La-5 1184

# SOVIET WWII FIGHTER 1:48 SCALE PLASTIC KIT



## intro

The Lavochkin La-5 fighter was developed from the preceding LaGG-3. This fighter aircraft designed by the trio comprising Lavochkin, Gorbunov, Gudkov was accepted by the Soviet armed forces in early 1941. The Klimov M-106 engine was supposed to be the powerplant for the LaGG-3 but its development had not yet been completed and the less powerful M-105P had to be installed instead. This change influenced the aircraft performance so badly that the LaGG-3 was replaced by the Yak-1 and Yak-7 on the production line.

Lavochkin and Gorbunov tried to improve the aircraft's performance using a more powerful engine. One of the engines available was the double row 14 cylinder radial Shvetsov ASh-82. This engine, developed from the Wright R-1820 Cyclone and was designated for use in light bomber aircraft. The installation into the LaGG-3 airframe was finished in the winter of 1941/42.

This improved aircraft made its maiden flight in April 1942 and aerial trials confirmed its superiority in comparison to the Yak-7. Apart from the engine, slats were installed and the tail was redesigned. The decision to launch serial production was made in May, and the new aircraft was known under the designation LaGG-5. The first airplanes were completed in May, and all unfinished LaGG-3 airframes were equipped with the ASh-82 engine. Eventually, production aircraft were designated La-5, following the departure of Gudkov and Gorbunov from the design team.

First production La-5s were accepted by the 49th KIAP on August 13, 1942. The second unit to use the new fighter was the 287th IAD that received it on August 20. The opponents of the La-5 were typically the Bf 109 F-4 and Bf 109 G-2 and the Russian airplane was inferior to them. German fighters were more maneuverable and poor manufacturing processes influenced the La-5's performance as well.

Aircraft development continued. The windscreen was redesigned, and the La-5F was powered by ASh-82F with improved lubrication and cooling that helped to increase aircraft performance during take-off. Later, during August, 1943, the production of the aircraft with a cut down spine was launched. Three factories were involved in its serial production - Zavod No. 21 in Gorky, Zavod No. 381 in Nizhny Taghil and Zavod No. 99 in Ulan Ude.

The most powerful version was the La-5FN. It was powered by the ASh-82FN with fuel injection and offered 1560 hp. The La-5FN was equal to its German opponents while flying below 3000 metres and inferior to the Bf 109 G and Fw 190 at altitudes over 3000 metres.

The armament was the same for the La-5, La-5F and La-5FN, and consisted of two 20mm ShVAK cannon, each with 200 rounds. Underwing racks could carry two bombs of up to 100 kg. The direct successor of La-5FN was the La-7 that entered service in September, 1944.

#### úvodem

Za předchůdce La-5 je považován stíhací letoun LaGG-3. Tato stíhačka z konstrukční kanceláře vedené trojicí Lavočkin, Gorbunov, Gudkov se do výzbroje Sovětského svazu dostala na počátku roku 1941. Původně byla konstruována pro motor Klimov M-106. Ten však nebyl k dispozici a konstruktéři se museli spokojit s méně výkonným M-105P. Změna se samozřejmě projevila na výkonech letounu, a to natolik negativně, že přednost ve výrobě dostaly typy Jak-1 a Jak-7.

Lavočkin s Gorbunovem se pokusili vše napravit zástavbou výkonnější pohonné jednotky. Nabízel se hvězdicový, vzduchem chlazený hvouhvězdicový čtrnáctiválec Švecov AŠ-82. Tento motor, odvozený od amerického Wright R-1820 Cyclone a původně zamýšlený pro lehké bombardéry, byl do draku LaGGu-3 zastavěn během zimy 1941 / 1942.

Přepracovaný letoun se dostal do vzduchu v dubnu 1942 a testy ukázaly jeho převahu nad Jakem-7. Kromě jiného motoru dostal také sloty, přepracovány byly ocasní plochy. V květnu padlo rozhodnutí o sériové výrobě, stroj nesl označení LaGG-5. Měla začít již v červenci, přičemž všechny dosud nekompletní draky LaGGů-3 měly dostat motory AŠ-82. Sériové stroje již nesly označení La-5, protože z konstrukční kanceláře odešel po Gudkovovi také Gorbunov.

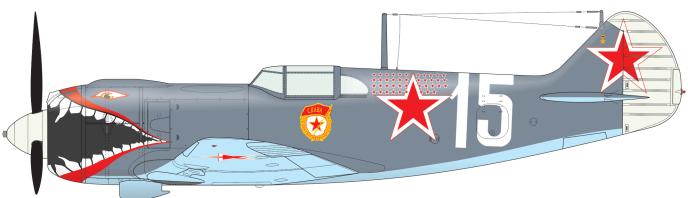
První stroje dostal 13. srpna 1942 49. KIAP, který působil v rámci 1. letecké armády, a 20. srpna také 287. IAD. Na konkurenci v podobě Bf 109 F-4 a Bf 109 G-2 nestačily. Zaostávaly v obratnosti, nekvalitní dílenské zpracování navíc ubíralo na výkonech.

