LUFTWAFFE COLOURS

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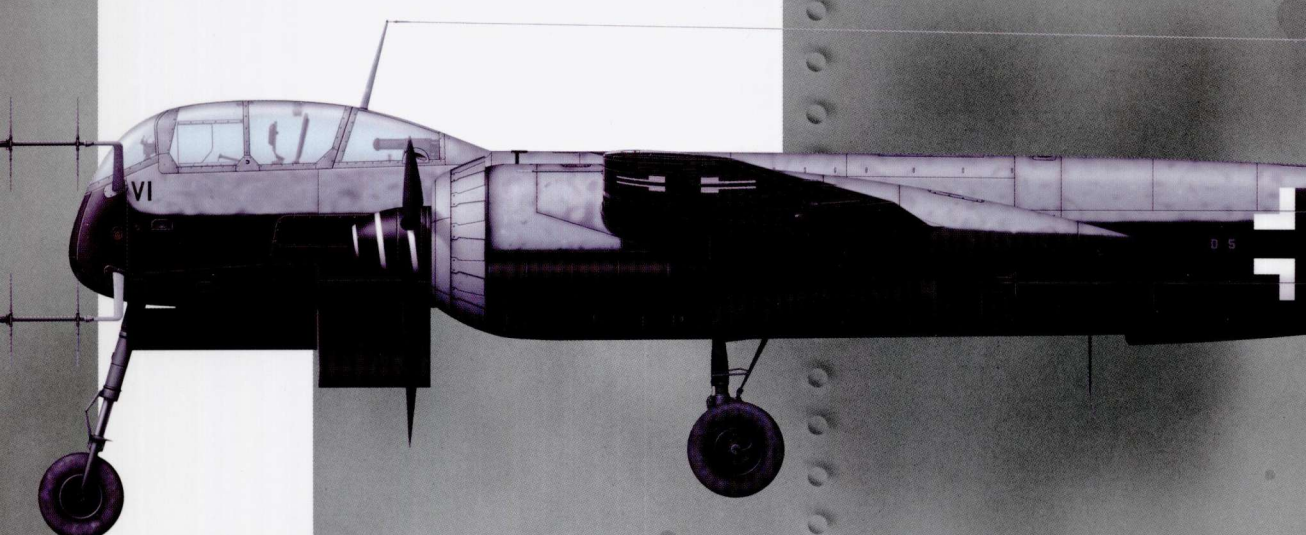
David P. Williams

LUFTWAFFE NIGHT FIGHTER UNITS

1943-1945

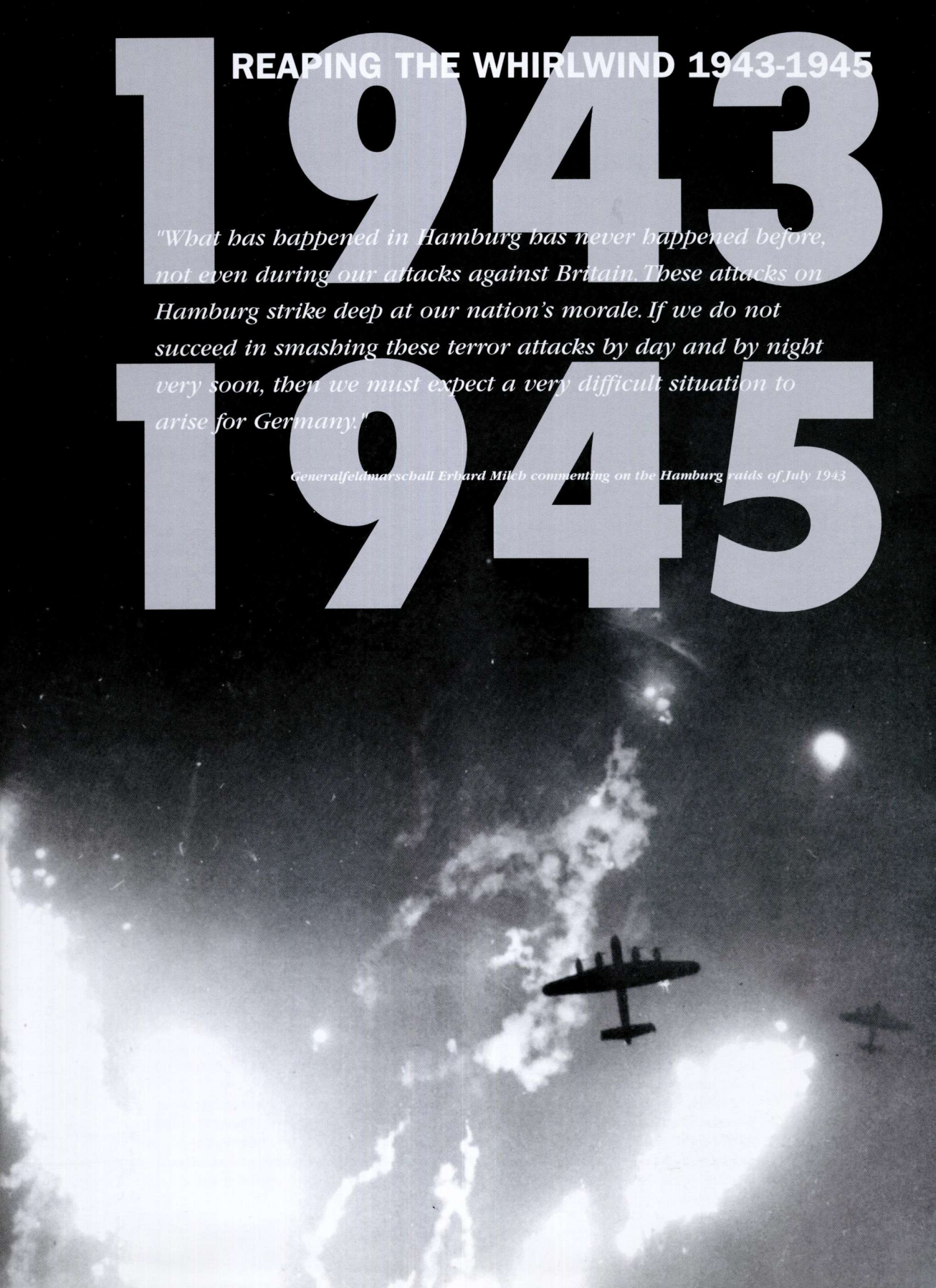


REAPING THE WHIRLWIND 1943-1945

1943 1945

"What has happened in Hamburg has never happened before, not even during our attacks against Britain. These attacks on Hamburg strike deep at our nation's morale. If we do not succeed in smashing these terror attacks by day and by night very soon, then we must expect a very difficult situation to arise for Germany."

Generalfeldmarschall Erhard Milch commenting on the Hamburg raids of July 1943



The Formation of the *'Wilde Sau'*

By July 1943, the outcome of the night air war over occupied Europe still hung very much in the balance as each of the protagonists evaluated and tested new tactics, technology and weaponry which they hoped would tip the scales in their favour. On the German side, a new system of night fighting was being developed that involved employing single-engined fighters to attack the bombers over the target area itself. The idea for this procedure was first considered in 1942 and came from a most unexpected quarter.

ABOVE: Hajo Herrmann began his flying career in August 1935 and, after qualifying as a pilot, he was posted to the bomber unit 9./KG 4. He flew during the Spanish Civil War, and later during the Polish, Norwegian and French campaigns. Towards the end of the 'Battle of Britain' he received the Knight's Cross and was then transferred to the Mediterranean where he took part in the bombing of Malta with III./KG 30. It was after he had been posted to Berlin in July 1942, that he devised his theory of employing single-engined fighters as night fighters. This method was soon christened 'Wilde Sau' and incorporated into the existing night defence system. Herrmann himself shot down nine bombers using this method and finished the war, as seen in this photograph, as an Oberst with the Knight's Cross, Oak Leaves and Swords.

In July 1942, Hajo Herrmann, an experienced bomber pilot, a holder of the Knight's Cross, and *Gruppenkommandeur* of III./KG 30, was transferred to an administrative staff posting in Berlin. There, he was attached to a department known as *Gruppe T* of the Command Staff of the *Luftwaffe,* and Herrmann, together with five other officers who made up *Gruppe T*, were responsible for evaluating the *Luftwaffe's* technical and tactical requirements. Each of the officers was given his own field of operational responsibility which, unsurprisingly in Herrmann's case, was that of the bomber force.

Within a few months Herrmann discovered, much to his concern, that the Western Allies were producing three times as many bombers as the German war industry could produce fighters. The seriousness of this situation prompted him to investigate ways in which the *Luftwaffe's* numerical inferiority could be overcome, even though he realised that Germany could never hope to match the number of aircraft produced by Great Britain and the United States. His solution to the problem was to utilise the available aircraft more effectively, and he submitted a report suggesting that with suitable technical, organisational and training support, single-engined fighters could operate at night, as well as during the day.

When the proposal fell on deaf ears, Herrmann decided to take matters into his own hands and, procuring a fighter and a He 111 to be used as a target, he began conducting a series of test flights from the airfield at Berlin-Staaken. With the assistance of a local searchlight unit to illuminate the bomber, he was able to carry out flying and target practice over Berlin.

After a number of practice flights, Herrmann felt confident enough to take part in a live defensive action and, in order that he could operate safely above the Flak without being shot down, formally requested that its fire be restricted to 6,000 metres. Although Herrmann received the appropriate authority to participate in operations, his request for the height of the Flak to be limited was turned down as Hitler himself had decreed that the anti-aircraft guns should be allowed to operate freely and not be restricted in any way.

Herrmann's first opportunity to put his theory and practical training to the test occurred in April 1943 when German radar picked up an aircraft heading towards the German capital. He immediately scrambled from Staaken and flew to a holding area on the edge of the searchlight zone near Potsdam. While circling at a height of 11,000 metres, he saw a number of searchlights lock on to a target and he immediately made his way towards it at high speed. Flying closer, he saw that the searchlights had coned a Mosquito flying through a heavy barrage of Flak some 2,000 metres below him. Having descended to the same height as his target, he gradually reduced the range and opened fire. His first burst went wide of its mark and, temporarily blinded by the muzzle flash, Herrmann immediately realised he had forgotten to have his weapons loaded with the correct type of ammunition. After quickly regaining his night vision, he made a second unsuccessful attack against the Mosquito, which soon cleared the searchlight zone and disappeared into the darkness.

Despite being disappointed by his performance, the incident provided Herrmann with some valuable experience and emphasised the importance of close cooperation with other organisations within the defence network. The searchlight units were particularly important, as these had also coned his aircraft during the encounter, as a result of which he had been fired upon by Flak. Indeed, upon returning to Staaken and examining his machine, he and his mechanic found that a shell splinter had torn a large hole in the fuselage one metre from where he had been sitting.

The next day, having sworn the ground crew to secrecy about the near miss, Herrmann related his experiences and thoughts during a meeting in Berlin chaired by *Generalfeldmarschall* Milch. Although Milch himself was sceptical of the whole incident and had been advised by Kammhuber that any collaboration between the fighters and the searchlights was impractical, Herrmann found support for his idea in the *General der Jagdflieger, Generalmajor* Adolf Galland, who promised to make further fighter aircraft available to him.

Following the briefing, Herrmann set about finding pilots willing to fly such missions and who possessed the necessary night-flying experience. Initially, he recruited instructors from the *Flugzeugführerschule* at Brandenburg-Briest who continued to instruct by day and flew practice interceptions at night. During May and June 1943, Herrmann and his men, known collectively as *'Kommando Herrmann'*, waited for the RAF to raid Berlin, but no such attack materialised. Impatient for action and a chance to put what had been learned into practice, Herrmann requested that the unit be transferred to the Ruhr where, during the shorter summer nights it was more likely they would encounter the bombers.

Herrmann's latest proposal was discussed at a conference held in Berlin-Dahlem between the Flak and Night Fighter Staff, and once again the question was discussed of limiting the height at which the Flak operated. *Generaloberst* Hubert Weise, who was in overall charge of air defence and chaired the meeting, refused to restrict the operational ceiling of the 700 heavy guns under his command for the sake of a few fighters. During the discussion, which became quite heated, one of the attending officers, *Oberstleutnant* Boehm-Tettlebach, referred to Herrmann's idea as *'Wilde Sau'*, which translated into English means 'Wild Boar', but in German means wild in the sense of being unheeding and reckless. Although the remark was meant in a disparaging way, the term *'Wilde Sau'* stuck, and from that moment on, this type of night fighting procedure was referred to by this name.

By the end of the meeting, however, Herrmann had been able to secure from Weise an agreement that his unit could operate in the West on the proviso he could obtain the cooperation of a local Flak commander willing to work with him. After some swift and effective negotiations with the commanding officer of the 4. *Flakdivision, Generalmajor* Johannes Hintz, it was agreed that all anti-aircraft fire that fell under his command within the Ruhr would be confined to a maximum height of 5,500 metres. With no further obstacles to his plan, Herrmann and Hintz's Operations Officer quickly began formulating guidelines on operational procedures and how the fighters and Flak could best work together during a major raid.

ABOVE: Friedrich-Karl Müller, known to his flying colleagues as 'Nose' Müller, flew pre-war as a Lufthansa pilot. Later, Müller shot down his first bomber, a Halifax near Cologne, on the night of 3/4 July 1943,and joined JG 300 later that summer. He was eventually credited with the destruction of 30 bombers and was awarded the Knight's Cross on 27 July 1944.

An opportunity to put these procedures into practice soon presented itself during the evening of 3 July 1943. After being informed of an approaching raid, Herrmann immediately sought, and was granted, overnight leave for his men, who flew to Mönchengladbach as planned. By the time Herrmann himself arrived an hour later, most of the nine pilots from the unit had already taken off and flown to a predetermined patrol area over Essen and Duisburg. There they waited at an altitude of around 6,000 to 7,000 metres.

As the bombers approached the Ruhr from the west, they were intercepted by conventional night fighters which shot down several of them. Soon afterwards, however, the bomber stream changed direction and, instead of heading north towards Essen as had been expected, it turned south and headed towards Cologne. This unexpected change in course presented Herrmann with a dilemma since Cologne fell under the jurisdiction of the 7. *Flakdivision,* with which he had made no prior agreement. However, on seeing the first coloured marker flares descend towards the city and the explosions of the first bombs, he decided to attack despite the threat of unrestricted Flak activity over the target area.

During the mêlée that followed, Herrmann and his fighters flew over the burning city, successfully avoiding the millions of shell splinters that filled the night sky, and shot down 12 of the raiders. The first of these, a Halifax, was claimed by *Oblt.* Friedrich-Karl Müller and, two minutes later, Herrmann himself shot down a Lancaster as his first aerial victory. Unfortunately, when he and his unit landed at Bonn-Hangelar, Herrmann's elation turned to surprise and consternation when he discovered that the Flak units in Cologne were claiming the same 12 aircraft. Following some lengthy negotiations, it was finally decided that the claims would be equally divided between the Flak gunners and the 'Wilde Sau' pilots.

Exhausted by the experience, but satisfied with his unit's performance, Herrmann retired to bed, only to be woken up several hours later to take a telephone call from Göring. The *Reichsmarschall* explained that he had just been informed about the unit's success against the bombers and ordered Herrmann immediately to fly to Berchtesgaden, where the operation was discussed in detail. Obviously impressed with what he heard, Göring authorised the formation of a new night fighter *Geschwader* equipped with single-engined fighters. The new unit was designated JG 300 and Herrmann was made its first *Kommodore.*

ABOVE: Gerhard Stamp joined the Luftwaffe just prior to the outbreak of the war and, on completing his pilot training, was posted to I./LG1. After 300 missions as a bomber pilot, primarily in the Mediterranean, he was awarded the Knight's Cross on 24 March 1943. In August 1943, Stamp became Kommandeur of I./JG 300 and, until wounded on 29 June 1944, flew approximately 100 'Wilde Sau' missions, during which he shot down four bombers. In late 1944 he formed an air-to-air bombing unit employing the Me 262, and this unit, known as Kommando Stamp, subsequently became the Stabsstaffel of JG 7. After the war, Gerhard Stamp joined the Bundesluftwaffe as a Major and retired on 30 September 1978 with the rank of Oberst.

Using his existing men and machines, Herrmann formed I./JG 300 to operate from Bonn-Hangelar under the command of *Major* Gerhard Stamp. (NDW 55) Further suitably trained pilots were recruited from other operational units and training schools to form the basis of two further *Gruppen,* II./JG 300 and III./JG 300, which were transferred to Rheine[1] and Oldenburg[2] and commanded by *Major* Kurt Kettner and *Major* Hans-Joachim von Buchwald respectively. These two airfields had been specifically chosen for their strategic locations and because they were also home to day fighters which, lying idle at night, could now be utilised by the *'Wilde Sau'*.

In addition to all the usual logistical problems associated with setting up a new *Geschwader,* Herrmann was acutely aware of the many technical difficulties that also had to be overcome, but he immediately set about addressing these with his more usual zeal. Nevertheless, he estimated that he would need at least until the end of September to bring all his units to operational readiness.

Although JG 300's aircraft were all standard fighters and therefore lacked the airborne radar employed by their twin-engined counterparts in the *Nachtjagd,* this was of no concern to Herrmann. On the contrary, he realised that the key to his unit's success was the fact that they were mobile, and the last thing he wanted was to have their operational potential restricted by *'Himmelbett'* and adherence to the existing night fighting procedures.

One of the first things that Herrmann introduced was a simple but effective navigational system which he hoped would enable him to concentrate his forces where they were most needed in the shortest possible time. While attending a military conference in Berlin, he had discovered that the *Kriegsmarine* was using a special type of flare that could be fired through cloud formations to illuminate enemy aircraft flying below it. He was able to procure several hundred of these flares which were distributed to a number of widely dispersed cities. The local Flak units were then instructed to fire, at regular intervals during a raid, two or three of the flares which had been pre-set to explode at an altitude of between 7,000 and 8,000 metres. These could be seen from great distances and would enable the *'Wilde Sau'* units rapidly to make their way to the town or city which was under attack. Furthermore, by being able to quickly identify the target, the fighters' chances of intercepting the bombers while they were still in that area were greatly improved.

In another attempt to improve the chances of success, the fighters were fitted with drop tanks which increased the aircraft's flight time to between two and three hours. With further training and closer cooperation with the searchlight and Flak units, Herrmann remained confident that by the end of September his pilots would be able to match the number of bombers shot down by the existing night fighter force. Unfortunately, due to events and circumstances beyond his control, his training schedule was interrupted as a result of Operation 'Gomorrah', a devastating and sustained RAF attack against Hamburg on 24 July 1943, the effects of which resounded throughout Germany and the Nazi hierarchy. During this raid, jamming rendered the existing *'Himmelbett'* system totally ineffective and only a few bombers were shot down. Desperate to save face and to be seen to be doing something, Göring ordered Herrmann to make all his units immediately operational. With no recourse or room for argument, Herrmann prepared his *'Wilde Sau'* pilots of JG 300 for their first action.

