SPACE (Brassin)
648512	P-51D wheels rhomboid treat (Brassin)	D48033	P-51D national insignia (Brassin)
648513	P-51D wheels pointed cross tread (Brassin)	D48034	P-51D stencils (Brassin)
648514	P-51D wheels grooved (Brassin)	EX663	P-51D TFace (Mask)
648517	P-51D gun bays (Brassin)		



Cat. No. 6484555



Cat. No. 6484599

644146

CH-47A LööKplus

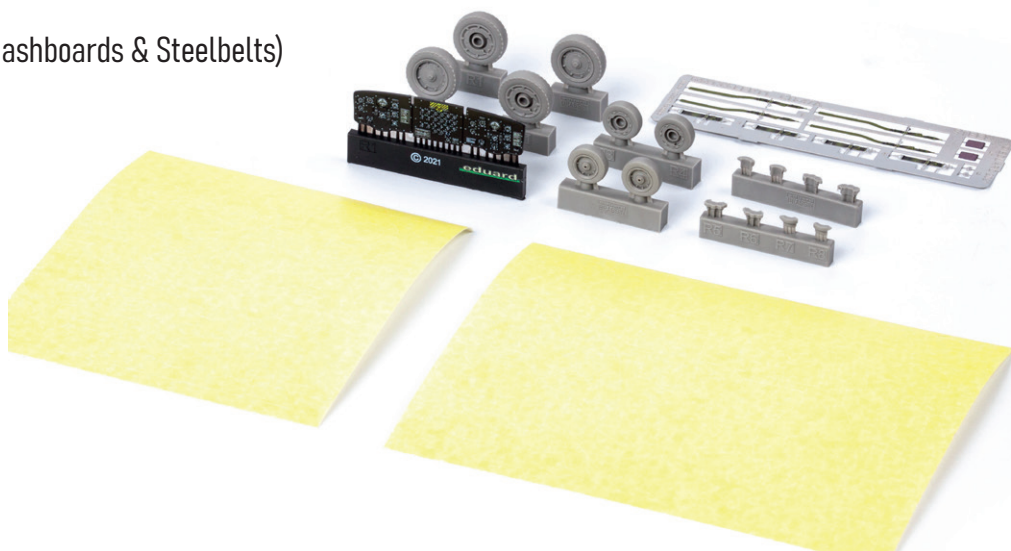
Löökt

1/48 Hobby Boss

Collection of 3 sets for CH-47A in 1/48 scale.

Recommended kit: Hobby Boss

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

[Product page](#)


644147

F-104S LööKplus

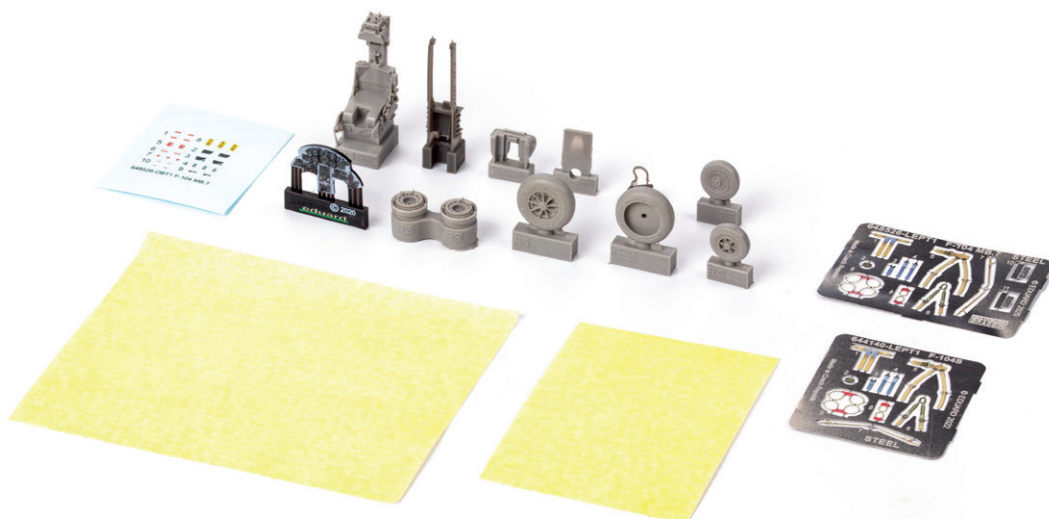
Löökt

1/48 Kinetic

Collection of 4 sets for F-104S in 1/48 scale.

Recommended kit: Kinetic

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

[Product page](#)


644148

F-104 ASA LööKPlus

Löökt

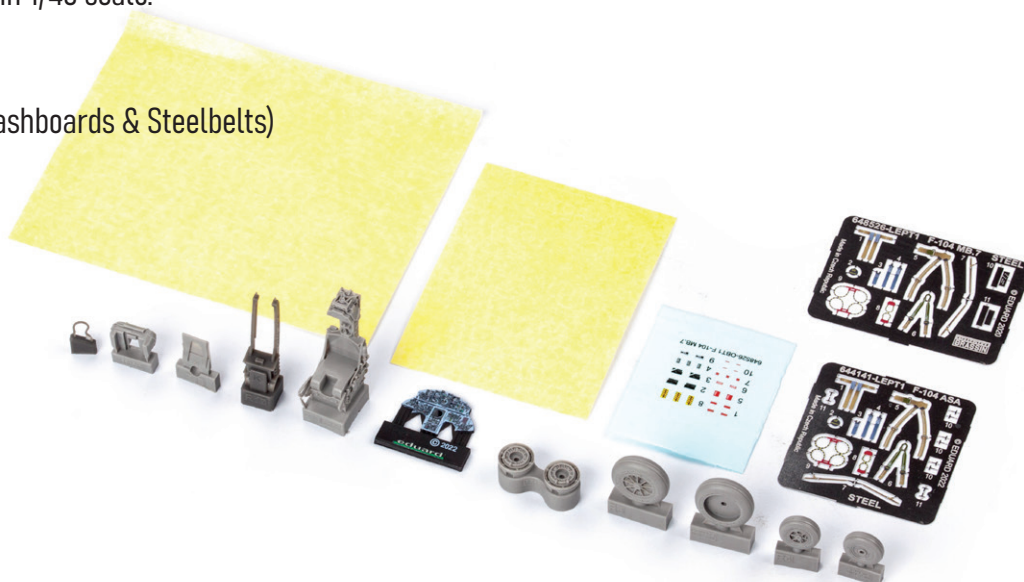
1/48 Kinetic

Collection of 4 sets for F-104 ASA in 1/48 scale.

Recommended kit: Kinetic

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

[Product page](#)



644149

F-104 ASA/M LööKPlus

Löökt

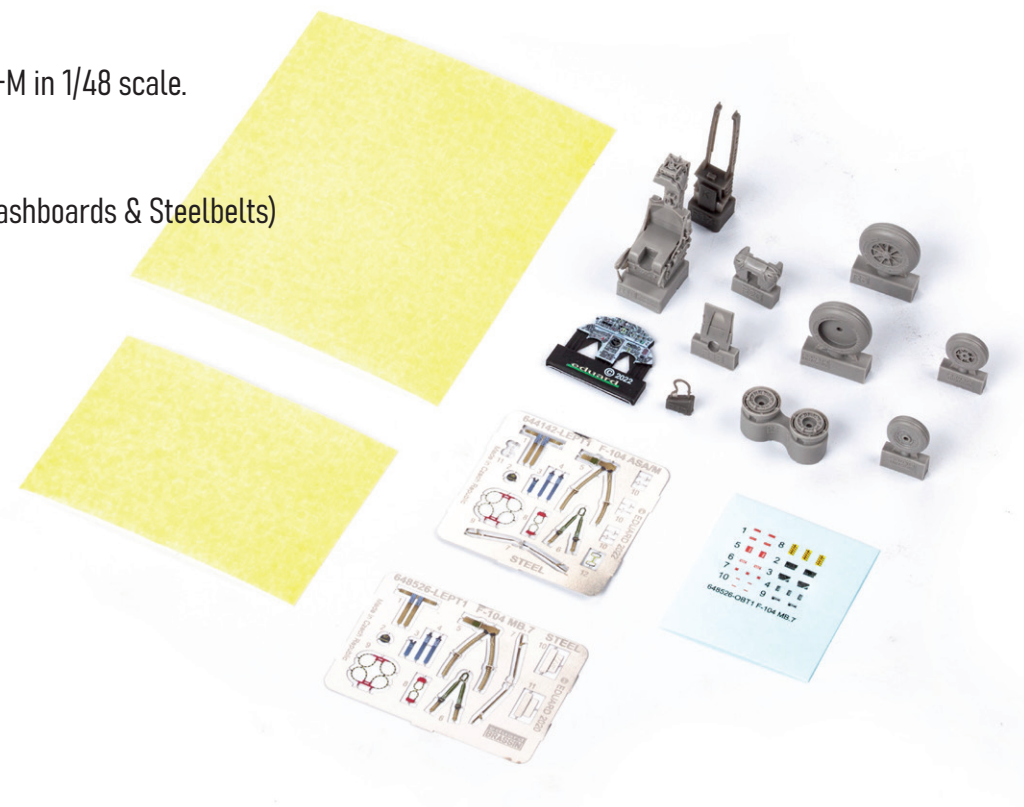
1/48 Kinetic

Collection of 4 sets for F-104 ASA-M in 1/48 scale.

Recommended kit: Kinetic

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

[Product page](#)



644151

F-14A late Löök



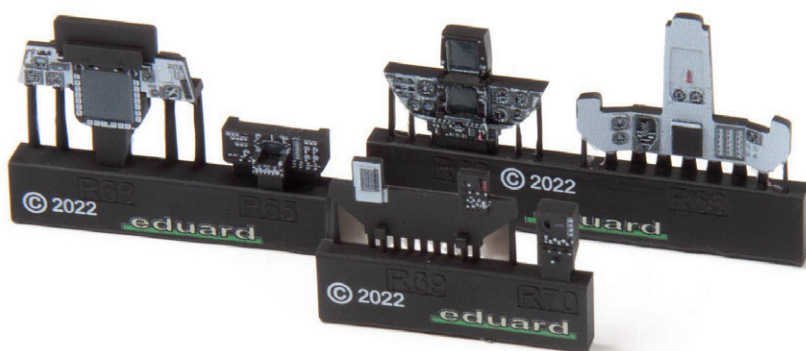
1/48 Tamiya

LööK set - Brassin pre-painted dashboard and STEEL seatbelts for F-14A late in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Tamiya

Set contains:

- resin: 6 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

[Product page](#)



644152

Vampire F.3 Löök



1/48 Airfix

LööK set - Brassin pre-painted dashboard and STEEL seatbelts for Vampire F.3 in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Airfix

Set contains:

- resin: 3 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

[Product page](#)



644153

OV-10A LööK

LööK

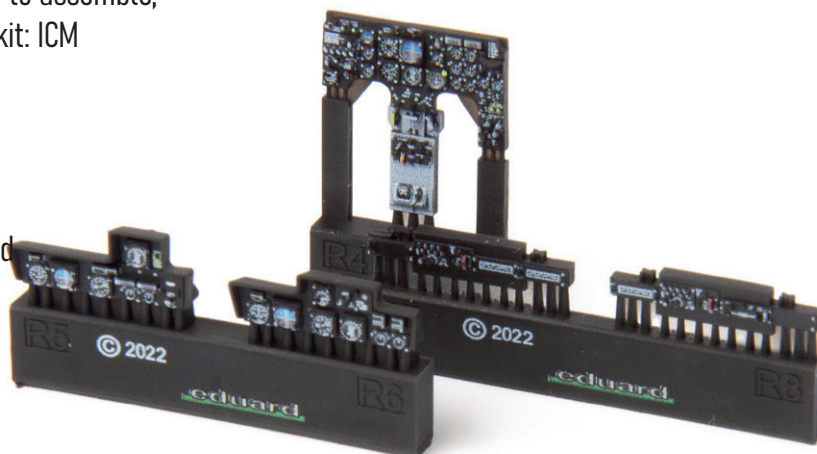
1/48 ICM

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

Set contains:

- resin: 6 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

Product page



648681

Z-126 Trener Walter Minor 4 engine PRINT

eduard
BRASSIN
Print

1/48 Eduard

Brassin set - the engine for Z-126 Trener in 1/48 scale. Made by direct 3D printing. Cowlings included. Recommended kit: Eduard

Set contains:

- 3D print: 13 parts
- decals: no
- photo-etched details: yes
- painting mask: no

Product page



648736

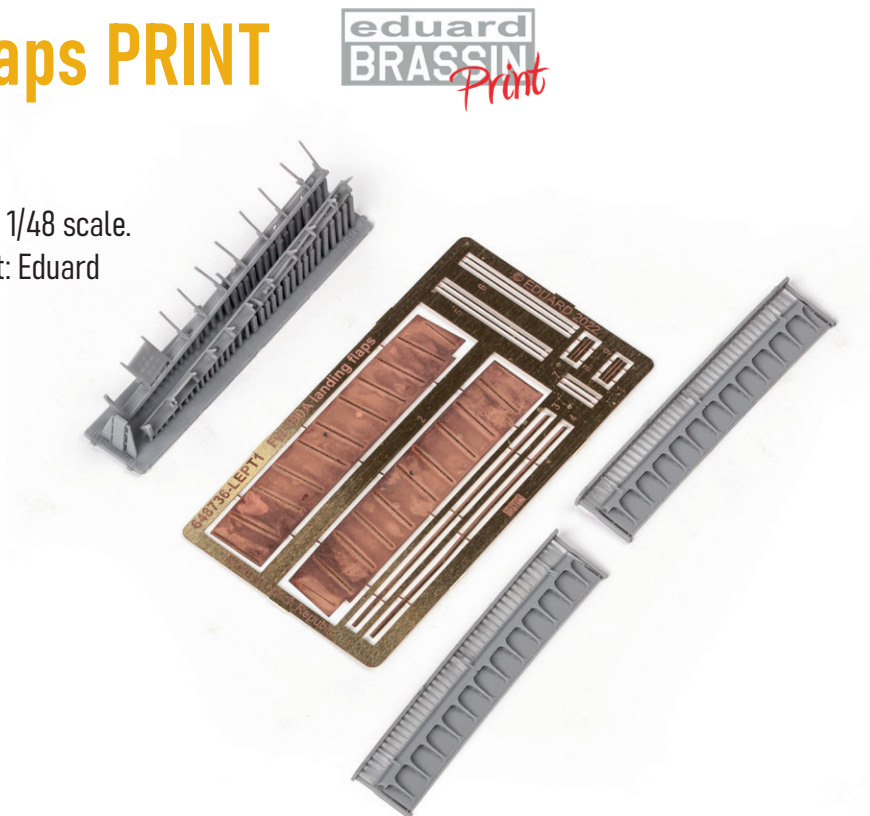
Fw 190A landing flaps PRINT

1/48 Eduard

Brassin set - the landing flaps for Fw 190A in 1/48 scale.
Made by direct 3D printing. Recommended kit: Eduard

Set contains:

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

[Product page](#)


648738

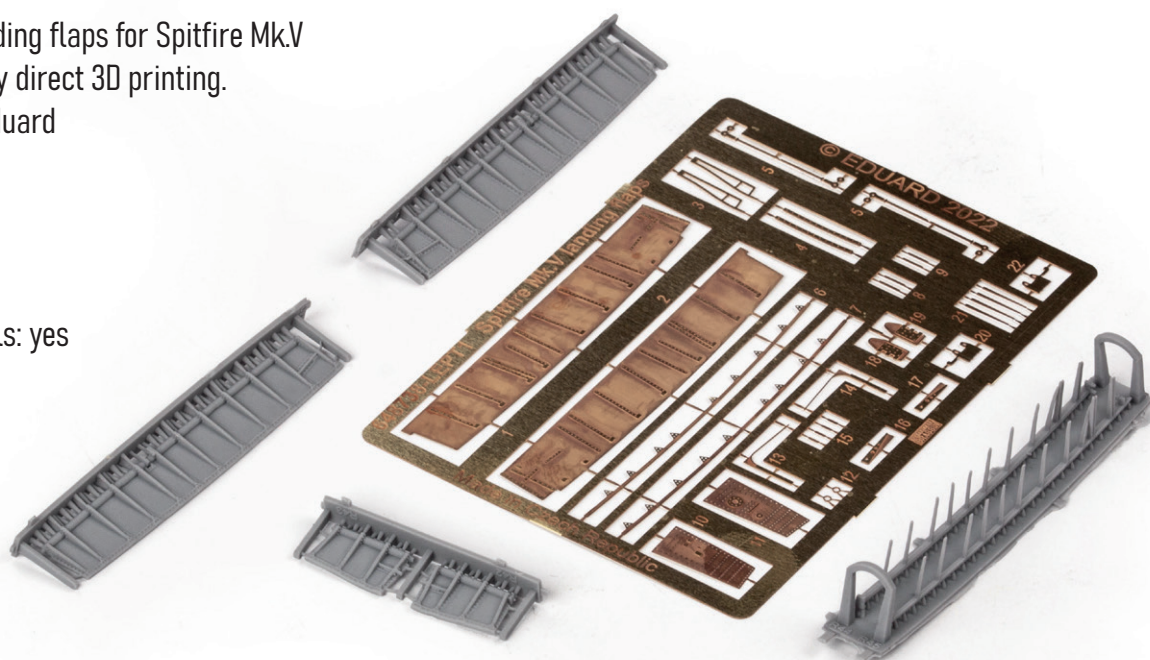
Spitfire Mk.V landing flaps PRINT

1/48 Eduard

Brassin set - the landing flaps for Spitfire Mk.V
in 1/48 scale. Made by direct 3D printing.
Recommended kit: Eduard

Set contains:

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

[Product page](#)


648739

F-14A late cockpit

1/48 TAMIYA

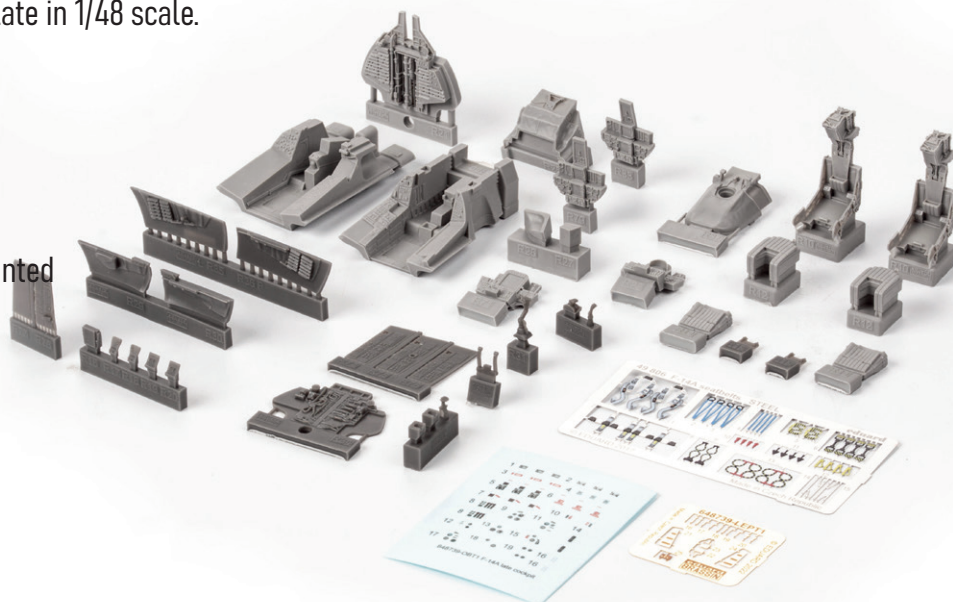
Brassin set - the cockpit for F-14A late in 1/48 scale.