Vývoj letounu pokračoval i nadále. Pro zlepšení výhledu z letounu byl přepracován čelní štítek překrytu kabiny. Verze La-5F dostala motor AŠ-82F se zlepšeným mazáním a chlazením, čímž byla odstraněna výkonová omezení během startu. Později, během srpna 1943 se do výroby dostal nový trup se sníženým hřbetem za kabinou. Sériová výroba probíhala ve všech třech továrnách, kde se La-5 montovaly – závod č. 21 (Gorkij), závod č. 381 (Nižnyj Taghil) a závod č. 99 (Ulan Ude).

Nejvýkonnější verzí byla La-5FN. Poháněl ji motor AŠ-82FN s přímým vstřikováním paliva, který dával až 1650 k. Až tato verze dokázala být rovnocenným protivníkem německým stíhačkám. Tedy alespoň v letových hladinách do 3000 m. Ve větších výškách pak měly Bf 109 G a Fw 190 převahu.

Všechny verze nesly stejnou výzbroj. Tvořila ji dvojice kanonů ŠVAK ráže 20 mm se zásobou 200 ran pro každý. Pod křídlo bylo možné zavěsit dvě pumy až do hmotnosti 100 kg.

Přímým pokračovatelem byl stíhací letoun La-7, který se do výzbroje začal dostávat v září 1944.



1184-NAV1



Carefully read instruction sheet before assembling. When you use glue or paint, do not use near open flame and use in well ventilated room. Keep out of reach of small children. Children must not be allowed to suck any part, or pull vinyl bag over the head.



Před započetím stavby si pečlivě prostudujte stavební návod. Při používání barev a lepidel pracujte v dobre větrané místnosti. Lepidla ani barvy nepoužívejte v blízkosti otevřeného ohně. Model není určen malým dětem, mohlo by dojít k požití drobných dílů.

#### INSTRUCTION SIGNS \* INSTR. SYMBOLY \* INSTRUKTION SINNBILDEN \* SYMBOLES \* 記号の説明



OPTIONAL **VOLBA** 



OPEN HOLE VYVRTAT OTVOR



SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ



REMOVE **ODŘÍZNOUT** 



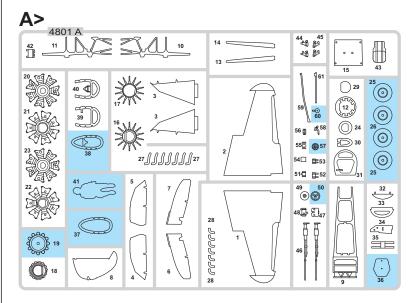
REVERSE SIDE OTOČIT

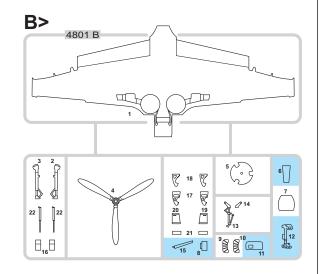


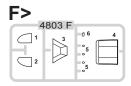
APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

