



#### intro

No other aircraft of the German Luftwaffe is so intimately connected with its rise and fall in the course of the Second World War than the Messerschmitt Bf 109. This type, by whose evolution outlived the era in which it was conceptualized, bore the brunt of Luftwaffe duties from the opening battles of Nazi Germany through to her final downfall. The history of the aircraft begins during 1934-35, when the Reich Ministry of Aviation formulated a requirement for the development of a single-engined monoplane fighter. Proposals were submitted by Arado, Heinkel, Focke-Wulf and Bayerische Flugzeugwerke. The last mentioned firm featured a technical director named Professor Willy Messerschmitt, who was riding a wave of popularity based on the success of his recent liason aircraft, the Bf 108. His goal was to conceive of an aircraft with the best possible performance for the specified weight, size, and aerodynamic qualities. Over the subsequent months, several prototypes were built that served first and foremost in development flights and further modifications. The aircraft was relatively small, and compared to the prevailing trends of the time, docile with revolutionary features such as low wing design, the use of a retractable landing gear, a wing with a very narrow profile, wing slats, landing flaps, weapons firing through the prop hub, and so on. Even the enclosed cockpit and the method of construction were not very common just four years prior to the beginning of the Second World War. At its conception, the Bf 109 was a very promising asset despite some powerplant troubles. These were solved by the introduction of the DB 601. This engine, together with its extrapolated development DB 605, is umbilically connected to the types success. These two-row, twelve cylinder inverted V engines powered several tens of thousands of '109s in over 25 versions and variants.

The first combat use was by three developmental Bf 109s in the Spanish Civil War, where they were delivered in December 1936. The pre-series airframes were to, first of all, validate the aircraft's abilities in modern aerial combat. Shortly thereafter, production machines in the form of the Bf 109B-1 began to reach 2./J.88, the Legion Condor. The desire of Germany to demonstrate her aerial prowess to potential foes was advanced further in international sport meets. The triumphs attained in Zurich in the summer of 1937 were complemented several months later by grabbing the speed record of 610.95 kph. In very short order, the progressive developments represented by the C, D and E versions appeared. Despite this, the delivery of the types to combat units did not sustain a rate that was desired by military brass. Even by August 1938, the Bf 109 accounted for less than half of the 643 front line fighters in service. The later months saw an increase in these rates. By the time of the invasion of Poland (which saw the participation of only a little more than 200 aircraft) the Luftwaffe possessed the best fighter produced in continental Europe. With both a qualitative and quantitative advantage, the fighter wing of the Luftwaffe entered the Polish campaign, the first defenses of the Fatherland, Blitzkrieg against the West, and the Battle for France. With one foot in the door that was the English Channel, the Luftwaffe embarked on the attacks on Britain in the summer months of 1940. Here, the first weakness of the Bf 109 was revealed: the inability to carry drop tanks that would have enabled the type to effectively escort bombers to England. This was one of the factors that made the defeat of the Luftwaffe in the Battle of Britain possible. Experiences gained in 1940 led to the development of the 'F' version prior to the spring of 1941. The elegance of the Bf 109 crested with the 'Friedrich'. Following a largely defensive stance over the Channel and northern France, the Bf 109F took on a more offensive role in Operation Barbarossa in the east, and in northern Africa. In later duties with the 'Jagdwaffe' during the second phase of the war in the east, and in the 'Defense of the Reich' from 1943 to 1945, the Bf 109 served in the form of the 'G' version, followed by the 'K'. Even if by the end of the war it was clear that the development of the Bf 109 was exhausted, during its combat career, the type was able to keep pace with the foes that it encountered. Besides its primary function as fighter, the Bf 109 also appeared as a fighterbomber, reconnaissance platform, night fighter, trainer and rammjäger.

The disappearance of the Bf 109 from the skies over Europe was not spelled out by the end of the war. Several examples were in Swiss service up to 1949, and many flew in the air force of Czechoslovakia in both original form with a DB 605 powerplant and as aircraft built out of necessity with surplus Jumo 211s. The latter type also served as the first fighter to fight for the independence of the newly formed state of Israel. Finland retired the type as recently as 1954, and Spain didn't retire its HA-1109-1112, re-engined Bf 109s, until 1967. The legendary low-wing fighter of Professor Willy Messerschmitt survived the state that developed it.

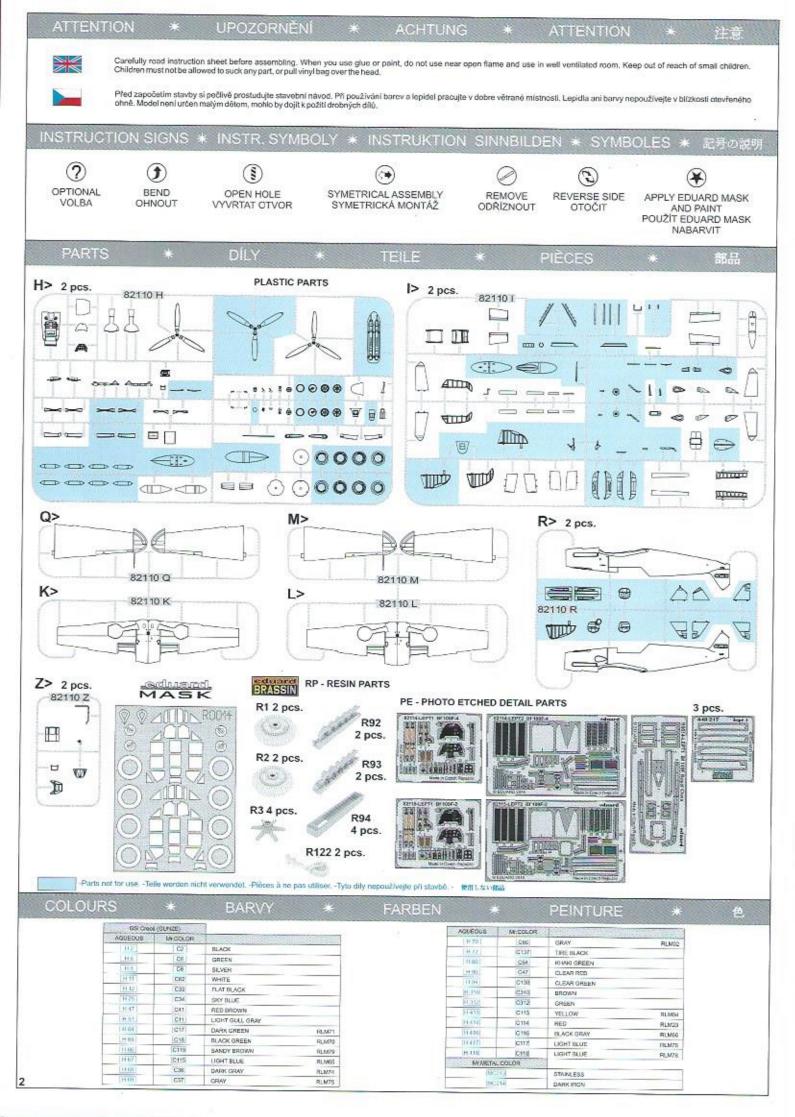
#### úvodem

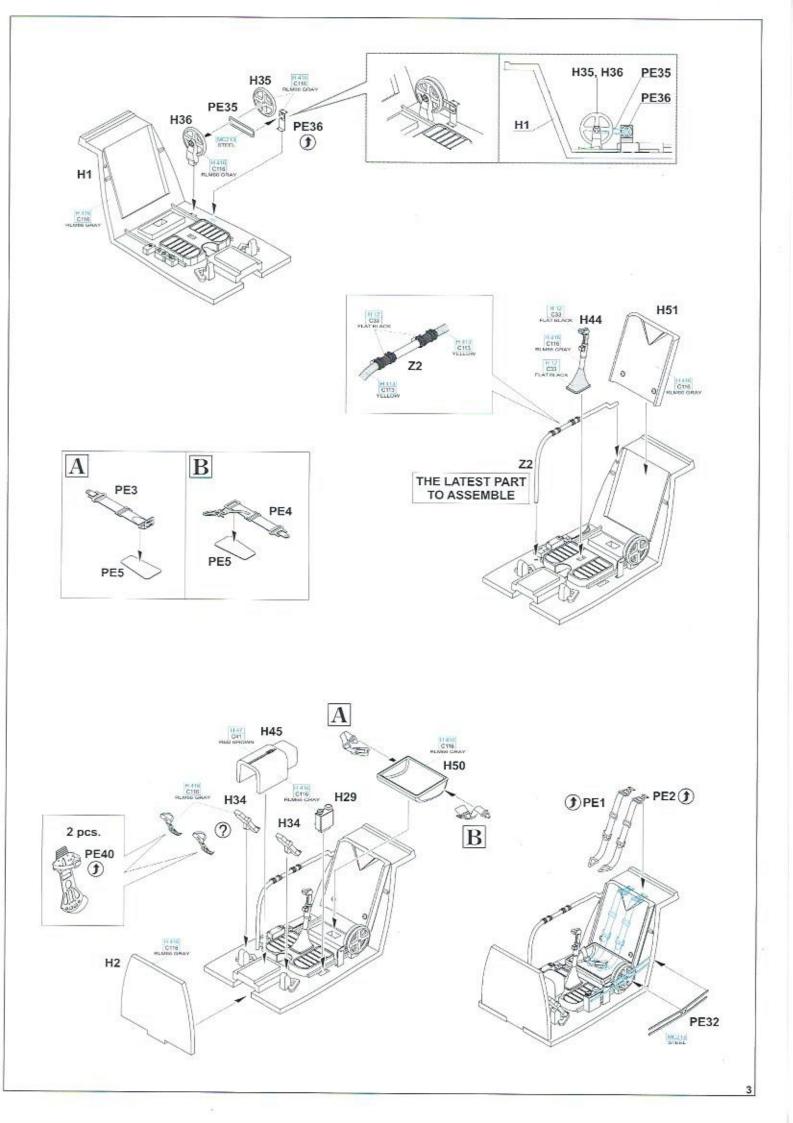
Žádný jiný stroj německé Luftwaffe není výrazněji spojen s jejím vzestupem a pádem ve 2. světové válce, než stíhací Messerschmitt Bf 109. Letoun, který svou koncepcí výrazně předběhl dobu, ve které vznikal, se stal tahounem stíhacího letectva od prvních válečných konfliktů nacistického Německa, až do jeho hořkého konce. Historie letounu se začíná v období let 1934-35, kdy Říšské ministerstvo letectví formulovalo specifikace zakázky na vývoj jednomotorové jednoplošné stihačky. Projektu se zúčastnily firmy Arado, Heinkel, Focke-Wulf a Bayerische Flugzeugwerke. V poslední jmenované působil na postu technického ředitele profesor Willy Messerschmitt, jehož popularita se nesla na vlně úspěchu nedávno dokončeného kurýrního Bf 108. Jeho cílem bylo vytvořit letoun s co největším poměrem výkonu k celkové hmotnosti, velikosti a aerodynamickým vlastnostem. V průběhu následujících měsíců vzniklo několik prototypů, které sloužily zejměna ke zkouškám a dalšímu vývoji. Letoun byl poměrně malý, oproti stavajícím zvyklostem relativně jemný, s revolučními konstrukčními prvky jako byla dolnokřídlá koncepce, použití zatahovacího podvozku, křídlo s velmi štíhlým profilem, pohyblivé sloty, vztlakové klapky, zbraně střílející osou vrtule, atd.