Recommended kit: Tamiya

Set contains:

- resin: 39 parts
- decals: yes
- photo-etched details: yes, pre-painted
- painting mask: no

[Product page](#)



672279

P-51B/C exhausts stacks PRINT

1/72 Arma Hobby

Brassin set - exhaust stacks without fairing for P-51B/C in 1/72 scale. Made by direct 3D printing. Easy to assemble, replaces plastic parts. Recommended kit: Arma Hobby

Set contains:

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

[Product page](#)



eduard
BRASSIN
Print

672280

P-51B/C exhausts stacks w/fairing PRINT



1/72 Arma Hobby

Brassin set - exhaust stacks with fairing for P-51B/C in 1/72 scale. Made by direct 3D printing. Easy to assemble, replaces plastic parts. Recommended kit: Arma Hobby

Set contains:

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

[Product page](#)


672281

P-51B/C bazooka rocket launcher

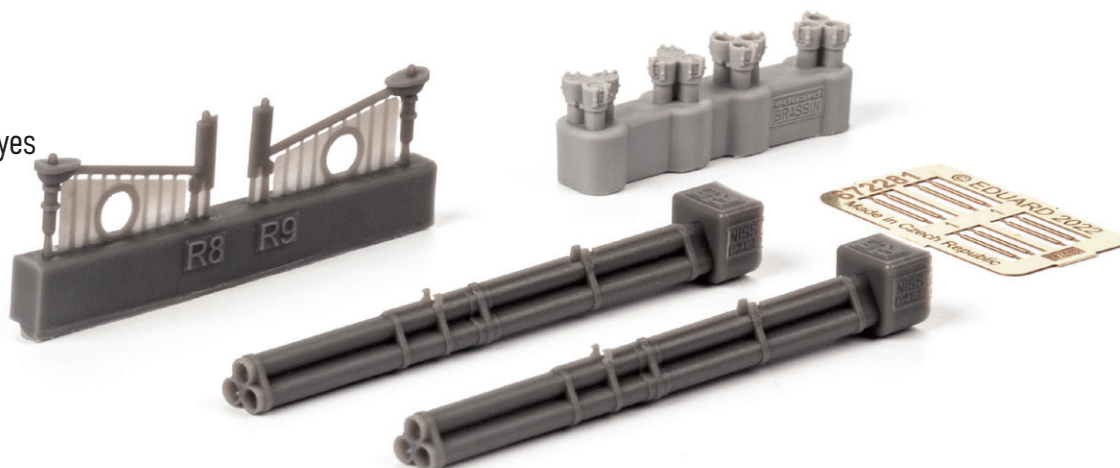


1/72 Arma Hobby

Brassin set - the Bazooka type rocket launchers for P-51B/C in 1/72 scale. The set consists of 2 rocket launchers. Recommended kit: Arma Hobby

Set contains:

- resin: 8 parts
- decals: no
- photo-etched details: yes
- painting mask: no

[Product page](#)


672282

P-51B/C wheels diamond tread

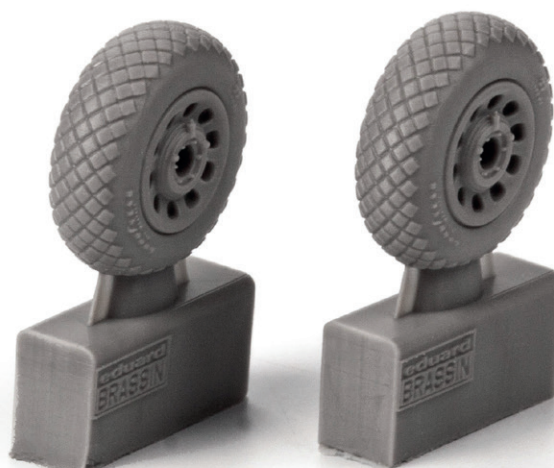
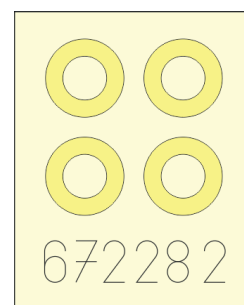
1/72 Arma Hobby

Brassin set - the undercarriage wheels for P-51B/C in 1/72 scale. The set consists of the main wheels. Easy to assemble, replaces plastic parts.
Recommended kit: Arma Hobby

Set contains:

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

[Product page](#)



672283

Tornado wheels

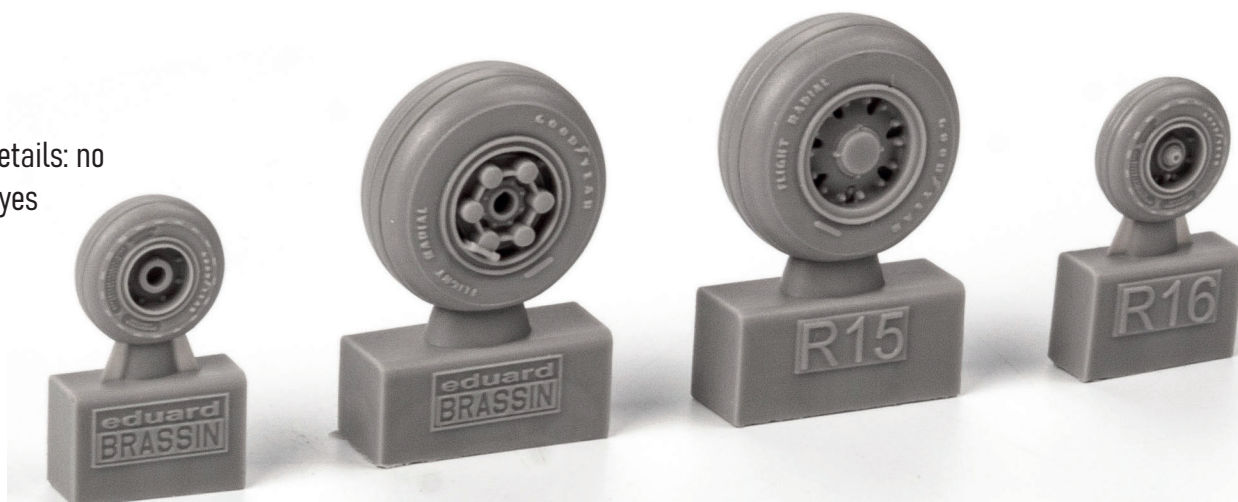
1/72 Revell

Brassin set - the undercarriage wheels for Tornado in 1/72 scale. The set consists of the main wheels and the nose wheels. Easy to assemble, replaces plastic parts.
Recommended kit: Revell

Set contains:

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

[Product page](#)



SIN67219

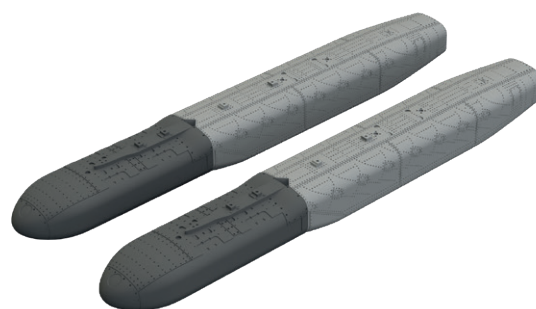
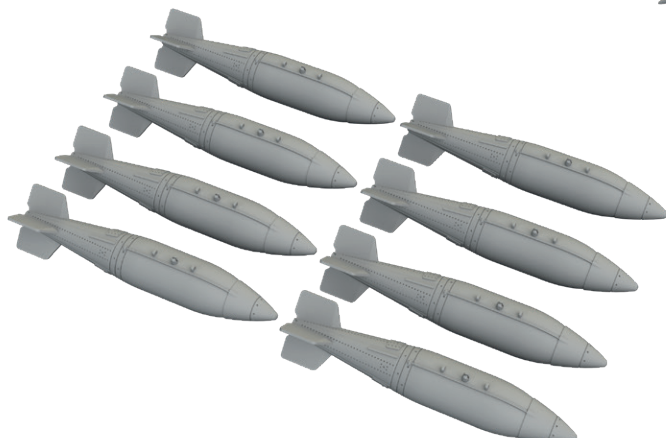
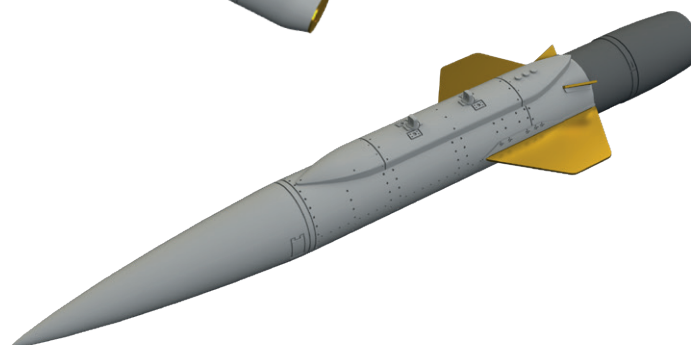
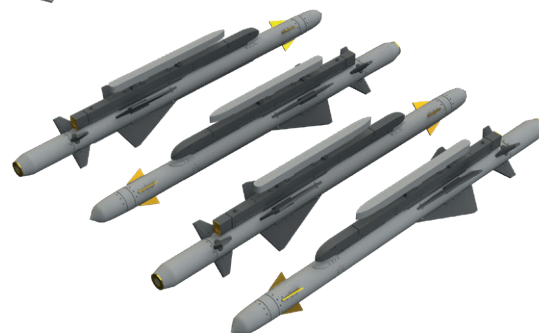
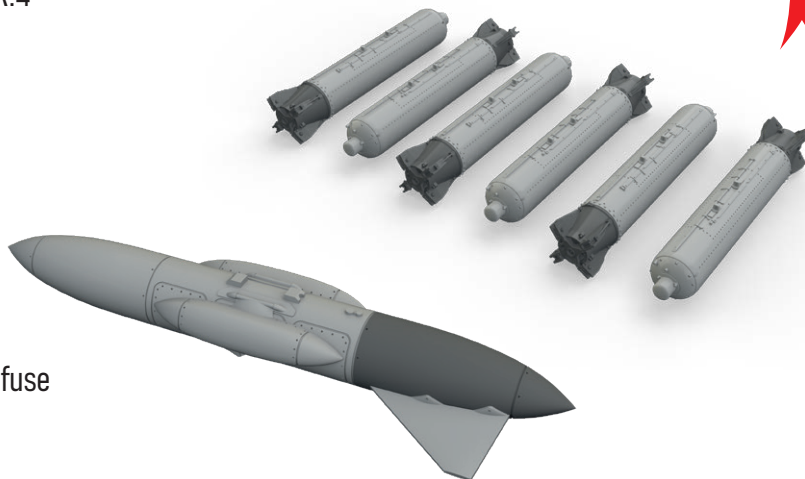
Tornado GR.1/GR.4 armament

1/72 Revell

Collection of 8 sets for Tornado GR.1/GR.4
in 1/72 scale. Recommended kit: Revell

- Sky Shadow ECM pod
- ALARM missiles
- TIALD pod
- CPU-123 Paveway II
- BOZ-107 pod
- JP233 dispenser
- British 1000lb retarded bombs w_960 fuse
- CBU-87 bombs

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

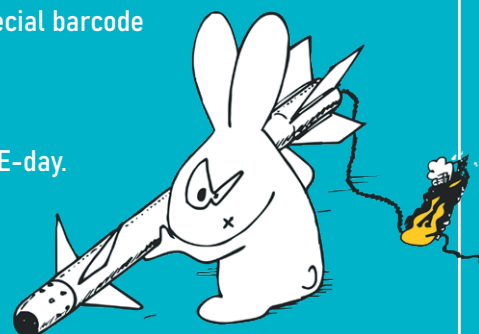
[Product page](#)

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

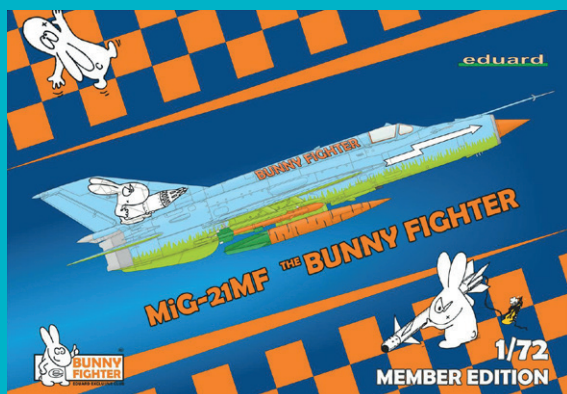


How to become a member of BFC?

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

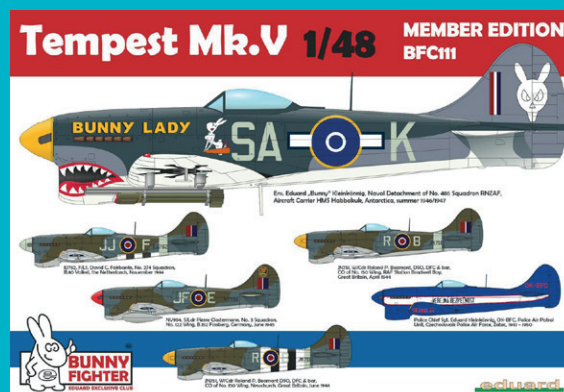


BOX CONTENT:

Plastic parts, Marking options 4, Decal Set, PE parts, Mask, 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, Mask, 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 side-walk instrument and control panels with photo-etched details and seat belts.

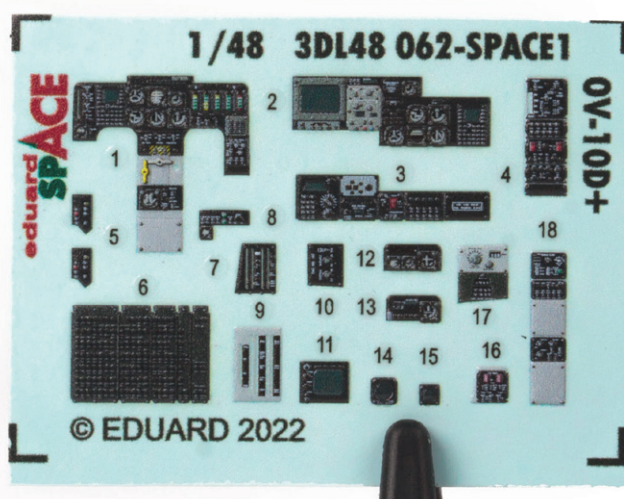
3DL48061 Vampire F.3 SPACE 1/48 Airfix

[Product page](#)



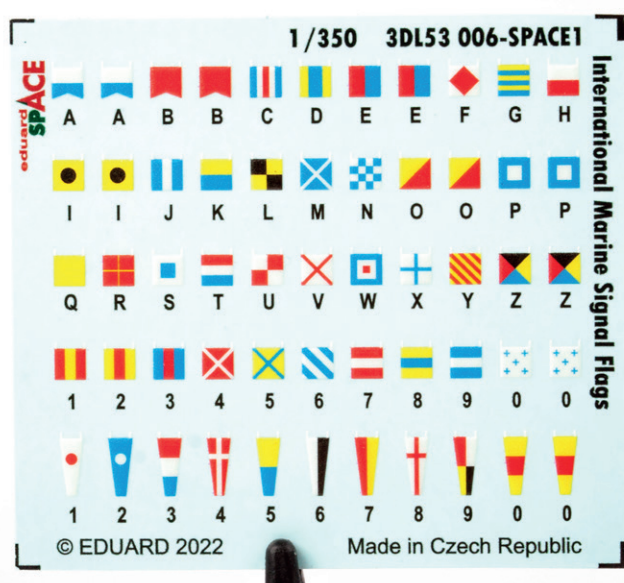
3DL48062 OV-10D+ SPACE 1/48 ICM

[Product page](#)



3DL53006 International Marine Signal Flags SPACE 1/350

[Product page](#)