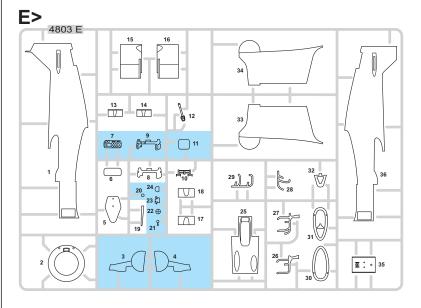
部品 **PARTS** DÍLY **TEILE PIÈCES** 

#### PLASTIC PARTS











**RP - RESIN PARTS** 

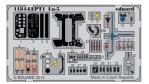


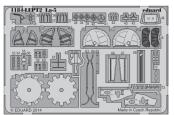












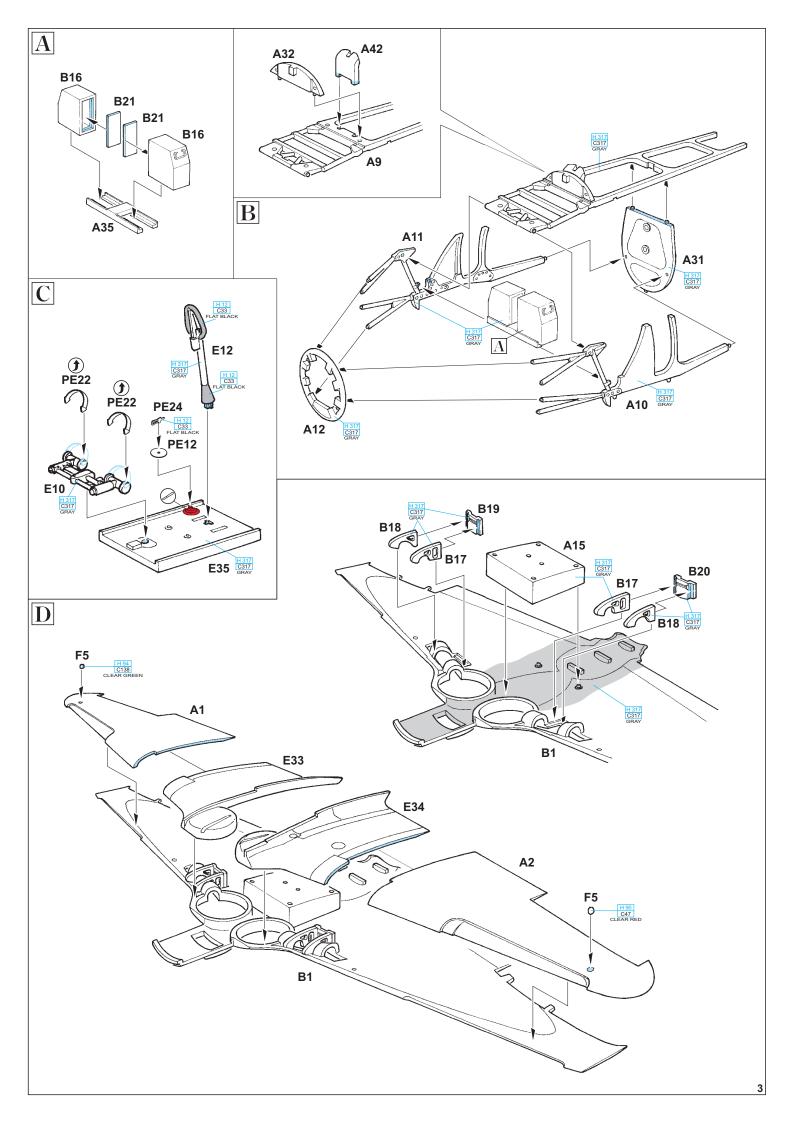
Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