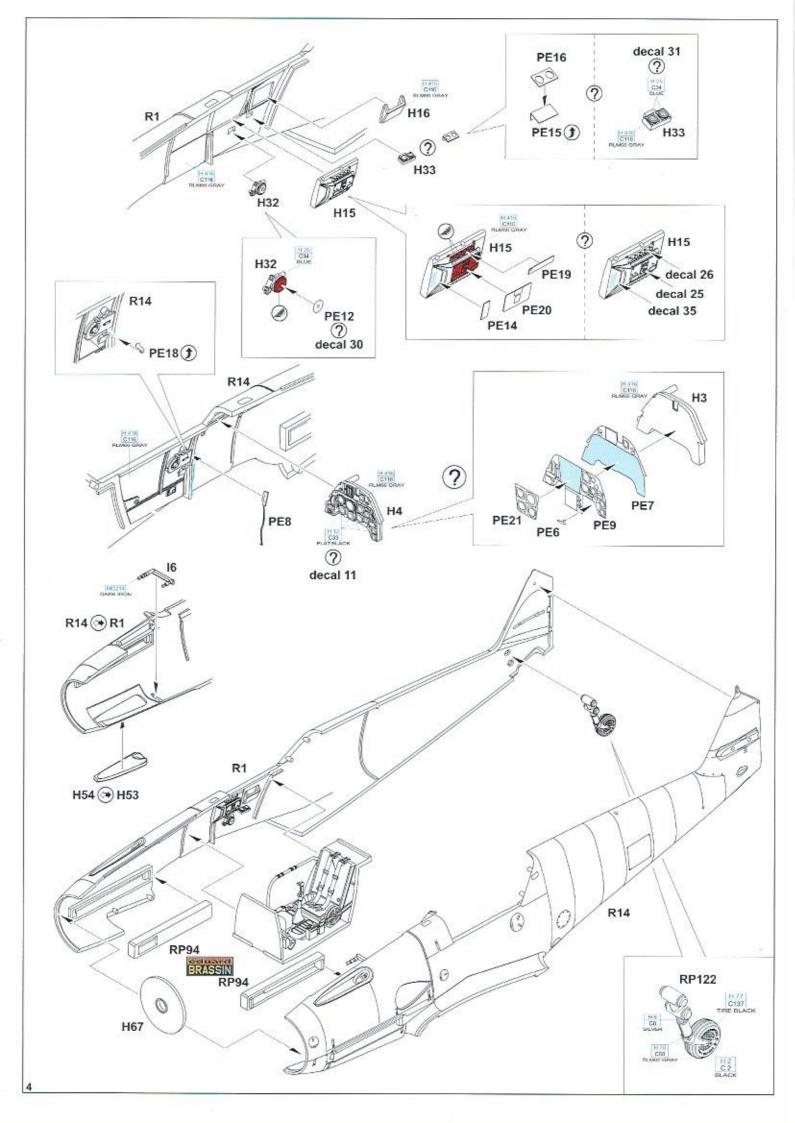
Dokonce uzavíratelný překryt kabiny nebo skořepinová konstrukce nebyly čtyři roky před začátkem 2. světové války tak obvyklým jevem, jak by se z dnešního pohledu mohlo zdát. Bí 109 byl již od počátku svého vývoje, i přes problémy s pohonnou jednotkou, velmí nadějným projektem. Problémy s pohonem vyřešila až zástavba motoru DB 601. Ten je spolu s pozdějším DB 605 neodmyslitelně spojen s úspěchy Bf 109. Řadový invertní dvanáctiválec do V poháněl několik desítek tisíc vyprodukovaných "stodevítek" ve více než 25 verzich a variantách. K prvnímu bojovému nasazení tří zkušebních kusů Bf 109 došlo za občanské války ve Španělsku, kam byly odeslány v prosinci 1936. Stroje z předsériové výroby měly především ukázat schopnosti letounu v moderní letecké válce. Následně se do bojového nasazení u 2./J.88 Legion Condor záčaly dostávat i sériové stroje varianty Bf 109B-1. Snaze Německa ukazovat svou leteckou sílu potenciálním protivníkům napomáhala i sportovní kláni. Triumf letounů Bf 109 na leteckém mítinku v Curychu v létě 1937 byl doplněn o několik měsíců později ustanovením rychlostního rekordu 610,95 km/h. Ve velmi krátkých časových úsecích následovaly verze C, D a E. Přesto však doplňování nových strojů k bojovým útvarům nepokračovalo tempem, který by si velení mohlo přát, Ještě v srpnu roku 1938 tvořila výzbroj letouny Bf 109 méně než polovinu z 643 stíhačů první linie. Ovšem během následujících měsíců roku se tempo dodávek k bojovým útvarům zrychlilo. V okamžik přepadení Polska (kterého se však zúčastnilo jen o málo více než dvě stě Bf 109) tak Luftwaffe disponovala zajisté nejlepší stíhačkou, jaká byla v kontinentální Evropě vyrobena. S technickou i množstevní převahou tak stíhací část Luftwaffe absolvovala polskou kampaň, první obranu Vaterlandu, Blitzkrieg proti západu i bitvu o Francii. S jednou nohou vykročenou přes kanál La Manche zahájila Luftwaffe v letních měsících roku 1940 útoky na Británii. V tu dobu se mj. projevil jeden vážný nedostatek Bf 109 - nepřipravenost konstrukce stroje na nesení přidavné nádrže, která by zvýšila dolet letounu při doprovodu bombardérů nad Británii. Tato zdánlivá maličkost byla jedním z faktorů, které zapřičinily porážku Luftwaffe v Bitvě o Británii. Zkušenosti z bojů v r. 1940 napomohly při vývoji verze F, která se začala k bojovým útvarům dostávat během předjaří 1941. Elegance Bf 109 u "Friedricha" dosáhla vrcholu. Po bojích nad Kanálem a severní Francii, spíše již defenzívního charakteru, se Bf 109F zapojíly i do útočných akci, a to zejména při operaci Barbarossa na východě nebo v severní Africe. Do pozdějších úkolů Jagdwaffe ve druhé fázi války na východě i do obrany Říše v letech 1943 - 1945 se zapojovaly především Bf 109 verze G a v posledních měsicích války pak také verze K. Ačkoli na konci války bylo jasné, že koncepce letounu Bf 109 se po deseti letech služby dostala na hranici možnosti, po celou dobu své bojové činnosti dokázaly jednotlivé varianty držet krok se svými stíhacími protivníky. Kromě svého prioritního určení stíhacího letounu se Bf 109 objevily i v rolích stíhacíbombardovací, průzkumná, noční stíhací, palubní stíhací, cvičné nebo jako rammjäger.

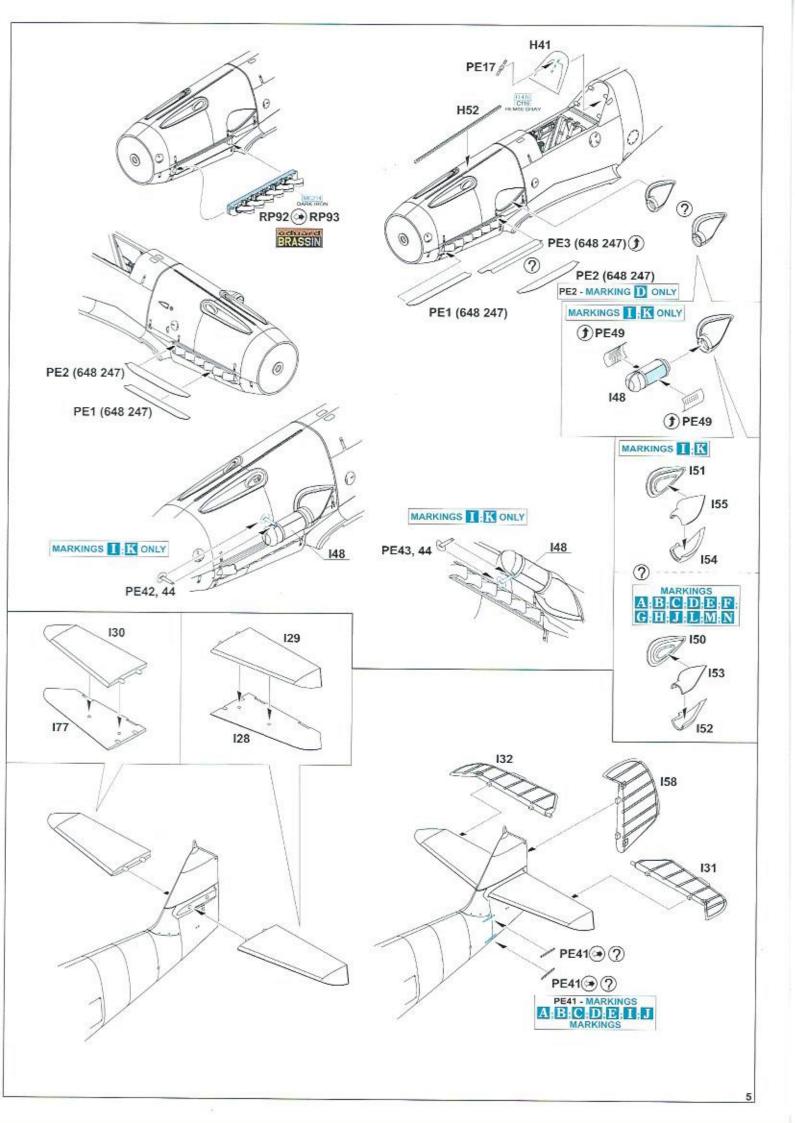
Nebe se pro Bf 109 nezavřelo ani po skončení války. Několik strojů sloužilo až do roku 1949 ve Švýcarsku, mnohé létaly v balkánských zemích, v osvobozeném Československu, a to jak v původní podobě s motory DB 605, tak v přestavěné variantě s motory Jumo 211. Zejména tyto stroje později tvořily základ letectva bránícího svobodu nově budovaného státu Izrael. Finsko zrušilo Bf 109 až v roce 1954 a Španělsko opustilo své HA-1109 a 1112 dokonce