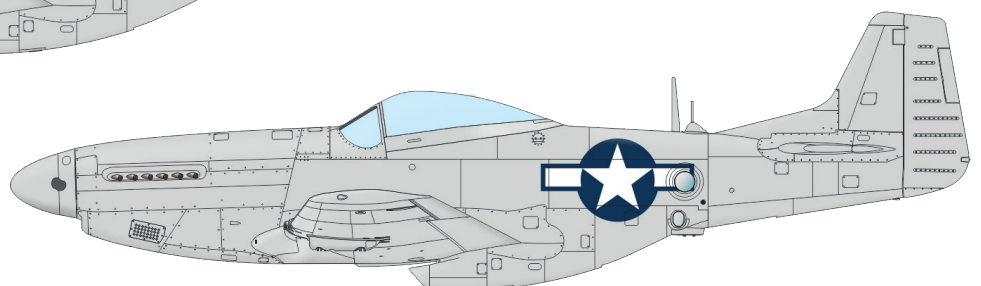
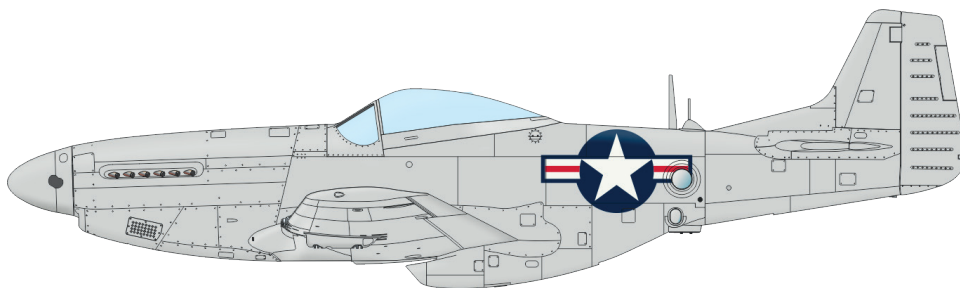
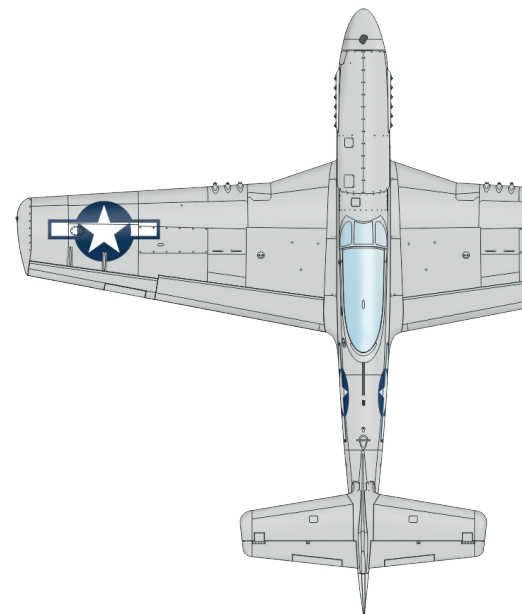
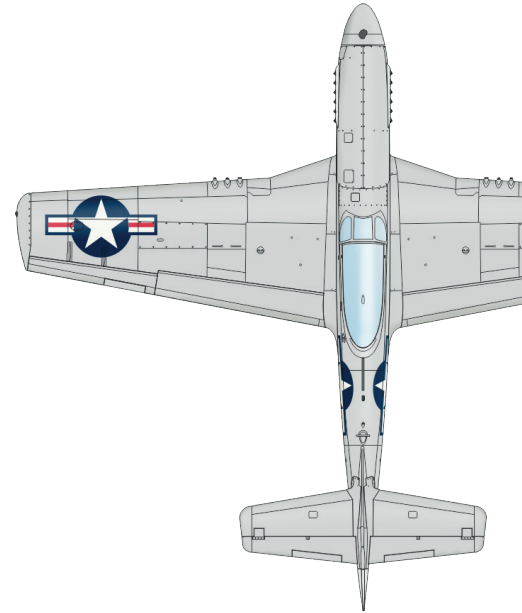
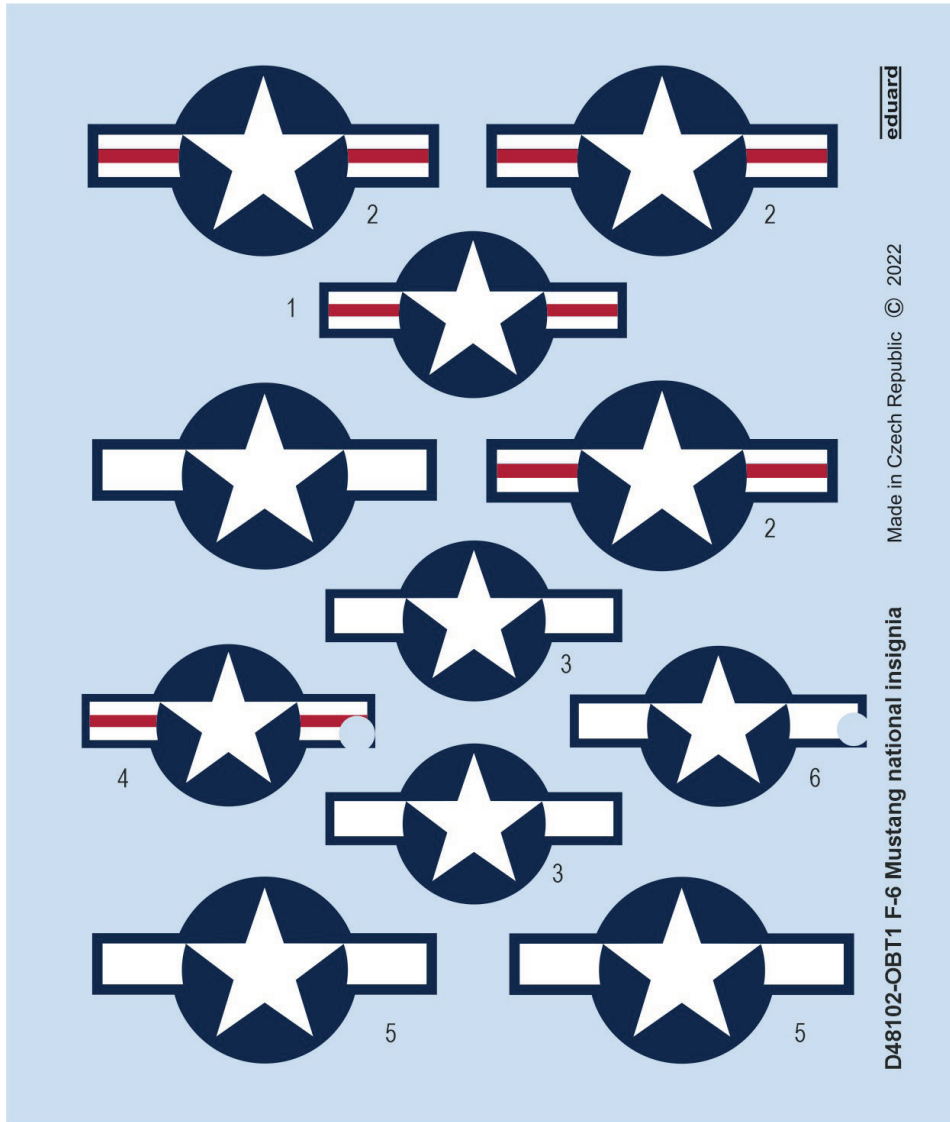


F-6 Mustang national insignia

Cat. No. D48102

1/48 Eduard

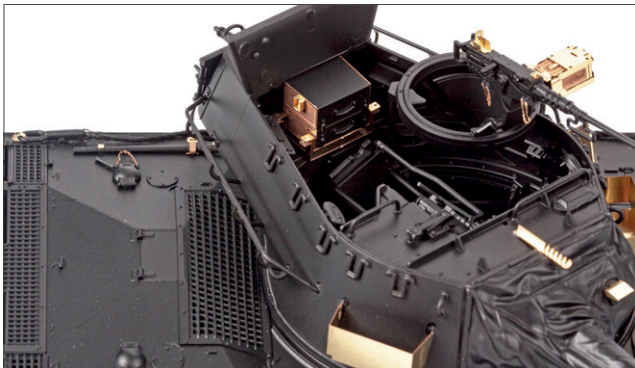
Product page



M18 tank destroyer

1/35 Tamiya

36478



U-2A

1/72 Hobby Boss

73768



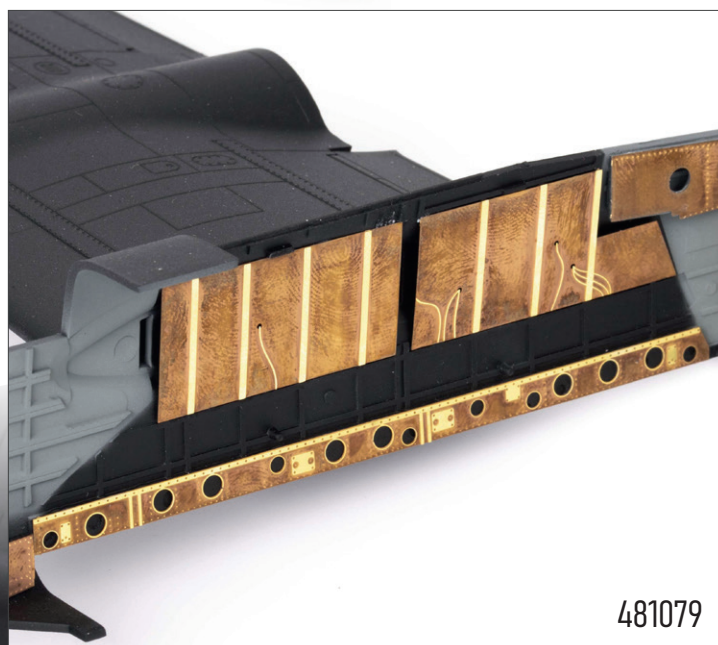
B-26K

1/48 ICM

- 481079 B-26K Invader bomb bay
- 481080 B-26K Invader exterior & undercarriage
- 491262 B-26K Invader
- FE1262 B-26K Invader
- FE1263 B-26K Invader seatbelts STEEL



481079

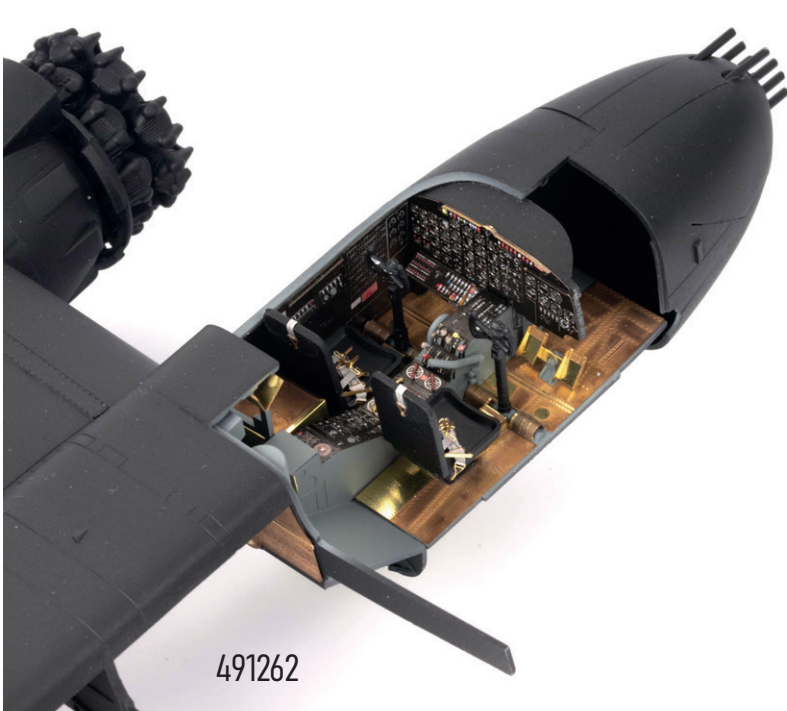


481079

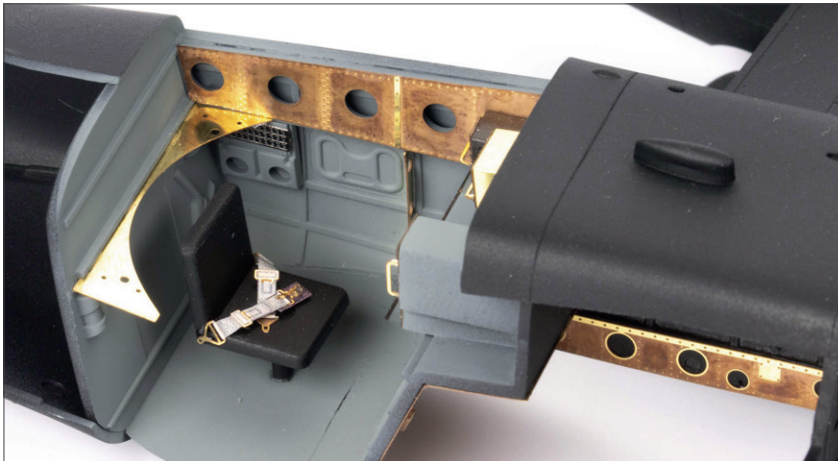
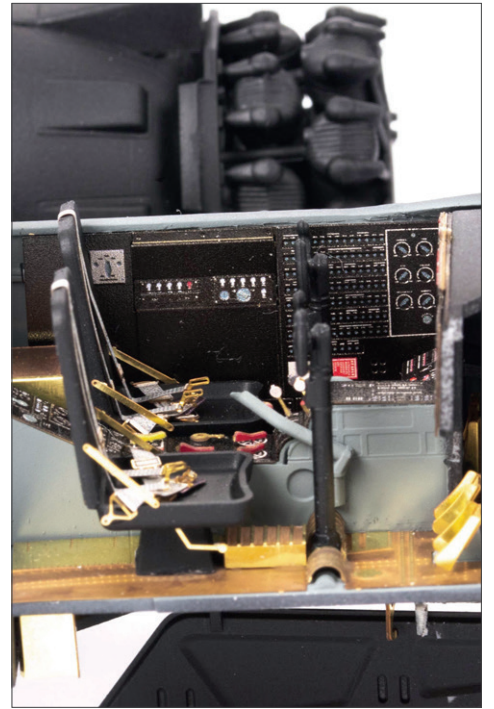


481080

481079



491262



FE1262



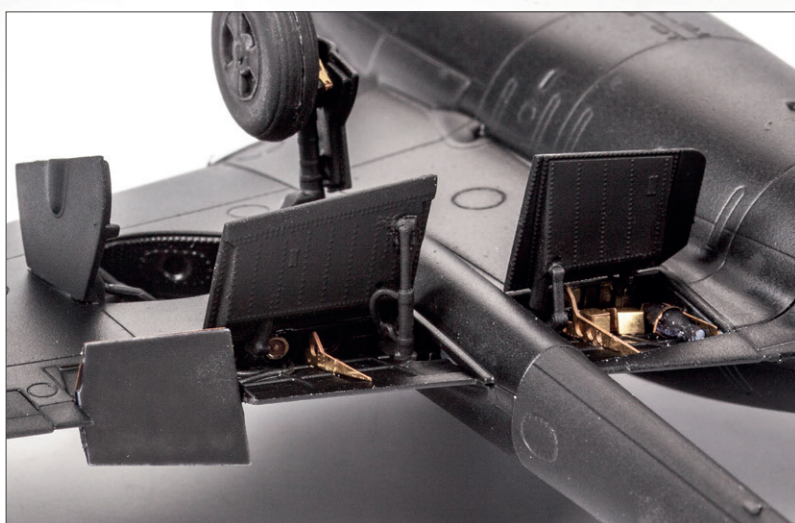
FE1263



Vampire F.3

1/48 Airfix

49258 Vampire F.3
FE1258 Vampire F.3 (Zoom)
FE1259 Vampire F.3 seatbelts STEEL



FE1258



491258

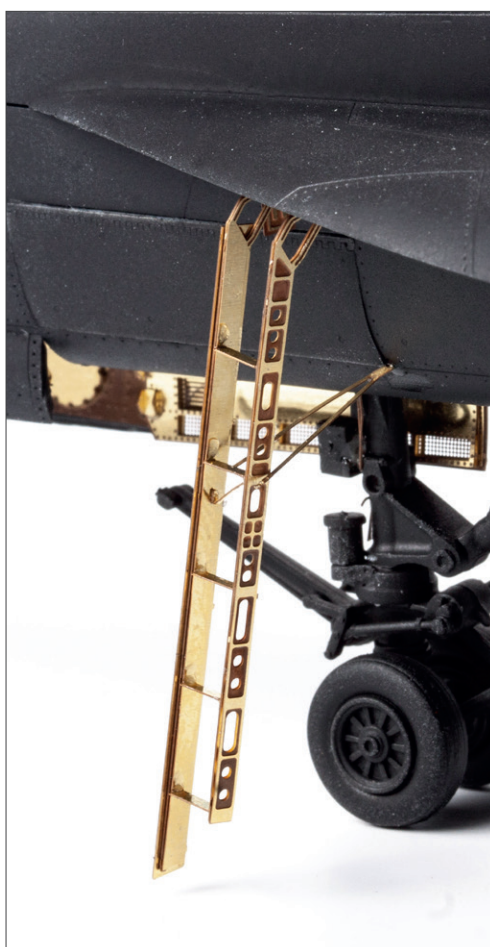


491258

F/A-18F

1/48 Hobby Boss

491260



FE1261
F/A-18F seatbelts
STEEL



FE1260
F/A-18F



Zoom



Fw 190D-9

1/72 IBG

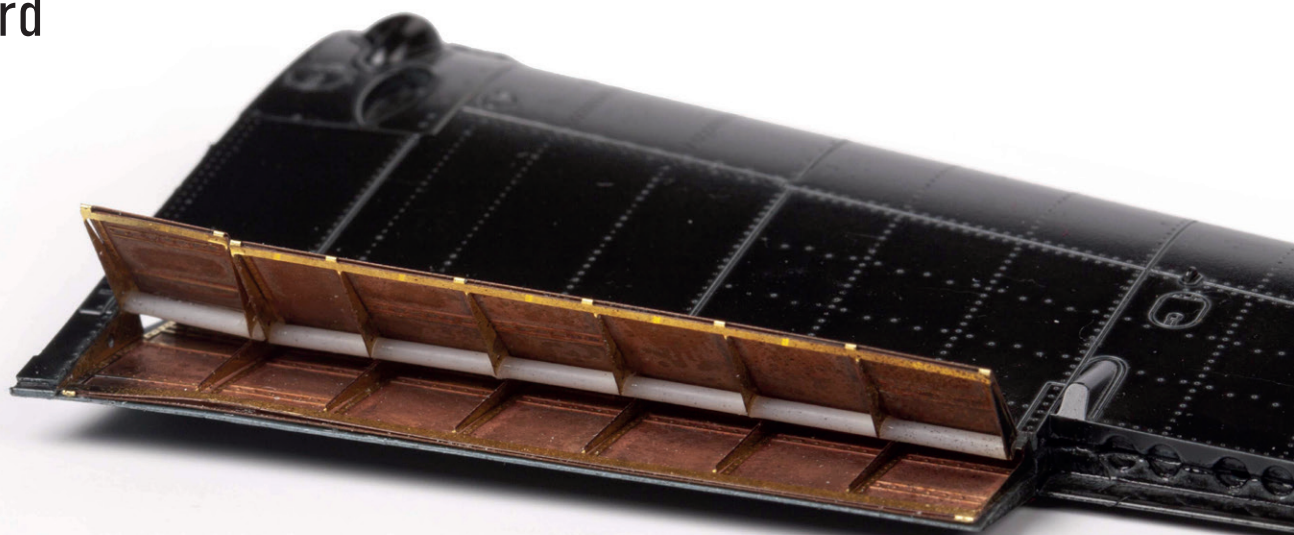
73767



Z-126/226 Trenér landing flaps

1/48 Eduard

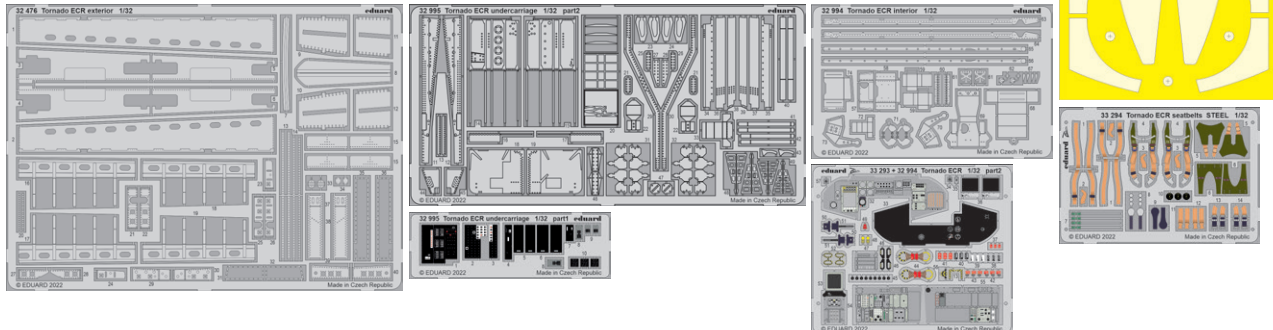
481084



BIG33142 Tornado ECR 1/32 Italeri

- 32476 Tornado ECR exterior 1/32
- 32994 Tornado ECR interior 1/32
- 32995 Tornado ECR undercarriage 1/32
- 33294 Tornado ECR seatbelts STEEL 1/32
- JX285 Tornado ECR 1/32