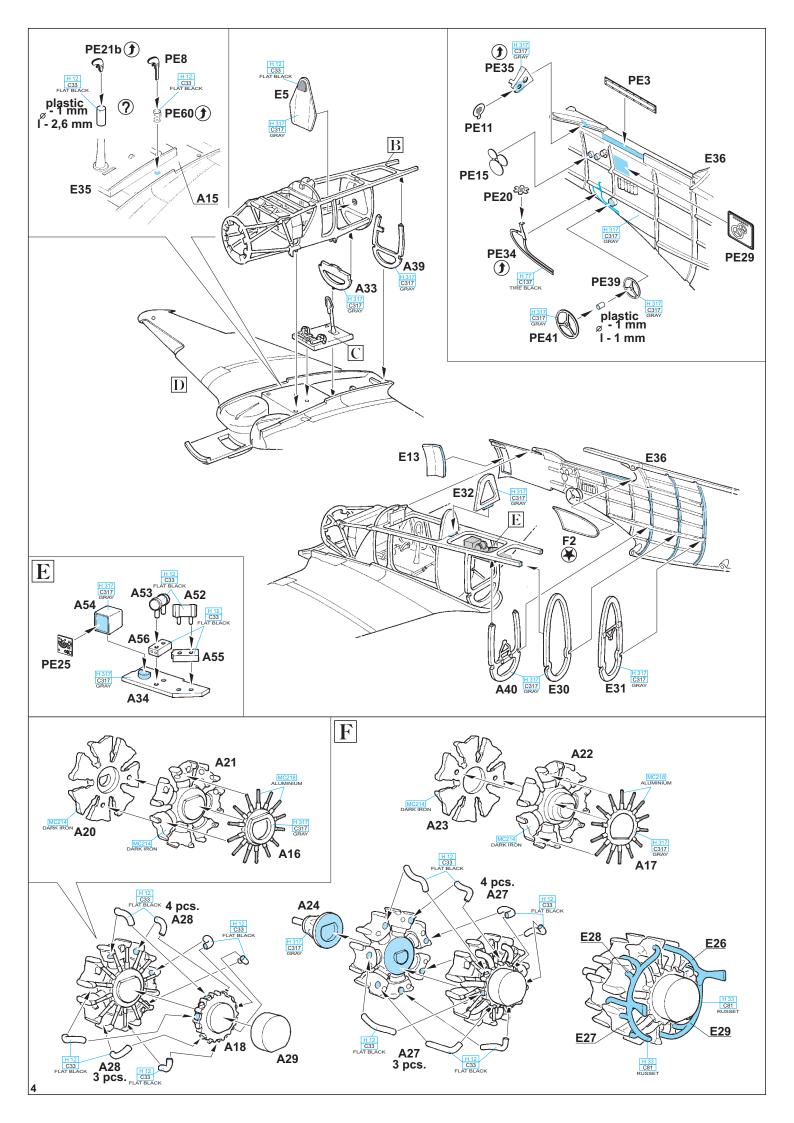
COLOURS BARVY **FARBEN PEINTURE** 

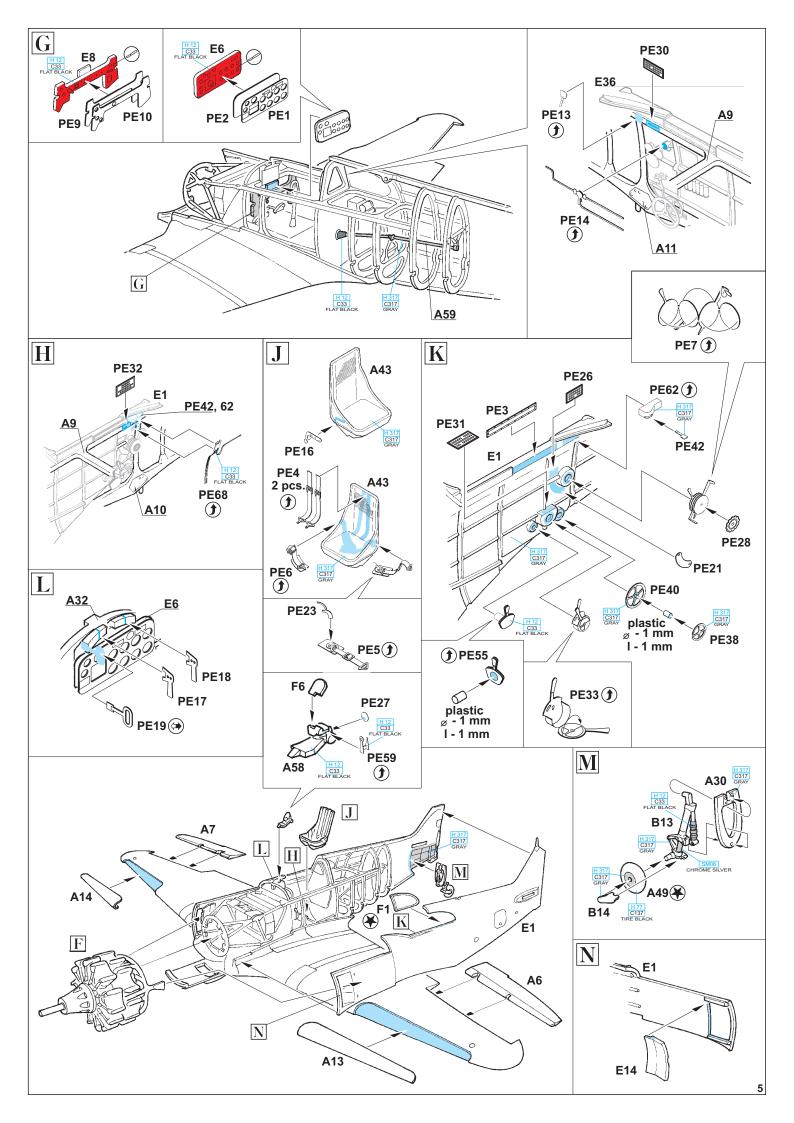
| GSi Creos | (GUNZE)  |             |
|-----------|----------|-------------|
| AQUEOUS   | Mr.COLOR |             |
| H 12      | C33      | FLAT BLACK  |
| H 33      | C81      | RUSSET      |
| H 77      | C137     | TIRE BLACK  |
| H 90      | C47      | CLEAR RED   |
| H94       | C138     | CLEAR GREEN |