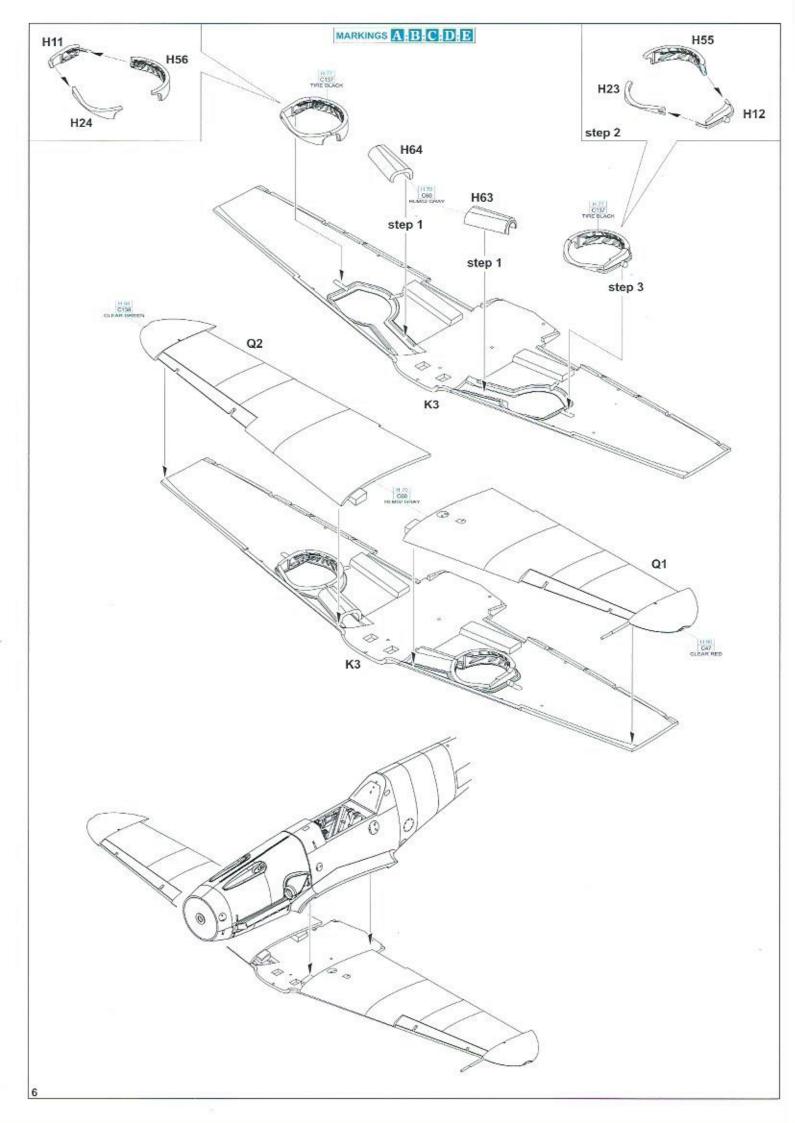
až v roce 1967.