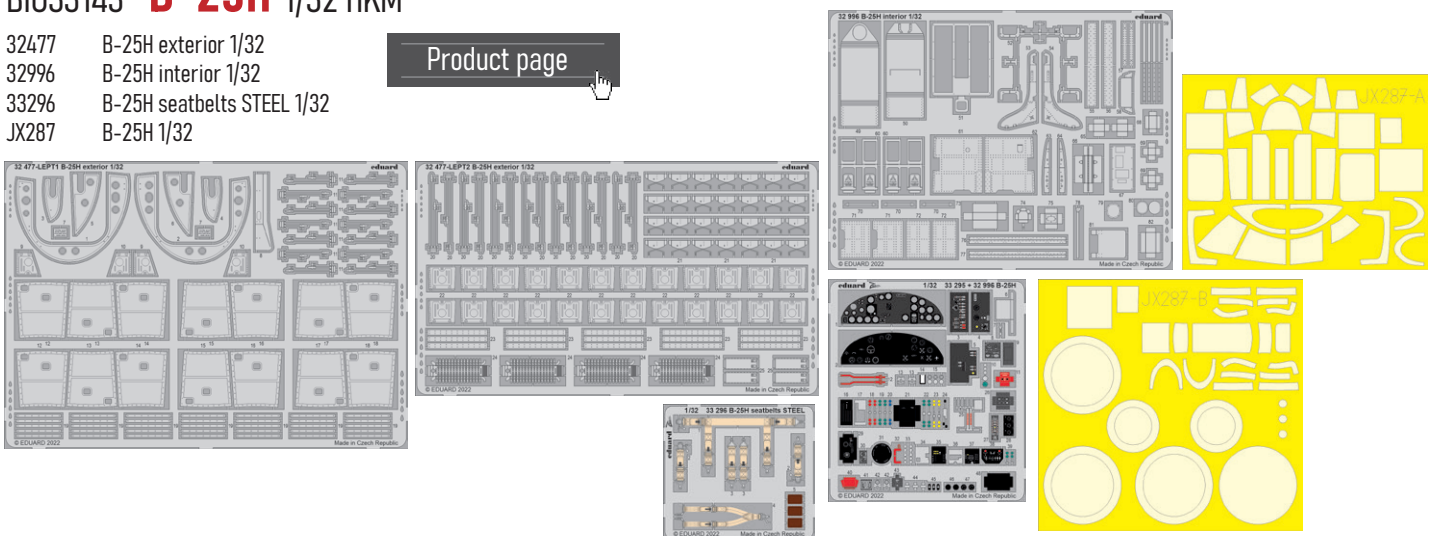
[Product page](#)



BIG33143 B-25H 1/32 HKM

- 32477 B-25H exterior 1/32
- 32996 B-25H interior 1/32
- 33296 B-25H seatbelts STEEL 1/32
- JX287 B-25H 1/32

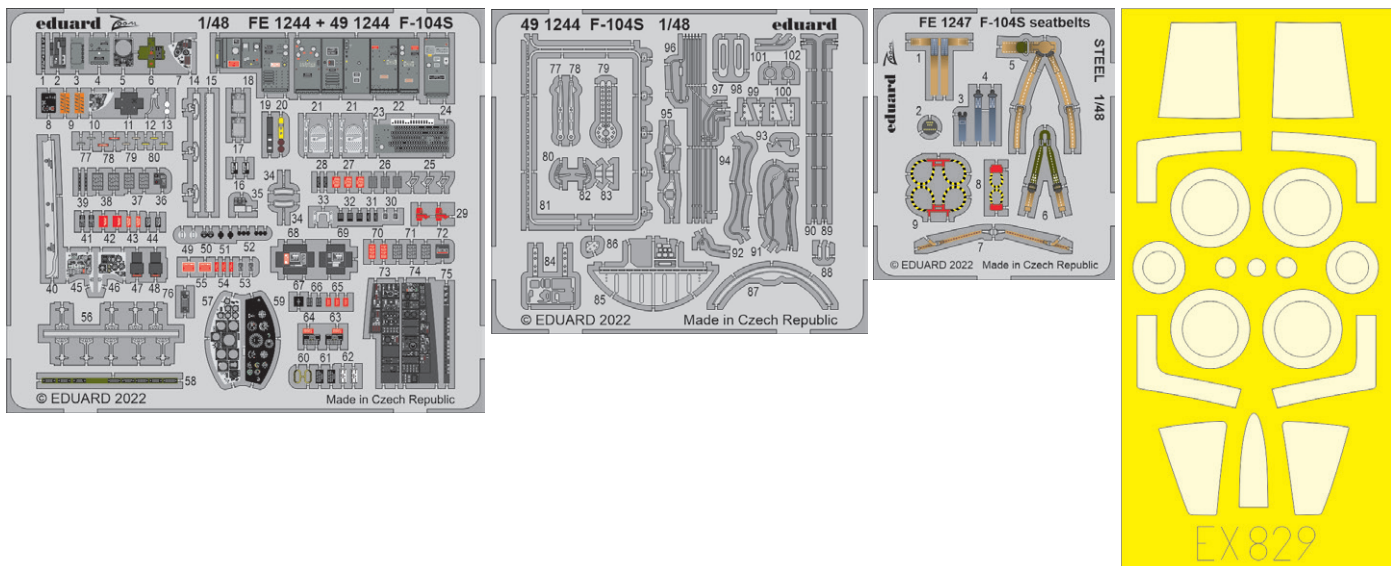
[Product page](#)



BIG49319 F-104S 1/48 Kinetic

- 491244 F-104S 1/48
- FE1247 F-104S seatbelts STEEL 1/48
- EX829 F-104S 1/48

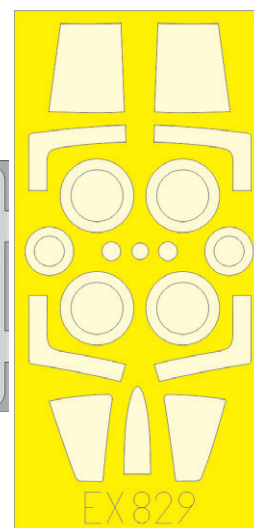
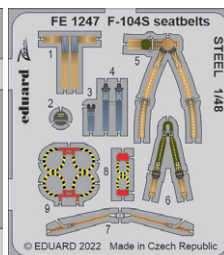
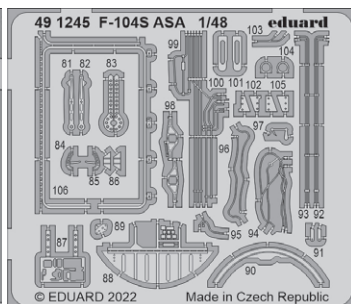
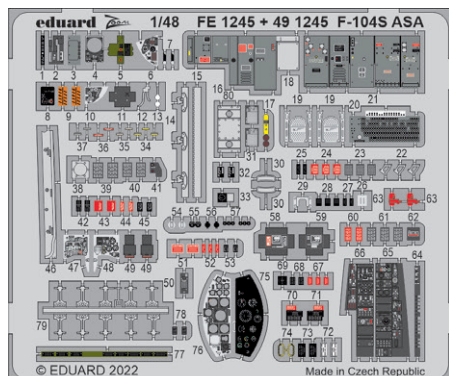
[Product page](#)



BIG49320 **F-104S ASA** 1/48 Kinetic

491245 F-104S ASA 1/48
FE1247 F-104S seatbelts STEEL 1/48
EX829 F-104S 1/48

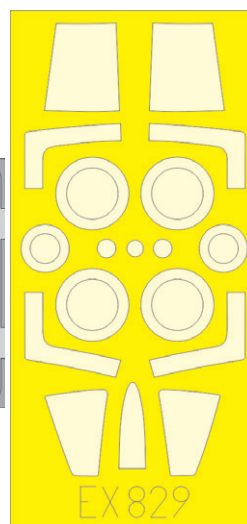
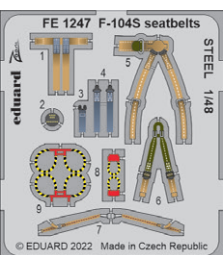
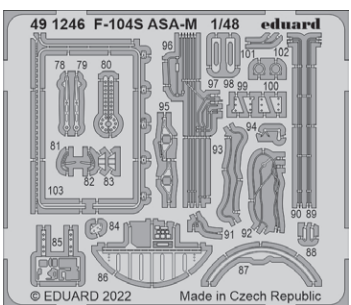
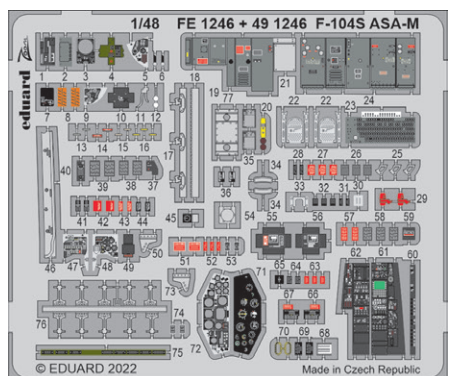
[Product page](#)



BIG49321 **F-104S ASA-M** 1/48 Kinetic

491246 F-104S ASA-M 1/48
FE1247 F-104S seatbelts STEEL 1/48
EX829 F-104S 1/48

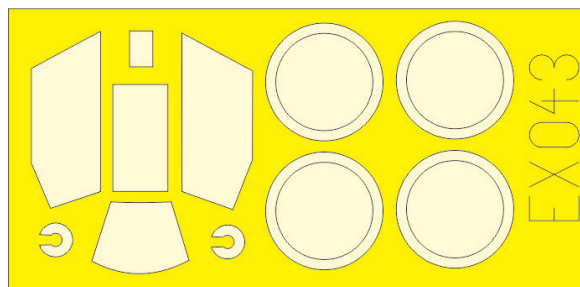
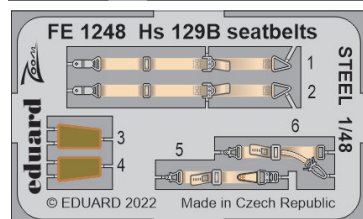
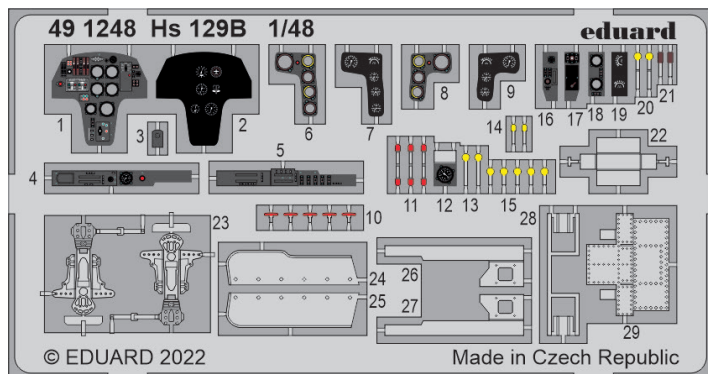
[Product page](#)



BIG49322 **Hs 129B** 1/48 Hasegawa/Hobby 2000

491248 Hs 129B 1/48
FE1248 Hs 129B seatbelts STEEL 1/48
EX043 Hs 129 1/48

[Product page](#)



JX289 Hawk 81-A2
1/32 ICM

JX290 Hawk 81-A2 TFace
1/32 ICM

EX844 B-26K Invader
1/48 ICM

EX845 B-26K Invader TFace
1/48 ICM

EX846 OV-10D+
1/48 Hobby Boss

EX847 OV-10D+ TFace
1/48 Hobby Boss

EX848 F/A-18F
1/48 Hobby Boss

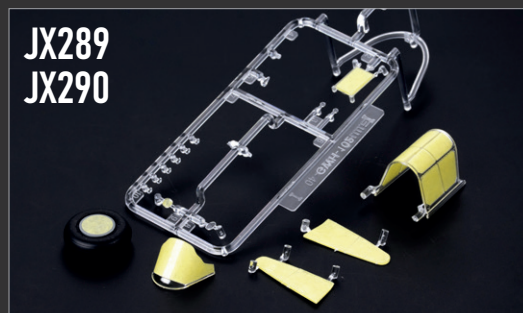
EX849 F/A-18F TFace
1/48 Clear Prop

CX623 U-2A
1/72 Fujimi/Hobby 2000

CX624 OV-1A / JOV-1A
1/72 Great Wall Hobby

CX625 TA-4J
1/72 Great Wall Hobby

JX289
JX290



JX289
JX290



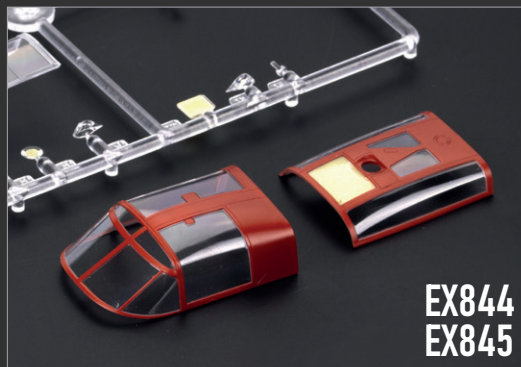
JX290



JX290



EX844
EX845



EX844
EX845

EX845



EX845



EX845



EX846
EX847



EX846
EX847



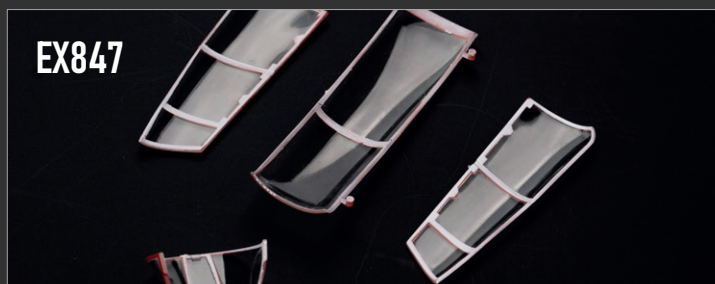
EX846
EX847

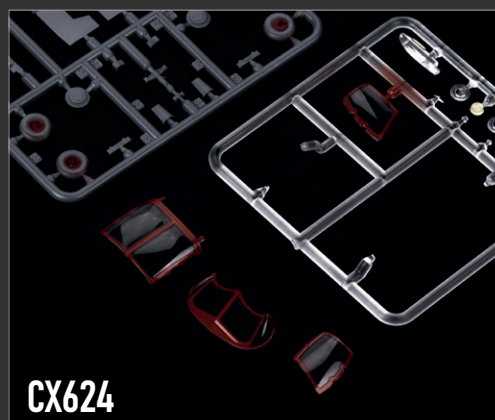


EX847



EX847





KITS

7461	MiG-15bis	1/72	Eduard Weekend
11158	ZERO ZERO ZERO! DUAL COMBO	1/48	Eduard Limited
82156	Spitfire Mk.Vb late	1/48	Eduard ProfiPack
84181	F6F-5	1/48	Eduard Weekend

PE-SETS

36478	M18 tank destroyer	1/35	Tamiya
73767	Fw 190D-9	1/72	IBG
73768	U-2A	1/72	Hobby Boss
481079	B-26K Invader bomb bay	1/48	ICM
481080	B-26K Invader exterior & undercarriage	1/48	ICM
481081	SR-71A undercarriage	1/48	Revell
481082	SR-71A engines	1/48	Revell
481083	SR-71A grilles	1/48	Revell
481084	Z-126/226 Trenér landing flaps	1/48	Eduard
491258	Vampire F.3	1/48	Airfix
491260	F/A-18F	1/48	Hobby Boss
491262	B-26K Invader	1/48	ICM
491264	OV-10D+	1/48	ICM
11158-LEPT	ZERO ZERO ZERO! PE-set	1/48	Eduard
82156-LEPT	Spitfire Mk.Vb late PE-set	1/48	Eduard

ZOOMS

FE1256	Z-526 seatbelts STEEL	1/48	Eduard
FE1258	Vampire F.3	1/48	Airfix
FE1259	Vampire F.3 seatbelts STEEL	1/48	Airfix
FE1260	F/A-18F	1/48	Hobby Boss
FE1261	F/A-18F seatbelts STEEL	1/48	Hobby Boss
FE1262	B-26K Invader	1/48	ICM
FE1263	B-26K Invader seatbelts STEEL	1/48	ICM
FE1264	OV-10D+	1/48	ICM
FE1265	OV-10D+ seatbelts STEEL	1/48	ICM
SS767	Fw 190D-9	1/72	IBG

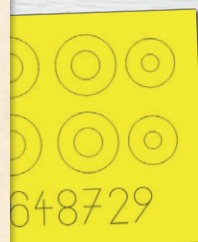
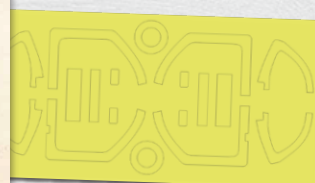
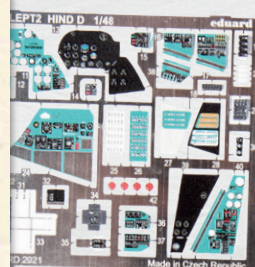
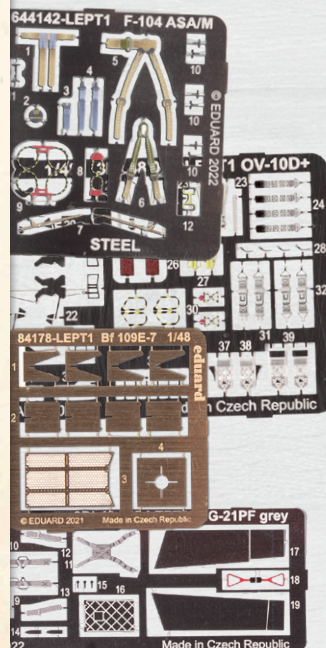
MASKS

CX623	U-2A	1/72	HOBBY BOSS
CX624	OV-1A / JOV-1A	1/72	CLEAR PROP
CX625	TA-4J	1/72	FUJIMI / HOBBY 2000
EX844	B-26K Invader	1/48	ICM
EX845	B-26K Invader TFace	1/48	ICM
EX846	OV-10D+	1/48	ICM
EX847	OV-10D+ TFace	1/48	ICM
EX848	F/A-18F	1/48	HOBBY BOSS
EX849	F/A-18F TFace	1/48	HOBBY BOSS
JX289	Hawk 81-A2	1/32	GREAT WALL HOBBY
JX290	Hawk 81-A2 TFace	1/32	GREAT WALL HOBBY

LIMITED

ProfiPACK
edition

WEEKEND
edition



BIG-ED SETS

BIG33142	Tornado ECR	1/32 ITALERI
BIG33143	B-25H	1/32 HKM
BIG49319	F-104S	1/48 KINETIC
BIG49320	F-104S ASA	1/48 KINETIC
BIG49321	F-104S ASA-M	1/48 KINETIC
BIG49322	Hs 129B	1/48 HASEGAWA/HOBBY 2000

BRASSIN

644151	F-14A late LööK	1/48 TAMIYA
644152	Vampire F.3 LööK	1/48 AIRFIX
644153	OV-10A LööK	1/48 ICM
648681	Z-126 Trener Walter Minor 4 engine PRINT	1/48 EDUARD
648736	Fw 190A landing flaps PRINT	1/48 EDUARD
648738	Spitfire Mk.V landing flaps PRINT	1/48 EDUARD
648739	F-14A late cockpit	1/48 TAMIYA
672279	P-51B/C exhausts stacks PRINT	1/72 ARMA HOBBY
672280	P-51B/C exhausts stacks w/fairing PRINT	1/72 ARMA HOBBY
672281	P-51B/C bazooka rocket launcher	1/72 ARMA HOBBY
672282	P-51B/C wheels diamond tread	1/72 ARMA HOBBY
672283	Tornado wheels	1/72 REVELL
D48102	F-6 Mustang national insignia	1/48 EDUARD

LööKPLUS

644146	CH-47A LööKplus	1/48 HOBBY BOSS
644147	F-104S LööKplus	1/48 KINETIC
644148	F-104 ASA LööKplus	1/48 KINETIC
644149	F-104 ASA/M LööKplus	1/48 KINETIC

