

LUFTWAFFE COLOURS
Volume Four Section 3



JAGDWAFFE

Christer Bergström
with Martin Pegg

**THE WAR IN
RUSSIA**

**November 1942-
December 1943**



1943

WAR IN RUSSIA

"...a Schwarm of Me 109s set upon a lone Il-2. One by one the fighters emptied their guns into the Russian machine at point-blank range. The Il-2 continued to fly on, untroubled by the storm of bullets and shells. I was astonished. I never saw any aircraft that could absorb battle damage and still fly as did the Il-2."

Dietrich Hrabak, JG 54 and JG 52.

"The Russians [...] caught on to our tactical formations very fast and copied them. It became evident to us that they soon became very confident and powerful."

Günter Rall of JG 52 on VVS pilots.

"...I am very tired, for we have to fight against an enemy which has a numerical superiority we have not experienced in Russia before; large squadrons of bombers with many fighters."

Günter Schack of 9./JG 51, describing sorties in August 1943.



Ominous Signs

By the autumn of 1942, the *Luftwaffe's* fighter arm had demonstrated a destructive power in air combat, that in qualitative terms, was absolutely unchallengeable. Nowhere had this been demonstrated more amply than on the Eastern Front, up to that time the scene of the greatest air combat, and the young pilots of the *Jagdwaiffe* were undoubtedly the idols of the Third Reich and its propaganda machine. Serving in a branch of the armed forces where all that mattered was the number of aerial victories, they had broken all previous records in the summer of 1941 while operating against the Soviet Air Force, the VVS, and had been rewarded with flattering attention and decorations.

Baron Manfred von Richthofen, the famous 'Red Baron,' had set the norm during the First World War with his emphasis on the 'modern art of manhunt,' namely individual air combat with the destruction of the opponent being the sole purpose of the mission. For almost 25 years his personal record of 80 victories had not been bettered, and when Hitler unleashed his attack against the Soviet Union on 22 June 1941, almost two years into the Second World War, von Richthofen's achievement was still unbeaten. However, a few weeks later, that record became history when *Obstlt.* Werner Mölders reached 100 victories and set a new standard for the future of air warfare. In the following weeks and months, a whole series of incredibly large personal successes in aerial combat were reported by various German fighter pilots on the Eastern Front, and before the end of the year four *Jagdwaiffe* pilots had reached, or surpassed, the 'Red Baron's' previous record.

The *Jagdwaiffe's* astronomical successes on the Eastern Front in 1941 had been attained by a *cadre* of pilots, who had been very well trained and flew the best fighter aircraft in the world. In addition, they had at that time gained a higher level of combat experience than the pilots of any other nation, but when the *Luftwaffe* attacked Russia in June 1941, it challenged the world's next strongest air force, and the often-expressed assessment that the VVS's technical equipment was inferior is valid only in comparison with the *Luftwaffe*. Most VVS aircraft types were, even in June 1941, equal or above average when compared with the majority of other air forces, and the tactics favoured by the VVS airmen conformed to those employed at the beginning of the war by the RAF and the French Air Force. Yet in a matter of weeks the *Luftwaffe* almost annihilated its adversary in the East. Apart, perhaps, from some of the extremely self-assured German fighter pilots themselves, such tremendous successes had been entirely unexpected and, conversely, no one – apart from the Soviets themselves – expected the remarkable recovery made by the whole Red Army during the following winter.

The *Jagdwaiffe* pilots surprised everyone even more, when they not only repeated but in fact surpassed these astronomical successes in 1942. On the eve of the German summer offensive on the Eastern Front in 1942, there were 11 German aces each with more than 100 victories, and between July and October 1942, another 18 pilots would exceed the 100-victory mark, and all of them flew on the Eastern Front. The previous standard of 100 victories was again pushed forward when JG 52's *Geschwaderkommodore*, Major Gordon Gollob, became the first to achieve 150 victories in August 1942, and as early as the following month, in the stiff fighting over Stalingrad, *Hptm.* Hermann Graf of 9./JG 52 revolutionised air warfare by becoming the first pilot to shoot down over 200 enemy aircraft.

All of this took place despite the fact, that since June 1941, the VVS had undergone some considerable changes. The daylight use of large formations of unescorted medium bombers, for example – one of the main reasons for the huge *Jagdwaiffe* victories in the summer of 1941 – had been stopped, and the old generation of Soviet aircraft, Polikarpov I-16 fighters and SB bombers, although still fairly modern compared with most other air forces at that time, had been completely outclassed by the standard German fighter, the Messerschmitt Bf 109 F, and were largely replaced by more modern types. As for fighter tactics, the Soviets learned from the enemy and abandoned the individual fighting pattern in favour of pairs and fours operating together in the same way as the *Jagdwaiffe's* *Rotte* and *Schwarm*. All of these measures were undoubtedly significant improvements.

Yet the Germans possessed an even better aircraft in the new Messerschmitt Bf 109 G-2, the 'Gustav', which had been introduced on the Eastern Front in July 1942. This machine, undoubtedly superior to any other contemporary fighter aircraft, became the *Jagdwaiffe's* standard fighter on the Eastern Front in late 1942. The Bf 109 G-2's Daimler-Benz DB 605 A engine produced 1,475 hp, whereas the DB 601 E engine of its predecessor, the Bf 109 F-4, had an optimum 1,350 hp and the older Messerschmitt Bf 109 F-2 – still in service with JG 5 and JG 51 in the autumn of 1942 – was powered by a DB 601 N engine of 1,175 hp. Thus, the 'Gustav' signified an important leap forward in

engine power and later versions introduced on the Eastern Front in 1943, the Bf 109 G-4 and G-6, also featured improved radio equipment and a more powerful armament.

The Messerschmitt Bf 109 F and G-2, however, suffered on the Eastern Front from three main shortcomings. One was that it had a comparatively limited armament, its standard weapons comprising only one 15 mm or 20 mm automatic cannon and two small-calibre machine guns. This proved inadequate, particularly when the Soviets put more and more of their heavily armoured Ilyushin Il-2s into action, and to meet demands to combat this tough ground-attack aircraft, the so-called 'Gondola' was developed. This consisted of a 20 mm MG 151/20 in a detachable mounting, one of which was mounted under each wing. When introduced in the summer of 1942, it was an immediate success, although the weight of these weapons also had a detrimental effect on the Bf 109's flying characteristics, an increasingly important consideration when the quality of the Soviet fighter pilots started to improve. A temporary solution was found in the Bf 109 G-6, in which the two 7.92 mm machine guns mounted above the engine were replaced by two 13 mm MG 131 machine guns, a heavier concentration of weapons which allowed the underwing gondolas to be deleted.

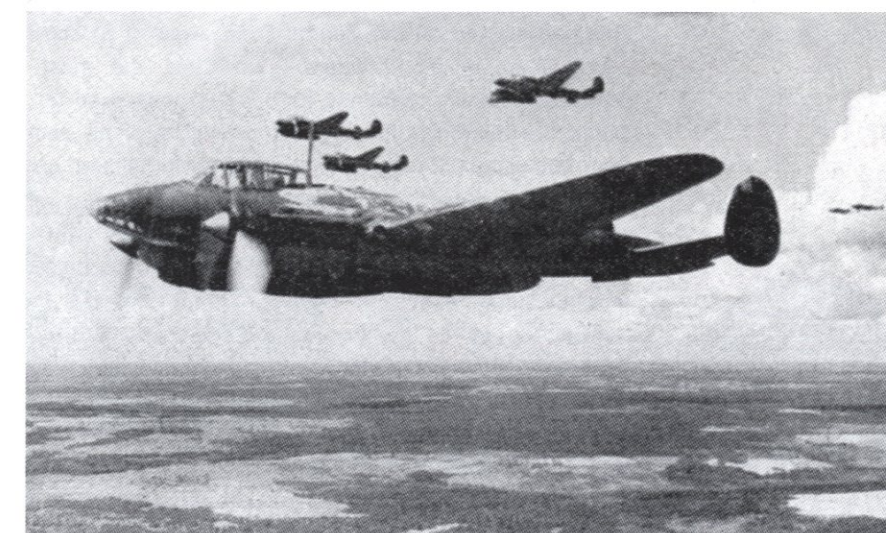
A second shortcoming inherent in all versions of the Messerschmitt 109 was its weak undercarriage. When taxiing, the Bf 109 was, in *Jagdwaiffe* pilots' slang, absolutely "criminal", i.e. lethally dangerous even during ideal conditions, but on the Eastern Front conditions were invariably far from ideal. There, the war was crude and fought under highly improvised conditions, and at the same time the often rapidly changing frontlines created a need to quickly move units forward, particularly the *Jagdgruppen*, whose Bf 109s had a fairly limited service range. This forced the *Luftwaffe* commanders to deploy many Bf 109-equipped units to basic airstrips where operating conditions for this type of aircraft were particularly unsuitable. As a result, a large number of Bf 109s suffered undercarriage failure and, if not completely written off, were put out of commission for long periods of time.

Another feature that rendered the aircraft unsuitable for operations on the Eastern Front was its liquid-cooled engine. According to the Soviet Army's manual, ground troops were instructed to open fire with any weapon, even small arms, on all enemy aircraft observed within firing range, and as any German airman who served on the Eastern Front will confirm, crossing the front line at low level meant running a gauntlet of small arms fire. Most fighter operations in the East took place below 15,000 feet but a great number were carried out at a considerably lower level, so that when pursuing ground-strafting Il-2s, for example, often at little more than tree-top height, the risks involved were very high indeed as even a single well-placed rifle bullet was sufficient to knock down a Bf 109.

Yet, paradoxically, had it not been for the specific nature of the air war on the Eastern Front, the number of Bf 109s totally destroyed in this theatre would certainly have been much higher. In the East, the ground war was characterised by almost constant crisis and both sides were repeatedly forced to call upon their air forces in order to relieve the situation on the ground. The air war in the East was therefore predominantly confined to tactical operations, since the relatively limited number of aircraft, even on the Soviet side, restricted the *Luftwaffe* and the VVS to supporting their respective armies. With both air forces being employed more or less as fire brigades, most of the aerial combats were therefore fought over, or in the immediate vicinity of, the front-lines. As a consequence, many of the German aircraft hit by enemy fire which would have crashed in other circumstances, were often able to glide down behind the front lines and crash-landed in friendly territory.

In this context, the debate concerning the absence of a German strategic bomber offensive against Soviet industrial areas has an interesting and neglected aspect, for if the *Luftwaffe* had undertaken a strategic bomber offensive, there would have been a need for a suitable long-range escort fighter. In the event, no such German fighter aircraft was available, but if there had been such an aircraft, the

BELOW: The Soviet Pe-2 first entered service with the VVS in the summer of 1941 and continued to serve throughout the war as a light bomber, dive-bomber and reconnaissance aircraft. There was also a heavy fighter version which was designated the Pe-3. The aircraft was fast and comparable to the best German aircraft of the day. In this view of a formation of Pe-2s the aircraft nearest the camera still has traces of snow camouflage.





ABOVE:
On 9 November 1942, after accounting for his 117th victory, Eichenlaubträger Lt. Franz-Josef Beerenbrock of JG 51 forced-landed behind enemy lines and was taken prisoner. He survived Soviet captivity.

losses during such long-range missions would definitely have reached levels much greater than those sustained by *Luftwaffe* fighter units operating at shorter range.

Some solutions to the deficiencies of the Bf 109 on the Eastern Front resulted from the introduction of the new Focke-Wulf Fw 190 A fighter in the autumn of 1942. The Fw 190's air-cooled engine made it less vulnerable to hostile fire, and with an armament of two 7.92 mm machine-guns and four 20 mm cannon, it was perfect as an anti-*Shturmovik* aircraft. Moreover, its sturdy undercarriage was much better suited to Eastern Front operations.

Even so, with the introduction of large numbers of Yak-1s and LaGG-3s with more powerful engines, together with the Yak-7B, the all-metal Pe-2 bomber and the heavily-armoured ground-attack Il-2 *Shturmovik*, the technical gap between the *Luftwaffe* and the VVS had already narrowed considerably by mid-1942. Then, in the late summer of 1942, a new fighter, the radial-engined Lavochkin La-5, appeared over the Eastern Front and, just prior to the Soviet counter-offensive at Stalingrad, new two-seat Il-2s featuring a rear gunner, were encountered for the first time.

However, these technical steps forward were eroded by the decline in the quality of Soviet flying personnel caused by very heavy losses and the subsequent reduction in pilot training schemes which were necessary in order to keep pace with losses. Indeed, most new pilots

arriving with front-line VVS units in the summer of 1942 were barely able to take off and land their aircraft.

Meanwhile, their German counterparts had gained a tremendous amount of experience and included veteran fighter pilots possessing a level of skills never previously seen. It was not uncommon for a *Jagdweffe* pilot to have flown over 600 combat sorties and more than a thousand flights, all on the same aircraft type, the Bf 109. These 'Flying Wolves,' as the Soviets dubbed them, were unchallenged experts in handling their fighting machines and, against this background, it is almost unnecessary to point out two other advantages enjoyed by the German fighter pilots. Firstly, contrary to their Soviet opponents, they operated offensively but were free to choose whether or not to accept combat and, furthermore, their aircraft were all equipped with reliable radio transmitters and receivers. Essentially, German fighter tactics were formed around steady radio communication between the different pilots in a formation, whereas most Soviet fighter aircraft were equipped only with radio receivers.

Yet, from the late summer of 1942, there was a tendency for the *Jagdweffe* on the Eastern Front to experience increasing hardship. This had started on the Central Front, west of Moscow, in August 1942 when JG 51 'Mölders' – in 1941 the most successful *Jagdgeschwader* – sustained its heaviest losses so far in the war. During the following four months, three fighter pilots, each with more than 100 victories, were shot down by Soviet fighters and put out of action: Lt. Franz-Josef Beerenbrock (117 victories, PoW), Oblt. Max-Hellmuth Ostermann (102 victories, killed), and Oblt. Viktor Bauer (106 victories, severely injured). These losses resulted from new measures taken by the Soviets to improve their air force and, for the German airmen in service on the Eastern Front, this had already become obvious by the autumn of 1942. Further improvements would be seen in the months ahead, but in Germany, Adolf Hitler and the *Luftwaffe*'s Commander-in-Chief, *Reichsmarschall* Hermann Göring, refused to acknowledge this developing trend. This refusal to face facts is, in itself, an important reason for the subsequent events at Stalingrad.



BELOW:
On 4 November 1942, Lt. Hans-Joachim Meyer of 8./JG 54 achieved the *Geschwader*'s 3,000th victory and is pictured here holding a bottle and a bouquet as well as a certificate to commemorate the event. Five days later, Meyer's 'Black 6', a Bf 109 G-2 W.Nr. 13809, collided with a Soviet fighter during an air battle. Only one parachute was observed and Meyer was reported missing in action. He had been decorated with the German Cross in Gold on 4 August 1942 and at the time of his death had been credited with 53 victories. On 25 November he was awarded a posthumous *Ritterkreuz*.



LEFT AND BELOW: Reinhard Seiler became Kommandeur of III./JG 54 on 1 October 1941 and continued to command the Gruppe until 15 May 1943 when he became Kommandeur of the *Geschwader*'s I. Gruppe. This photograph shows an aircraft of III./JG 54 which, when Seiler first took command, was equipped with the Bf 109 F-2. This was followed by the F-4 and, in August 1942, by the G-2 which it continued to employ until March 1943 when it received the G-4. The aircraft in this photograph, a Bf 109 G-2/R6 heavy fighter equipped with two underwing MG 151 cannon, is marked with the double chevron of a Kommandeur and was flown by Seiler himself. The member of the ground staff walking past the aircraft is well muffled against the cold, but as the machine shows no trace of an earlier snow camouflage, this suggests that it was photographed in late 1942.



Messerschmitt Bf 109 G-2/R6 flown by the Kommandeur of III./JG 54, late 1942

The green uppersurface scheme employed by several units on the Eastern Front consisted of two colours both of which were a blue-based rather than a brownish green as, for example, in the US Olive Drab. The darker of these Eastern Front greens appears to have been the most consistent and was similar to RLM 70 or perhaps slightly darker than RLM 71, whereas the second colour was more varied and seems to have ranged from a dark green, similar again to RLM 71, to a much lighter, brighter green. On this aircraft, the uppersurfaces have been finished largely in the lighter of the two greens with, in this case, patches of a much darker than usual green being confined to the rear fuselage and tail area. The undersurfaces were RLM 76, and an area of the original RLM 76 grey, mottled with 74 and 75, appeared around the swastika.



Attack at Stalingrad

In the late autumn of 1942, after just a few weeks fighting, Stalingrad was already a dismal field of ruins and the scene of thousands of deaths. Since the late summer of 1942, the city that carried Josef Stalin's name, situated on the west bank of the River Volga near the mighty Don Bend, had become the main focus of the whole war. Throughout September, in the largest air campaign ever mounted over such a small area, the *Jagdwaaffe* had totally routed two Soviet air armies. This was where the famous Hermann Graf had ensured his place in aviation history by shooting down his 200th enemy aircraft. This, too, was where JG 53 'Pik As' – mainly through the deadly trio of *Hptm.* Friedrich-Karl Müller, *Oblt.* Wolfgang Tonne, and *Fw.* Wilhelm Crinius – earned a place in Soviet and Russian history that is still valid for, even decades after the war, the 'Pik As' *Geschwader* was still specifically mentioned in their accounts of the battle of Stalingrad.



ABOVE AND ABOVE RIGHT: Before the German invasion of Russia, Stalingrad ranked among the country's greatest industrial cities, but by the autumn of 1942 it was a battleground where every building was contested in bitter hand-to-hand fighting, after which the contestants fought for the rubble. In these bleak views, the scene (ABOVE) shows civilians in a residential part of the city while (ABOVE RIGHT) is a devastated industrial suburb.



However, by November 1942, all these men had left the scene; Graf had been transferred to Germany for new assignments, and JG 53 'Pik As', together with JG 77, had permanently left the Eastern Front and transferred to the Mediterranean area where Allied forces had achieved dangerous breakthroughs. Hitler and Göring shared the view that, as the Soviets were more or less finished, more *Luftwaaffe* units in the East could be better employed if transferred elsewhere. Only a few months previously, *Luftflotte* 4, commanded by *Generaloberst* Wolfram *Freiherr* von Richthofen¹, had been the *Luftwaaffe*'s most powerful air fleet, but by 20 November 1942 its IV. and VIII. *Fliegerkorps* had been reduced to a mere 402 serviceable aircraft. As for the *Jagdwaaffe*, this was represented by *Stab*, I. and III. *Gruppen* of Major Wolf-Dietrich Wilcke's JG 3 'Udet' and amounted to less than 50 serviceable Bf 109 G-2s, although there was in addition a mixture of various other fighter units of varying quality from Germany's Axis allies, including contingents from Rumania, Hungary and Italy.

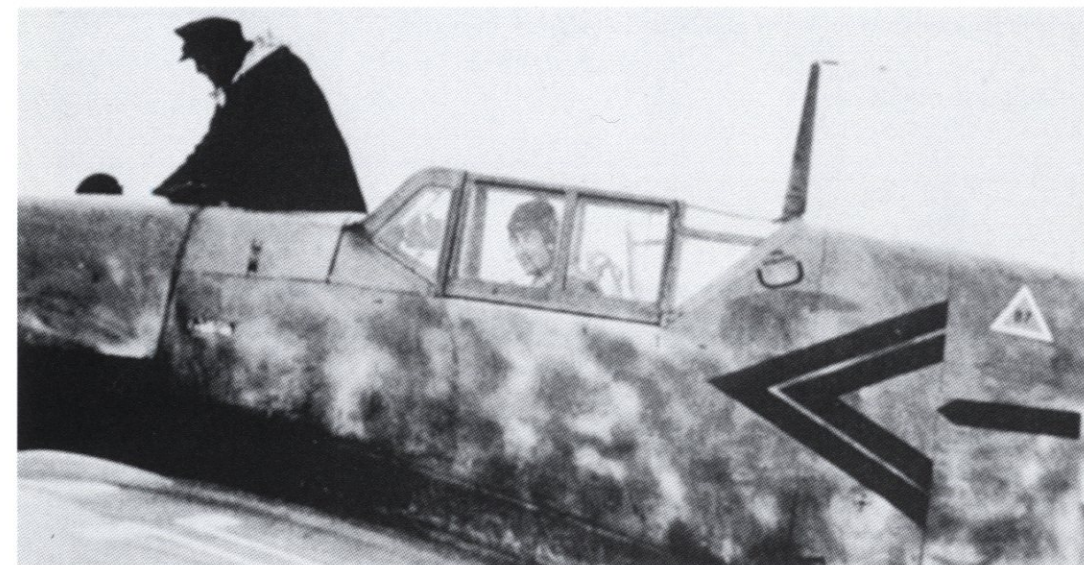
The most important of these allies was the Rumanian *Grupul 7 Vânătoare* of General Aviator Ermil Gheorghiu's Rumanian Combat Air Group, the *Gruparea Aeriană de Luptă* or GAL, equipped with Bf 109 Es. Also available were the Rumanian-designed IAR 80 fighters of *Grupul 8 Vânătoare*, but the Rumanian contingent made little impact on the situation in the air. The same can be said of the two Hungarian fighter squadrons in the East, 1. and 2./I *Vadász Osztály*, which reported four aerial victories in October 1942 and one in November 1942, by which time these units had been reduced to just nine serviceable Reggiane Re. 2000 fighters. As for the 21 *Gruppo Autonomo Caccia* of the Italian ARMIR², although it possessed approximately 50 Macchi C. 200 *Saetta* and C. 202 *Folgore* fighters, it suffered from shortages in all manner of supplies and appears to have operated on a highly sporadic basis. Moreover, both the Italian and Hungarian aviation units were situated on bases further up the River Don where they were tied to the support of their own respective ground forces and were, therefore, not directly available for the air battle at Stalingrad.

As the lack of a night fighter force still constituted one of the *Luftwaaffe*'s weaknesses in the East, the Soviets were able to conserve much of their forces by switching the bulk of their operations to nocturnal missions. At the same time, new units were arriving from all parts of the USSR and by 19 November they had amassed in the Stalingrad – Don Bend area well over 1,500 machines, 575 of which were Il-2 ground-attack aircraft.

1. Contrary to the widespread myth, Wolfram von Richthofen was related to Manfred von Richthofen, the 'Red Baron' of First World War fame, but was not his cousin.
2. Armata Italiana in Russia; Italian Armed Forces in Russia.

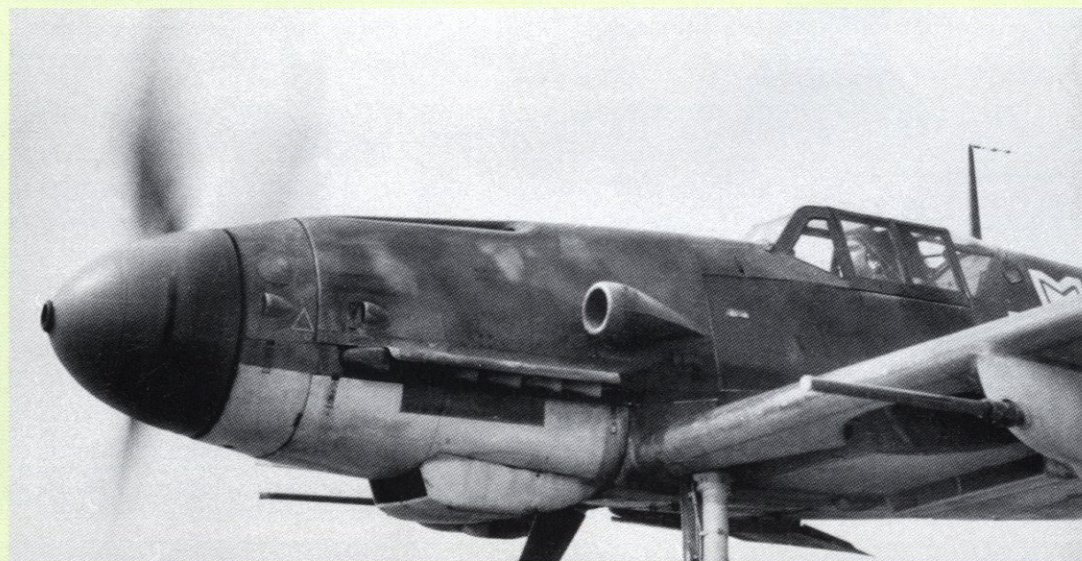
On the ground, the forward positions held by the Sixth Army and parts of 4. *Panzerarmee* in the ruins of Stalingrad formed the easternmost part of a 50-mile corridor that stretched across the open steppe between the Don Bend and the Volga. Moreover, the Don itself formed an east-west bulge in this sector, the northern stretch of which was held by Rumanian, Italian and Hungarian armies, none of which was comparable to the modern standards of the *Heer*. To the south of Stalingrad, the front-line more or less faded out into an unpopulated steppe covered by another Rumanian army.

RIGHT AND BELOW: Major Wolfgang Ewald, Gruppenkommandeur of III./JG 3, seated in a Bf 109 G-2/R6 in early 1943. This aircraft was flown by the Kommodore of JG 3, Major Wolf-Dietrich Wilcke, and carried appropriate *Stab* markings in solid black without any outline, a feature observed on other aircraft of JG 3. Traces of the overpainted Stammkennzeichen are just visible on the fuselage side.



Rumanian Bf 109s

The Rumanian Air Force was in action on the Eastern Front from the first day of 'Barbarossa', its fighter arm largely equipped with IAR 80s and Bf 109 Es. By the spring of 1943 it had become clear that these aircraft were obsolete and by mid-March the Rumanians had received a number of Bf 109 G-2s, G-4/R2s and G-4/R-6s. When conversion to the Bf 109 G first began, 20 selected pilots were sent to JG 3 so that, as well as learning to fly the new aircraft, they would benefit from the experience of the German pilots. By June, the Rumanian pilots had returned to their parent unit and began flying over the southernmost areas of the Eastern Front where ground and air activity was intense.



LEFT: Armed with two underwing MG 151 20 mm cannon, a Rumanian Bf 109 G-4/R-6 runs up its engine shortly before taking off.



LEFT AND RIGHT: Three Rumanian Bf 109 Gs clearly showing their individual aircraft numbers painted aft of the fuselage Balkenkreuz. The rudders of these aircraft were painted with vertical stripes in the Rumanian national colours of red, yellow and blue, the blue appearing closest to the rudder hinge line. Also visible on the fuselage and fin of the aircraft marked 'White 13' are the areas where the original Luftwaffe markings have been painted out. These photographs were taken at Dnepropetrovsk, in Southern Russia, in April 1943, and the Luftwaffe airman is Obfw. Hergesell, a technician of 7./JG 3.



LEFT: From his position on the starboard wing, a member of the ground staff guides a Rumanian Bf 109 G-4 pilot over the airfield. This photograph, probably taken in the Ukraine in the summer of 1943, shows the dark green uppersurface camouflage and the hard demarcation line running from the leading edge of the tailplane to the training edge of the mainplane.



LEFT: Rare air-to-air view of 'White 7' in flight. The machine appears to be camouflaged on the upper surfaces in a single shade of dark green.



BELOW: German soldiers familiarising themselves with Rumanian aircraft at Dnepropetrovsk airfield. Parked in the background is a Bf 109 G-2 coded 'White 7'. Note that the undercarriage fairings on this aircraft have been removed.



BELOW: A Rumanian Bf 109 G-2 'White 43a' with 'Yellow 1' behind and a Luftwaffe Me 323 'Gigant' in the background. Note again the absence of undercarriage fairings and the 'a' suffix to the aircraft number which indicates that this was a replacement machine for the original aircraft coded '43'. This photograph was probably taken in 1944.

Since October 1942, German reconnaissance aircraft had observed a steady build up of Soviet forces against these flanks, but while the intentions of the Soviets to mount an offensive in the Don Bend area was obvious, there had been almost no German aircraft available to disturb the build up of enemy forces on the flanks as German attention was focused on the struggle to expel the last Soviet troops from Stalingrad. When the Red Army launched its counter-offensive on 19 November 1942, the whole area was covered in thick fog, the result of mild air sweeping in and meeting with cold ground temperatures. This frustrated the air strike that the Soviets had planned but would prove effective in increasing the confusion on the German side. The German commanders, accustomed to relying on aerial reconnaissance, lost their overall view of the situation and at several places *Luftwaffe* units were caught by surprise when Soviet tanks emerged from the fog and advanced towards the runways. While ground service personnel improvised local defences, and wherever possible aircraft were flown out to safety, almost before the Germans realised it a quarter of a million troops under the command of General Friedrich von Paulus had been surrounded in the area between the Don Bend and Stalingrad.

At first, everyone on the German side assumed that eventually the trapped forces would be relieved through some counter-action. The *Jagdwaaffe* in the sector, commanded by Major Wolf-Dietrich Wilcke, was reinforced by the arrival of II./JG 3 and II./JG 52, and almost immediately preparations were made to mount an airlift. Soon, hundreds of Ju 52 transport aircraft were ready to supply the surrounded 6th Army.

However, the Germans were beset by many severe problems, one of which was the weather which remained mostly damp and cold, conditions that easily caused dangerous aircraft icing. Bad visibility was no obstacle to the transport fliers, who were trained in blind flying and were guided to Stalingrad by powerful radio homing beacons, but for their fighter escort it constituted a serious problem. Perhaps the greatest difficulty, however, was the sorrowful state of the German supply system in the East. For example, throughout December, although fighting in the centre of such a decisive battle, *Hptm.* Johannes Steinhoff, commanding II./JG 52, found it almost impossible for his *Jagdgruppe* to receive an adequate number of replacement aircraft and although his *Gruppe* had lost 20 machines, only four replacement Bf 109 G-2s arrived from Germany.

All the same, the air supply operation was mounted and Major Wilke was provided with the task of organising and conducting the fighter cover for the transport flights. Wilke divided his fighter units into 'deliverers' and 'receivers'. For the former task, Wilke kept most of his Bf 109s outside the cauldron, and used them to escort the transports only as far as Stalingrad where they turned back after handing them over to the 'receivers'. For the latter task, he formed an ad hoc *Platzschutzstaffel*, or Airfield Protection *Staffel*, under the command of *Hptm.* Rudolf Germeroth inside the cauldron³ at Pitomnik.

At this time there was every reason for optimism. After all, during the previous winter and spring, the *Luftwaffe* had successfully carried out similar airlift operations to supply Demyansk and Kholm and, initially, *Hptm.* Germeroth's *Platzschutzstaffel* proved successful, at least in numerical terms, as it shot down more Soviet aircraft than it lost. But under the supervision of the VVS's Commander-in-Chief, GenLt. Aleksandr Novikov, the Soviets organised an air blockade of Stalingrad. Various blockade areas were set up, each provided with particular anti-aircraft units and flying units which utilised different methods. Moreover, the Soviet fighter force opposing the airlift was very different than previously, for in this sector the VVS formed the war's first formalised elite fighter unit by concentrating the most skilled and experienced fighter pilots into one formation, the 9th Guards Fighter Aviation Regiment. Included in this Regiment were a number of successful female fighter pilots such as *Serzhant* Lidiya Litvyak.

As a result of these measures, the *Luftwaffe* soon encountered problems on a scale never before experienced in the East. To be sure, the adverse weather and the supply shortages were indeed severe disadvantages but, as the Germans themselves admitted, the main obstacle to the air supply of Stalingrad was the action of the VVS's fighters. Although He 111 bombers, better suited to withstand fighter interception, were employed to supplement the Ju 52s' supply flights, this in turn weakened the bomber force carrying out air attacks on Soviet ground forces and, as aircraft losses rose, so other aircraft had to be called in as replacements. These included obsolescent twin-engined Ju 86s, most of which were lost in a matter of weeks, as well as four-engined Fw 200s, the new He 177 and even some of the few giant Ju 290s.

3. A cauldron is a translation of the German word Kessel, used by the military to describe a battle of encirclement, or sometimes of encirclement and annihilation, and is equivalent to a pocket of surrounded forces.

Operation 'Wintergewitter' – Winter Storm

Provided with assurances that Göring's *Luftwaffe* would provide the Stalingrad garrison with all the supplies it required, Hitler ordered General von Paulus's Sixth *Armee* to remain where it was while relief, in the form of the new *Heeresgruppe* Don under the command of *Generalfeldmarschall* Erich von Manstein, prepared to strike from the south and break through the Soviet ring in an action named *Unternehmen 'Wintergewitter'*, or Operation 'Winter Storm'. *Generaloberst* Wolfram *Freiherr* von Richthofen, *Luftflotte* 4's commanding officer, allocated General Kurt Pflugbeil's IV. *Fliegerkorps* to support this operation. One of Pflugbeil's most important units was *Hptm.* Johannes Steinhoff's II./JG 52, which included Steinhoff himself and *Oblt.* Gerhard Barkhorn, each with over 100 victories, as well as such other seasoned and successful veterans as *Hptm.* Rudolf Resch, *Oblt.* Gustav Denk, and *Ofw.* Willi Nemitz.

Operation 'Wintergewitter' opened on 12 December 1942 and met with initial success. On the ground, *Generaloberst* Hermann Hoth's rebuilt 4. *Panzerarmee*, mustering 230 tanks, crashed through the positions held by the numerically and technically inferior Soviet 51st Army where the British-made Matilda tanks in service with the Soviets in this sector were no match for Hoth's armour. Meanwhile, in the air, *Luftflotte* 4's fighters claimed 29 victories against only two aircraft lost, but the Germans were unable to follow up these opening successes and as early as the next day *Generaloberst* von Richthofen was raging over what he regarded as negligence on behalf of a *Jagdwaaffe Gruppenkommandeur* in the area. After 'kicking them out of their sleep', as he later wrote in his diary, the *Luftwaffe* carried out effective new strikes against the Soviets but, much to von Richthofen's dismay, the German ground troops then failed to follow up quickly enough so that when the ground troops did attack, the Soviets had already recovered from the effects of the air attacks.

The Collapse of I./JG 52

Along the River Don to the north-west of Stalingrad, a long sector was held by the German Eighth Army, which was insufficiently equipped and was manned by poorly-motivated Italian troops who were often disinclined to fight for German *Lebensraum* in Russia. On 16 December 1942, the Red Army opened its major attack against the Italian troops in an operation named 'Little Saturn' which was carried out by *General-Leytenant* Nikolay Vatutin's South-Western Front and which had at its disposal 400,000 troops, over 4,000 artillery pieces and 400 tanks. This force was supported by the Soviet 17th Air Army with 632 aircraft, of which a large proportion were Il-2 *Shturmoviks*.

The weak Italian air corps in this area was hampered by an endemic lack of fuel and spare parts, and in fact, the Soviets' main opponent was a single *Jagdgruppe*, *Hptm.* Helmut Bennemann's I./JG 52. Six months previously, another *Jagdgruppe* – II./JG 77 – had been sufficient to hold the VVS at bay in this sector, but much had changed since then. Indeed, the pilots of I./JG 52, most notably *Hptm.* Johannes Wiese, *Fw.* Wilhelm Freuwörth, and *Fw.* Rudolf Trenkel, were able to achieve some quite astonishing successes against unescorted Il-2s during the opening phase of Operation 'Little Saturn', but following a lapse during the first few days, 17th Air Army's fighter units soon filled the skies over the battlefield with their Yak-1s, Yak-7Bs, and new La-5 fighters. One of the VVS's units brought into action here was the 5th Guards Fighter Aviation Unit, which at that time included some of the Soviets' finest fighter pilots.

Gradually, the strength of I./JG 52 was eroded, so that after just five days of fighting it was left with only a handful of Bf 109s and the *Gruppe* had to be reinforced by detaching 4./JG 54 from *Luftflotte* 1's *Jagdgeschwader* 54 'Grünherz' in the Northern Sector and transfer it southwards. In a matter of weeks, the strength of 4./JG 54, led by *Oblt.* Heinrich Jung, then with 38 victories, was also severely depleted.

On 12 January 1943, the Soviet Voronezh Front, on the right flank of South-Western Front, presented I./JG 52 and 4./JG 54 with a new threat by striking against the Hungarian 2nd Army, situated on the Italian Army's left flank. By that time, neither of these *Jagdwaaffe* units was in a position to pose any threat against the combined forces of three whole VVS air armies supporting the offensives in this area and the situation was further complicated by bad weather. Between 12 and 24 January 1943, the Hungarian 2nd Army was completely destroyed with losses amounting to 100,000 killed and 60,000 taken prisoner. Not a single aerial victory was achieved by I./JG 52.

Soviet Air Superiority

Due to the carefully organised air blockade around Stalingrad, the Soviet fighters were able to take control of the skies over the city fairly quickly. *Hptm.* Germeroth's *Platzschutzstaffel* became absolutely overwhelmed and on 25 December 1942, Lt. Georg Schentke, with 90 victories one of the best of Germeroth's pilots, was shot down in aerial combat and parachuted into Soviet-held territory.

The announcement that III./JG 3 'Udet' achieved its 1,500th victory on

28 December 1942 could not cover the grim fact that the *Jagdwaaffe* was failing in its vital task to cover the supply flights to Stalingrad and, within the cauldron, the besieged men were suffering from an acute shortage of food. With the *Jagdwaaffe* unable to duplicate the fighter cover that it had provided at Demyansk, the German transport fliers resorted to flights in bad weather in order to avoid Soviet fighter interception.

The attempt to relieve Sixth *Armee* with *Generaloberst* Hoth's 4. *Panzerarmee* also failed when the Soviets brought in reinforcements which halted the German armour. *Hptm.* Steinhoff's II./JG 52 also encountered mounting difficulties and with only 12 serviceable Bf 109s remaining, the *Gruppe* was unable to prevent Soviet Pe-2 bombers from destroying much of Hoth's fuel supplies and a subsequent Soviet counter-attack completely altered the situation. At Kotelnikovo aerodrome, II./JG 52 blew up its unserviceable aircraft and fell back to Zimovniki, 20 miles farther south-west, but a few days later they were forced to withdraw to Gigant, another airfield 90 miles to the south-west.

With II./JG 52 pushed back and I./JG 52 severely disorganised, the whole task of protecting the Stalingrad airlift was entrusted to JG 3 'Udet'. On 3 January 1943, *Hptm.* Kurt Brändle, *Kommandeur* of II./JG 3 claimed his 120th and the *Geschwader*'s 4,000th victory, but this was to little avail and most of JG 3 was also forced to retreat in the face of the Red Army's advance. Thus, on the same day that Brändle achieved JG 3's 4,000th victory, the *Geschwader* had to abandon Morozovsk aerodrome, leaving behind a number of unserviceable Bf 109s, and on the 16th and 17 January the main base of



LEFT: *Hptm.* Johannes Wiese (left), the *Staffelkapitän* of 2./JG 52, showing his 'victory stick' to General Hans-Jürgen Stumpff at Rossosh East in January 1943. As well as being decorated with the *Geschwader* and *Gruppe* badges, Wiese's stick is marked with at least 50 rings, each one representing a victory. This photograph was probably taken soon after 5 January 1943, on which date Wiese was awarded the *Ritterkreuz* for 51 victories. Stumpff commanded *Luftflotte* 5 up until 31 December 1943, when he was replaced by General Joseph Kammhuber and took command of the newly created *Luftflotte* Reich.

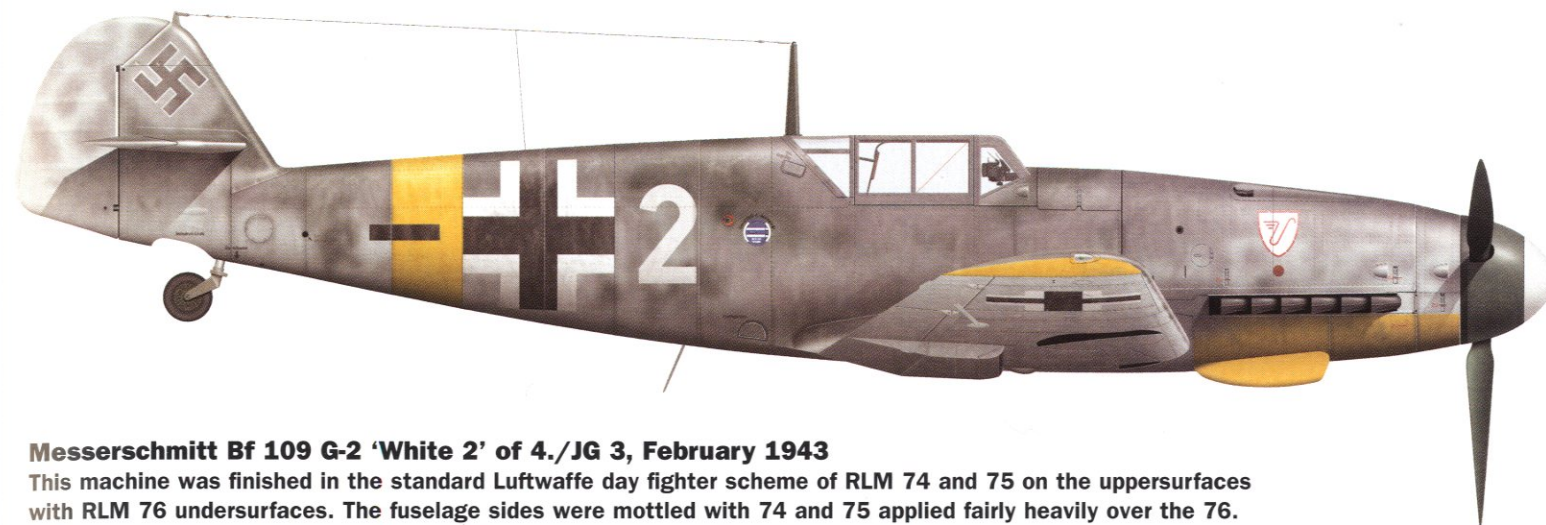
the *Platzschutzstaffel* Pitomnik inside the Stalingrad pocket fell into Soviet hands.

On 30 January 1943, six of *Stab*/JG 3's Bf 109 G-2s equipped with drop tanks and five Bf 110 G-2s from I./ZG 1 took off for the first long-range fighter mission to Stalingrad. The date was of great symbolic value, being the tenth anniversary of Hitler's seizure of power, but the fighters and destroyers returned with only two victory claims and the formation leader, Knight's Cross holder *Oberleutnant* Eduard Tratt, barely survived a crash at Rovenki. The skies over Stalingrad remained in VVS hands and the following day the drama at Stalingrad ended when *Feldmarschall* von Paulus surrendered and the whole of Sixth Army except for 11. *Korps* laid down their arms. 11. *Korps* followed suit two days later.

Oberfeldwebel Grislawski and the Caucasus Retreat

At the same time as the German front in the Stalingrad and Don Bend area was collapsing, the situation to the south was characterised by a stalemate in the Caucasus throughout November and most of December 1942. Even though the main objective of the major German offensive of the previous summer had been the seizure of the rich oil fields at Grozny and Baku, most of the *Luftwaaffe*'s forces initially deployed in the Caucasus had been transferred to other sectors, and in November 1942 the only German fighter units available to support the 1. *Panzerarmee*'s thrust toward Grozny was *Stab* and III./JG 52 which, by 20 November 1942, possessed just 32 serviceable Bf 109s. Nevertheless, the veterans of this *Gruppe* were able to make a stand against considerable Soviet numerical superiority when, in late November, the Soviets made a determined attempt to push

RIGHT: On the evening of 30 January 1943, Hitler promoted General Friedrich von Paulus to *Feldmarschall*. Knowing that no German field marshal had ever surrendered, Hitler hoped that Paulus would commit suicide rather than be disgraced. Instead, on the morning of the 31st, Paulus surrendered Sixth Army. This photograph was taken a short time later.



Messerschmitt Bf 109 G-2 'White 2' of 4./JG 3, February 1943

This machine was finished in the standard *Luftwaaffe* day fighter scheme of RLM 74 and 75 on the uppersurfaces with RLM 76 undersurfaces. The fuselage sides were mottled with 74 and 75 applied fairly heavily over the 76. The red spot which appeared below the winged 'U' badge of JG 3 'Udet' is thought to have been in red primer and was probably the result of a recent repair.