Hamburg and 'Operation Gomorrah'

Since taking command of the newly formed *Nachtjagddivision* on 17 July 1940, *General der Flieger* Josef Kammhuber had succeeded in forming the German night defences into a formidable force, but as Bomber Command mounted effective spoof attacks and developed tactics to confuse and frustrate the German defences, the inflexibility of *'Himmelbett'* and the *'Kammhuber Line'* was exposed. The main criticism expressed by the night fighter pilots themselves was that operating in individual *Räum* not only limited their operational range, but also prevented them from flying into other *Räume* if the bombers bypassed the one in which they were patrolling. On a more personal level, many of the younger and newer pilots were resentful that the best and most productive *Räume* were usually allocated to the most senior crews, thus depriving them of any chance to gain experience and denying them the opportunity to achieve their first victories.

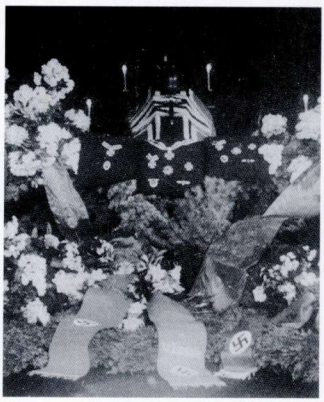
Nevertheless, as the *Nachtjagd* continued to account for the greater share of the bombers shot down by the German defences its operational strength was increased, either by creating new units or

1. II./JG 300 operated with the Fw 190-As of II./JG 1.
2. III./JG 300 operated with the Bf 109 G-6s of III./JG 11.

by adding new *Gruppen* to already-established *Nachtjagdgeschwader.* Thus by June, a sixth operational Geschwader had been created with the raising of IV./*Nachtjagdgeschwader* 6 under the command of *Hauptmann* Herbert Lütje, followed later in the month by the creation of V./NJG 6 under the command of Hauptmann Paul Semrau, although this latter *Gruppe* was redesignated III./NJG 2 the following month. By the end of August, the continued expansion of the existing *Geschwader* had resulted in the creation of III./NJG 5, V./NJG 5, III./NJG 6, IV./NJG 6, a new V./NJG 6, I./NJG 7 and I./NJG 100, so increasing the *Nachtjagd* from 15 to 22 *Gruppen.* On this basis, the organisation therefore possessed approximately 500 aircraft, although not all of these were available for operations.

ABOVE: Looking somewhat bemused by the fuss, Oberleutnant Reinhold Knacke of 1./NJG 1 is wearing his recently awarded Knight's Cross, presented to him on 1 July 1942 for shooting down 23 bombers. On 28/29 July 1942, Knacke became the first German night fighter pilot to shoot down an RAF Mosquito. He continued to score steadily throughout the rest of 1942 but was killed on the night of 3/4 February 1943 when his total number of victories stood at 44. Knacke was posthumously awarded the Oak Leaves three days later. On his right in this photograph is Wilhelm Johnen.

Kammhuber's defences were further bolstered by technological advances that had resulted in the production of several different types of improved ground radar. The first of these, known as *'Mammut'*, was basically a larger version of the existing *'Freya'* type with an increased effective range of 200 miles, although as with its predecessor, it could not measure a target's altitude. This, however, was overcome with the introduction of a second type of ground radar code-named *'Wassermann'*, a long-range, early-warning radar which was able to give the height, range and bearing of an aircraft up to 150 miles away. Once in service, both types of radar were positioned along the west coast of occupied Europe where they were able to detect the approach of any bomber flying from the British Isles.



ABOVE LEFT AND RIGHT: Hptm. Paul Semrau was appointed Kommandeur V./NJG 6 when it was created in June 1943, but when this Gruppe was redesignated III./NJG 2, he spent virtually all of his career with NJG 2 becoming its Kommodore in November 1944. Here, Semrau is seen taking the salute from the men of I./NJG 2 following the award of the Knight's Cross from Generalmajor Kammhuber in October 1942. Semrau was killed on 8 February 1945 when he was shot down by a Spitfire while trying to land at Twente in Holland. He was buried with his crew at Twente and posthumously awarded the Oak Leaves in April 1945.

LEFT: Pilots from 5./NJG 5 enjoying a social gathering during a lull in the fighting. This photograph was taken circa April/May 1943 when the unit was stationed at Parchim. Soon afterwards, the unit was transferred to the West, where it helped to bolster the night defences against an increasing number of raids mounted against the Ruhr. Seated third from the left in this photograph is the Staffelkapitän of 2./NJG 5, Leopold Fellerer.

ABOVE: This tail unit with 29 victory bars is reported to have belonged to the Ju 88 C-6 flown by Hptm. Heinrich Prinz zu Sayn-Wittgenstein, the Kommandeur of IV./NJG 5, probably when based at Insterburg in East Prussia in May or June 1943. There are many inconstancies between the victory bars shown and Sayn-Wittgenstein's known confirmed victories. For example, although the bars in the bottom row – including the linked bars which represent multiple kills – correspond precisely with Sayn Wittgenstein's kills in July 1942, the rest cannot be reconciled with his subsequent claims. Moreover, on the night of 24/25 June 1943, he claimed four kills which raised his total from 28 to 32, but why only one of those victories should be shown, bringing the total to 29 bars, is again not known. The grey camouflage on this aircraft, a Ju 88 C-6 code C9+AE, would appear to consist of 74 mottles over 75.

In the air, the *Nachtjagd* was operating with the *'Lichtenstein'* BC airborne interception radar, first used with success on 9 August 1941. Despite early difficulties in acquiring operational sets and some scepticism expressed by many of the more experienced pilots, by June 1943 this radar was used in increasing numbers of night fighter aircraft.

These three types of radar were all very effective in their individual roles, but their one inherent weakness was that they all operated on virtually the same frequency. As long as the British remained unaware of what that frequency was, the radars were safe from interference but during a raid on Frankfurt on the night of 3 December 1942, the bombers had been accompanied by an RAF Wellington from No. 1474 Wireless Investigation Flight. This aircraft was equipped with electronic measuring equipment and, as the RAF had intended, it was stalked and attacked by a number of night fighters. During these attacks, a special radio operator aboard the Wellington was able to measure the frequency of one of the attacking fighters' *'Lichtenstein'* airborne interception radar. Although damaged in the attacks, the Wellington returned to its base with its valuable information.

The RAF's knowledge of the latest German radar technology was further increased on 9 May 1943 when the defecting crew of a Ju 88 R-1 landed their aircraft at Dyce airfield, Aberdeen. This proved to be an incredible stroke of luck for Bomber Command as, once examined by British technicians, the aircraft was found to be fitted with a *'Lichtenstein'* set complete with all electronic equipment. Less than three months later, the capture of this Ju 88 would cost the residents of Hamburg dearly.

Meanwhile, by July 1943, Bomber Command had already expanded to an establishment of 53 squadrons with almost 900 bombers, approximately 650 of which were four-engined types. Since being appointed Commander-in-Chief of Bomber Command on 22 February 1942, in little more than a year Air Chief Marshal Sir Arthur Harris had sufficient aircraft available to carry out his theories on area bombing and could mount raids on the German cities almost on a nightly basis. Many of Harris' machines were being equipped with the most up-to-date electronic aids, one of which, code-named 'H2S', had first been used operationally on the night of 30/31 January 1943 during an attack on Hamburg. At the heart of this device, housed in a blister beneath the bomber's rear fuselage, was a powerful magnetron valve which sent out high-frequency impulses through a continuously rotating aerial. Any impulses that struck built-up areas, trees or hills, produced strong returns, whereas very few returns were received when they struck fields or lakes or other similar flat areas. Any radio energy reflected from the ground was detected by the same aerial equipment and the impulses were displayed as varying shades of light on a cathode-ray tube, the intensity with which objects appeared on the display being dictated by the strength of the reflected radio energy. As the aerial was constantly sending and receiving signals, a visual representation of the countryside beneath the bomber was produced which enabled the bomber's navigator to identify landmarks. This improved the accuracy of the route flown and assisted the bomber in locating its target.

Both sides had also been working on countermeasures to jam the other's ground and air radar. Potentially, the most effective countermeasure was based upon an idea that had originated in the late 1930s. This involved dropping vast quantities of paper strips, coated on one side with aluminium, which when dispersed in the air, would form vast clouds that produced false echoes on the radar displays. Although the Germans had already produced and experimented with the strips which they code-named *'Düppel'*, when the results were documented and forwarded to Göring, he immediately prohibited further testing. Göring's great fear was that the British would discover their findings and attempt to duplicate them, but the British had in fact already developed their own version of *'Düppel'*. Measuring 27 cm long[3] and 2 cm wide, the strips were supplied in bundles which were to be released at intervals into the slipstream by a member of the bombers' crew. When the bundles burst open, the individual strips obliterated and masked the real echoes produced by the bombers. The British code-name for this counter measure was 'Window', and for the first time it was about to be employed operationally.

As Bomber Command's offensive against the Ruhr neared its conclusion in July 1943, Harris had already turned his attention to planning an all-out attack against a major German city. The selection of Hamburg in north-west Germany as the target was not a difficult decision for Harris, as he had intended

3. 27cm was half the wavelength of the radar that controlled the German anti-aircraft guns, searchlights and fighter control radars.

to carry out a large-scale raid against the city for some time. In fact, had the weather not intervened, then Hamburg, and not Cologne, would have been the target for the RAF's first thousand bomber raid on the night of 30/31 May 1942. Although Hamburg had been bombed on 137 previous occasions since the outbreak of the war, Harris now planned to completely destroy the city in a series of successive raids in which, for the first time, the American Eighth Air Force would carry out follow-up daylight attacks. The operation was code-named 'Gomorrah' and, in order to thwart the German defences, Harris was given authority to employ 'Window'. On the evening of 24 July 1943, a total of 791 bombers took off and headed out across the North Sea and towards the north German coast.

Having correctly assumed that Bomber Command would not conduct deep operations into Germany during the short summer nights, XII. *Fliegerkorps* had already transferred night fighter units from other theatres of operations to bolster defences in the north of the country. Once the approaching raid was detected, it was tracked and the German defences and the night fighters of the four *Gruppen* of NJG 3 stationed in northern Germany and Denmark were scrambled to meet them. However, when the bombers were approximately 100 kilometres from the German coastline, they began to drop their bundles of 'Window'. The effect upon the German ground defences was almost immediate. Operators at coastal batteries, fighter controllers and *'Lichtenstein'* operators in the night fighters all found their screens swamped with a deluge of echoes and false reports. These gave the impression that the sky was full of many thousands of bombers and made it almost impossible for the radar operators in the fighters to distinguish what was a real target and what was not.

Masked by this huge cloud of tin foil, the first of the bombers reached Hamburg at 01.02 hrs. During the following 53 minutes, 728 bombers released their bombs on the centre of the city and its northern suburbs, killing approximately 1,500 people. Over Hamburg itself, the bombers went almost unmolested since the *'Würzburg'*-controlled searchlights were rendered virtually useless, and only three bombers were shot down by the city's Flak defences. Another nine bombers were also lost, but some of these had inadvertently strayed well outside of the protective 'Window' shield where they were shot down, predominantly by the night fighter crews of NJG 3.

The use of 'Window' during this raid had not only rendered Germany's defences completely useless, but it had also highlighted the inherent weaknesses of the rigid *'Himmelbett'* system of night fighting. After having spent so much time, effort and money in creating it, Josef Kammhuber was naturally unwilling to replace the existing system with another, but other individuals within the organisation were less reluctant. They could see that drastic changes were required if other German towns and cities were to be spared a similar fate. Unfortunately, however, on the afternoon of 25 July, and before any action could be taken, the city was bombed by 100 Eighth Air Force B-17s, and then again the following morning by a smaller force of 60 B-17s.

Bomber Command resumed its own offensive against Hamburg on the night of 27/28 July 1943, by which time the German ground stations had taken to broadcasting running commentaries to the night fighters and local defence units on the progress of the bomber stream, with constant updates regarding its location, height and projected heading. This was only possible because, unlike *'Wurzburg'* and *'Mammut'* etc, *'Freya'* operated on a different wavelength and remained unaffected by 'Window'. At the same time, although the *Nachtjagd* was in complete disarray, while some of its commanders insisted on operating strictly within the *'Himmelbett'* system, others permitted their night fighter pilots to operate freelance within the bomber stream.

Nevertheless, a combination of factors – chiefly the accuracy of the bombing and the weather, which had made the city very dry – resulted in a great many fires which converged into one large conflagration. Soon, with the city's water supplies disrupted and the civil defences overwhelmed by the ferocity of the attack, the fire was raging out of control. The resultant firestorm consumed everything in its path and killed an estimated 40,000 people.

Of particular significance on this night was the involvement of the newly created *'Wilde Sau'* units which, although then far from being completely prepared, had been ordered by Göring to immediate readiness after the first raid on Hamburg. On being scrambled from their respective airfields, the three Gruppen of JG 300 converged on Hamburg and began searching for the bombers attacking the city. Thus, while the residents of Hamburg were dying in their homes and shelters, Hajo Herrmann's *'Wilde Sau'* units doggedly pursued the bombers over the burning city, through the heavy Flak and columns of thick smoke, to claim the destruction of four bombers. Bomber Command lost a total of 17 aircraft that night to the German defences, a slight increase over the first raid and an indication that the Germans had begun to overcome the initial problems created by the introduction of 'Window'.

It is thought that even during the first two raids on Hamburg, a small number of the more experienced *'Lichtenstein'* and *'Würzburg'* radar operators were able to differentiate between the false returns created by 'Window' and those created by the bombers. This was certainly the case on the night of 29/30 July when the city was subjected to its third major raid in six nights, this time by a force of 777 RAF aircraft. Although there was no repetition of the devastation caused by the firestorm, further wide spread damage was caused and approximately 800 of the city's inhabitants were killed. On this occasion, the ability of some operators to differentiate between bombers and false echoes was clearly apparent as the Flak and fighters accounted for 28 bombers, almost twice the number they had achieved during each of the previous two attacks.

With more twin-engined fighters authorised to fly freelance, eight bombers were shot down before they ever reached the target, while a further four were destroyed on the return leg. Once again, pilots from NJG 3 submitted most of the claims, with *Oblt.* Gerhard Raht of 4./NJG 3 claiming four. Various *Gruppen* from NJG 1 were also involved that night with such established night fighter pilots as Helmut Lent, Egmont Lippe-Weissenfeld and Werner Streib each destroying a bomber. The *'Wilde Sau'* again played a part during the attack, harrying the bombers as they made their bomb runs over the burning city and, according to the *Oberkommando der Luftwaffe* claims files, claiming 17 bombers. Thus a total of 36 bombers were claimed by night fighters on this night, although according to RAF records, 28 were lost during the raid to the German defences with a further three written off in take-off and landing accidents. Despite this discrepancy in the respective claims and recorded losses, the *Nachtjagd* still had been able to inflict losses heavier than expected. To be sure, while Harris and his team had anticipated that the German defences would eventually overcome the effects of 'Window', the speed at which this recovery actually occurred was surprising and had resulted in Bomber Command's loss rate increasing from 1.5 per cent to 3.6 per cent in just three attacks.

BELOW: One of the most respected pilots in the Nachtjagd was Hans-Joachim Jabs, who became Kommodore of NJG 1 on 1 March 1944. He began the war as a Zerstörer pilot with II./ZG 76 and shot down 19 enemy aircraft, 12 of which were British fighters over England. This was a remarkable record considering the terrible losses inflicted on the Zerstörer units during the 'Battle of Britain' and for this feat he was decorated with the Knight's Cross on 1 October 1940.

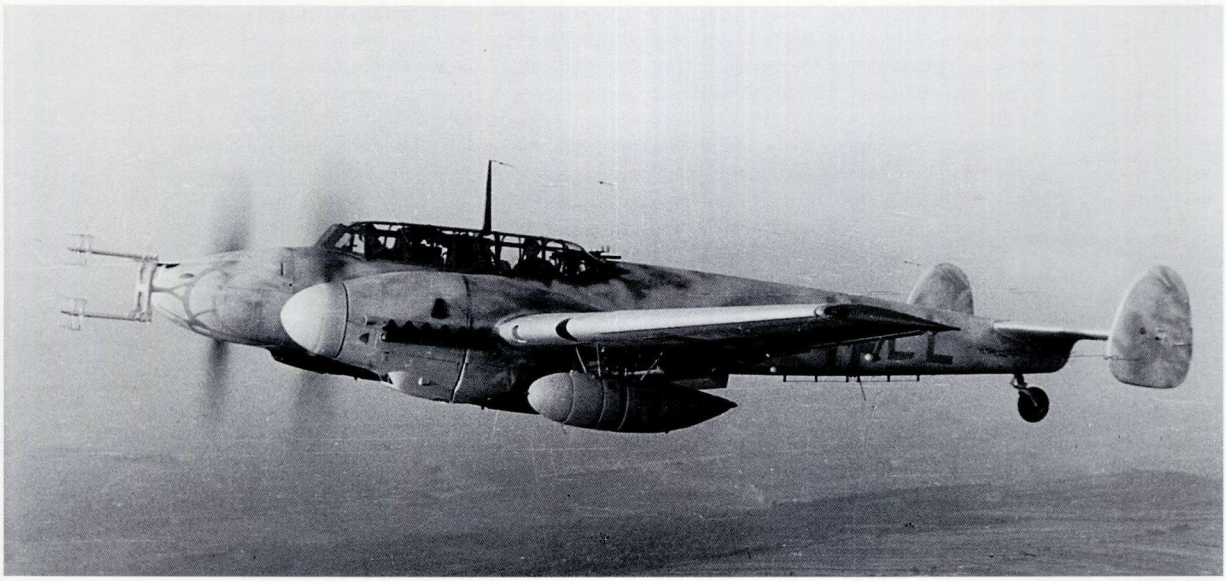
The fourth and final raid against Hamburg took place on 2/3 August 1943, and was by far the least effective. Due to a large electrical storm covering the approaches to the target, only 423 of the 737 aircraft which took off from England actually claimed to have bombed in the Hamburg area. Aircraft that failed to reach the city either jettisoned their bomb loads and headed back to England, or attacked secondary targets. Where aircraft did reach Hamburg, bombing results were poor and caused few casualties and very little damage. The poor weather also caused the bomber stream to become spread out and many bombers found themselves outside the protective umbrella of 'Window'. In addition, those bombers that chose to bomb secondary targets such as Bremen, Wilhelmshaven and Heligoland came within range of night fighter units based in northern Holland. As the returning bombers crossed the Dutch coast and headed back out over the North Sea, they were intercepted by fighters from III. and IV./NJG 1. The *Kommandeur* of IV./NJG 1, *Hptm.* Hans-Joachim Jabs, shot down a Halifax and two Stirlings while two other members of his *Gruppe, Ofw.* Karl-Heinz Scherfling and *Oblt.* Georg Greiner, each claimed one and two respectively.