BIGSIN

SIN67219	Tornado GR.1/GR.4 armament	1/72 REVELL
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DECAL SET

D48102	F-6 Mustang national insignia	1/48 EDUARD
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SPACE

3DL48061	Vampire F.3 SPACE	1/48 AIRFIX
3DL48062	OV-10D+ SPACE	1/48 ICM
3DL53006	International Marine Signal Flags SPACE 1/350	SPACE350

BIG-ED

eduard
BRASSINeduard
BRASSIN
Print

LööK

LööK+

BIG
SINeduard
SPACE

BUILT

LIMITED

1/48

Spitfire Story: Southern Star



Cat. No. 11157

marking F

Built by **Luboš Zach**

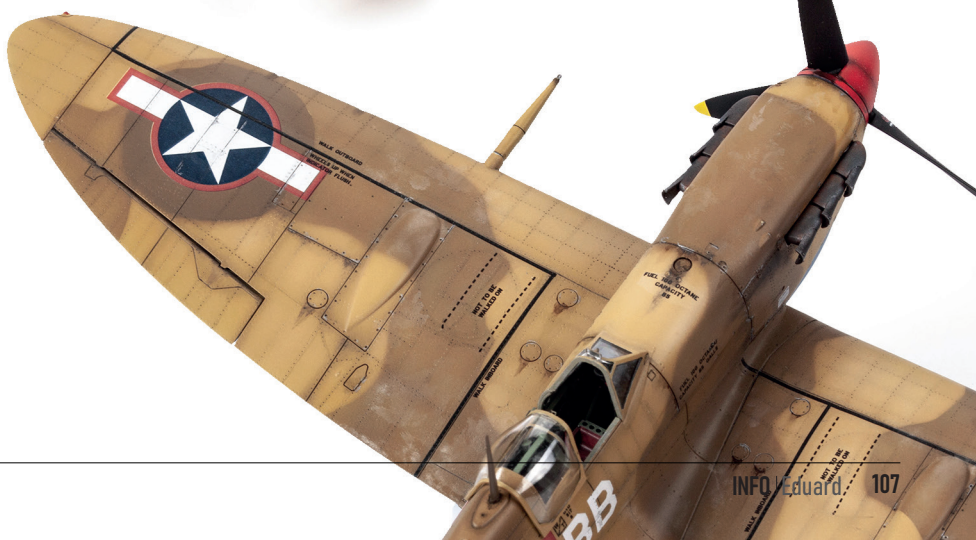


Spitfire Mk.Vc trop, EP813, Lt. Haskins/Lt. Curtis, 2nd FS, 52nd FG, Palermo, Sicily, 1943

In June 1943, when the 2nd Fighter Squadron was based at La Sebala airfield in Tunisia, its members named it the American Beagle Squadron as a joking counterpart to the more famous Eagle Squadrons. The American Beagle Squadron emblem

was painted on several 2nd FS Spitfires and was carried on the nose of the machine flown by Lieutenants Haskins and Curtis. It should be said, however, that the entire 52nd FG was not lagging behind its more famous colleagues from the 8th

Air Force, and its performance on both Spitfires and Mustangs (after being transferred to the 15th Air Force) made a significant mark in the history of American aviation.

[Product page](#)


BODENPLATTE



Cat. No. 11125
marking F
Built by Jan Baranec

1/48

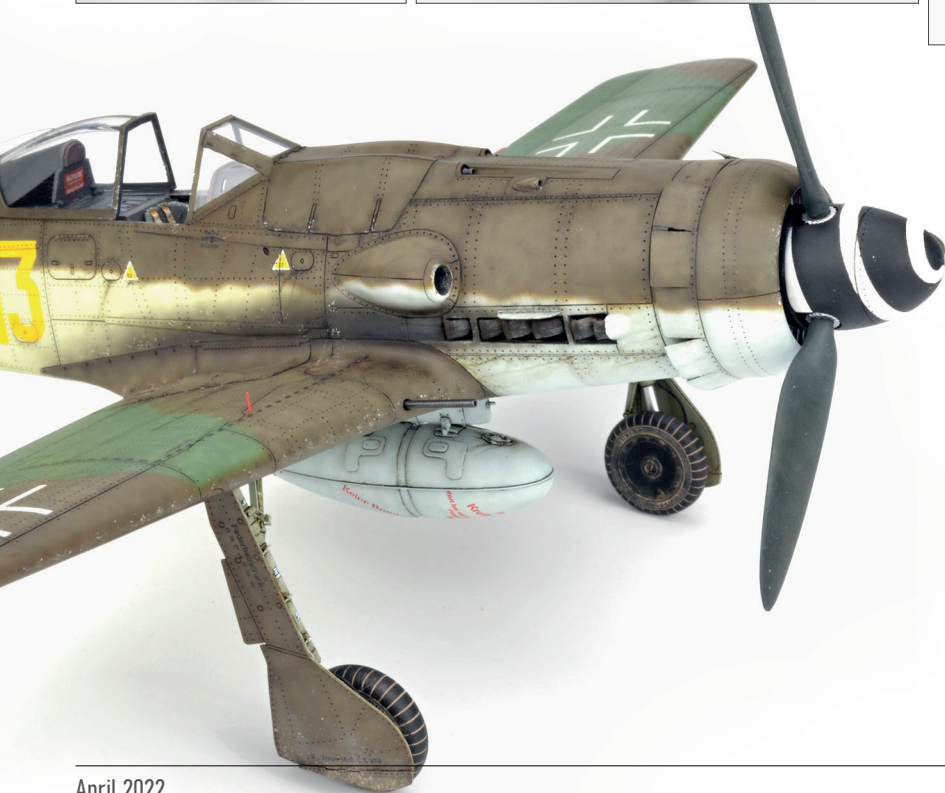


Fw 190D-9, W. Nr. 500093, flown by Ogefr. Dieter Kragelöh, 3./JG 26, Fürstenau, Germany, January 1st, 1945

The target of the I. Gruppe JG 26 was Grimbergen airport. During the flight to the target, over the Scheldt estuary, the aircraft of the 3. Staffel commander Oblt. Alfred Heckmann was hit by the ship-born anti-aircraft guns as well as his wingman's aircraft, at that time 21-years old Ogefr. Dieter Kragelöh. Heckmann managed to return to the base, Kragelöh was not that lucky. The engine

damage forced him to perform emergency landing nearby Heidekapel and he was captured. The aircraft, manufactured in Mimetall factory in Erfurt, was camouflaged RLM 82/83 on the wing and fuselage upper surfaces, RLM 83 wrapped around the wing's leading edge reaching the middle of the lower wing chord. The rest of the lower wing surface was left unpainted in the natural

metal finish. The ailerons and landing flaps were spray-painted in RLM 76 as well as the engine cowl lower part and the rudder. The fuselage sides and bottom, including the vertical tail surface, were sprayed in green-blue color.



P-51D-5

1/48



Cat. No. 82101

marking A from Cat. No. D48077

Built by Robert Szwarc



44-13586, Capt. Richard Peterson, 364th FS, 357th FG, 8th AF, Leiston, Great Britain, autumn 1944

ACCESSORIES USED:

- 648517 P-51D gun bays (Brassin)
- 648522 P-51D cockpit (Brassin)
- 648555 P-51D engine (Brassin)
- 648572 P-51D 108gal drop tanks (Brassin)
- D48077 P-51D-5 "357th FG" (Decal Set)



A6M2 Zero Type 21

1/48



Cat. No. 82212

marking D

Built by Matthias Becker



Lt. Kunio Kanzaki, CO of Hikōtai 311 of Kōkūtai 381, Kendari airfield, Celebes island, May 1944

Kōkūtai 381 was established in October 1943 at Kendari Base on the island of Celebes. It was a mixed Kōkūtai with 48 fighter-bombers (Hikōtai 602), 24 night fighters (Hikōtai 902) and 48 fighter aircraft in Hikōtai 311, the latter commanded by Lt. Kanzaki. During the 1944 he operated from bases on islands in Indonesia and the Philippines. Their most frequent opponents were U.S. Army aircraft. Kanzaki's unit used special phosphorus anti-aircraft bombs to attack enemy bombers. Kanzaki's

aircraft, manufactured by the Nakajima company, has been reconstructed in the past with various color markings. It is assumed that the vertical tail surfaces and part of the upper wing surfaces were painted the same color like lower surfaces. The front part of the engine may also have been painted grey or yellow. It is not entirely clear from the photograph of the aircraft whether the white stripes on the lower fuselage are joined. It may have been designed to improve the mutual identification of

Army and Navy aircraft when fighting Allied fighters. Another reason for this camouflage may have been for easier identification during night fighter flights. For example, Lt. Kanzaki and his wingman shot down a B-24 of the 380th BG over Balikpapan on the night of January 12-13, 1944. Some aircraft of Kōkūtai 331 were also painted in the same upper and tailplane camouflage. Both units operated in one tactical group during part of 1944.

[Product page](#)


F6F-5

1/48



Cat. No. 84181

built by Jan Novotný



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

Before the planned landing of the American units on Okinawa (Operation Iceberg, April 1, 1945) on March 19, 1945 the USN airplanes attacked the enemy air bases located on the islands of Kyūshū, Shikoku and southern Honshū and the naval bases Kure and Kobe. The mission was to destroy the Japanese ships and aircraft and prevent them from any action against the invasion forces. One of the units that were to participate in this

strike was VBF-17 based on the aircraft carrier USS Hornet (CV-12). In the formation of twenty Hellcats, with which VBF-17 was equipped, flew Lt. Prinz and Lt. Karr. Kōkūtai 343 equipped with N1K2-J fighters was launched against the approaching enemy. The dogfight took place over the ocean. During the surprise attack on two American pilots Lt. Karr was shot down while Lt. Prinz's Hellcat was damaged and the unit's comman-

der was destroyed after the collision with one of the attackers, Kiku-ichi Ishikawa. Prinz managed to nurse the damaged aircraft back to Hornet where he landed. Hellcats participating in these missions were marked by white-painted noses for the better recognition of the friendly aircraft.



ACCESSORIES USED:

- 644012 F6F-5 LööK
- 49489 F6F-5
- 648683 F6F exhaust stacks
- 648102 F6F wheels
- 648075 Browning M-2 guns
- 48588 F6F gun boys



[Product page](#)

Z-526AFS Akrobat

1/48



Cat. No. 82184

marking A

Built by Robert Szwarc



Z-526AFS, SP-CSU, s/n 1226, Piotr Haberland, Żelazny Aerobatic Group, Zielona Góra airfield, Poland, mid 2007

In December 1999, an aerobatic group was formed by members of Aero Club Zielona Góra, supported by then-emerging network of hardware stores Żelazny (Iron). In the beginning, the group had a pair of Z-526AFSs and one Z-50LA. In 2001, another plane, Z-526F was added. The pilots of the group amazed the public with their skillful flying at airshows not only in Poland but also in Germany and other countries. In 2004, Lech Marchelewski beca-

me leader of the group and three years later the Żelazny began rehearsing a six-planes formation with the debut planned for airshow in Radom. However, on September 1, tragedy struck during the premiere show. Conducting a maneuver called "the rose" aircraft No. 1 (Z-526F, SP-CDF) and No. 2 (Z-526AFS, SP-ELE) collided. Both pilots, retired Colonel Lech Marchelewski and Piotr Bachanowicz, were killed. The second Z-526AFS (SP-CSU) just

narrowly missed the crash point... Today the group flies Z-50s, Z-526Fs and EA300 LC/LX and usually flies as formation of four. The decals supplied allow the SP-ELE to be built as an alternative to the SP-CSU. Where the question mark appears, it indicates option and the second number always belongs to the decal corresponding to the SP-ELE marking.

ACCESSORIES USED:

644143 Z-526AFS LööK (Brassin)

648733 Z-526AFS cockpit PRINT (Brassin)



Product page



CAMEL & Co.

1/48

Cat. No. 11151

marking D

Built by Frank Barkhofen

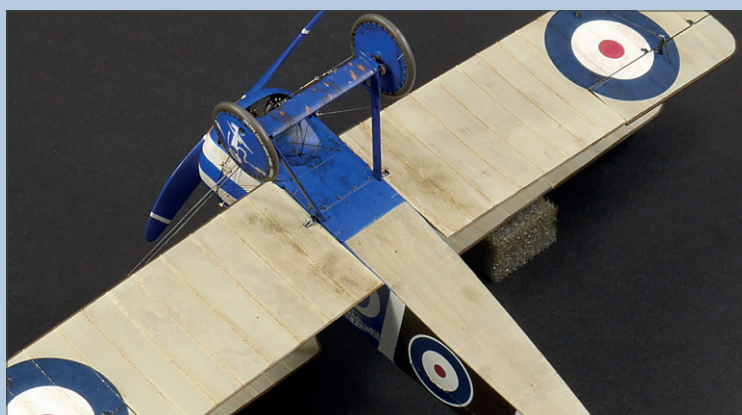
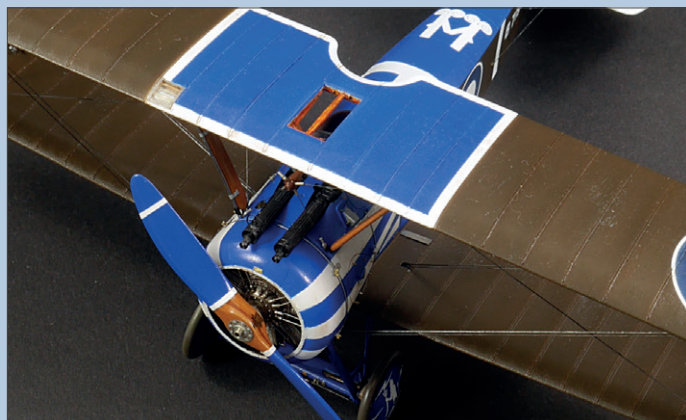


B7190, Capt. Walter G. R. Hinchliffe, C Flight, No. 10(N) Sqn RNAS, Tétégghem, France, March 1918

"Hinch", as Walter Hinchliffe was called, scored six kills during World War I, all when at controls of a Camel. He shot down his second and third victims on the one of serial number B7190. Hinchliffe served with the artillery at the start of the Great War, only joining the ranks of the RNAS (Royal Navy Air Service) in 1916. He completed his pilot training and served as an instructor at the RNAS base at Cranwell afterwards. There he clocked an incredible 1,250 flight hours in thirteen months. It was not until January 1918 that he joined No. 10

Sqn RNAS. He scored his first kill on February 3 when he shot down an Albatros D.V., his last one occurred on May 19. On June 3 he suffered serious head and facial injuries after a crash and lost his left eye. After the War he flew as an airline pilot. In 1928 he attempted to fly across the Atlantic. He took off from Cranwell Airport on March 13 with co-pilot Elsie Mackay. They have not been seen since... "Hinch's" Camel bore a striking livery with blue and white stripes on the nose and a blue fuselage spine. There was a drawing of a devil on the

wheel discs, the German word **DONNERWETTER** behind the cockpit, possibly on both sides, and a symbol, which was, according to the only known photo of this part of the aircraft, probably stylized combination of the letters W and H on the ridge of the aft fuselage. Upper and sides were probably in PC10 color. Camel B7190 was built by the Clayton & Shuttleworth company and was powered by a Bentley B.R.1 engine.


[Product page](#)


BIG ED (May)

BIG49323 Mi-24D 1/48 Trumpeter
 BIG49324 F/A-18F 1/48 Meng
 BIG49325 Su-27 1/48 Great Wall Hobby
 BIG72170 Wellington Mk.II 1/72 Airfix

BRASSIN (May)

644154 SR-71A LööK 1/48 Revell
 648737 Fw 190D landing flaps PRINT 1/48 Eduard
 648740 SR-71A wheels 1/48 Revell
 648741 Vampire F.3 wheels 1/48 Airfix
 648743 F-15A/B wheels 1/48 Great Wall Hobby
 648746 Mosquito wheels 1/48 Tamiya
 648747 F6F undercarriage legs BRONZE 1/48 Eduard
 648748 Spitfire Mk.IX landing flaps PRINT 1/48 Eduard
 648751 M2 Browning w/ handles for aircraft PRINT 1/48
 672284 S-199 exhaust stacks PRINT 1/72 Eduard
 672285 S-199 wheels PRINT 1/72 Eduard
 672286 Fw 190D exhaust stacks PRINT 1/72 IBG
 672287 Fw 190D wheels 1/72 IBG
 653001 USN searchlights 36 inch PRINT 1/350
 653003 USN electric ship winches PRINT 1/350

LööKPlus (May)

644150 Z-526AFS LööKplus 1/48 Eduard
 644155 OV-10A LööKplus 1/48 ICM
 644156 F-14A late LööKplus 1/48 Tamiya

BIGSIN (May)

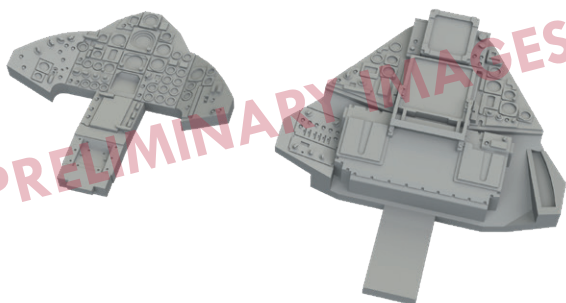
SIN64882 Mi-24D conversion set 1/48 Zvezda
 SIN64883 A6M2 Zero Model 21 ESSENTIAL 1/48 Eduard

644154**SR-71A LööK****1/48 Revell**

LööK set - Brassin pre-painted dashboards and STEEL seatbelts for SR-71A in 1/48 scale. Easy to assemble, replaces plastic parts. Recommended kit: Revell

Set contains:

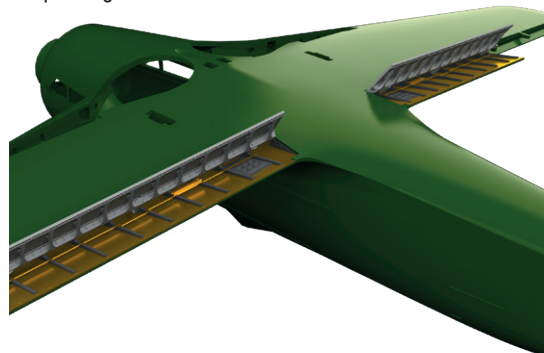
- resin: 2 parts
- decals: no
- photo-etched details: yes, pre-painted
- painting mask: no

**648737****Fw 190D landing flaps PRINT****1/48 Eduard**

Brassin set - the landing flaps for Fw 190D in 1/48 scale. Made by direct 3D printing. Recommended kit: Eduard

Set contains:

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

**648740****SR-71A wheels****1/48 Revell**

Brassin set - the undercarriage wheels for SR-71A in 1/48 scale. The set consists of the main wheels and nose wheels. Easy to assemble, replaces plastic parts. Recommended kit: Revell

Set contains:

- resin: 8 parts,
- decals: no,
- photo-etched details: no
- painting mask: yes

**648741****Vampire F.3 wheels****1/48 Airfix**

Brassin set - the undercarriage wheels for Vampire F.3 in 1/48 scale. The set consists of the main wheels and a nose wheel. Easy to assemble, replaces plastic parts. Recommended kit: Airfix

Set contains:

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



648743

F-15A/B wheels

1/48 Great Wall Hobby

Brassin set - the undercarriage wheels for F-15A/B in 1/48 scale. The set consists of the main wheels and a nose wheel. Easy to assemble, replaces plastic parts. Recommended kit: GWH