LEFT AND BELOW: This Bf 109G-2, 'White 2', belonged to 4./JG 3 and is pictured after making an emergency landing in February 1943. As may be seen here, it was usual practice with II./JG 3 at this time to show the *Gruppe* bar in black, regardless of the *Staffel* colour. The aircraft was camouflaged in an RLM 74/75/76 scheme with the fuselage sides being particularly densely mottled so that little of the RLM 76 was visible. In addition, the starboard side shows a large, dark stain, but as this is not present on the port side, it is thought that instead of carbon deposit from the exhaust, this may be oil and might possibly indicate the cause of the crash-landing. There is also some evidence, especially in the port view, that the machine received some unit-level modifications to the scheme. This is particularly noticeable under the cockpit, where there is a patch of an unusually dark colour, while the areas around the swastika and on the rudder appear to have been lightened with sprayed areas of RLM 76.



The Stalingrad Airlift

On 11 June 1942, *Generalmajor* Fritz Morzig, the head of *Luftwaffe* air transport, was ordered to set up a headquarters with *Luftflotte 4* to supply the air and ground forces then engaged in the summer offensive against Stalingrad and the advance into the Caucasus. For this purpose, the four Ju 52 *Gruppen* and two He 111 *Gruppen* already with *Luftflotte 4* were reinforced with an additional five Ju 52 *Gruppen*, but in October, the situation in the Mediterranean demanded additional air transport and one He 111 and two Ju 52 *Gruppen* were transferred to that area.

The following month, on 19 November 1942, two Soviet Army Groups, supported by a barrage from 3,500 guns, broke through the Axis-held lines along the River Don north-west of Stalingrad, and the next day, another Soviet Army Group attacked to the south of the city. The attacking forces joined up at Kalach, west of Stalingrad on 23 November, trapping over 250,000 men.

Despite this critical turn of events, the German High Command did not believe the Soviet penetration would have serious consequences and, although accepting that Sixth Army might be encircled for a while, believed it could be relieved by a counter-offensive. In the meanwhile, Hitler was assured that Sixth Army could be supplied from the air and therefore ordered it to remain in position.

Exactly who was responsible for assuring Hitler that such a supply undertaking was possible has never been conclusively established, although the evidence would seem to point to *Reichsmarschall* Göring. What is certain, is that as soon as the decision was announced, a number of senior officers tried to have the decision reversed. *Generalleutnant* Martin Fiebig, the commander of VIII. *Fliegerkorps*, was thunderstruck, exclaiming, "A whole Army? It's quite impossible!", while *Generaloberst* Wolfram von Richthofen, C-in-C *Luftflotte 4*, was even more outspoken, describing the decision as "...stark, staring madness!"

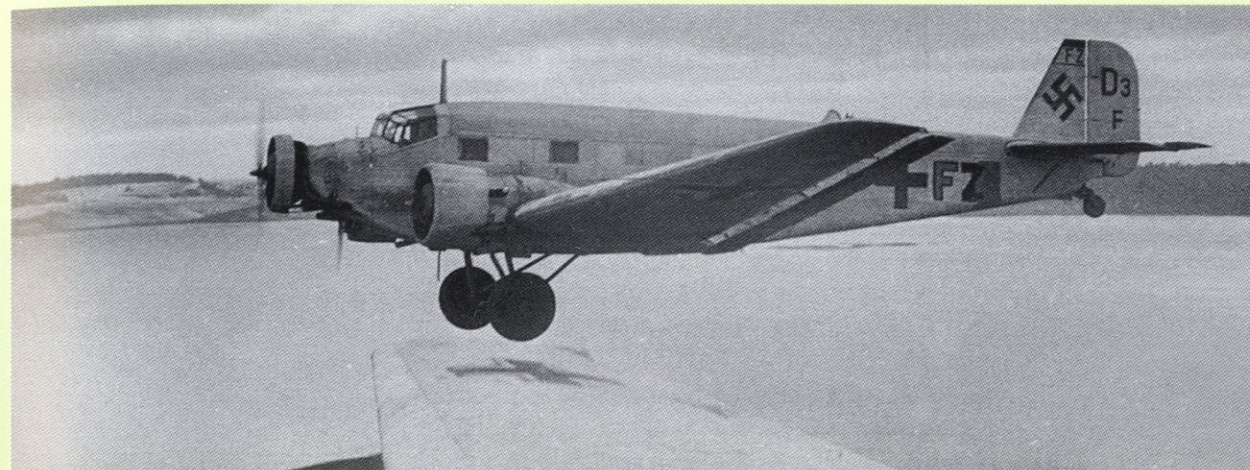
Nevertheless, despite these and other similar comments regarding the impracticality of an airlift, the decision held and immediately, steps were taken to reinforce the air transport strength of *Luftflotte 4*. By 1 December, a programme had been drawn up to increase the transport *Gruppen* to ten equipped with Ju 52s, seven with He 111s, two with Ju 86s and one equipped with the He 177, in addition to which there was one *Staffel* of Fw 200s and one *Staffel* equipped with Ju 90 and 290 aircraft.

Immense difficulties were encountered in supplying Sixth Army, not the least of which were overcrowded bases, a shortage of fuel, heavy mists, frost, snow and severe icing. The result was that, despite an outstanding effort made by the transport crews, the transport units were never able to cope properly with the supply operation and, against a daily target of 300 tons, calculated to be the minimum necessary to keep Sixth Army supplied, it seems an average of just 100 tons of supplies was actually delivered.

At first, the aircraft engaged in the operation were able to land on airfields inside the Stalingrad pocket, unload supplies and bring out wounded, but as these bases were lost, a proportion of the supplies had to be dropped by parachute. Later, the closest bases outside the pocket were also lost, resulting in increased flying distances in already appalling conditions, and apart from losses caused by accidents, additional casualties were caused by Russian flak and fighters. In early January, the supply flights had to be made at night and by 22 January, when the last landing areas were lost, all supplies had to be dropped by parachute. These invariably landed in deep snow and were often lost as the troops were simply too weakened by hunger to recover them.

When Sixth Army surrendered on 31 January 1943, a total of approximately 285 aircraft had been lost while engaged in supply missions. As most aircraft had been withdrawn from flying schools and were flown by instructor crews, many of which were also lost, this had a severe impact on the bomber training programme which relied on the very same Ju 52 aircraft.

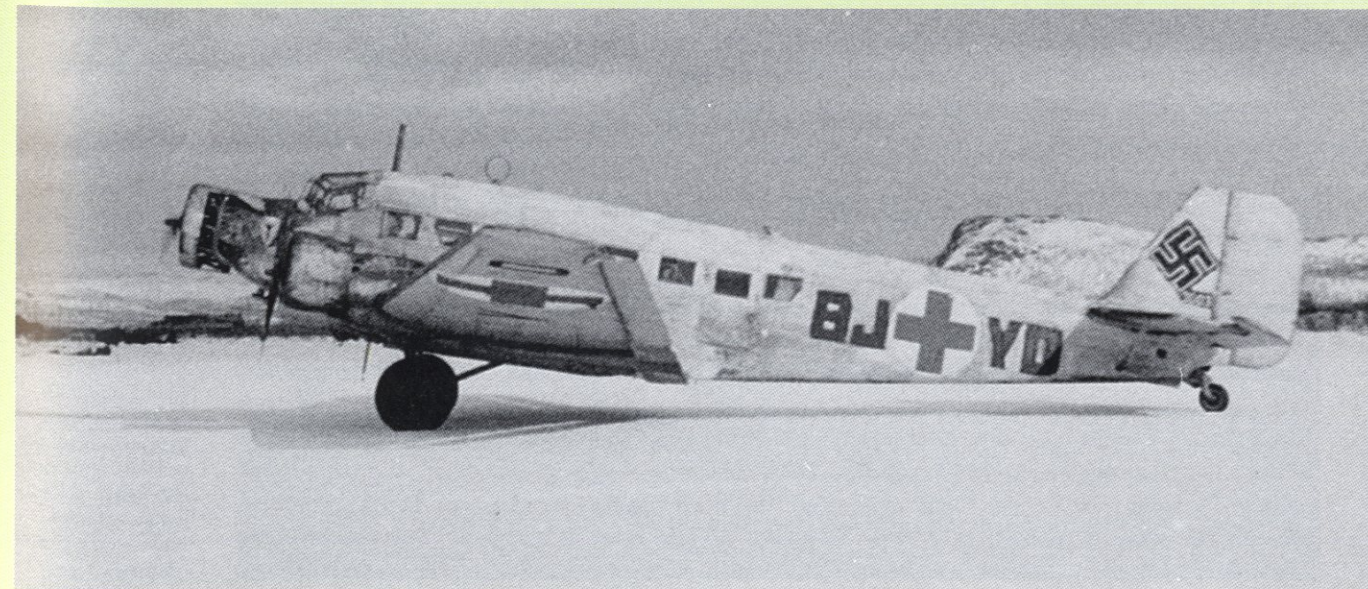
BELOW: A total of seven He 111 *Gruppen* were assigned to transport and supply duties during the Stalingrad operation, two coming from the bomber unit KG 27 and two from KG 55. With its superior speed, the He 111 was well-suited to the task of air supply, especially when Soviet fighter opposition increased. In most He 111 supply operations, the supplies were dropped by parachute in special containers.



ABOVE AND RIGHT: More Ju 52s were employed during the Stalingrad airlift than any other type. These views show aircraft from KGzBV 1. Note that the tail of IZ+ FZ carries the last two letters of the code on the top of the fin and, on the rudder, an example of the special tactical code devised to ease the problems associated with the control of hastily formed transport units which, as the majority were only put together when needed from aircraft drawn from schools, communications units, duty flights, Lufthansa, etc, often carried a variety of unit codes and Stammkennzeichen.



BELOW: Representative of the Stammkennzeichen seen on transport aircraft is the code BJ+YD, seen on this snow camouflaged Ju 52 air ambulance, W.Nr. 3003, which actually served with Sanitätsflugbereitschaft 8, normally based at Kirkenes. If this aircraft had been required to take part in a major airlift operation, it would have been given a tactical rudder code to indicate the unit to which it had been temporarily assigned.



back 1. *Panzer* Division from its positions south of the Terek River before their attack became bogged down on 30 November. On 27 November, the first day of the attack, the Soviet 4th Air Army (4 VA) dispatched a total of 120 aircraft, including 53 Il-2s, in three waves against targets near Ardan in a raid lasting over three hours. The Soviet 230th Ground-Attack Division flew 97 sorties and claimed to have destroyed four tanks and 40 other motor vehicles, but it suffered dearly at the hands of III./JG 52 and this Division alone lost five Il-2s and three LaGG-3s to the Bf 109 pilots of III./JG 52, one of which, Knight's Cross holder *Ofw.* Alfred Grislawski, claimed his 69th and 70th victories.

These massive air attacks were repeated during the next two days, and on 29 November, *Fw.* Hans Dammers of 7./JG 52 shot down five aircraft, attaining his 85th to 89th victories. This *Staffel*, led on operations by *Ofw.* Grislawski, was a particularly dangerous opponent for the units of 4 VA. This was again demonstrated on 10 December when Grislawski intercepted four of the 7th Guards Ground-Attack Regiment's Il-2s and shot down three in a matter of four minutes. In this combat, 7 GShAP lost one of its best pilots, *Lt.* Petr Rudenko, who had been appointed Hero of the Soviet Union on 16 November 1942 after completing 96 combat missions, during which he was credited with the destruction of 40 tanks and 30 aircraft on the ground. On 12 December, in an attempt to strike back, 4 VA flew dawn attacks against the German airfields at Soldatskaya, Krasnogvardeyskaya, and Zolotaryov but failed to destroy a single German aircraft and instead, lost four of its fighters shot down by Grislawski.

By the end of December, *Stab* and III./JG 52 had claimed a total of 46 victories, including 13 by *Ofw.* Grislawski alone, whereas their only combat loss that month was *Uffz.* Friedrich Heeg of 7. *Staffel* who was killed when he was dazzled by the sun during a dogfight and collided with an I-153 flown by *Lt.* Viktor Makutin of 84 IAP, who was also killed. However, when the Soviets crushed Operation 'Wintergewitter' much farther north and began pushing the 4. *Panzerarmee* toward the Rostov bottleneck, the German positions in the Caucasus came under threat of becoming isolated and an order to retreat was issued on 29 December. Most of *Stab* and III./JG 52 was rushed northward to help II./JG 52, leaving behind only a small detachment commanded by *Ofw.* Grislawski. Thus an *Oberfeldwebel* found himself commanding the fighter cover for an entire *Panzerarmee*.

During the first eight days of January 1943, Grislawski flew from both Mineralnye Vody and Armavir, carrying out missions to provide the retreat road with air cover, mainly with *Lt.* Erich Hartmann as his wingman. The weather was generally bad and only on 8 January did Grislawski encounter any aircraft, destroying in this single encounter two LaGG-3s as his 85th and 86th victories. Inevitably, however, the situation became more difficult as the Germans were pushed farther northwards and during a sortie on 18 January, again with *Lt.* Hartmann as his wingman, Grislawski was shot down by a Soviet fighter shortly after his 90th and 91st victories. Grislawski, who baled out and landed in no-man's land, was later rescued by Hartmann, who landed with a Fieseler *Storch* and flew him to safety.

By late January 1943, German Army Group A had been split and pushed into two small pockets with 1. *Panzerarmee* in the Rostov-Bataysk area in the north, and 17. *Armee* in the so-called Kuban bridgehead in the north-west.

Focke-Wulf 190s Into Action

When the German forces crumbled in the south, the Soviets sought to expand their success to the north and their first objective was to envelop and annihilate German Army Group Centre. This was holding defensive positions some 80 miles to the west of Moscow, but here, VVS forces built up for this operation were hampered by various severe logistical deficiencies while the Germans were well prepared. Thus, when the Soviet onslaught was launched in the Rzhev sector on 25 November 1942, it was met with powerful German resistance both on the ground and in the air. In this area, *Luftwaffe* forces were organised into *Luftwaffenkommando Ost* under the command of the First World War fighter veteran *Generaloberst* Robert Ritter von Greim. The main fighter force was JG 51, the 'Mölders' *Geschwader*, recently deprived of its most successful *Gruppe* when II./JG 51 was transferred to the Mediterranean theatre. However, compensating for this loss was the arrival during this period of the first



ABOVE: On 29 November, *Fw.* Hans Dammers of 7./JG 52 shot down five aircraft, attaining his 85th to 89th victories. On 5 May 1943, Dammers attained his 100th victory and is seen in this photograph at Taman with the rudder of his Bf 109 G-4. However, instead of being applied as Dammers' victory tally accumulated, the rudder was only specially decorated to mark the occasion of his 100th victory, as shown by the total at the bottom, together with the date 5.5.43. At the top of the rudder is a small painting of a Knight's Cross complete with ribbon and the date of his first victory, 31.8.41. These rudder markings were applied only to the port side of the rudder, the starboard side being marked with a different representation of his successes.

examples of the Fw 190 A to enter service in any large numbers on the Eastern Front, and by the end of the year, I. and III./JG 51 were fully equipped with the type while IV./JG 51 retained its Bf 109s. Moreover, the 'Mölders' *Geschwader* was reinforced by II./JG 3, which was later replaced by III./JG 54, while the Spanish 'Blue Squadron', also equipped with Bf 109s, arrived in time to meet the Soviet offensive.

On 4 December, the reinforced JG 51 made a major effort to clear the skies of Soviet aircraft. The result was an outstanding success, and in a series of decisive air battles, the Fw 190 units proved particularly effective against the large numbers of Il-2s that had been massed to support the offensive. That day, 571 Soviet aircraft sorties were counted in *Luftwaffenkommando Ost's* operational area, in addition to the 397 nocturnal sorties reported the previous night, and pilots of JG 51 claimed 35 of these aircraft shot down without loss to themselves. Throughout the day, small groups of Fw 190s and Bf 109s fell upon formations of *Shturmoviks*, against which the heavy armament of the Fw 190 proved particularly effective. Indeed, most of the 31 Il-2s claimed by JG 51 on 4 December 1943 were shot down by the Fw 190 pilots of the *Stabsstaffel* and I. *Gruppe*, with *Hptm.* Heinrich Krafft claiming five as his 71st to 75th victories, *Oblt.* Edwin Thiel claimed five in a single combat, while the *Stabsstaffel's* *Hptm.* Horst Riemann, and *Oblt.* Heinz Lange claimed five and two respectively.

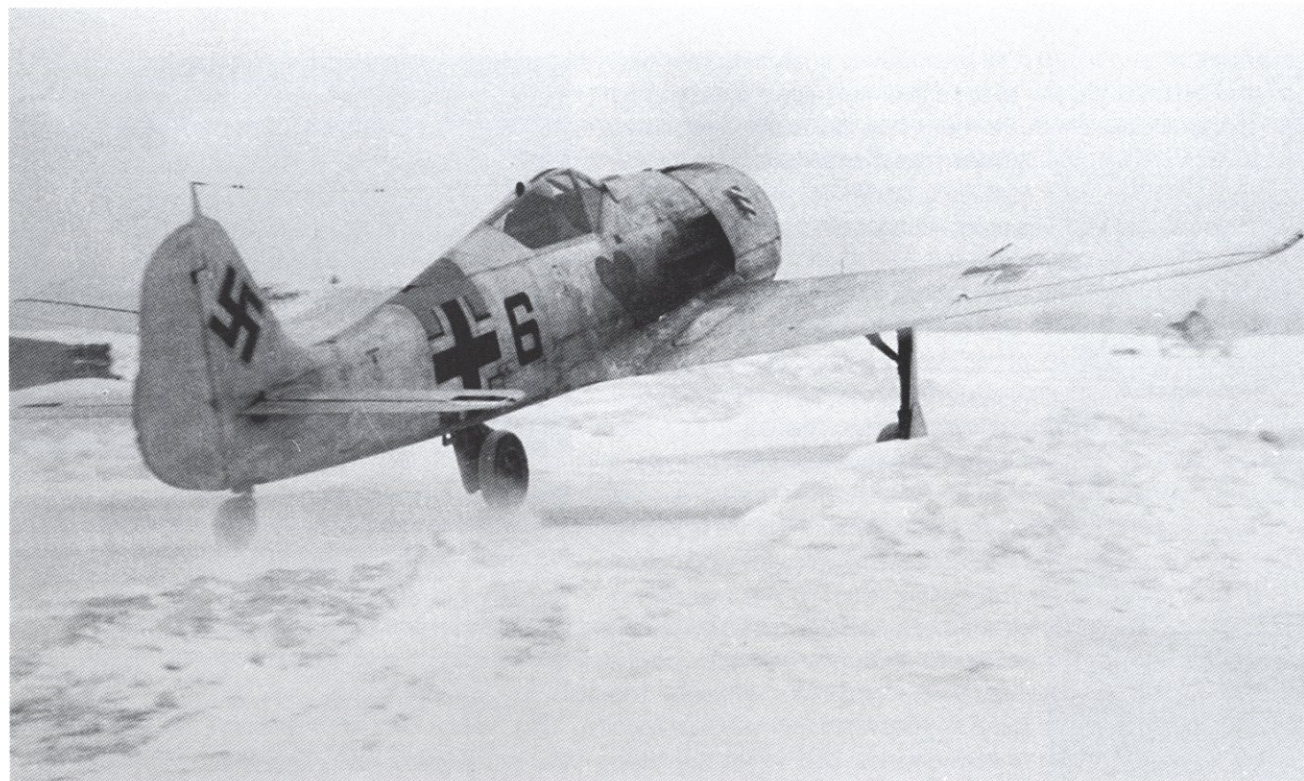
Meanwhile the Soviets responded to *Luftwaffenkommando Ost's* strong counter-actions with greater emphasis on attacks against airfields. On 10 December, three of III./JG 51's remaining Bf 109 F-2s were destroyed on the ground at Dugino but in daylight the VVS found it increasingly difficult to fulfil its tasks over the Rzhev Bulge due to a shortage of aviation fuel and the presence of the two *Gruppen* of Fw 190s. What fuel was available was used mainly to bring into combat as many *Shturmoviks* as possible, and during the first stage of the winter offensive, for every fighter sortie, there were two *Shturmovik* sorties. Between 1 and 11 December *Luftwaffenkommando Ost* claimed to have shot down 105 Soviet aircraft, 76 of which were Il-2s, against less than 20 of its own aircraft lost in combat.

Even so, despite their superior aircraft, whenever the German fighter pilots encountered Soviet fighters, they met with stiff resistance and on 14 December a Soviet fighter shot down the *Kommandeur* of I./JG 51, *Hptm.* Heinrich Krafft. 'Gaudi' Krafft baled out and was captured by Soviet troops, who reportedly murdered the German ace.⁴ With 78 victories, Knight's Cross holder Krafft was among JG 51's top scorers.



ABOVE: Generaloberst Robert Ritter von Greim, on the right, in conversation with Generaloberst Alfred Keller. In November 1942, von Greim, a First World War fighter veteran, was in command of *Luftwaffenkommando Ost* which controlled *Luftwaffe* forces in the Rzhev sector. Later, in April 1943, in preparation for the Kursk offensive, Greim's *Luftwaffenkommando Ost* was redesignated *Luftflotte 6* with the bulk of its forces stationed around Orel. In November 1942, Keller was in command of *Luftflotte 1*.

LEFT: At the end of 1942, I. and III./JG 51 began converting from the Bf 109 to the Fw 190 but only I. and III. *Gruppen* returned to the East, II./JG 51 abandoning the conversion when it was ordered to the Mediterranean theatre still equipped with Bf 109s. For a while, the *Geschwader's* IV. *Gruppe* also continued to operate on the Eastern Front with Bf 109s. This photograph shows 'Brown 7', an Fw 190 A-3 of 3./JG 51 at Vyazma in early 1943. Note the heavy exhaust staining and that the broad yellow fuselage band is identical to that employed by JG 54. This photograph was probably taken between sorties as the pilot's parachute is resting on the horizontal tailplane.



LEFT: 'Black 6', an Fw 190 A-4 of 2./JG 54, taxiing in snow. In such difficult airfield conditions, the wide-track undercarriage of the Fw 190 gave it a distinct advantage over the Bf 109.

All Soviet attacks against Army Group Centre in the Rzhev sector were defeated by German forces which inflicted terrible losses on the Red Army and the only Soviet success in this operation was the destruction of the 9,000-strong German garrison surrounded further north at Velikiye Luki. In this sector, the German fighters also met much stiffer resistance in the air than at Rzhev and a number of leading German fighter pilots, including three from III./JG 54, were lost during December 1942 and January 1943. One of these was Fw. Kurt Stöber, credited with 36 victories. Knight's Cross holder Oblt. Hans-Ekkehard Bob led III./JG 54 during this campaign and recalled that, "The Battle of Velikiye Luki ended in tragedy and had a depressing effect on us all."

Nevertheless, the battles over Army Group Centre in late 1942 and early 1943 had shown that the Fw 190 A was extremely well suited to operations on the Eastern Front. At best, the Bf 109 G-2 could offer three 20 mm MG 151/20 automatic cannon against the heavily armoured Ilyushin Il-2s, but the weight of the two underwing gondola weapons had a negative effect on the Messerschmitt fighter's flying characteristics. Moreover, to approach an Il-2 from behind became increasingly hazardous as more of these ground-attack aircraft were equipped with rear gunners, and if they hit the radiator of the Messerschmitt's liquid-cooled engine, even a single round from an Il-2's rear-mounted machine gun was sufficient to bring down a Bf 109.

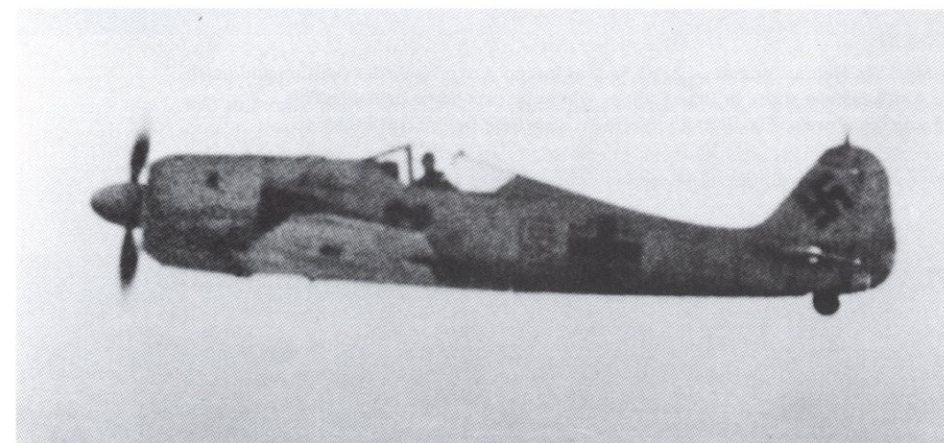
The Focke-Wulf 190 enjoyed advantages over the Bf 109 fighter in both these aspects. Firstly, the Fw 190's standard armament included four 20 mm automatic cannon – two MG 151/20 and two MG FF – which had hardly any adverse effect on the aircraft's flying characteristics and, although the Bf 109 could probably turn a little faster, the Fw 190 could carry out a faster half roll. In addition, the air cooled BMW 801 radial engine of the Fw 190 A created something of a protective shield, at least against small calibre fire from ahead, and this created an important psychological effect in that many German fighter pilots were convinced they could close behind an Il-2 without undue risk.

The particular value of the Fw 190 was again demonstrated later in January 1943 when the Soviets launched an attack to relieve Leningrad, besieged in the north. A key factor in the Soviet offensive was the number of Il-2 units which were to provide support, but although the Soviets managed to open a narrow land corridor to the city, they were prevented from widening the breach, largely due to the part played by I./JG 54. This *Gruppe*, led by Hptm. Hans 'Fips' Philipp, had only recently re-equipped with Fw 190s but it succeeded in inflicting such terrible losses that the actions of the Il-2s were suppressed and the defensive role of the Fw 190s proved decisive.

4. Details are understandably vague, one account stating that Krafft was beaten to death, another that he was hanged.



LEFT: Although conversion to the Fw 190 had already begun when this photograph was taken at Krasnogvardeisk in January 1943, I./JG 54 still retained a few of its Bf 109 Gs. The Bf 109 G-2 'Yellow 12' of 3./JG 54 has had its undercarriage fairings removed and the quick finish applied by the spray-painter is apparent on the rear fuselage. The yellow of the fuselage band appears much darker than the yellow wingtip due to the reflected light from the snow which has lightened the undersurface colours. One of the Gruppe's new Fw 190s may be seen banking in the distance.



ABOVE AND ABOVE LEFT: Fw 190 A-4 'White 9' flown by Fw. Karl Schnörrer, believed to be during an escort mission for an Hs 126 reconnaissance aircraft, in early 1943. Schnörrer, shown (ABOVE), first joined I./JG 54 in mid-1941 and remained with the unit until seriously wounded in November 1943 shortly after attaining his 35th victory. Schnörrer was awarded the Ritterkreuz in March 1945 and survived the war with a final total of 46 victories. He died in Nürnberg in September 1979.



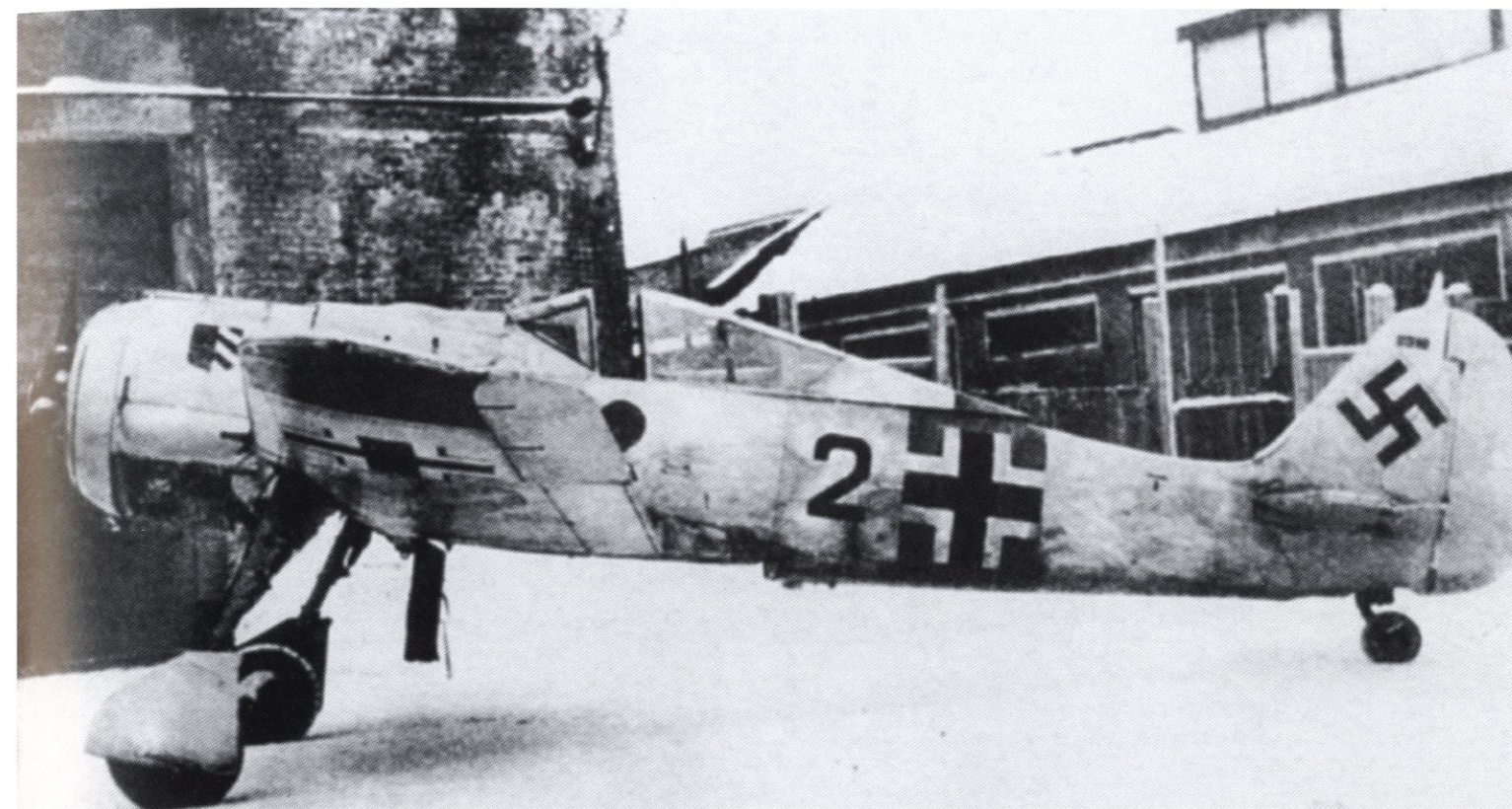
LEFT: Walter Nowotny examining the damaged wing of one of Karl Schnörrer's Fw 190s.



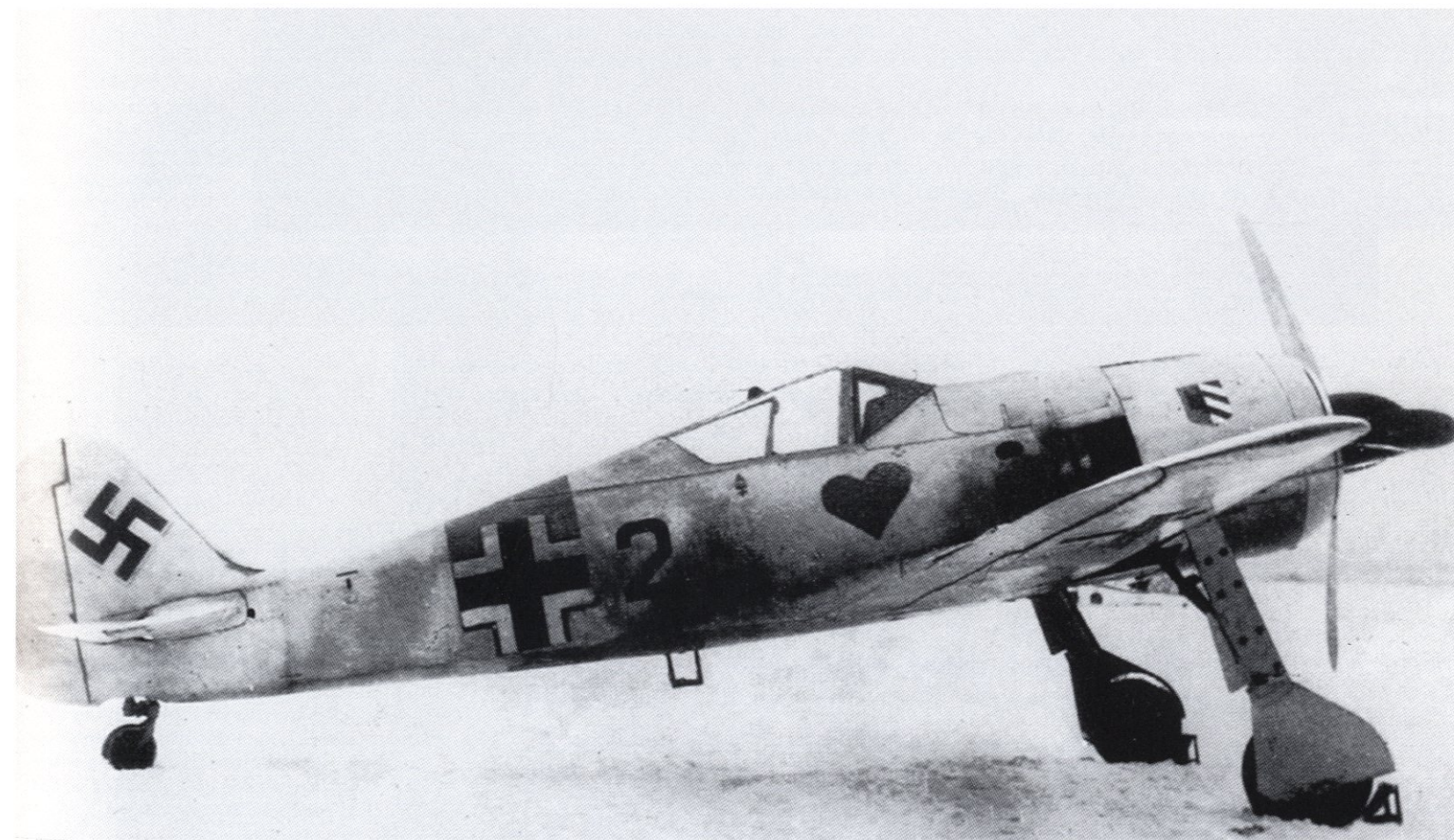
Focke-Wulf Fw 190 A-4 'Black 2', flown by Uffz. Helmut Brandt of 2./JG 54, Lake Ladoga area, 13 January 1943

The uppersurfaces on this aircraft were overpainted with a white winter finish but, as may be seen in the accompanying photographs, this soon became worn and weathered. Note that on the starboard side the Staffel painter has inadvertently overpainted the lower part of the fuselage Balkenkreuz.

BELOW: On 13 January 1943, Uffz. Helmut Brandt of 2./JG 54 was forced down by Soviet fighters and crash-landed on the ice near the south-eastern shore of Lake Ladoga, where he was taken prisoner. This photograph, from German sources, shows Uffz. Brandt's 'Black 2', sometime before this incident.



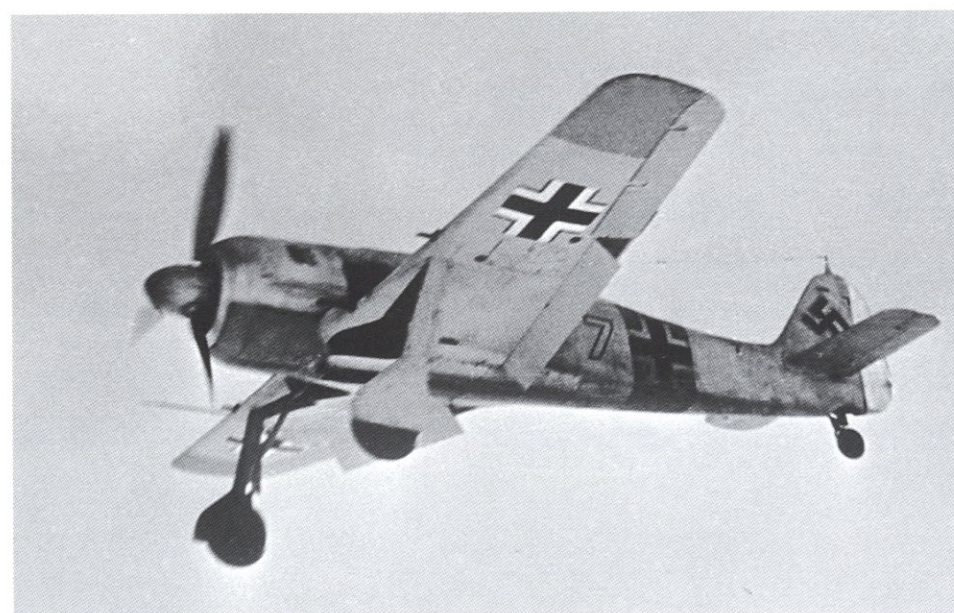
ABOVE AND BELOW: Uffz. Brandt's aircraft was subsequently recovered from the frozen lake and, although it had suffered a bent propeller and several panels were missing from the lower fuselage (*ABOVE*), it was quickly restored to an airworthy condition (*BELOW*) and extensively flight tested in the summer of 1943. It would seem that any parts of the white winter finish disturbed during repairs were also refurbished as the tail area of the aircraft when it was photographed in Soviet hands appears cleaner than in the view of the machine before it was forced down.



RIGHT: Two newly camouflaged Fw 190 A-4s of I./JG 54 in the winter of 1942/43, the aircraft nearest the camera being 'Yellow 11' of 3. Staffel. This photograph shows the appearance of the temporary white snow finish shortly after its application, the aircraft displaying little sign of wear or weathering.

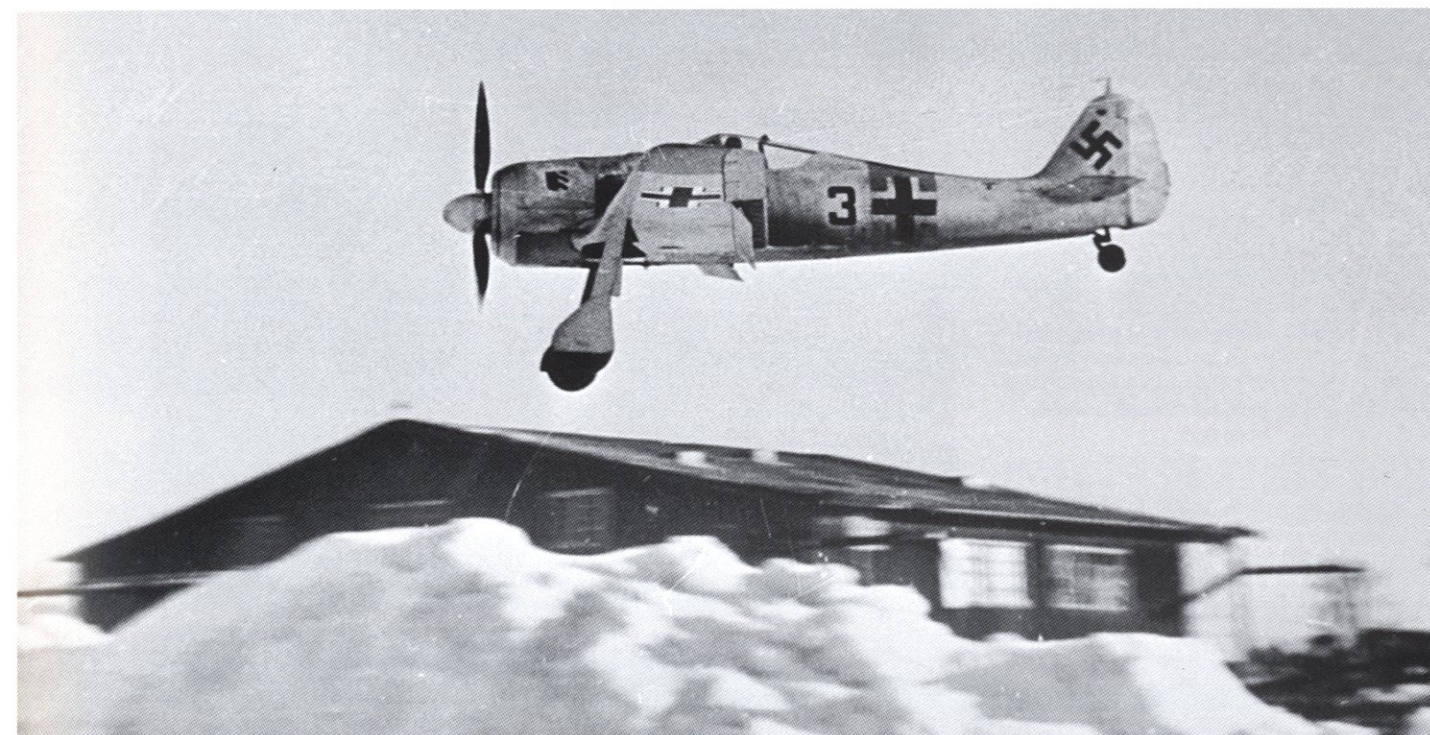
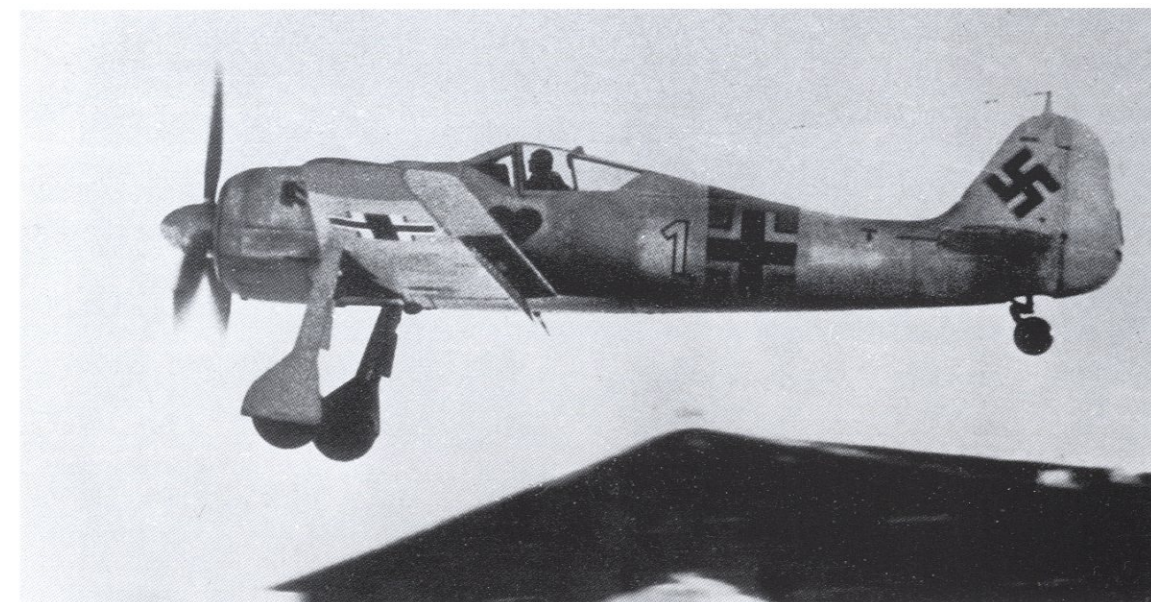


LEFT: 'White 7', a newly snow camouflaged Fw 190 A-4 of I./JG 54. Again, apart from some exhaust staining, the temporary white finish is still quite clean.



LEFT: Another view of 'White 7', pictured at a later date as the white winter finish now shows signs of weathering. Clearly visible are the yellow areas under the nose, the yellow band around the fuselage, and the yellow panels under the wingtips, but again the latter do not extend to the ailerons. Note the exhaust stain under the fuselage, not usually visible when the aircraft was photographed on the ground, and the closed inner undercarriage doors.

RIGHT: 'White 1', another Fw 190 A-4 of I./JG 54, in a very weathered snow finish. Exhaust staining was a feature of the Fw 190 which was made more visible by the temporary white camouflage. This aircraft was probably assigned to the Staffelkapitän, and the brighter areas of white distemper before and behind the fuselage Balkenkreuz suggest this machine has been transferred from another unit or otherwise given a new identity.