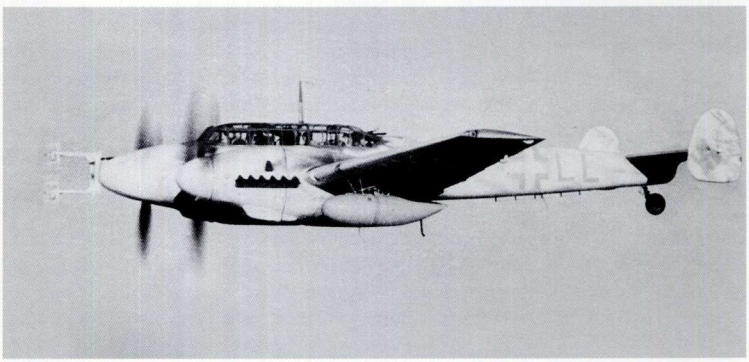
Total Bomber Command losses that night due to the combined action of fighters, Flak and bad weather, were 33 aircraft, taking total losses for the 'Battle of Hamburg' to 87 aircraft, of which 55 were claimed by the *Nachtjagd.* Although Harris had lost in the region of 620 personnel killed, taken prisoner or interned, overall the series of raids was considered to have been successful. For the Germans, the raids finally marked the end of Kammhuber's *'Himmelbett'* system, for they emphasised to all levels of the *Nachtjagd* that, if it was not to be overwhelmed by superior numbers, then tactical and technological changes were urgently required. It is much to the credit of the organisation, therefore, that it was able to rally so quickly after the initial shock of the first raid and the neutralisation by 'Window' of many of its radar-controlled defences.

Thus July 1943, and particularly the Hamburg raids, was a significant period and represented a turning point in the air war over Germany. The lessons learned through trial and error during this very short period forced the *Nachtjagd* to re-evaluate its tactics and implement a series of wide-sweeping operational changes. This in turn subsequently resulted in new tactics employed to great effect by the night fighter crews, ground controllers and technicians for much of the remainder of the war.

The necessary changes, however, had yet to be fully implemented. After the Hamburg raids, the *Nachtjagd* was given little respite by Bomber Command which was preparing for a series of attacks on Berlin.

LEFT: On 5 August 1943, Hptm. Rudolf Schönert bade farewell to II./NJG 5 at Parchim before taking command of I./NJG 100. He had led the Gruppe since 1 December 1942, and was respected by all who knew him. Behind the guard of honour is a Bf 110 with its 'Lichtenstein' BC aerials clearly visible. He was replaced by another respected and experienced pilot, Hptm. Manfred Meurer.





ABOVE AND RIGHT: From the spring of 1943, German night fighters were employed against American aircraft in daylight operations. It was thought that the long endurance of the night fighter aircraft, the navigational skill of the crews and the ability of their aircraft to carry heavy armaments would prove useful in augmenting the German day fighters, but in fact the night fighter crews found themselves thrust into a role in which they lacked the specialised training and experience. In particular, their inability to launch concentrated attacks while in close formation led to unduly heavy losses which continued even when the night fighters were ordered only to attack single bombers separated from their formations. The night units themselves were much against their daylight employment and, taking matters into their own hands, prohibited their most experienced crews from flying daylight operations. Nevertheless, the losses considerably weakened the Nachtjagd's effort against RAF night raids for this period of 1943 and eventually forced the termination of daylight operations. These photographs show a FuG 212 'Lichtenstein'-equipped Bf 110 G-4 of 3./NJG 6 from Mainz-Finthen, probably in the late summer of 1943. The aircraft was camouflaged in 76 but with grey 75 reverse mottles over the uppersurfaces of its wings and fuselage. From the photographs, the mottling appears darker around the cockpit area than elsewhere and all national markings appear in the same grey used for the tactical code 2Z+LL. To improve the aircraft's performance, the flame dampers, redundant during daylight sorties, have been deleted, leaving a clean area over the exhausts where these have been removed. Note that this machine has the early-pattern vertical tail surfaces.

New Tactics and 'The Battle of Berlin'

The most pressing matters facing the German High Command in the summer of 1943, then, were the British jamming of *'Würzburg'* and *'Lichtenstein'*, the introduction of new types of radar impervious to all forms of interference, and – if Bomber Command was to be prevented from destroying other German cities at will – new tactics. The solutions to these problems were in fact already under development, but following the devastation of Hamburg there were demands from the very highest levels to introduce them at the earliest possible opportunity.

The new method of night fighting was again conceived by a former bomber pilot, *Oberst* Viktor von Lossberg, who proposed guiding a single night fighter aircraft towards the bombers and then infiltrating it into the bomber stream. This aircraft would navigate by means of an existing position-finding method known to the Germans as *'Ypsilon-Verfahren'*, or 'Y' System which, although used to great effect by the bomber and day fighter force, was rarely utilised by the *Nachtjagd*, which favoured the use of *'Würzburg'*. A large number of these *'Ypsilon'* sites, each of which could control up to five aircraft at any one time and had a range of between 250 and 300 kilometres, was spread across Germany and occupied Western Europe. Through radio communication with the aircraft, and by means of a direction-finding aerial, technicians at the 'Y' site could work out the aircraft's range and bearings. From this information the position of the aircraft could be calculated and plotted on a *Seeburgtisch* so that ground controllers could inform the pilot of his position and any changes in course necessary to guide him to the bomber stream.

Once this first fighter, known as the *Fühlungshalter*[1], was in position at the head of the bomber stream, it would transmit a continuous homing signal, enabling other night fighters to join it. However, this continuous transmission proved unpopular with the majority of night fighter pilots, already wary of British intruders, who thought that it might further attract their attention. The *Fühlungshalter* procedure did not therefore become standard practice and the night fighters were subsequently guided into the bomber stream verbally by means of R/T. In time, as more of the fighters were fitted with 'Ypsilon', even this method was superseded, allowing them to operate independently of each other.

ABOVE: Major Viktor von Lossberg.

Viktor von Lossberg also advocated equipping all available twin-engined night fighters with *'Lichtenstein'* SN-2, a new type of airborne interception radar developed by the electronics firm, *Telefunken*. SN-2 operated on a lower frequency than the existing *'Lichtenstein'* BC, was not affected by 'Window', and had a maximum range of four miles. *Generalfeldmarschall* Erhard Milch, the Director-General of Air Equipment, requested *Telefunken* to speed up development and production so that it could be rushed into service as quickly as possible.

Milch also shared von Lossberg's ideas concerning the role of freelance night fighters and on 29 July 1943, took him to a high-level meeting where he was given an opportunity to outline his ideas to *Generaloberst* Hubert Weise. Von Lossberg's proposals were soon accepted and his new method of bringing large numbers of night-fighters into contact with the enemy bomber stream became known as *'Zahme Sau'*, or 'Tame Boar'. It was to evolve into an effective method of night fighting which became standard throughout the *Nachtjagd* and remained in use for the rest of the war.

While the *Nachtjagd* was frantically re-organising itself, Bomber Command's offensive against the Third Reich continued with its next heavy raid being a precision attack on the weapons research facility at Peenemünde on the Baltic coast. The destruction of the site was so imperative that for the first time Harris employed a 'Master Bomber' to oversee the raid and ensure the bombing was as accurate as possible. To further ensure the accuracy of the bombing, the raid was carried out during the full moon period on the night of 17/18 August 1943. A total of 596 four-engined bombers set out on the raid, while at the same time a small force of eight Mosquitoes took part in a diversionary raid against Berlin. At first, this feint proved very effective and drew the majority of the night fighters to the German capital and away from Bomber Command's intended target, but when the deception was discovered, some 30 night fighter pilots flew north to Peenemünde and operated freelance *'Wilde Sau'* operations over the facility.

Single-engined night fighters also took part in the action, and amongst the successful pilots that night were Hptm. Friedrich-Karl *'Nasen'* Müller from I./JG 300, who claimed two Lancasters, and *Oblt.* Paul Zorner of 7./NJG 3, who also made a similar claim. A combination of good visibility over

1. Literally, 'Contact-keeper'.

"Like corpses' fingers"

LEUTNANT PETER SPODEN, 6./NJG 5

I was still at high school in early 1940 when RAF bombers began bombing the industrial Ruhr district as well as my home town of Essen. So far as I remember, no German bombs had fallen on England in those days because the German bombing of England only occurred later in August 1940 as a result of the RAF's bombing of Berlin[1]. It was then that I decided to become a pilot – a night fighter pilot – so that I could defend my home town and other areas where bombs were falling.

My application to join the *Luftwaffe* was accepted in October 1940 and the subsequent training to become a night fighter pilot lasted a total of 27 months. Firstly, I underwent three months of infantry training with a *Fliegerausbildungsregiment* and then, from March to December 1941, I attended the *A/B Schule* at Munich where I qualified for my pilot's badge and amassed 180 hours of flying time. I then went on to C-Schule No. 17 at Pütnitz-Pommern where I flew Ju 52s, He 111s and Do 17s before transferring to a *Blindflugschule* at Copenhagen in Denmark.

I then went to a *Nachtjagdschule* at Kitzingen before finally transferring to a front-line unit, II./NJG 5, which was based at Parchim in Mecklenburg for the protection of Berlin. My *Gruppenkommandeur* was *Hauptmann* Rudolf Schönert, who was one of those fine officers that you find in every air force. He told us young night fighter pilots to, *"Shoot the bombers between the engines where the fuel tanks are, as they burn easily and the boys have a chance to parachute!"*

One of my first missions was on 25 July 1943 when 791 RAF bombers attacked Hamburg. This was a complete disaster for the *Nachtjagd* as the RAF dropped 'Window' for the first time and rendered our radar, anti-aircraft guns and ground organisation useless. We night fighters were kept at our radio beacons instead of being allowed to fly to the burning city where we would have been able to see the bombers silhouetted like moths. Only 12 of them were shot down and more than 45,000 German civilians were killed.

And what did we think about the RAF crews? The mental and physical burdens they experienced during a flight of eight hours or more must have been enormous, and on many occasions they impressed us very much.

On the night of 23 August 1943 there was turmoil over Berlin as Bomber Command lost a total of 56 bombers. It was one of those nights you remember for the rest of your life! First of all, high explosives were dropped, followed by phosphorous incendiaries which were released into the shattered ruins of the buildings so that fierce fires were soon blazing in the great city. It was an inferno without equal. Hundreds of searchlights rose towards us, sweeping the heavens like *'Leichenfinger'*[2], dazzling friend and foe alike. The anti-aircraft guns fired a furious barrage up to ten thousand feet, and above were the single-engined *'Wilde Sau'* and the twin-engined *'Zahme Sau'* night fighters. At times I could see between 30 and 40 aircraft all milling around together. The night sky was criss-crossed with cannon and machine gun tracer and illuminated by cascading flares of every colour, to which was added the recognition flares fired by the night fighters when the Flak opened up on them. There were also huge clouds of garishly illuminated smoke rising into the sky, white condensation trails everywhere and, down below, fearful explosions. A Lancaster attempting to escape from a cone of searchlights did a full loop. I had the impression that everyone was firing at everyone else and I was in the middle of it all. It was hell – Dante's Hell!

1. Author's note: This statement is clearly incorrect as almost 2,000 HE bombs and many more incendiaries were released on mainland targets in the UK in July 1940 alone. It is highly likely that what Peter Spoden means is that no bombs had fallen on London.
2. Literally 'corpses' fingers', a Luftwaffe term for searchlight beams.

Peenemünde and the fact that, despite 'Window', a number of radar operators could identify the bombers on their radar screens, resulted in the night fighters exacting a heavy toll. Although Peenemünde was heavily damaged, 27 of the bombers were shot down over, or close to, the target, and a further 13 were lost on the return leg.

Less than a week later, on the night of 23/24 August 1943, Bomber Command flew the first of 19 major operations against Berlin in a sustained campaign that was destined to last the best part of seven months. Harris was determined to completely destroy the city even though he estimated it would cost him 500 aircraft to do so. This first raid also marked the occasion of the first *'Zahme Sau'* operation, which proved highly successful, but over Berlin itself the vast majority of the fighters still operated by means of *'Wilde Sau'*. Through a combination of both methods, the *Nachtjagd* and the Flak defences destroyed 56 bombers, or 7.9 per cent of the bomber force, which was Bomber Command's highest loss of aircraft in a single operation to date. Following an attack against Nuremberg on the night of 27/28 August and a further raid against Berlin on 31 August/1 September, the German night fighters inflicted further heavy losses on the bombers, and by the end of August the *Nachtjagd* claimed to have destroyed some 250 enemy aircraft. Encouragingly for the defenders, over 200 of these were claimed by freelancing night fighters, whereas *'Himmelbett'* victories had only accounted for 48.

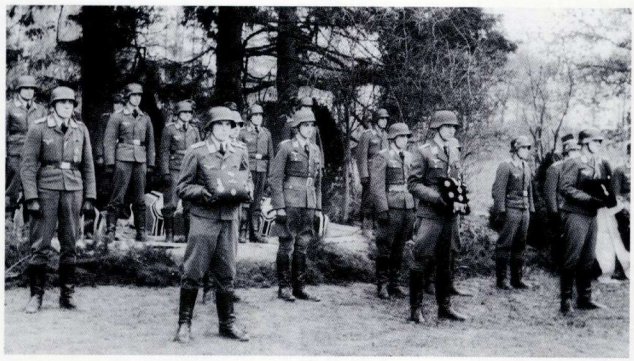
However, just as a spirit of optimism and confidence was developing within the *Nachtjagd,* Bomber Command introduced various changes in tactics to counter its growing losses. These included the implementation of more diversionary raids to confound and confuse the German ground controllers and to conceal the bomber's true targets, and the introduction of new electronic counter measures[2] which jammed the controllers' broadcasts to the night fighters. In addition, by mounting operations during periods of bad weather over Germany, Bomber Command reduced the effectiveness of *'Wilde Sau'* operations. All of these measures resulted in a significant reduction in night fighter claims and culminated in Göring relieving Kammhuber of his command of XII. *Fliegerkorps* on 15 September 1943. Kammhuber was succeeded by *Generalmajor* Joseph Schmid, and for the time being continued as *General der Nachtjagd.*

ABOVE: When Generalmajor Josef Kammhuber was relieved of his position as General der Nachtjagd, production of the He 219 night fighter was delayed. First conceived in 1940 as a high-speed bomber and reconnaissance aircraft, the He 219 was developed in late 1941 to meet a need for a new night fighter. Although Kammhuber was enthusiastic about the He 219, the project suffered setback when he was dismissed and further development and production was delayed due to a combination of short-sightedness within the RLM and opposition on the part of Generalfeldmarschall Milch. When the type did finally enter service, it proved almost universally popular with the crews who found it fast, manoeuvrable and well-armed. This photograph was purportedly taken on 22 January 1942 during a visit by Generalmajor Josef Kammhuber to the Heinkel factory at Rostock/Marienehe. The purpose of the visit was to observe test flights of the He 219, then still under development. Behind Kammhuber is Major Wolfgang Falck, and on the far right of the picture is Ernst Heinkel.

Almost two weeks later, on 26 September 1943, disenchanted by the failures of the existing night fighter force, Göring ordered the formation of two further single-engined night fighter *Geschwader.* These two units, each initially comprising just a single *Gruppe,* were designated JG 301 and JG 302 and were stationed in Bavaria and Brandenburg respectively.

Following a further series of failures to protect German cities in October, caused mainly by a breakdown in communications between the air raid reporting services and the Flak, Göring ordered a complete reorganisation of the *Reich* Air Defence. Once again Kammhuber was a casualty of these changes and he was relieved of his position as *General der Nachtjagd* and transferred to Norway where he took charge of *Luftflotte 5.* The position of *General der Nachtjagd* was then abolished and responsibility for night fighters came under the direct command of the *General der Jagdflieger, Generalmajor* Adolf Galland.

In an attempt to improve the command structure, XII. *Fliegerkorps* was reduced to just three *Jagddivisionen* and re-designated I. Jagdkorps with overall responsibility for the defence of the Reich. II. *Jagdkorps* was formed to protect occupied France, while 7. *Jagddivision,* with its headquarters in Munich, was set up to defend Germany against Allied bombers operating from the Mediterranean.

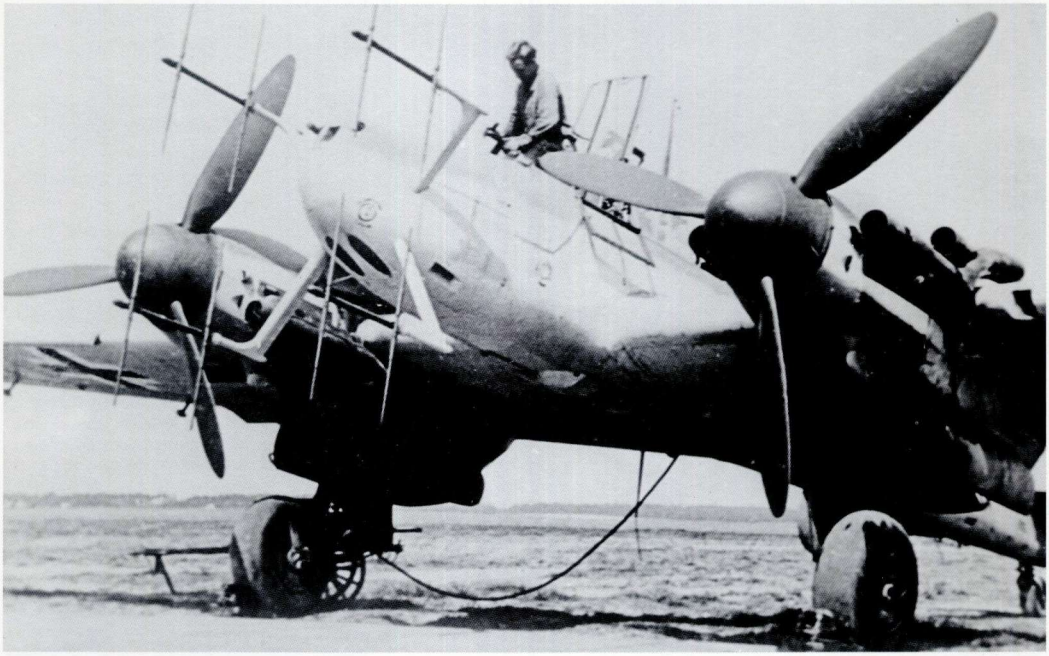


ABOVE: As a result of an accident while landing on the night of 17/18 November 1943, Major Walter Ehle, the Gruppenkommandeur of II./NJG 1, and his crew, Ofw. Leidenbach (Bordfunker) and Uffz. Derlitzky (Bordschutze) were all killed. Here a guard of honour flanks the graves during the funeral ceremony, while three members of the unit present each of the crew's decorations on black cushions. The centre cushion carries the decorations of Major Ehle and is being held by Lt. Otto Fries.

LEFT: Undefeated by the enemy – the final resting place of Major Walter Ehle.

2. The code-name for this device was 'Tinsel'. It consisted of a microphone fitted in the engine bays of RAF bombers. Once a wireless operator had tuned into the German ground controller's wavelength, he would switch on the microphone and drown out the broadcasts with engine noise.

The effectiveness of these changes was put to the test on the night of 18/19 November 1943 when, following a two and-a-half month pause in which Bomber Command tried to improve the accuracy of its target marking, Harris recommenced his offensive against Berlin. The previous attacks against Berlin in August and September had not been deemed successful and it was now hoped that this problem would be overcome by the recent introduction of the new 'H2S' Mk.III.