Set contains:

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



648746

Mosquito wheels

1/48 Tamiya

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

Set contains:

- resin: 8 parts
- decals: no
- photo-etched details: no
- painting mask: yes



648747

F6F undercarriage legs BRONZE

1/48 Eduard

Brassin set - the undercarriage legs for F6F in 1/48 scale. The legs are made of bronze. Recommended kit: Eduard

Set contains:

- 3D print: 6 parts
- decals: no
- photo-etched details: no
- painting mask: no
- bronze: 2 parts



648748

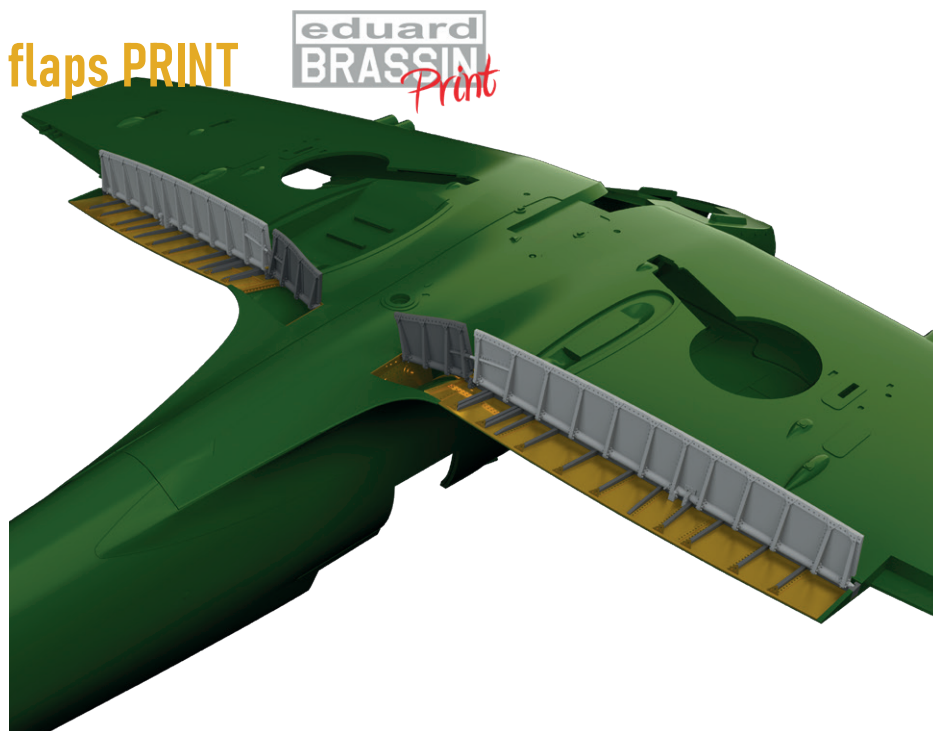
Spitfire Mk.IX landing flaps PRINT

1/48 Eduard

Brassin set - the landing flaps for Spitfire Mk.IX in 1/48 scale. Made by direct 3D printing. Recommended kit: Eduard

Set contains:

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



eduard
BRASSIN
Print

648751

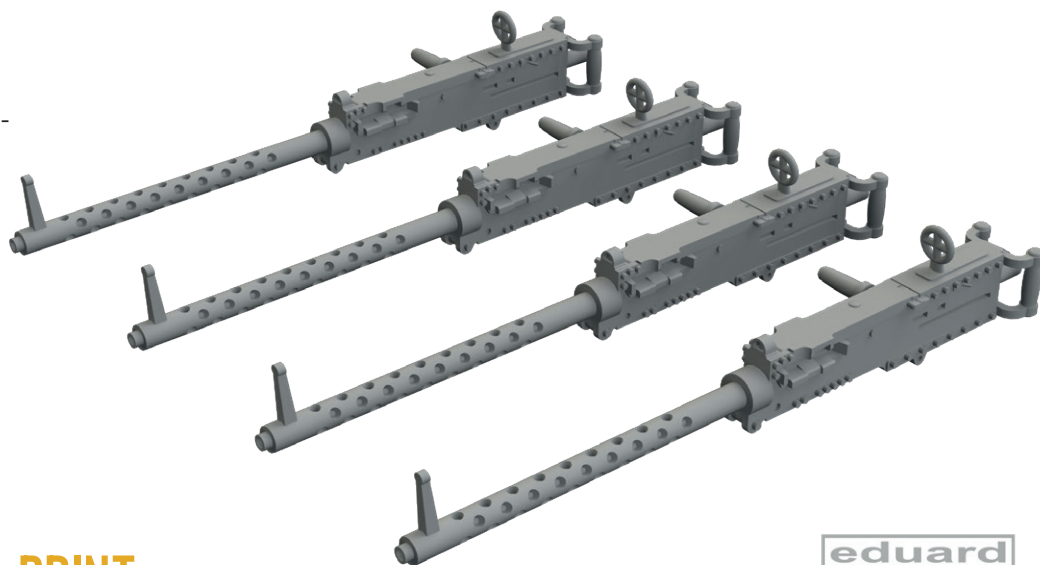
M2 Browning w/ handles for aircraft PRINT

1/48

Brassin set - manually operated M2 Browning machines guns in 1/48 scale. Set consists of 4 guns. The version for A/C. Made by direct 3D printing. Easy to assemble, replaces plastic parts.

Set contains:

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



eduard
BRASSIN
Print

672284

S-199 exhaust stacks PRINT

1/72 Eduard

Brassin set - exhaust stacks for S-199 in 1/72 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: no
- painting mask: no



eduard
BRASSIN
Print

672285

S-199 wheels PRINT**1/72 Eduard**

Brassin set - the undercarriage wheels for S-199 in 1/72 scale. The set consists of the main wheels. 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: no
- painting mask: yes


eduard
BRASSIN
Print

672286

Fw 190D exhaust stacks PRINT**1/72 IBG**

Brassin set - exhaust stacks for Fw 190D in 1/72 scale. Made by direct 3D printing. Easy to assemble, replaces plastic parts. Recommended kit: IBG

Set contains:

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



672287

Fw 190D wheels**1/72 IBG**

Brassin set - the undercarriage wheels for Fw 190D in 1/72 scale. The set consists of the main wheels. Easy to assemble, replaces plastic parts. Recommended kit: IBG

Set contains:

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



653001

USN searchlights 36 inch PRINT

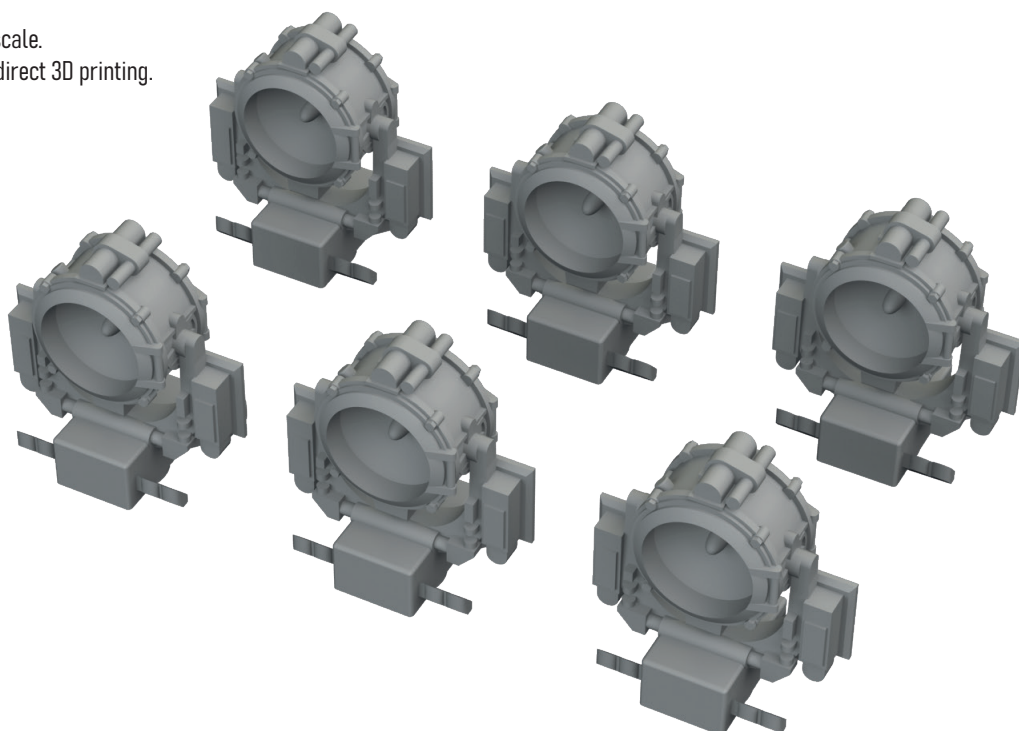
1/350

eduard
BRASSIN
Print

Brassin set - USN 36" searchlights in 1/350 scale.
The set consists of 6 searchlights. Made by direct 3D printing.
Easy to assemble, replaces plastic parts.

Set contains:

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



653003

USN electric ship winches PRINT

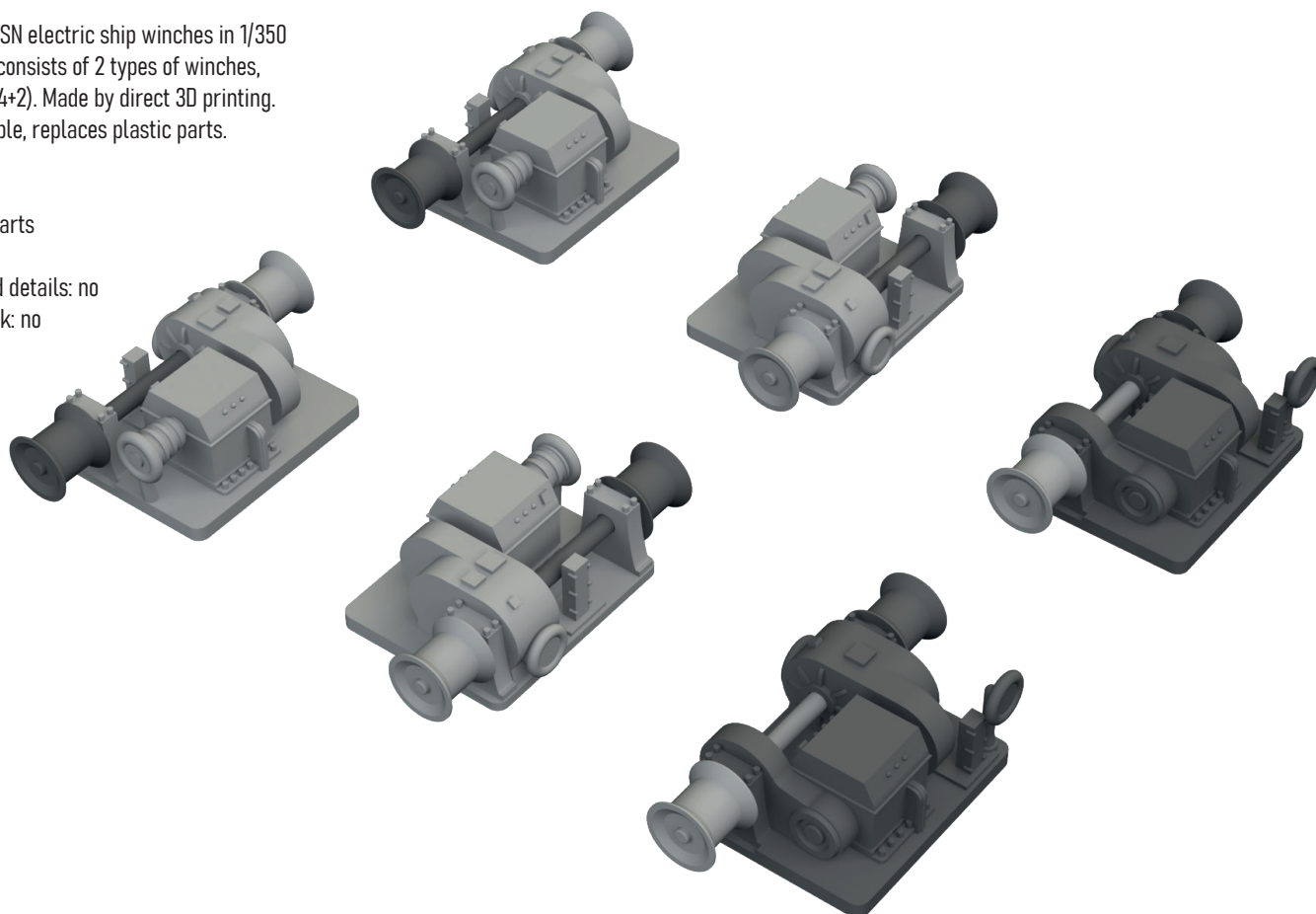
1/350

eduard
BRASSIN
Print

Brassin set - USN electric ship winches in 1/350 scale. The set consists of 2 types of winches, 6 pcs in total (4+2). Made by direct 3D printing.
Easy to assemble, replaces plastic parts.

Set contains:

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



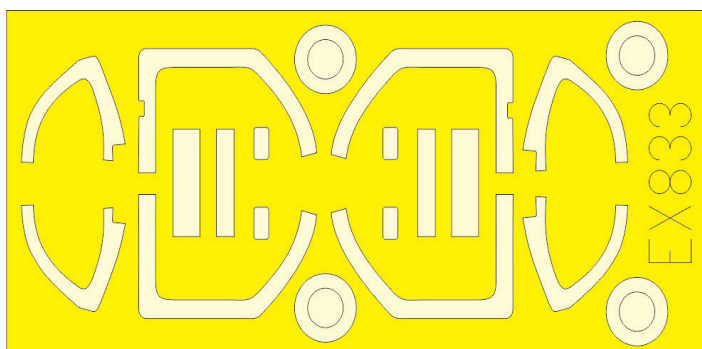
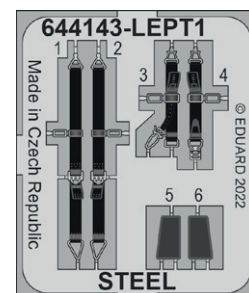
644150

Z-526AFS LööKplus**1/48 Eduard**

Collection of 3 sets for Z-526AFS in 1/48 scale.

Recommended kit: Eduard

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



644155

OV-10A LööKplus

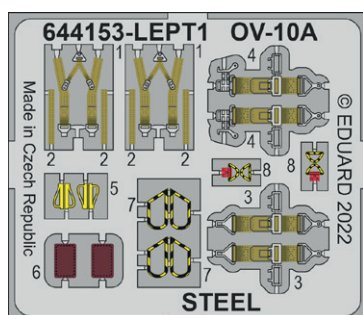
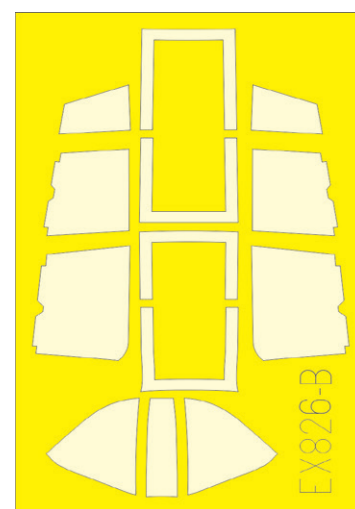
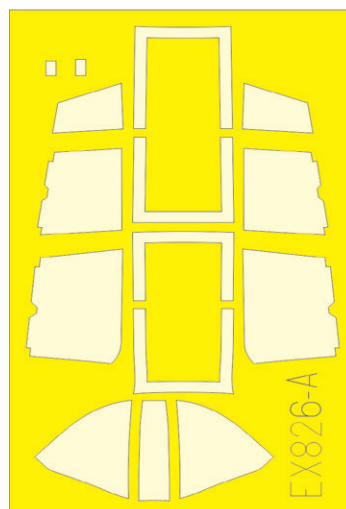
1/48 ICM

Löökt

Collection of 3 sets for OV-10A in 1/48 scale.

Recommended kit: ICM

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



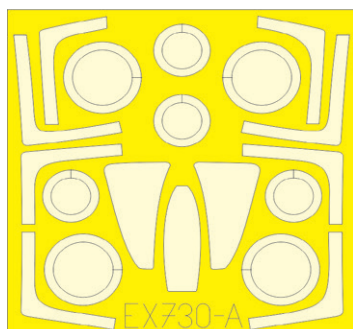
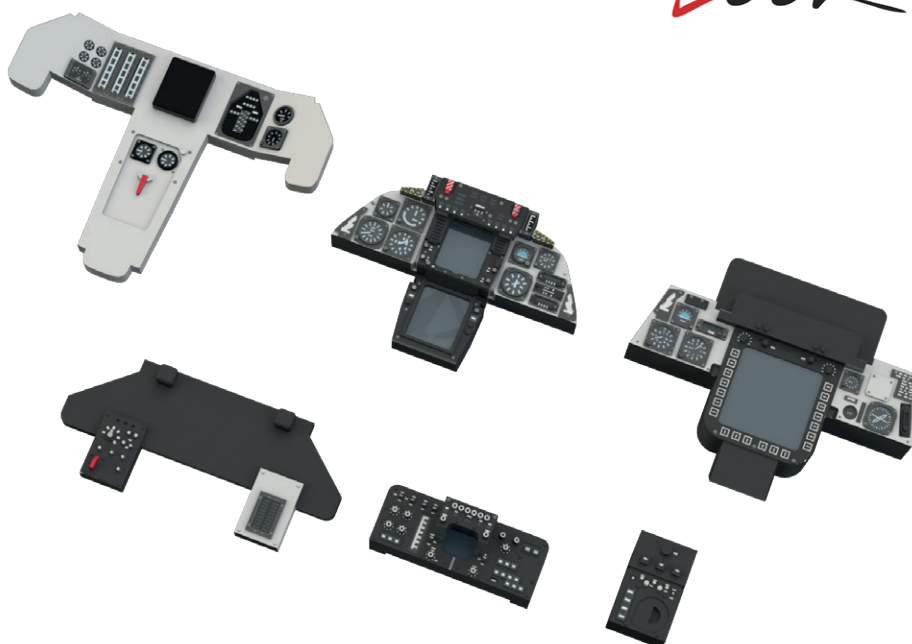
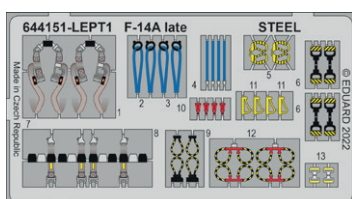
644156

F-14A late LöökPlus**1/48 Tamiya**

Collection of 4 sets for F-14A late in 1/48 scale.