ABOVE: With flaps down and its engine idling as it glides in for a landing, 'Black 3' of 2./JG 54 was obviously photographed at the same time.



LEFT: Ground personnel manoeuvring 'White 4', an Fw 190 of I./JG 54. Note the man at the rear guiding the aircraft with the aid of a special attachment fastened to the tailwheel.

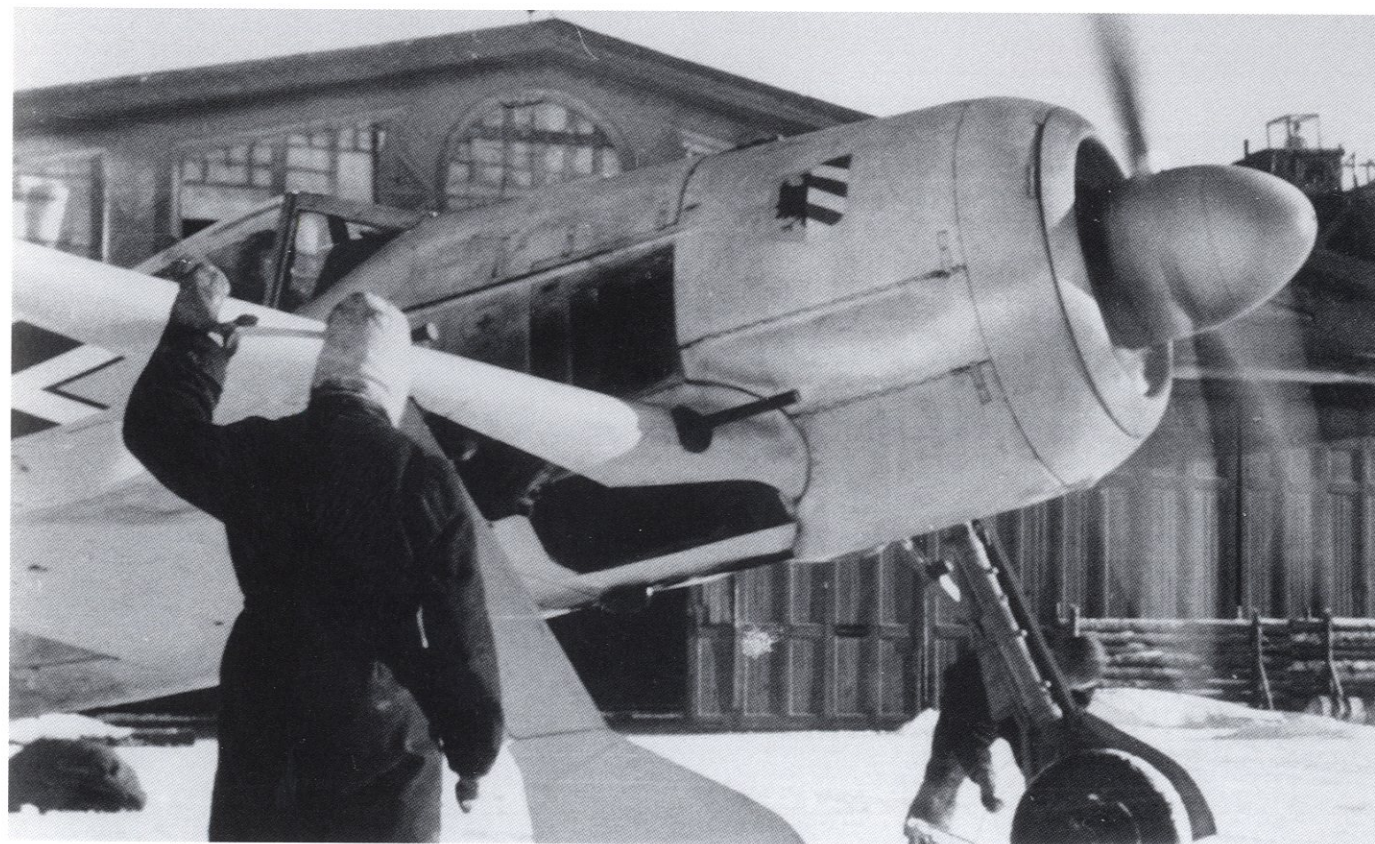


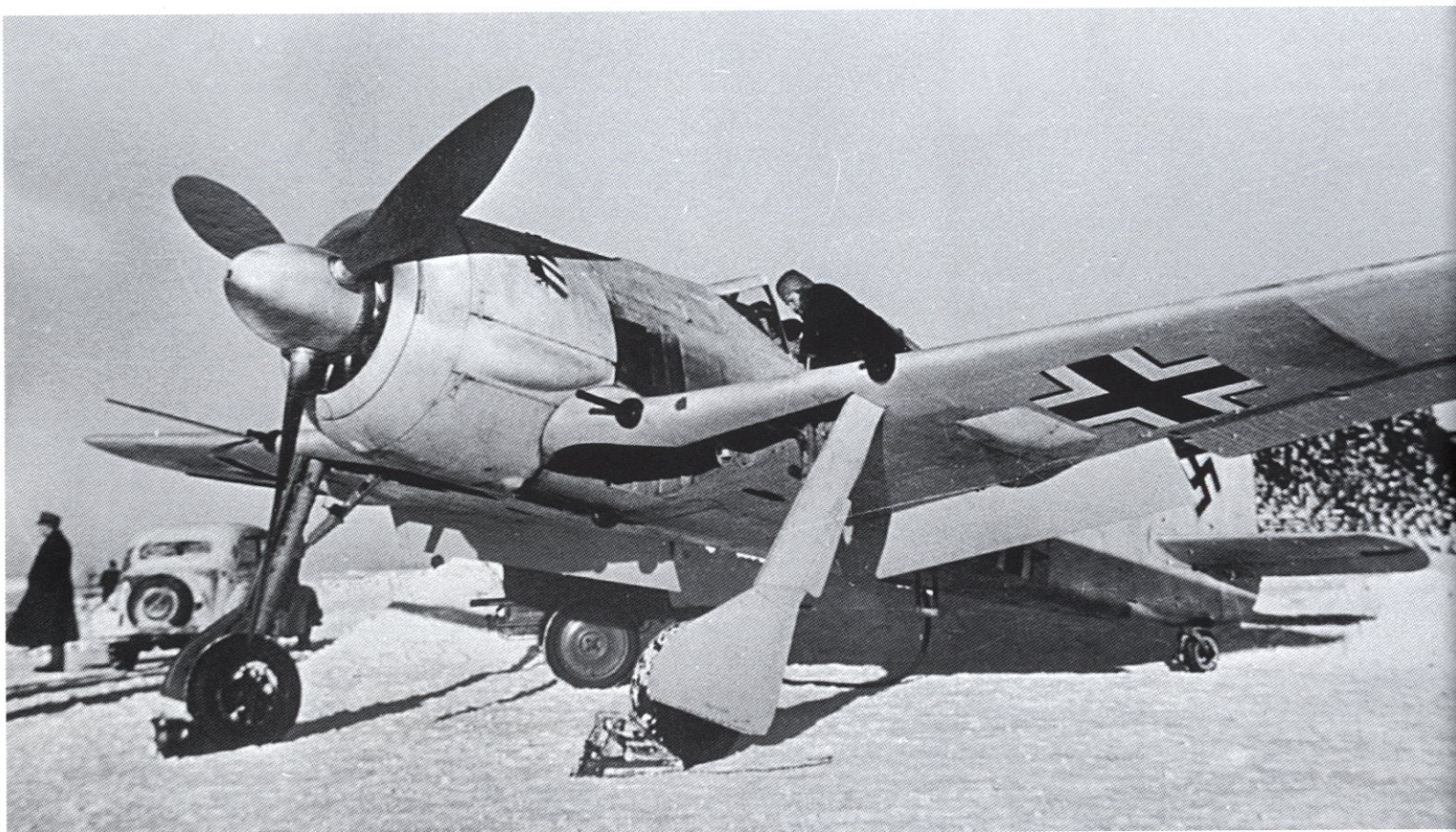
LEFT: This Fw 190 A undergoing maintenance at Siwerskaja has had its outer wing guns deleted. Pilots reported that the ammunition feeds to these weapons sometimes jammed due to g-forces during high-speed manoeuvres, but the main reason for deleting them was to save weight and therefore improve the aircraft's speed and manoeuvrability.

RIGHT: A snow camouflaged Fw 190 A of I./JG 54 throwing up a spray of slush as it accelerates during its take-off run. The fuselage markings, consisting of a chevron and two vertical bars, are those of a Major beim Stab.



LEFT AND OPPOSITE PAGE: According to the Stab marking and the unit emblem on the fuselage of this Fw 190 A-4, it was assigned to the Gruppen Adjutant of I./JG 54.





ABOVE AND BELOW: These photographs of two Fw 190 A-4s of I./JG 54 show that the aircraft (BELOW) apparently did not have the usual wide yellow fuselage band and had received a lightly-applied winter finish in such a way that it resulted in a mottled appearance, whereas the machine shown (ABOVE) has the more usual and more densely-applied white finish. Both aircraft have retained their outer-wing armament of an MG FF/M in addition to the inboard MG 151 20 mm cannon.



ABOVE: This snow camouflaged Fw 190 A-4 coded 'Black 1' is believed to have been the aircraft flown by the Staffelkapitän of 2./JG 54, and was photographed in the winter of 1942/43. At that time the Staffel colours were white for 1. Staffel, black for 2. Staffel and yellow for 3. Staffel.

Focke-Wulf Fw 190 A-4 'Black 1' flown by the Staffelkapitän of 2./JG 54, Winter of 1942/43

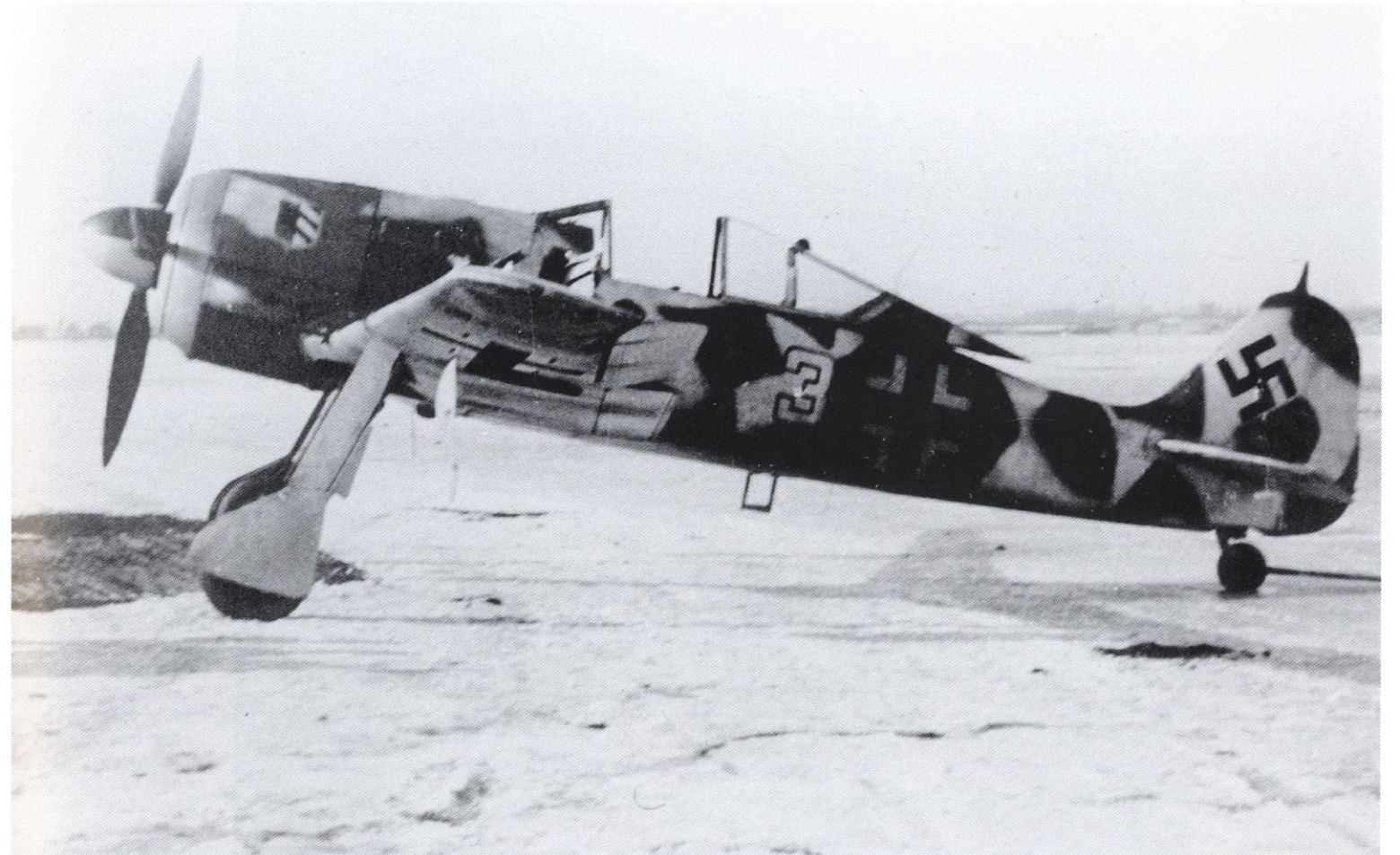
The winter scheme on this aircraft seems to have been originally applied with some care in order to avoid overpainting the markings and unit badges. Note that even the small stencil on the rear fuselage has been carefully preserved. Beneath the white finish was a standard RLM 74/75/76 grey camouflage, parts of which may be seen showing though those areas where the white was more thinly applied and in the area of the wingroot where it has been worn away by the groundcrew's feet. It is thought that the lower undercarriage doors covering the wheels had also received a light overspray of white.





LEFT: Obstdt. Hannes Trautloft, the Kommodore of JG 54, in his snow camouflaged Fw 190, probably in early 1943. Trautloft continued to lead the 'Grünherz' Geschwader until the summer of 1943 when Galland, the General der Jagdflieger, transferred him to his staff as Inspizient Ost, or Inspector for Fighter Units in the East. The emblem on the fuselage consists of a large Green heart, within which are the emblems of the Geschwader's I., II. and III. Gruppen.

BELOW: Snow camouflaged Fw 190s of I./JG 54 at Krasnogvardiesk. It is interesting to note that the swastikas on both aircraft have been sprayed on when the winter camouflage was applied, yet great care has clearly been taken to avoid overpainting the stencilling on the rear fuselage.



ABOVE: 'White 3' of I./JG 54 showing an interesting variation in the winter scheme. It would seem that the same characteristic low-demarkation finish of dark greens previously applied to the unit's Bf 109s was also employed on its Fw 190s but, in this instance, patches of the green have been left showing through the temporary white winter finish.

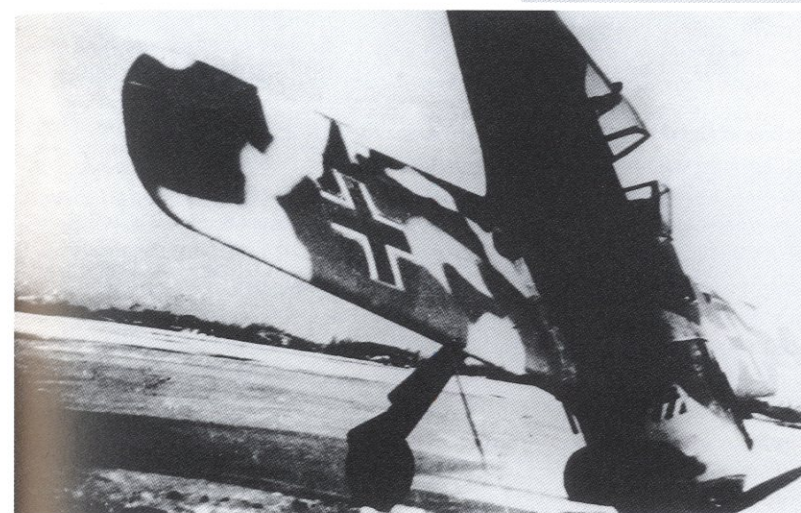
Focke-Wulf Fw 190 A-4 'White 3' of I./JG 54, Winter of 1942/43

The base colour on this aircraft consisted of two shades of green, both very dark and very similar in tone. A temporary white pattern was then applied over these greens which, although beginning to show signs of wear, was nevertheless brighter than the white parts of the fuselage Balkenkreuz which shows evidence of dirt and grime accumulated earlier. The white number on the fuselage, however, seems to have been kept clean. The undersurfaces on this aircraft were RLM 76 and yellow theatre markings had been applied to the underside of the engine cowling, the wingtips, the fuselage and the lower part of the rudder.

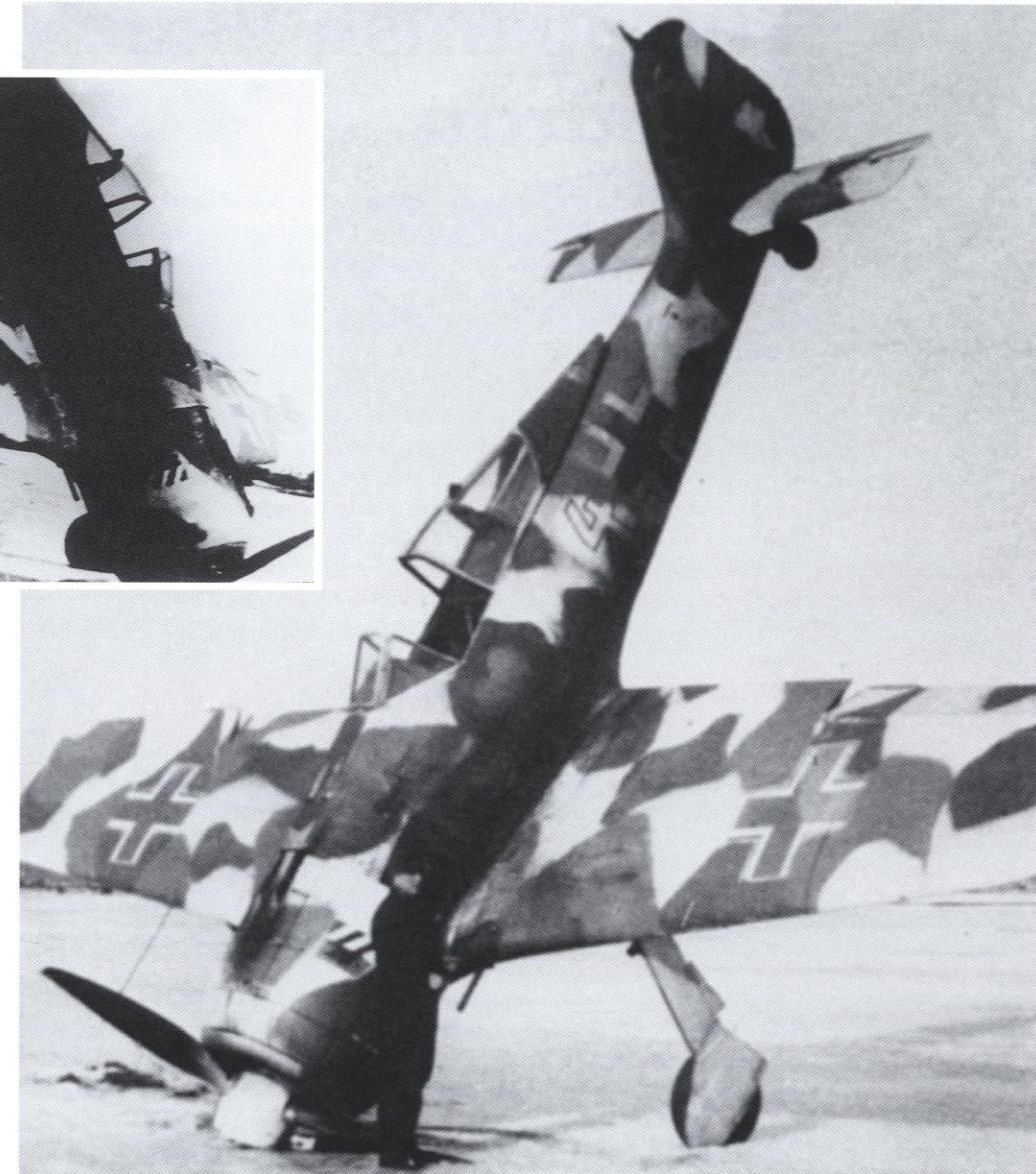




LEFT AND BELOW: This segmented scheme would have been especially suitable for operations during the spring of 1943 when, in wooded or forested areas, snow which had fallen on trees was the first to melt, leaving dark areas contrasting with the white in glades and other clearings where snow usually disappears more slowly.



RIGHT AND INSET: Two useful views of 'White 4', another similarly camouflaged aircraft of 1./JG 54, showing the white camouflage pattern on the upper surface of the wings. This has in turn been applied over a two-tone dark green scheme which was, in turn applied over the standard grey factory finish, traces of which may still be seen in the areas surrounding the upper wing Balkenkreuz.



BELOW: A similarly camouflaged Fw 190 coded 'White 1'. Just visible on the fuselage, but mostly obscured by the wingtip, is what is believed to be the 'Green Heart' emblem of JG 54. However, this could also be an area of green camouflage and, as this example lacks the usual cowling emblems invariably observed on aircraft of JG 54, it is possible that this machine served with JG 51. The spinner on this aircraft has been painted with two yellow rings.



The Spanish 'Blue' Squadron

Although sympathetic to the Axis cause and feeling obliged to repay the military assistance Hitler had given him during the Spanish Civil War, General Francisco Franco, the Spanish dictator, resisted Hitler's repeated requests to bring Spain into the war and adopted an attitude of benevolent neutrality as the country had not yet recovered from the effects of the three years of civil war. However, with the launching of Operation 'Barbarossa', Franco was presented with an opportunity which allowed him to maintain Spain's neutrality while at the same time repay his debt of gratitude and also to continue his fight against Bolshevism. Franco therefore agreed to allow 4,000 Spanish volunteers to serve under German arms on the Eastern Front and, following a formal offer of such Spanish aid, and Hitler's approval, recruiting stations were opened in Spain. The response, however, was so overwhelming that the stations were soon closed, and by using a system of rotation as many as 45,000 Spanish volunteers are believed to have fought on the Eastern Front.

The air component of the Spanish legion included a fighter squadron of Bf 109s, the 1a *Escuadrilla 'Azul' de Caza*, known as the 'Blue' Squadron and named after the dark blue shirts worn by the *Falange*, the Spanish Fascist movement. This unit arrived on the Russian Front on 24 September 1941 and was incorporated into VIII. *Fliegerkorps* as the 15.(*Span.*)/JG 27, but it performed so poorly – five pilots were killed and one injured in return for 10 victory claims – that it was withdrawn to Spain in January 1942.



ABOVE: A Bf 109 F of 1a *Escuadrilla*, the first Spanish contingent to serve on the Russian Front.

In the summer of 1942, Franco decided to despatch a second *Escuadrilla 'Azul'* to support the German crusade in the East. Created at Bordeaux on 21 June 1942, this unit was led by one of Spain's most able fighter pilots, *Comandante* Julio Salvador Díaz-Benjumea, who had been credited with 24 victories in the Spanish Civil War. Now re-equipped with Bf 109 Fs, the 2a *Escuadrilla 'Azul'* duly arrived at Orel where it was incorporated into the fighter force under *Luftwaffenkommando Ost* and was deployed under the command of JG 51 as 15.(*Span.*)/JG 51. The *Staffel's* first victories occurred on 1 July 1942, when *Hptm.* Frutos Rubio accounted for a LaGG-3, followed on 5 July when *Oblt.* Garret-Rueda shot down another LaGG-3 and *Hptm.* Bengoechea destroyed a DB-3.

The 2a *Escuadrilla* remained on the Eastern Front until October 1942 when it was withdrawn and relieved by the 3a *Escuadrilla*, equipped with the Bf 109 F-4 as well as G-2s, G-4s, and later, a few examples of the Fw 190. During the time that it operated in the East, the 3a *Escuadrilla* flew 779 sorties and accounted for 16 Soviet aircraft up until the time it was withdrawn on 30 December 1942. The unit was then posted to Southern France in order to receive further combat training under the direction of *Major* Hermann Graf. It returned to the front in June 1943 as the 4a *Escuadrilla* equipped with the Fw 190. With 74 enemy aircraft destroyed, this was to prove the most successful *Escuadrilla* and remained on the Eastern Front until 23 February 1944.

Coinciding with the withdrawal of the 4a *Escuadrilla*, a 5a *Esquadrilla* under *Cmte.* Frutos Rubio had already arrived at Bobruisk. The unit's participation at the front was short-lived, however, as after six days, during which the pilots flew 86 sorties, a *Luftwaffe General* arrived to inform *Cmte.* Rubio that, in accordance with orders from the *Führer*, *Reichsmarschall* Göring had instructed him order the *Staffel's* withdrawal.

RIGHT: Spanish officers of 2a *Escuadrilla*, including *Major* Salvadore Arango, the *Staffelkapitän*, far left, in conversation with a *Luftwaffe* liaison officer in the summer of 1942. The uniforms worn by the men of the Spanish Air Force while serving in Russia were identical to standard *Luftwaffe* issue with the exception of the Spanish volunteers' shield on the right sleeve which consisted of horizontal red, yellow, red stripes with the word 'España' in yellow capital letters against a black field across the top.



BELOW: Officers inspecting the wing armament of another of the unit's Bf 109 Fs. Note the tropical air cleaner.



RIGHT: A Bf 109 F of the 15.(*Span.*)/JG 51 with standard *Luftwaffe* camouflage and markings but with the addition of the Spanish Falangist yoke and arrows emblem on the rear fuselage and the name of a former member of the *Escuadrilla 'Azul'* on the engine cowling. This practice of adding the names of fallen comrades to one of the unit's machines was also observed by some *Luftwaffe* units (see, for example, Page 91 of 'Strike in the Balkans' – Volume 3, Section 1). In this instance, the inscription commemorates Cabo Mecanico (Corporal Mechanic) Zaro.



RIGHT: A Spanish volunteer standing guard over one of the unit's Bf 109 Fs. The emblem on the nose of this machine is that of the 3a *Escuadrilla*, which operated on the Eastern Front between November and July 1943, at which point it was relieved by another contingent of volunteers equipped with the Fw 190.



LEFT: This aircraft, 'White 10', an Fw 190 A-3, is believed to have belonged to 15.(*Span.*)/JG 51, operating on the Central Russian Front in the summer of 1943. As with the unit's earlier Bf 109s, the Fw 190s of the *Escuadrilla 'Azul'* carried standard *Luftwaffe* camouflage and markings, in this case a 74/75/76 scheme with theatre and aircraft recognition markings in yellow. The front of the spinner was white.

Rebuilding Luftflotte 4

The collapse of the Axis forces at the Don Bend in December 1942 sounded an alarm that alerted the attention of the Germans to their inefficient supply system in the East. Through harsh but effective methods implemented by *Generalfeldmarschall* Erhard Milch, *Generaloberst* von Richthofen and a number of other German officials, almost miraculous improvements were evident astonishingly rapidly and *Luftwaffe* units that had been in a sorrowfully depleted state in January 1943 were brought up to full operational strength in February 1943. *Generalmajor* Adolf Galland, the *General der Jagdflieger*, arrived from Germany on a morale-boosting tour of fighter units in the East and one of the first *Jagdgruppen* to be thus bolstered in respect to both morale and materials, was II./JG 52. This unit was now responsible for fighter cover over the Rostov bottleneck which formed 1. *Panzerarmee*'s narrow escape route from the Caucasus. On 2 February, the *Gruppenkommandeur*, *Hptm.* Johannes Steinhoff, achieved his 150th victory and reports from the Soviet 8th Air Army, responsible for air support in this sector, describe its very difficult situation in the air fighting during this time.

Further north, Soviet ground troops were more successful. During the first half of February 1943, their armoured spearheads crossed the River Donets, seized Belgorod, Kursk and Kharkov, and swept south-westwards, threatening to envelop and destroy two whole German army groups. Had they succeeded in this so soon after the Stalingrad disaster, it is quite plausible that the Germans' will and ability to continue fighting would have quickly collapsed. In fact, the Soviets were less than 50 miles and only days away from achieving this goal when the *Luftwaffe* struck with terrible effect.

As acknowledged by such authorities as *Generalfeldmarschall* von Manstein, it is an established fact that the reinforced *Luftflotte 4* played the dominant role in saving the whole situation in this grave crisis, yet this has received surprisingly little recognition or attention in historical accounts. The ground forces were, to a large extent, fragmented and demoralised after a prolonged retreat, and although reinforcements were in transit, they were still arriving at various railway stations and had yet to move up to the front lines. The fierce battle that followed therefore involved mainly Soviet ground forces and *Luftwaffe* aircraft which appeared in numbers similar to those employed in the early days of the war.

It is simply impossible to exaggerate the *Luftwaffe*'s contribution to the battle in February and March 1943 in which the Red Army's attempt to create a second Stalingrad was utterly destroyed. Because of the long distance from the Soviet fighter bases to the forward armoured spearheads engaged in this battle, the *VVS* made only a limited appearance. Thus, the air fighting was at first fairly limited and it was only when the subsequent German counter-attack brought the front-lines closer to the Soviet fighter bases that the air fighting grew stiffer. The German fighters shot down many more Soviet aircraft than they lost, but casualties to I./JG 52, which had been considerably reinforced in February 1943, included *Ofw.* Karl Hammerl who, with 67 victories, went missing after a forced-landing near Kharkov on 2 March. Four days later, the same *Gruppe* lost *Uffz.* Gerhard Hübner, who had 20 victories, and on 18 March, while Kharkov and Belgorod again fell into German hands, I./JG 52's *Lt.* Hans-Werner Schneider, with 30 victories, was killed in combat with La-5s.

Meanwhile, over the bridgehead in the north-western Caucasus, *Hptm.* Johannes Steinhoff's II./JG 52 and *Major* Hubertus von Bonin's III./JG 52 provided decisive air support which allowed 17. *Armee* in the Kuban to consolidate. After retreating from the Caucasus, III./JG 52 had received new aircraft at Nikolayev, and had now been restored to its previous strength. While II./JG 52 included Steinhoff and Barkhorn, III./JG 52 contained a concentration of other successful pilots including *Hptm.* Günther Rall, *Lt.* Alfred Grislawski, *Lt.* Josef Zwernemann, *Lt.* Berthold Korts, and *Ofw.* Edmund Rossmann.

To reinforce 17. *Armee*, a major new airlift operation was mounted and JG 52's fighters effectively prevented most attempts by the *VVS* to interfere. Throughout February 1943, heavy air fighting also erupted above the Myshako Bay, west of Novorossiysk, on the Caucasus Black Sea coast. Here the Soviets had made an amphibious landing in the German rear area and it was during these battles that II./JG 52 lost its 67-victory *Ritterkreuzträger* *Oblt.* Gustav Denk. This occurred on 13 February 1943, a day when II./JG 52 claimed 12 victories for the loss of five Bf 109 Gs to all causes.

Further north, similar defensive successes were achieved through the support of *Luftwaffenkommando Ost*, operating from such well-equipped air bases as those around Orel, when a major new operation against Army Group Centre was initiated on 22 February. On that date, the Soviet Western Front's 16th Army attacked the German 2. *Panzerarmee*'s northern flank at



ABOVE: Johannes Steinhoff led II./JG 52 in Russia from 1 March 1942 to 24 March the following year when he was transferred to take command of JG 77 in the Mediterranean. This photograph of *Hptm.* Steinhoff preparing for a flight was probably taken in 1942.

Zhidzhra, and Bryansk Front's 13th and 48th Armies struck at its southern flank at Orel. Both attacks failed, mainly due to the *Luftwaffe*'s activity. Soviet 1st and 15th Air armies, 1 VA and 15 VA were launched in strength but suffered severe losses inflicted by JG 51 'Mölders' which, on 23 February, claimed 46 victories, including five by *Fw.* Josef of I./JG 51 and *Lt.* Günther Schack of III./JG 51 for only one loss. The air fighting on 24 February opened shortly after 06.00 hours, when the Focke-Wulf Fw 190s of I. and III./JG 51 intercepted large groups of Il-2s above 2. *Panzerarmee*'s positions and claimed 13 shot down. Until around 14.30 hrs that day, JG 51 claimed a total of 47 victories, of which seven were credited to *Fw.* Jennewein, without any losses. As a result of these actions and adverse weather conditions, 15 VA remained completely grounded for at least the next four days. Meanwhile, groups of between four to 15 *Luftwaffe* bombers and dive-bombers harassed the attacking Soviet ground troops.

'Assi' Hahn and 'Beisser' Beisswenger Are Lost

In the restructuring of *Luftwaffe* forces in the East in early 1943, two Bf 109-equipped *Jagdgruppen* – I./JG 3 'Udet' and III./JG 54 'Grünherz' – were permanently withdrawn from the Eastern Front. The remnants of I./JG 3 were pulled back to Germany where the large gaps in its ranks were filled by new pilots before it was committed against the heavy bombers of the US Eighth Air Force. III./JG 54 was in far better condition when it arrived in France to replace the Fw 190 A-equipped I. Gruppe of JG 26 'Schlageter' which then transferred to the Eastern Front. At the same time, 4./JG 54 was sent to the West and was replaced by 7./JG 26, which was attached to the main part of JG 54, the 'Grünherz' *Geschwader*, in the East. Thus, *Obstlt.* Hannes Trautloft, commanding JG 54, could muster two whole Fw 190 *Gruppen* plus one *Staffel*. To lead II./JG 54, the *Geschwader*'s only remaining Bf 109 *Gruppe* in the East, the famous *Major* Hans 'Assi' Hahn was transferred from JG 2, the 'Richthofen' *Geschwader*, then operating against the RAF and USAAF on the *Kanalfront*. Together with *Lt.* Max Stotz, 'Assi' Hahn formed a *Rotte* and within a short period this pair soon accumulated an astonishing row of victories, each frequently returning from missions to file multiple claims. On 26 January 1943, Stotz reached his 150th victory while 'Assi' Hahn accounted for his 100th the next day.

Another outstanding fighter pilot in II./JG 54 was *Oblt.* Hans 'Beisser' Beisswenger, who achieved his victories at a steadier pace and without the large, multiple claims in a single day, but reached 125 victories on 23 January 1943. Beisswenger had been a fighter instructor, and among the aces tutored under his supervision were JG 52's Helmut Bennemann and Alfred Grislawski.

In mid-February 1943 the fighting in the northern combat zone was focused on the German stronghold at Demyansk. Under relentless pressure from the Red Army, it was decided to abandon this forward position and *Major* Hahn's II./JG 54 was assigned the task of clearing the skies of Soviet aircraft over the retreating columns. This, however, proved a most difficult task and, following combat with *VVS* fighters on 21 February, 'Assi' Hahn was shot down over Soviet territory. After a crash landing, Hahn was captured and taken to a Soviet fighter base where he was introduced to the pilot who had reportedly shot him down⁵. Beisswenger went missing during combat with other Soviet fighters in the same sector on 6 March. The loss of those two aces, both of whom carried the Oak Leaves to the Knight's Cross, was indeed grievous to II./JG 54, since apart from their experience and qualities as fighter pilots, Hahn had been credited with a total of 108 victories, and Beisswenger with 152.

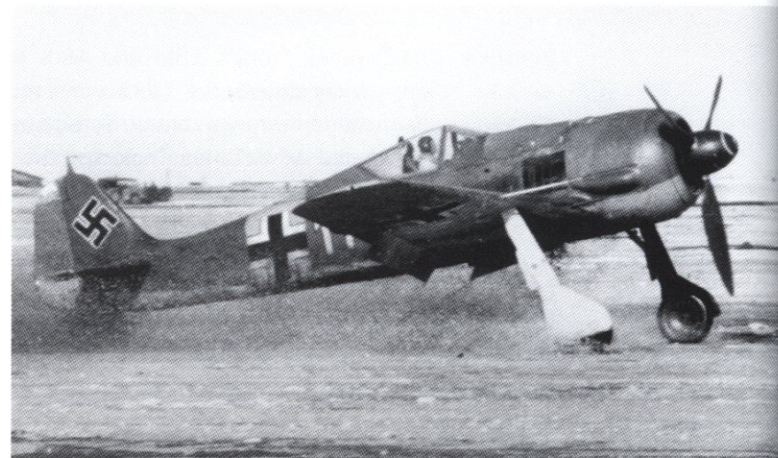
The day after Beisswenger was lost, and almost in an act of revenge, JG 54's leading ace, *Hptm.* Hans 'Fips' Philipp, *Kommandeur* of I./JG 54, shot down nine Soviet aircraft. On 17 March, his 26th birthday, Philipp became the war's second pilot, after Hermann Graf, to reach the 200-victory mark. Shortly afterwards, this formidable pilot left the East to become a unit leader in the *Reichsverteidigung* where his extraordinary skills in fighter versus fighter combat would be wasted in head-on assaults against large formations of US four-engined bombers.

Later, the increased demands to reinforce the Home Defence force also led to the departure of I./JG 26 and 7./JG 26 from the East. The *General der*

BELOW: Hans Philipp, *Kommandeur* of I./JG 54, being assisted with his parachute prior to a sortie on the Eastern Front in early 1943. In the background is his snow camouflaged Fw 190 carrying *Stab* markings comprising the black and white double chevron. Philipp led I./JG 54 from 17 February 1942 until 1 April 1943, when he was transferred to the Defence of the Reich in the West and became *Kommodore* of JG 1.



5. Hahn remained in captivity, until as with most other German PoWs held by the Soviets, he was released in late 1949.



THIS PAGE: Fw 190s landing and taxiing during the spring thaws in early 1943. Despite the camouflage scheme, which is similar to that employed by JG 54, these aircraft do not have any of JG 54's unit emblems and are therefore thought to have belonged to I./JG 51. The similarity between the style of numeral seen and in the photograph of the Fw 190 of 15.(Span.)/JG 51 shown on Page 225 would appear to support this theory.



Focke-Wulf Fw 190 A-4 'White 11' of I./JG 51, Spring 1943

This aircraft was finished in a two-tone camouflage of Eastern Front greens on the upper surfaces and carried markings very similar to those seen on the Fw 190s operated by JG 54. The undersurfaces were RLM 76 and an area of the original 74/75/76 colours may be seen around the swastika. An interesting feature on this machine was the white spiral on the spinner, a decoration which seems to have gained in popularity in all theatres in 1943.



THIS PAGE: By the end of 1942, I., and III./JG 51 had fully converted to the Fw 190 while IV. Gruppe retained its Bf 109s. When these photographs were taken the Geschwader's II. Gruppe, also equipped with Bf 109s, was operating in the Mediterranean theatre.



Jagdfliager, Adolf Galland, had intended to have JG 54 and his own old JG 26 change places, with the whole of JG 26 going East while JG 54 went in the opposite direction, but this plan did not materialise. Although I./JG 26 and 7./JG 26 achieved some successes in air combat in the East, their victory-to-loss ratio in the first four weeks on the Eastern Front was not much better than those parts of the *Geschwader* that had remained in the West and were definitely inferior to those produced by the apparently more skilful pilots of JG 54 'Grünherz'. When I./JG 26 and 7./JG 26 were recalled to the West in the early summer of 1943, JG 54 received no replacements as compensation for their departure, nor for those parts of the unit which had already been transferred to the West. Shortly afterward, Galland chose *Obstlt.* Hannes Trautloft, the skilled and popular unit commander of JG 54 who had created much of the 'Grünherz' *Geschwader's* particular strength, to become his personal *Inspizient Ost*.

Although claiming a long list of aerial victories in the East, I./JG 26 and its neighbouring unit, I./JG 54, failed to protect I./KG 1 from the VVS when it arrived with *Luftflotte 1* on 19 March 1943. The arrival of this fresh *Kampfgruppe* immediately caught the attention of the Soviet commanders who drew up plans for a series of attacks aimed at neutralising it. As a result, I./KG 1 was completely knocked out by Soviet air raids carried out in daylight against Kotly aerodrome on 19 and 20 March 1943 and had to be withdrawn from action. One German report concerning the attack on the 19th reads: "It was a classic bomber strike by 15 to 20 Russian aircraft approaching at low level from the sea. The anti-aircraft fire by

RIGHT: Lt. Walter Nowotny flew a number of different Fw 190s on the Eastern Front including this A-4, 'White 10', finished in a segmented scheme, which he is reported to have flown from Krasnovardeisk in February 1943. It is thought that this aircraft was camouflaged white overall during the depths of the winter of 1942/43 and that the white was progressively removed to coincide with the progress of the spring thaw. If that is the case, however, the ragged light outline to the fuselage numeral is difficult to explain as this would have been applied in a permanent paint and there would have been no risk of accidentally removing it if the area had been scrubbed completely clear of the temporary white. Under these circumstances, it is possible that the area around the numeral is in fact part of the original RLM 76 factory finish, left exposed when the uppersurface greens were roughly applied.



BELOW: Nowotny in the cockpit of another Fw 190 which displays an interesting 'Rammbock' emblem.

four quadruple-barrelled 20 mm machine guns was completely inadequate. German fighters were busy at quite a distance elsewhere, which was probably known to the Russians through intelligence channels. The small and medium bombs hit precisely between the parked aircraft and the billeting areas. After the bombardment the aircraft returned for low-level strafing attacks." The attack was repeated that same afternoon when 17 bombers destroyed or put out of commission ten Junkers Ju 88s and caused considerable losses in personnel. On 20 March, 24 Soviet bombers attacked Kotly again and destroyed another five Ju 88s.

I./JG 26 succeeded in shooting down a single Soviet aircraft, an old R-5 biplane, on 19 March but lost a Focke-Wulf 190 when Soviet aircraft raided its airfield. During various encounters the same day, JG 54 claimed 15 victories, including two by Lt. Walter Nowotny. Next day, I./JG 26 reported no successes, while I./JG 54's Lt. Nowotny attained his 75th victory.

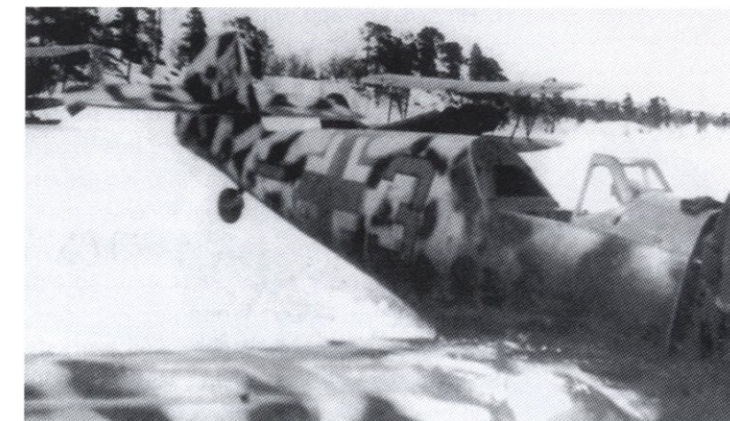


Messerschmitt Bf 109 G-2/R6 'Yellow 3', flown by Ofw. Rudolf Müller of 6./JG 5, 19 April 1943
The white winter scheme on the uppersurfaces of this aircraft, W.Nr. 14810, were applied in such a way that, as with the aircraft flown by Hptm. Heinrich Ehrler, shown later, patches of the standard Luftwaffe 74/75/76 day fighter scheme remained, although some of these patches were then oversprayed in a very dark green. Undersurfaces remained RLM 76 and it is not known if this aircraft carried its *Stammkennzeichen* under the wings.

INSET AND BELOW: Ofw. Rudolf Müller of 6./JG 77 in the cockpit of his Bf 109 G-2/R6 'Yellow 3', shown again (**BELOW**). This pilot's flying career began when he was posted to 1./JG 77 and claimed his first victory on 12 September 1941. In March 1942, 1./JG 77 was redesignated 6./JG 5, and Müller was flying with this unit as a *Feldwebel* when he was awarded the *Ritterkreuz* on 19 June 1942, by which time he had increased his victory tally to 46. On 13 March 1943, Müller accounted for his own 92nd victory, which was also the 500th for 6./JG 5.