ABOVE: A Bf 110 G equipped only with aerials for SN-2 radar. As SN-2 had a maximum range of 6.4 km but a minimum of 477 metres, which was still beyond visual range, 'Lichtenstein' radar was later added so that it was possible to continue to track the target down to 238 metres. The installation of aerials for both types of radar, however, as shown (*LEFT*), had an effect on the aircraft's directional stability. To overcome this the twin fin and rudder assemblies on the Bf 110 were modified to increase the surface area, as shown in the photograph at the bottom of page 129.

ABOVE: A spectacular view of an early Bf 110 G of III./NJG 3 raising clouds of dust as its engines are started. The use of 'Window', first used by the RAF during an attack on Hamburg on the night of 24/25 July 1943, rendered existing ground and airborne radar useless and it was not until October 1943 that this was overcome with the introduction of the new FuG 220 'Lichtenstein' SN-2 radar which operated on a different frequency. In the meantime, 'Zahme Sau' tactics dominated, with the conventional twin-engined fighters using FuG 227 'Flensberg' to home in on the RAF's 'Monica' tail-warning radar or various jamming transmitters. This aircraft is finished in a 74/75/76 scheme and has retained the traditional shark's mouth design of II./ZG 76, from which III./NJG 3 was formed in 1941. The aerials on the nose are for the FuG 220 SN-2 radar, and the pitot tube, normally on the starboard wingtip, has been relocated inboard to avoid interfering with the aerial for the FuG 227 'Flensburg' radar homing device.

LEFT: A Ju 88 G-6 showing the FuG 220 aerials on the nose and fairing on the canopy which housed the FuG 350 'Naxos' radar receiver. This equipment allowed Luftwaffe night fighters to home in on the transmissions from the 'H2S' navigation device in British bomber aircraft and was first introduced at the end of 1943. The fairing itself was offset to port and consisted of a plywood frame covered in canvas. Note the individual aircraft letter 'A' on the nose indicating that this machine was flown by a Staffelkapitän or a Gruppen-kommandeur, and that some lower parts of the radar antenna have been painted white with a red stripe as a warning to ground crews.

By the time this second phase of the Berlin offensive began, more night fighter aircraft had been equipped with the SN-2 radar. Although SN-2 was at first somewhat restricted by its minimum range of 477 metres, as an interim measure until improvements could be made, the night fighters were also equipped with simplified versions of the older, *'Lichtenstein'* BC, which had a minimum range of 238 metres. This compromise resulted in two sets of aerials being fitted to the nose of the fighter and, in the case of the Bf 110, eventually resulted in a change of flight characteristics which necessitated larger rudders.

Although a shortage of SN-2 equipment caused a delay of a further six months before there was sufficient to equip the entire force, the sets that were available were put to good use from the early autumn of 1943 and on the eight occasions when Berlin was attacked between November and December 1943, no fewer that 479 bombers[3] were shot down. During a number of these raids, the bomber stream became widely scattered due to poor weather conditions over Germany, and many of the errant aircraft became easy prey for *'Zahme Sau'* freelancing twin-engined night fighters. These bomber losses, combined with those from the earlier three raids, had already surpassed Harris' estimate of 500 for the entire offensive and his loss rate was averaging almost six per cent.

There was, nevertheless, no respite for the residents of Berlin, and as the new year began, the city was again attacked on the night of 1/2 January 1944 by 421 aircraft, all of which were Lancasters. Due to delays caused by the weather, the bombers were forced to fly a more direct route to Berlin which took them over Holland and made them more vulnerable to the night fighter units stationed there. Operating from Deelen in Holland, and flying a Ju 88 C equipped with SN-2 and *'Schräge Musik'*, *Major* Heinrich *Prinz* zu Sayn-Wittgenstein, the newly appointed *Kommodore* of NJG 2, managed to infiltrate the bomber stream and shoot down six of them. Another successful pilot that night was *Oblt.* Ludwig Meister, the *Staffelkapitän* of 1./NJG 4, who claimed the destruction of four Lancasters. All told, 16 bombers were shot down before they even reached Berlin and total losses for the raid totalled 28.

In a similar raid against Berlin the following night, the bomber stream passed over Holland on the outward and homeward legs of the flight. A further 27 Lancasters were lost as they battled their way towards the target, combating adverse weather conditions as well as approximately 150 to 200 night fighters. Running battles with the night fighters took place over Berlin as the bombers carried out their bomb runs and at least ten bombers were shot down over the target while others fell as they headed away from the city. Once again the *Nachtjagd* accounted for the majority of those lost, with 21 claims being submitted in all. For the next three weeks Berlin was reprieved from further attacks, partly due to a period of full moon, although other cities, such as Stettin on 5/6 January and Brunswick on 14/15 January, were raided.

Harris, frustrated by the poor bombing results of the previous raids, sent his bomber force back to Berlin on the nights of 20/21, 27/28, 28/29 and 30/31 January 1944, in what was a concerted effort to try and finish what he had started five months earlier. Despite attempts to reduce bomber losses by routing them further out over the North Sea, away from German night fighter bases in Holland and Belgium, Bomber Command still lost a total of 147 aircraft as a consequence of these operations.

By now the offensive had become a battle of attrition, and although the German night fighters had enjoyed some increased success, they too had suffered losses and since the attack against Peenemünde in August 1943, the *Nachtjagd* had lost 71 aircraft and some of its foremost night fighter pilots. Amongst those lost was *Major* Hans-Dieter Frank who had destroyed 55 bombers at the time of his death on 27/28 September 1943. Two nights later, *Hptm.* August Geiger, with 54 victories, was shot down and killed by an RAF night fighter over the Zuider-See. But by far the greatest blow to the *Nachtjagd* occurred on 21/22 January 1944, when it lost two of its most prestigious, and highest scoring, aces. On this particular night, Bomber Command's target was Magdeburg and two of the pilots operating against the bombers were *Major Prinz* zu Sayn-Wittgenstein and *Hptm.* Manfred Meurer, the *Kommandeur* of I./NJG 1. After shooting down five aircraft, and briefly becoming the *Nachtjagd's* highest scoring night fighter pilot with 83 victories, it is believed that Wittgenstein was killed when his Ju 88 was attacked by a roving British

BELOW: Major Heinrich Prinz zu Sayn-Wittgenstein, the Kommodore of NJG 2, with his crew at Rechlin in January 1944. In the middle of the group is Wittgenstein's Bordmechaniker, Kurt Matzüleit, and to his right is Friedrich Ostheimer, the crew's Bordfunker.

3. Figures taken from 'The Bomber Command War Diaries' by Martin Middlebrook and Chris Everitt.

Werner Streib

In terms of his personal achievement and his contribution to the development of night fighting during the Second World War, one of the most outstanding personalities of the *Nachtjagd* was Werner Streib.

Streib was born in the Black Forest town of Pforzheim on 13 June 1911, and after leaving school with his *Abitur*, spent a further three years training for a career in commercial finance. However, at the end of his examinations, Streib decided that he was not after all suited to a life in the business world and decided to join the Army. His formal application to join the *Heer* as a soldier was successful and he subsequently joined the 14. *Infanterie Regiment* in 1934. A year later, in March 1935, and shortly after having completed his basic infantry training, he heard about the formation of the *Luftwaffe* and immediately put in a transfer request to join this new arm of the services.

With his request accepted, Werner Streib entered the *Luftwaffe* as an officer cadet on 1 October 1935 and began training as an observer in a reconnaissance unit. However, this was a time of rapid expansion for the *Luftwaffe* and an increased demand for pilots, and in 1936 Streib was selected for fighter pilot training. After qualifying for his pilot's badge, he was promoted to *Leutnant* and posted to II./JG 132 *'Richthofen'*, then stationed at Jüterborg-Damm, some 70 km south of Berlin.

This *Gruppe,* like many others in the *Luftwaffe,* underwent a number of changes as the service continued to expand. For example, with the development of the Bf 110 twin-engined destroyer, II./ JG 132 was selected as one of the first units to receive this type and in November 1938 the *Gruppe* was redesignated I./ZG 141. Streib, together with other pilots from the *Gruppe,* received conversion training on the type and when war finally broke out in September 1939, the unit had been re-designated I./ZG 1 and was equipped with the Bf 110 C.

ABOVE: Following his 43rd night victory, Streib was decorated with the Oak Leaves to the Knight's Cross on 26 February 1943. On the very same day two other prominent night fighter pilots, Paul Gildner and Ludwig Becker, were both killed and posthumously awarded the same decoration.

During the invasion of Poland, Streib and I./ZG 1 participated mainly in bomber escort and ground support missions, and following the successful conclusion of this brief campaign, the *Gruppe* was transferred back to Neuhausen ob Eck in Southern Germany. Although Germany was now at war with England and France, the winter of 1939/40 proved a relatively quiet period and allowed many of the *Luftwaffe's* fighter units to rest and re-equip. Streib busied himself with his duties as Communications Officer for I./ZG 1 and, in February 1940, the unit received a new *Gruppenkommandeur – Hauptmann* Wolfgang Falck.

Streib had first met Falck at Jüterborg-Damm when they had both served with II./JG 132, and although neither of them realised it at the time, this association would not only cement a life-long friendship but would also shape their future careers in the *Luftwaffe.*

The period of quietude known as the 'Phoney War' came to a dramatic end on 9 April 1940 when, under the code name *'Weserübung'*, Hitler launched the invasion of Denmark and Norway. During this operation, I./ZG 1 took off from its airfield at Barth in Northern Germany and helped secure the airfield at Vaerlöse-Copenhagen. Although the Danes capitulated almost immediately in the face of insurmountable German forces, I./ZG 1 was forced to continue flying support missions to Norway as resistance to the *Wehrmacht's* invasion continued to grow. Operating from their recently captured airfield at Aalborg in Northern Denmark, Falck's *Gruppe* came under direct attack in nuisance raids conducted by Bomber Command aircraft returning from night attacks on targets in Germany.

As a consequence of these attacks, Falck, with other selected pilots from his unit, including Streib, attempted to intercept these bombers, and this experience resulted in Falck submitting a report on the possibilities of night fighting to the *Luftwaffe's* High Command. But on 10 May 1940, and before this report could be properly evaluated, Germany invaded France and the Low Countries, and any thoughts of night fighting were shelved. On the opening day of the offensive, however, Streib found himself operating against aircraft of Bomber Command which were flying day missions, and following a short skirmish, he attacked a Bristol Blenheim which he destroyed as his first and only daylight victory.

BELOW: It is believed that this photograph was taken during the early phases of the invasion of France in May 1940. At that time Werner Streib (far left) was the Intelligence Officer for I./ZG 1. On the far right is Oberstleutnant Joachim-Friedrich Huth, the Kommodore of ZG 26 'Horst Wessel', and, to his right, Hptm. Wolfgang Falck, the Kommandeur of I./ZG 1.

Following the bombing of Rotterdam on 13 May 1940, Bomber Command began attacking targets in Germany itself, and to counter these Göring ultimately ordered the formation of the *Nachtjagd,* and when Falck was made *Kommodore* of NJG 1 – the first night fighter *Geschwader* – I./ZG 1 was redesignated I./NJG 1. Operating from Gütersloh as the *Staffelkapitän* of 2./NJG 1, Streib shot down a Whitley bomber from 51 Squadron in the early hours of 20 July 1940, and so achieved the *Nachtjagd's* first success. The following month, Streib shot down a Wellington and a Hampden on the night of 30/31 August, and during raids against Berlin and other targets in Germany on the night of 30 September, he was credited with three more victories.

On 6 October 1940, after his seventh night victory, Streib received the Knight's Cross and promotion to *Hauptmann.* Two

RIGHT: Still bearing the wounds he received during an encounter with an RAF bomber, Werner Streib enjoys a quieter moment during a garden party at Wolfgang Falck's headquarters at Deelen in Holland.

ABOVE: Streib, who was well-known for his sense of humour, displays his obvious pleasure at having just received the Knight's Cross, presented to him by the Luftwaffe's Commander-in-Chief, Hermann Göring, at the RLM in Berlin on 7 October 1940.

weeks later, he was appointed *Gruppenkommandeur* of I./NJG 1 and took over command from *Hptm.* Günther Radusch. Streib added one further victory to his tally by the year's end, but in the first half of 1941 raised his total to 14 victories. At this time, I./NJG 1 was operating from Venlo on the Dutch/German border and was ideally located to intercept RAF bombers flying over Holland to attack targets in the German homeland.

As the number of RAF raids increased, so also did the bombers' losses, and the likes of such successful night fighter pilots as Werner Streib, Helmut Lent, Paul Gildner and Ludwig Becker, became household names. By the end of 1941, Streib had claimed a total of 22 bombers destroyed, making him the Nachtjagd's highest scorer, closely followed by Gildner with 21 and Lent with 20.

Streib's first victories of 1942 came on the night of 26/27 March when he shot down two Wellington bombers returning from a raid against Essen. Two further Wellingtons fell to his guns in the early hours of 11 April, and this was followed on the night of 30/31 May by two Whitleys which were taking part in the first 'Thousand Bomber Raid' against Cologne. Streib also flew during the second of these raids aimed against Essen on the night of 1/2 June, and claimed the destruction of a Wellington approximately five kilometres from his airfield at Venlo. Although more of his time was taken up with his duties as *Kommandeur,* he continued to fly as many operations as possible, and at the end of 1942 Streib was credited with the destruction of 39 bombers.

Streib was promoted to *Major* on the first day of 1943, and on 26 February he was awarded the Oak Leaves to the Knight's Cross in recognition of his 42 confirmed kills. As a highly-respected night fighter pilot, Streib was often called upon to fly new types of aircraft, one of which was the Heinkel He 219 *'Uhu'*. Thus, on the night of 11/12 June 1943, after numerous test flights, Streib took off in an He 219 A-O coded G9+FB and became the first night fighter pilot to fly the type on an operational sortie. In a demonstration of the He 219's capabilities, Streib penetrated the bomber stream and shot down four Halifax bombers and a Lancaster. Unfortunately, this outstanding debut of the aircraft was somewhat marred when a fault with the electrically-operated landing flaps prevented

RIGHT: In August 1942, a delegation of Italian Air Force officers, interested in forming their own night fighter force, was invited to visit several units of the Nachtjagd in Holland and Germany. One of the units involved was I./NJG 1, stationed at Venlo and commanded by Streib, seen here in conversation with several of the Italian officers. Falck is shown on the far left and General Josef Kammhuber is on the far right.

ABOVE: Photographed during an informal meeting at Deelen in early 1941, Werner Streib is seen here seated next to the Kommandeur of I./NJG 3, Hptm. Günther Radusch, who is in turn seated next to Major Wolfgang Falck.

RIGHT: On 30 June 1943, Werner Streib bade farewell to I./NJG 1, which he had commanded since 18 October 1940 and, promoted to Major, he became Kommodore of NJG 1. To Streib's left is the officer who succeeded him as Kommandeur of I./NJG 1, Hauptmann Hans-Dieter Frank. Looking on from the far end of the line is Leutnant Wilhelm Johnen.

them from locking in place, and during the final approach the He 219 dropped onto Venlo's concrete runway with such force that the aircraft broke into several sections. One of these was the cockpit which slid for some 50 metres before coming to rest. Amazingly, both Streib and his *Bordfunker,* Helmut Fischer, were able to extricate themselves from the wreckage and suffered barely a scratch.

On 1 July 1943, following the promotion of Wolfgang Falck to Oberst and his transfer to Berlin, Streib was made *Geschwaderkommodore* of NJG 1. Despite an increasingly bureaucratic workload, he continued operational flying and scored his 60th kill on 26 July. He was promoted to *Oberstleutnant* on 1 October 1943, and by the beginning of 1944 his tally had reached 67. On 11 March 1944, he became the 54th recipient of the Oak Leaves and Swords to the Knight's Cross, and thereby became one of only four night fighter pilots to receive this high decoration[1]. As recognition of his leadership and organisational abilities, Streib was transferred from front-line duties and promoted to *Inspekteur der Nachtjagd* on 1 April 1944, in which position he was working under the command of the *General der Jagdflieger, Generalmajor* Adolf Galland. He remained in this post, with the rank of *Oberst*, until the war ended in May 1945.

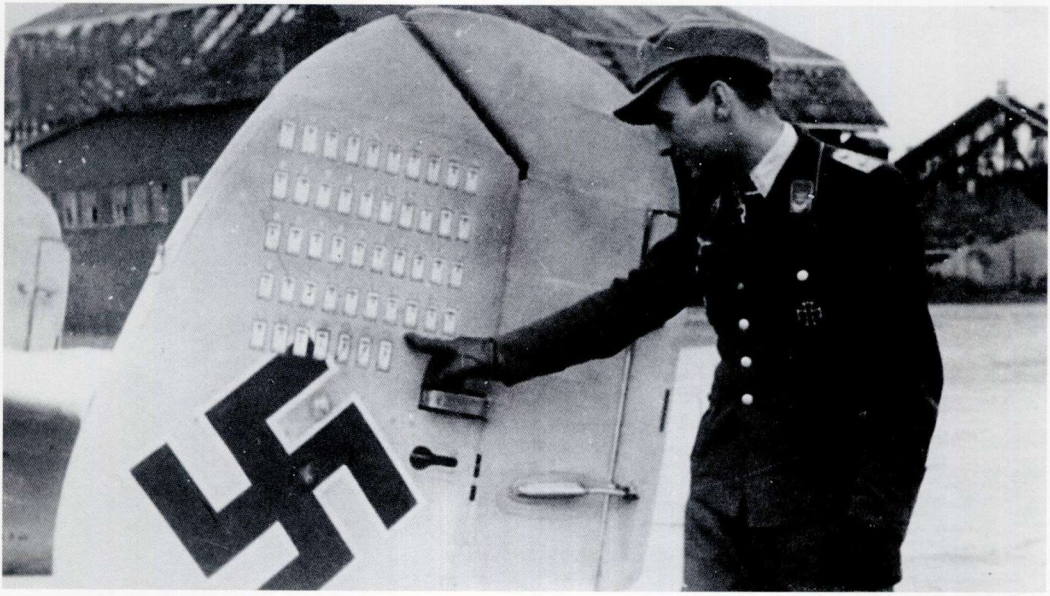
With the return of peace, Streib moved to Munich in 1947 with the wife he had married during the war, started a family and became a successful businessman in the field of food packaging. However, when the new *Bundesluftwaffe* was formed in 1956, he rejoined the service and was placed in command of the *Flugzeugführerschule* at Landsberg.

Streib retired in 1966 the rank of *Brigadegeneral,* having served his country for 21 years. He died on 15 June 1986 at the age of 75 and was buried in the *Ostfriedhof* in Munich.

RIGHT: All of the top-scoring and most successful night fighter pilots attributed their success to the expertise and skill of their Bordfunker. Between January and June of 1943, Helmut Fischer flew with Werner Streib, and together they shared 16 victories, which included five on 12 June 1943, with the Heinkel He 219. In addition, Fischer had also participated in at least another ten kills with Reinhold Knacke and Bruno Eikmeier. Fischer finished the war as an Oberfeldwebel and holder of the German Cross in Gold.

LEFT: On 11 March 1944, Streib became the 54th member of the Wehrmacht to be decorated with the Swords after shooting down a total of 67 bombers in the defence of the Reich. Despite the fact that his operational flying career ended when he was appointed Inspekteur der Nachtjagd, Streib finished the war as the fourth highest-scoring night fighter pilot after Schnaufer, Lent and Wittgenstein.