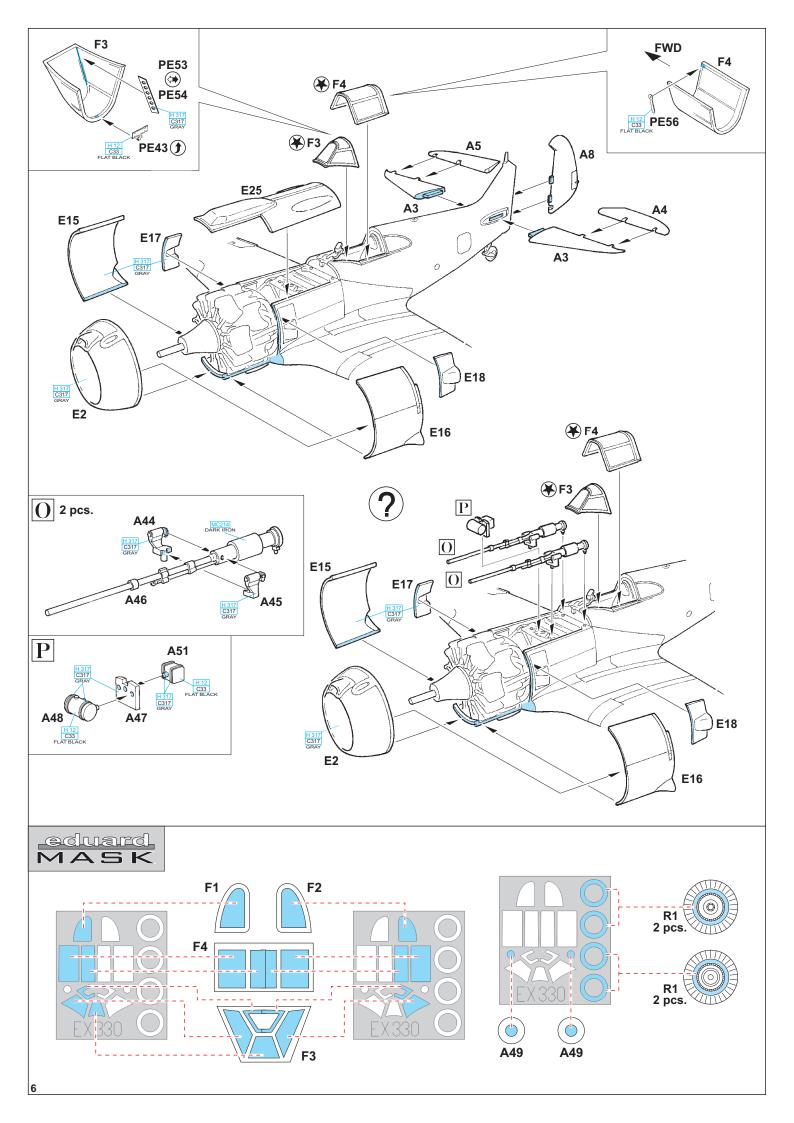
| AQUEOUS | Mr.COLOR |              |
|---------|----------|--------------|
| H 303   | C303     | GREEN        |
| H 316   | C316     | WHITE        |
| H 317   | C317     | GRAY         |
| H 323   | C323     | LIGHT BLUE   |
| H 331   | C331     | DARK SEAGRAY |

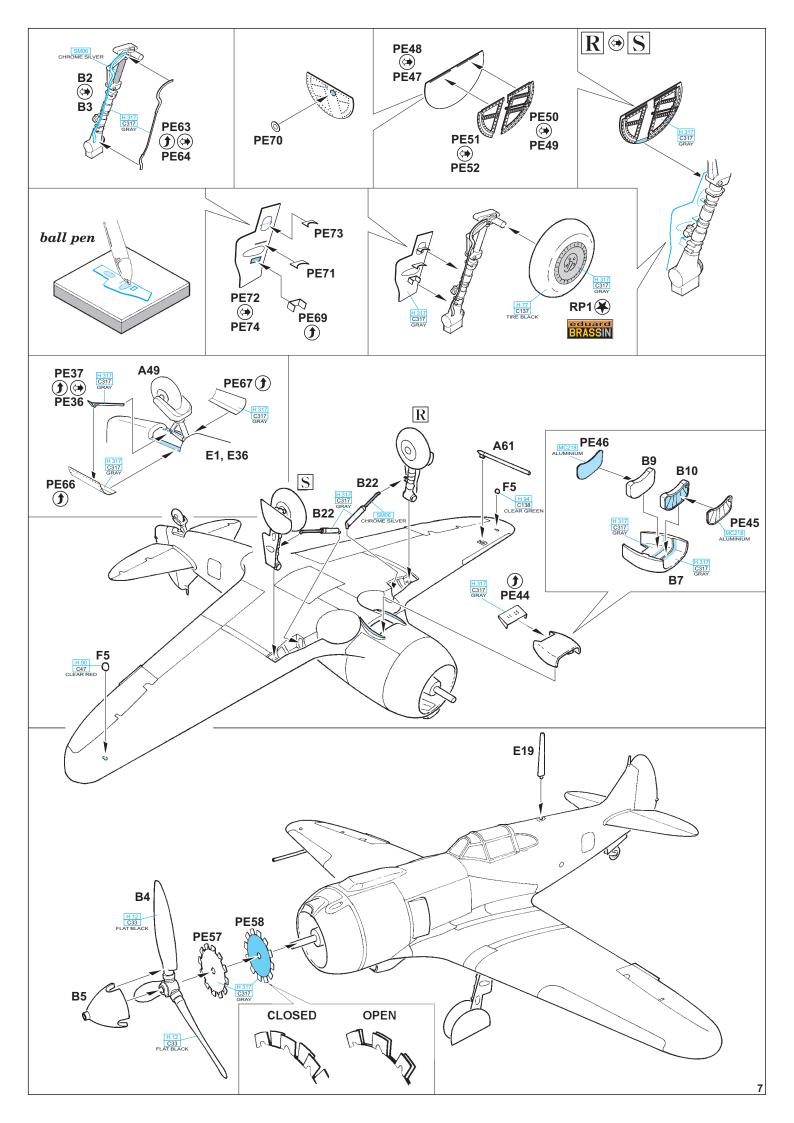
| Mr.METAL COLOR          |               |
|-------------------------|---------------|
| MC213                   | STAINLESS     |
| MC214                   | DARK IRON     |
| MC218                   | ALUMINIUM     |
| Mr.COLOR SUPER METALLIC |               |
| SM06                    | CHROME SILVER |