RIGHT: On 19 April 1943, Ofw. Rudolf Müller was flying his 'Yellow 3', when he became engaged in aerial combat with a large number of Soviet fighters over Murmansk. In this engagement, Müller's aircraft was damaged by a Soviet-flown Airacobra and he was obliged to make an emergency landing on the frozen Lake Bolschoje in the Murmansk area. Exactly what happened to him then is the subject of various pieces of often conflicting information. As with a number of aircraft operating in the Far North, Müller's carried a special escape kit which included skis and a machine-pistol, and it is believed he may have tried to escape before being captured by a Soviet ski patrol and made a prisoner of war. What is certain is that Müller was taken to visit the VVS unit against which he had fought for many months and which he encountered during his last flight, but there is again no reliable information concerning his subsequent fate, particularly the exact date and circumstances of his death. One source states that he was shot while trying to escape from a PoW camp in October or November 1943, while another states that he was seen alive as late as 1947 but was murdered in a Soviet prison camp in 1947 or 1948. There is also a report that, post-war, he enjoyed a long career as a flying instructor in Russia and lived until the 1990s.



Air Battle over the Kuban

Since the *Luftwaffe's* air superiority in the East was based on the performance of extremely experienced individual pilots, the loss of each fighter-pilot inevitably lessened the *Jagdwaaffe's* position of strength. As seen in the autumn of 1942, the transfer from Stalingrad of such top aces as Hermann Graf, Friedrich-Karl Müller, Günther Tonne, and Wilhelm Crinius resulted in a certain weakening of the *Jagdwaaffe* in that sector and the subsequent losses of 'Assi' Hahn and 'Beisser' Beisswenger had a similar impact. Reflecting Germany's increasingly desperate situation, two other pilots, JG 54's Major Hans Philipp with 204 victories and JG 52's Major Johannes Steinhoff with 156, were transferred to other theatres of war.

Another important loss in that period in the Far North was *Ofw.* Rudolf 'Rudi' Müller of JG 5. Müller's fighter career came to an end on 19 April 1943 when an Airacobra pilot shot up his Bf 109 G-2 over Soviet territory. He forced-landed and attempted to escape on skis but was seized and taken to a Soviet fighter base near Murmansk. There, Müller, who had been credited with 94 victories, was introduced to some of the pilots he had been fighting during the last 18 months.

In the spring of 1943, the focus of the air war on the Eastern Front moved south towards the Kuban bridgehead where a formidable *Luftwaffe* force eventually comprising over 600 aircraft was built up. At that time, *Stab/JG 3*, *Stab/JG 51*, *Stab/JG 52*, and five further *Jagdgruppen* comprising II. and III./JG 3, and all three *Gruppen* of JG 52, plus the Slovak 13./JG 52 and the Croatian 15./JG 52, operated over this small territory. Combined into I. *Fliegerkorps*, these forces were, at the beginning of April 1943, opposed by almost 600 Soviet aircraft.

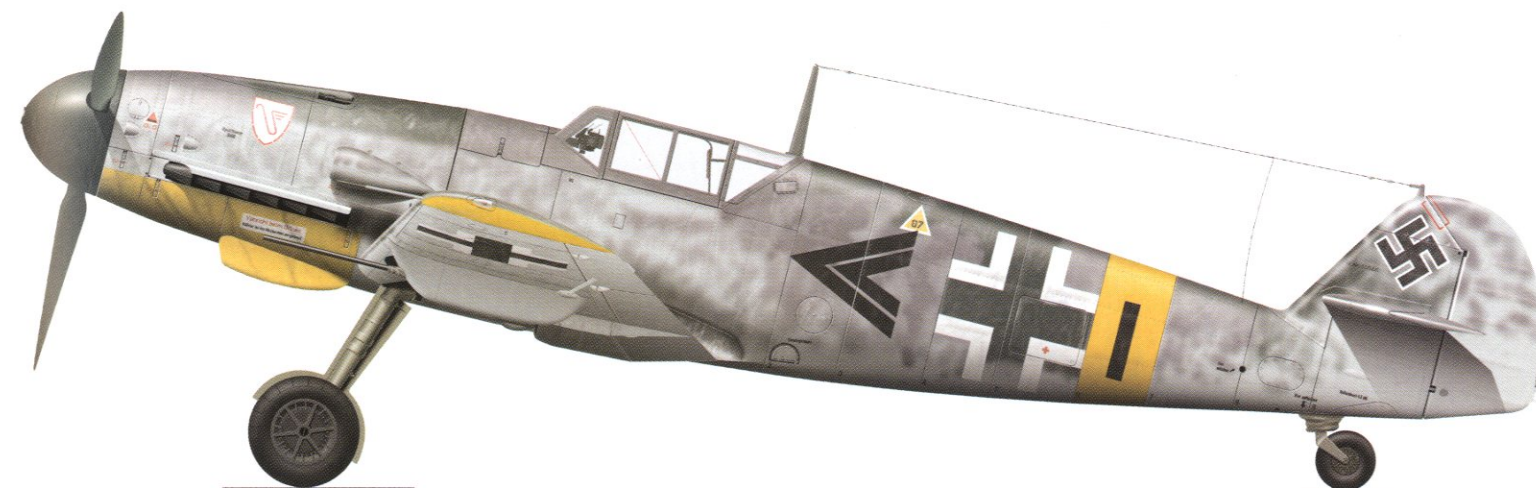
Sporadic skirmishes in March 1943 soon developed into an extended air battle, often involving hundreds of aircraft from both sides in the air simultaneously. Already the initial encounters in these battles indicated to the Germans that their Soviet counterparts had gained a great deal of new experience. Helmut Lipfert, who flew as a *Leutnant* with II./JG 52, based at that time at Anapa in the Kuban, described the first air combats in his memoirs: "Things did not go well for the II. Gruppe at Anapa. There were few contacts with the enemy but many losses, and it was not just the beginners and young pilots who failed to return, but some of the old hands as well." The pilots of a Soviet fighter group equipped with Airacobras were found to be particularly aggressive, and on 11 April a formation of these aircraft from the 16th Guards Aviation Regiment attacked a number of Bf 109s from II./JG 52, shooting down *Ofw.* Willi Nemitz, credited with 81 victories, without loss to themselves.

The air battle over the Kuban entered a new, elevated stage on 17 April, when German 17. *Armee* launched Operation 'Neptun', which was intended to neutralise the Soviet bridgehead at Myshako Bay. On that day, I. *Fliegerkorps* mounted 1,560 sorties against 538 by the enemy. Over the next few days, the Soviets reinforced their air forces in the area until they numbered 800 aircraft and on 20 April a huge air battle raged as these aircraft were dispatched to thwart the German attack. The German fighters claimed 80 shot down, and one of them, destroyed by III./JG 52's *Hptm.* Günther Rall, was recorded as JG 52's 5,000th victory. The most successful *Jagdgruppe* in terms of the victory to loss ratio was II./JG 3, the *Kommandeur* of which, *Hptm.* Kurt Brändl, had a tally of more than 100 kills at this time. Two other II./JG 3 pilots who rose to fame during this period were *Oblt.* Joachim Kirschner and *Lt.* Wolf Ettel, both of whom had been credited with more than 80 victories apiece in the Kuban by April 1943, but the *Jagdgruppen* were unable to prevent the VVS bombers from routing the German attack force.

As the bloody battle continued to rage, the VVS gradually gained air superiority over the units of I. *Fliegerkorps* and, interestingly, the material in Soviet military archives presents a slightly different picture from the high victory claims made by the German fighters. This, of course, is only natural in view of the large scale of these air battles and, conversely, the Soviet claims were also highly exaggerated.

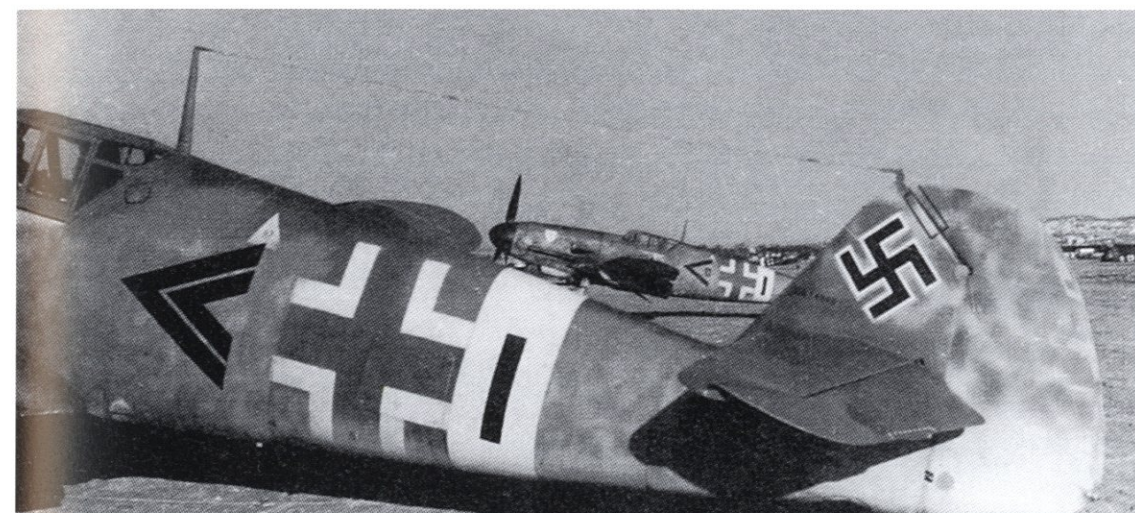
On 24 April, when Soviet ground troops counter-attacked, I. *Fliegerkorps* was unable to dispatch more than 281 sorties to counter this threat. It was during this counter-attack that the German airmen for the first time were confronted with Soviet Spitfires, albeit old and second-hand Mark Vs which had previously been used in North Africa by the RAF's Desert Air Force. All the same, from 29 April, as the Germans themselves admitted, the Soviets gained a marked air superiority, but in spite of this, JG 52 claimed 63 Soviet aircraft shot down that day, a figure which included five Spitfires, although actual Soviet Spitfire losses were two.

The huge air battles continued every day and among the losses on 8 May were five top-scoring Soviet pilots who were killed in action and, on the German side, *Lt.* Helmut Haberda of III./JG 52, who had been credited with 58 victories, was also killed. With such losses, both sides were compelled to



Messerschmitt Bf 109 G-4/R6 W.Nr. 14946 flown by Major Wolfgang Ewald, Kommandeur of III./JG 3, Kuban, Spring 1943

Major Ewald's W.Nr. 14946 was finished in a standard day fighter scheme of RLM 74 and 75 on the upper surfaces with these colours being applied over an RLM 76 fuselage. The undersurfaces were also RLM 76 and the machine carried black Stab and Gruppe markings without any contrasting outline as well as yellow theatre markings in the usual positions. Note that, as part of the RLM's programme of economisation, the centre of the fuselage Balkenkreuz is not black but RLM 74. This practice would have applied to the upper wing Balkenkreuz, which would also have been outline types only.



LEFT: The air war in the East entered a new phase in the spring of 1943 with the launching of Operation 'Neptun', which was intended to neutralise the Soviet bridgehead in the Kuban and where *Luftwaffe* forces comprising over 600 aircraft were employed. One of the units involved was III./JG 3 under the command of Major Wolfgang Ewald, whose Bf 109 G-4/R6s is seen in the foreground of this photograph.

Messerschmitt Bf 109 G-4/R6 of Stab III./JG 3, Kuban, Spring 1943

Apart from the Stab symbols, the camouflage marking and the Geschwader emblem on this aircraft were almost identical to Major Ewald's machine. Similarly, the Balkenkreuz on the upper surfaces of the wings and fuselage sides were outline type only, and the demarcation line between the RLM 74 and 75 on the upper surfaces of the wings, fuselage and tailplane had an undulating edge. Note that the upper fuselage sides of both aircraft show where the factory or ferry markings have been oversprayed to facilitate the application of the Stab markings.



pause and recover but the air battle exploded again on 26 May after the Germans brought up new units to regain their lost air superiority, and on this day, aircraft of I. *Fliegerkorps* flew no fewer than 2,685 combat sorties in the area, three times more than the Soviets were capable of mounting. There were fierce air battles, during which JG 52 alone claimed 44 victories on 26 May; 33 on the 27th; 44 on the 28th, 26 the next day, and 36 on 30 May. In the process, the unit itself lost a quarter of its aircraft inventory and a number of experienced pilots.

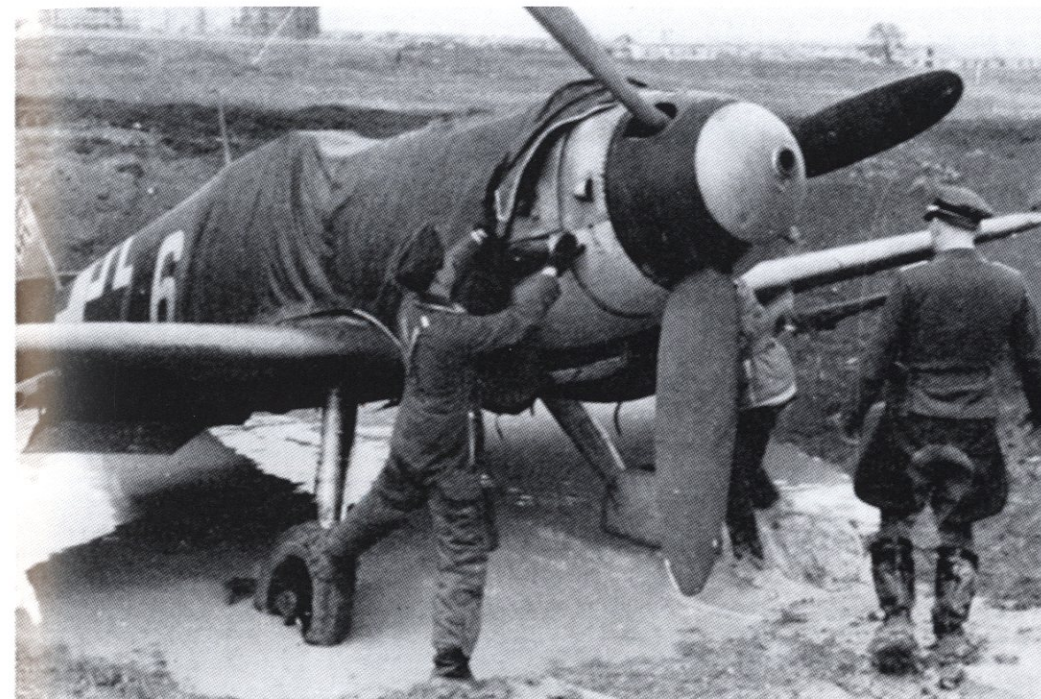
In May 1943, *Stab*, II. and III./JG 3 were transferred from the Kuban bridgehead and moved northwards. This was followed in June and early July by *Stab*, I. and III./JG 52, plus the Croat 15./JG 52. All preparations on the German side were now focused on the forthcoming summer offensive which was to be directed against the bulge in the German front lines at Kursk which had resulted from the earlier Soviet winter offensive and the subsequent German counter-attack in the spring. This left the Slovak 13./JG 52 and II./JG 52 as the only *Jagdwaaffe* units remaining in the Kuban bridgehead, and the Soviets as the final victors in this air battle.



LEFT AND OPPOSITE TOP AND CENTRE: Pilots of 6./JG 52, probably at Poltava or Taman during the spring of 1943, retrieving 'Yellow 6', a Bf 109 G-2/R6 which is up to its axles in muddy water. Note that in the view (OPPOSITE TOP), the green RLM 70 spinner appears to have a plain yellow tip, whereas the photograph of the port side (LEFT) shows there was also a white segment. The position of the horizontal Gruppe bar, just above the centreline of the Balkenkreuz, is typical of that applied to aircraft belonging to II./JG 52 in the first half of 1943.

Messerschmitt Bf 109 G-2/R6 'Yellow 6' of 6./JG 52, Anapa, Spring 1943

This aircraft was finished in standard 74/75/76 colours with yellow theatre markings. The modification to the camouflage on the upper engine cowlings, in this instance white flecks, was a feature often seen in one form or another on aircraft operated by JG 52.



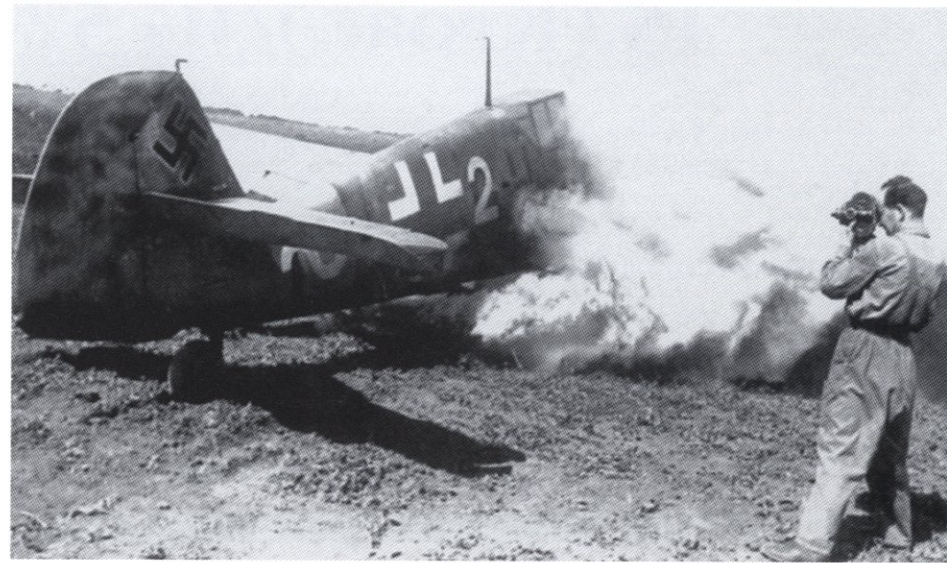
BELOW: Another of JG 52s aircraft, a newly delivered Bf 109 G-2/R6 or G-4/R6, probably at Anapa, still wearing its four-letter Stammkennzeichen.



RIGHT: Lt. Erich Hartmann joined 7./JG 52 in October 1942 as a talented and highly individual pilot eager to run up an impressive number of victories and to accrue the rewards of rapid promotion and high decorations, but in his first encounter with the enemy his aircraft was damaged and he was obliged to make an emergency landing. Hartmann achieved his first victory on 5 November 1942, but was again shot down. During the following week, he was involved in a number of air actions but it was not until his 41st combat sortie that he managed to account for his second victory. When Oblt. Walter Krupinski arrived to take command of 7./JG 52 in March 1943, Hartmann flew as his wingman and slowly his victory tally began to increase. This photograph, taken at Taman in mid-May 1943, shows Hartmann with his 'White 2', the rudder of which is marked with 15 victory bars. On 25 May, Hartmann was brought down for the fifth time when he was either rammed or by colliding with a LaGG-3. Although he survived this incident, he had to be sent home to recover from a nervous reaction but returned to the front in June.

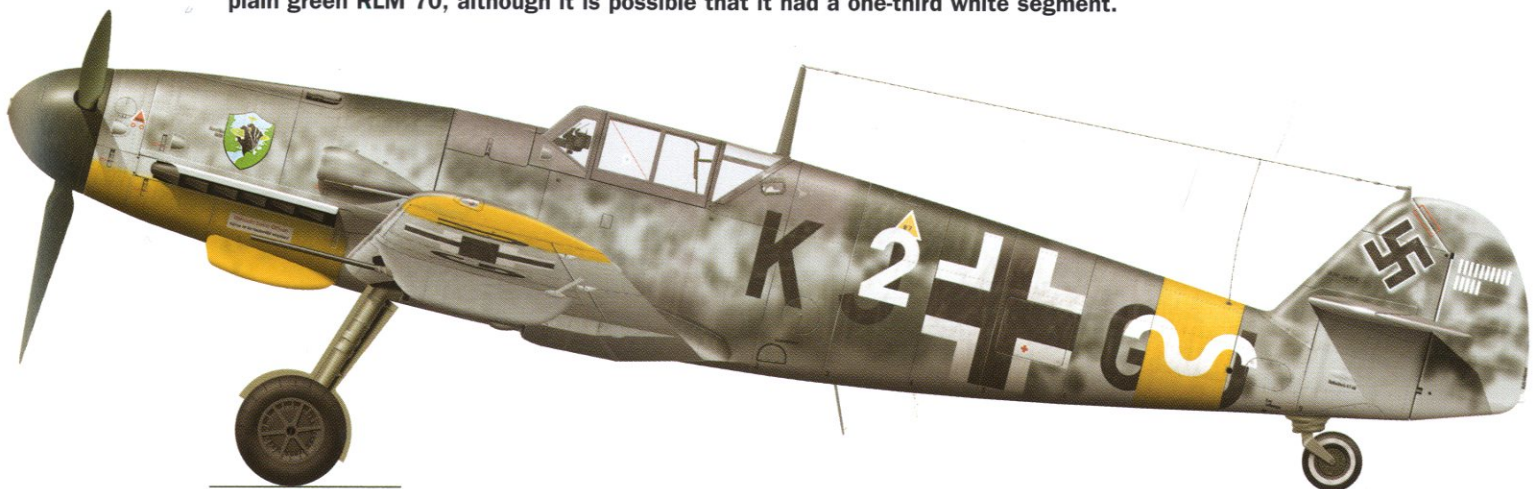


THIS PAGE AND OPPOSITE: When Erich Hartmann went home to Germany on convalescent leave in May 1943, his 'White 2', a Bf 109 G-4/R6, W.Nr. 14997, was flown by Uffz. Herbert Meissler, also of 7./JG 52. Meissler was flying this aircraft on a mission over the Kuban bridgehead on 28 May when his aircraft was damaged by a LaGG-3 and he was obliged to make a wheels-up forced landing in enemy territory and was captured. The Soviets later raised the aircraft onto its wheels and the photograph (*OPPOSITE BOTTOM*) shows the capture of the aircraft being reported to the commanding officer of the Soviet 3 IAK, who wished to inspect the machine. Later, the aircraft was filmed for propaganda purposes, evidently with the aid of a smoke grenade to create the impression it was on fire. As may be seen in the view (*BELOW*) although serving with the 7. Staffel, i.e. part of III./JG 52, this machine had evidently served previously with I./JG 52, the badge of which was retained on both sides on the nose. The 15 kill markings, of course, represent Hartmann's victories.



Messerschmitt Bf 109 G-4/R6 'White 2' of 7./JG 52 flown by Uffz. Herbert Meissler, Kuban, 28 May 1943

Although this aircraft carried full operational markings, no attempt had been made to erase the Stammkennzeichen KJ+GU from the fuselage or below the wings. The camouflage was a standard 74/75/76 scheme with yellow theatre markings and although this aircraft belonged to 7. Staffel, the badge of the Geschwader's I. Gruppe appeared on the engine cowling. As the photographs of this aircraft do not show a view of the spinner, it has been depicted here in plain green RLM 70, although it is possible that it had a one-third white segment.



ABOVE: Badge of I./JG 52. The origins of this badge are explained on page 246.

15.(Kroat.)/JG 52

The Independent State of Croatia came into existence on 10 April 1941 following the occupation of Yugoslavia by German troops. Soon afterwards, German forces attacked Russia and on 27 June, a Croatian Legion was formed with naval, infantry and air force units which were to fight alongside their German allies on the Eastern Front. The Croatian Air Force legion was formed on 12 July and immediately came under the control of the RLM, with its personnel being subject to German military law, wearing *Luftwaffe* uniforms and even swearing an oath of loyalty to the *Führer*. Croatian volunteers who wished to become fighter pilots were sent to *Jagdfliegerschule* 4 in Fürth for appropriate training, after which the first 11 pilots, flying ten Bf 109 Es and one F, left for the Ukraine on 28 September 1941. Due to accidents, only nine aircraft arrived at Poltava where the unit was placed under the command of Major Hubertus von Bonin's III./JG 52 as the 15.(*Kroatische*)/JG 52.

The *Staffel* flew its first combat mission on 9 October and the first aerial victory was claimed by Hptm. Vladimir Ferecine when he shot down an I-16 on the 11th. The next day the *Staffel* transferred to Taganrog, in southern Russia, before moving to Mariupol on 1 December. By the end of 1941, the unit had flown 50 combat missions and had claimed 11 victories, but it had also attacked and damaged a *Luftwaffe* bomber in error and only five of the victories claimed were confirmed.

Meanwhile, a second batch of pilots had arrived at Mariupol on 16 December and joined the *Staffel* in early January 1942, but because of the particularly severe winter of 1941/42, there was little aerial activity until March. The unit then began to claim various successes, but the *Staffel's* history was marred by the political unreliability of some pilots who defected to the Soviets. The first occurred on 27 April when a *Hauptmann* landed in Soviet territory, and although this was apparently in error, he later claimed to have defected. Another occurred on 4 May when an *Oberleutnant* deserted to the Soviets, this pilot later defecting again post-war when he flew to the West.

By 6 July the *Staffel* had been credited with some 60 victories, but was still operating Bf 109 Es – some of which had already seen considerable service – long after other units had received the Bf 109 F and early versions of the Bf 109 G. Following complaints, the *Staffel* received 14 new Bf 109 G-2s by the end of July but the German attitude towards the *Staffel* did little to encourage the Croat personnel whose disillusionment was reflected in the continued number of desertions.

BELOW: Officers of the Croat *Staffel* of JG 52 in 1942. From left to right: Hptm. Josip Helebrant, who accounted for the *Staffel's* 100th confirmed victory on 8 August 1942 and was eventually credited with a personal tally of 11 confirmed victories; Lt. Dragustin Ivanic; Oblt. Stampa and Hptm. Zlatko Stipic. Hptm. Stipic was credited with his first victory in May 1942 and within two months had increased his tally to 12. He was eventually credited with a total of 13 victories.

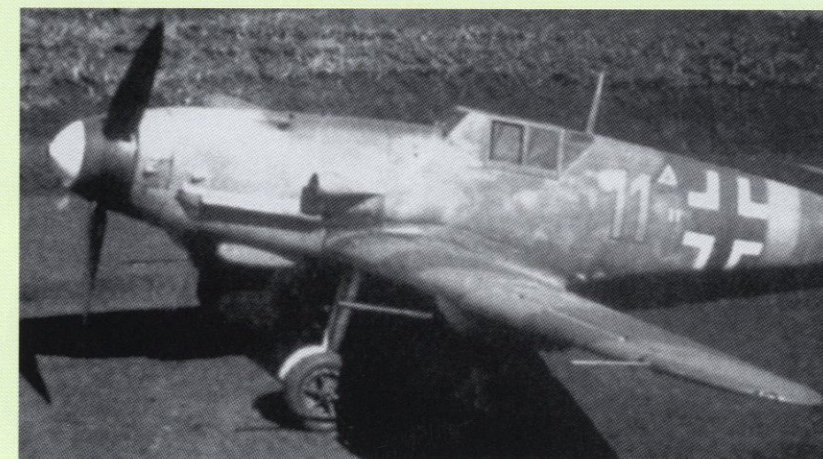


By September 1942, after almost a year of operations, combat losses and disease had reduced the *Staffel* to nine combat-ready pilots and although eight replacements arrived and joined operations in October, the unit needed to be rested and on 15 November 1942, after handing over its remaining aircraft to II./JG 52, the *Staffel* left for home. By this time the unit had lost four pilots killed and another two were missing, but it had been credited with 164 confirmed victories, and another 14, which were then unconfirmed, were later added to this total. At this time, the most successful of the *Staffel's* pilots was *Fähnrich* Cvitan Galic with 29 confirmed victories.

After a relatively short rest, the unit returned to the Eastern Front in February and resumed operations on 31 March 1943. Once again, there were a number of desertions and by mid-May another three pilots had defected to the Soviets, as a result of which the unit was grounded in June and temporarily withdrawn from operations in July, having lost four pilots killed in return for a finally adjusted total of 42 confirmed victories achieved between March and July.

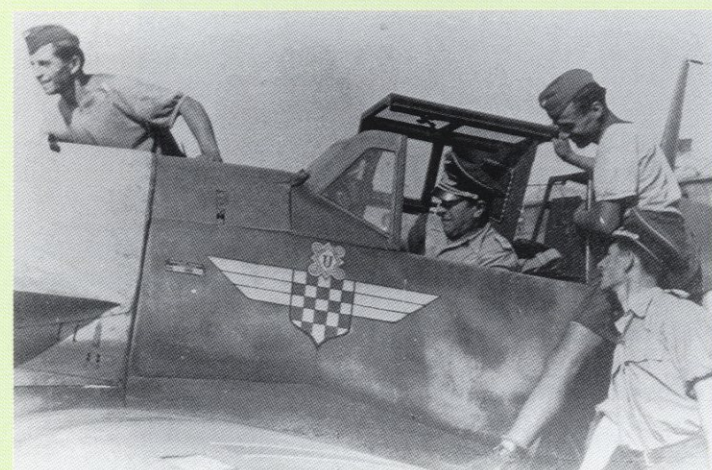
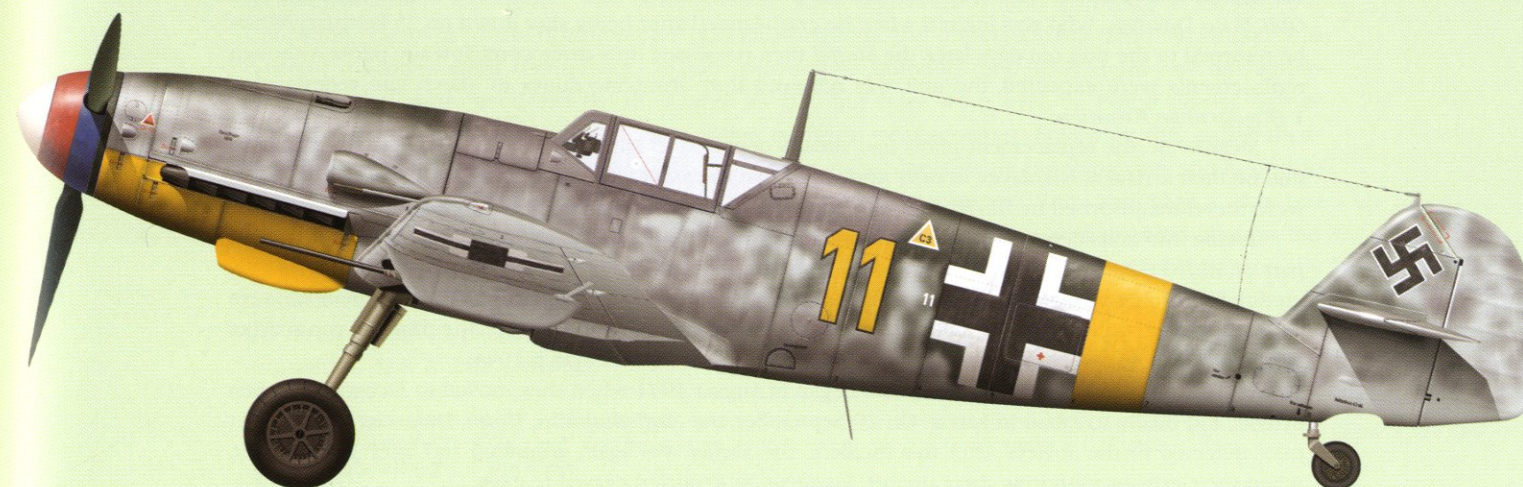
With a number of new personnel who had recently completed training in Germany, 15.(*Kroat.*)/JG 52 began a third tour of operations on 21 October 1943 with its second-ranking ace, Oblt. Mato Dukovac, as *Staffelkapitän*. The unit was now equipped with Bf 109 G-4 and G-6 aircraft and flew its first operation from Bagerovo, on the eastern tip of the Kertch peninsula, on the 26th. One new pilot now serving with the *Staffel* was *Uffz.* Zedenko Avdic who was credited with his first kill, an Il-2, on 1 November and in only 18 combat missions added four LaGG-3s, two P-39 Airacobras – reckoned by the Croats to be their toughest adversary, probably because of the P-39 pilots' aggressive tactics – two La-5s, a Yak-1 and an A-20 to his tally before his flying career was cut short by a particularly grisly experience on 21 November. The unit had now moved to Karankut and Avdic was taking part in an escort mission for Ju 87s when his formation was attacked by two LaGG-3s. Avdic shot down one but was bounced by more

RIGHT: This late production Bf 109 G-2, 'Yellow 11', W.Nr. 14545, was delivered to 15.(*Kroat.*)/JG 52 in the Kuban in May 1943 and has the spinner tip finished in the Croatian national colours of white, red and blue. Otherwise, the aircraft was finished in standard *Luftwaffe* colours and markings, but an unusual feature was the duplication of the aircraft number in small white numerals just ahead of the fuselage Balkenkreuz. On 14 May, Oblt. Albin Starc deserted to the Soviets in this machine which was subsequently tested in mock combat with a Yak-1.



Messerschmitt Bf 109 G-2 'Yellow 11', W.Nr. 14545, flown by Oblt. Albin Starc of 15.(*Kroat.*)/JG 52, 14 May 1943

'Yellow 11' was finished in RLM 74, 75 and 76 and, having flown for only a few hours before the pilot deserted to the Soviets, was still in a clean condition. Note that the widths of the spinner rings are uneven and that the backplate remained in RLM 70. Although not visible in the photograph, the W.Nr. 14545 was almost certainly painted on the tail fin.



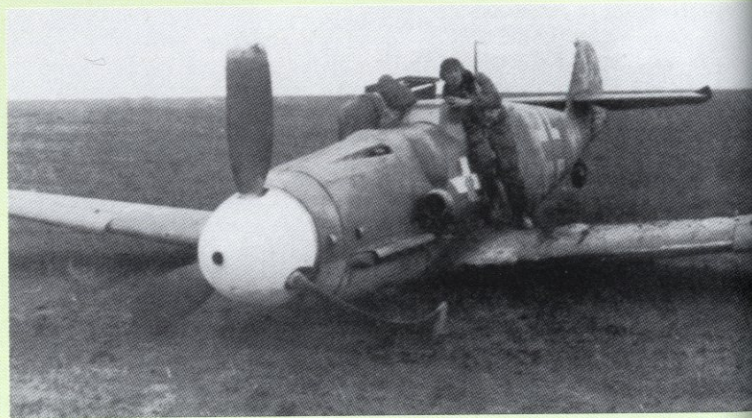
ABOVE AND RIGHT: Oberst Pzčil of 15.(*Kroat.*)/JG 52, photographed at Taganrog in the summer of 1942, seated in the cockpit of a Bf 109 G-2 marked with the winged Ustachi shield which became the unit's emblem in January 1942 and was subsequently applied to most of the *Staffel's* aircraft. The officer standing far right is the *Staffel's* non-flying Technical Officer, Lt. Dragustin Ivanic, seen again, (RIGHT), with the unit's 'Black 8', a Bf 109 G-2, W.Nr. 13463, in the background. As pilots of the 15.(*Kroat.*)/JG 52 flew whatever machines happened to be available and did not have their own aircraft assigned to them, this aircraft was flown by at least eight different pilots including Hptm. Josip Helebrant who while flying this aircraft is believed to have been credited with seven victories plus one other which was unconfirmed. This photograph of 'Black 8' was taken at Mariupol in July 1942 when the aircraft's rudder was marked with a single white bar, possibly representing one of Hptm. Helebrant's victories. Note that at the time of this photograph, the machine still has a yellow engine cowlings.

of the Soviet fighters. As he pulled back on the control column to take advantage of his G-6's superior rate of climb, there was a huge explosion in the cockpit, he felt a great pain in his left arm and his aircraft began to dive. Avdic attempted to reduce the speed of his dive by closing the throttle but found to his horror that his left hand, still gripping the levers, had been separated from his arm. Gripping the control column between his knees, Avdic used his right hand to remove the severed left one and close the throttle. By this time he felt so faint from loss of blood that he had to allow the aircraft to fly itself. It glided to a smooth landing in friendly territory where German grenadiers rescued him and sent him to a military hospital in Odessa where his left arm was amputated. Later, he was evacuated to a *Luftwaffe* sanatorium in Germany and, with an artificial limb, returned to Croatia in April 1944. He survived the war only to be imprisoned by the post-war Communist authorities.



ABOVE: An as yet unidentified Bf 109 G-6 of 15.(Kroat.)/JG 52, probably in October or November 1943. Note that the undercarriage doors have been removed from this aircraft. During their various periods of operations on the Eastern Front, the Croat pilots flew *freie Jagd*, *Jabo*, escort and reconnaissance missions, attacking various ground and sea targets as well as engaging in aerial combat.

RIGHT: Combat damage sustained on 25 November 1943 obliged Uffz. Albin Sval to make a forced landing in Bf 109 G-5 'Black 5', W. Nr. 15770. Credited with three confirmed victories, Sval was killed flight testing a Bf 109 in March 1944.



Bad weather at the end of November largely restricted flying operations until the New Year. Few of the missions undertaken were successful but resulted in a number of losses, including the *Staffelkapitän*, *Oblt.* Mato Dukovac, who was injured when he crash-landed after being shot down on 25 February. When he returned to the unit ten days later, the *Staffel* then possessed only three combat-ready pilots. Although replacements were expected, the unit was removed from front-line duties in March and redesignated 1./*Jagdgruppe Kroatien*.

Meanwhile, the replacement pilots had already departed to join their colleagues at the front, only to find on their arrival at Nikolayev in early April 1944 that the *Staffel* had already departed. These new pilots were therefore absorbed by III./JG 52 and flew as wingmen to the experienced German pilots.

Taking into consideration the missions and victories achieved by the last group of personnel flying as part of III./JG 52, the 15.(Kroat.)/JG 52 had flown more than 5,000 sorties, its pilots being eventually credited with 299 victories. The *Staffel's* two highest-scoring pilots were awarded the German Cross in Gold; *Lt.* Cvitan Galic, with 38 victories, receiving his on 23 July 1943, while the *Staffel's* top-scoring *Oblt.* Mato Dukovac, with 44 victories, was similarly decorated on 29 March 1944.

The last tour by Croatian fighter pilots began in August 1944 when they moved to Eichwalde in East Prussia and finally to Libau in Latvia. On 20 September, the *Staffelkapitän*, *Hptm.* Dukovac, and another pilot defected to the Soviets. After this incident, the *Staffel* was again grounded and after 1 November, when the Germans withdrew their aircraft, *Jagdgruppe Kroatien* ceased to exist.

The Air Battles Prior to 'Zitadelle'

While the air battle was being fought over the Kuban, on other sectors of the Eastern Front it was the bombers of both combatants which played the main role, carrying out a series of semi-strategic missions. This was the prelude to the next major confrontational battle between the world's two largest armies.

As mentioned above, as a result of the Soviet winter offensive and the subsequent German counter-offensive in the eastern Ukraine, where the German Army Groups Centre and South met, the front-line formed a bulge at Kursk, and on 15 April 1943, Hitler instructed these two Army groups to prepare a pincer movement against the Kursk bulge. Named *Unternehmen 'Zitadelle'*, or Operation 'Citadel', the strategic aim was to destroy sufficient quantities of the Red Army to enable the *Wehrmacht* to regain the initiative on the Eastern Front.

A powerful force was concentrated to provide air support for this offensive. *Generaloberst* Robert Ritter von Greim's *Luftwaffenkommando Ost* was redesignated *Luftflotte 6* with the bulk of its forces stationed around Orel, north of the Kursk Bulge, while *Luftflotte 4's* VIII. *Fliegerkorps* meanwhile began gathering around Kharkov to the south of the bulge. Farther south, in the Ukraine, IV. *Fliegerkorps* held its position.

Due to the desperate needs which arose from the situation over the Kuban bridgehead, *Luftflotte 4* had been forced to dispatch all its fighter units to I. *Fliegerkorps*, leaving the IV. and VIII. *Fliegerkorps* without any fighters, but this changed in late April when *Major* Wolfgang Ewald's III./JG 3 'Udet' was transferred to IV. *Fliegerkorps*. Shortly afterwards, *Major* Kurt Brändle's II./JG 3 arrived as the first unit in the planned build up of VIII. *Fliegerkorps*.

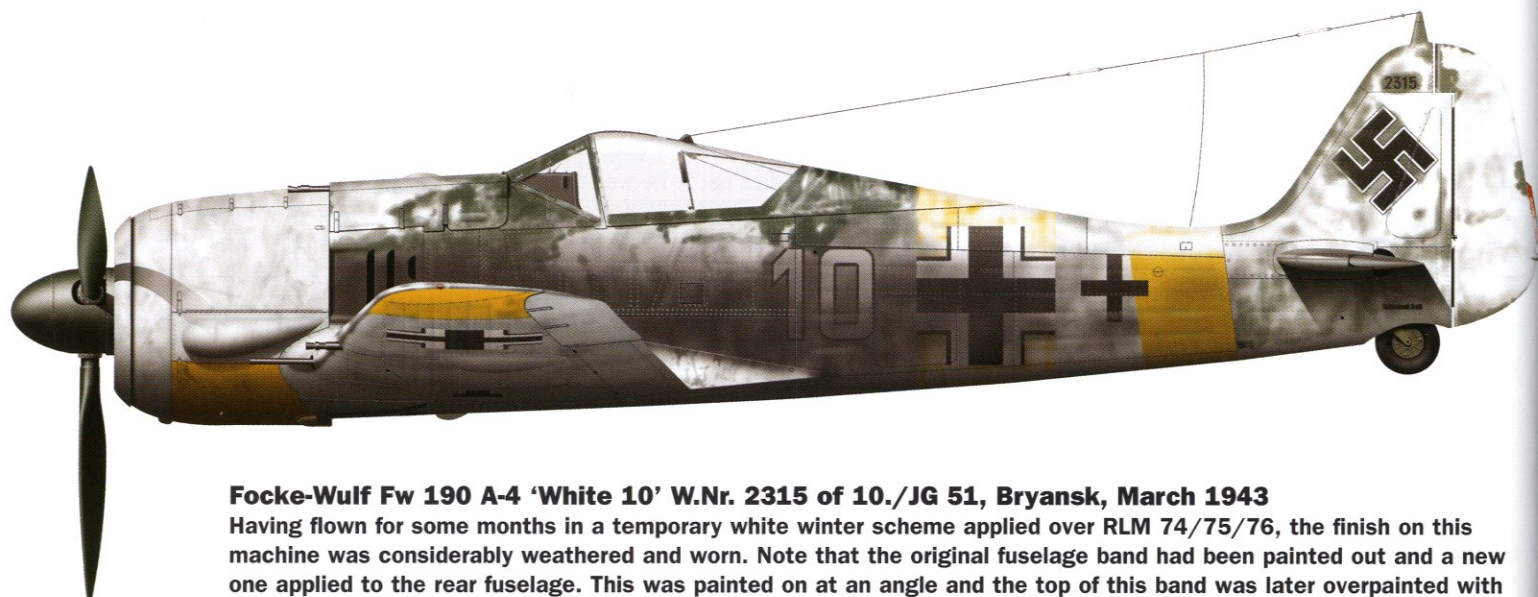
However, the Soviets had been provided with intelligence material which informed them of the German plans and indicated that *Unternehmen 'Zitadelle'* would probably begin between the 10th and 12 May. They therefore initiated extensive nocturnal bombing against points of communication in the German rear area while, between 6 and 8 May, a total of six air armies launched a series of massive strikes against all *Luftflotte 4's* and *Luftflotte 6's* airfields. From the Soviet point of view, the opening attacks were successful, particularly against *Luftflotte 6*, but when they were repeated, following the same pattern, the German fighter defence was alerted. In drawn-out air combats, fighter pilots of JG 54 and JG 51 were able to pay back dearly for the losses their units had been dealt previously.

With *Major* Rudolf Resch's IV./JG 51 having exchanged its Bf 109s for Fw 190 A-4s and A-5s in March 1943, all three Eastern Front *Gruppen* of *Jagdgeschwader 'Mölders'*, i.e. *Stab*, I., III., and IV./JG 51, were equipped with Focke-Wulfs. These fighters became involved in very dramatic aerial combats when, at noon on 6 May, the second wave of VVS attacks began and although the claims made by JG 51 were inevitably inflated due to the large-scale air battles, the participating Soviet units suffered significant damage.

However, the launching of *Unternehmen 'Zitadelle'* was delayed when, due to a number of factors, Hitler finally decided to postpone the attack date until 5 July, by which time more German armour would be available. Meanwhile, the increased Soviet air superiority over the Kuban bridgehead compelled the Germans to return III./JG 3 to this sector, leaving II./JG 3 alone⁶ to combat the forces of the Soviet 8th and 17th Air Armies which began renewed raids on airfields on the 7 and 8 May.