1. Helmut Lent, Heinrich Prinz zu Sayn Wittgenstein and Heinz Schnaufer.



intruder[4]. Some 30 minutes later, Manfred Meurer lost his life when his He 219 A-0 collided with the Lancaster he was attacking and both aircraft crashed 22 kilometres east of Magdeburg. This was Meurer's 65th and final victory.

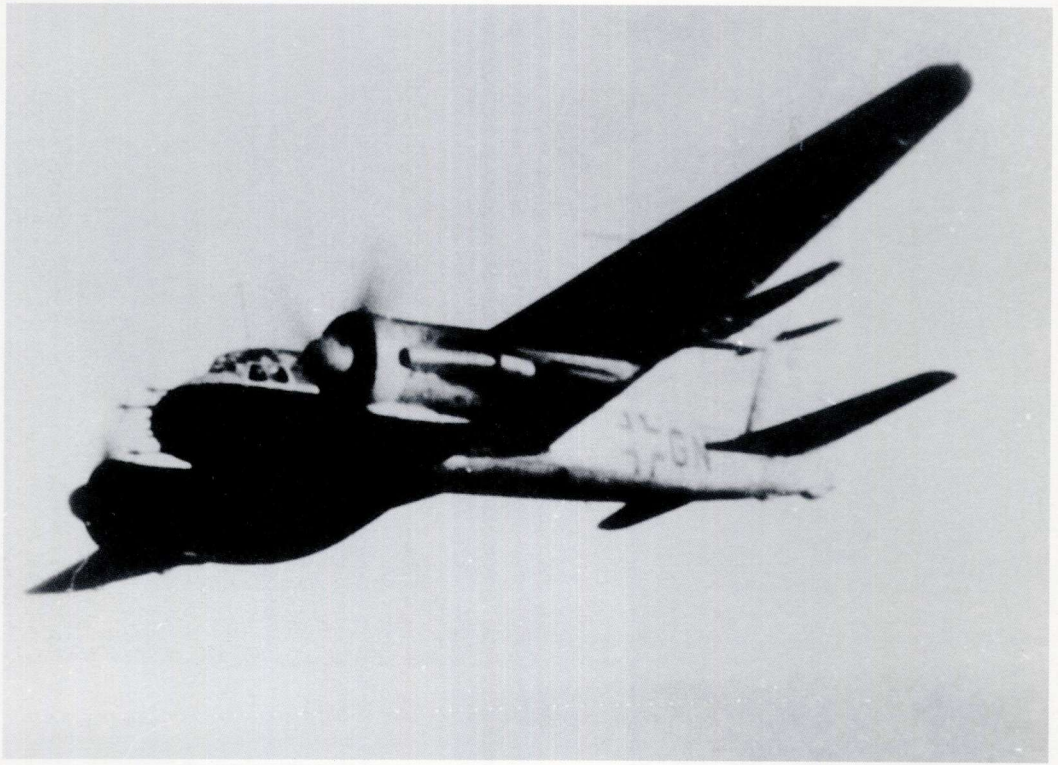
Following the attack on 30/31 January 1944, there was a two week lull in the offensive during which Harris made good his losses. Then, on the evening of 15 February, the German early warning radar detected a large bomber force crossing the North Sea. This was the largest number of aircraft assembled to attack Berlin and consisted of 891 bombers, 561 of which were Lancasters. As the bombers crossed the east coast of Denmark they were attacked by *Gruppen* from NJG 3 and NJG 5 and harried all the way to the target area. By the time the outskirts of Berlin was reached, the German countryside was already littered with at least 20 destroyed bombers. On the return leg, the bombers flew over northern Holland and were attacked by fighters from III. and IV./NJG 1 which claimed the destruction of a further seven aircraft. A total of 43 bombers was lost, and among the most successful night fighter pilots that night was *Hptm.* Erhard Peters from 9./NJG 3, who claimed five, and *Oblt.* Heinz Schnaufer, who claimed three Lancasters and so increased his personal tally to 47.

Four nights later, the *Nachtjagd* enjoyed another notable victory during a raid against Leipzig when everything seemed to go wrong for the bombers almost as soon as they had taken off. Due to incorrectly forecast winds by the meteorological office, the bomber stream became widely dispersed and many of them reached the target too early. This resulted in large numbers of bombers circling the target area waiting for it to be marked by the Pathfinders, and some 20 bombers were shot down by Flak while at least four others were lost in collisions. Furthermore, a diversionary raid to Kiel had failed to draw away many night fighters and, as a consequence of this, the bomber stream found itself under attack all the way to Leipzig. Conditions were ideal for *'Zahme Sau'* and the night fighters reaped the benefit of good weather conditions and a widely dispersed bomber stream. In all, 78 bombers were lost, the equivalent of 9.5 per cent of the force. This was a staggering loss for Bomber Command and an unequivocal success for the German defences.

As a direct result of this raid, Harris turned away from Berlin and began to target industrial cities in the south of Germany which had, up until now, been spared much of the bombing. This was a shrewd decision for the path to these targets would take the bombers over France and thus well away from many of the night fighter bases in Holland and Belgium. For six weeks, such cities as Frankfurt, Augsburg and Stuttgart were attacked with considerably reduced losses. In the meantime, however, Harris was acutely aware that he would be forced to divert his resources to assist in the preparations for D-Day and he was determined to have one more go at the German capital before this happened. On 24/25 March 1944, therefore, he committed his force to their 19th and final raid against Berlin.

ABOVE: Oblt. Heinz-Wolfgang Schnaufer of 12./NJG 1 photographed in February 1944 with the tail of his Bf 110 G, W.Nr. 720260, which was then marked with 47 victory bars. The last of these victories were all claimed on the night of 15/16 February when, between 22.58 and 23.33 hrs, Schnaufer shot down three Lancasters. Schnaufer ended the war with the rank of Major and a total of 121 night victories claimed in only 164 sorties. He was awarded the Ritterkreuz in December 1943, the Oak Leaves in June 1944, the Swords a month later and the Diamonds on 16 October 1944 when he reached 100 victories. Post-war, Schnaufer was seriously injured in a road accident in France on 13 July 1950 and died two days later.

4. There is some evidence to suggest that Wittgenstein was attacked by a Mosquito from 141 Sqn., piloted by F/Sgt. D. Snape and F/O L. Fowler.

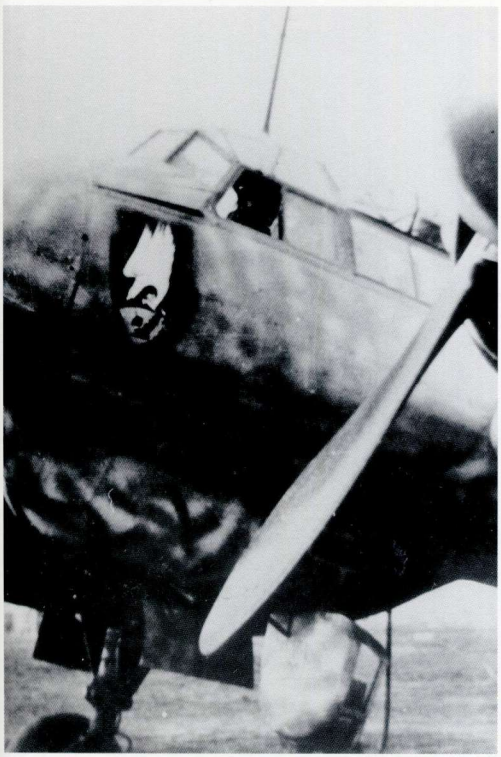


ABOVE: A Ju 88 C-6 of 5./NJG 2, probably photographed in late 1943, clearly showing the aerials for the FuG 202 'Lichtenstein' BC radar on the nose. The night fighter versions of the Ju 88 C series were originally introduced relatively slowly due to limited availability of the radar and were later replaced by the Ju 88 G which began to appear in mid-1944. Given the period in which this machine was photographed, the full code would almost certainly have been R4+GN, although in 1944 the Geschwader's operational code was reversed to '4R'.

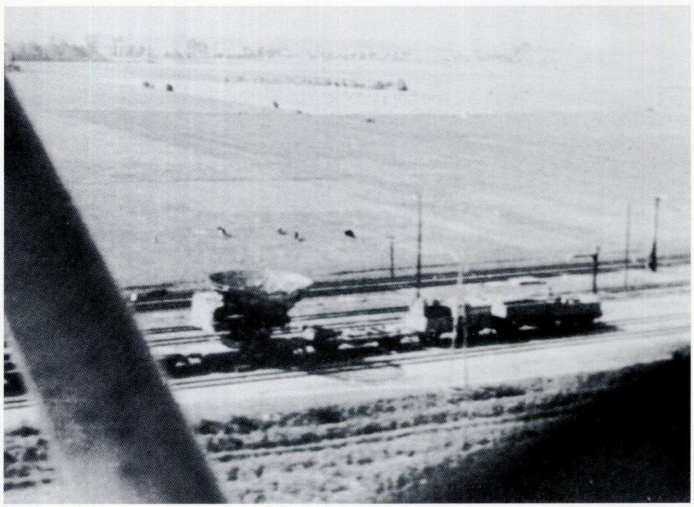
High winds disrupted this raid from the very start and, once again, the bomber stream became spread out. However, although *'Zahme Sau'* night fighter operations were made easier, very few of the bombers were lost as they made their way to Berlin because of their northerly route over the North Sea. Once they reached Berlin, they were engaged by all three *'Wilde Sau' Geschwader* which had been waiting for them over the city and subsequently submitted claims for the destruction of 17 bombers. Meanwhile, almost the entire *Nachtjagd* was airborne with a great many of its fighters circling to the south, waiting for the bombers to emerge from over the city. In the first 60 miles of their homeward journey, 19 bombers were shot down, but more losses were to follow. Having monitored the progress of the bomber stream, the German ground controllers had shrewdly kept NJG 1 on the ground until certain of the bombers' return heading. Once the bomber stream had been detected heading westwards across Northern Germany, the ground controllers, guessing it would probably fly over Holland, ordered NJG 1 to scramble all available units. Thus the greatest losses occurred as the bombers struggled back over Germany and into Northern Holland. Among the successful night fighter pilots was Heinz Schnaufer, the recently appointed *Kommandeur* of IV./NJG 1, who took off from St. Trond and shot down three Lancasters, while his friend Martin Drewes, *Kommandeur* of III./NJG 1, also claimed three bombers. Total Bomber Command losses amounted to 72 aircraft and, despite Harris' ambition to destroy the city, the raid proved to be the last major attack mounted against Berlin for the remainder of the war.

Much of the success achieved by the Nachtjagd during this prolonged Berlin offensive was due to the progressive and continual integration into the overall defensive network of the *'Zahme Sau'* method of night fighting. Encouragingly, as the numbers of pilots who adopted this style of night fighting increased, so did the occurrences of multiple victories by individual crews. Furthermore, with the abandonment of *'Himmelbett'* in favour of *'Zahme Sau'*, many more pilots, regardless of their experience or personal success, could actively participate in operations and a greater number of them became aces. The *Nachtjagd* had shown great resilience in overcoming most of the British attempts to jam its ground and air radar systems, and had actually grown stronger and more formidable as a result. At this time, Helmut Lent was its highest-scorer with 85 kills, followed by Werner Streib with 65 and Rudolf Schoenert with 60 victories. Buoyed up by its recent victories, the *Nachtjagd* was about to experience its finest hour.

ABOVE: A Ju 88 C-6 night fighter of the 4. Staffel of an unidentified Nachtjagdgeschwader. The camouflage consists of 76 undersurfaces and plain 75 on the uppersurfaces which has been extended well down the fuselage sides. The 75 was then oversprayed with what appears to be 76 but in such a way that small patches of 75 remained. Such a finish, referred to in this work as 'reverse mottling', is often mistaken for 75 mottles applied over 76.



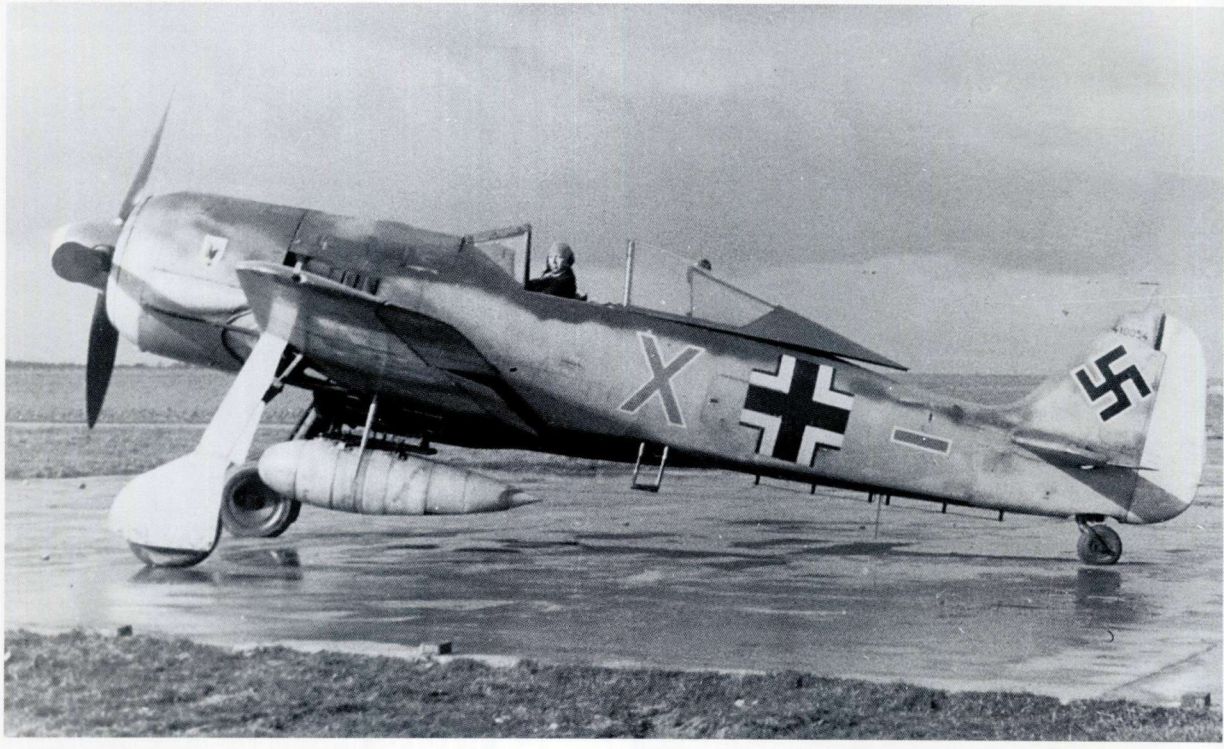
LEFT: Another example of a camouflage finish probably modified at unit level may be seen on this Ju 88, believed to have belonged to NJG 2. Note that the mottled uppersurface finish, which already comes well down the fuselage sides, has been further extended with sprayed streaks to include the ventral gondola.



ABOVE: Generally, Luftwaffe night fighters operating on the Eastern Front lacked airborne radar equipment and crews were vectored to intercept enemy aircraft by ground control alone. For increased mobility during such Eastern Front operations, a few Würzburg-Riese radars with their associated equipment and personnel were mounted on a series of railway wagons. The unit shown here belonged to 'Sumatra II', a mobile station which operated in cooperation with NJG 100.

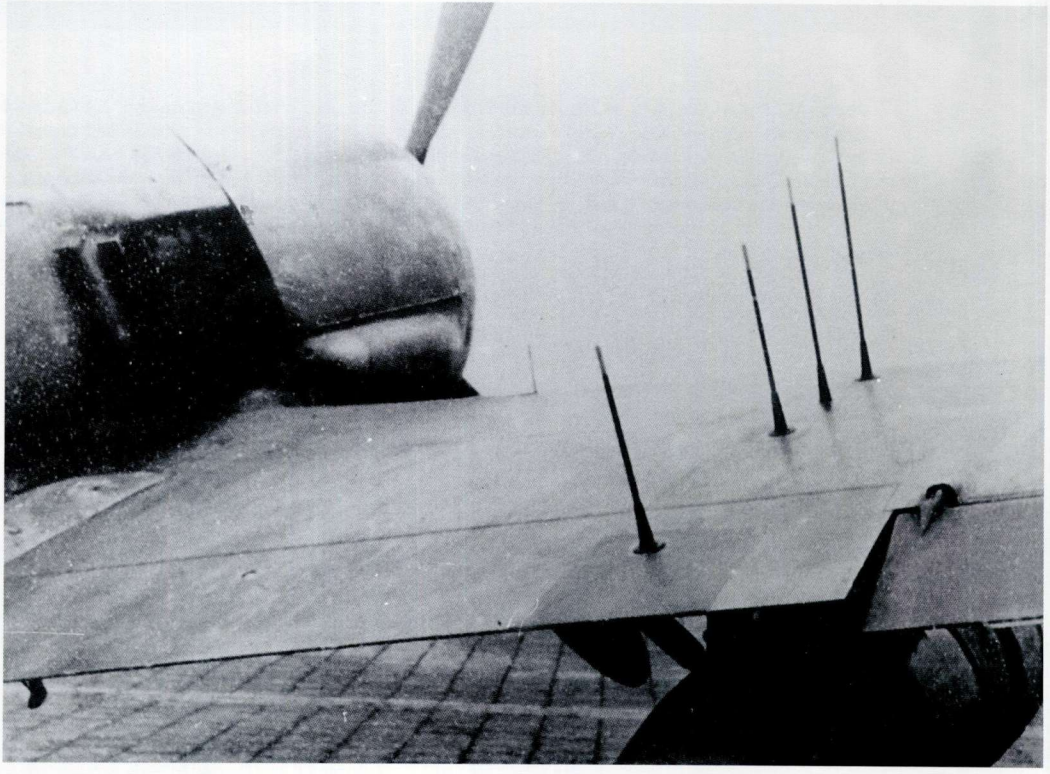
BELOW: For a short time in 1943, NJG 100 was under the command of Major Heinrich Prinz zu Sayn-Wittgenstein. In this photograph, he is seen examining a weapon recovered from the wreckage of a Soviet aircraft.

ABOVE RIGHT, BELOW AND OPPOSITE PAGE: In November 1943, Oberst Walter Grabmann became Kommandeur of 3. Jagddivision and was a frequent visitor to the units under his command. The photograph *(ABOVE RIGHT)* shows Grabmann at Störmede on 10 April 1944 with Major Heinz Bär (left), the Kommandeur of II./JG 1, and Oberst Walter Oesau (right), the Kommodore of JG 1. Parked in the background is Grabmann's personal Fw 190 A-5. *(BELOW AND OPPOSITE PAGE)* is another Fw 190 A-5, W.Nr. 410054, which Grabmann first flew in July 1943 when he was Jagdfliegerführer Holland, retained after his appointment as Kommandeur of 3. Jagddivision, and continued to fly until at least May 1944. The 3. Jagddivision, which had a link via the 1. Jagddivision to the original Nachtjagddivision, controlled NJG 1, NJG 2, NJG 4 and NJG 5, hence the 'Englandblitz' badge of the Nachtjagd on the aircraft's engine cowling. Grabmann, who was promoted to Generalmajor on 1 August 1944, remained with 3. Jaddivision until 1945.