Recommended kit: Tamiya

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



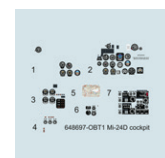
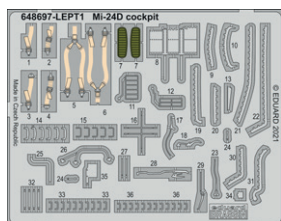
SIN64882

Mi-24D conversion set**1/48 Zvezda**

Collection of 4 sets to convert Mi-24V to Mi-24D in 1/48 scale.
Recommended kit: Zvezda

- cockpit
- undercarriage wheels
- dashboard, exhausts, chaff dispensers and chin sensors
- painting mask

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



SIN64883

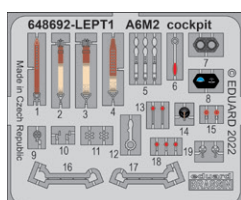
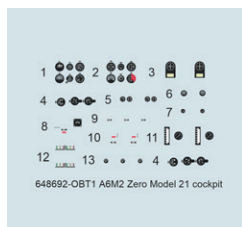
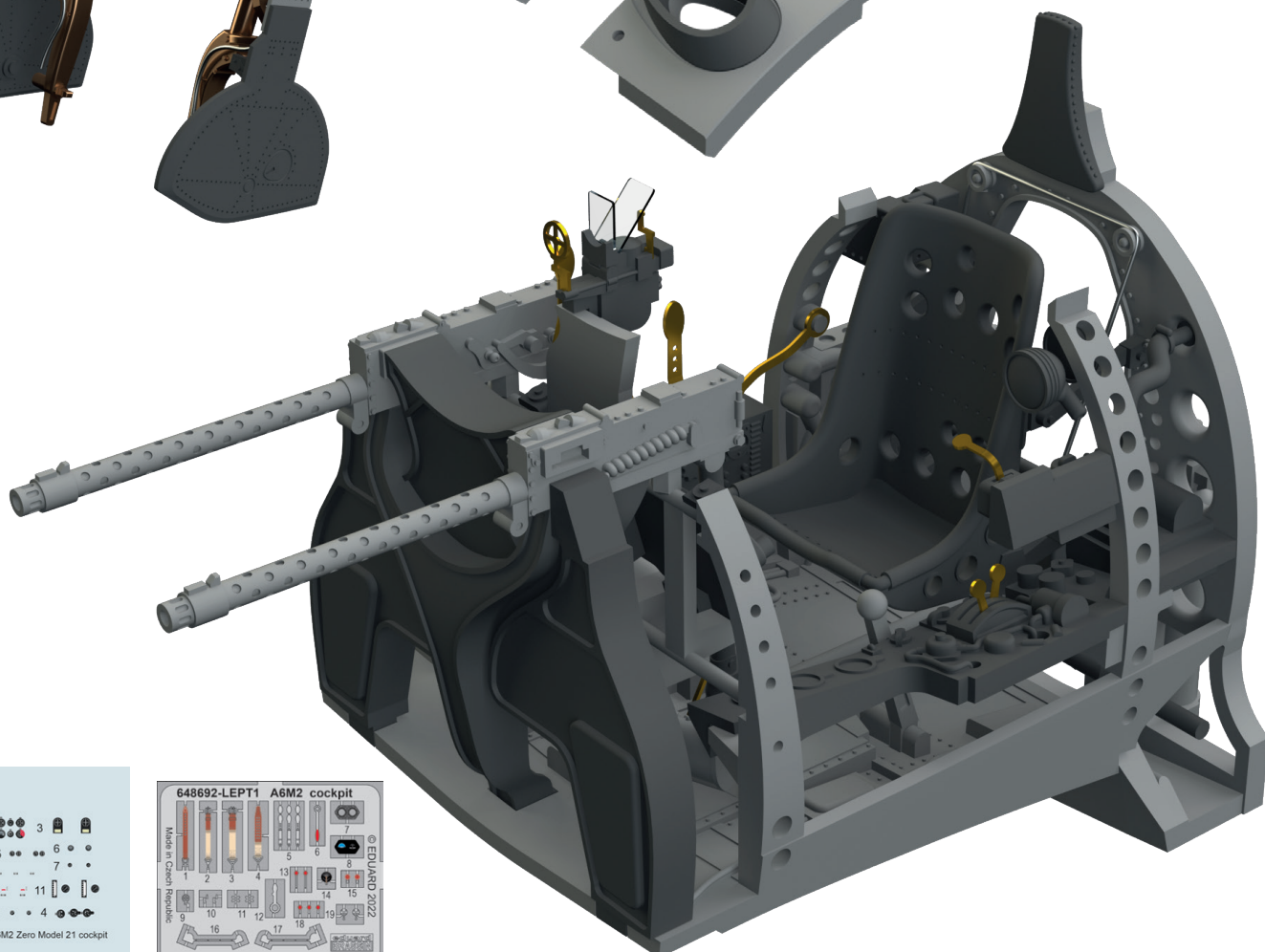
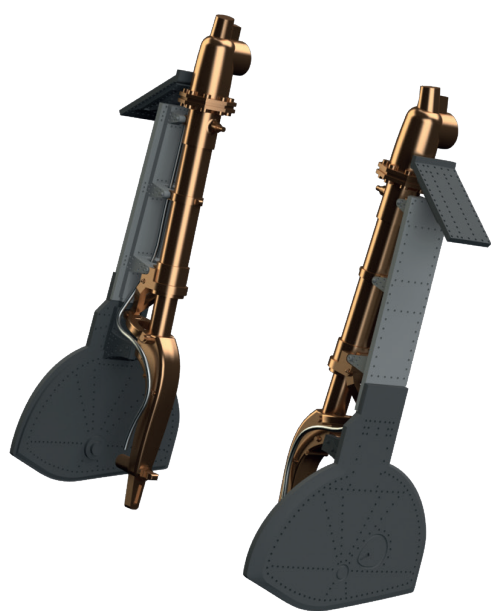
A6M2 Zero Model 21 ESSENTIAL**1/48 Eduard**

Collection of 4 sets for A6M2 Model 21 in 1/48 scale.

Recommended kit: Eduard

- cockpit
- undercarriage wheels
- undercarriage leg BRONZE
- exhausts

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



PE-SETS

53279	Tirpitz part 1	1/350	Trumpeter
53280	Tirpitz part 2	1/350	Trumpeter
32997	Hawk 81-A2	1/32	Great Wall Hobby
36479	Jackal 2	1/35	Hobby Boss
481085	IL-2 mod. 1943 landing flaps	1/48	Zvezda
491266	F-104A	1/48	Kinetic
491267	F-104C	1/48	Kinetic
491268	EA-18G	1/48	Hobby Boss
491271	IL-2 mod. 1943	1/48	Zvezda
491273	F-22A	1/48	I Love Kits
73769	J1N1-S Gekko	1/72	Fujimi/Hobby 2000
73770	TA-4J	1/72	Fujimi/Hobby 2000

ZOOMS

33297	Hawk 81-A2	1/32	Great Wall Hobby
33298	Hawk 81-A2 seatbelts STEEL	1/32	Great Wall Hobby
FE1266	F-104A	1/48	Kinetic
FE1267	F-104C	1/48	Kinetic
FE1268	EA-18G	1/48	Hobby Boss
FE1269	EA-18G seatbelts STEEL	1/48	Hobby Boss
FE1270	F-104A/C seatbelts STEEL	1/48	Kinetic
FE1271	IL-2 mod. 1943	1/48	Zvezda
FE1272	IL-2 mod. 1943 seatbelts STEEL	1/48	Zvezda
FE1273	F-22A	1/48	I Love Kits
FE1274	F-22A seatbelts STEEL	1/48	I Love Kits
SS769	J1N1-S Gekko	1/72	Fujimi/Hobby 2000
SS770	TA-4J	1/72	Fujimi/Hobby 2000

MASKS

EX850	F-104A/C	1/48	Kinetic
EX851	F-104A/C TFace	1/48	Kinetic
EX852	F-22A	1/48	I Love Kits
EX853	F-22A TFace	1/48	I Love Kits
EX854	EA-18G	1/48	Hobby Boss
EX855	EA-18G TFace	1/48	Hobby Boss
EX856	IL-2 mod. 1943	1/48	Zvezda
EX857	IL-2 mod. 1943 TFace	1/48	Zvezda

SPACE

3DL32006	Hawk 81-A2 SPACE	1/32	Great Wall Hobby
3DL48063	F-104A SPACE	1/48	Kinetic
3DL48064	F-104C SPACE	1/48	Kinetic
3DL53007	Tirpitz flags SPACE	1/350	Trumpeter

DECAL SET

D72038	S-199 Czechoslovak national insignia	1/72	Eduard
D72039	S-199 Israeli national insignia	1/72	Eduard
D72040	S-199 Czechoslovak stencils	1/72	Eduard
D72041	S-199 Israeli stencils	1/72	Eduard

Eddie the Riveter

ER48001	Mi-24V positive rivets & surface details	1/48	vezda
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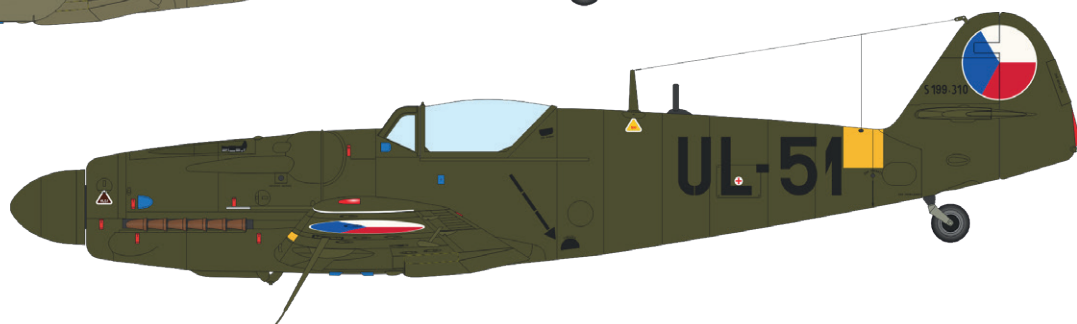
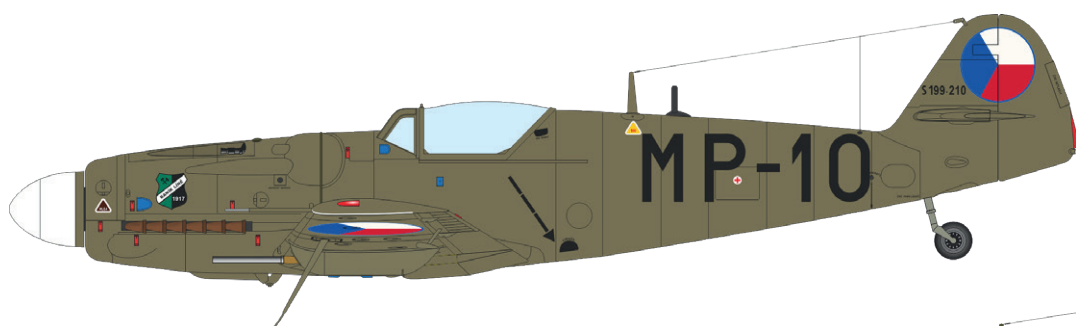
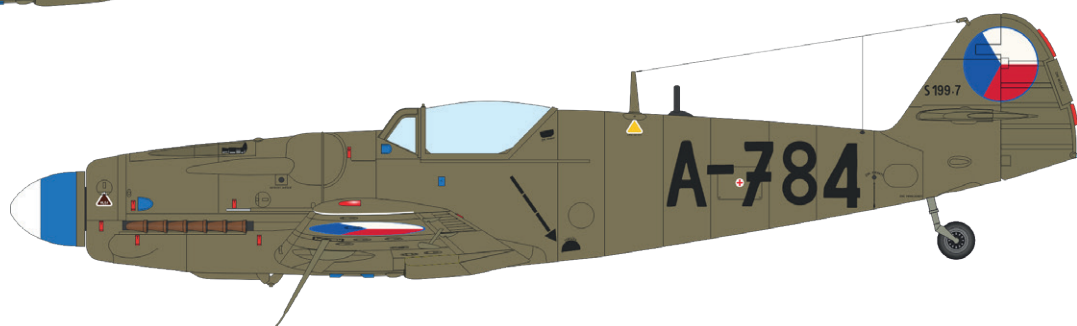
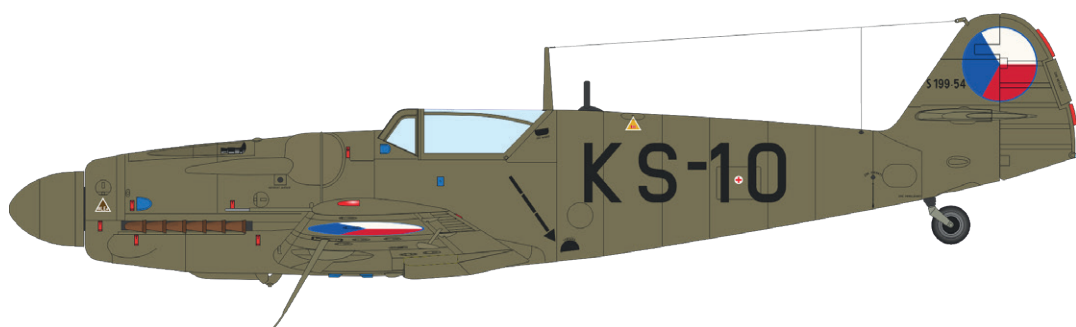
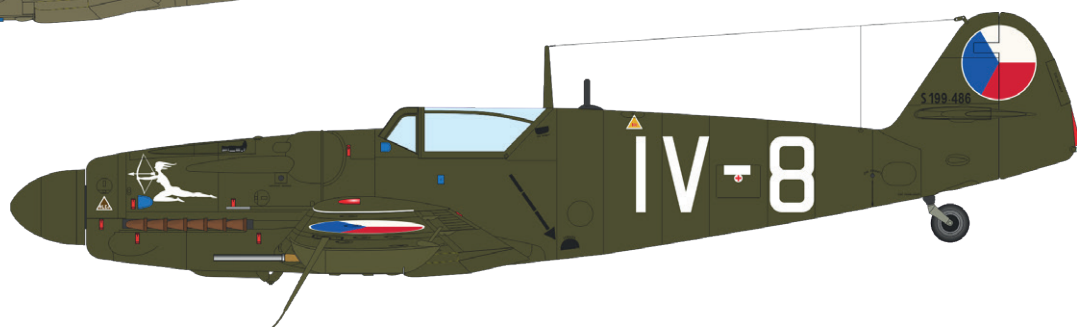
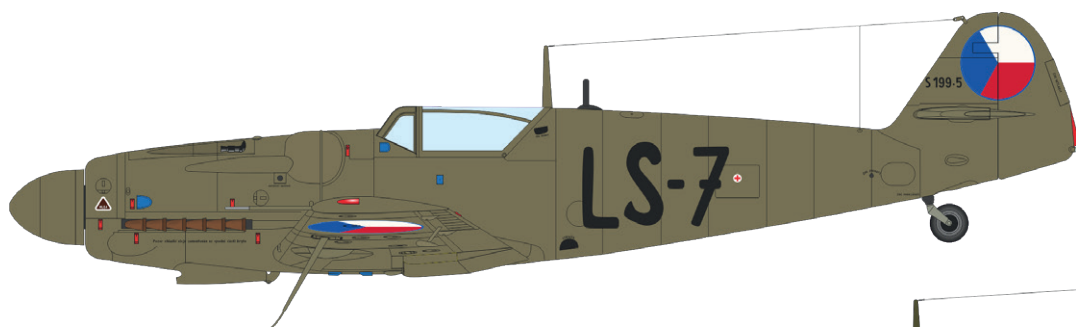
Z-126 Trenér #82181