In the meantime, both sides stepped up their air attacks against lines of communication and airfields in their opponents' rear areas. On 2 June, *Luftflotte 4* and *Luftflotte 6* carried out Operation 'Carmen', a 24-hour long air operation against the important rail depot at Kursk. The daylight missions were carried out by both twin-engine bombers and Ju 87s as well as fighter-bombers and were escorted by JG 3 and JG 51, but they were met by fierce Soviet fighter opposition and in a new air battle, both sides suffered heavy losses. Following this experience, the *Luftwaffe* refrained from carrying out any more similar, large-scale bombing operations on the Eastern Front. Instead, on 8 June, three Soviet air armies – the 1st, 2nd, and 15th – plus the Soviet strategic bomber force, launched a new series of attacks of their own directed against the airfields used by *Luftflotte 4* and *Luftflotte 6*. These operations were supplemented by simultaneous strikes against rail targets by other VVS units and in three days of heavy fighting in the air, the Fw 190 pilots of *Jagdgeschwader 'Mölders'* were credited with vast successes against formations of Il-2 *Shturmoviks*.

6. The *Stabsstaffel* of JG 3 'Udet' had meanwhile transferred to join the *Geschwader's* I. *Gruppe* in the *Reichsverteidigung* in the West.



Focke-Wulf Fw 190 A-4 'White 10' W.Nr. 2315 of 10./JG 51, Bryansk, March 1943

Having flown for some months in a temporary white winter scheme applied over RLM 74/75/76, the finish on this machine was considerably weathered and worn. Note that the original fuselage band had been painted out and a new one applied to the rear fuselage. This was painted on at an angle and the top of this band was later overpainted with temporary white. The black cross behind the Balkenkreuz is the Gruppe symbol used by IV./JG 51.

RIGHT: This Fw 190 A-4, 'White 10', W.Nr. 2315 of 10./JG 51, was photographed at Bryansk on the Central Sector of the Eastern Front after a landing accident when the aircraft ran into the 250 kg bomb in the foreground and the starboard undercarriage leg collapsed. As this incident occurred on 22 March 1943, the machine could only have been with the Gruppe for a short time. The aircraft has a very weathered white winter camouflage and the sides of the fuselage are heavily stained with black exhaust deposits which have half obscured the fuselage numeral and the lower parts of the fuselage Balkenkreuz, behind which is a smaller cross which is the identifying symbol of IV./JG 51. Unusually for an aircraft of JG 51 at this time, the wide yellow band which normally backed the Balkenkreuz has been replaced with a narrower theatre band, but even this has had the top overpainted with white distemper to help render the aircraft less conspicuous from the air. After being repaired, this aircraft returned to service but with the training unit 2./JG 103.



Unternehmen 'Zitadelle' Begins

On the eve of 5 July 1943, the *Wehrmacht* had created its strongest concentration of Army and *Waffen-SS* forces on both flanks of the Kursk Bulge while *Luftflotte* 6 and VIII. *Fliegerkorps* had been built up to a total of 1,830 operational aircraft, all tasked with the support of *Unternehmen 'Zitadelle'*. Fighter cover on the southern flank, controlled by VIII. *Fliegerkorps* under the command of Generalmajor Hans Seidemann, was provided by Major Kurt Brändle's II./JG 3 and Major Wolfgang Ewald's III./JG 3 'Udet', plus JG 52's *Stabsstaffel*, led by the *Geschwaderkommodore*, *Obstlt.* Dietrich Hrabak, *Hptm.* Johannes Wiese's I./JG 52 and *Hptm.* Günther Rall's III./JG 52. Generaloberst Robert Ritter von Greim's *Luftflotte* 6 meanwhile deployed the fighters of *Stab*, I., III., IV. and 15./JG 51 'Mölders', plus I./JG 54 'Grünherz', on the northern flank around Orel. All of these units were led by experienced veterans: *Jagdgeschwader 'Mölders'* by Oak Leaves holder *Obstlt.* Karl-Gottfried Nordmann; I./JG 51 by Knight's Cross holder Major Erich Leie; III./JG 51 by *Hptm.* Fritz Losigkeit, a veteran of the Spanish Civil War; IV./JG 51 by Knight's Cross holder Major Rudolf Resch; and I./JG 54 by Oak Leaves holder Major Reinhard Seiler. Moreover, 15.(Span)/JG 51 – the new 4th Spanish *Escuadrilla 'Azul'*, the 'Blue Squadron' – had arrived in June 1943 after having been withdrawn to receive combat training under the direction of the first pilot to achieve 200 victories, Major Hermann Graf, in Southern France. The 4th 'Blue Squadron' would eventually develop into the most successful of all the *Escuadrillas 'Azules'*.

RIGHT: Luftwaffe personnel with another of 3./JG 51's Fw 190 As on an airfield near Orel. The yellow spinner and fuselage band have again been covered.



ABOVE: Fw 190 A-4s in their dispersal at Orel. The two aircraft nearest the camera are finished in the dark colours employed by JG 51 and were from 3./JG 51, but the machine third from left appears in a 74/75/76 scheme and, with the brown fuselage number '1', was the machine flown by the *Staffelkapitän*. Most aircraft have had their spinners and fuselage bands covered.



RIGHT: This aircraft, 'Brown 8' of 3./JG 51, is finished in a low-discrimination scheme of two greens. The earlier wide yellow band backing the fuselage cross has now disappeared and has been replaced by a more conventional, narrower band which, in this photograph, has been covered over to make the aircraft less conspicuous while on the ground. For the same reason, the yellow spinner, too, has been covered.

Focke-Wulf Fw 190 A-4 'Brown 8' of 3./JG 51 'Mölders', Orel, Summer 1943

The undersurfaces of this aircraft were RLM 76 and the uppersurfaces were finished in the two-tone green Russian Front scheme described earlier, this particular example showing particularly well how bright the lighter of the two greens could sometimes appear. Although brown was used for the *Staffel* colour, within the unit the aircraft were described as having yellow numbers and this aircraft would therefore have been known as 'Yellow 8'.





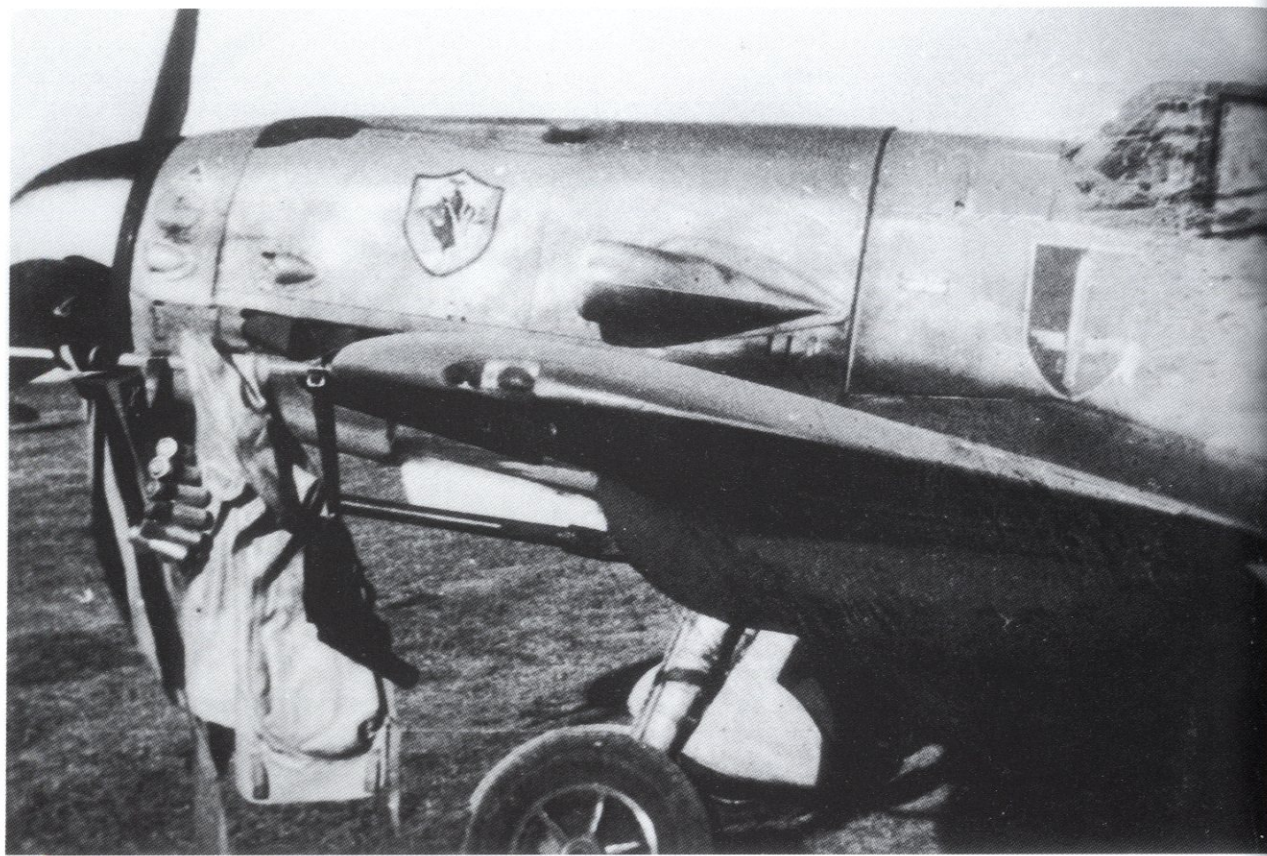
ABOVE AND RIGHT: 'White 10', a Bf 109 G-6 of I./JG 52 at Kharkov-Rogan, a major air base in Southern Russia, in the summer of 1943. Particularly well-shown in these views is the nature of the fuselage camouflage comprising light mottles of RLM 02 over RLM 76, followed by heavier mottles of the darker greys RLM 74 and 75.



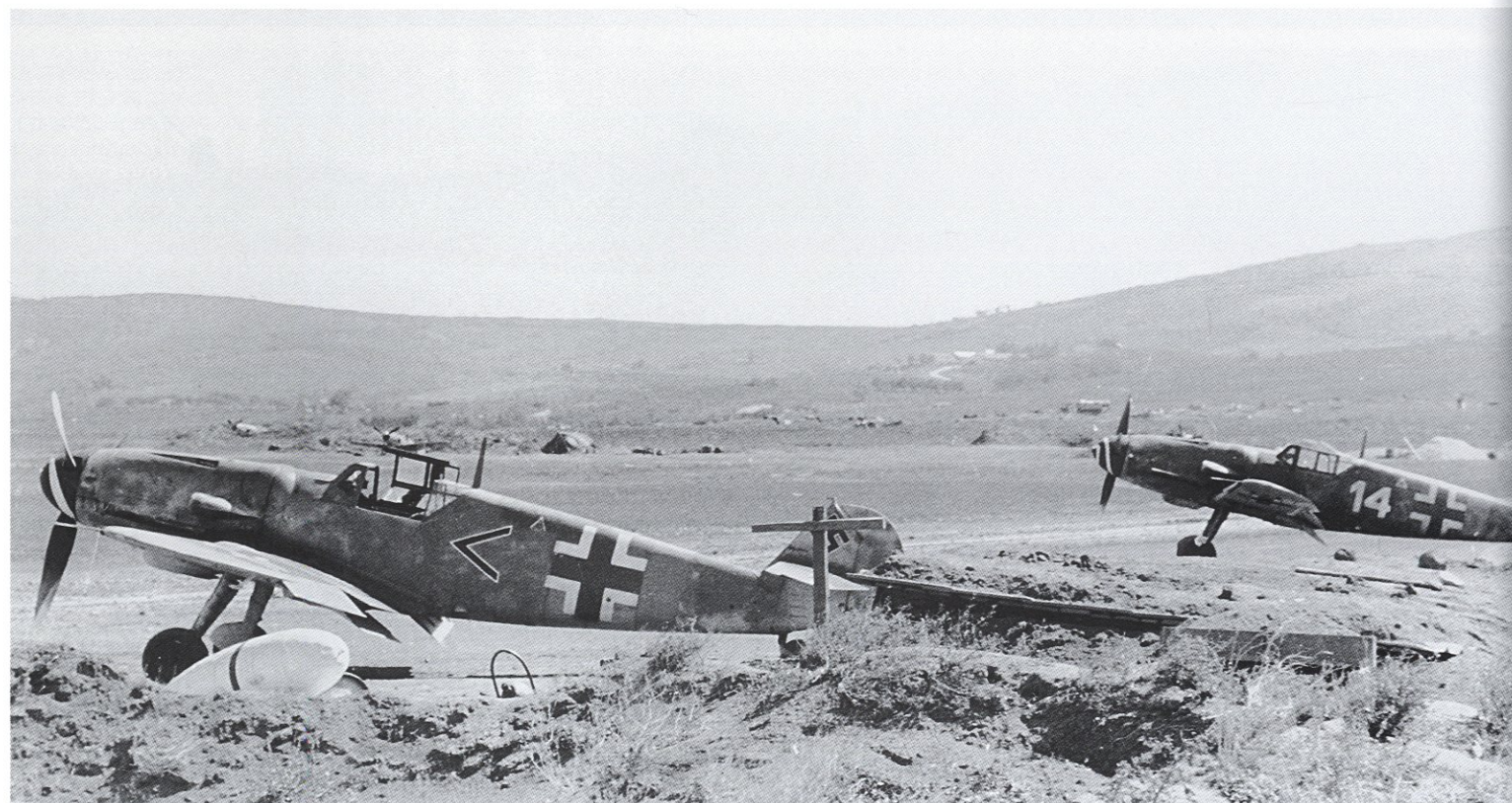
ABOVE AND BELOW: Two views of a Bf 109 G-6, W.Nr 15999, of I./JG 52 at Anapa in 1943. Finished in a standard RLM 74/75/76 day fighter scheme, this machine carries the double chevron of the Gruppenkommandeur and may have been flown by Hptm. Helmut Bennemann or Hptm. Johannes Wiese of I./JG 52. A characteristic feature of the airfield at Anapa was the excavation of the shallow earthworks in which the aircraft were parked. As with a number of aircraft of JG 52 and some other units at this time, the spinner was painted with a spiral design which, in July 1944, was ordered to be applied to all German front-line aircraft as recognition aid. Traces of the production or delivery Stammkennzeichen are still visible on the fuselage and the view (ABOVE) shows the flat disc wheel hub which, beginning with the G-4, replaced the spoked type hub used previously. Note also the short radio mast.



RIGHT: This Bf 109 G-2/R6 was flown by Helmut Bennemann, the Kommandeur I./JG 52 and carried the Gruppe's badge on the nose and the Geschwader's winged sword and shield badge under the windscreen. The Gruppe badge featured a map of the English Channel and North Sea with a superimposed hand clutching a Spitfire, and although perhaps somewhat incongruous in this theatre, was added to some aircraft of I./JG 52 in Russia to commemorate the time when Bennemann flew on the Channel Front. Here, the pilot's life jacket and flare pistol cartridges are hanging from the pitot tube.



BELOW: These Bf 109 G-6s are also believed to have belonged to I./JG 52 and were probably photographed at Anapa or Taman, both bases being used by the Gruppe at various times during 1943. Note again the white spiral on the spinners of these aircraft, a feature which began to appear at around the same time on some of the aircraft operated by JG 54, also operational on the Eastern Front, and also on the aircraft of JG 27 and JG 53 in the Mediterranean theatre.



But one man was missing: *Generalfeldmarschall* Wolfram *Freiherr* von Richthofen⁷. For the two years since the opening of Operation 'Barbarossa' in June 1941, von Richthofen had commanded VIII. *Fliegerkorps* and later *Luftflotte* 4, the two most important *Luftwaffe* forces in the East, but only weeks prior to *Unternehmen 'Zitadelle'* he was ordered to Italy to assume command of *Luftflotte* 2. He was replaced by *General der Flieger* Otto Dessoloch, who previously had led I. *Flakkorps*, but undoubtedly, once deprived of von Richthofen's drive and personality, the *Luftwaffe* in the East was considerably weakened.

One interesting feature of the German disposition was the marked division between the area controlled by *Luftflotte* 6, where the fighter units were equipped with Fw 190 As, and those of VIII. *Fliegerkorps* which were equipped with Bf 109 G-4s or G-6s. Be that as it may, the numerical strength of all units, whether equipped with Fw 190s or Bf 109s, was the largest in many years.

With just hours to go before the intended opening of the German attack, the Soviets once again launched a pre-emptive strike against VIII. *Fliegerkorps'* airfields, this time involving over 400 aircraft. The Soviets had gained much experience in attacking airfields in the past, and on various occasions since the summer of 1942, VVS units had succeeded in neutralising whole *Luftwaffe Gruppen* on the ground, one of the most recent examples being when I./KG 1 was annihilated by Soviet Il-2s at Kotly in the spring of 1943, with the result that this *Kampfgruppe* had to be withdrawn. Therefore, had it not been for a *Freya* early warning radar station, the Soviet attacks on 5 July could have led to disastrous consequences for the Germans, but now the whole fighter strength of VIII. *Fliegerkorps* was scrambled. The pilots of more than four whole *Jagdgruppen* took off, hurled their Messerschmitt Bf 109 Gs against the VVS formations and tore them to pieces. When the battle was over, 50 Soviet aircraft had been claimed shot down and Soviet records confirm horrendous VVS losses in this air battle. The Soviet operation had completely backfired and resulted in the *Luftwaffe* maintaining air superiority over the southern flank during the initial phase of the onslaught.

However, the Soviets rapidly recovered and began to challenge the *Luftwaffe*, flying a total of 3,385 sorties over the Orel-Kursk-Belgorod battle area on 5 July compared with 4,462 mounted by VIII. *Fliegerkorps* and *Luftflotte* 6. Losses were very high on both sides. The German fighters claimed 383 victories and even though this figure includes a considerable amount of overclaiming, true Soviet losses indeed amounted to several hundred aircraft. Conversely, unit records show that VIII. *Fliegerkorps'* and *Luftflotte* 6's own losses on 5 July 1943 were many times higher than the preliminary figure of 26 aircraft which, regrettably, is frequently mentioned in post-war accounts. In fact, whereas the figure of 26 is supposed to represent all losses, German fighter losses alone totalled 34, with JG 52 losing 13 aircraft and sustaining nine pilot casualties, JG 3 losing 12 aircraft, all but three to hostile action and sustaining seven pilot casualties, while JG 51 lost nine Fw 190s in this day's fighting. These losses are more severe than during the famous 15 September 1940, when the hardest hit *Jagdgeschwader* lost eight fighters.

By the evening of 5 July 1943, concerned German Army Headquarters were already starting to file reports stating that the Soviets had control of the airspace over the advancing *Panzer* groups. Vast air battles continued to rage, with an average of over 3,200 *Luftwaffe* sorties being conducted each day until 9 July. The *Jagdgruppen* continued to claim further large numbers of victories, and on 7 July JG 52 reported its 6,000th victory of the war.

The cost of such successes however was high: *Major* Reinhard Seiler, *Kommandeur* of I./JG 54, who had attained his 100th victory on 6 July, was shot down and badly injured; *Ofw.* Hubert Strassl of III./JG 51 with 67 victories was killed in air combat on 8 July; and on 9 July, *Lt.* Edmund Rossmann of III./JG 52 – a veteran of the Battle of Britain – was captured by the Soviets. Rossmann, awarded the Knight's Cross in the spring of 1942, was credited with a total of 93 victories and was one of six pilots lost by JG 52 on 9 July. Two days after the loss of Rossmann, *Major* Rudolf Resch, the *Kommandeur* of IV./JG 51, credited with 94 victories, was shot down and killed by a Soviet fighter pilot. By that time, *Unternehmen 'Zitadelle'* had ground to a halt, and as well as meeting



BELOW: Burning German armour, destroyed during one of the major tank battles of 'Zitadelle'. Some of the claims for armour destroyed by Il-2 units have been greatly exaggerated.

7. Von Richthofen had been promoted in February 1943.

increasing difficulties in the air, the *Luftwaffe* was experiencing shortages in its fuel supply. Soviet aircraft were frequently able to operate freely against the German *Panzer* spearheads, sometimes without any German fighters present to oppose them. Nevertheless, it should be pointed out that some of the claims made at this time by Il-2 units following their attacks against German tank formations, and which have been widely circulated in various post-war accounts, have proven hugely exaggerated.

On 12 July, the Soviets launched a counter-offensive and the VVS mounted 2,174 sorties, against which VIII. *Fliegerkorps* and *Luftflotte* 6 could mount 1,784. As a measure



RIGHT: On 12 July 1943, Uffz. Walter Steinhans of 6./JG 3 shot down a Soviet aircraft as his fifth personal victory. As this also happened to be the Gruppe's 2,000th victory, Steinhans was presented with this certificate to commemorate the event.

of the increasing Soviet air superiority, large Soviet bomber formations began attacking German supply columns in the rear in broad daylight, often without any interference from the *Jagdflotte*. Meanwhile, Soviet fighters carried out free-hunting sorties, also deep into the airspace over German-controlled areas, hunting for any German aircraft. This further complicated the situation for the *Jagdflotte*, which until then had been the hunters, never the hunted, on the Eastern Front.

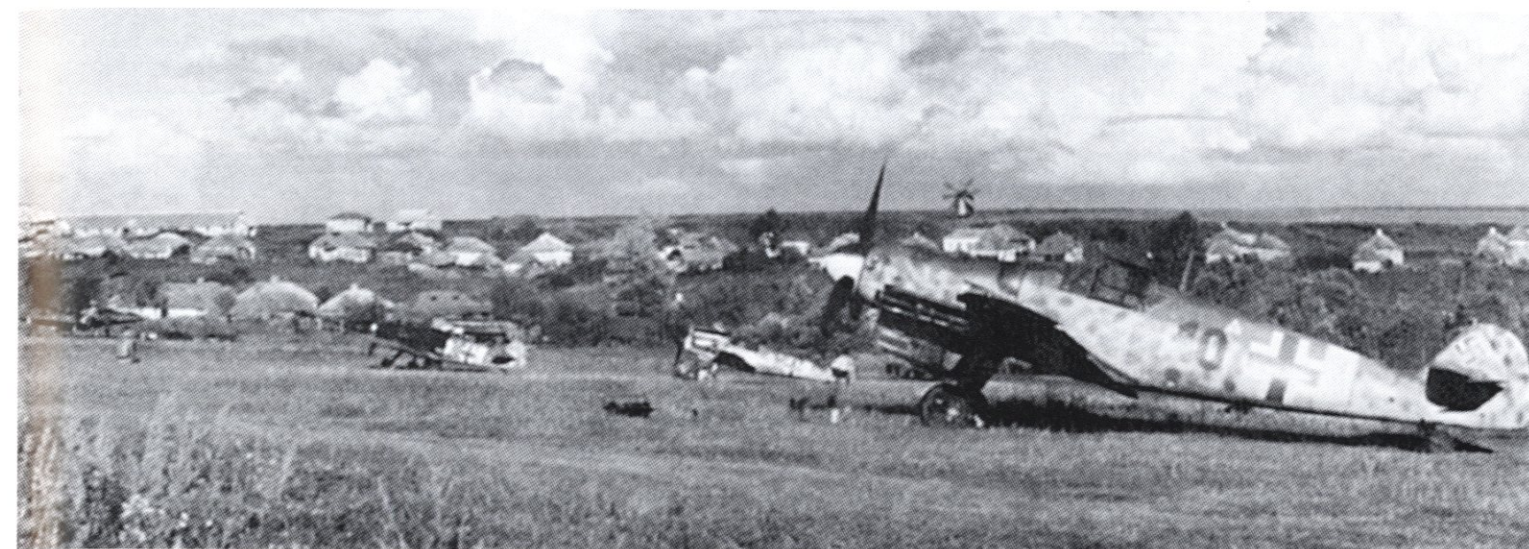
On 14 July, the Germans lost another of their most experienced pilots when Major Wolfgang Ewald, Kommandeur of III./JG 3, was shot down and taken into Soviet confinement. Ewald, who had served with the *Legion Condor* in Spain, was credited with 78 confirmed victories. Two days later, I./JG 54's Lt. Günther Scheel was killed when he collided with a Yak-9 over Soviet-controlled territory. Scheel's career is remarkable as it only began operationally when he joined I./JG 54 as late as the spring of 1943, yet he attained 71 aerial victories in only some 70 combat missions. Scheel was posthumously awarded the Knight's Cross.



ABOVE: Among the more experienced pilots involved in Unternehmen 'Zitadelle' was Major Reinhard Seiler, the Kommandeur of I./JG 54, who achieved his 100th victory on the 6 July 1943, the second day of 'Zitadelle', but was shot down soon afterwards and wounded so severely that he was rendered unfit for further combat flying. After recovery, however, Seiler took over the training unit JG 104 where his knowledge and experience could be passed on to new fighter pilots.



LEFT: Hptm. Johannes Wiese was awarded the Ritterkreuz on 5 January 1943 when he had 51 victories. By 10 July 1943 he had practically doubled this and is shown here on his return from the mission in which he accomplished his 100th victory.



ABOVE: Bf 109 G-6s, almost certainly of I./JG 52 at a forward landing ground probably situated east of Belgorod in July 1943.



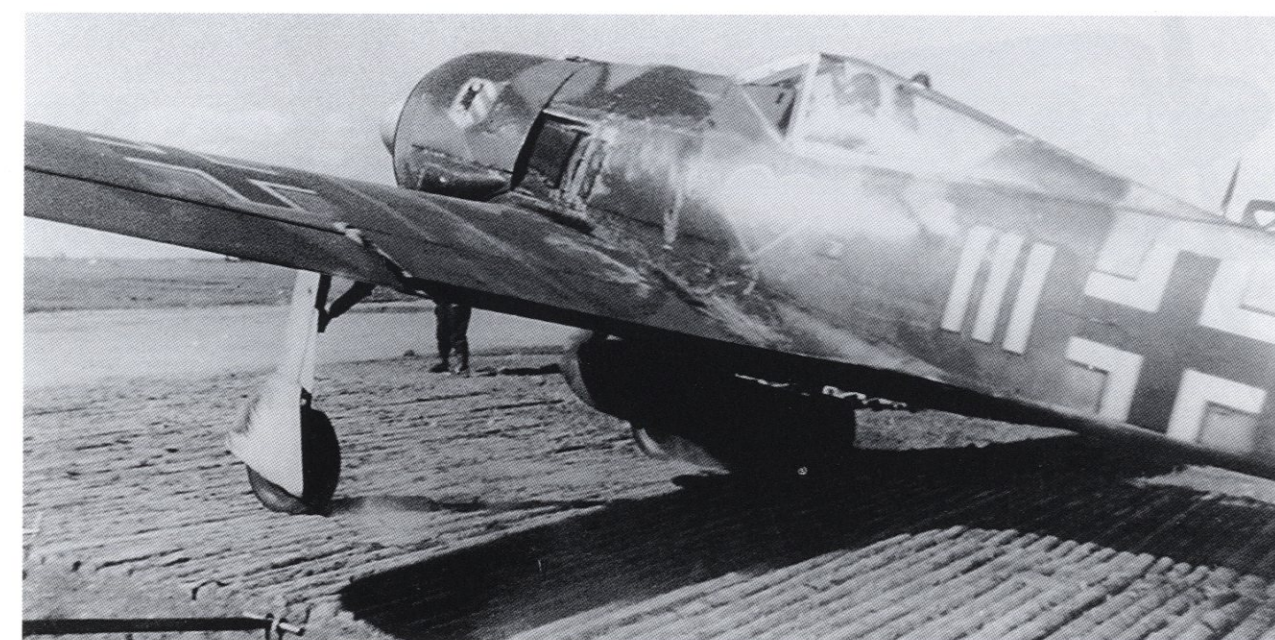
ABOVE: Obviously photographed on the same airfield seen above, this Bf 109 G-6, apparently with overpainted spinner rings, is believed to have belonged to the 13.(Slovak)/JG 52.



LEFT: The use of small numerals was a feature of some Gruppen of JG 52 and may be seen again on the aircraft shown. Note the small mottles on the fuselage and the serrated demarcation line separating the RLM 74 and 75 uppersurface colours on the wings.

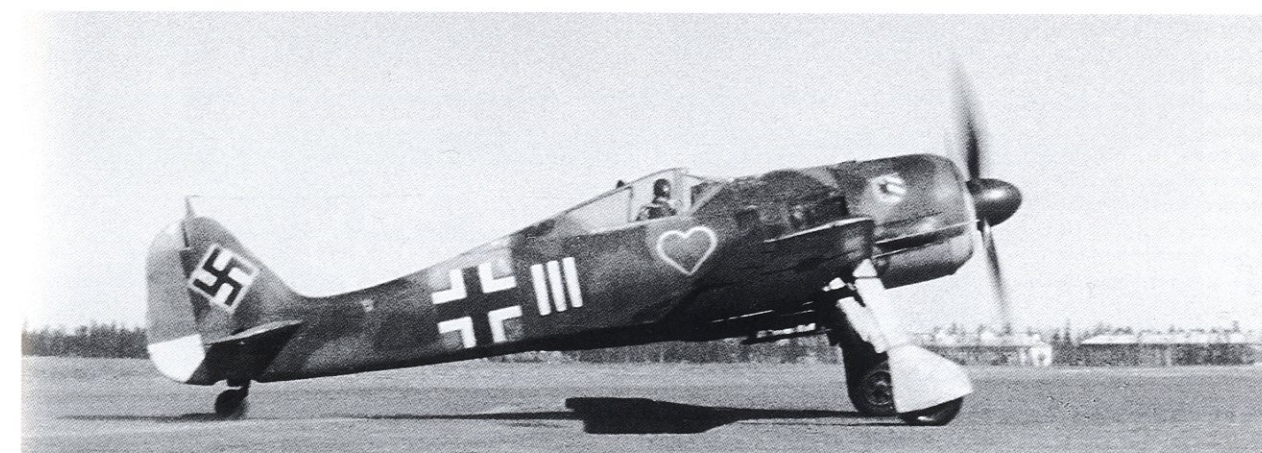


ABOVE, BELOW AND OPPOSITE TOP: Even today, after a great deal of research, the precise significance of the three vertical bars on this Fw 190 A-4 is not fully understood. Photographs show that several aircraft were marked in exactly the same manner, the only difference between the machines being the slight variations in their camouflage patterns. One theory is that, in the winter of 1942-43, I./JG 54 formed a Jaboschwarm for special missions under the Gruppenadjutant, Oblt. Edwin Dutel, with aircraft marked with one, two or three vertical bars to represent Roman numerals. Certainly, Dutel himself was killed during a Jabo operation near Schlüsselberg on 10 April 1943 and was awarded a posthumous German Cross in Gold a month later, but although loss lists record his aircraft as 'White 1', it is thought this may in fact have been a single bar of the type shown here and which may have been intended to signify a Roman numeral.

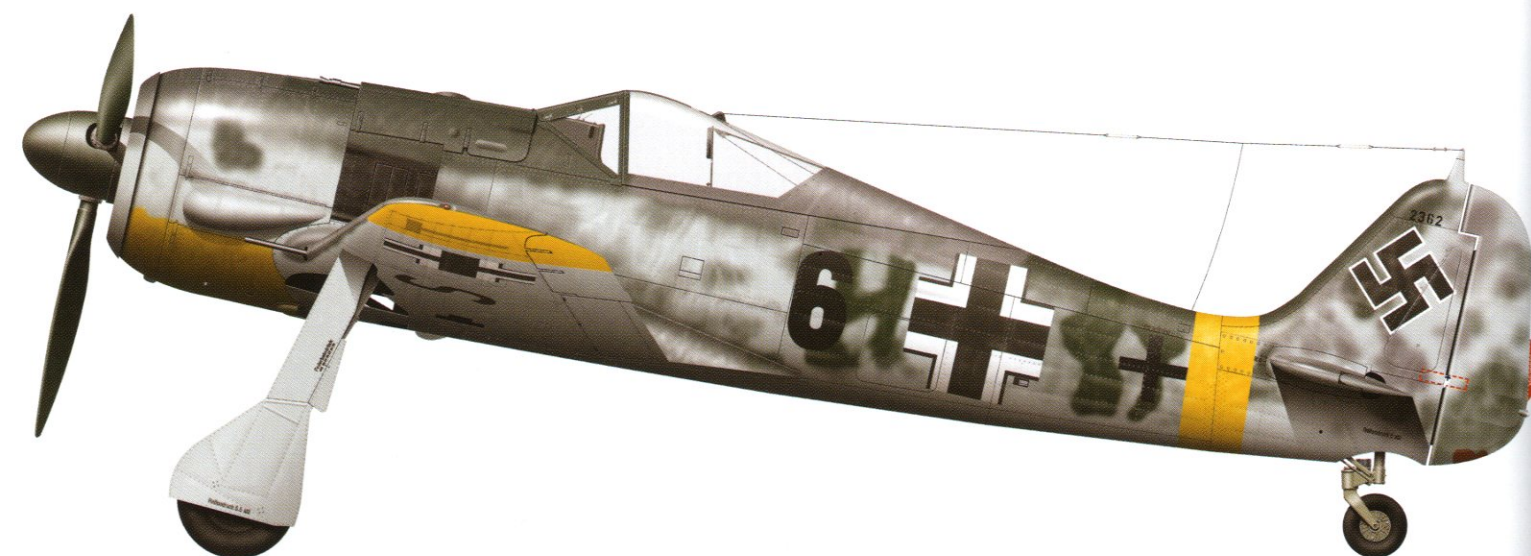


Focke-Wulf Fw 190 A-4, possibly of the Jaboschwarm of I./JG 54, Spring 1943

This further example of the green Russian Front scheme shows again that while the darker of the two colours remained fairly consistent and was similar to RLM 71, on this aircraft the second colour was a much lighter green. Three white vertical bars outlined in black appeared forward of the fuselage Balkenkreuz and the machine carried the badge of JG 54 below the cockpit and the badge of I./JG 54 on the engine cowling. Note the hand-painted patch of RLM 02 under the cockpit, probably where some damage has been repaired.

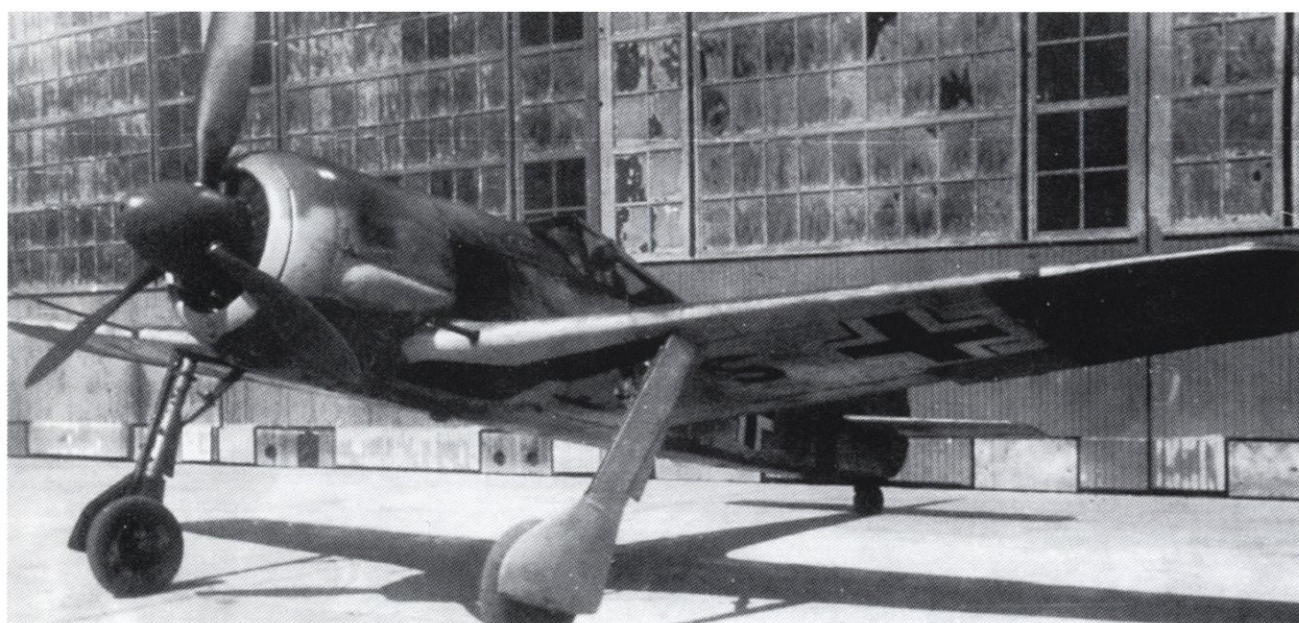


LEFT: Although appearing similar to the Fw 190 A-4 already shown, this is in fact another aircraft of the same Schwarm, this machine having a different camouflage pattern on the engine cowling.

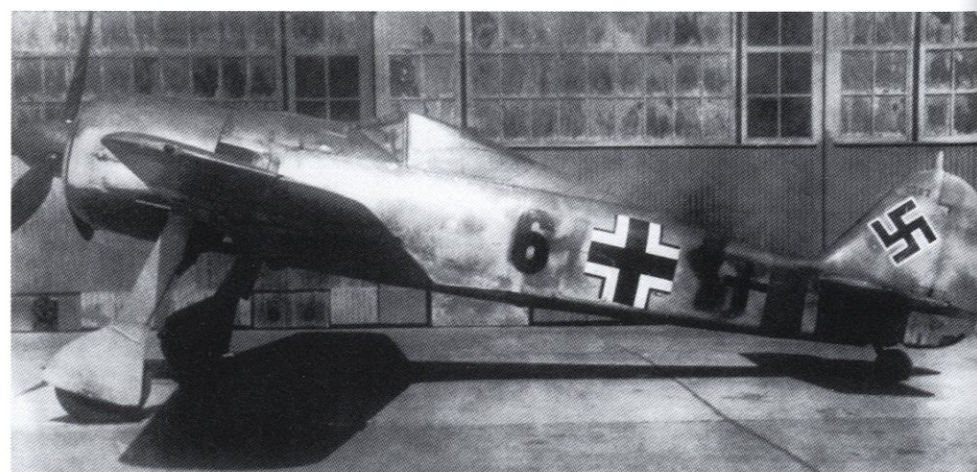


Focke-Wulf Fw 190 A-4 'Black 6' flown by Uffz. Erwin Grossmann of 11./JG 51 Central Russia, 12 July 1943

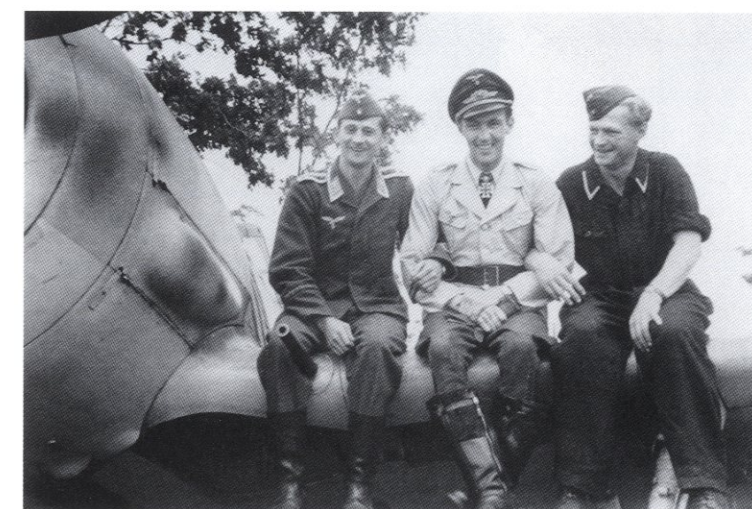
Uffz. Grossmann's aircraft was finished in a standard grey scheme consisting of the colours 74 and 75 on the upper surfaces and 76 on the undersurfaces and fuselage sides. Clearly visible on the fuselage were patches of RLM 74 where the original Stammkennzeichen was painted out, and as the yellow wingtip panels extended further inboard than usual, the first and last letters of the underwing Stammkennzeichen were largely obscured. Note also that the rear fuselage band was applied at a slight angle.



ABOVE AND RIGHT: When Major Rudolf Resch's IV./JG 51 exchanged its Bf 109s for Fw 190 A-4s and A-5s in March 1943, the Stab plus I., III., and IV./JG 51, the three Gruppen of Jagdgeschwader 'Mölders' operating on the Eastern Front, were all equipped with Focke-Wulf 190s. However, following the opening of the Kursk offensive in July, IV./JG 51 lost all its Fw 190s within a fortnight and, as no replacements were available, the Gruppe had to re-equip with Messerschmitt Bf 109 G-6s. This Fw 190 A-4, 'Black 6', was normally flown by Uffz. Erwin Grossmann of 11./JG 51 but was captured by Soviet forces at the major air base at Nevel, about 95 km north of Vitebsk in Central Russia, on 12 July 1943. Behind the Balkenkreuz on the fuselage of this machine, which served with IV./JG 51, is the smaller black cross used by this Geschwader to identify aircraft of its IV. Gruppe, and beneath the wings was the production Stammkennzeichen TH+ST. The full Werk Nummer was 142362, but only the last four digits appeared on the fin.



ABOVE AND RIGHT: The dark green camouflage on this Fw 190 appears to be confined to the aircraft's fuselage as the wings and tail seem to be in the original 74/75/76 factory finish. This machine, coded 'Brown 5' and with yellow spinner, was probably one of JG 51's casualties during the air battles of July 1943 when Stab, I. III. and IV./JG 51, operating under Luftflotte 6, lost a total of 63 aircraft during the first ten days of 'Zitadelle'. At this time, JG 51 was commanded by Eichenlaubträger Obstlt. Gottfried Nordmann, seen (RIGHT) seated with members of his ground crew on the wing of one of JG 51's Fw 190s. Nordmann was Kommodore of JG 51 from April 1942 to April 1944.



LEFT: Not all aircraft lost or damaged were the result of enemy action. This Fw 190 of JG 51 was photographed at Orel in July following the opening of Unternehmen 'Zitadelle' and before the Soviet recapture of the airfield in August. Orel was in the area controlled by Luftflotte 6 and was a well-prepared air base with areas laid with steel mesh to provide a firm surface should rain soften the ground. During 'Zitadelle', there were indeed numerous summer thunderstorms over the battle areas, but despite the careful preparations, the pilot of this Fw 190, appears to have missed the mesh area while taxiing with the result that his aircraft ended up as a 'Fliegerdenkmal'. The position of this aircraft relative to the sun has caused glare off the fuselage and long shadows which make positive identification of its camouflage and markings difficult, but it is believed to be 'Brown 2' of 3. Staffel and lacks the usual wide yellow band backing the fuselage Balkenkreuz.

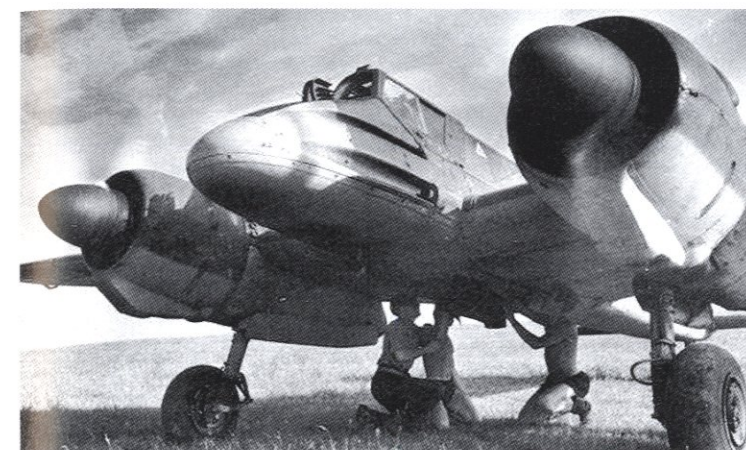


LEFT: Alfred Druschel was born on 4 February 1917 in Bindsachsen, Upper Hessen, the son of a civil engineer and provincial official. After studying at Wiesbaden he left school in 1936 and joined the Luftwaffe as a Fahnenjunker. He was commissioned in 1938 as an observer in a Kampfgeschwader and then became ordnance officer on the staff of a Luftflotte, but by the outbreak of war in 1939 he was operational again and took part in the Polish and French campaigns, flying Hs 123s with II.(Schlacht)/LG 2. In the spring of 1941 he was in the Balkans and moved to the Eastern Front at the start of the Russian campaign. In the spring of 1942, II./LG 2 became part of the newly-created Schlachtgeschwader 1, Druschel being appointed Gruppenkommandeur of I./Sch.G 1 and, from March 1943, Kommodore. He was noted for his efficiency, experience and particularly for the excellence of his reconnaissance results. Awarded the Swords in February 1943, Druschel remained on operations until, with the re-organisation of the dive-bomber and ground-attack forces in October 1943, he joined the staff of the General der Schlachtfliieger. He returned to operations as Kommodore of SG 4 in late December 1944 but went missing during Operation 'Bodenplatte' on 1 January 1945.