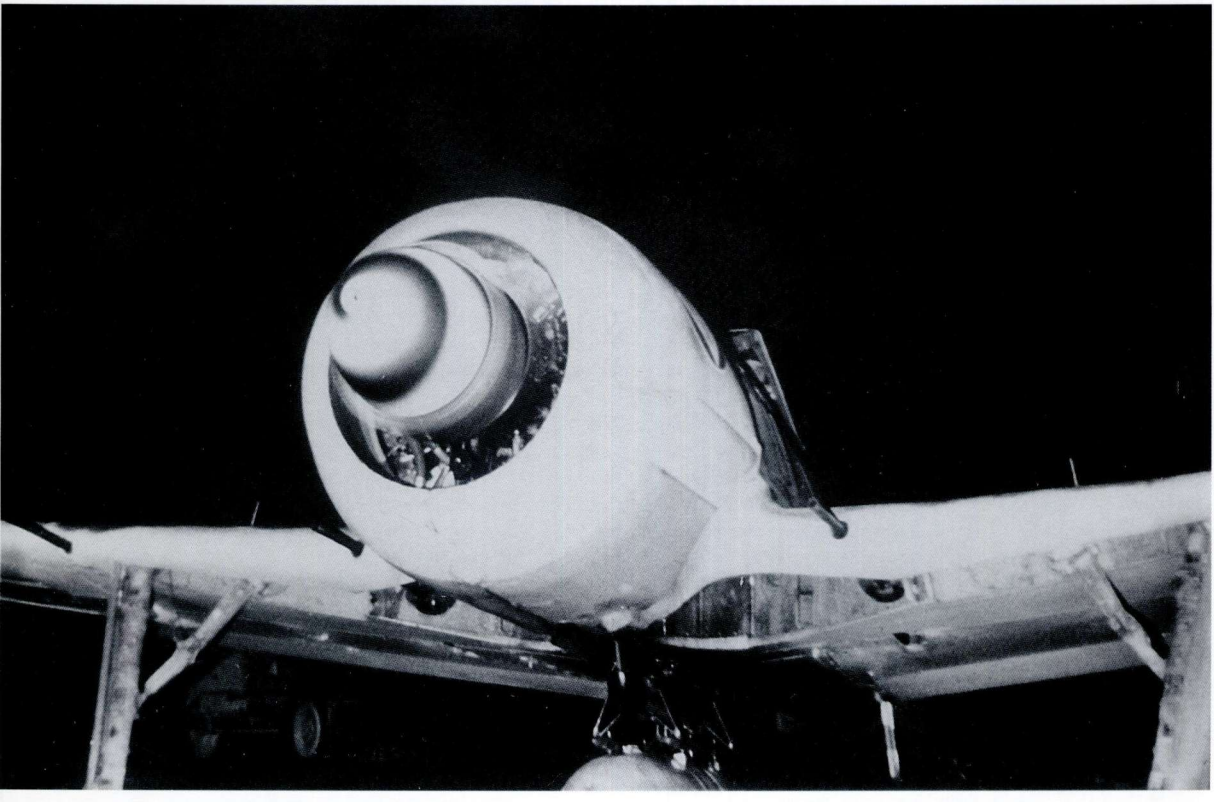
Focke-Wulf Fw 190 A-5, W.Nr. 410054, flown by Oberst Walter Grabmann, 1943-1944
This aircraft was camouflaged in the standard mid-war 74/75/76 day fighter scheme and the green 70 spinner had a white ring near the tip. Although this aircraft has elsewhere been identified as 'Red X', careful comparison in the accompanying photographs between the tone of the letter and the known yellow areas under the wingtips and under the nose indicate that the aircraft letter was also yellow, edged in white. The badge of the Nachtjagd was applied to the engine cowling and the aerials under the fuselage were non-standard.

ABOVE: An Fw 190 A-6 coded 'Black 8' of 2./JG 300 in the autumn of 1943 showing the FuG 217 'Neptune' aerials mounted on the wings and in front and behind the canopy.



RIGHT: A close-up of another Fw 190 night fighter fitted with FuG 217 aerials. This example was equipped with underwing long-range tanks.

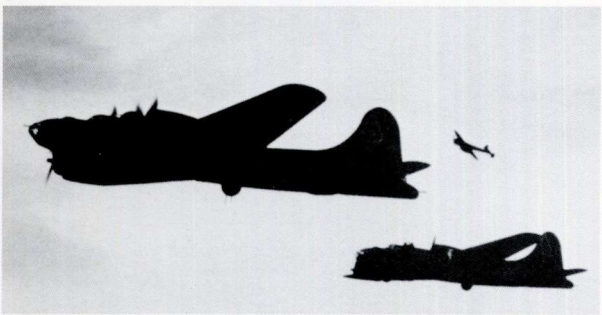
LEFT AND BELOW: Fw 190s of JG 300 preparing for a night sortie.



The Nuremberg Raid

After its successes during the early months of 1944, morale within the *Nachtjagd* was now high. The force had emerged from a difficult period and although it may have seemed that a full recovery was impossible, it had quickly reorganised itself until it was once again a potent and dangerous adversary. Indeed, its effectiveness and the increasing losses inflicted by the defences on Bomber Command during the 'Battle of Berlin', many of which had been due to German night fighter action, had led Harris to end his offensive. But Harris was still convinced that his policy of area bombing was correct and that this was the only way to bring the war to a swift conclusion. He also knew that he was quickly running out of time for, as D-Day approached, his bombers would soon be required to divert to tactical targets in preparation for the invasion.

On 26/27 March 1944, just two days after the last Berlin raid, Harris sent 705 bombers to bomb the industrial city of Essen in the Ruhr. After so many recent attacks against targets deep in Germany, the ground controllers monitoring the course of the bomber stream expected an attack somewhere in central Germany and the shallow intrusion took them completely by surprise. Consequently, a great many of the available night fighters were patrolling in the wrong area and only a small number of them actually came into contact with the bombers. With such little opposition, combined with accurate target marking by the Pathfinders, significant damage was caused to Essen for the loss of only nine bombers. *Hptm.* Paul Zorner, the *Staffelkapitän* of 8./NJG 3 claimed three of these, while *Major* Wilhelm Herget, the *Gruppenkommandeur* of I./NJG 4, claimed two others, but overall, it was a very disappointing night for the *Nachtjagd* which also lost 20 of its own aircraft in the process. This was an unacceptably high loss rate and one that, if sustained, it could ill afford.



ABOVE:
On 20 February 1944, the USAAF began a series of long-planned attacks against German aircraft factories. This photograph was taken on 22 February, when 289 B-17s of the US 1st Bombardment Division attacked Ochersleben, Aschersleben, Halberstadt and Bernburg but lost 38 bombers. Although the US attacks continued for a week, it was on this date that Luftwaffe night fighter pilots from NJG 3, NJG 5, NJG 6 and NJG 102 achieved their greatest success and claimed a total of 11 victories. Here, a Bf 110 is seen attacking B-17s of the 91st Bombardment Group.

However, four nights later, on 30/31 March 1944, the situation was dramatically reversed in what would be regarded as the *Nachtjagd's* most successful defensive action. Relieved by the low losses incurred during the Essen attack, Harris now planned a maximum-effort raid against Nuremberg, a city of economical and political importance to the Nazi state. A force of 795 aircraft was gathered together from 51 Squadrons, the vast majority of which were Lancasters. RAF planners, in an attempt to divert some of the night fighters away from the main force, sent 49 Halifaxes to the south of Heligoland to lay mines, while Mosquitoes were tasked with attacking night fighter airfields and carrying out spoof attacks against Aachen, Cologne and Kassel.

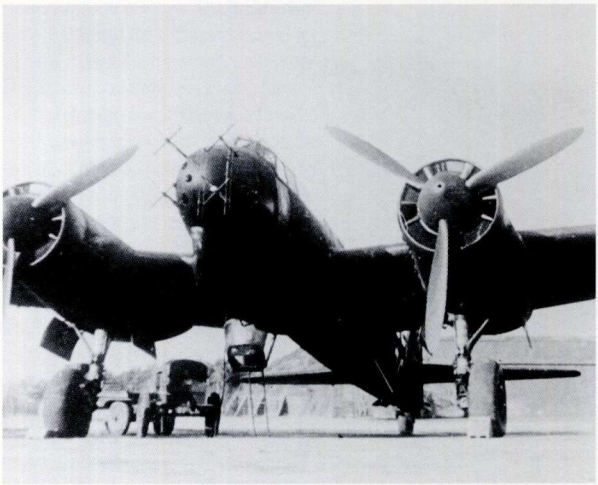
Monitoring the increased RAF radio and 'H2S' activity, the Germans correctly anticipated that a large-scale attack was being planned for that evening but were unable to deduce which city might be the target. Once the main force had taken off, it was tracked by German radar and fighters were assembled at two radio beacons; *'Ida',* near Bonn, and *'Otto',* in the vicinity of Frankfurt/Main. Although the bombers released bundles of 'Window', which masked the individual aircraft, this tactic was of little avail. German controllers had since learnt to gauge the direction of the bomber stream from its radar returns and more German night fighter aircraft were now equipped with the SN-2 interception radar which was unaffected by 'Window'. On this night, not only were the bombers detected by *'Freya'* and SN-2 radar, but the weather, in which the bombers were clearly visible, played an integral part in the events of the night and was almost wholly responsible for what proved to be a disaster for Bomber Command.

High cloud cover had been predicted during the planning stages of the operation and it was hoped that this would mask the moon, which was almost full at that time of the month. However, a reconnaissance flight on the morning of the attack revealed that the high cloud cover would not materialise to conceal the bombers but that cloud would cover the city itself. In spite of the unfavourable weather reports, Harris unwisely ordered the operation to proceed.

The bombers flew across Belgium on a south-easterly heading before turning east as they neared the town of Charleroi. It was as they approached the Belgian-German border that the first bombers began to encounter night fighters. It is estimated that at this point there were over 200 night fighter aircraft from some 23 *Gruppen* in the air, all of which were heading for the *'Ida'* and *'Otto'* radio beacons. Unfortunately, the course of the bombers was such that it took them towards these beacons

and the bombers flew straight into a trap. The first bomber shot down during the Nuremberg raid was a Lancaster from 467 Sqn. that was intercepted by *Hptm.* Martin Drewes of III./NJG 1, who positioned himself 50 metres below the bomber and opened fire with his *'Schräge Musik',* setting one of the bomber's wings ablaze. The doomed bomber remained airborne for five minutes and crashed to the north-east of Spa, becoming Drewes' 16th victory.

Drewes had encountered the bomber stream while still making his way to *'Ida',* and within minutes of his victory other fighters from bases in Holland, Belgium and France were also making contact with the bomber stream. Conditions for *'Zahme Sau'* were perfect. One of the effects of the change in cloud cover was a change in the forecast wind speed, which caused the bomber stream to become scattered over a very wide area. In addition, because of the cold, clear air, some of the bombers were leaving condensation trails, and these, together with the bright moon, indicated the direction in which the bomber stream was headed and assisted the night fighters in locating their targets. Having turned eastwards, the bombers now faced a long straight flight of 265 miles, known as the 'Long Leg' until, reaching the vicinity of Oberstadt, they would turn south towards Nuremberg on a shorter, straight leg of about 79 miles.



ABOVE:
A Ju 88 C-6 with the four aerials for FuG 202 'Lichtenstein' BC or FuG 212 'Lichtenstein' C-1 radar and still wearing the early overall black night finish. This particular machine almost certainly served with NJG 2 which retained the type until well into 1944, while other units continued to operate the type until the surrender in May 1945.

Skilfully guided by the controllers, the night fighters had infiltrated the bomber stream at a very early stage and wreaked such havoc that by the time the bomber stream reached the turning point at the end of the 'Long Leg', 41 Lancasters and 18 Halifaxes had been shot down in the previous hour. A good many of the night fighters were fitted with *'Schräge Musik'* and used the weapon to such great effect, that many of the bomber crews shot down were unaware that a fighter had been responsible.

Paradoxically, however, the most successful pilot that night, *Oberleutnant* Martin 'Tino' Becker of I./NJG 6, did not have *'Schräge Musik'* fitted to his Bf 110 and accomplished all his victories using only his forward-firing armament. Becker was already an established ace with 19 victories and had shot down six bombers during an attack against Frankfurt on 22/23 March. On the night of the Nuremberg raid he took off from Mainz-Finthen at 23.43 hrs. and set course for *'Ida'.* He too happened across the bomber stream and shot down a Halifax[1] at 00.20 hrs to the south-west of Cologne. Becker's preferred style of attack involved trailing the target to starboard, usually at a distance so that he could not be seen by the rear gunner. Then, at the right moment, he would sweep across and underneath the bomber and, raising the nose of his aircraft, fire a long, accurate burst into its port engine. This is the method he used on this night and three minutes after having shot down his first bomber he proceeded to shoot down a second, followed ten minutes later by a third. During the next 17 minutes, he continued to follow the bomber stream eastwards and dispatched three more aircraft in much the same way. After his sixth victory, he returned to Mainz-Finthen, refuelled and was airborne again 30 minutes later.

In the meantime, the first of the bombers had already reached the last turning point and were heading south towards Nuremberg. By the time the main force had reached the city and carried out their bomb runs, almost 80 had been shot down since the first loss over Spa in Belgium. In view of all their difficulties, that approximately 512 bombers were still able to reach Nuremberg was an amazing achievement. Unfortunately, however, despite their courage and determination, the results of the bombing were disappointing. Thick cloud covered the city and the bombing was spread out over a wide area, causing very little damage and few casualties.

As the bombers, now considerably fewer as a result of the losses, continued on the homeward leg of their journey, many of the German night fighters were obliged to land to refuel and re-arm, but accounted for a further five bombers shot down between the German border and the Channel. One of

1. According to Martin Middlebrookes' 'The Nuremberg Raid' this aircraft was a Halifax from 432 Sqn. piloted by P/O C.R. Narum RCAF. Only three of the seven-man crew survived the encounter.

ABOVE: Eckart-Wilhelm von Bonin began his career with the Luftwaffe in November 1937. After the war began, he transferred to the Nachtjagd in October 1940 and achieved his first kill victory with 6./NJG 1 on 10/11 May 1941, when he shot down a Wellington. He went on to claim a total of 37 bombers and was awarded the Knight's Cross on 5 February 1944.

these was Martin Becker's seventh and final encounter of the night, which occurred over Saarbrücken at 03.15 hrs. As the bomber, which has since been identified as a Halifax of 429 Sqn., cleared the town, it was attacked by Becker and one of its wings set on fire. The entire crew was able to abandon the doomed aircraft before it crashed at Eichen in Luxembourg. Although this last kill was carried out using *'Himmelbett'*, Becker's other victories had all been achieved using *'Zahme Sau'* and demonstrated how effective this type of night fighting could be. Three weeks later, on 20 April 1944, Becker's achievement was recognised when he was awarded the Knight's Cross.

Many other pilots were also successful during the Nuremberg raid, and while it had presented an ideal opportunity for a large number of newer pilots to obtain their first night victories, some of the more experienced also claimed victories including multiple kills by *Lt.* Wilhelm Seuss of 11./NJG 5, *Lt.* Hans Raum of 9./NJG 3, *Ofw.* Rudolf Frank of 3./NJG 3 and *Oblt.* Helmuth Schulte of 4./NJG 5, each of whom claimed four victories.

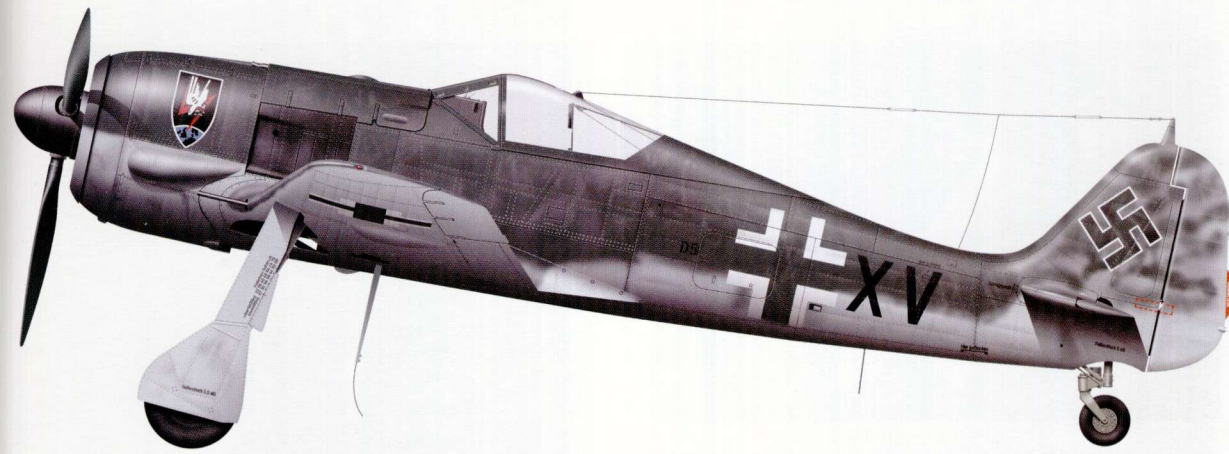
The Nuremberg raid resulted in the total loss of 95 bombers and a further nine crash-landed back in England. The *Nachtjagd,* and indeed all facets of the German defensive network, had performed exceptionally well, and as a result of close cooperation had been able to inflict on Bomber Command its heaviest loss of the war. However, one battle does not win a war, and the Nuremberg raid proved to be the last occasion on which the *Nachtjagd* would achieve such an overwhelming victory.

Meanwhile, since early March, Bomber Command had been involved in a small number of bombing operations over France and Belgium, attacking railways, military installations, ammunition depots and munitions factories in preparation for the invasion of the European mainland. In April, following the Nuremberg operation, the number of these raids increased dramatically, resulting in a marked decrease in the number of attacks against Germany, and this allowed the night fighters to temporarily transfer to airfields in France to support night fighter units already operating there[2]. II./NJG 1, under the command of *Hptm.* Eckart-Wilhelm von Bonin, was transferred from St. Trond in Belgium to St.Dizier, south-west of Verdun, along with I./NJG 5, under the command of *Hptm.* Werner Hoffmann. In addition, III./NJG 1 under *Hptm.* Martin Drewes and *Hptm.* Paul Zorner's III./NJG 5 were transferred from their respective airfields to Laon-Athies in Northern France.