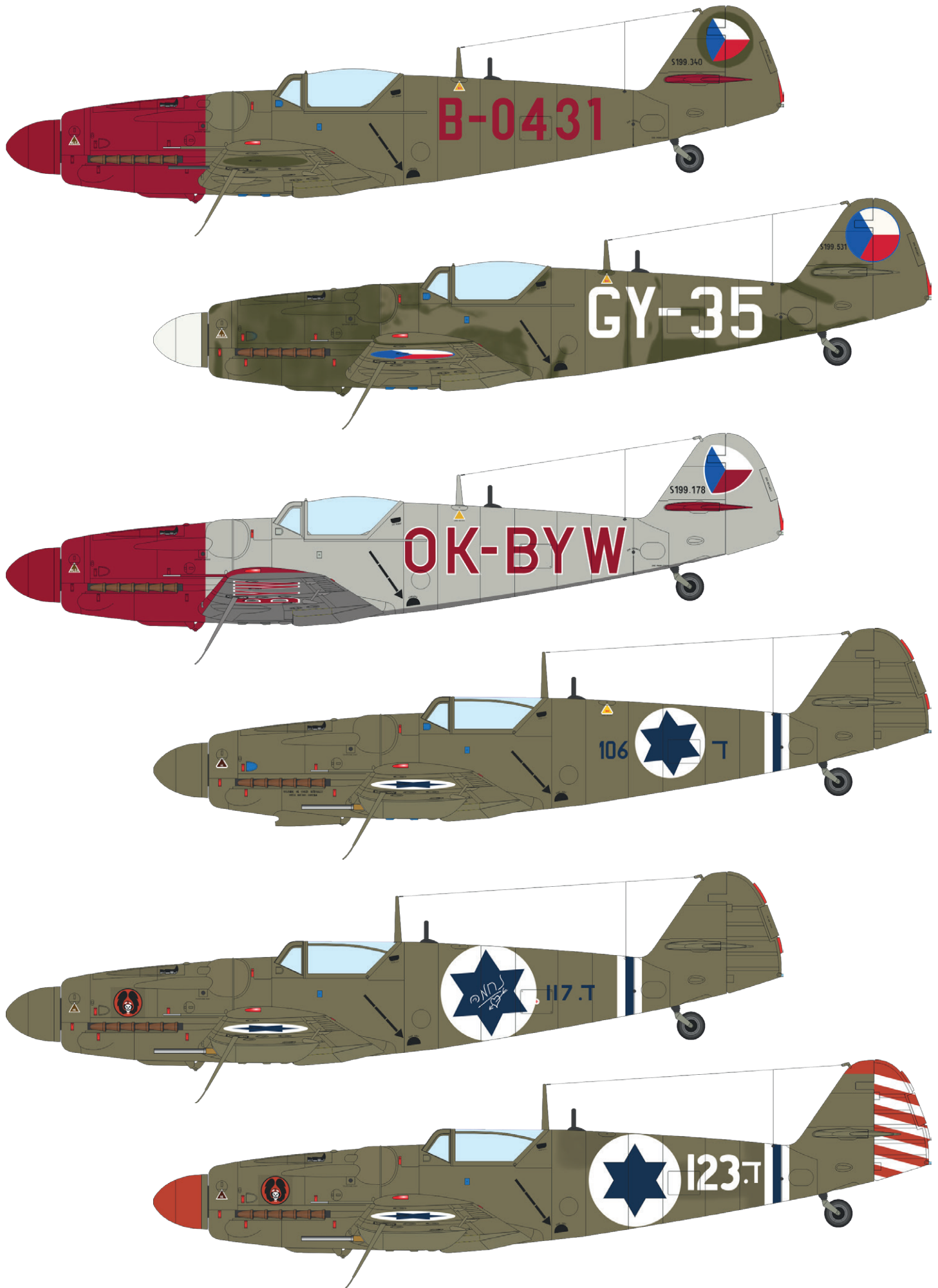
1/48



MEZEK #2141

1/72 DUAL COMBO

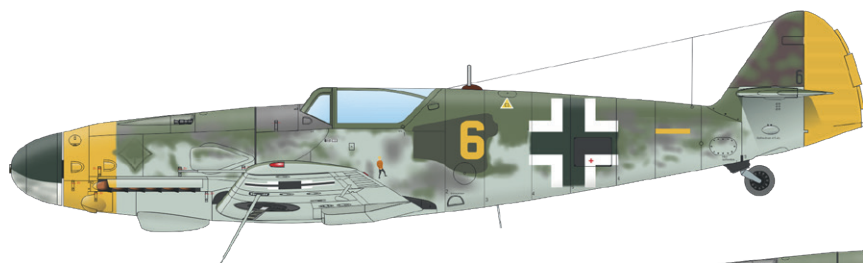




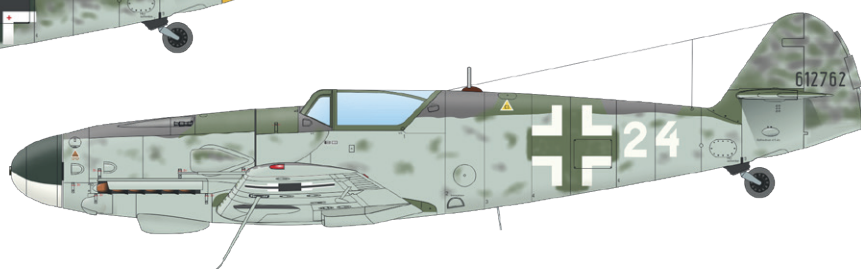
Bf 109G-10 WNF/Diana

#84182

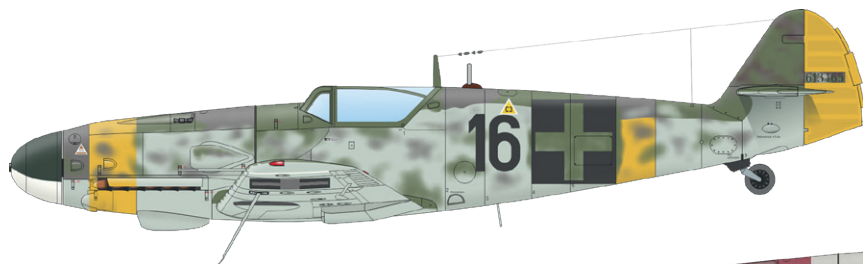
1/48


WEEKEND
 edition


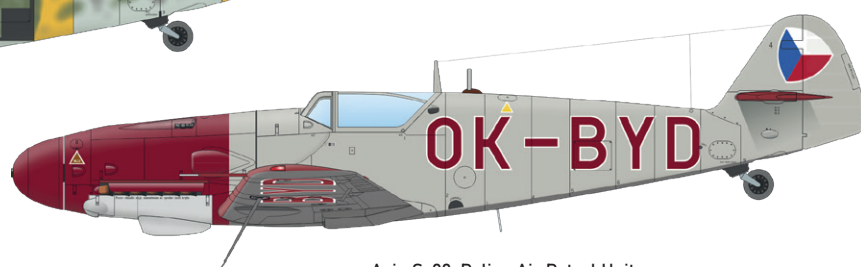
Bf 109G-10/U4, II./JG 52, Ainring, Germany, May 1945



Bf 109G-10/U4, WNr. 612762, Jagdstaffel 5 der ROA (Russian Liberation Army), Německý Brod, Protectorate of Bohemia and Moravia, April 1945



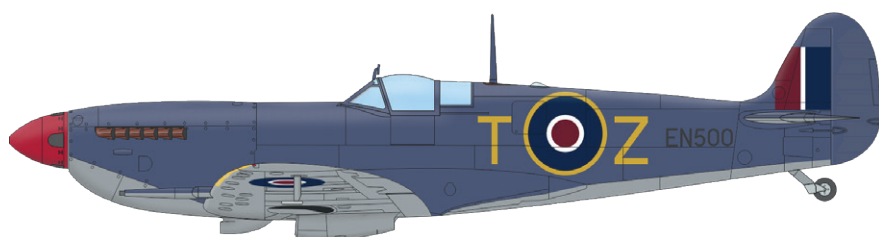
Bf 109G-10/U4, WNr. 613165, 101. "Puma" vadászrepülő osztály, Neubiberg, Germany, May 1945



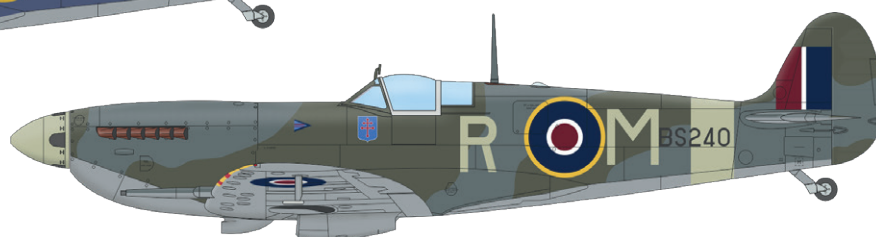
Avia S-99, Police Air Patrol Unit, Czechoslovak Police Air Force, Praha - Kbely, 1947

Spitfire F Mk.IX #7460

1/72



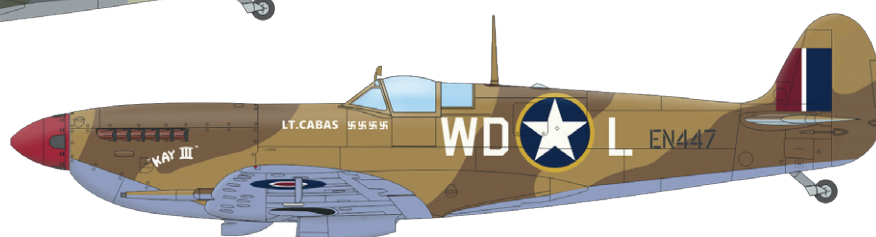
EN500, F/O Irving F. Kennedy, No. 249 Squadron, Qrendi, Malta, July 1943



BS240, W/Cdr Richard Milne, CO of Biggin Hill Wing, Biggin Hill, United Kingdom, January - March 1943



BS152, F/O Lorne M. Cameron, No. 402 Squadron RCAF, RAF Kenley, Surrey, United Kingdom, February 1943



EN447, Lt Victor N. Cabas, 4th FS, 52nd FG, Le Sers, Tunisia, April 1943

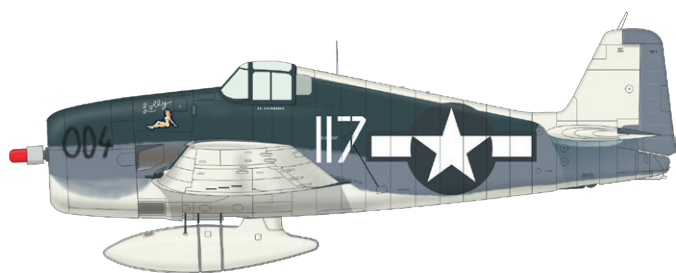
WEEKEND
edition

F6F-3

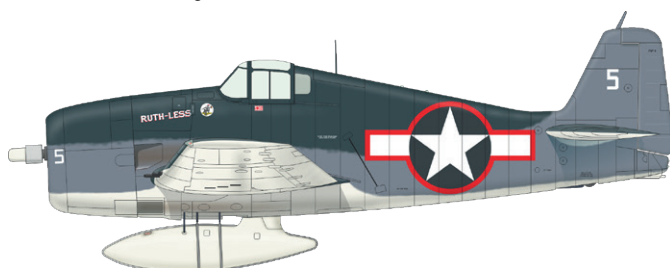
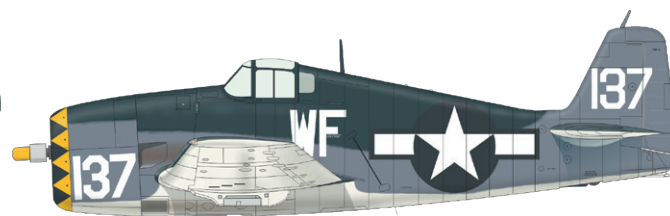
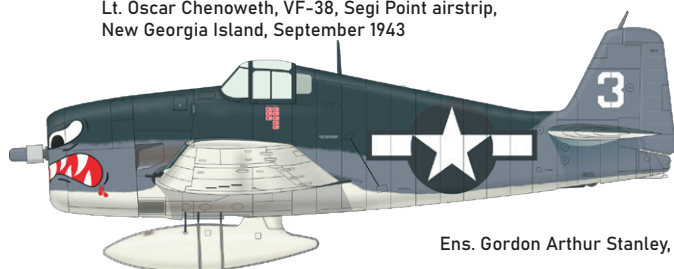
1/48 #8227

ProfiPACK
edition

Re-release



Lt. Lochridge, VF-34, Nissan Island, 1944

VF-8, USS Intrepid (CV-11),
Summer 1943Lt. Oscar Chenoweth, VF-38, Segi Point airstrip,
New Georgia Island, September 1943OTU VF-2, NAS Melbourne, United States of America,
October 1944

Ens. Gordon Arthur Stanley, VF-27, USS Princeton (CVL-23), October 1944

Spitfire HF Mk.VIII

1/48

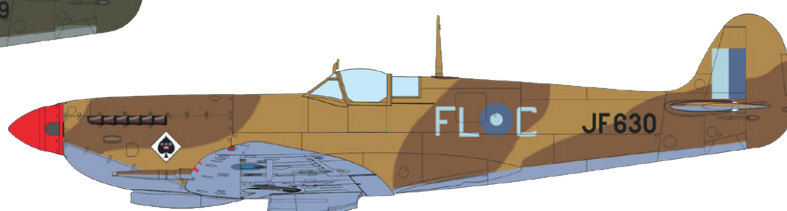
#8287

ProfiPACK
 edition

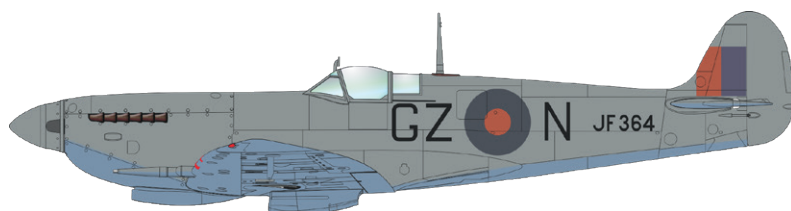
Re-release



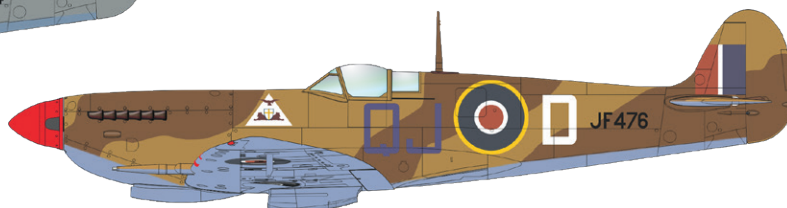
JF519, No. 1 Squadron SAAF, Trigno, Italy, June 1944



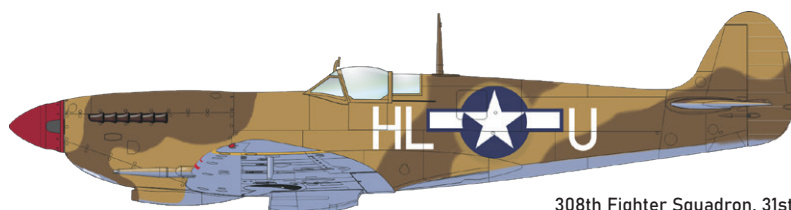
JF630, F/O L. Cronin, No. 81 Squadron, Palel, India, March 1944



JF364, No. 32 Squadron, Foggia, Italy, early 1944



JF476, No. 92 Squadron, Triolo, Sicily, November 1943



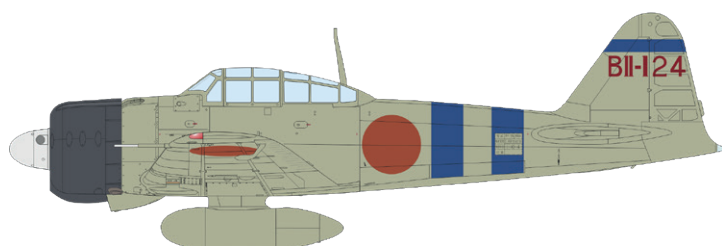
308th Fighter Squadron, 31st Fighter Group, Castel Volturno, Italy, 1944

A6M2 Zero Type 21

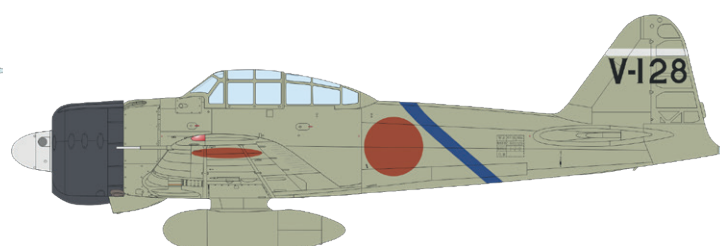
1/48 #82212

ProfiPACK
edition

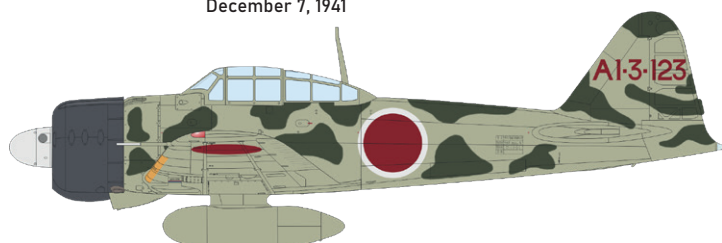
Re-release



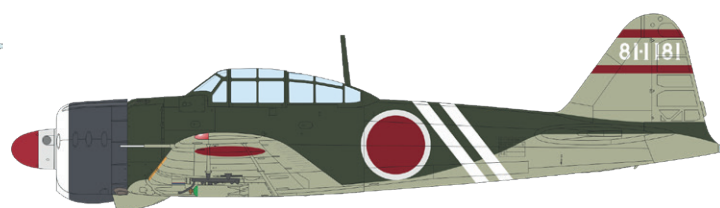
c/n 5379, P01c Tsuguo Matsuyama,
Hiryū Fighter Squadron, aircraft carrier Hiryū,
December 7, 1941



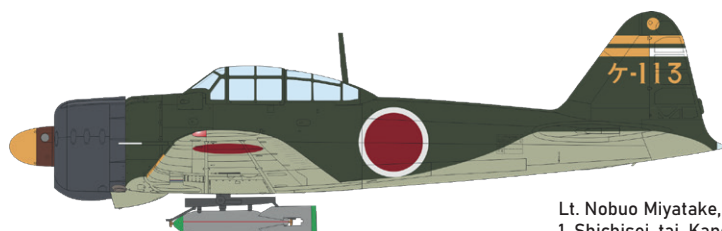
P01c Saburō Sakai, Tainan Kōkūtai, Lakunai airfield,
Rabaul, New Britain island, August 1942



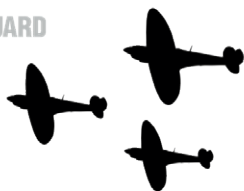
P02c Kōtarō Koyae, Zuihō Fighter Squadron,
Rabaul, New Britain island, April 1943



Lt. Kunio Kanzaki, CO of Hikōtai 311 of Kōkūtai 381,
Kendari airfield, Celebes island, May 1944



Lt. Nobuo Miyatake, Kamikaze Tokubetsu Kōgekitai,
1. Shichisei-tai, Kanoya airbase, Japan, April 1944



FROM „MULE“ TO GRIPEN

So, we finished the „Mezek“ (Mule), as we call the S-199, in 1/72nd scale... The molds are ready, instructions, markings, photo etched parts and decals are prepared too. I will leave the evaluation of this kit, much awaited by many, to the modelling community, but I personally like it very much. In the course of preparing this kit we have time and again encountered various ambiguities, contradictions in the interpretation of many photographs and other joys, every aviation history researcher knows very well. While it is true that no one seems to be discovering anything completely new, when it comes to the subject of S-199, we have nevertheless come up with a few interpretations of our own. I am curious to see how they will be received by the modelling community.

What I am very interested in, and have been pondering for some time, is the real importance of this aircraft to Czechoslovakia and its Air Force. It's reputation here in Czech Republic or in Slovakia is a specific mix of nostalgia, patriotism as well as sober perspective. Although it was a "mishmash" made of German components available, we still keep that feeling it was our aircraft. And you know what? I like the S-199 probably the best of all the Messerschmitt variants. Not because of nostalgia, I just like the altered silhouette with smaller propeller cone more than the somewhat blunt-nosed Bf 109G. After all, I don't know what words one would choose in the case of the S-199, who perhaps should have called the Bf 109G-10 "the bastard from the Erla factory". For grafting a bombers-dedicated Jumo 211 engine

onto the airframe of late Messerschmitt BF 109 airframe and on top of it using also heavy and wide "bomber" propeller, he would hardly find an appropriate term.

I would, however, be sparing with strong condemnations. Even though it was an aircraft that was far from being able to compete with the top fighters of its time, it not only fulfilled, but actually surpassed its task. It was originally intended only for training of fighter pilots, helping to bridge the critical period until the arrival of modern jet aircraft, but in the end, it was the backbone of Czechoslovak fighter air force for about three years. There were not enough funds to buy modern aircraft in required numbers. Buying latest versions of Spitfires, Tempests or Mustangs in the required quantities would have drained almost all of the country's foreign exchange reserves at the time. And considerations of buying Meteor jets, which were also said to have been discussed, could already be called an unattainable dreams. The Soviet Union did not show up too much of helpfulness after the war and the aircraft the Czechoslovak pilots came back with from abroad, whether from the East or the West, were not in sufficient numbers. The war may have been over, but a new war was expected within ten to fifteen years at that time, so the projected peacetime numbers of combat aircraft were quite generous.

In spite of this, the creation of the S-199 was actually quite a smart move. It saved money, made use of what was already there. Without the problems with the quality of the components, especially the engines, and perhaps lousy quality of the

work of the postwar aircraft industry, the S-199 might have had a slightly better reputation after all.

Interestingly, despite the many unflattering articles, veteran pilots remember the S-199 mostly fondly. "I can notify you," as Major Zdeněk Smetana, my former Mi-2 pilot instructor, began his sentence in his typical way, "that a well-adjusted Mule was capable of doing over 600 kilometers per hour in level flight!" The year was 1986 and this elderly gentleman was completing his flying career as an instructor by pounding the necessary coordination of collective, cyclic and pedals movements into the heads of twenty-year-old academy students. He certainly didn't swear at Mule. Quite on the contrary! "It was nice to fly it, one just had to keep it under control on takeoff..." That's what he said to me at the time when I asked him about his experience with Mule.

Recently, I thought of a connection to the present, where the future of the Czechoslovak Air Force is once again being discussed regarding the fighter aircraft. I was thinking that it would be best to keep the existing Gripens, add possibly one more squadron and update these aircraft as much as possible. It seemed to me to be a cost-saving and sufficient solution which would not drain the money out from the budget too much. I considered every thoughts about acquiring state-of-the-art F-35s to be an even more unattainable than the consideration of buying hundreds of Meteors for our post-war Air Force. I was in favor of a path more in line with that of the Mule, though I certainly don't want to compare the Gripen to it. It's an excellent aircraft that bridged our Air Force successfully from the old Mig-21s to the modern Western technology. I thought it would be the best solution. Then I woke up to February 24, 2022 and I don't think so anymore...

Richard Plos



Photo: collection Michal Ověčák