BELOW: Fw 190s of a ground attack unit, probably Schlachtgeschwader 1, which also operated the twin-engined Hs 129 anti-tank aircraft. This unit's greatest success during Operation 'Zitadelle' occurred on 8 July 1943 when a routine patrol revealed a large number of Soviet troops and armour emerging from woods and advancing for a flank attack near Belgorod. With the whole Geschwader scrambled, the Fw 190s, led by the Kommodore, Major Alfred Druschel, attacked the infantry with cluster bomb containers filled with SD 2 anti-personnel weapons. Whole blocks of Soviet soldiers were killed or maimed, yet still the main force continued to advance and it was only when the Focke-Wulfs began to fire directly into the leading ranks with their cannon and machine guns that the mass of troops was induced to break and flee to the cover of the woods.



BELOW: The relatively small but well-armed and well-armoured Hs 129 B-2 anti-tank aircraft played an important role on the Eastern Front in 1943. In the 8 July attack against Soviet forces near Belgorod described opposite, Hs 129 units attacked the Soviet armour in relays, destroying 80 tanks and damaging a number of others. After the failure of 'Zitadelle', the Hs 129 Staffeln were largely employed against Soviet tank forces which had broken through the German lines, in which role they were very successful and the type remained in service until the end of the war.



RIGHT: Also very active and assigned important targets during 'Zitadelle' were the Ju 87 dive-bombers of the Stukageschwader. During the first days of the operation, Ju 87 crews each flew an average of five or six sorties against all types of targets in the battle area where crews considered the Soviet light anti-aircraft guns and soldiers' rifle and machine gun fire a far greater menace than their fighter attacks which were warded off by the skill of the fighter cover. Here, an Fw 190 provides fighter escort for Ju 87 D-5s.



BELOW: Fw. Peter Bremer of 1./JG 54 was flying this Fw 190-A4 on 13 July 1943 when it was hit by Soviet anti-aircraft fire and he was obliged to make a forced landing at Krasnogorye. Fw. Bremer, who was made a prisoner of war, had 40 victories, and was awarded the German Cross in Gold in absentia on 31 August 1943. Here a Soviet soldier examines Bremer's aircraft, W.Nr. 145772, 'White 3'. Gone now are the colourful badges sported by the Geschwader at the start of the year, but the broad yellow fuselage band has been retained.





LEFT: Eichenlaubträger Oblt. Max Stotz, Staffelführer of 5./JG 54, explaining gunnery to two new pilots at Siverskaya in August 1943. When 'Assi' Hahn was posted from the Channel Front in January 1943 to take command of II./JG 54, he teamed up with Stotz and formed a Rotte, both pilots frequently returning from successful missions with multiple kills. Perhaps as a grim reminder that, contrary to popular opinion at the time, conditions on the Eastern Front were no less severe than in the West, Hahn was shot down and captured as early as 21 February. Stotz survived some months longer but on 19 August, only a few days after this photograph was taken, and soon after Stotz's Staffel had transferred to support Army Group Centre, he was shot down near Vitebsk, while flying 'Black 7', an Fw 190 A-6, W.Nr. 550201. He was last seen descending behind the Soviet lines on his parachute and was subsequently posted missing. At the time of his disappearance he had been credited with 189 victories.

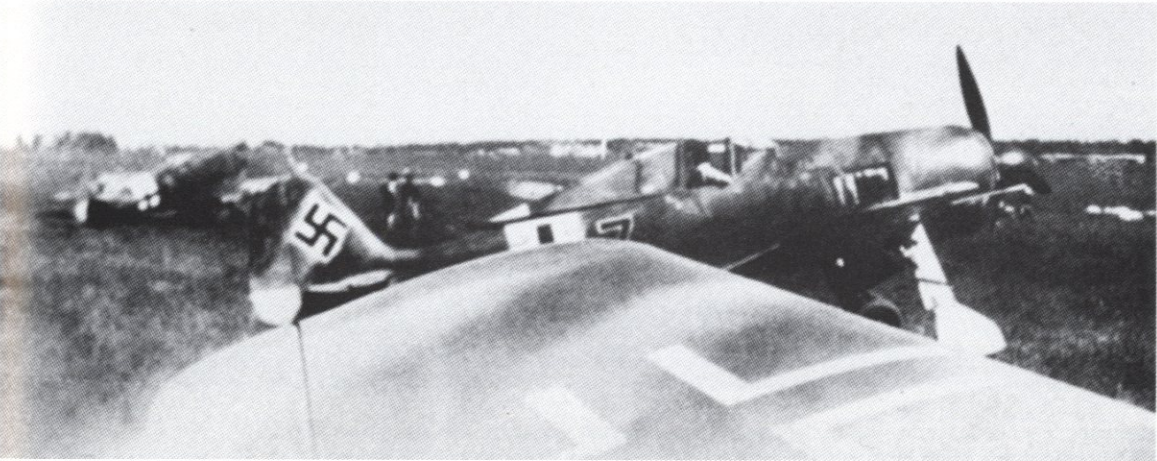


RIGHT: These two Fw 190 A-5s, 'Black 7' and 'Black 5', photographed in the Summer of 1943, both belonged to 5./JG 54. Although, as mentioned above, the Staffelführer, Oblt. Stotz, was listed as flying an Fw 190 coded 'Black 7' when he was shot down, it is thought that he normally flew the 'Black 5' in the background and that the A-5 'Black 7', in the foreground, was the aircraft allocated to Lt. Emil Lang. Note that, as mentioned in the profile caption below, 'Black 7' has an area of new paint on the cowl where a Gruppe badge had been painted out. However, as only I./JG 54 applied its Gruppe badge to the cowl of its Fw 190s, it is thought that this aircraft must therefore have previously served with that Gruppe.

Focke-Wulf Fw 190 A-5 'Black 7' of 5./JG 54, Central Sector of Eastern Front, Summer 1943
While the undersides of this aircraft remained in the factory finish of RLM 76, the uppersurfaces, originally RLM 74, 75 and 76 on the fuselage with a splinter pattern of 74 and 75 on the wings, tailplane and upper fuselage, have been oversprayed in the two-tone green scheme greatly favoured by JG 54. In this case however, irregular sand coloured patches have been added to help make the aircraft less conspicuous against the summer landscape. Note the areas of newer paint on the cowl and under the windscreen where the colourful Gruppe and Geschwader badges seen on JG 54's aircraft earlier in the year, have been painted out.



RIGHT: Another view of what is thought to be Oblt. Stotz's 'Black 5', possibly W.Nr. 5868, which was lost on 7 October, when during a Stuka escort mission, it received a hit in the engine. The pilot on that occasion was Lt. Karl-Heinz Lühau, who baled out and, although wounded, returned to his unit. The light area above the Hakenkreuz is a rectangular patch of the original RLM 76, probably mottled with 74 and 75, upon which the aircraft's Werk Nummer appeared.



ABOVE AND RIGHT: Two more views of Lt. Emil Lang's 'Black 7' with (RIGHT), Oblt. Max Stotz discussing his 'Black 5' with technical personnel in the foreground. Like 'Black 5', 'Black 7' retained its inboard undercarriage doors and both aircraft have outboard wing armament. In the view (ABOVE), the wing in the foreground provides some indication of the extent of sand colouring and shows that the Balkenkreuze were the outline type.

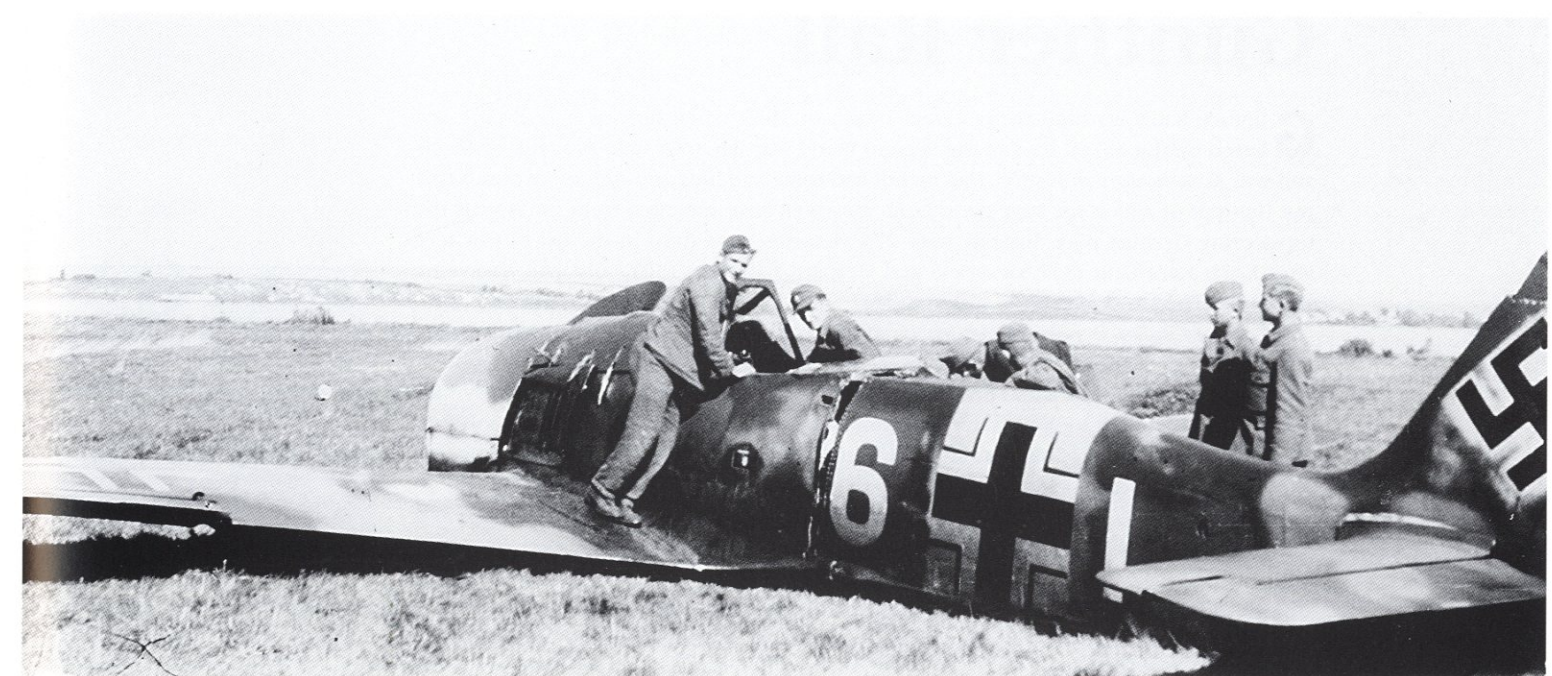




ABOVE: Despite the letter code on the fuselage, normally seen on aircraft operating with the Schlachtflieger, this Fw 190 A-5 belonged to 4./JG54. From July 1943 to February 1944, this Staffel operated as fighter-bombers on the Northern Sector of the Eastern Front under the command of IV./JG 54, and during that period the Staffel's aircraft were marked with letters instead of the usual numerals, perhaps because of their ground-attack role, adopting the system of identification then in use by the Schlachtflieger. This particular aircraft, 'White K', is an Fw 190 A-5.

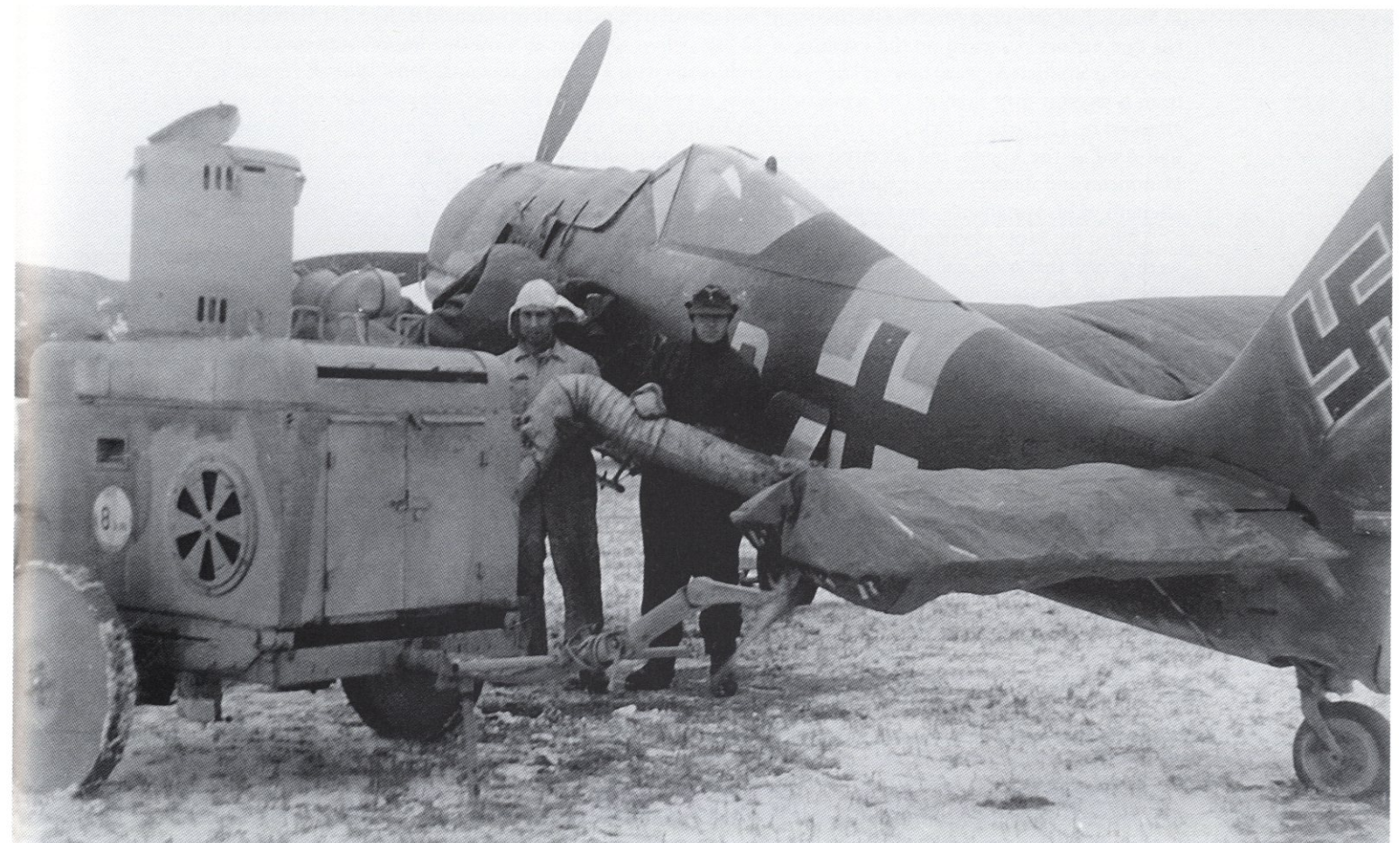
Focke-Wulf Fw 190 A-5 'White K' of 4./JG54, Summer 1943

Although finished in the two-tone Eastern Front greens already shown and described, on this particular aircraft the dividing lines between the two colours were far less clearly defined. The undersurfaces were RLM 76, a wide yellow band encircled the fuselage, but the yellow on the rudder has been restricted to a small section at the base.



ABOVE: This crash-landed Fw 190 'White 6' of III./JG 51 was photographed in August 1943, when the Geschwader was still operating on the Central Sector of the Eastern Front. The original print was marked with the location 'Tschemlysh Ost'. The lighter areas on the front of the engine cowling and rear fuselage suggest that the two-tone dark green finish has been modified with patches of a sand colour.

BELOW: Clearly taken in colder weather, probably at the end of 1943, this photograph is shown here in order to provide a direct comparison with the almost identically finished 'White K' shown opposite. Although the identification letter on this Fw 190 is partly hidden, it is believed to have been 'White D', another aircraft of 4./JG 54 operating in the fighter-bomber, or Jabo, role. The ground staff are positioning the flexible tubes of the 'Zwerg', or 'Dwarf' petrol heater, seen on the left.



Günther Rall

Günther Rall's wartime flying career began in 1939 when he was a *Leutnant* and lasted until the final days of the Second World War when he held the rank of *Major* and was *Kommodore* of JG 300. Had he not had some bad luck and suffered wounds that put him out of action for long periods, he may well have emerged from the war as the top-scoring German pilot. Instead, with 275 victories he is third in the list of top aces after Erich Hartmann (352 victories) and Gerhard Barkhorn (301) and will always be known as 'The Third Man'.

Günther Rall was born on 10 March 1918 in the small village of Gaggenau, on the edge of the Black Forest in Baden, to Rudolf and Minna (née Heinzelmann) Rall. Günther was the couple's second child and arrived when their daughter, Lotte, was already four years old. Because Rudolf Rall was serving with the German Army's signal corps in France, he did not see his son until he returned home following the armistice of November 1918, by which time Günther was six months old.

In 1922, the Rall family moved to Stuttgart where Rudolf re-established himself as a merchant. Like most others in Germany at that time, the family experienced economic hardship as a result of the war and the punitive effects of the Treaty of Versailles. Günther's parents were middle-class Protestants with traditionally conservative views and Günther had a stable, loving, but very disciplined upbringing in which a sense of honour and duty for one's country was instilled from a young age.

With his education completed in 1936, Günther Rall's ambition was to become an officer in the German armed forces and he duly applied to join *Infanterie Regiment Nr. 13*. Although only a few vacancies existed, Günther was accepted and, after a year's training, he was sent to Dresden on a special course, and it was there that he learned of the adventures of a school friend who had joined the newly-created *Luftwaffe*. Unable to resist the lure of flying, Rall requested a transfer and was accepted. His flying training, which began in the summer of 1938, was completed a year later, after which Rall was sent to a weapons school at Werneuchen, north of Berlin, where his tutors included Günther Lützow, Theo Osterkamp and others who had gained experience in the Spanish Civil War.

With his training completed, in January 1940, Rall was posted as a *Leutnant* to 4./JG 52, based at Stuttgart, where the unit's mission was to fly largely uneventful patrols along the Franco-German border. In March, Rall was promoted to *Oberleutnant* and transferred to the newly-created 8./JG 52 at Mannheim. His first victory occurred on the evening of 12 May when ten aircraft from the *Staffel* were ordered to take off from their forward base at Trier and rendezvous with a German reconnaissance aircraft returning from a mission over France. The rendezvous was accomplished just as the reconnaissance aircraft was attacked by 12 Curtiss Hawk 75As of the French Air Force and in the hectic engagement which followed, Rall fired at the enemy but received damage to his own aircraft. After making his way back first to Mannheim and thence to Trier, Rall made no claim but was credited with one Hawk 75 destroyed on the strength of his wingman's observations.

When the Battle of Britain began, III./JG 52 was the first *Gruppe* to fly missions against England but losses were so high that at the end of July, after the loss of the *Kommandeur*, Hptm. Wolf-Heinrich von Houwald, plus three *Staffelkapitäne*, the unit was withdrawn. At this time, Rall, now an *Oberleutnant*, was appointed *Staffelkapitän* of 8./JG 52 which spent August and September at Zerst in Germany. The *Gruppe* was then sent to Rumania to protect the Ploesti oilfields and an important pontoon bridge over the Danube, during which time the *Gruppe* operated under the temporary cover designation I./JG 28. The *Gruppe* did not see further action until called upon to provide reinforcements during the final stages of the attack upon Crete, after which III./JG 52 received orders to move back to Rumania where, as well as resuming its protection of the oilfields, it was to prepare for 'Barbarossa', the attack on Russia, by converting from its Bf 109 Es to the latest Bf 109 F-4.

The *Gruppe's* defensive duties in Rumania continued for some weeks, and on 24 June 1941, two days after the launching of 'Barbarossa', the oilfields and airfield at Constanta came under attack by Soviet bombers. Thirty-two of the bombers were claimed destroyed by III./JG 52, of which one DB-3 was credited to Rall as his second victory. From that point on, Rall was able to regularly add to his score, claiming an SB-2 on the 25th and a DB-3 on the 26th. Once released from its defensive duties in Rumania at the beginning of August, III./JG 52 transferred to Belaya Tserkov in the Ukraine and on 4 August, Rall achieved his fifth, sixth and seventh victories when he shot down three I-16s. On 28 November, Rall was credited with shooting down two I-16s, increased his tally to 36 enemy aircraft, making him the *Geschwader's* most successful pilot, but as he watched his latest victim fall in flames, he was himself attacked by a Yak-1 which damaged his aircraft. Rall forced-landed within his own lines but was severely injured and knocked unconscious when his Bf 109 F-4, 'Black 1', W.Nr. 7308, struck the ground near Rostov.

Rall was pulled from his aircraft by German soldiers and taken to a field hospital where his head wounds were examined, although the full extent of his injuries could not yet be established due to a lack



BELOW: Hptm. Rall, in life jacket, photographed in the spring of 1943 when *Staffelkapitän* of 8./JG 52. Drinking from the bottle is Lt. Josef Zwernemann, who had been awarded the Oak Leaves on 31 October 1942, just a few days after Rall was similarly decorated.



RIGHT: Günther Rall, only the third pilot after Hermann Graf and Hans Philipp to reach 200 victories, returning to the airfield at Makeyewka on 28 August 1943.

of suitable medical facilities. In great pain, he was flown to Mariupol and then on to Bucharest. There it was discovered that Rall's back was broken in three places and he was subsequently transferred to a hospital in Vienna where he would receive better treatment. On 15 December, Rall was awarded the German Cross in Gold, but for the next five months he lay with his body encased in plaster and with his right side and right leg partially paralysed.

To the medical staff it seemed Rall's flying days were over, but he was determined to rejoin his unit and, once free of the plaster cast, he set about learning to walk again and proving that he was up to the demands of combat flying. With willpower and the aid and encouragement of a female doctor, Hertha Schön, whom Rall would later marry, he succeeded in overcoming his injuries and convincing the appropriate authorities that, not only was he ready to be discharged, but that he was fit enough to return to flying duties.

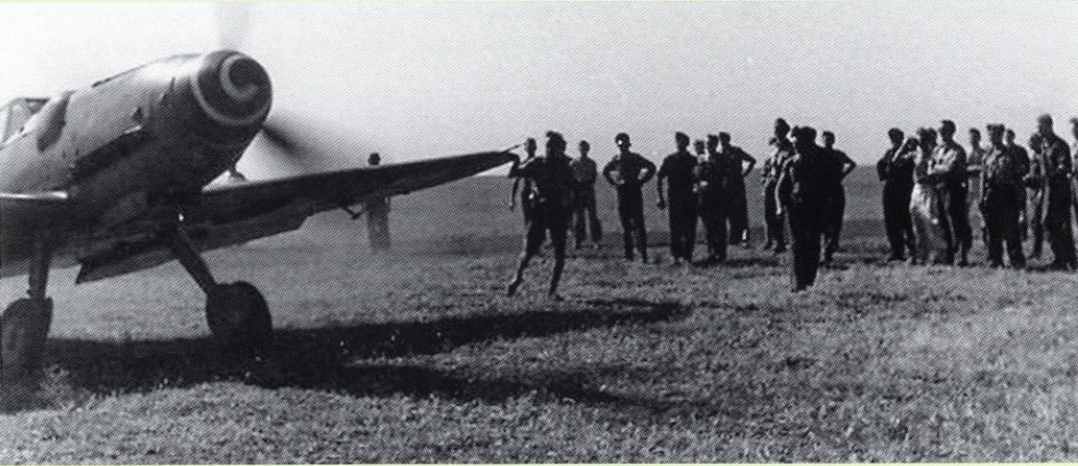
In late July 1942, eight months after his crash-landing, Rall rejoined III./JG 52 at Rostov and resumed command of 8. *Staffel*. He was immediately surprised to note that his earlier and quite respectable tally of 36 victories had now been surpassed by *Oblt.* Hermann Graf and *Lt.* Adolf Dickfeld, both with over 100 victories and, moreover, by a large number of NCO pilots each with around 40 or more victories. Clearly, Rall had some catching up to do, and although he had to be helped in and out of the cockpit and was still in some pain, he was credited with an I-153 and a MiG-1 on 2 August, although the latter was probably a Yak-1, and on the 6th destroyed two Il-2s and two LaGG fighters. By the 18th he had increased his score to 50 and on 2 September accounted for his 65th aerial victory, for which he was awarded the *Ritterkreuz* the following day. On 22 October he destroyed two Soviet fighters which brought his total to 100 victories, an outstanding achievement for a pilot who had been so seriously injured and who had only returned to his unit in August. This accomplishment was recognised by the award of the Oak Leaves, personally presented by the *Führer* in an official ceremony on 2 November. In another quiet ceremony on 11 November, while taking advantage of a few days leave, Rall and Hertha Schön were married and had a brief honeymoon before he returned to the front.

In April 1943, III./JG 52 was based at Taman in the northern part of the Caucasus and was now equipped with the new Bf 109 G. Despite the well-known shortcomings of this series, Rall, now a *Hauptmann*, preferred the Bf 109 G, a type he would fly for the remainder of the war, to the earlier Es and Fs on account of its heavier armament and more powerful engine. Fierce air fighting over the Kuban began in April with the launch of Operation 'Neptun' and on 20 April, in a particularly large air battle, one of the 80 Soviet aircraft claimed destroyed by German fighters was shot down by Rall as JG 52's 5,000th victory.

On 6 July 1943, Hptm. Rall was appointed *Gruppenkommandeur* of III./JG 52, then assigned to *Luftflotte 6* for the 'Zitadelle' offensive. In August, Rall was credited with another 33 enemy aircraft destroyed including two LaGG fighters shot down on 29 August which brought his total to 200 victories. Although the symbolic 200 victory barrier had already been broken by Hermann Graf and Hans Philipp, neither was



ABOVE: Returning from a mission, Günther Rall and his Bf 109 G-2 'Black 3', in which he added another victory to his score.





LEFT: The Führer awarding Hptm. Rall, third from left, with the Swords. The official date of this award was 12 September 1943, although the presentation took place on 22 September when three other Luftwaffe fighter pilots were also decorated. On the far left is Major Hartmann Grasser of JG 51 who received the Oak Leaves with, next to him, Hptm. Heinrich Prinz zu Sayn-Wittgenstein of NJG 3, also awarded the Oak Leaves. At the end of the line is Oblt. Walter Nowotny of JG 54 who received two decorations; the Oak Leaves, officially awarded on 4 September, and the Swords, the official award date of which was 22 September.

serving on the Eastern Front at this time, so Rall's achievement placed him as the leading ace in that theatre. During another visit to the Führer on 12 September, he was presented with the Swords.

In spite of this personal success, the defeat

of the German forces at Kursk, the subsequent German retreat and the wearing down of *Luftwaffe* forces profoundly affected Rall who claims that from this point he had little faith in a German victory. He and fellow pilots had already noted a significant improvement in the quality of the Russian fighter aircraft and in their pilots, with the result that III./JG 52 was particularly hard-pressed. On 14 October, Russian armour broke through the German lines and forced the *Gruppe* to evacuate within a few hours of the airfield being overrun.

On 28 November, Rall became the second fighter pilot in history to reach 250 victories when he shot down a LaGG south of Zaporozhye. To judge from the achievement of Walter Nowotny, who was awarded the Diamonds for his 250th victory a month earlier, it seems strange that Rall was not also similarly honoured. One theory is that this was withheld because of the friendship and assistance Rall's wife had extended to some Viennese Jews, although Gerhard Barkhorn with 301 victories and Otto Kittle with at least 267 were also denied the Diamonds.

Rall remained *Kommandeur* of III./JG 52 until April 1944 when he was ordered to the West to take command of II./JG 11, then engaged in *Reichverteidigung* duties against the Allied daylight bombers. Here, although still flying the Bf 109 G, Rall soon realised that the air war was very different than on the Eastern Front where he had flown many *freie Jagd* missions daily, searching out the enemy. Now he and his Bf 109s were restricted to the sole task of engaging the US fighter escort so that the more heavily armed Fw 190s could attack the bombers. However, the task was formidable as the German fighters were greatly outnumbered. Rall himself has stated that he was both shocked and surprised at the numbers of US aircraft involved and realised that the situation was hopeless. Losses were indeed high in this theatre and Rall would survive for only about a month before he was himself shot down.

On 12 May 1944, the US Eighth Air Force began its offensive against the German oil industry and a total of no fewer than 1,846 US aircraft, comprising 866 B-17 and B-24 bombers supported by 980 fighters, was dispatched to attack five main oil plants in central Germany. Rall's II./JG 11 was just one of the German fighter *Gruppen* in action that day and rendezvoused with two *Gruppen* of Fw 190s which were to attack the bombers. But as they made their way towards the bombers, the German aircraft ran into a number of P-47s. Rall managed to shoot down two in flames before he was attacked by four more P-47s which damaged his aircraft. After a brief chase, a final burst entered the cockpit of Rall's Bf 109 G-5, injured his left elbow and severed his left thumb. Baling out over Frankfurt/Main, Rall was taken to hospital.

When Rall was discharged, his wounded hand refused to heal and another operation to remove bone splinters was required. Unfortunately, this operation took place on an unsterilised operating table used earlier to amputate a wounded B-17 pilot's leg, and Rall had become infected with diphtheria. This acute bacterial illness delayed his recovery until November 1944, when he was assigned to a school for fighter leaders at Königsberg-Neumark. Later, the school was forced to relocate to southern Bavaria, and here Rall flew captured Spitfires, P-38s, P-47s and P-51s. He also familiarised himself with the Me 262 at Lechfeld before, in February 1945, he was appointed *Kommodore* of JG 300.

Rall was enough of a realist to appreciate that Germany now stood no chance of securing a victory. Soon, operations were curtailed because of the fuel shortage, communications broke down and in April



LEFT: Rall recovering from the wound which resulted in the loss of his left thumb.

the unit found itself without orders. By the first week of May, *Luftwaffe* units were already being disbanded and a few days later Rall surrendered JG 300 to American forces and was taken prisoner.

With the cessation of hostilities, Rall eventually found himself with thousands of other *Wehrmacht* prisoners in a PoW camp in Heilbronn where conditions were so appalling that some prisoners died of starvation. Later, all *Luftwaffe* officers were assembled in one place and a US officer began reading out the names of pilots known to have knowledge of the Me 262. These pilots were taken first to Wiesbaden for special interrogation by the US Army, which wanted information on Germany's technically advanced jet aircraft.

In July, Rall and other important PoWs were shipped to France. From there they were taken to England for further interrogation by the RAF, which was more interested in exploiting the German PoWs' operational experiences and skills rather than their knowledge of technical matters. After some weeks, Rall was returned to the camp in France and, later, succeeded in securing his release and transport to Germany. Reunited with his wife, who soon secured employment due to her medical skills, Rall found a return to civilian life more difficult. No one wanted to employ an ex-officer, a 'militarist', and even entrance to university for further study preparatory to a civilian career or profession was barred. Eventually, however, in 1946, he secured employment, first as a trainee in a weaving company and later as a simple clerk. In 1947, as the result of a position offered to Hertha Rall, the couple moved to Stuttgart and, slowly, their position began to improve. For Günther Rall, a lumber enterprise brought in more money and, following various sales appointments, he broke into middle management as sales manager for a radio company.

In 1950, the Ralls were presented with their first daughter and, in 1951, Hertha accepted a position at the prestigious Salem boarding school for boys and girls, which also had a position providing

employment for Günther Rall. Another daughter was born in 1955 and, with ideas circulating about the possibility of Germany establishing a new air force, Rall's attention turned again to flying and he obtained a civilian pilot's licence.

The West German Air Force, or *Bundesluftwaffe*, was officially created in 1956 and comprised a core of officers who had served during the war, all of whom joined retaining their previous wartime ranks. Thus Günther Rall joined the new *Luftwaffe* as a *Major*, at first flying T-6 piston-engined trainers before progressing to the jet T-33 and F-84 and a spell as operations officer with *Waffenschule* 10. This was followed by

various staff positions, and in 1958 Rall was selected to head a project to evaluate and later introduce the F-104 into service with the *Luftwaffe*. As head of this project, Rall's duties also involved co-ordination with other NATO countries which had elected to purchase and eventually manufacture the F-104 themselves.

Rall then became *Kommodore* of *Jabo Geschwader* 34 and held further staff positions until 1 May 1969 when he became Chief of Staff of the 4th Allied Tactical Air Force at Ramstein. In 1970, Rall replaced Johannes Steinhoff as Commanding General of the *Luftwaffe* in Bonn and in 1974, *Generalleutnant* Rall was appointed German Military Representative to NATO's Military Council. This appointment, however, was cut short following media exposure of a politically sensitive visit to South Africa in August 1974, during which Rall and his wife travelled incognito as 'Mrs and Mrs Ball' as guests of that country's Department of Defence. Rall offered his resignation, which was accepted, and he was honourably discharged in December 1975.

As a civilian again, Rall was soon in great demand by the aircraft industry and he held various appointments as chairman, board member and advisor with a number of companies. His wife, Hertha, died in 1985, and although the Berlin Wall was demolished in 1989 and requirements for military hardware lessened, at the time of writing (2003) the demand for *Generalleutnant a.D.* Günther Rall to address military organisations and groups for aviation enthusiasts remains as strong as ever.

Despite his considerable peacetime achievements, it is in the nature of things that Günther Rall will be best remembered for his wartime career, during which he flew a total of 621 missions, was shot down eight times and was thrice wounded or injured. With a total of 275 enemy aircraft destroyed, he is 'The Third Man'; the third highest-scoring fighter pilot in history.



RIGHT: Rall when Kommodore of Jagdbomber Geschwader 34 at Memmingen with one of the unit's F-104Gs in the background. Eventually manufactured under licence in Germany, the F-104G Starfighter became the new Luftwaffe's main combat aircraft and served for 20 years.



LEFT: General Rall: A visit to South Africa as 'Mr. Ball' resulted in his resignation.

Retreat

The very heavy aerial fighting on the Central and Southern sectors of the Front continued for many weeks, wearing down the air forces on both sides. During the first ten days of the battle, JG 51 had lost 63 aircraft, and on 18 July Soviet fighters shot down and killed Lt. Alfons Mittelmeier in 9./JG 51's last remaining Fw 190. The situation was almost as bad for IV./JG 51 which lost all its Fw 190s in a fortnight and then had to re-equip with Messerschmitt Bf 109 G-6s, simply because there were no more Fw 190s available to replace those lost. *Ritterkreuzträger* Major Hans-Ekkehard Bob, then with 58 victories and in command of 9./JG 54 in the *Reichsverteidigung*, was transferred to take over and boost the morale of the badly mauled and dejected IV./JG 51.

Through steps such as these the Germans were able to introduce new vigour into their air units. One of the toughest pilots in the heavily-stricken 9./JG 51 was *Oblt.* Hermann Lücke, who had brought down seven Soviet aircraft on the first day of 'Zitadelle'. On 27 July 1943 he destroyed five Il-2 *Shturmoviks*, thus achieving his 54th to 58th personal victories, of which no fewer than 39 were destroyed in July and one, an Il-2, was the 'Mölders' *Geschwader*'s 6,000th confirmed aerial victory. Others were less fortunate during these difficult days.

Ofw. Josef Jennewein, another of JG 51's most successful pilots, attained 23 victories in July, including five on the 21st, but was shot down and listed as missing on the 26th. Jennewein was credited with a total of 86 aerial victories and was posthumously awarded the Knight's Cross. Four days later, JG 51 lost another great ace when Lt. Otto Tange of the *Stabsstaffel* was killed in action. He had a total of 68 victories.

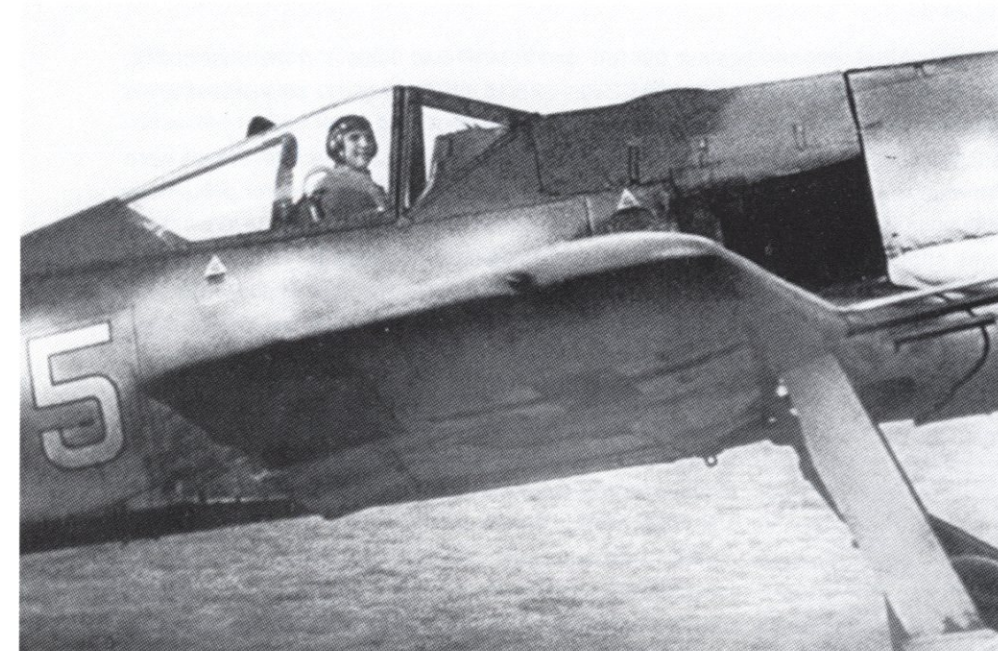
Only by cleverly deploying the bulk of their air forces to the most critical sectors and completely abandoning other zones were the Germans able to avoid a complete breakdown, yet added to the decline caused by combat losses was the effect of demands from other theatres of war. In the middle of the desperate defensive battle at Orel and Kharkov, for example, the remainder of JG 3 'Udet' was transferred to *Reichsverteidigung* duties.

On 31 July German Army Group Centre began its withdrawal from the Orel Bulge and this resulted in a new upsurge in the air battle as the Soviets attempted to overrun the German forces. Between 3 and 7 August, *Luftflotte* 6's *Jagdgruppen* lost three of their best pilots in this sector: Major Gerhard Homuth of I./JG 54 with 63 victories on the 3rd; *Oblt.* Hans Götz with 82 victories on the 4th; and I./JG 51's Lt. Heinrich Höfemeier, 96 victories, on the 7th. Nevertheless, the pilots of the Focke-Wulfs and Messerschmitts managed to deal the Soviets sufficiently heavy blows to save the retreating German troop columns from total disaster and, but for the *Jagdwaaffe*, a situation similar to that in France in the summer of 1944, when thousands of Allied aircraft totally destroyed German army columns in the rear area, could have become a reality in the Ukraine as early as the summer of 1943.

The aces in the German fighter arm had always played an important role, but now, it grew in importance as many of the best *Jagdwaaffe* pilots were sacrificed in the very difficult air battles on the Eastern Front in the spring and summer of 1943, but other pilots emerged to assume their places. When *Oblt.* Walter Nowotny arrived to replace Gerhard Homuth as *Kommandeur* of I./JG 54, this signified an important reinforcement. A 22 year old Austrian, Nowotny had developed in recent months into a remarkably successful fighter pilot. Following his 124th victory in June 1943 he had been on leave, but he now returned and threw himself into combat with devastating effect and began by shooting down eight aircraft on 13 August. He followed this by destroying another six on 18 August, raising his total to over 150, and seven on the 21st. Throughout August, he reportedly destroyed a total of 49 Soviet aircraft, exceeding the month's result obtained by the leading *Luftwaaffe* ace on the Eastern Front at that time, *Hptm.* Günther Rall, *Kommandeur* of III./JG 52. Rall's total for August was 33 aircraft destroyed which included his 200th victory on 29 August. Another boost to German fighter strength came when *Hptm.* Erich Rudorffer also arrived in August to assume command of II./JG 54, a unit that had been rushed in from its base farther north to participate in the Orel sector. Rudorffer had



LEFT: *Ofw.* Josef Jennewein belonged to 2./JG 51 and was flying one of the many Fw 190s lost during the 'Mölders' *Geschwader*'s operations around Orel in July 1943 when he was shot down behind enemy lines in 'Black 7', an Fw 190 A-6, and posted missing. A former world champion in alpine skiing, Jennewein was one of JG 51's most successful pilots and had been awarded the German Cross in Gold on 12 April 1943. With a final tally of 86 victories, he was awarded the *Ritterkreuz* in absentia on 5 December.



ABOVE AND RIGHT: Walter Nowotny in an Fw 190 A-6 coded 'White 5'. Although the aircraft carries the wide, yellow fuselage band of JG 54, the machine is unusual for an aircraft of this *Geschwader* in that it is still finished in the standard day fighter scheme and has not been overpainted.



LEFT: Major Erich Rudorffer, far left, *Kommandeur* of II./JG 54, with his *Staffelführer* at Karachev in August 1943. Next to Rudorffer is the *Staffelführer* of 6./JG 54, *Hptm.* Horst Adameit, who became *Kommandeur* of I./JG 54 in January 1944.

earned fame for his many serial victories against the RAF and USAAF over Tunisia in the past spring, and he now repeated his success by claiming eight Soviet aircraft on 24 August, so increasing his personal score to 88.

Achievements such as these, however, could no longer turn the tide. While the German armies were pushed farther to the west, the Soviet air force was growing in strength and its best fighter pilots were now increasingly challenging even the best of the German pilots. When *Obt.* Max Stotz of II./JG 54, then with 189 victories, was shot down by a Yak-9 and listed as missing on 19 August, he was the highest scoring German fighter *Expert* to be lost to date due to the actions of an enemy fighter pilot. With this following only months after the losses of the two 100-plus pilots 'Assi' Hahn and 'Beisser' Beisswenger, II./JG 54 was particularly heavy stricken. Eight days after the demise of Stotz, this *Jagdgruppe* lost another *Expert* when *Ofw.* Xaver Müller, a pilot with 47 victories, was shot down and killed.

The situation was similar for the Soviets and in August 1943 the female ace Lidya Litvyak was shot down and killed over Kharkov by a Bf 109. Among other personnel losses in the air fighting in August 1943, was Georgiy Kuzmin whose 28 victories made him one of the top scoring Allied fighter pilots at that time. During another engagement in VIII. *Fliegerkorps*' area in August, an Airacobra flown by the famous Vladimir Lavrinenkov of the 9th Guards Fighter Aviation Regiment was shot down over German-held territory. Lavrinenkov was taken to a German airfield where he was introduced to one of the leading *Luftwaffe* pilots in that sector. He later managed to escape and, after successfully returning to the Soviet lines, continued flying with the 9th Guards Regiment.

Albeit paying a heavy price for their successes, the Soviet pilots kept fighting with an increasing élan. On 29 August a group of Lavrinenkov's colleagues pounced with their Airacobras on III./JG 52's 113-victory ace *Lt.* Berthold Korts and his wingman. In a matter of minutes, both German pilots had been shot down and killed.

In September 1943, German Army Groups South and Centre were pulled back to establish the so-called *Ostwall*, or Eastern Wall, a new line of defence behind the River Dnepr and southwards to Melitopol and the Sea of Azov. Covering the northern flank of this strategic withdrawal, I./JG 54's *Obt.* Walter Nowotny continued his astonishing string of victories, claiming ten on 1 September and another six on the 2nd. One of the pilots under Nowotny's command, *Lt.* Gerhard Loos, was credited with JG 54's 5,500th victory when he destroyed a Soviet aircraft as his 79th victory on 5 September. In an astonishing start to his career as a fighter pilot, Loos had achieved his first aerial victory on only his third combat mission in February 1943, and when he attained the '*Grünherz*' *Geschwader*'s 5,500th, he had claimed 70 victories since the opening of '*Zitadelle*'. Shortly afterwards, Loos was transferred to III./JG 54 in the West where eventually he would perish while flying *Reichsverteidigung* missions.