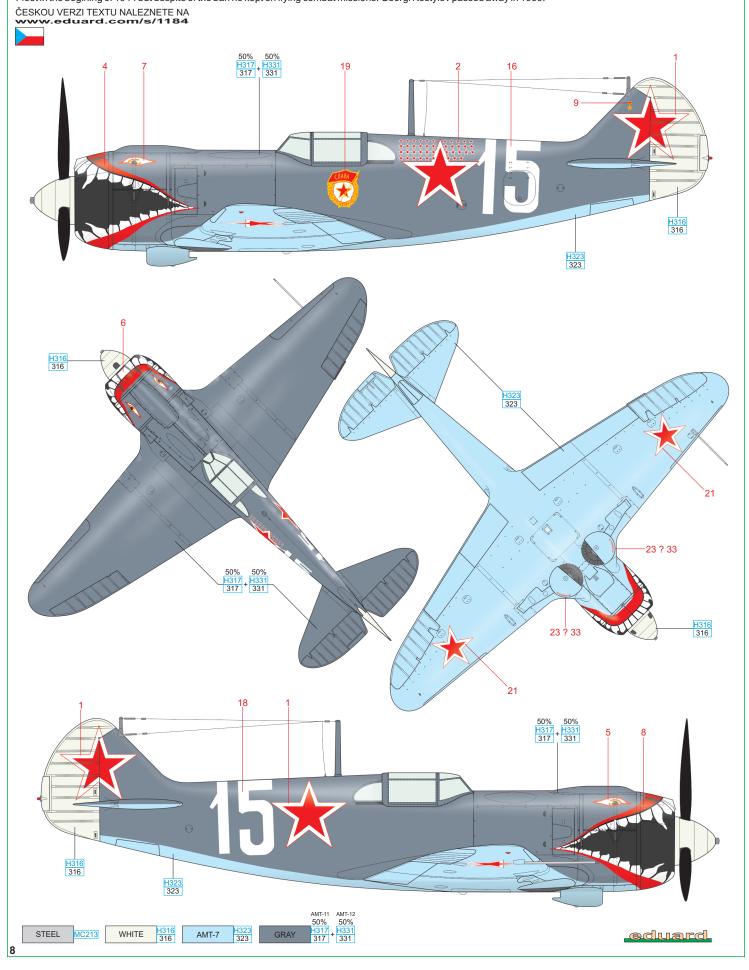






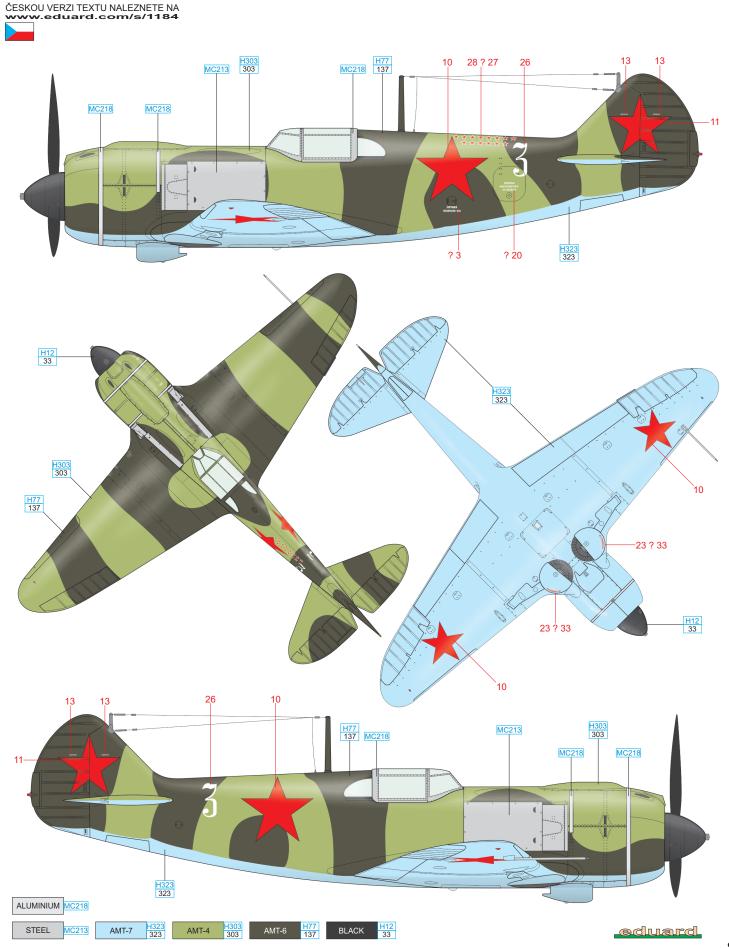
#### A Flown by Guards Major Georgi D. Kostylev, 4th GIAP, Leningrad, Summer, 1944