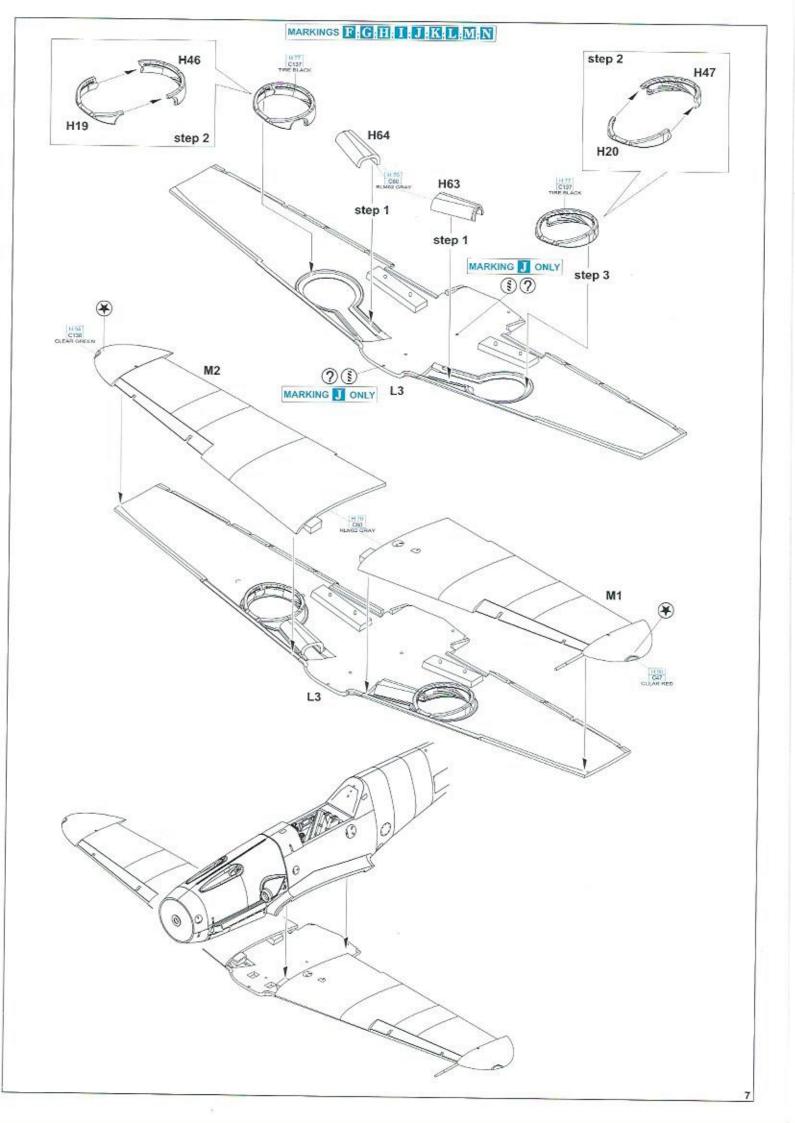


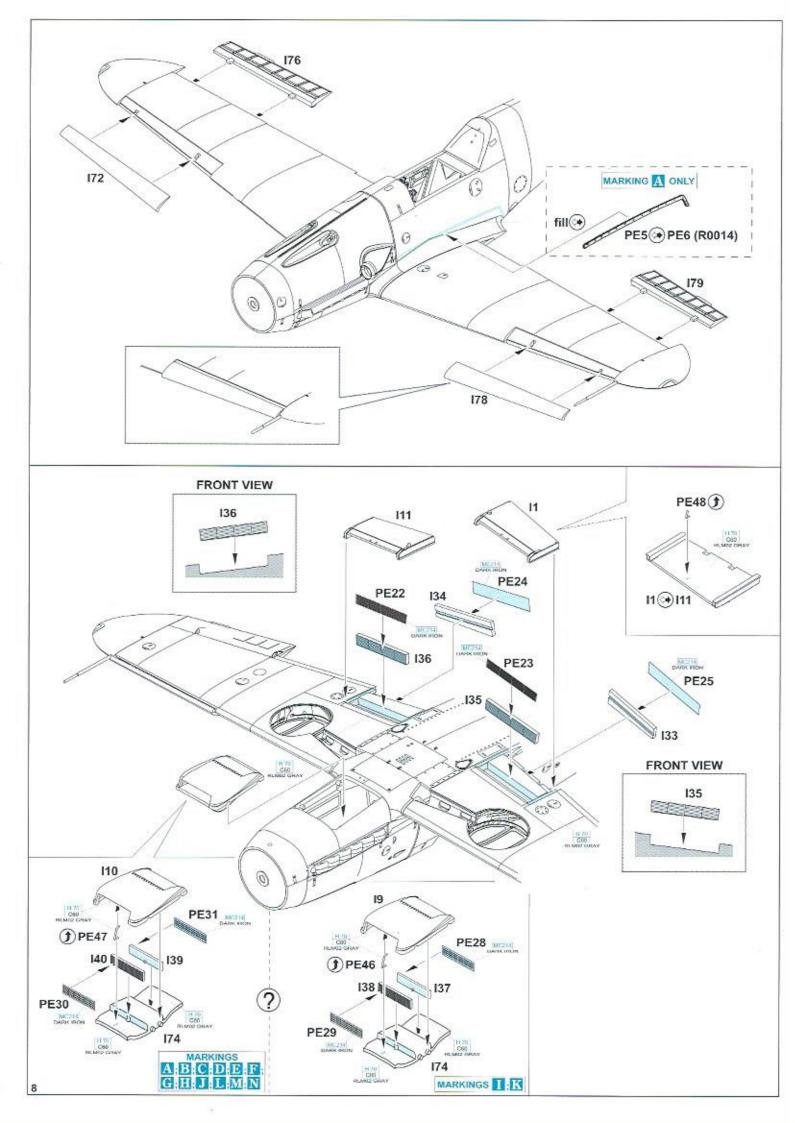


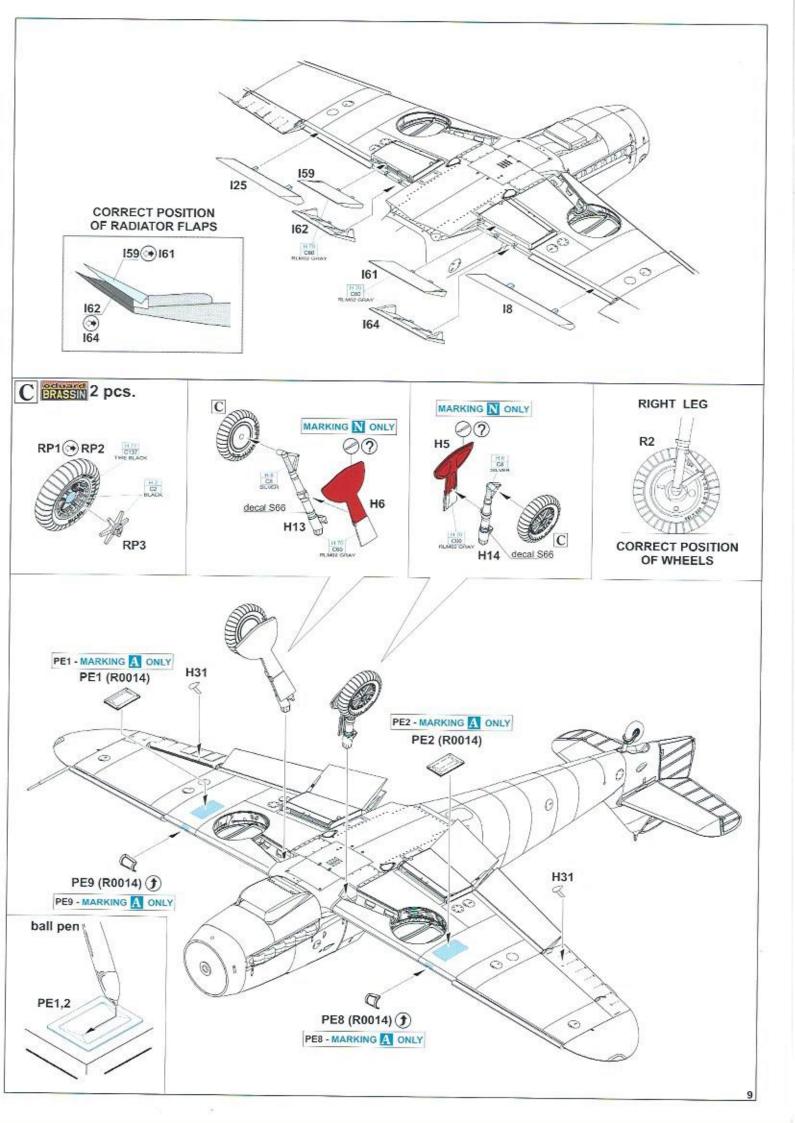


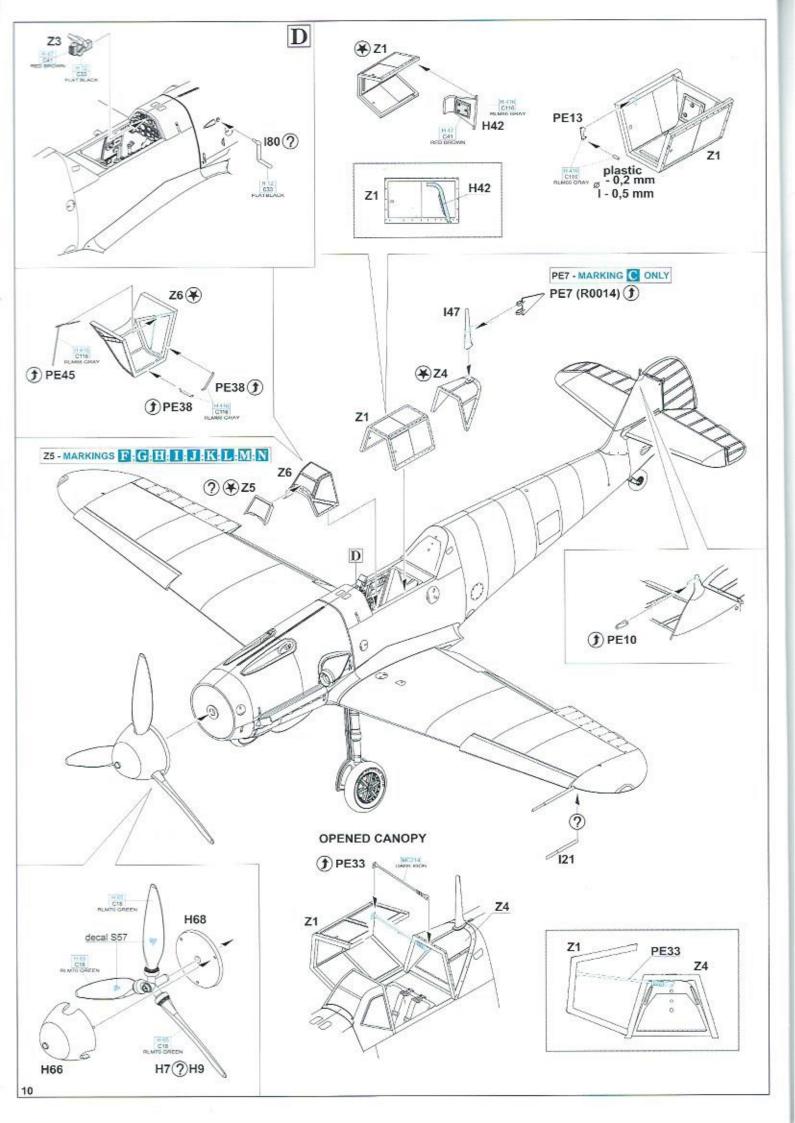


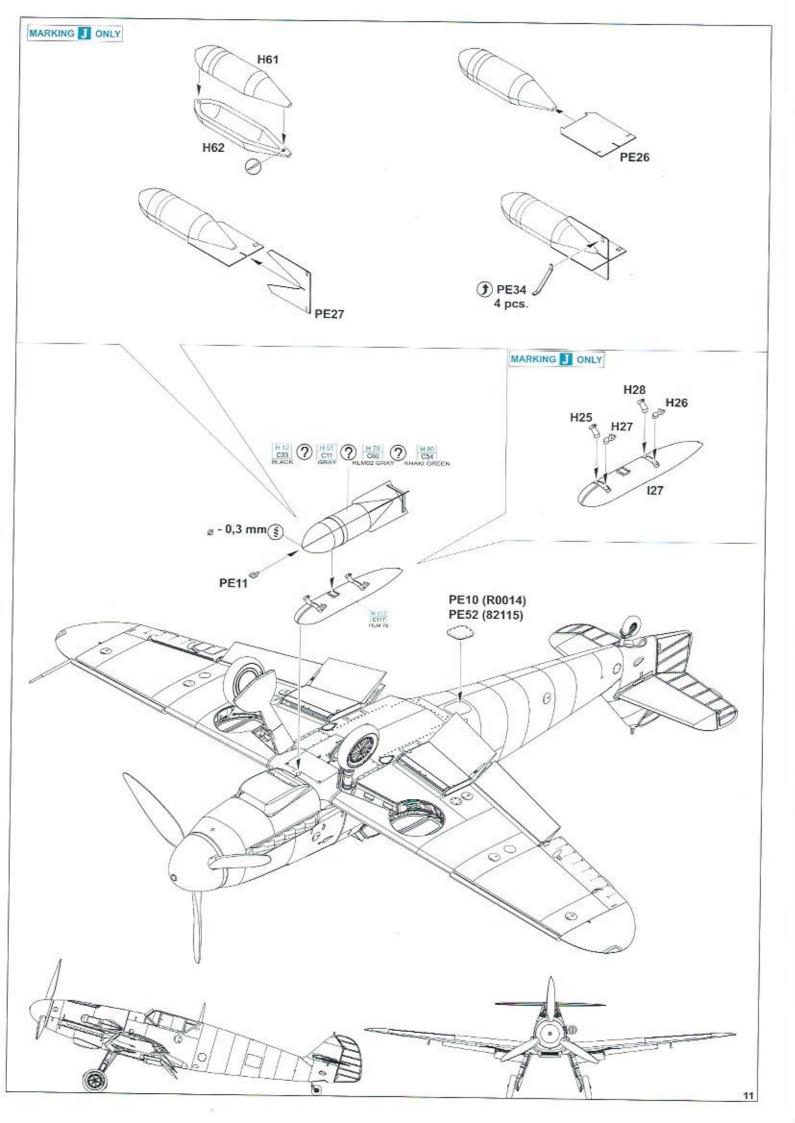




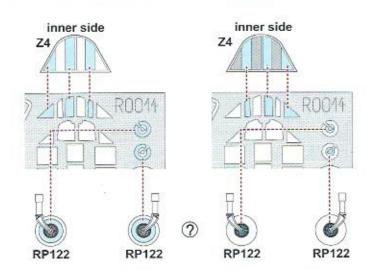


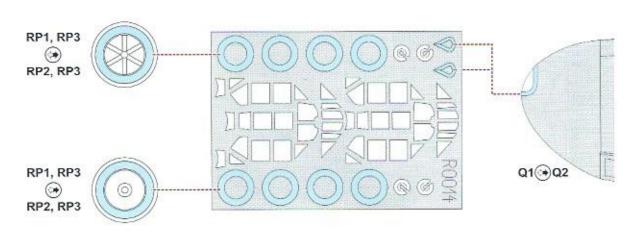


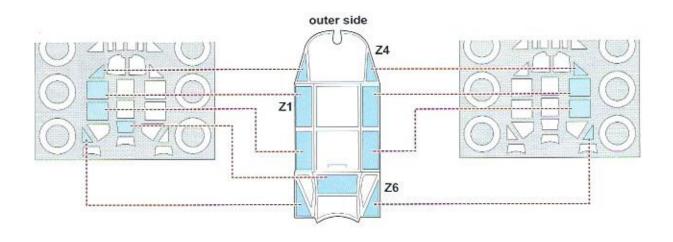


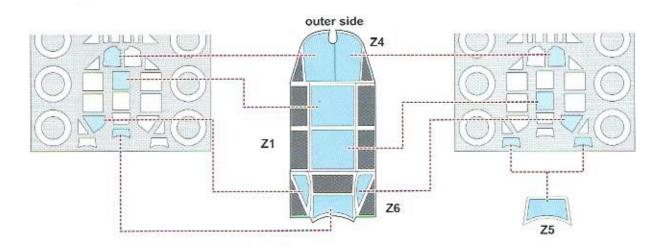






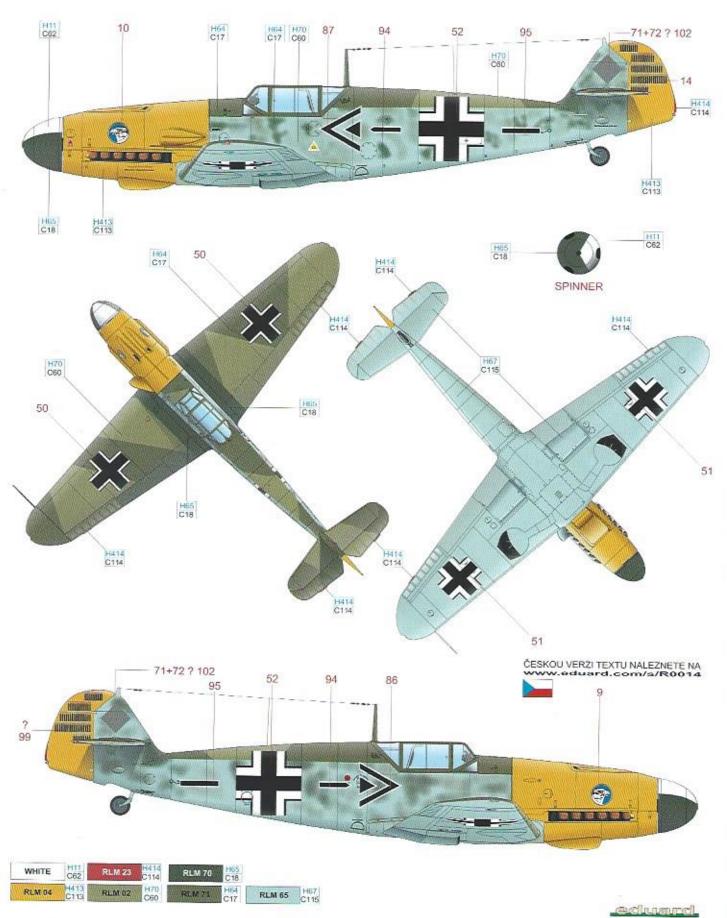






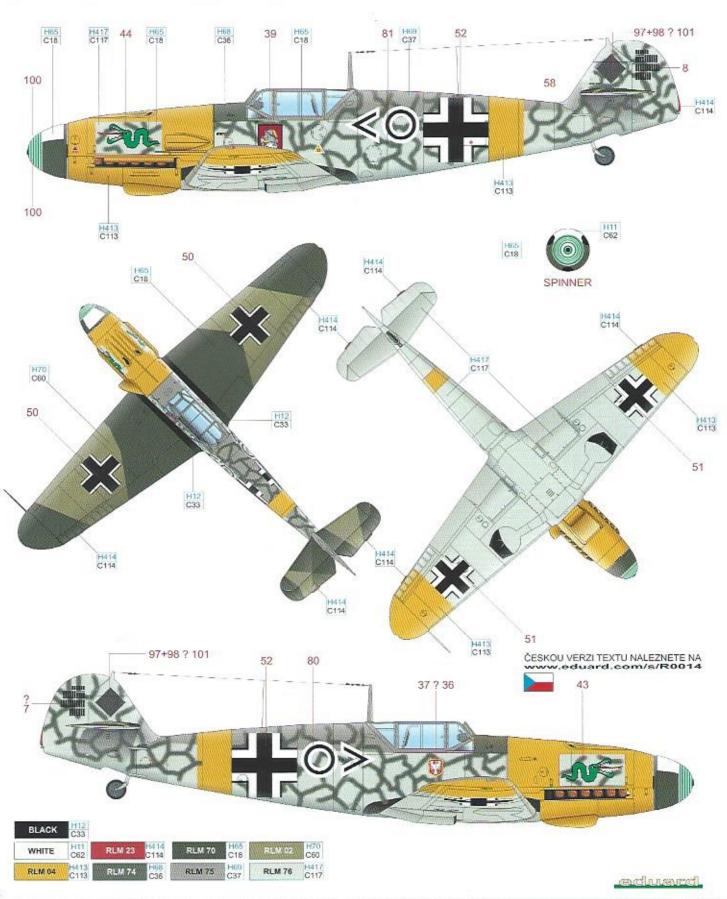
### A Bf 109F-1, Obstlt. Werner Mölders, Stab JG 51, Krefeld, Germany, June 1941

Werner Mölders, commonly nicknamed 'Vati' (Daddy), became an ace already during the Spanish Civil War. He was the first to reach the magical number of one hundred kills, and was there for the origins of the 'four finger formation'. During the early phases of the war, when his kills were quickly accumulating, he became a favourite of the Third Reich propaganda machine. During his career, he was awarded the Knight's Cross with Oak Leaves, Swords and Diamonds. Due to Nazi leadership concerns over his possible capture, or death, he was appointed Fighter Inspector and was removed from Eastern Front service. His life ended on November 22, 1941 in a crash of an He 111, in which he was a passenger, in a storm. He was on his way to the funeral of Ernst Udet. His tally ended at 115 kills. The illustrated aircraft was flown by Werner Mölders in the summer of 1941 during a downtime as the unit prepared for Operation Barbarossa (the attack on the Soviet Union). The aircraft carried a camo scheme from the first half of 1941, when the top surfaces were sprayed RLM 71/02, and the lowers in RLM 65. The engine cowl sports the unit marking of JG 51, and the rudder displays the pilot's score.



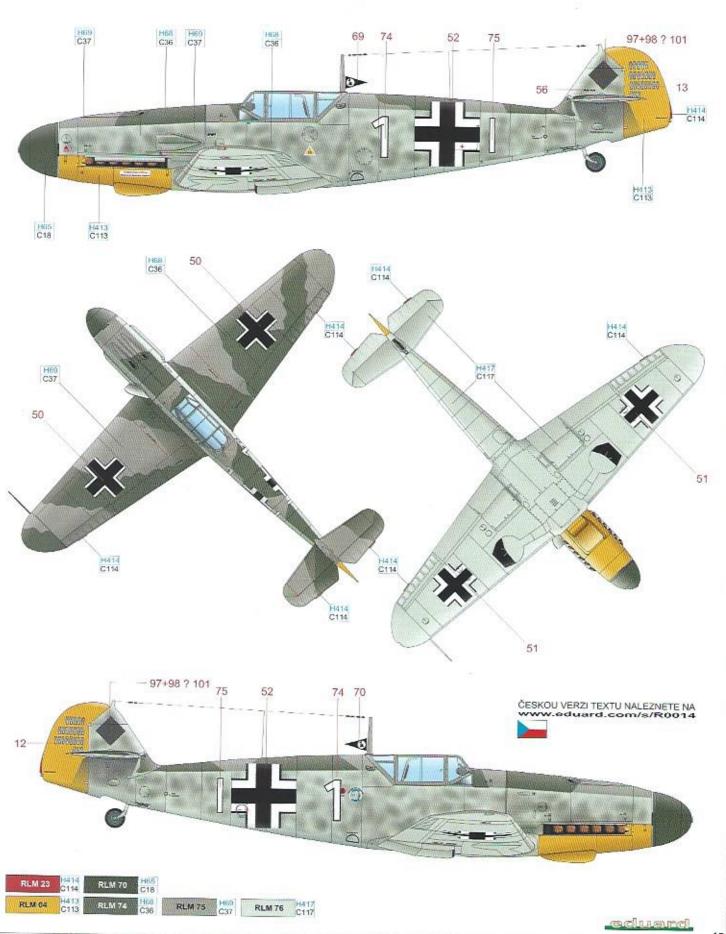
# Bf 109F-2, W. Nr. 6601, Lt. Detlev Rohwer, Stab I./ JG 3, Byelaya Tserkov, Soviet Union, August 1941

Rohwer's fighter pilot career started during the Battle of France, in which he took part as a member of L/JG 3. He served in the ranks of JG 3 throughout the entire war. He was several times shot down and was several times severely wounded, but he