The southern flank received a most welcome reinforcement when the Kuban bridgehead was evacuated, allowing the Bf 109-equipped II./JG 52 to be transferred from this sector to the southern Ukraine on 1 September. This left the Slovakian 13./JG 52 as the only fighter unit available to defend the eastern Crimea against Soviet aerial incursions and in consequence the morale of its pilots rapidly deteriorated. On 9 September 1943, two Slovakian pilots reportedly deserted when they pretended to engage in aerial action but later landed their aircraft, Bf 109 G-4s, W.Nr. 19347, 'Yellow 9', and W.Nr. 16259, 'Yellow 13', near the village of Novomalorosiyska. Three days later another Slovakian Bf 109 pilot, *Ctk.* Alexander Geric, followed their example when, with a radio mechanic stowed in the fuselage of his Bf 109 G-4 W.Nr. 14938 coded 'Yellow 2', he deserted and they both surrendered after landing near Novorossiysk. The Russians valued them both and Radio Moscow even broadcast a message that Geric had been shot down and killed to cover up the desertion⁸. This was in total contrast to the achievements of 13.(Slovak.)/JG 52 during the past spring,



ABOVE: On 1 August 1943, 22 year old Lidya Litvyak, one of Russia's top female fighter pilots was escorting a unit of *Shturmoviks* returning from an attack when her Yak-1 was attacked by Bf 109s and shot down. No trace of her aircraft or her body were found during the war years, and it was not until 1979 that she was discovered near the village of Dmitriyevka, her body lying under the wing of her wrecked aircraft. Her remains were removed for official burial and on 5 May 1990 she was posthumously awarded the honour of Hero of the Soviet Union. In her flying career, Lidya Litvyak had completed 168 missions, and had been credited with 12 personal victories plus another three which she shared with other pilots.

8. The information regarding 13.(Slovak.)/JG 52 is from Milan Krajci's article, 'Messerschmitt Bf 109 in the Slovak Air Arms', published in *Luftwaffe Verband*, Issue No 11 dated July 1997.

the performance of which had been above average even when compared to German *Jagdgruppen*. One parallel however followed in the autumn of 1944, when the remaining pilots of 13.(Slovak.)/JG 52 deserted to Slovakian partisans and flew their fighters against their former allies.

In a series of fierce air battles in the ten days following its transfer to the Southern Ukraine, II./JG 52 shot down 39 Soviet aircraft including 12 by the *Gruppenkommandeur*, *Hptm.* Gerhard Barkhorn, for five losses. Included among the losses was the experienced and high-scoring *Obt.* Heinz Schmidt with 175 victories, who was killed in action on 5 September 1943. *Hptm.* Barkhorn achieved his 175th and 176th victories against two Yak-1s on 13 September, but the greatest achievements were made by *Obt.* Walter Nowotny of I./JG 54, who was awarded the Oak Leaves on 4 September and on 8 September became the fourth pilot to achieve 200 victories. On 14 September, when the Soviets extended the offensive by launching the Western Front against the city of Smolensk, Nowotny was operating from Shatalovo aerodrome. From there he flew *freie Jagd* missions over the battlefield and, in a single combat on the 14th, he brought down four aircraft as his 204th to 207th victories. In an attempt to neutralise the German fighters of I. and II./JG 54 plus elements of JG 51, the Soviets dispatched a strong bomber operation against Shatalovo airfield. In the ensuing combat, JG 54's pilots claimed 25 aircraft shot down, including two by Nowotny. Of JG 54's total of 36 victories for the day, no fewer than 26 were attained by Nowotny's *Gruppe* and *Ofw.* Otto Kittel, one of Nowotny's pilots, claimed three, thus achieving his 100th and almost doubling his victory total since the beginning of August.

In II./JG 54, the *Gruppenkommandeur*, *Hptm.* Erich Rudorffer, was credited with five victories on 14 September, when JG 54 lost five aircraft and two pilots. The intense air fighting continued the next day when JG 54 claimed another 39 victories including another six by Nowotny, five by II./JG 54's *Ofw.* Albin Wolf, and two by Otto Kittel, against three aircraft lost. Meanwhile JG 51 reported 53 Soviet aircraft destroyed, of which *Fw.* Günther Josten claimed eight, bringing his victory total to 78, while Nowotny reached 215, for which he was awarded the Swords to his Knight's Cross with Oak Leaves on 22 September.

On the southern flank, it was reported on 16 September, that JG 52 became the first *Jagdgeschwader* to achieve 7,000 victories. The next day, *Obt.* Hermann Lücke of 9./JG 51 who had been credited with JG 51's 6,000th victory on 27 July 1943, was also reported on 17 September to have been responsible for increasing the *Geschwader*'s total to over 7,000 victories.

LEFT: Soviet anti-aircraft fire was probably the cause of the rudder damage on this Fw 190, W.Nr. 157274 of I./JG 54, although no details can be traced regarding the date of this incident. Later, however, this machine, an Fw 190A-5 coded 'White 10', was shot down during an air battle on 26 August 1943 and the pilot, *Lt.* Hans Pöstges, was posted missing. The area around the Hakenkreuz shows where the original scheme was avoided when the aircraft's finish was modified and it was camouflaged with darker colours.



LEFT: Fw Otto Kittel of JG 54, seen here in winter clothing, claimed his 100th victory on 14 September 1943. In marked contrast to the requirement in 1940 and 1941 when the Knight's Cross was usually awarded for 20 victories, Kittel finally became a *Ritterkreuzträger* on 29 September 1943, by which time he had increased his tally to 123 victories.

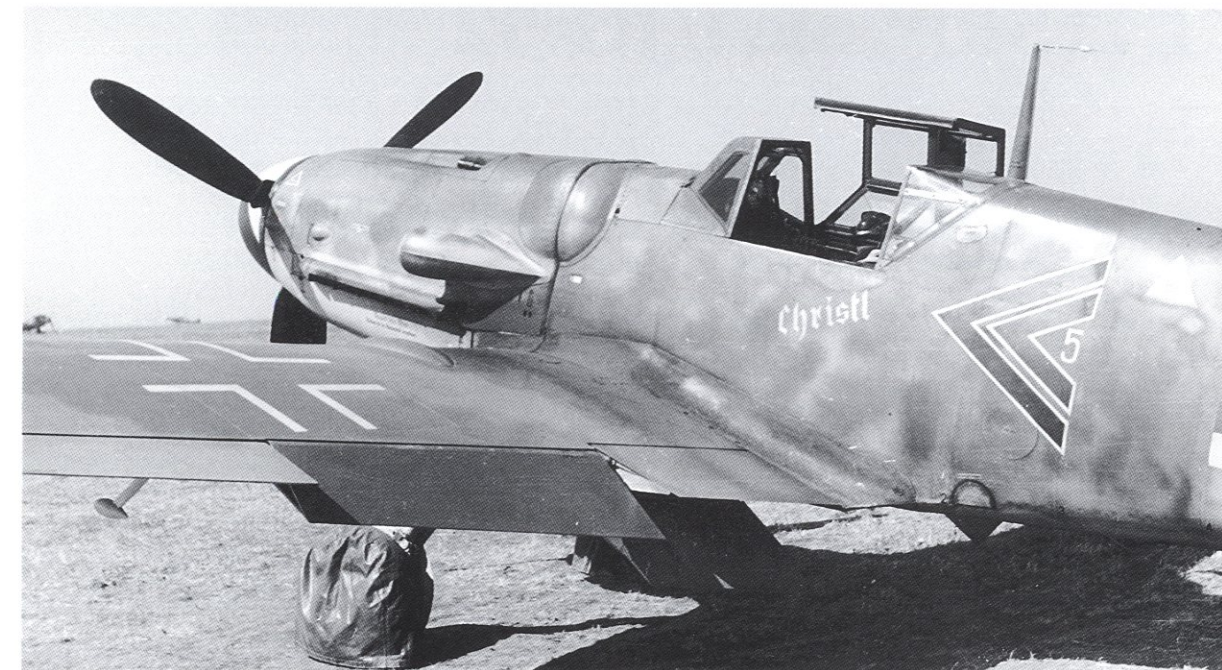
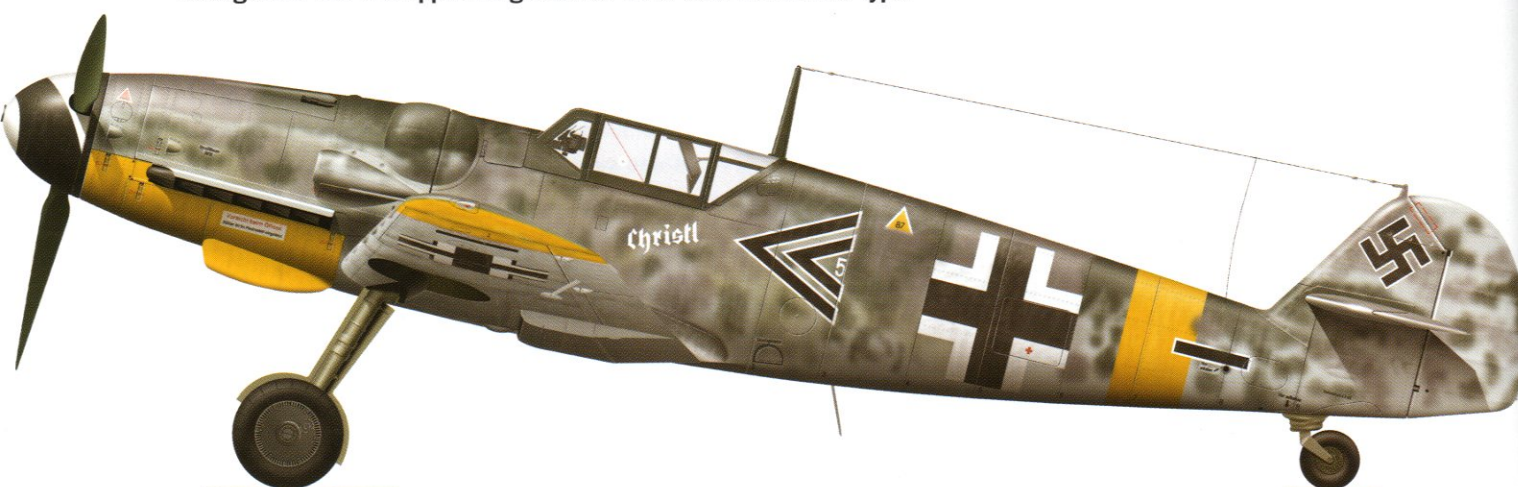




INSET, ABOVE AND OPPOSITE: Hptm. Gerhard Barkhorn shown (*INSET*) with the Oak Leaves, awarded on 11 January 1943 after he had been credited with 120 victories, became Kommandeur of II./JG 52 on 1 September 1943. Apart from a four-month period when he was out of action as a result of being severely wounded, he remained in command of the Gruppe until 15 January 1945. In this time he flew at least two similarly marked Bf 109 G-6s, both carrying a small number 5 in the Kommandeur's chevrons and the name of his wife, Christl, painted in white below the cockpit. The aircraft shown here was flown by Barkhorn in 1943 and although the RLM 74/75/76 camouflage and yellow theatre markings were standard and Barkhorn did not display his victory tally on the rudder, the aircraft was personalised in other ways, notably the two features already mentioned.

Messerschmitt Bf 109 G-6 flown by Hptm. Gerhard Barkhorn, Kommandeur of II./JG 52, late Summer 1943

This aircraft was camouflaged in a 74/75/76 scheme with a more obvious use of 02 in the fuselage mottling. Note the type of head armour installed in the cockpit and that the spiral on the spinner does not extend to the backplate, which remained in RLM 70, and that the undersurface colour tended to wrap around the leading edge of the wings, meeting the uppersurface colours in a regular undulating line. The fuselage Balkenkreuz was a white outline type on a very dark grey background and the upper wing crosses were also the outline type.



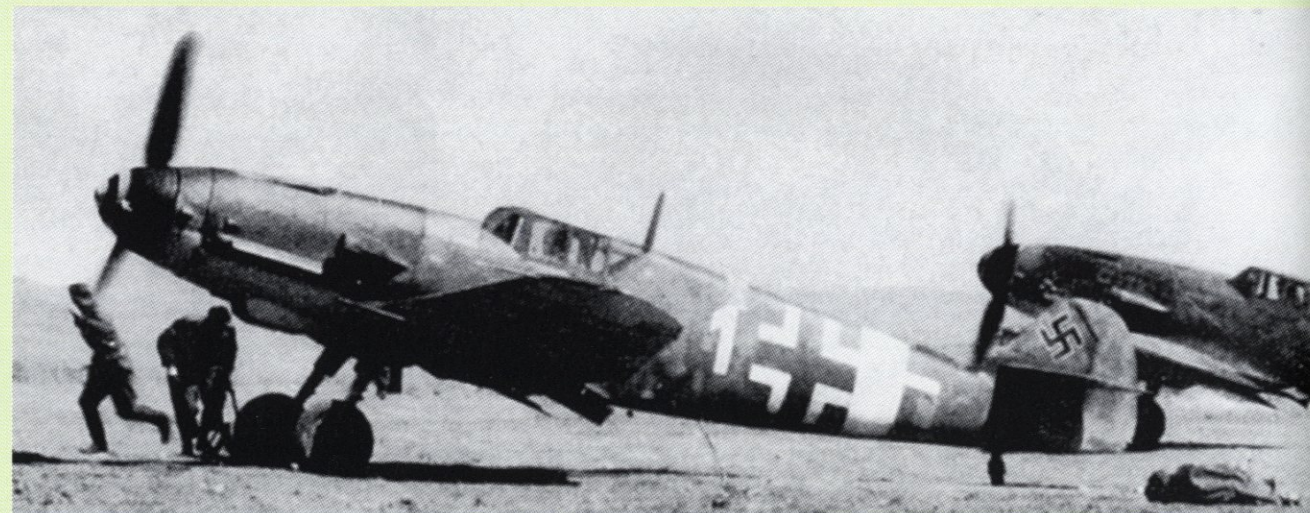
13.(Slowak.)/JG 52

The new pro-German state of Slovakia was created in March 1939 and, following 'Barbarossa', elements of the Slovak Air Force were despatched to the Soviet Union. Although equipped with *Luftwaffe* aircraft, Slovak personnel wore their own uniforms, came under Slovak jurisdiction and, despite being allocated a German designation for administrative purposes, remained part of the Slovak Air Force. The fighter component of this contingent was, however, largely equipped with obsolete aircraft and was withdrawn in October 1941.

In early 1942, retraining began on the Bf 109 E with flying personnel selected from pilots friendly to the German regime. In October, the unit returned to the Eastern Front where it was attached to III./JG 52, then operating on the southern sector of the Eastern Front under *Luftflotte 4*, as the 13.(Slowak.)/JG 52. Operationally, co-operation with the parent unit was very close, but for administrative matters the *Staffel* was entirely independent. In January 1942 the *Staffel* was modernised with Bf 109 Fs, soon followed by G-2s and G-4s.

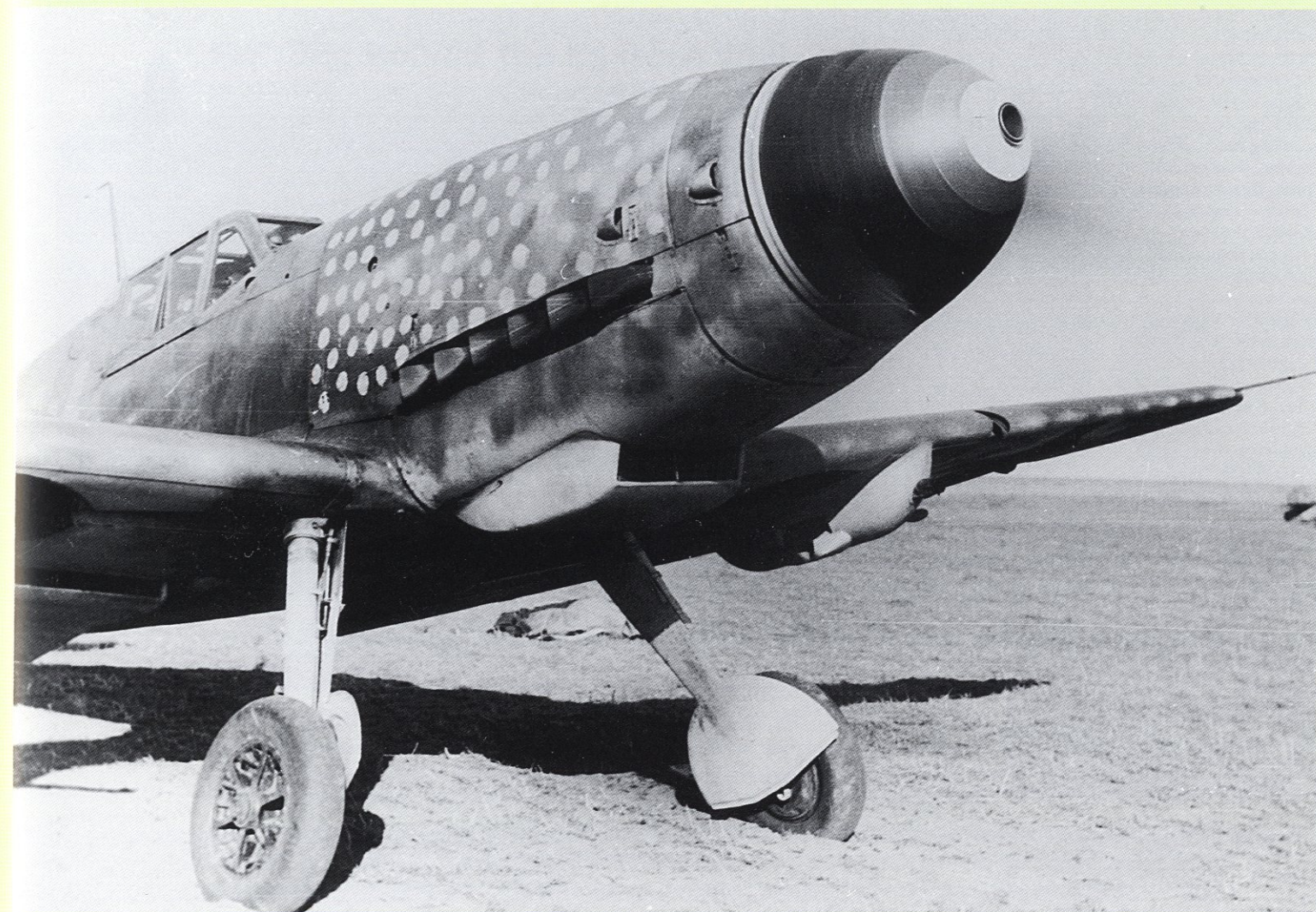
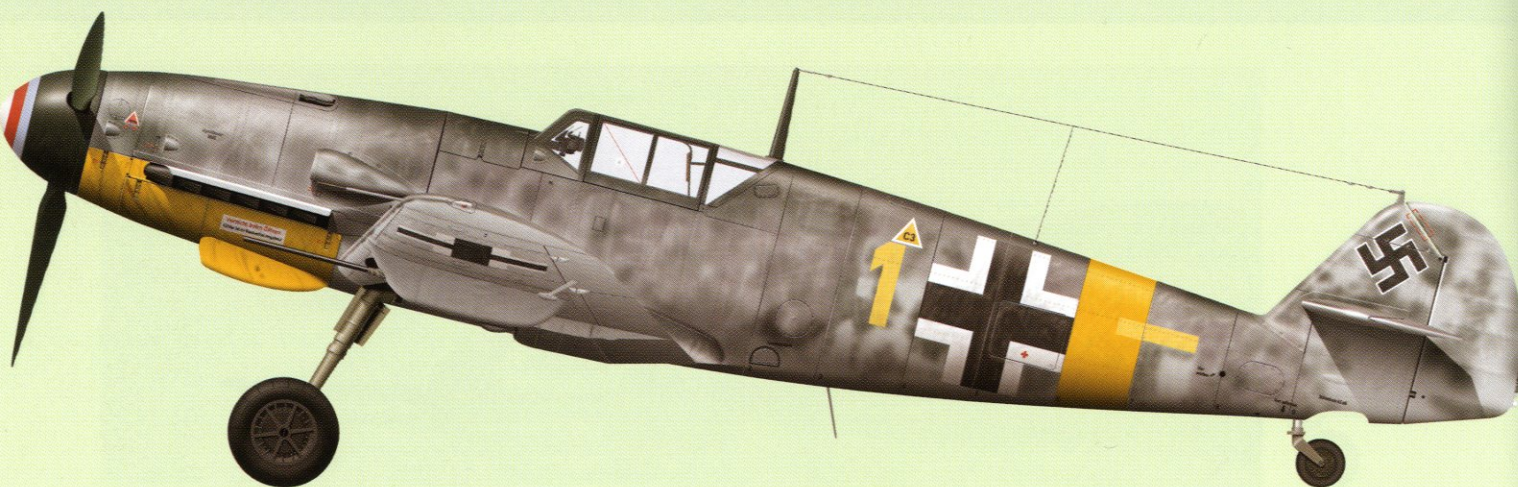
Between November 1942 and June 1943 the Slovakian pilots achieved good results, some being awarded the German Cross in Gold, but the morale of a batch of replacement pilots was low. Their belief in a German victory had already been shaken by the defeats at Stalingrad and Tunisia, and they had also witnessed the increasing Allied air raids in the occupied territories. The new pilots therefore lacked the motivation to fight for what they perceived as a losing cause. During their first sorties over the front in July 1943, the new pilots were accompanied by some of the experienced pilots, but as soon as they flew by themselves most tried to avoid combat. The first desertions began in September and by late October 1943 the unit had been withdrawn, its aircraft being retained by JG 52.

RIGHT: In this photograph, two Bf 109 G-4/R6s of 13.(Slowak.)/JG 52 are preparing to take off from Anapa in the Kuban in April 1943. Note the Slovak national colours painted on the spinner tip of 'Yellow 1' in the foreground and also that the lower parts of the undercarriage fairings have been removed from this aircraft. As the Slovak pilots did not have their own aircraft, victory bars were not applied.



Messerschmitt Bf 109 G-4/R6 'Yellow 1' of 13.(Slowak.)/JG 52, Anapa, April 1943

This aircraft was finished in a grey 74/75/76 camouflage scheme with fairly regular and even mottling on the fuselage sides and without any obvious use of RLM 02. The yellow used for the aircraft and Gruppe markings on the fuselage was notably lighter than the yellow of the fuselage band, and the blue used for one of the spinner rings was a light blue.

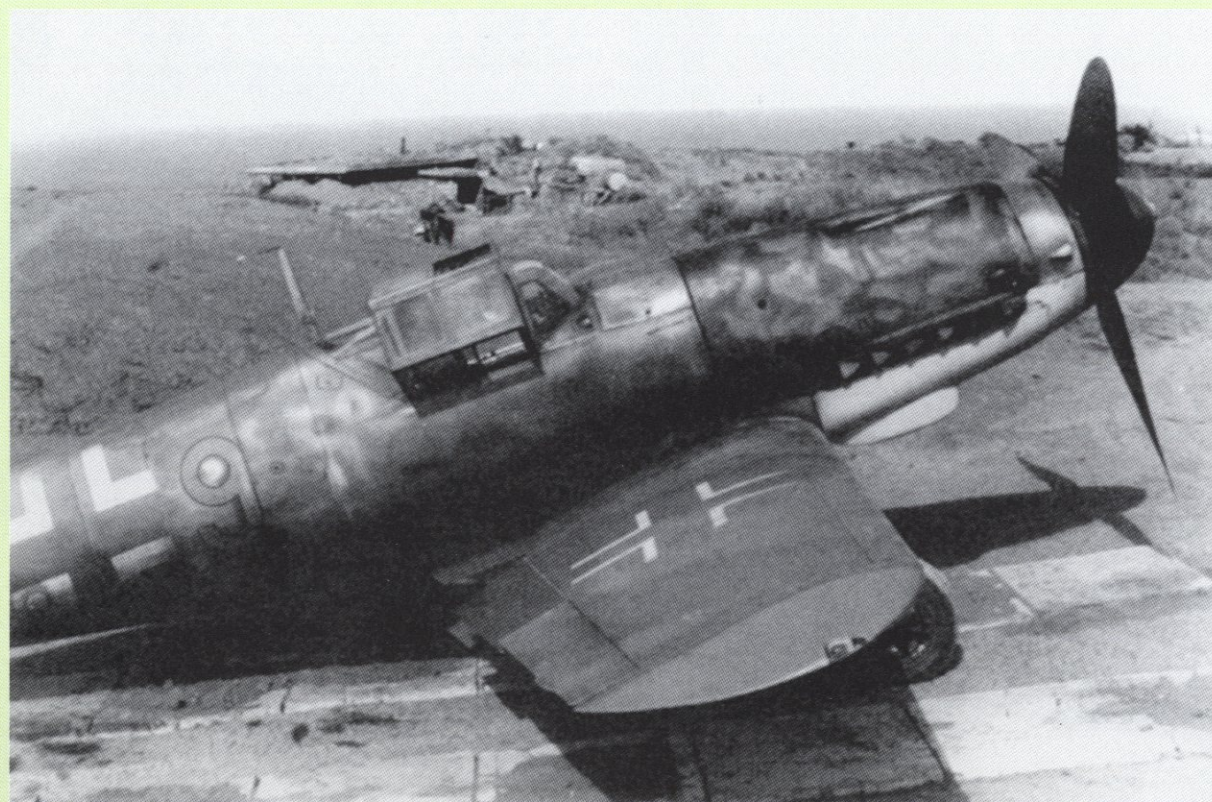


ABOVE: A Bf 109 G-2/R6 of 13.(Slowak.)/JG 52 running up its engine on the Southern Sector of the Eastern Front in the summer of 1943. This aircraft was 'Yellow 2' with the spinner painted in white, blue and red rings, the Slovak national colours. The white or, perhaps RLM 76, spots on the upper engine cowling are interesting and seem to have been a feature on a number of JG 52's aircraft.



RIGHT: A Bf 109 G-2 or G-4 of 13.(Slowak.)/JG 52 at Anapa in the Kuban in the summer of 1943. The camouflage and markings on Slovakian aircraft were the same as on *Luftwaffe* aircraft, the only distinguishing feature being the white, blue and red rings on the spinner tip. The personnel are, in the front row from left to right, Ctk. Karol Geletko, Rtk. Frantisek Hanovec and Ctk. Stefan Martis. In the back row are Ctk. Anton Matusek, Ctk. Stefan Jambor, unknown, and Hptm. Theim, the *Staffel's* *Luftwaffe* liaison officer.

RIGHT: 'Yellow 9', a Bf 109 G-4, W.Nr. 19347, of 13.(Slowak)/JG 52 at Anapa in July or August 1943. The engine cowling has evidently been re-camouflaged, probably to conceal an earlier overall yellow finish. The Slovak national colours are just visible on the tip of the spinner. On 9 September 1943, Rotnik (Staff Sergeant) Matussek deserted to the Soviets in this aircraft accompanied by Catnik (Sergeant) Dobrods flying 'Yellow 13'.



BELOW: Another scene at Anapa in the summer of 1943 showing aircraft of 13.(Slowak)/JG 52 preparing for a mission. Note the two groups of four holes on the cowling of the machine in the foreground. These were the mounting holes which, on tropical versions of the Bf 109 G series, were for the brackets which held the air cleaner in place.)



Fighting Behind the Eastern Wall

By 30 September the German armies had managed to establish themselves behind the Eastern Wall, but while the ground forces had succeeded in bringing most of their equipment across the Dnepr in fairly good order, the *Luftwaffe* had been weakened and by early October 1943 reported that it possessed a total of no more than 840 serviceable aircraft available for operations on the Eastern Front. At the same time, the focus of the combat shifted northward when the Soviet Kalinin Front attacked and managed to dislodge German troops from the strategically important city of Nevel and severed communications between Army Group Centre and Army Group North. With new Soviet attacks following, the Germans threw an important part of their air force in the East into this sector, and once again Walter Nowotny, now a *Hauptmann* and holder of the Swords, was in the forefront. On 9 October he destroyed eight Soviet aircraft, one of which was JG 54's 6,000th victory. Another four followed on 11 October, a day when the Kommandeur of II./JG 54, *Hptm.* Erich Rudorffer, claimed seven, which included his 100th, and *Lt.* Emil Lang of 5./JG 54 claimed four. On 13 October, Nowotny contributed six and Emil Lang no fewer than ten to JG 54's total of 34 victories for the day, against three losses. Thus Nowotny's total tally reached 246, the highest victory score so far achieved by any fighter pilot.

On 14 October, *Luftflotte* 6 dispatched strong formations of dive-bombers and ground-attack aircraft against Soviet troop concentrations in the Nevel area, and in the heavy air fighting that followed, both sides sustained heavy losses. Any German aerial reconnaissance mission – now undertaken exclusively with Bf 109s – had to be provided with strong fighter escort as protection against Soviet fighters, and in this sense the situation was completely different from that of the previous year. It was while he was escorting one of the reconnaissance Bf 109s on 14 October that *Hptm.* Nowotny shot down three intercepting Soviet fighters. His score now stood at 249, and the eager young ace refused to land before he had bagged his 250th. After escorting the reconnaissance aircraft back to safety, Nowotny returned to the area over the front line and, after searching for a while, he discovered and attacked a lone Curtiss P-40 Warhawk. Ostensibly, the fight was most unevenly balanced, the leading ace of the war flying a Fw 190 against an obsolescent P-40, but whether due to the Soviet pilot's skills or Nowotny's nerves, it took Nowotny a full ten minutes before he was able to destroy his adversary.

Returning to his airfield, Walter Nowotny received a jubilant welcome and the *Führer* awarded him the highest military award, the Diamonds to the Knight's Cross with Oak Leaves and Swords. Prior to Nowotny, only seven servicemen had received this award, all but two being fighter pilots.

In the meantime, fighting flared up all along the Eastern Wall, with Soviet attempts to achieve a breakthrough being made both in the south and in the north. In the south, *Hptm.* Günther Rall and his III./JG 52 were kept fully occupied by a sudden breakthrough of Soviet tanks on 14 October. Charging through the German lines, this armoured force threatened to overrun III./JG 52's airfield at Novo Zaporozhye and an alarmed Günther Rall began to imagine a repetition of the disaster at Tatsinskaya in December when Soviet tanks had wrecked dozens of German aircraft in their parking areas. Although *Obt.* Walter Krupinski had achieved 7./JG 52's 1,000th victory on 13 October, there was little time to celebrate as the next few days were devoted to hectic defensive activity. Early on 15 October, *Hptm.* Rall twice took off to meet the scores of Soviet aircraft supporting the armour and shot down three La-5s as his 223rd to 225th victories. Another three La-5s fell to one of Rall's most promising young officers, *Lt.* Erich 'Bubi' Hartmann, who thus reached his 136th victory. But the Soviet tank thrust could not be halted, and although Rall and Hartmann fought desperately, III./JG 52 was forced to leave Zaporozhye aerodrome, escaping annihilation by only a few hours. In the meantime, the victorious Soviet tank columns swept through the area once held by the *Panther Stellung*, part of the Eastern Wall, and isolated the German 17. *Armee* in the Crimea. It was through this advance that the Soviets created what they later described as "our largest POW camp" the German garrison being sealed in the Crimean Peninsula.

Rall took his unit to Malaya Beresovka, further to the north-west. There he immediately received an urgent call to deploy all available aircraft to the Kremenchug sector where the Soviets were pounding the German lines with artillery and strong aerial bombardment. "All available aircraft" was a phrase which must have sounded ironic to a *Gruppenkommandeur*, who only an hour previously had seen his *Gruppe* flee its airfield, depleted and disorganised, and with the additional disadvantage of



ABOVE: Erich Rudorffer was credited with seven kills on 11 October, one of which was his 100th victory. This photograph shows Rudorffer earlier in 1943 during his period of service with JG 2 in Tunisia.

rain, III./JG 52 struggled during the next three days just to shoot down some eight Soviet aircraft. However, other *Luftwaffe* units increased their activity and although they reached a total of 1,727 combat sorties on the Eastern Front on 16 October, they compared unfavourably with more than 3,000 flown by the VVS.

In the last fortnight of October, fierce battles raged all along the Eastern Wall as the Soviets made strong attempts to break through but were thwarted by German counter-attacks. On 15 October, during the subsequent air battles in the Nevel area, JG 51's Lt. Anton Hafner attained his 100th victory and five days later increased his tally from 102 to 106.

It was clear that the VVS had sacrificed many of its most experienced airmen in the past months of severe fighting. On 21 October the pilots of JG 51 claimed 21 and those of JG 54 no fewer than 41 victories, the latter *Jagdgeschwader* without sustaining even a single loss. On the same day, the *Staffelkapitän* of 5./JG 54, Lt. Emil Lang, contributed 12 to the *Geschwader*'s total, thus reaching a personal score of 72. Lang had rapidly achieved success as a fighter pilot, having served with the *Jagdwaflfe* only since early 1943.

On 23 October the *Luftwaffe* added another 73 aerial victories to its achievements on the Eastern Front, but among the pilots lost was JG 51's 23 year old *Obt.* Hermann Lücke, famous for having achieved the 'Mölders' *Geschwader*'s 6,000th and 7,000th victories, but whose Fw 190 A-5 collided in mid-air with the Fw 190 A-6, 'Black 6', piloted by *Obt.* Wilhelm Laufer of the *Geschwader*'s 8. *Staffel*. Both pilots involved in the accident survived with injuries, but Lücke was the least fortunate and he died in hospital 16 days later. Lücke was credited with a total of 78 victories, all in the East, 73 of which had been achieved in the last five months alone. For this he was posthumously awarded the Knight's Cross on 6 April 1944.

Again it was the *Luftwaffe* that played a main role in containing the Soviet offensives and on 26 October it flew 1,290 combat sorties although this was only possible by sending up every available pilot and aircraft. Next day the Germans mounted a powerful counter-attack against the Soviet area of penetration at Kremenchug.

The Germans claimed to have destroyed a total of 1,442 Soviet aircraft in October 1943. Of this number, JG 51 claimed 220, and JG 54 a total of 365 victories.



ABOVE: 'Black 7', an Fw 190 A of 8./JG 51 after a landing accident in slippery conditions, probably in the early winter of 1943. The snow must have fallen quite recently as the uppersurfaces of this aircraft retain an overall dark green camouflage which has apparently been applied over the original RLM 74/75/76 scheme, traces of which are still visible around the swastika. The small vertical III. Gruppe bar in white is characteristic of III./JG 51 which also adopted a narrow, yellow rear fuselage band, the upper part of which has, in this instance, been overpainted to improve the aircraft's camouflage when viewed from above. The usual yellow panel is visible under the nose and the underside of the wingtips would also have been yellow.



INSET AND BELOW: When Hptm. Walter Nowotny became Kommandeur of I./JG 54 on 10 August 1943, he already had about 127 victories. By the end of September 1943, Nowotny's confirmed claims totalled 218 and in October, Nowotny's last full month in Russia, he shot down 32 Soviet aircraft, this figure including eight on 9 October and six on the 13th and 14th, bringing his total to 250 victories. The photograph of Nowotny (INSET) is believed to have been taken on 14 October when he shot down two P-40s, two LaGG-3s and two La-5s, bringing his tally to 250 victories. On this occasion he was flying his Fw 190 A-5 W.Nr. 410004, seen in the background and more clearly (BELOW). Nowotny was the first pilot to reach this total and was thus the *Luftwaffe*'s most successful fighter pilot. On 19 October he was awarded the Diamonds. Although Nowotny officially retained command of I./JG 54 until 4 February 1944, he in fact left the Eastern Front some months earlier, his final victories in the East being two Il-2s which he shot down on 15 November 1943, bringing his tally to 255.



Focke-Wulf Fw 190 A-5, W.Nr 410004, flown by Hptm Walter Nowotny, Kommandeur of I./JG 54, 14 October 1943

With the exception of the tail area, which remained in standard RLM 74, 75 and 76, the uppersurfaces of Hptm. Nowotny's aircraft were camouflaged in two shades of green, the undersurfaces remaining RLM 76. Theatre and identification markings consisted of a yellow panel under the engine, a wide yellow fuselage band and yellow panels under the wingtips and at the base of the rudder. The front half of the spinner had an even, white spiral, and the machine carried Nowotny's personal markings, a small white '8' enclosed within the arms of the inner chevron of the Kommandeur's markings, and a figure 13 under the cockpit. For the purposes of this profile, the centre section undercarriage doors have been shown in the up position.



An Unprecedented Crisis

The effect of the German defensive successes in October 1943 were not long lasting. On 31 October, the Soviets caught the Germans by surprise when they made an amphibious landing near Kerch on the eastern tip of the Crimean Peninsula. This called for the rapid redeployment of I./JG 52, now commanded by *Hptm.* Johannes Wiese, together with *Hptm.* Gerhard Barkhorn's II./JG 52 which transferred from the Dnepr front to the Crimea. The Croat 15./JG 52, which previously had been left as virtually the only Axis fighter unit in this sector, lost two Bf 109s against three victory claims on 2 November 1943.

On 3 November 1943, the Soviets again caught the Germans by surprise when they launched a massive attack against the city of Kiev, and by skilfully deploying their armour and ground-attack aircraft in large numbers, managed to overwhelm the defenders. *Hptm.* Erich Rudorffer's II./JG 54 rose in full strength to counter the attack, and on the first day, this *Gruppe's* Lt. Emil Lang was able to increase his score to 99 by shooting down four Il-2s and three Yak-7Bs during a single engagement between 09.31 and 09.42 hrs, followed by another ten claims against Yak-7Bs, Yak-9s, and Il-2s in the afternoon. Thus Lang shot down 17 aircraft in a single day,⁹ duplicating the tremendous record achieved by Hans-Joachim Marseille against the RAF in 1942.

Bad weather caused a lull in the air fighting in the south during the next few days, but that only brought the focus of the air war further north where, on 5 November, *Luftflotte* 6 deployed its forces against Soviet troop concentrations at Nevel. In the subsequent aerial fighting, Walter Nowotny, recently returned to his unit following a period of leave in Germany, shot down two more Soviet aircraft. In total, the *Luftwaffe* carried out 1,444 combat sorties in the East on 5 November 1943.

The next day, when the Soviets seized the important city of Kiev, *Luftflotte* 4 deployed all its available Junkers Ju 87 ground-attack aircraft¹⁰ against the advancing Soviet tank columns. While providing these aircraft with extended fighter cover, II./JG 54's *Hptm.* Erich Rudorffer repeatedly dived into various groups of Soviet fighters during one mission at around 13.00 hrs and claimed no fewer than 13 victories in a single combat, thus setting a probably unbeatable record and increasing his score to a total of 120 confirmed victories. Elsewhere, in other actions further north, I./JG 51's *Gruppenkommandeur*, *Hptm.* Erich Leie, reached his 100th victory by destroying four Soviet aircraft.

Still the Soviets placed the Germans under mounting pressure. In the Nevel area, much of the German advantage in the air relied on the famous Nowotny *Schwarm*, which consisted of the four aces *Hptm.* Nowotny, *Fw.* Karl 'Quax' Schnörrer with 34 victories, *Ofw.* Anton Döbele with 94 victories and *Ofw.* Rudolf Rademacher with 45, but this advantage would not last long. On 11 November *Ofw.* Döbele perished when his Fw 190 A-4, 'White 11', collided with an Il-2, and the next day, despite pouring rain, Nowotny and Schnörrer scrambled to intercept a formation of Il-2 *Shturmoviks* from a Soviet Guards unit. Nowotny managed to shoot down one Il-2 as his 255th victory and Schnörrer another as his 35th, but in the next moment a Soviet aircraft manoeuvred into position behind Nowotny's machine. While attempting to aid his *Rottenführer*, Schnörrer's Fw 190 A-5 was severely damaged and although he baled out, he was severely injured when his parachute opened too late to arrest his fall and he broke both his legs when he struck the ground. Schnörrer returned to combat only after many months of convalescence. Walter Nowotny escaped badly shaken but would attain only one more victory on the Eastern Front, his 256th on 15 November 1943, before he was sent home to Germany, permanently, later that month.



RIGHT: *Hptm.* Nowotny (right) and his wingman, *Ofw.* Anton Döbele, enjoying a game of cards.



LEFT: *Ofw.* Anton Döbele, awarded the German Cross in Gold on 31 August 1943, flew as Nowotny's wingman in a *Schwarm* which also comprised Karl Schnörrer and Rudolf Rademacher. All these pilots were awarded the *Ritterkreuz* although, as Döbele was killed on 11 November 1943 when his Fw 190 A-4 'White 11' collided in the air with an Il-2 and crashed in flames north of Vitebsk, his award was posthumous. At the time of his death he had been credited with 94 victories. His *Ritterkreuz* was awarded on 26 March 1944.

9. Most accounts put the figure at 18 but only 17 claims were recorded.

10. Although designed as a dive-bomber, Ju 87s were now operating in the ground-attack role and all Stukageschwader had been redesignated as Schlachtgeschwader in October 1943.

What occurred in November 1943 was nothing short of critical. The Soviets had succeeded in creating several large gaps in the Eastern Wall and exerted a pressure from two directions against the enveloped German 17. *Armee* in the Crimean Peninsula. *Luftwaffe* *Generalleutnant* Hermann Plocher summarised the situation when he wrote:

*"For several days in succession Soviet tank divisions and motorised infantry units carried their attack forward on an average of 15 miles a day, and by 15 November a crisis had developed in the Eastern Theatre of Operations on a scale which was then unprecedented in the war. On the following day the advancing Soviet armoured forces encountered German Panzer divisions (under the command of Generaloberst Hoth and the Fourth Panzer Army) which struck them in the flank and brought their offensive to a halt west of Zhitomir. All available German air units assisted in stopping this advance."*¹¹

Inevitably the *Luftwaffe* was again becoming worn down and on 17 November, *Luftflotte* 4 could only mount a mere 370 combat sorties in support of the German counter-offensive. Major Günther Rall, commanding III./JG 52, now the only German fighter unit available to support the counter-attack, which succeeded in recapturing Zhitomir, became the second fighter pilot to reach 250 victories when he shot down a LaGG on 28 November. Meanwhile, while engaging Soviet aircraft trying to suppress the German defences at Kerch, II./JG 52's *Hptm.* Gerhard Barkhorn shot down an Airacobra and a Yak-1 for his 198th and 199th victories, followed by another Yak-1 on the 30th as his 200th victory. Lt. Erich Hartmann, whom Rall had placed to lead the *Karayastaffel*, 9./JG 52, attained his 150th on 13 December.

Partly as a result of adverse weather, and except in the Crimea, the air fighting declined in most parts of the Eastern Front in December 1943. JG 54 claimed 71 victories against 14 Fw 190s lost during the last month of 1943, and compared to earlier that year, this was a considerable change for the worse in the *Geschwader's* victory-to-loss ratio. The most severe of these losses occurred when the *Geschwader's* new *Kommodore*, Major Hubertus von Bonin, was killed in combat on 15 December. Meanwhile, in the same area but in a different engagement, IV./JG 51's 81-victory ace Lt. Rudolf Wagner was shot down and killed.

When the Soviets resumed their offensive with a surprise attack near Brusilov on Christmas Eve, the *Luftwaffe* was restricted from mounting a sufficiently adequate response due to a lack of aircraft. The subsequent Soviet advance tore the German Front Lines apart and created the preconditions for the envelopment of a large German troop contingent at Cherkassy and brought further hardships for the *Luftwaffe* on the Eastern Front.

Conclusions

By the end of 1943, the fortunes of Hitler's war and the Third Reich were clearly in decline. US and British heavy bombers were reducing German cities to rubble, North Africa had been lost, Hitler's faithful ally Mussolini had been removed from power, and German U-boats were being hunted on the high seas, but nowhere had the crisis reached such a depth as on the Eastern Front. When Adolf Hitler assembled the largest and most powerful army the world had yet seen to invade the Soviet Union in June 1941, he and most of his generals had predicted that the Red Army and the USSR would collapse within a matter of weeks. "We only have to kick in the front door and the whole rotten structure will come crashing down," the *Führer* had predicted then, but two years later, what remained of his Eastern Army found itself overwhelmed by Soviet forces.