This La-5 belonged to Hero of the Soviet Union Georgi D. Kostylev. The aircraft was a part of the exhibition of the very first Defence of Leningrad Museum. According to the memoirs the unusual color coat was applied shortly before overhanding of the aircraft to the museum and Kostylev flew it once only. The grey color on upper sides is a mix of AMT-11 and AMT-12 greys. The former camouflage was green and this aircraft was stored as a spare one as the air regiment flew La-5FN at that time. The sharkmouth was painted at least on three aircraft by technician of the 1st squadron Makarov. Kostylev achived 10 (or 11 according to the different sources) individual and 35 shared kills. He was awarded with the Gold Star of the Hero of the Soviet Union on October 23, 1942. He was appoited the General Inspector of the fighters of Baltic Fleet in the begining of 1944 but despite of the ban he kept on flying combat missions. Georgi Kostylev passed away in 1960.



### B Flown by Konstantin A. Novikov, 40th GIAP, summer, 1943

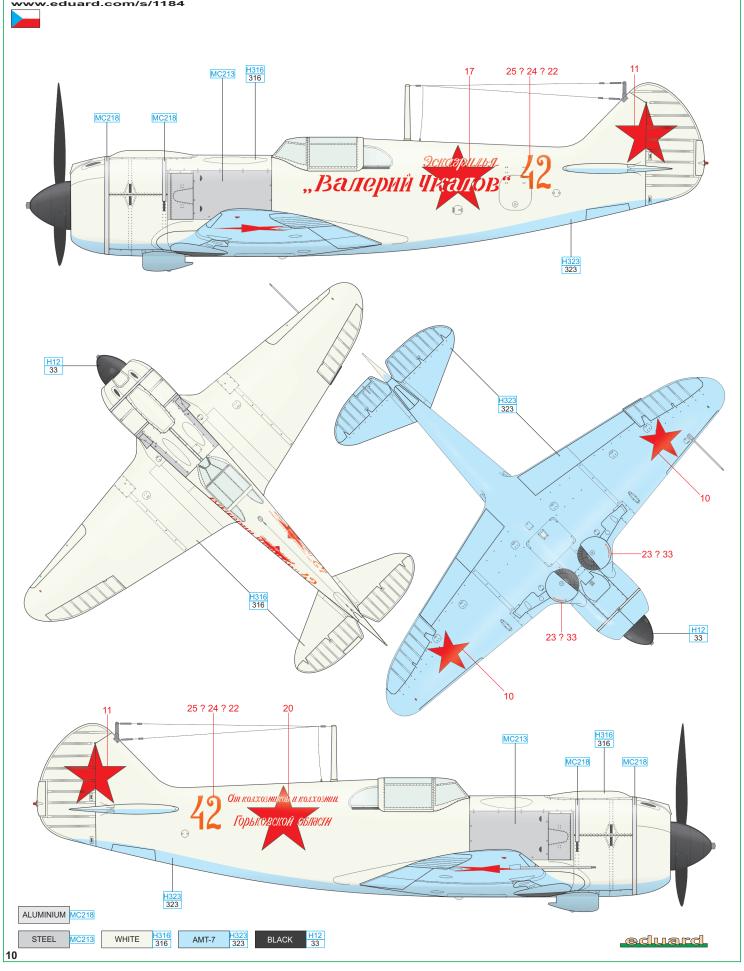
Konstantin A. Novikov is credited with 31 individual and 10 shared kills by some Russian historians (other sources state 30 individual and 6 shared). The very first victory achieved as a member of 862th IAP on September 17, 1942. He became famous for ramming Fw 189 recce aircraft ten days later. He managed to stay unhurt during this specific way how to destroy enemy aircraft. His LaGG-3 is told to be combat ready after the replacement of damaged propeller only. In November, 1943 was Novikov transfered to 40th GIAP armed with La-5 fighters. He stayed with this unit till the end of WW2. In the postwar years Novikov acted as a test and ferry pilot. He passed away in 1958. Novikov's aircraft wore the typical La-5 camouflage scheme. Upper surfaces are painted with irregular areas of green AMT-4 and black AMT-6 colors, the undersides were AMT-7 blue.