always recovered and carried on flying. Except for when his career, and ultimately his life, ended on March 29th, 1944, when his Bf 109G-6 was hit by defensive fire from a B-17. He had to set down, and P-38s in the area were bent on finishing him off. During their attack, Rohwer was seriously wounded. His lower limbs had to be amputated, but he nevertheless succumbed to his injuries the next day. He shot down a total of 38 enemy aircraft, and was awarded the Knight's Cross. The illustrated aircraft was flown by Detlev Rohwer during the summer of 1942. The wing camouflage was made up of RLM 70/02 while the fuselage had already been sprayed in RLM 74/75. The sides of the fuselage were covered by irregular snakes of RLM 70. The aircraft markings were supplemented by the typical yellow quick identification aids carried by aircraft serving in the East, a fuselage band, wingtips and engine cowl. The side of the cowl sports the Tatzelwurm, the unit marking of L/JG 3 and Rohwer's personal emblem of the Götz von Berlichingen knight below the cockpit. The left side probably carried the Coat of Arms of the City of Frankfurt on the Mohanen (the hometown of L/JG 3's CO, Hans von Hahn), or of the City of Kiel, the hometown of Detlev Rohwer.



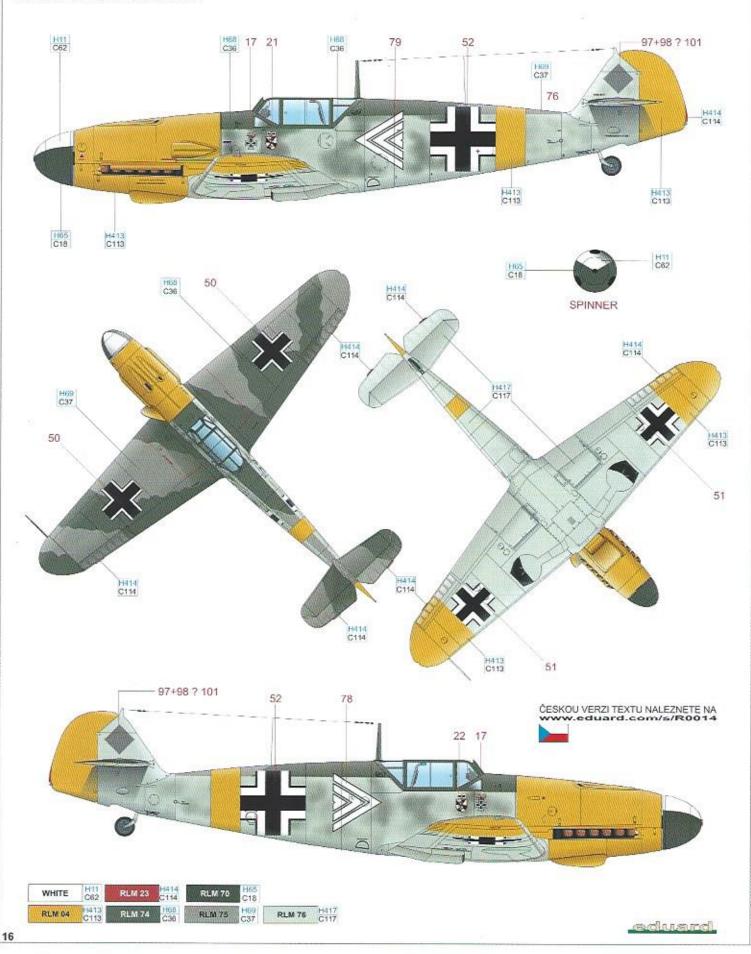
## C Bf 109F-2, W. Nr. 6720, Oblt. Egon Mayer, 7./ JG 2, France, September 1941

Egon Mayer fought the entire Second World War as a member of the famous JG 2. He began his career as a fighter pilot at the end of 1939 in the Battle of France, continued in the Battle of Britain, and later over occupied France until March 2nd, 1944, when it was ended by pilots of the 358th FS in P-47 Thunderbolts, that shot him down while on an escort mission near Montmedy in France. Over the course of 353 combat flights, he downed 102 aircraft, all over the Western front. He posthumously awarded the Knight's Cross with Oak Leaves and Swords. The depicted aircraft was flown by Mayer over the second half of 1941 during the defence of occupied French territory against British pilots. This 'F' was painted in RLM 74/75/76, typical for Luftwaffe fighters of the time.