In a mighty contest between industrial capacities, the Soviets had triumphed over the Germans. The Red Army had sustained tremendous losses, far higher than previously experienced by any country in any conflict. In October 1943 the Germans reported total Soviet combat losses since the opening of the conflict in June 1941 as over 50,000 aircraft but, if losses to all causes are included, real Soviet losses were even higher. The output figures for Soviet industry, which had been evacuated from the western regions of the country in order to escape the German advance in the autumn of 1941 and re-established further eastwards, far exceeded these losses and by the end of 1943, no fewer than 70,000 Soviet combat aircraft had been produced since the outbreak of hostilities with Germany. By that time, the Soviet air forces could muster a total of 8,800 combat aircraft.

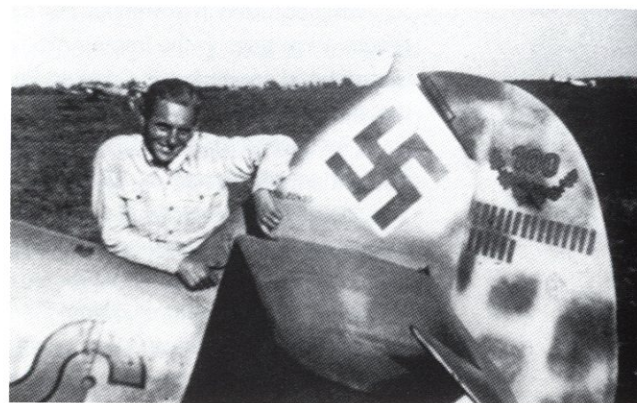
The mighty *Wehrmacht* was simply ground down on the Eastern Front. This process had already started in the summer of 1941, reached its first disastrous climax in the winter of 1941-1942, peaked again during

BELOW: Major Hubertus von Bonin, *Kommodore* of JG 54 'Grünherz', who was killed near Vitebsk on 15 December 1943.



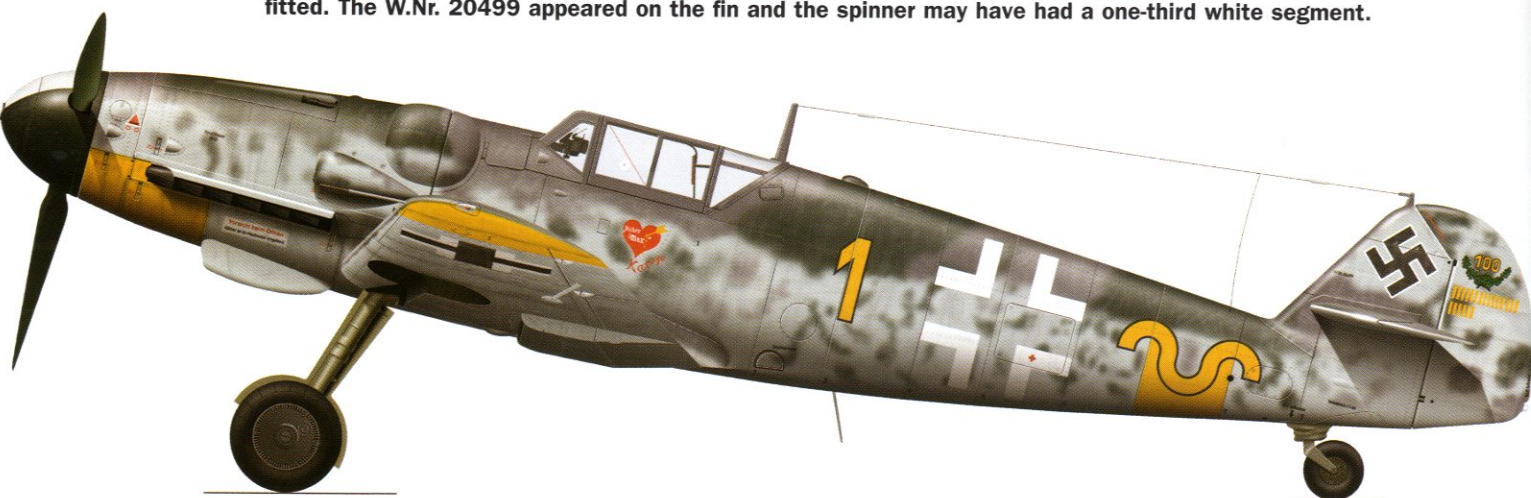
11. This last comment is a valid one. Although the subject of this publication is the *Jagd* *waffe* and therefore concentrates on the exploits of German fighter pilots, the contribution of the other arms of the *Luftwaffe* should not be overlooked. In this connection, the actions of the *Schlachtflieger* which, in October 1943, combined the former *Stuka-* and *Schlachtgeschwader* into a new ground attack organisation, which included all anti-tank and night ground-attack units, were particularly important and, indeed, often decisive.

RIGHT AND BELOW: By the time Erich Hartmann returned to operations after his convalescent leave in June 1943, he had flown 180 war flights which had served to thoroughly familiarise him with the Bf 109 and, having absorbed the lessons learned while flying with Grislawski, began to increase his score. In the first day of the Kursk offensive on 5 July, he flew four missions and returned from each one with a victory. By the end of July he had 41 victories and on 2 September was appointed *Staffelkapitän* of 9./JG 52. On 20 September Lt. Hartmann reached 100 victories, but by this time such a milestone had become so commonplace – 50 other German fighter pilots having already reached this total – that it usually no longer warranted the award of the *Ritterkreuz*. By the end of September, Hartmann had increased his victories to 115 and reached 132 in October. These photographs, taken somewhere between these two events, show Hartmann and his Bf 109 G-6 'Yellow 1' with the rudder marked to indicate 121 victories. Hartmann was eventually awarded the *Ritterkreuz* on 29 October after he had been credited with 148 confirmed victories.



Messerschmitt Bf 109 G-6 'Yellow 1' flown by Lt. Erich Hartmann, *Staffelkapitän* of 9./JG 52, October 1943

Although finished in a standard 74/75/76 scheme, the yellow band only on the lower part of the rear fuselage and the lack of a dark backing for the outline type fuselage Balkenkreuz are unusual. The emblem below the cockpit was a red heart pierced by a yellow arrow, and within the heart were the words 'Dicke Max' ('Big Show') in white and below was the inscription 'Karaya' in red. The upper wing crosses were the outline type and, behind the shortened radio mast, was a Bakelite blister which was a baseplate for a loop antenna which, however, was not fitted. The W.Nr. 20499 appeared on the fin and the spinner may have had a one-third white segment.



the collapse at Stalingrad one year later, and developed into a permanent decline from the summer of 1943 onwards. In 1943, the whole German war effort on the Eastern Front could well have conclusively collapsed, and although there were several instances in the year, when the Red Army could have decisively defeated the Third Reich, the *Wehrmacht* was in fact able to avoid such a collapse.

The *Jagdwaaffe* had always played a key role in the various German campaigns, but in 1943, and particularly towards the end of that year, this was more marked than ever before. In the early *Blitzkrieg* years of the war, the *Luftwaaffe*'s bombers and dive-bombers had played the most important role by either paving the way for the advancing *Panzers*, or somewhat later, slowing down or even halting enemy offensives, but Soviet fighters changed this situation and, after Operation 'Zitadelle', the VVS was on the offensive, and the *Luftwaaffe* on the defensive. In this situation, it was the *Jagdwaaffe* that saved the retreating German armies from being destroyed from the air.

As we have seen, the value of the *Jagdwaaffe*'s most experienced and highest-scoring pilots increased in 1943. Ever since the outbreak of hostilities the Third Reich had praised and applauded the achievements of individual fighter pilots, and in no other branch of the *Wehrmacht* were the most successful servicemen so generously rewarded with decorations and publicity than in the *Jagdwaaffe*. This treatment had been criticised during the early days, but in fact the events of 1943 show that the strong emphasis on individual achievement, particularly within the *Jagdwaaffe*, had an important effect on inspiration and encouragement. Thus spurred on to ever-greater deeds, the most skilful among the *Jagdwaaffe* pilots indeed increased their individual successes beyond anything previously anticipated. By the end of 1943, more than 60 German fighter pilots had surpassed 100 victories; some had doubled that figure, and two – Walter Nowotny and Günther Rall – had set a new standard by reaching 250 victories. Without doubt, and despite the dismal course of the war, the accomplishments of a nucleus of top *Jagdwaaffe* aces contributed decisively in maintaining the fighting spirit of the *Wehrmacht* at a high level.

In other respects, both sides learned from each other. The Soviets copied much of the German operational methods and doctrines, just as did most other air forces. Ever since the Spanish Civil War, *Luftwaaffe* fighter pilots had operated in close teams in which the *Rottenführer* was the sword and the wingman, or *Rottenflieger*, served as a shield. By 1943, this method was in common use by VVS fighter pilots who also started operating in offensive sweeps over enemy-controlled territory in the manner of the *Jagdwaaffe*'s *freie Jagd*, or free hunt. Conversely, with a blend of trepidation and admiration, the Germans had observed the tremendous Soviet fighting stamina. After the Battle of Stalingrad, it was apparent that German servicemen on the Eastern Front, including the fighter pilots, had also adopted this fighting stamina.

Hence, it may be said in part, that a new kind of German fighter ace emerged from the bloody aerial battles on the Eastern Front in 1943. In the early years, the 'Richthofen generation' had prevailed, but the new kind of *Jagdwaaffe* aces that took the lead in the East in 1943 were not only good marksmen and skilful pilots, but also tactically gifted and tough fighters. JG 52's Alfred Grislawski was one of the forerunners of these men. Grislawski himself left the Eastern Front with 109 victories after he had been injured by a land mine in early June 1943, but one of the young pilots he taught, Erich Hartmann, would develop into the war's most successful fighter pilot. In 1943, Hartmann's victory tally rose steeply from two in January to 90 in August, surpassing 100 in September and exceeding 150 by the end of the year. Other pilots of this kind were Walter Nowotny, Emil Lang, and Otto Kittel.

With these men in the forefront, and by creating points of concentration at the expense of other Front sectors, the Germans in 1943 were repeatedly able to avoid complete disaster on the Eastern Front. However, even at these points of concentration, resources were too scarce. Although the *Luftwaaffe* – and sometimes even the *Jagdwaaffe* itself – often proved to be the decisive force in a battle, the lasting effect could never be more than that of delaying final defeat. Despite many astounding individual achievements and many tactical victories, albeit defensive, the *Wehrmacht* was relentlessly pushed back and subjected to an attrition of material and personnel that, in the long run, could no longer be replaced.

Throughout 1943, the *Luftwaaffe*'s opponent in the East grew ever more dangerous as Soviet airmen became better and their tactics and equipment steadily improved, although the *Jagdwaaffe* still enjoyed a certain advantage regarding quality. In the summer of 1943, German pilot training remained at what can be described as peacetime standards in that no reduction had yet been made in pilot training schemes. At the same time, the rate of pilot losses in the VVS made it impossible for the Soviets to expand their pilot training schemes to meet the German standard but, nevertheless, the qualitative gap between the *Luftwaaffe* and the VVS was gradually closed and from at least the spring of 1943, the Soviets were able to compensate for this deficiency through their numerical superiority. The year 1943 had seen the strength of the *Luftwaaffe* in the East decline; 1944 would result in its ruin.

RIGHT: This Bf 109 G-6 was captured by Soviet forces and is believed to have been photographed during the winter of 1943/44 at Siverskaya in Northern Russia, known to have been a base occupied by JG 54. However, no record can be found of any part of JG 54 operating from this airfield at the time in question, although at the end of 1943 and early 1944, IV./JG 54 was based at Pleskau, about 100 miles to the south of Siverskaya. On that basis, therefore, it is thought that this aircraft belonged to that Gruppe, although any further details are lacking. Certainly the wide yellow band which encircled the fuselage, and upon which was superimposed the Balkenkreuz, was a feature seen on JG 54's aircraft into 1944. Note that the access hatch to the first aid kit on the fuselage has been replaced upside down.



Messerschmitt Bf 109 G-6 'White 2', W.Nr. 412605, of IV./JG 54, Siverskaya, Winter of 1943/44
This aircraft had a weathered temporary white finish, beneath which were JG 54's characteristic dark greens although much of the canopy framing remained in the original 74 and 75 colours. No loop antenna was fitted to the baseplate situated on the fuselage just forward of the fuel filler point, and the radio mast was the shortened type. The undercarriage fairings on this machine had been removed.

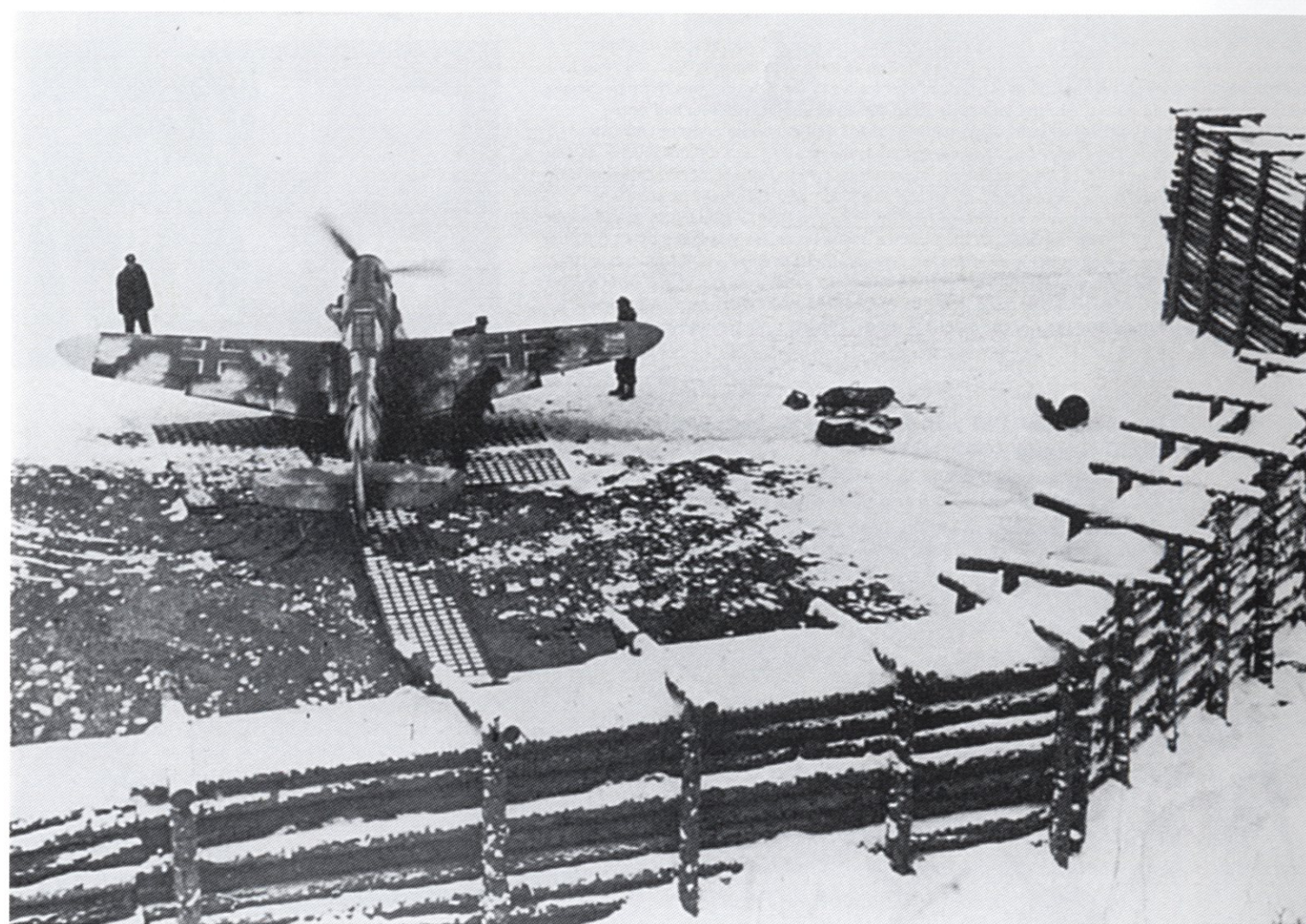


LEFT: Throughout 1943, JG 5 operated in the far north where temperatures in winter dropped well below zero and the daylight hours were few. However, flying personnel of units based in this area were provided with good, permanent accommodation and villages were not far away, but the technical personnel and the airfield ground organisation, upon which the unit depended, had to endure great inconveniences in winter as their work was made very difficult. With temperatures on the ground as low as 40 degrees below zero, heat generators and hangars were essential and the ability to make a cold start, a technique in which the engine oil was thinned with petrol, proved an absolute necessity. In this photograph, ground staff are warming the engine of one of the unit's aircraft. Paradoxically, units based elsewhere on the Eastern Front were far worse off. In southern Russia for example, units operating without permanent fixtures or properly prepared aerodromes had to survive the winter in open fields and envied the personnel of units based in Norway, Finland or in Northern Russia where there were barracks and perhaps an officers' mess. In the far north, it was the summer that placed the greatest demands upon the pilots as, in the long daylight hours, missions could be flown around the clock.



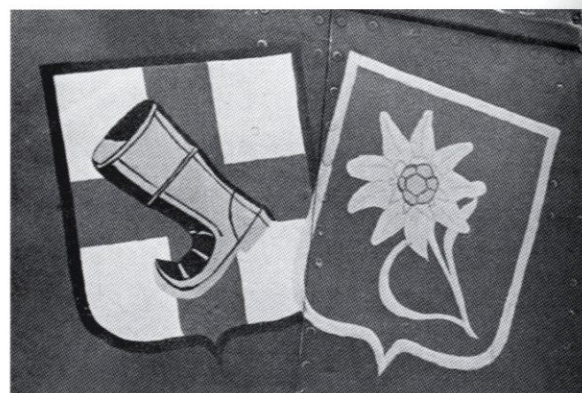
LEFT: Successful pilots of 6./JG 5 on the Eismeerfront in the winter of 1942/43. From left to right, they are Fw. Hans Döbrich, Lt. Theo Weissenberger, Oblt. Heinrich Ehrler, the Staffelkapitän, Ofw. Rudolf Müller and Ofw. Albert Brunner.

BELOW: A Bf 109 of JG 5 in its well-constructed blast bay on an airfield in Finland. Note the pierced steel planking laid down to provide a hard surface when the ground thawed.





ABOVE: A Bf 109 F of 8./JG 5. The formation of JG 5 was complicated and, at least on paper, appears rather haphazard with, for example, 7. Staffel being formed in January 1942, followed by 8. Staffel in February and a 6. Staffel in March. The first leader of the 8. Staffel was Hermann Segatz, who was first appointed Staffelführer and came from JG 51, with which unit he had been successful during the opening months of 'Barbarossa'. The 8. Staffel continued to operate the Bf 109 E for some time after other units had converted to the Bf 109 F and did not receive its first Fs until the summer of 1942, by which time the more advanced Fw 190 and Bf 109 G had already entered service. Nevertheless, Segatz was able to add to his tally and eventually became Staffelführer, leading the unit until September 1943. In February 1944, Segatz left JG 5 to become Kommandeur of II./JG 1, then operating in the Defence of the Reich. He was killed by a US fighter on 6 March 1944 and as well as being awarded the German Cross in Gold on 25 September 1942, is believed to have shot down at least 34 aircraft. Note that the position of the Staffel and Gruppe badges on the aircraft of 8./JG 5 was often reversed, the Staffel badge appearing first on Segatz's aircraft, whereas in the closer view of the emblems shown (RIGHT), the Gruppe badge was presented first.



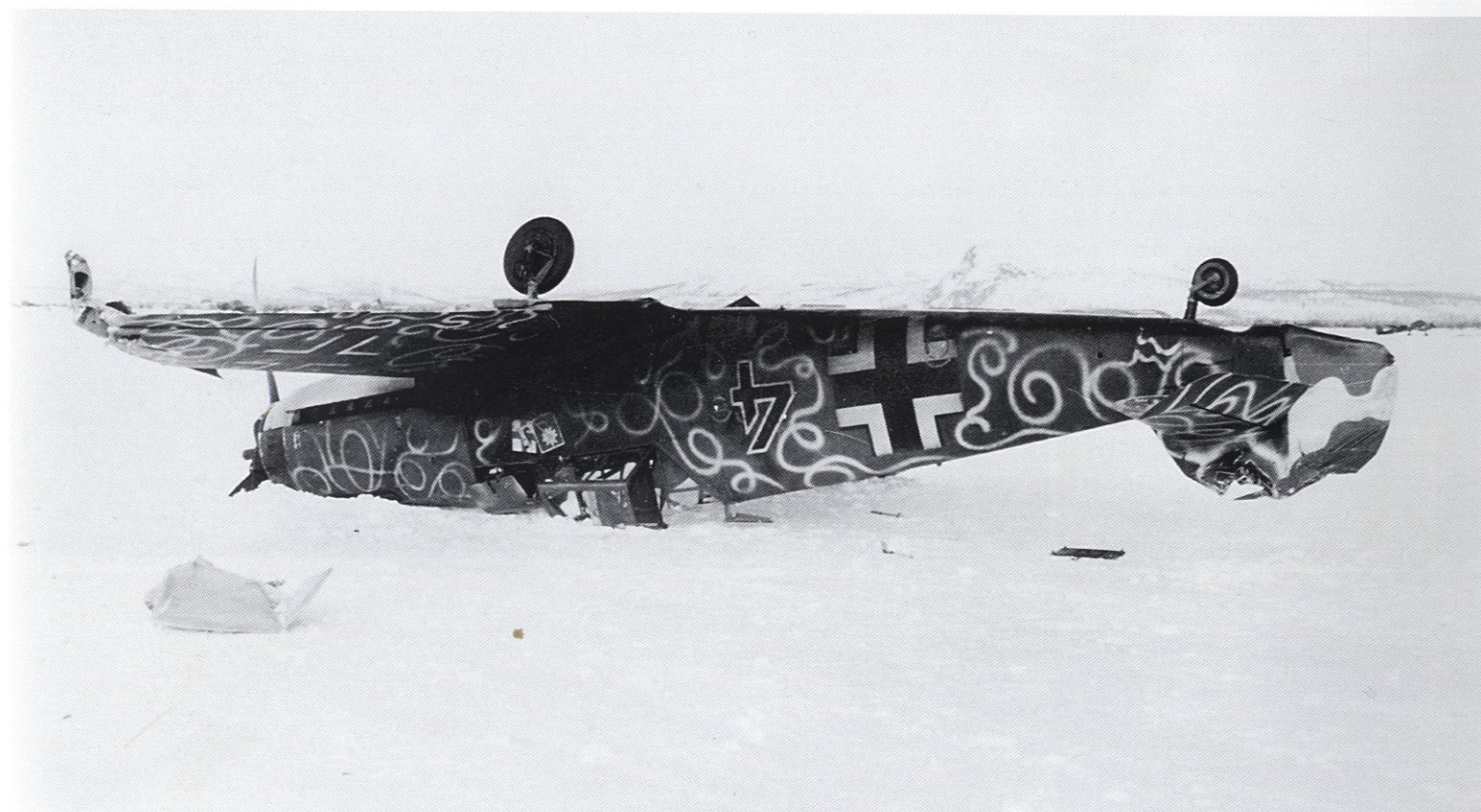
Messerschmitt Bf 109 F-4 'Black 3', believed flown by Oblt. Hermann Segatz, Staffelführer of 8./JG 5, early 1943.

This machine was finished in a standard RLM 74/75/76 camouflage scheme with yellow theatre markings. The RLM 70 spinner had a one-third white segment and on the fuselage side, the Staffel badge, comprising a yellow Edelweiss on a brown shield, preceded the Gruppe badge, a Lapp boot superimposed on a blue cross on a white shield. The 8. Staffel of JG 5 is known to have used black numbers outlined in white.



LEFT: Oblt. Horst Berger in his similarly winter-camouflaged Bf 109 F 'Black 14'. Berger succeeded Oblt. Herman Segatz as Staffelführer of 8./JG 5 in September 1943.

BELOW LEFT, BELOW RIGHT AND BOTTOM: Bf 109 Fs of JG 5 in Finland. 'Black 4' shown (BOTTOM) is believed to have been flown by Ofw. Karl Schulz of 8./JG 5 and overturned while attempting a crash-landing after being damaged by a Soviet fighter. Unlike most examples of the so-called 'wave' type finish, which are usually aesthetically pleasing, all the finishes shown on this page are untidy and resemble a hurriedly applied scribble.



BELOW: Hptm. Heinrich Ehrler of JG 5 with his earlier Bf 109 F 'Yellow 12' in a summer scheme of either 74/75 or 70/02.



LEFT: Hptm. Ehrler, the Kommandeur of III./JG 5, in the cockpit of another Bf 109 G-2 'Yellow 12' at Petsamo in Finland on 27 March 1943. Note that the mottled effect on this aircraft has been achieved by overpainting the standard uppersurface colours with white in such a way that patches of the original scheme remained. Some of these grey patches were then oversprayed in a dark green, and in this photograph it may be seen that although the patch behind the canopy has received a touch of green, it shows more of the original grey than those under the windscreen and canopy sill.

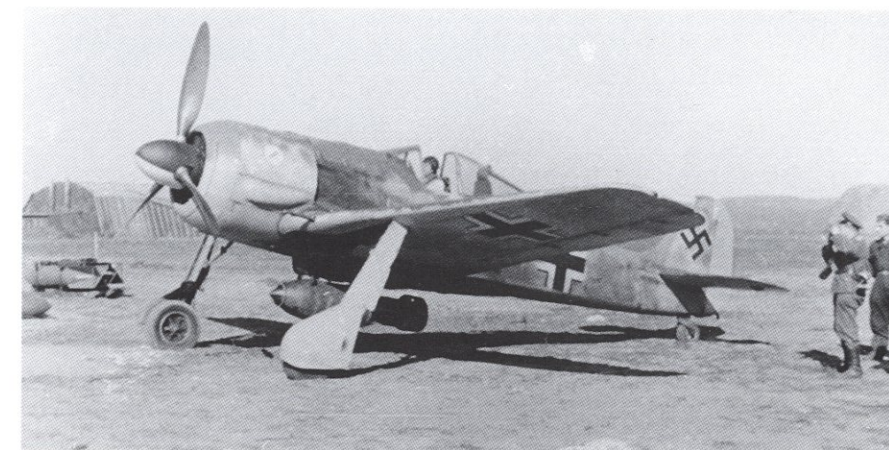


ABOVE: The tail of the same aircraft showing 77 victory bars and that the rudder retained its original RLM 76 mottled with RLM 74 and 75. Examination of the fuselage mottles shows where they have been partially oversprayed with dark green.

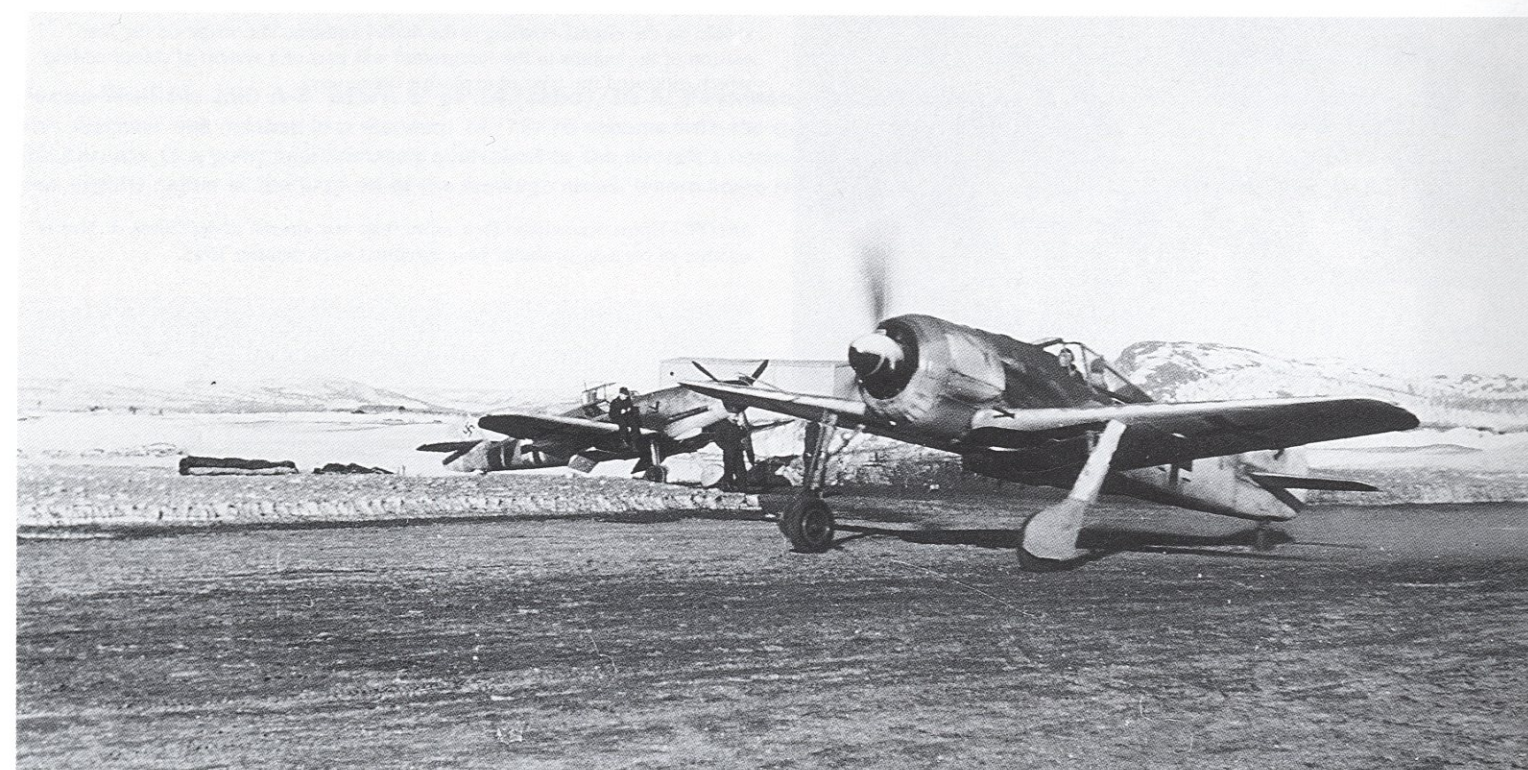


LEFT: Hptm. Heinrich Ehrler became Kommandeur of II./JG 5 in June 1943 and on 2 August 1943, after he had been credited with 112 victories, he was awarded the Oak Leaves.

RIGHT: The pilot of 'Black 4' makes last-minute checks before starting his engine prior to another mission. The weapon under the fuselage is an SC 500 fitted with a nose ring which was intended to slow down the bomb as it penetrated soft ground when used against land targets. The Staffel also operated against shipping, particularly vessels operating along the coastline between Murmansk and the White Sea port of Archangel.



LEFT AND BELOW: The fighter-bomber Staffel 14.(Jabo)/JG 5 was created on 15 January 1943 by redesignating 11./JG 5. The Staffel operated from Petsamo in Finland, and although only in existence for about a year, succeeded in sinking a considerable tonnage of enemy shipping as well as carrying out a number of attacks against Soviet airfields and other ground targets, with such good overall results that on 19 August 1943, the Staffelführer, Hptm. Friedrich-Wilhelm Strakeljahn, was awarded the Ritterkreuz. Throughout its period of operations, casualties in the Staffel were fairly light and in its whole period of existence 14.(Jabo)/JG 5 had just six pilots killed and two posted missing. When, therefore, two aircraft were shot down by Soviet anti-aircraft fire within two weeks of each other, it was viewed by the Staffel as a relatively heavy loss. The first loss occurred on 5 April 1943 when some of the unit's pilots took off to attack a 7,000 BRT freighter. After releasing their bombs, the aircraft attacked ground targets and left two barracks in flames, but Soviet anti-aircraft emplacements lining the coast shot down Uffz. Kurt Dobner's 'Black 14' west of Hormasi. The second loss occurred on 13 April when 'Black 1', flown by Uffz. Kurt Wendler, failed to return and it was assumed that he had also been shot down by anti-aircraft fire. In these photographs, 'Black 4', is shown returning from the 13 April mission during which Wendler was killed.

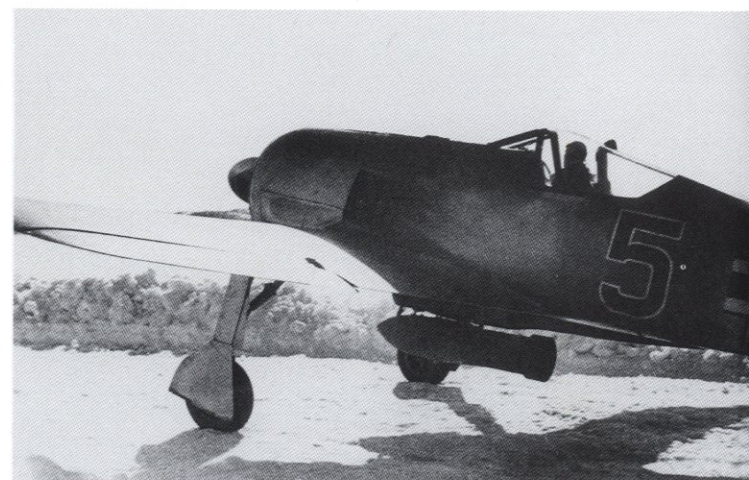




ABOVE: Ground personnel watch as Hptm. Friedrich-Wilhelm Strakeljahn, the Staffelkapitän of 14.(Jabo)/JG 5, taxis his Fw 190 A-3 'Black 5' at Petsamo. Just visible on the engine cowling is the Staffel emblem. The stripe on the rear section of the bombs in the foreground was part of a system of colour coding which indicated the type of explosive filling used.



ABOVE: Fw. Albert Wittmann returning from a sortie which was 14.(Jabo)/JG 5's 1,000th mission. During the course of these missions, the unit accounted for over 35,000 BRT of Soviet and other Allied shipping. Here, with one of the unit's machines suitably adorned for the occasion, Uffz. Wittmann and fellow pilots enjoy a celebratory drink.



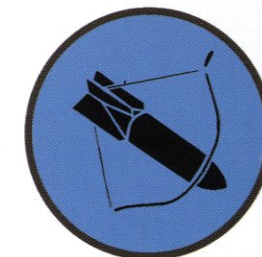
BELOW: Hptm. Strakeljahn flew more than one aircraft coded 'Black 5'. This is another of his A-3s, probably photographed in November 1943.



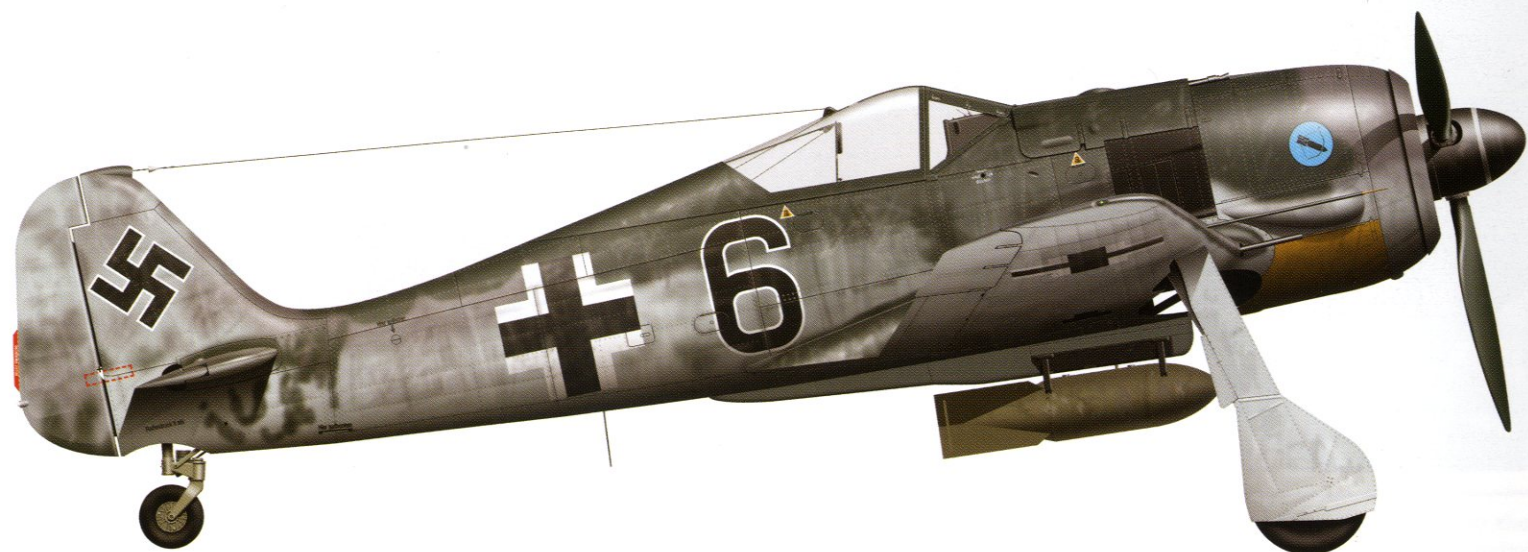
ABOVE: The oversize 'Black 6' on the fuselage of this Fw 190 A-3 of 14.(Jabo)/JG 5 taxiing with an SC 250 bomb is typical of this Staffel's aircraft. Note that as frequently observed on older models of the Fw 190 retained in service, this aircraft has been modified with the later pattern exhausts as fitted to the A-5. The circular plate on the front of the bomb was intended to ensure that the blast effect was maximised by detonating the bomb above ground.

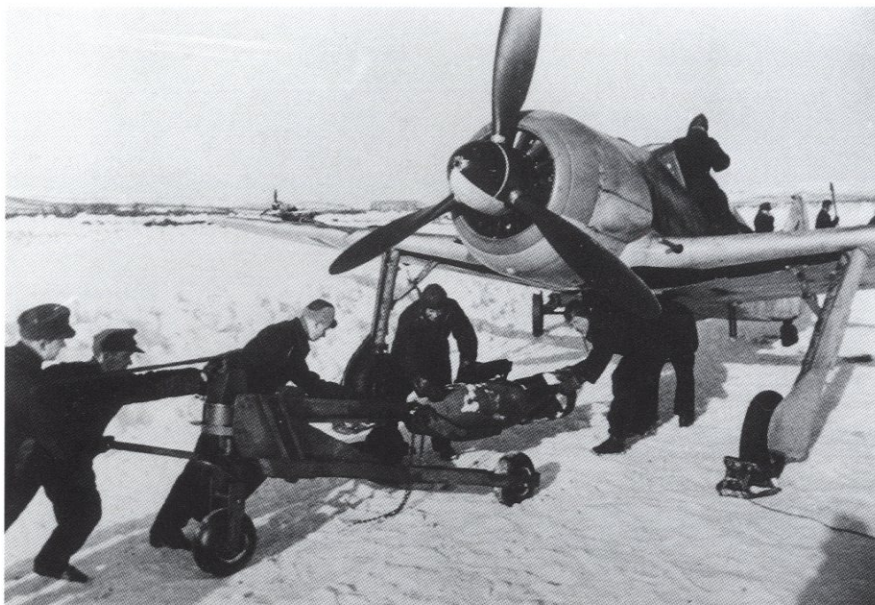
Focke-Wulf Fw 190 A-3 'Black 6' of 14.(Jabo)/JG 5, Petsamo, Finland, 1943

This machine was finished in a standard 74/75/76 scheme with the camouflage extending down the fuselage to a point approximately equivalent to the aircraft's horizontal axis, although this was slightly higher in the area aft of the fuselage cross, where some repainting had occurred.

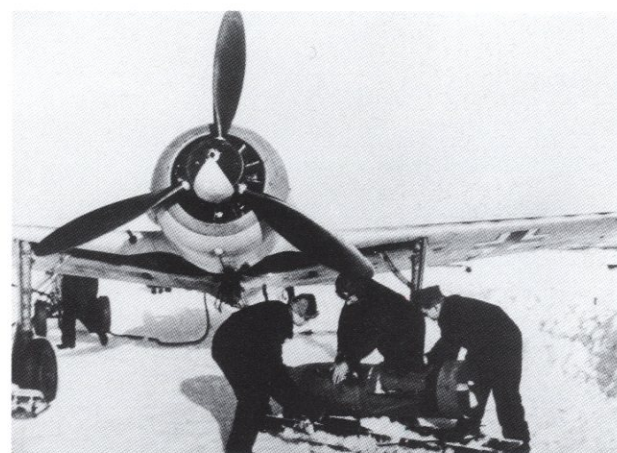


Badge of
14.(Jabo)/JG 5





THIS PAGE: Armourers of 14.(Jabo)/JG 5 loading an SC 250 bomb beneath 'Black 9', an Fw 190 fighter-bomber at Petsamo in late 1943. The SC series of bombs were used where a purely blast effect was required and had thin-walled casings so that they could be filled with the maximum explosive content. During 1942 and 1943, it was thought that, at the most, four or six aircraft could be employed against a single target and that the attack should be carried out in pairs. The reason for this was that if any more aircraft were employed together they would disturb each other in the air. Later, when increased Soviet anti-aircraft defences were encountered, the Fw 190 fighter-bomber units of the Schlachtflieger found the best results were achieved by exactly the opposite tactics and, adopting the methods previously employed by the Ju 87 units, preferred to make a concentrated massed attack which split the enemy's defences and had the greatest effect on enemy morale.

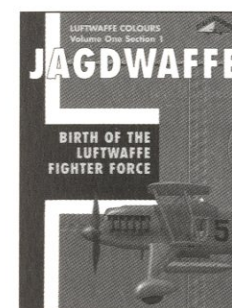


CLASSIC COLOURS

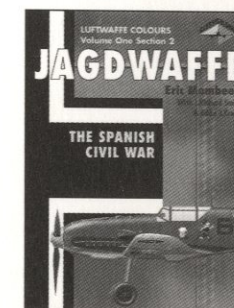


JAGDWAFFE

The most comprehensive study of the camouflage and markings of the Luftwaffe fighter force ever published



ISBN 0-9526867-5-9



ISBN 0-9526867-6-7



ISBN 0-9526867-7-5



ISBN 0-9526867-8-3



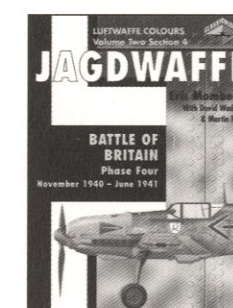
ISBN 1-903223-05-9



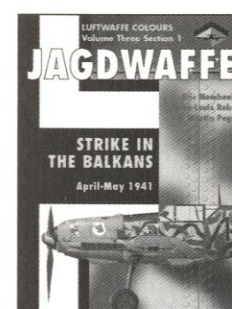
ISBN 1-903223-06-7



ISBN 1-903223-07-5



ISBN 1-903223-08-3



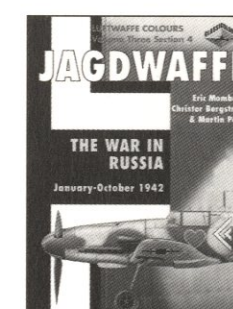
ISBN 1-903223-20-2



ISBN 1-903223-21-0



ISBN 1-903223-22-9



ISBN 1-903223-23-7



ISBN 1-903223-34-2



ISBN 1-903223-35-0



ISBN 1-903223-36-9



ISBN 1-903223-37-7

Available from most good book shops, including the Ian Allan Bookshops in Birmingham, Cardiff, London and Manchester, and at the Aviation Experience, Birmingham International Airport, and hobby stores – or simply contact CLASSIC PUBLICATIONS via our website at www.classic-books.co.uk



JAGDWAFFE

The most comprehensive study of the camouflage and markings of the Luftwaffe fighter force ever published

- Birth of the Jagdwaffe
- The Spanish Civil War
- Blitzkrieg
- The Battle of Britain
- The Balkans
- Barbarossa
- North Africa
- The Mediterranean
- The Eastern Front
- The Western Front and North West Europe
- The Defence of the Reich



**CLASSIC
PUBLICATIONS**

UK Price £14.95 USA \$27.95

ISBN 1-903223-36-9



9 781903 223369