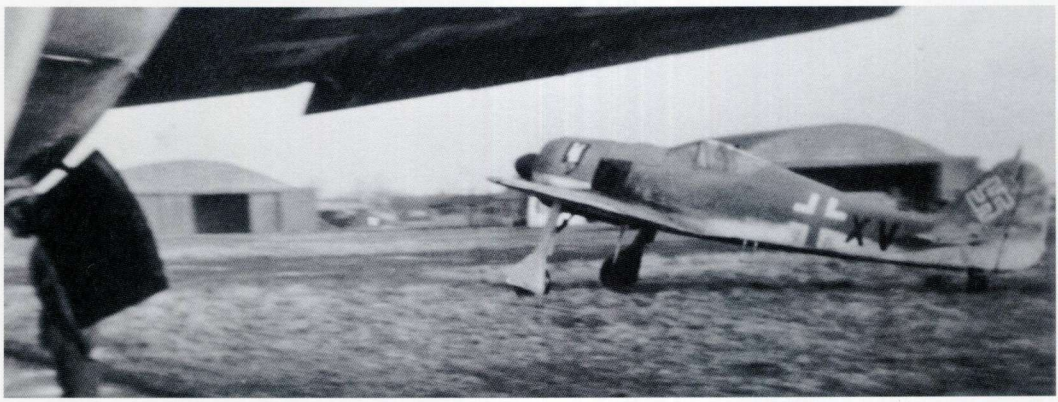
These *Gruppen* experienced varying degrees of success during this period depending on the location of Bomber Command's targets, for if the targets were near the coast, the raids were invariably over before the night fighters could react. However, the *Nachtjagd's* most notable success came on the night of 3/4 May 1944, when 346 Lancasters attacked a German military camp near Mailly-Le-Camp, approximately 90 miles west of Paris. The target was well marked and, initially, the raid went well for the bombers, but then a communications problem caused a delay in the bombing by the main force, during which night fighters arrived over the target. In a running battle with the bombers, the fighters claimed 47 kills, and although RAF records only show the loss of 42 Lancasters, it was nevertheless an admirable total, with *Hptm.* Helmut Bergmann of 8./NJG 4 topping the list of victories with a total of five for the night.

In a concerted effort to reduce the operational efficiency of *Luftwaffe* units in occupied western Europe, the RAF and USAAF also carried out round the clock strafing and bombing attacks on night fighter airfields. These persistent attacks were effective in many ways and disturbed the day-to-day running of the night fighter units. At night, their nocturnal operations were disrupted by Mosquitoes which bombed and strafed the airfields, as well as seeking night fighters taking off or landing. By day, Allied fighters roamed almost at will, attacking any aircraft seen, whether on the ground or in the air, as a result of which a not inconsequential number of night fighter pilots were wounded or killed while on daylight test flights. However, when on 29 April 1944, six Spitfires of 132 Sqn. led by S/L Geoffrey Page attacked a Bf 110 making its final approach at Deelen airfield, the results were not what the British pilots had expected. The Bf 110 just happened to be flown by the *Kommodore* of NJG 1, *Major* Hans-Joachim Jabs who, on seeing the Spitfires, opened his throttles and attacked the British fighters head-on. In less than a minute, Jabs had shot down two of the Spitfires[3] but the odds were overwhelmingly against him. He was then attacked by the remaining Spitfires and forced to crash-land his fighter, walking away from his damaged aircraft uninjured.

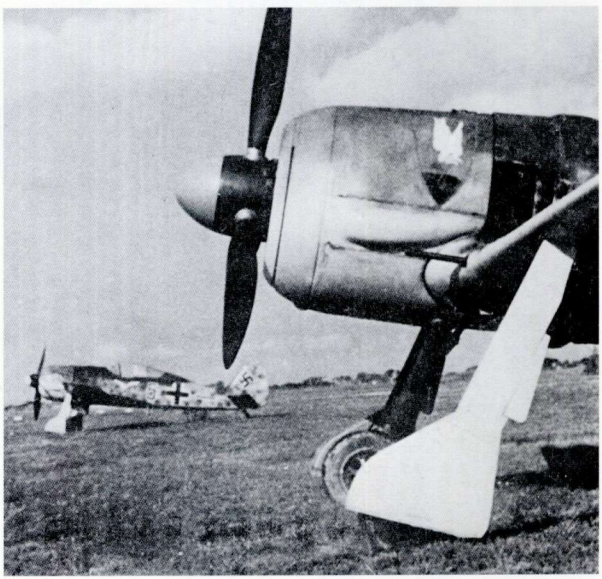
2. I./NJG 4 at Florennes; III./NJG 4 at Dijon and III./NJG 4 at Juvincourt.
3. The pilots of these two aircraft were F/O J.J. Caulton who became a PoW, and P/O R.B Pullin who was killed as a result of the combat.



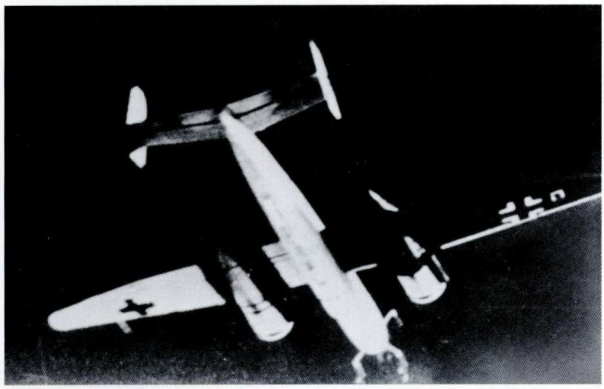
Focke-Wulf Fw 190 A-5 of 10./NJG 3 coded D5+XV, Aalborg-West, early 1944
This machine had large areas of the fuselage and the entire uppersurfaces of the wings and tailplane oversprayed with grey 74, although an area oversprayed with 75 and mottled with 74 is visible on the vertical tail surfaces. The operational markings on the fuselage were entirely in black.

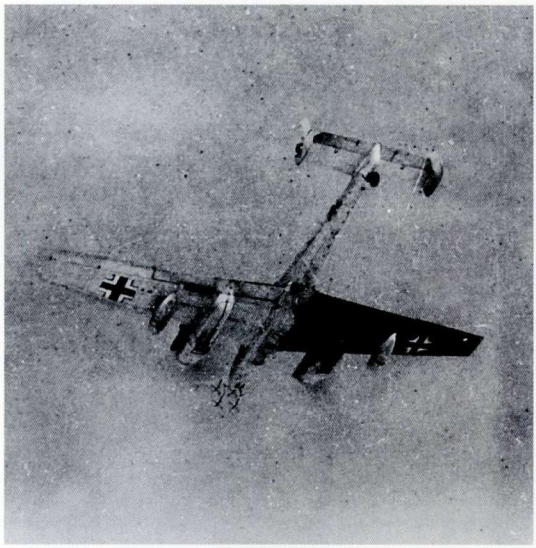


ABOVE: In November 1943 there was some concern in certain Luftwaffe circles that the speed of the Ju 88 C-6 and Ju 88 R-1 was insufficient to combat the civil Mosquitoes which were flying between Scotland and Sweden. The Staffelkapitän of 10./NJG 3, Oblt. Hans-Hermann Müller whose Staffel was then based at Aalborg-West, in Denmark, decided to employ the Fw 190, but an appeal for the loan of such an aircraft from a neighbouring unit, 10./JG 11 at Aalborg-East, was refused. Müller then appealed to 2. Jagddivision and was provided with one Fw 190 A-5 which was assigned the code D5+XV. In December, 10./JG 11 was ordered to loan Müller two Fw 190 A-4s which were subsequently coded D5+YV and D5+ZV, and while in the charge of 10./NJG 3 the Fw 190 detachment was known as Nachtjagdkommando 190. However, trials with the single-seat Fw 190s did not result in the expected successes and the Fw 190 A-4s were returned to JG 11 in February. The A-5 was also eventually returned to 2. Jagddivision in March.

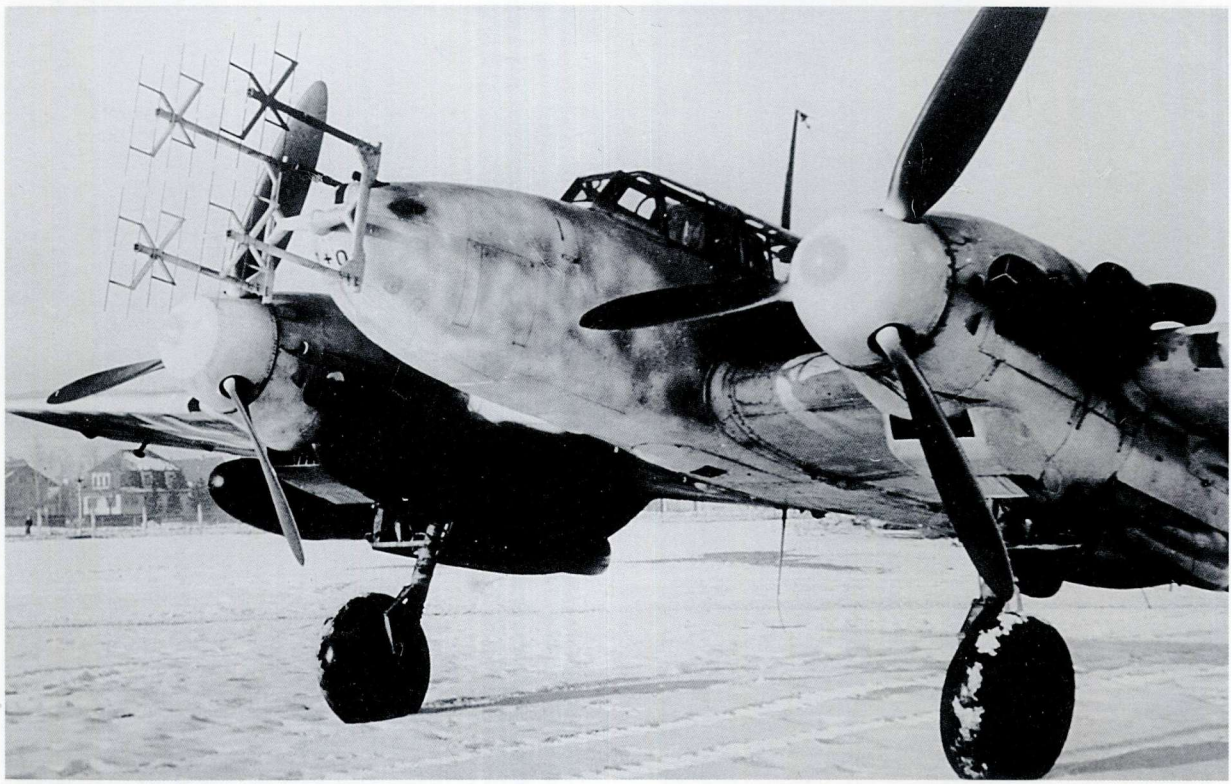


RIGHT: Less easy to explain are these Fw 190s which, to judge from the 'Englandblitz' badge on the machine in the foreground, clearly belonged to a night fighter unit and may have been one of the Fw 190 A-4s from 10./JG 11 assigned to 10./NJG 3. The machine in the background with the tactical marking 'Red 5' and a II. Gruppe bar aft of the fuselage Balkenkreuz, also has a large white gull painted below the cockpit. Such a marking is known to have been applied to the Fw 190 A-5 flown by Hptm. Dietrich Wickop of II./JG 1 in May 1943 (see page 141 of 'Defenders of the Reich', Volume 2, published by Classic Publications). As there is a link back to JG 1 via a number of redesignations, it is possible that Wickop's machine may have been the Fw 190 A-5 later assigned to 10./NJG 3 as D5+XV, and is shown here before being repainted in new camouflage and markings.





ABOVE AND RIGHT: At the beginning of 1944, German night fighters began to appear with one wing painted black, presumably as a feature to identify friendly aircraft to the Flak units. Such a finish is shown here on a Bf 110 *(ABOVE)* and an He 219 A-2, *(RIGHT)* but it is thought that this undersurface colouring existed only for a short time. The He 219 shown here was flown by Hptm. Ernst-Wilhelm Modrow of 1./NJG 1 who was awarded the Ritterkreuz on 19 August 1944 after achieving 25 night victories and went on to increase his tally to 33.



ABOVE AND OPPOSITE PAGE: This Bf 110 G-4 of 6./NJG 6 landed at Dübendorf in Switzerland shortly before midnight on 15 March 1944. The aircraft was fitted with auxiliary fuel tanks and had 76 undersurfaces with most of the starboard wing, including the drop tank, painted black. Note, however, that an area immediately aft of the spinner was not painted black and that the black under the wing terminated in an irregular line just short of the leading edge. The uppersurface colouring is most interesting, for while the nose area approximately forward of the windscreen retained the original factory 74/75/76 finish, the rest of the aircraft's uppersurfaces had been repainted in a low demarcation splinter scheme of 74 and 75. Note that the tactical code 2Z+OP was repeated on the nose and the Werknummer 5547 was applied to the tail.

"The bomber began to burn brightly and immediately went into a dive"

Hauptmann Paul Zorner, 8./NJG 3

Paul Zorner began his career with the Luftwaffe as an instructor at Zeltweg-Steiermark in Austria. When Rommel began experiencing supply problems in North Africa, Zorner and other instructor pilots from all over Germany were assigned as transport pilots and flew supply flights between Sicily and North Africa. His career as a night fighter began in January 1942 and, with his specialist training completed, he joined II./NJG 2 on 1 July 1942. His first victory came on 17 January 1943, and by the end of the year he had shot down a further 18 aircraft. When he was awarded the Knight's Cross on 9 June 1944, this total had increased to 48. Three months later, Paul Zorner became the 588th member of the Wehrmacht to receive the Oak Leaves and finished the war with 59 confirmed victories, all of which were achieved at night.

In March 1944, I was the *Staffelkapitän* of 8./NJG 3, stationed at Lüneburg[1]. At that time of the year, however, experienced crews were frequently moved up to airfields further to the west and took off from Vechta and Nordholz in north-west Germany or, as on 22 March 1944, from St. Trond in Belgium.

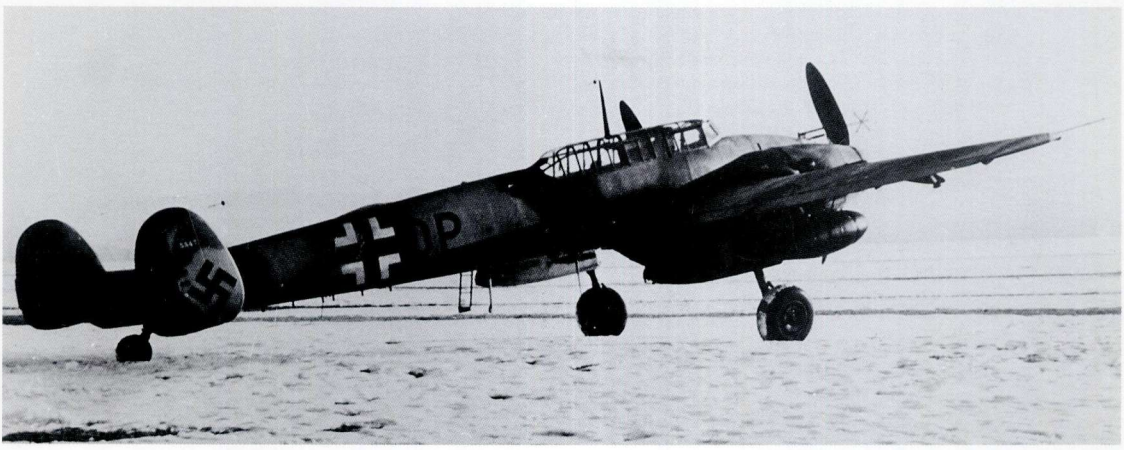
Detachments to St. Trond were always very relaxed. My deputy was responsible for the unit at Lüneburg, and as I was only responsible for my own aircraft and its crew, we sat down and made ourselves comfortable in the readiness room. This did not last long, however, for on this particular night, at only about seven o'clock, reports started to come through of RAF bombers preparing to take off and we had to reckon with early action. This proved correct, for an hour later, cockpit readiness was ordered, and at about 20.15 hrs we were ordered to take off against aircraft approaching at heights of between 5,500 and 6,000 metres.

I took off at 20.19 hrs and climbed to height. My personal papers did not give me any information about the bombers' approach route, but the RAF leadership was clearly able to conceal it from us because for a long time we were unable to receive any positive air situation reports and searched in the area south-west of St. Trond. It was not until 75 minutes after take-off that, to the south of our airfield and at an altitude of 6,000 metres, we found ourselves in the bomber stream. The weather presented us with no problems as it was a cloudless, moonless night with relatively good visibility.

At about 21.35 hrs, my radio operator, Heinrich Wilke, reported a contact on his SN-2 set. He told me to go down a little and directed me towards the bomber. At 21.45 hrs, at a height of 5,900 metres, I saw a Lancaster in front of me heading east, which meant that he was still on his way to the target. Taking into consideration the dark, cloudless background, I was able to position myself about 100 metres below the bomber. At 21.45 hrs I attacked with *'Schräge Musik'*. After a single burst of fire in between its starboard engines, the bomber began to burn brightly and immediately went into a steep dive. We watched it going down and at 21.45 hrs we saw it hit the ground north of the enemy's target, which we were now able to identify as Frankfurt.

As we still had fuel remaining for more than an hour's flying, we continued to search to the west of the target. After 25 minutes, Wilke had another contact flying on a westerly heading and which, to judge by the blip on the SN-2 set, was probably another bomber. At 22.15 hrs I saw, directly in front of me but slightly above, a Lancaster. I positioned myself at once and attacked with *'Schräge Musik'* from point-blank range, aiming between the two engines on the starboard wing. This bomber, too, began to burn fiercely and went into a dive. The aircraft came to earth at 22.18 hrs on a bearing of 235 degrees from Frankfurt. We continued searching for some while longer until we had ascertained that it had become quiet over the target. As our fuel was getting low I decided to land at Mainz-Finthen.

1. The Staffel was equipped with Bf 110 Gs
Author's note: The two victories described were Paul Zorner's 36th and 37th.



"After a long burst of fire it went down in flames from 5,500 metres with all of its bombs on board"

Unteroffizier Erich Handke, III./NJG 1

Erich Handke was trained as a Bordfunker during 1941/42 and was posted to 12./NJG 1 in October 1942. Handke first flew with Fw. George Kraft and they participated in 14 victories together. On 17/18 August 1943, they were attacked and shot down by an RAF Beaufighter, flown by the British night fighter ace, Wing Commander 'Bob' Braham. Kraft was killed during the attack, but Handke was able to parachute to safety. He then went on to fly briefly with Heinz Schnaufer and Karl-Heinz Scherfling, before being transferred to III./NJG 1 where he crewed with Martin Drewes for the remainder of the war. On 27 July 1944, he and Drewes each received the Knight's Cross, Handke thus becoming one of the very few Bordfunkers to receive this decoration. When hostilities ceased in May 1945, he had participated in 59 victories, three of which were claimed during the day.

During the raid on Nuremberg on 30 March 1944, incoming bombers were reported and we took off for the radio beacon *'Ida'* near Aachen. We didn't think we had reached the bomber stream when 'Schorsch' Petz [the gunner] saw a bomber flying above us. As we were turning onto an easterly heading, I switched on the SN-2 and immediately three targets appeared. I gave directions for the nearest one. Then Drewes saw it at 600 metres. The weather was excellent: a starlit sky, a half moon, small clouds and no mist. It was simply ideal, almost too bright.