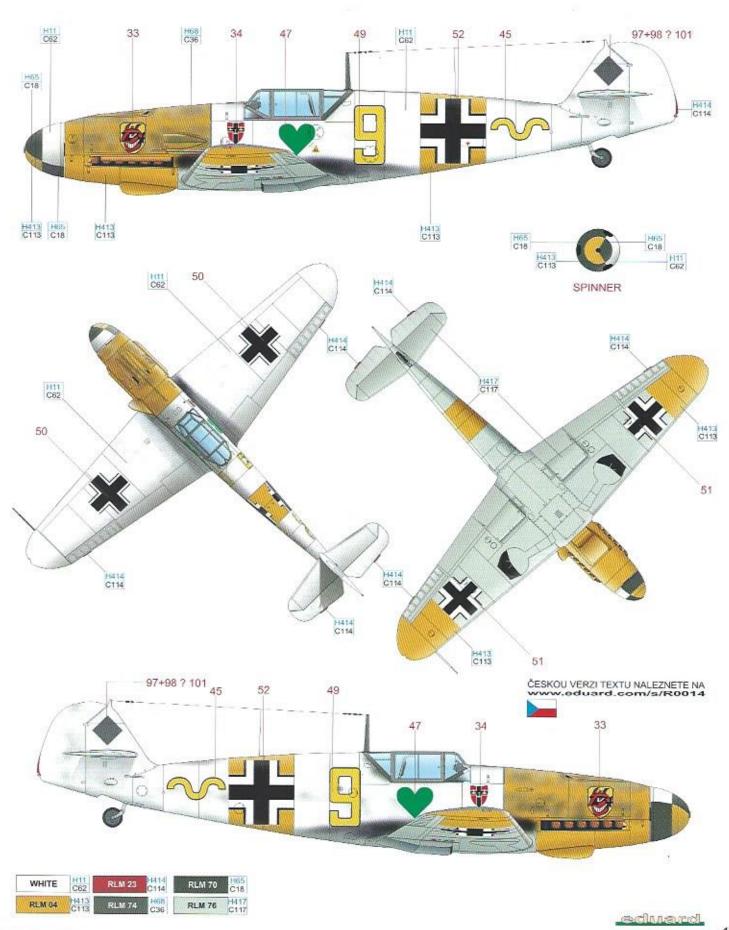
# D Bf 109F-2, W. Nr. 8117, Maj. Günther Lützow, Stab JG 3, Schatalowka, Soviet Union, October 1941

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



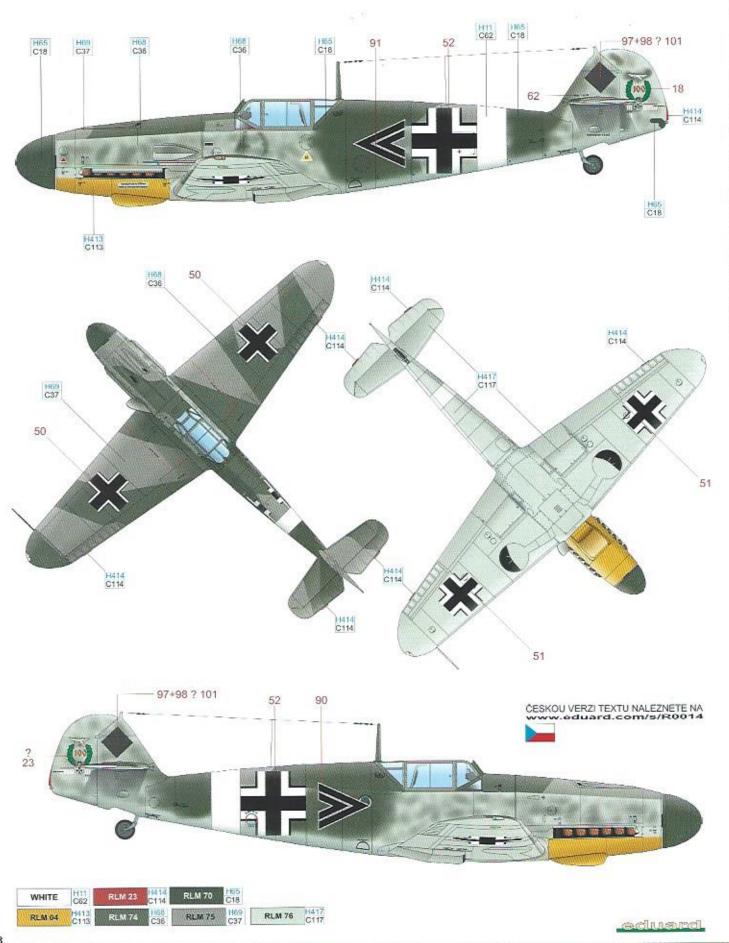
# E Bf 109F-2, W. Nr. 7186, Oblt. Hans-Ekkehard Bob, 9. JG/54, Siverskaya, Soviet Union, December 1941

Hans Ekkehard joined the Luftwaffe in 1936 and served up to the end of the war. He ended the war as a member of Jagdverband 44, units equipped with the Me 262 Schwalbe. Over the course of some 700 sorties, he shot down sixty enemy aircraft, and was awarded the Knight's Cross. After the war, he first worked on a farm, afterewhich he formed his own transportation company, and in 1956 he formed the world-famous firm BOMAG. He flew the illustrated aircraft in the winter of 1941/42 in the northern section of the Russian Front, where in an effort to better mask their aircraft when on the ground, support personnel sprayed them in a washable white paint on the upper surfaces. The aircraft carries the typical identifiers carried on the Eastern Front - a yellow fuselage band and yellow wingtips.



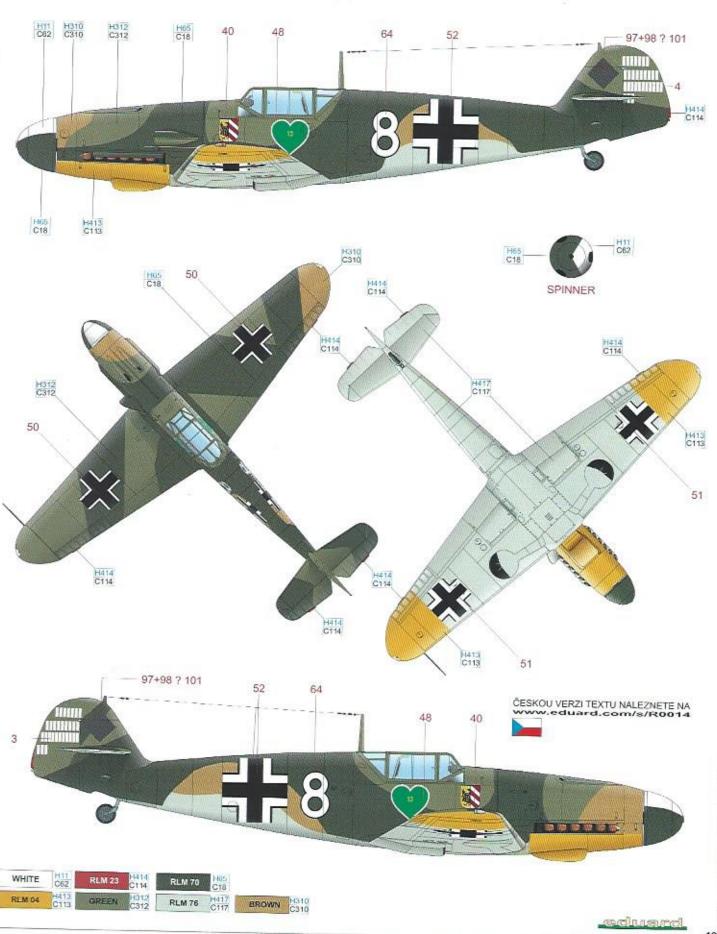
### F Bf 109F-4, W. Nr. 13376, Hptm. Heinz Bär, Stab I./ JG 77, Comiso, Sicily, July 1942

Heinz 'Pritzl' Bär was one of the Luftwaffe fighter pilots that fought on all of the main battle fronts of the Second World War. He took part in over a thousand combat sorties, claiming 220 kills. He himself was shot down on 18 occasions, and for his accomplishments, he was awarded the Knight's Cross with Oak Leaves and Swords. After the war, he continued flying as a test pilot of sport aircraft, and was killed on April 28, 1957 during a routine flight in an LF-1 Zaunkönig. He flew the illustrated aircraft as the CO of 1./JG 77 over the Mediterranean. The aircraft carried a classic Luftwaffe scheme comprised of RLM 74/75/76. The factory radio codes were oversprayed in a dark colour, probably RLM 70. The white fuselage band identified aircraft fighting on the Southern front.



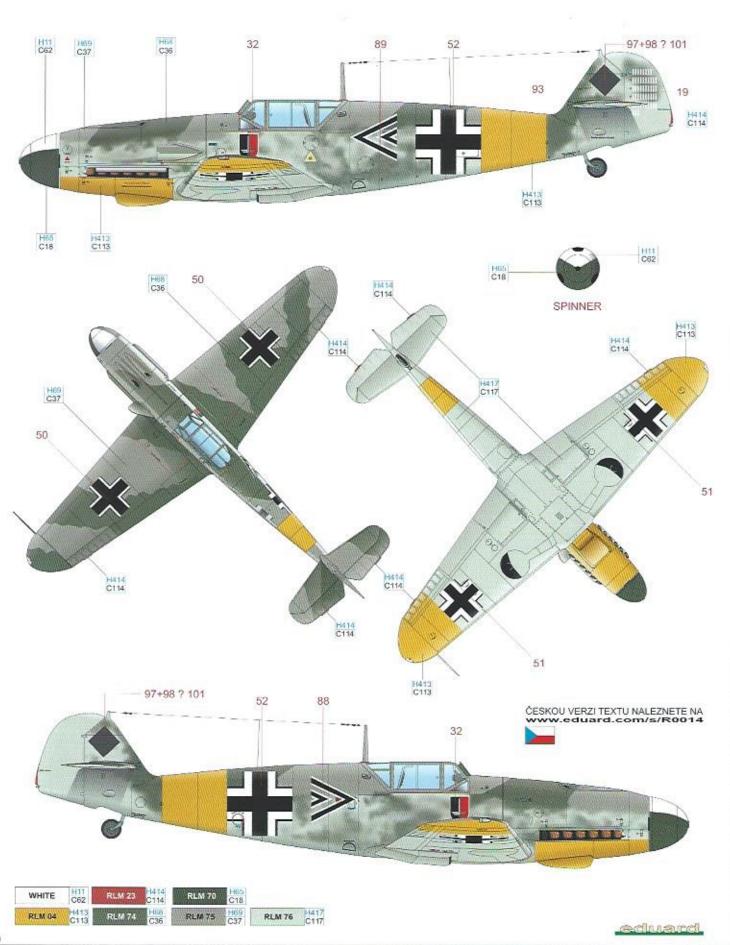
# **G** Bf 109F-4, Walter Nowotny, 3./ JG 54, Krasnogvardyeysk, Soviet Union, July 1942

A German fighter pilot of Austrian decent and a native of Gmunde situated near the border with Czechoslovakia, Walter 'Nowi' Nowotny was a holder of the Knight's Cross with Oak Leaves, Swords and Diamonds, and shot down 258 enemy aircraft over the course of 442 combat sorties. He was killed in an Me 262 Schwalbe in combat with American escort fighters near an airfield at Hesepe on November 8th, 1944. With this Friedrich, he fought against the Soviets, claiming one kill after another. The aircraft carried a non-standard scheme consisting of two greens and one brown on the upper surfaces, probably RLM 71 and its combination with RLM 62 or 02 or russians colors. The lower surfaces remained in RLM 76. The wingtips were painted in RLM 04 Yellow on the lower surfaces, which was an identification marker of aircraft serving on the Eastern Front.