# C 193rd IAP (Fighter Air Regiment), February, 1943

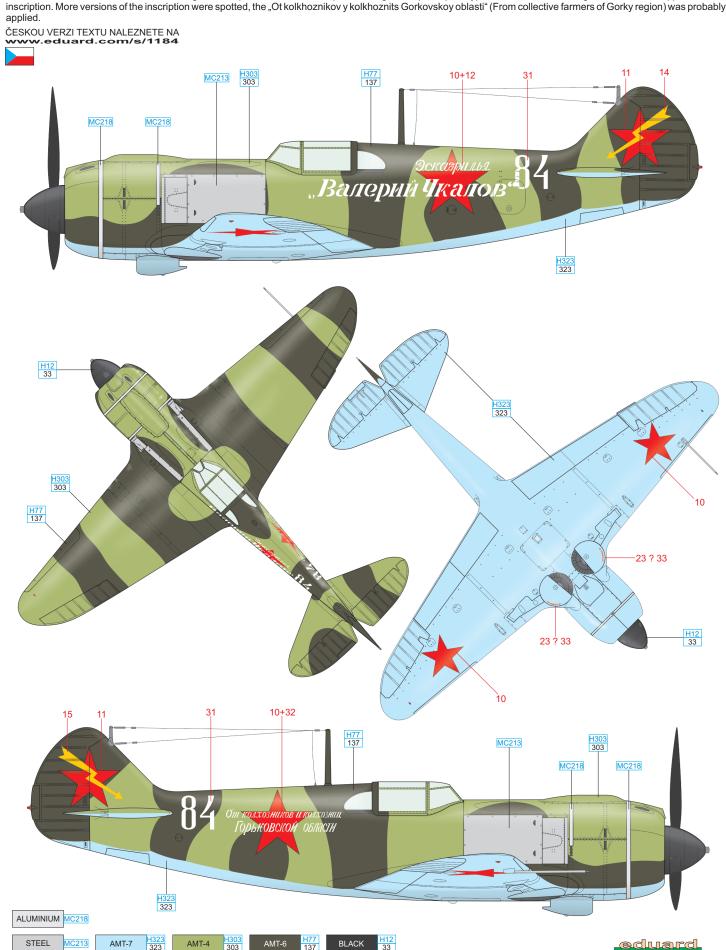
The washable white coat was applied on many Soviet aicraft during winter. La-5s of 193rd IAP had the whole upper and side surface overpainted. The incription Eskadrilya Valery Chkalov was rather frequently seen in Soviet air forces. It was painted on tens of aircraft (reportedly about 200 aircraft were decorated this way) flown by many air units. These aircraft were purchased thanks to fund-raising campaigns organized by local people from Gorky region. The hometown of Valery Chkalov – town of Vasilyevo (Chkalovsk now) is situated in this region. The exact color of the fuselage number 42 is not known – pale red, blue or yellow are posile.

ČESKOU VERZI TEXTU NALEZNETE NA www.eduard.com/s/1184



#### D 88th GIAP (Guards Fighter Air Regiment), September, 1943

The yellow lightning painted on the tail was typical for 88th GIAP aircraft. This particular La-5 was captured by German forces in 1943 shown to public during one of the exhibitions. The inscription "Eskadrilya Valery Chkalov" on the port fuselage side refers to the famous prewar Soviet pilot. He was born nearby town of Nizhnyi Novgorod (know as Gorkij during communist era), became a favourite pilot of Soviet leader Josif Stalin and was popular for brave aerobatic skills and long-distance flights. He participated in the flight from Moscow to Northern America via North Pole carried out on June 18 to 20, 1937. He became a test pilot and met his fate in this role. He was killed on December 15, 1939 during an attempt to land with Polikarpov I-180 fighter airplane prototype. The starboard fuselage side was also topped with the inscription. More versions of the inscription were spotted, the "Ot kolkhoznikov y kolkhoznits Gorkovskoy oblasti" (From collective farmers of Gorky region) was probably applied.



#### E 240th IAP (Fighter Air Regiment), August, 1942

Three La-5s in total were decorated with the inscription "Baumantsy geroyu Lukyanovu" (to the Hero Lukyanov from Baumans). It was dedicated to the Alexander M. Lukyanov, the Hero of the Soviet Union. He became famous as a pilot of 159th IAP. He rammed emeny aircraft on July 4, 1941 using the propeller of his own aircraft to cut off his opponent's tail. He survived and was awarded with the Gold Star and the title Hero of the Soviet Union on July 22, 1941. Lukyanov succesfully rammed one more German aicraft on January 4, 1942. He damaged the tail of the Bf 110 heading towards Leningrad (St. Petersburg now). Few days later, on January 28, Lukyanov wa killed in an aerial fight with Bf 109. In June of the same year his mother supported the fund-raising campaign for buying fighter aircraft. That happened on June 12, 1942 during the meeting of the local people in city park named after N. E. Bauman (the radical socialist who lived in tzarist Russia era). Three aircraft were purchased in the end. All of them were decorated with the inscription and the artwork of the Gold Star. Lukyanov's mother Maria Ivanovna Lukyanova overhanded the aircraft in person to pilots of 240th IAP in August. These La-5s were flown by pilot led by 2ndLt. Patoka. Patoka was killed at the controls of La-5 No. 23 qiute soon during the battle of Stalingrad.