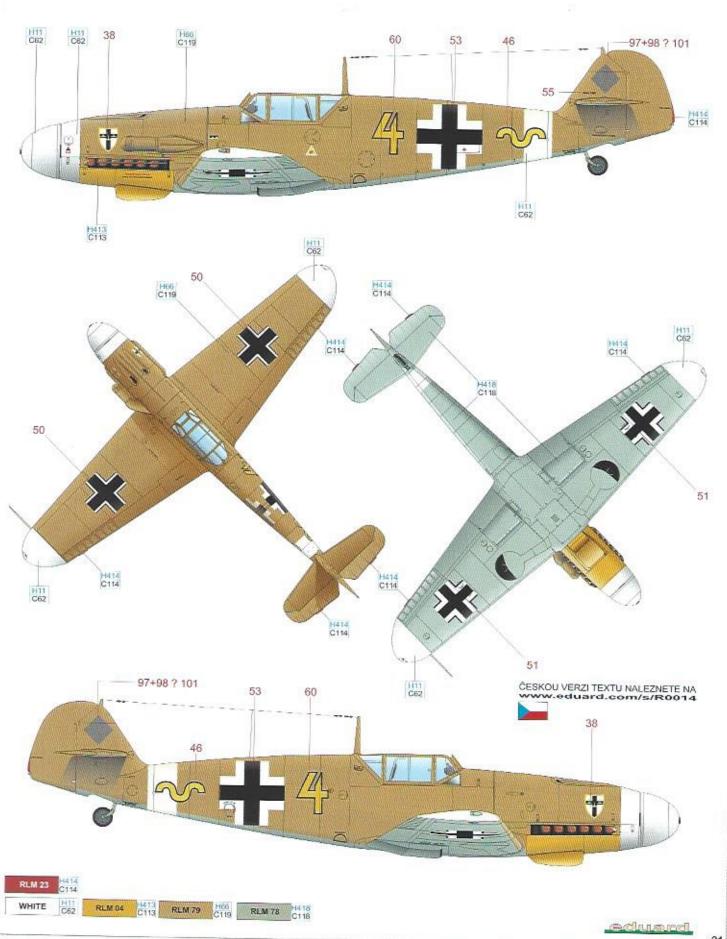
# H Bf 109F-4, W. Nr. 13744, Oblt. Johannes Steinhoff, Stab II./ JG 52, Klin, Soviet Union, December 1941

Johannes 'Macky' Steinhoff was one of not many German Second World War pilots that served from the very beginning of the conflict and survived the war. Over the course of the war, he claimed a total of 176 victories and was awarded the Knight's Cross with Oak Leaves and Swords. After the war, he served in the resurrected Luftwaffe and later became its commander. Later, he would go on to lead all of the allied air assets in central Europe, Chief of Staff of the Luftwaffe and subsequently NATO Chairman. He died of complications brought on by a heart attack on February 21st, 1994. The camouflage scheme of this aircraft used by the CO of II./JG 52, 'Macky' Steinhoff, in the freezing cold Russian winter was composed of RLM 74/75/76. The Eastern Front recognition markings made up of the yellow fuselage band and wing tips are carried.



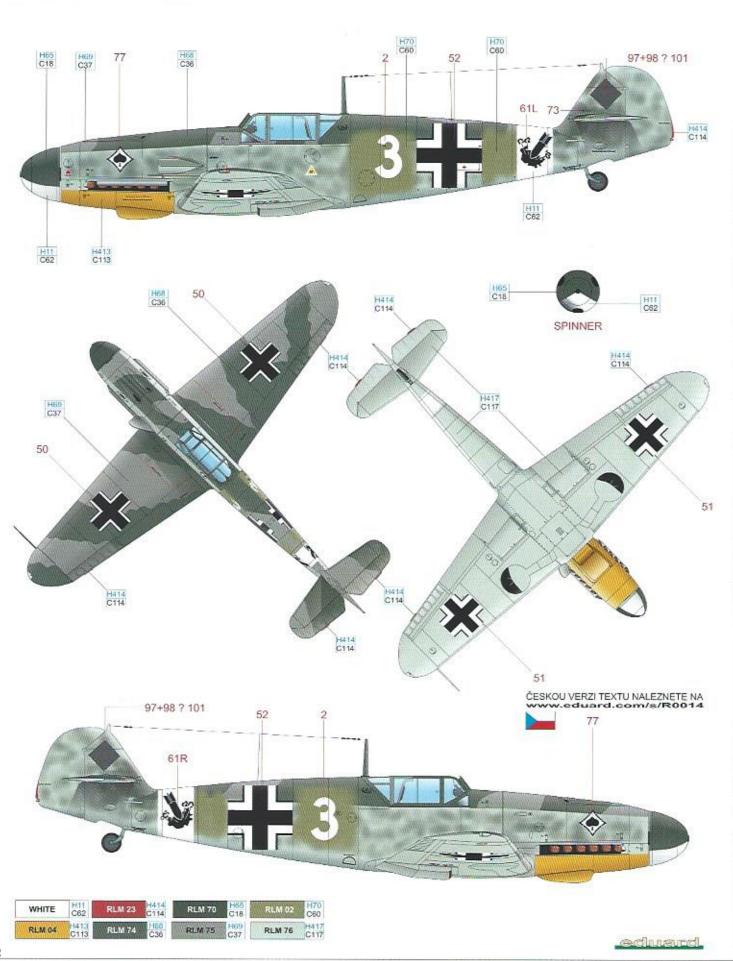
## Bf 109F-4/Trop, W.Nr. 7420, Uffz. Andreas Kühn, 9./ JG 27, Daba, Egypt, November 1942

After the transfer of Luftwaffe units to North Africa, its leadership was tasked with dealing with the problem presented by finding fighters that would be capable of enjoying superiority over the British. After provisional use of the Bf 109E, the Bf 109F-4 entered the arena with tropical air filters, larger oil coolers, along with other modifications for service in the hot African climate. The aircraft were camouflaged in RLM 79 on the upper surfaces, and the lower surfaces were in a light blue, RLM 78. It was no different for this aircraft, flown by Andreas Kühn, who made a forced landing with a sick engine on October 15th, 1942 near Alexandria. He is listed as MIA ever since.



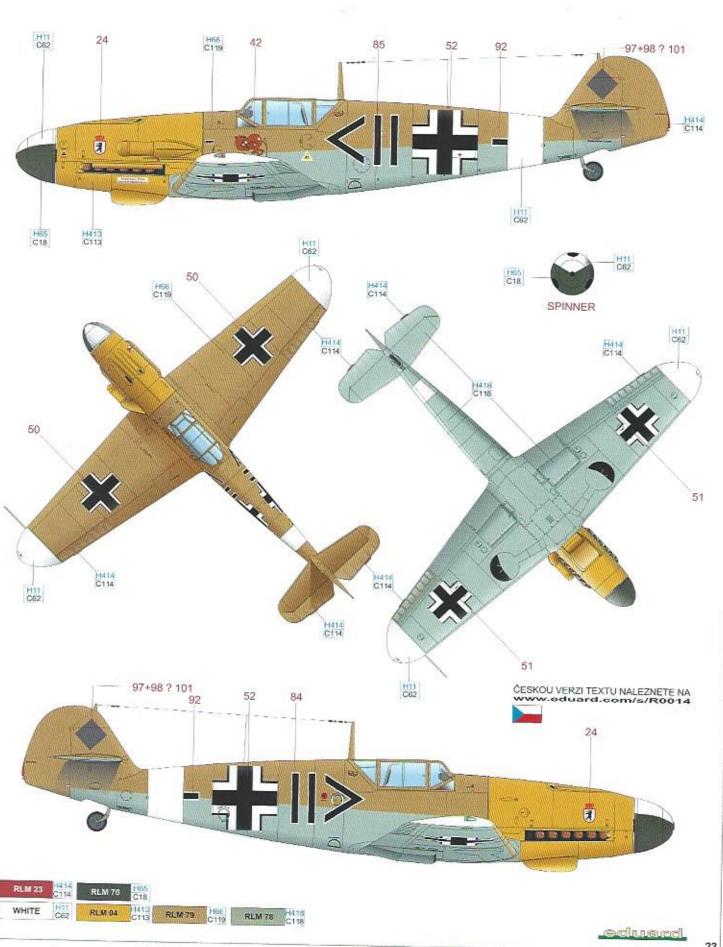
#### Bf 109F-4/B, W. Nr. 7473, Uffz. Felix Sauer, 10.(Jabo)/ JG 53, San Pietro, Sicily, March 1942

San Pietro was home to 10.(Jabo)/JG 53 at the beginning of February 1942. It was tasked with airfield attacks, as well as attacking other military targets, on the island of Malta. Dr. Felix Sauer was a member of this unit, and due to engine trouble, was forced into an emergency landing on the shores of Sicily near the town of Pozzallo flying this aircraft on March 27th, 1942. The aircraft carried the standard day camouflage scheme of Luftwaffe fighters at the time, made up of RLM 74/75 on the upper surfaces and RLM 76 on the lowers. The white fuselage band was the standard identifier of aircraft seving in the Mediterranean. The band carries the marking of 10.(Jabo)/JG 53. The factory codes are sprayed over with, probably, RLM 02.



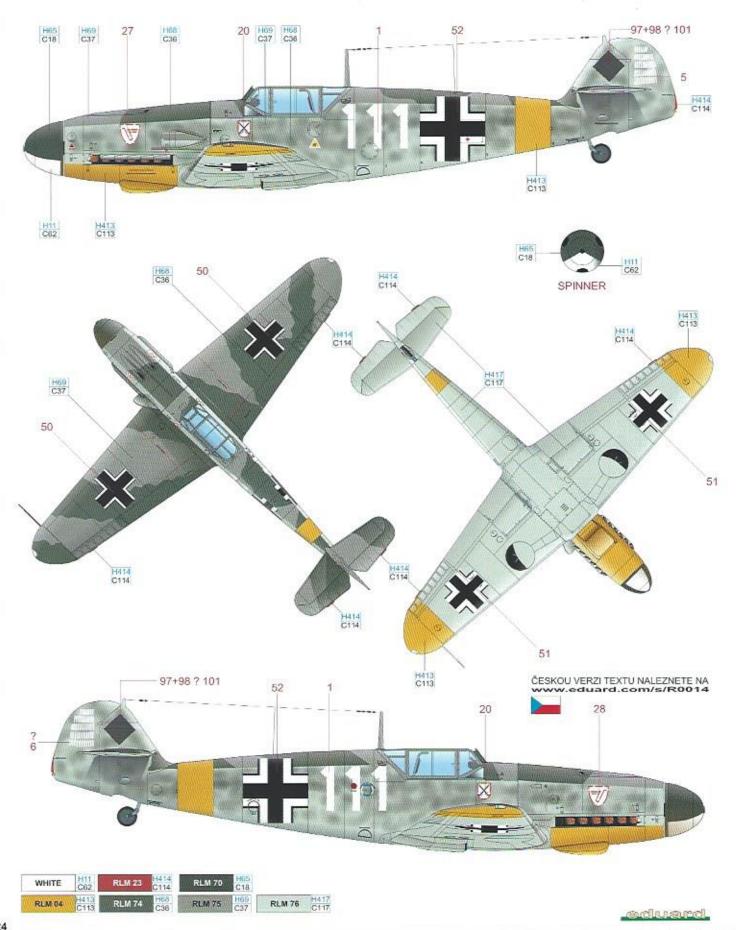
## Bf 109F-4/trop, Stab II./JG 27, Libya, February 1942

Aircraft serving in the North African environment needed different camouflage protection from enemy reconnaissance flights and during combat itself than that needed in Europe. For this reason, aircraft typically received upper surface paint of RLM 79 Sand together with a bottom and side surface colour of RLM 78 Light Blue which more appropriately corresponded to the African sand and sky colours. This Friedrich flown by members of the Second Gruppe JG 27 carries a caricature of a British lion trying to avoid a German round below the cockpit.



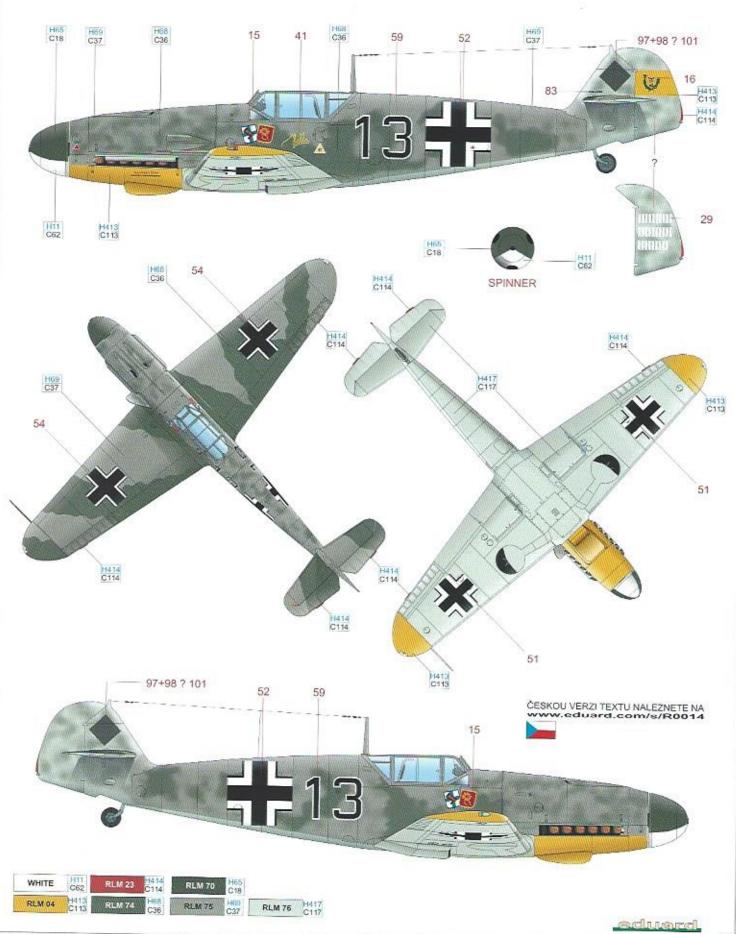
#### Bf 109F-4, Obit. Helmut Mertens, 1./ JG 3, Frolov, Soviet Union, August 1942

A recipient of the Knight's Cross, Helmut 'Pitt' Mertens began his military career in 1937 when he joined the Luftwaffe. Within its service, he went through the Battle of France, Britain, and over the vast expanse of the Soviet Union. Subsequently, he took part in the Defence of the Reich against American bomber raids. On February 20th, 1944 he got his final kills, when he first bagged a B-17 and then downed a B-24 in a taran ramming attack. During the taran attack, he was injured, and after recuperating, he would only serve in training units. In aerial combat during the war, he claimed 97 kills. His aircraft, with which he flew combat over Russia, carried a nonstandard three digit fuselage code. Combat units tended to carry a maximum of two digit codes, and three digits were reserved for training unit aircraft. This Friedrich is camouflaged in RLM 74/75/76 with yellow identifiers used on aircraft on the Eastern Front.



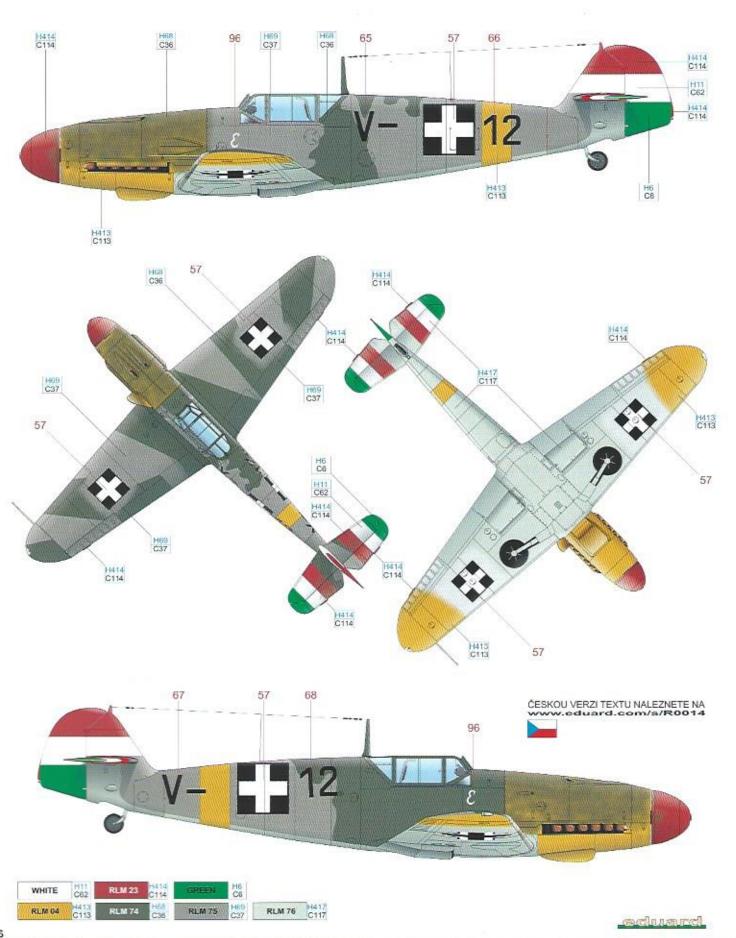
## M Bf 109F-4, W. Nr. 13169, Fw. Heinrich Bartels, 8./ JG 5, Petsamo, September 1942

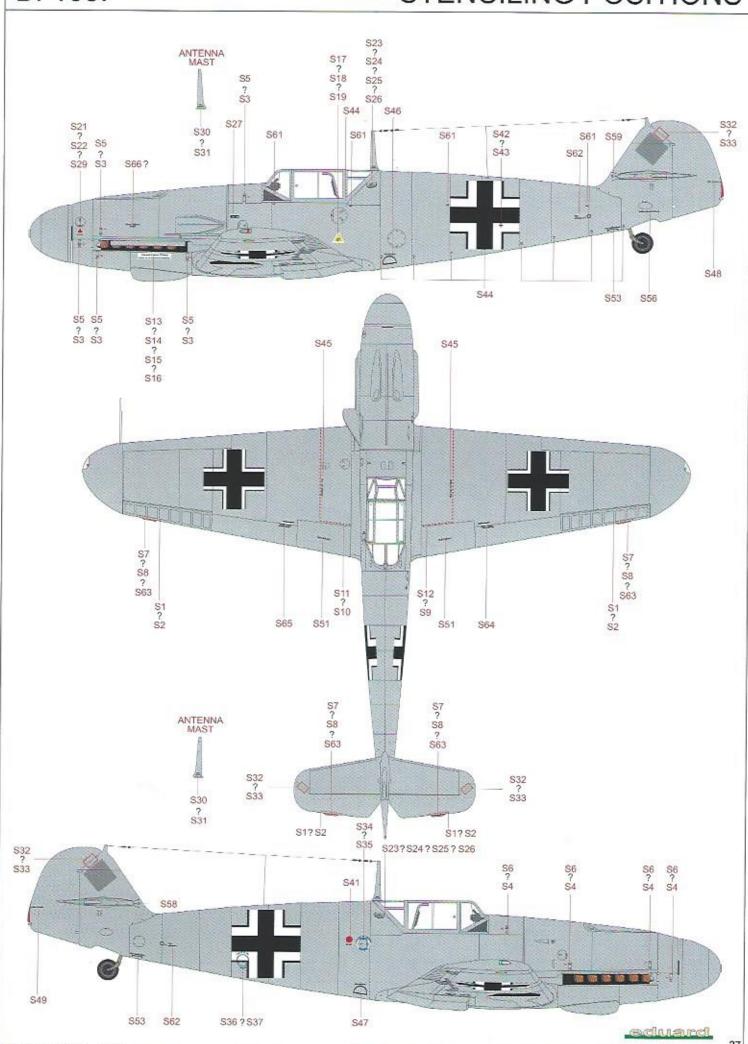
The Austrian Heinrich Bartels, a German ace with 99 kills acquired over around 500 combat sorties giving him the Knight's Cross, served in all fronts on which Luftwaffe units were engaged. Half of his kills were gained in the north while with JG 5 against Soviet pilots. He met his fate on December 23, 1944 against P-47s of the USAAF's 56th FG in the Battle for the Ardennes. The wreck of his aircraft was discovered in 1968, together with an unused parachute near the town of Bad Godesberg in Germany. He flew the pictured aircraft in the second half of 1942 during fighting in northern Finland. The aircraft was corresponding to his score. After Bartels was awarded the Knight's Cross, and after reaching a kill total of 45, his crewchief painted the award on the rudder



#### N Bf 109F-4, Hdgy. György Debrödy, 5/2. vadászszázad, Uman, Soviet Union, Spring 1943

German allies also took part in the battle against the Soviets. Among them were pilots of the Royal Hungarian Air Force - Magyar Királyi Honvéd Légierö. György Debrödy flew 173 combat sorties on the Eastern Front and shot down 18 enemy aircraft. In mid-1944, he was called back to Hungary, where he continued his fight against the allies. On November 16th, 1944, he was seriously injured in a head-on attack with a Yak-9 and did not return to active combat duty. He was, however, credited with the kill. Hungarian Friedrichs flew in the same camouflage as their German counterparts. The scheme was made up of RLM 74/75/76 with yellow Eastern Front quick identification markings. Hungarian machines also carried the three national colours on the tail surfaces.





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