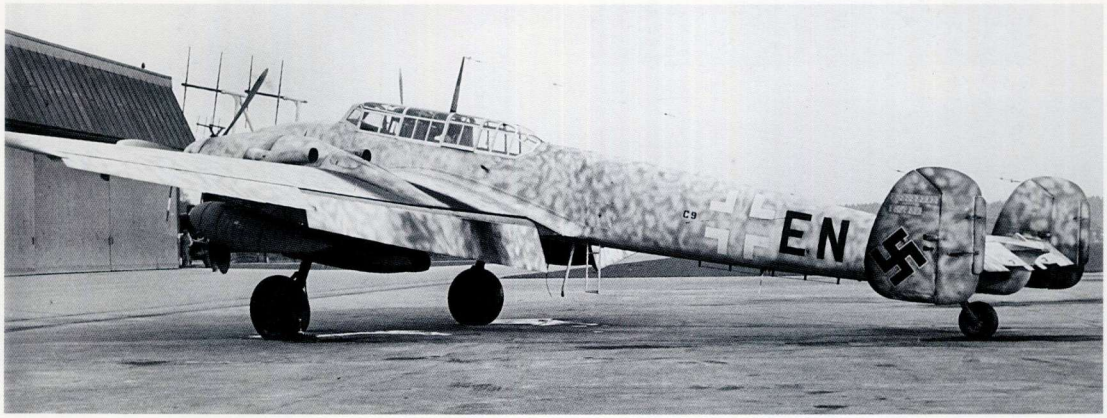
It was a Lancaster, flying beautifully straight ahead, so that we were easily able to position ourselves beneath it. From about 50 metres Drewes fired with our *'Schräge Musik'* and its port wing immediately caught fire. Five minutes later the Lancaster came down with a huge explosion in the middle of an area where the attack was just beginning, probably Aachen.

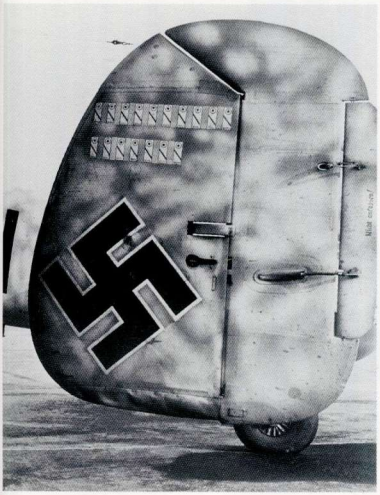
We continued our flight on a heading of 100 degrees until, after ten minutes, we picked up another single target far above us on a similar heading. Until then we had been flying at an altitude of 5,500 metres, but now we had to climb a long time until we reached the Lancaster, which was flying at 7,000 metres. Once again we positioned ourselves 50 metres below our target, but our cannon jammed after only two rounds and we were unable to clear it. However, the Lancaster must have been hit, because all at once it lost height. We had not dived away, so it probably saw us, because it then suddenly curved steeply away.

We immediately went down beneath it whilst it was flying very slowly at a height of 5,500 metres. Now we had to climb to attack in the old way, from astern, where one is exposed to the rear gunner's fire. We were now accustomed to the new *'Schräge Musik'* attack method, as it was a far safer technique.

This time we wanted to fire directly into the wing, because the fuselage, with its many bombs, was too dangerous. At last, Drewes climbed to the correct height and from 50 metres fired into the starboard wing, which immediately began to burn. Although we did not break away immediately, the Lancaster crew apparently had no time for defensive action because it went into a dive and exploded into many pieces. Below there lay a field scattered with many incendiary bombs. We were somewhere in the Vogelsberg area.

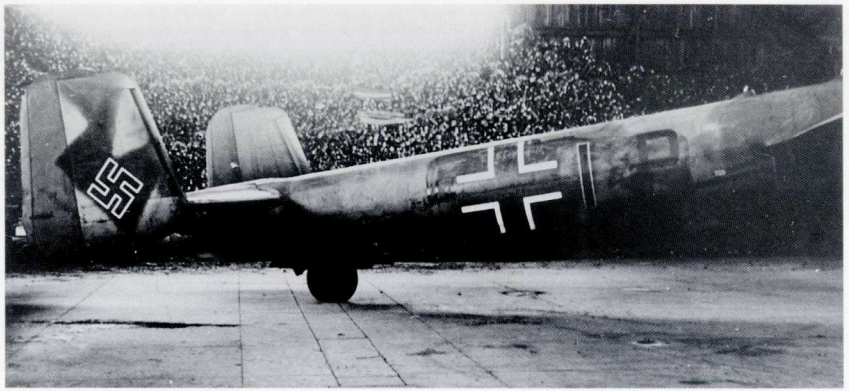
Around us, there were still bombers going down like flies. After some time we picked up yet another target and followed it. Drewes saw the target, a Lancaster, at a distance of 700 metres. In the meanwhile, we had been able to reload one of the upward-firing cannon, so once more we positioned ourselves 50 metres beneath it. After a long burst it went down in flames from 5,500 metres with all of its bombs on board. Two men were able to bale out before it crashed about 20 kilometres to the north of Bamberg. As we had run out of contacts we flew back and landed at Hanau-Langendiebach, where a further 40 crews joined us.

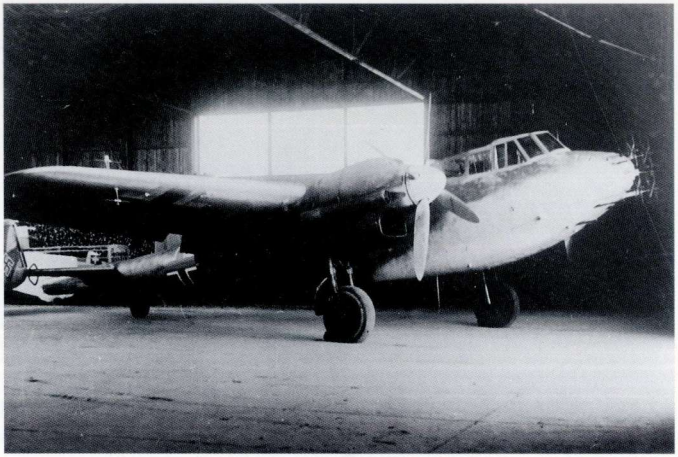




TOP AND ABOVE: When Oblt. Wilhelm Johnen, the Staffelkapitän of 6./NJG 5, landed this Bf 110 G-4 at Dübendorf on the night of 27/28 April 1944, it was at first feared that he had defected and his family was immediately arrested. In fact, however, after destroying an RAF bomber as his 19th victory near Strasbourg in eastern France, the pursuit of the remaining bombers had continued close to the Swiss border. Johnen then experienced trouble with an overheating port engine, shut the engine down and headed for home but was blinded by searchlights and so lost his bearings that when the searchlights directed him to an airfield, he landed, only to find that he had strayed into Swiss airspace and was in neutral Switzerland. There, the aircraft and the two other members of his crew were interned. As this machine, an almost new Bf 110 G-4 W.Nr. 740055, was equipped with the latest SN-2b airborne intercept radar, 'Lichtenstein' C-1 and oblique armament, its landing intact in neutral territory was of major concern to the Germans who wished details of its equipment to remain secret. In a deal between the German and Swiss authorities, it was arranged that the Bf 110 would be destroyed, in return for which the Swiss would be sold a number of Bf 109 Gs. The Bf 110 was duly destroyed on the night of 19 May 1944 and the crew repatriated, but neither the Swiss nor the Germans had been entirely honest with each other. The Swiss had examined and recorded details of the radar before the aircraft was destroyed, while the Bf 109 Gs sold to the Swiss were in such poor condition that, post-war, both Messerschmitt and Daimler-Benz were obliged to pay compensation. The Bf 110 was camouflaged in a form of Wellenmuster finish on the uppersurfaces comprising 76 over a base of 75, while the lower surfaces were 76 with the underside of the starboard wing overpainted with black but which terminated in a soft, undulating line just short of the leading edge.

LEFT: The victory markings on Oblt. Johnen's aircraft were slightly out-of-date as the tally on the port fin recorded only 17 of the 18 victories with which Oblt. Johnen was credited up to the night of 27/28 April. After being repatriated, Johnen later became Kommandeur of III./NJG 6 and increased his victories to 33, for which he was awarded the Ritterkreuz on 31 October 1944. He survived the war with a total of 34 confirmed victories.



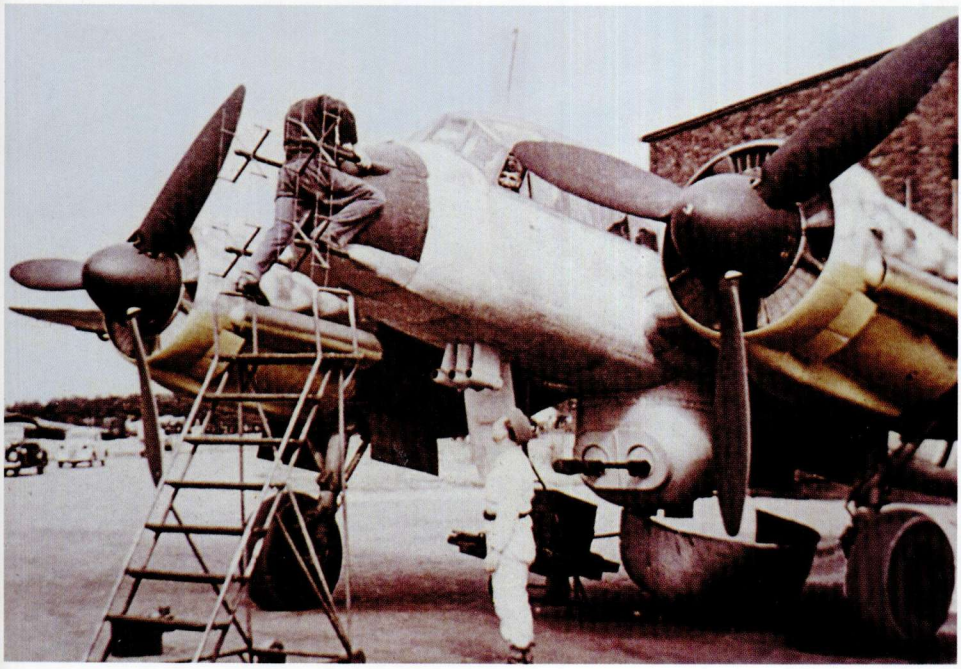


ABOVE AND RIGHT: From August 1943 to 7 May 1944, 6./NJG 4 was based at Taveaux, some 60 miles from the Swiss border in eastern France. In the early hours of 2 May, one of the Staffel's, aircraft flown by Fw. Günther Konzac landed in error on the Swiss airfield at Basel-Birsfelden, where the aircraft and crew were interned. Fw. Konzac's aircraft was a Do 217 N2/R22 with four MG 151 cannon and four 7.9 mm MG 17 machine guns mounted in the nose, plus an oblique armament of four 20 mm MG 151 cannon installed in the fuselage. The four barrels of the latter protruded from the upper fuselage and may just be seen above the wing root in the photograph (*ABOVE*).

Dornier Do 217 N-2/R22 flown by Fw. Günther Konzac of 6./NJG 4, Taveaux, France, May 1944
This aircraft, W.Nr. 1570, was finished in a splinter scheme of 74 and 75 on the uppersurfaces and while the undersurfaces were 76, the starboard wing had been overpainted black up to a point just short of the leading edge and terminated in an undulating demarcation line. Although the full operational code was 3C+IP, only the last two letters appeared on the fuselage in black with the individual aircraft letter edged in yellow. The spinners were 76 and the propeller blades green 70. Note the configuration of the tail cone.

LEFT: Personal inscriptions and emblems on aircraft of the Nachtjagd appear only rarely, so this Ju 88 with 'Komm' Zurück' and a four-leaf clover painted on the crew entry door is unusual. The photograph was taken in 1944, in which year 'Komm' Zurück' was a popular song in Germany and may have provided the inspiration for the artwork. Unfortunately, the names of the aircrew are not known, but they may have belonged to NJG 5.

ABOVE: Major Heinrich Wohlers was awarded the Ritterkreuz on 1 April 1944 after 28 Nachtabschüssen. At that time he was Kommandeur of I./NJG 6, but had originally flown in 1940 as a reconnaissance pilot. After transferring to the Nachtjagd, he became Staffelkapitän of 8./NJG 1 in 1941 and remained with this unit when it was redesignated 8./NJG 4 in May 1942. In January 1943 he became Kommandeur of IV./NJG 4, redesignated I./NJG 6 in August 1943, and became Kommodore of NJG 6 in February 1944. He was killed in March when his aircraft crashed while landing in fog.

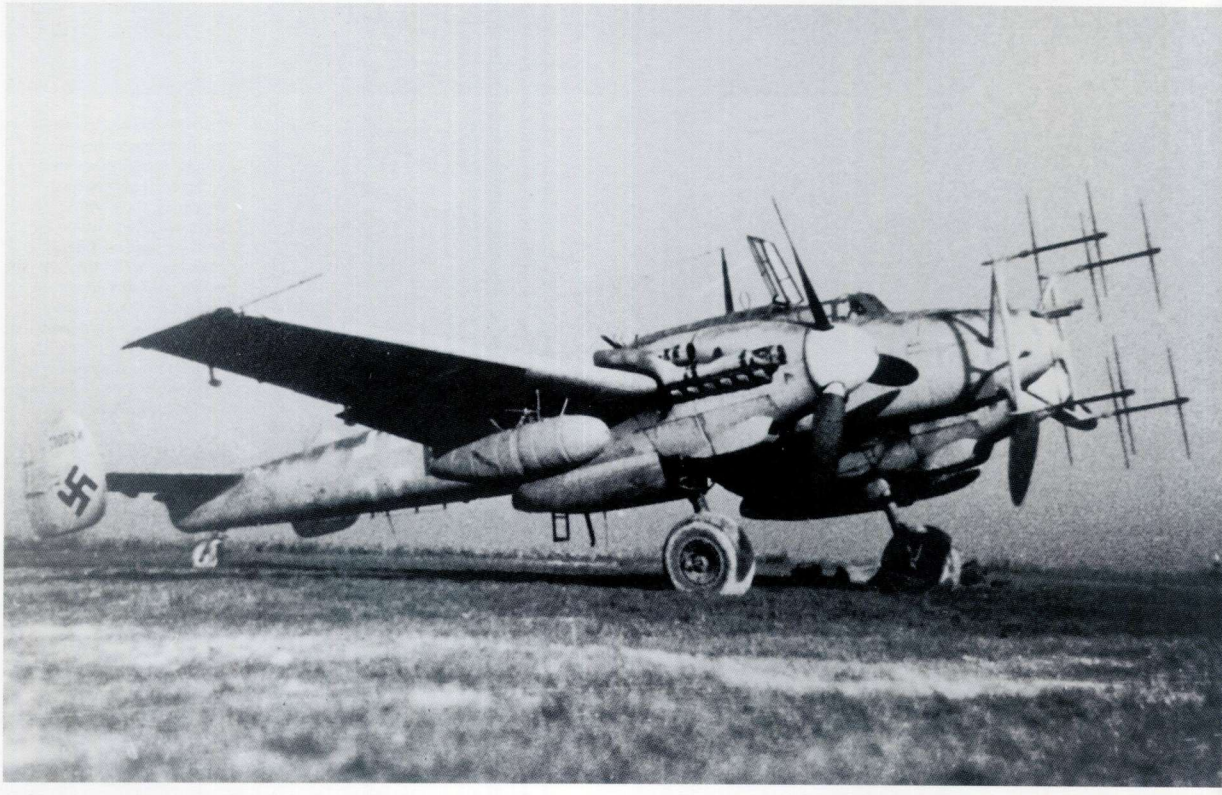


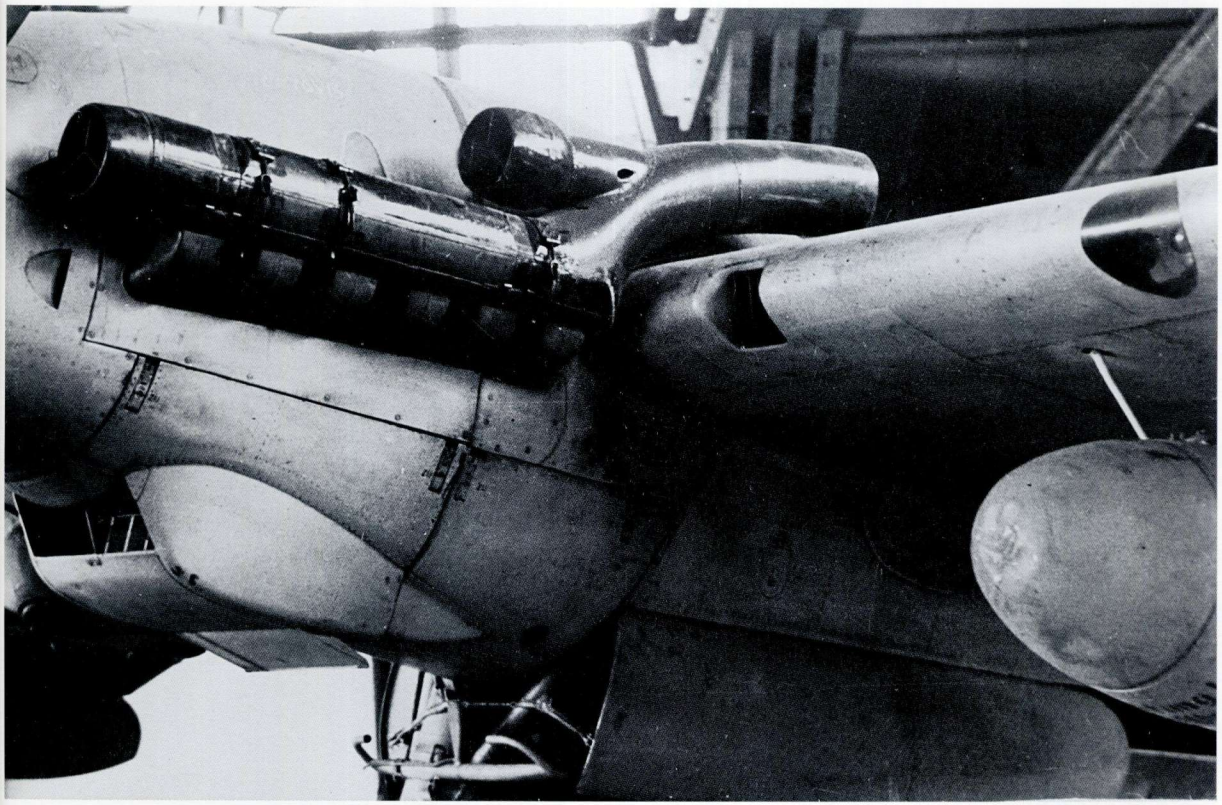
ABOVE : Major Helmut Henz, the Kommandeur of the Truppenversuchskommando – or Service Experimental Attachment – at Werneuchen, seen standing in front of a Bf 110 equipped with SN-2. Note the 74/75/76 camouflage and the yellow areas under each engine cowling which were intended to identify the aircraft as friendly to Axis ground forces and were a widely employed recognition aid.

LEFT: The yellow identification panels are again in evidence in this photograph of a Ju 88 G-6 fitted with an FI-A-103Z gun pack comprising two 30 mm MK 103 cannon.

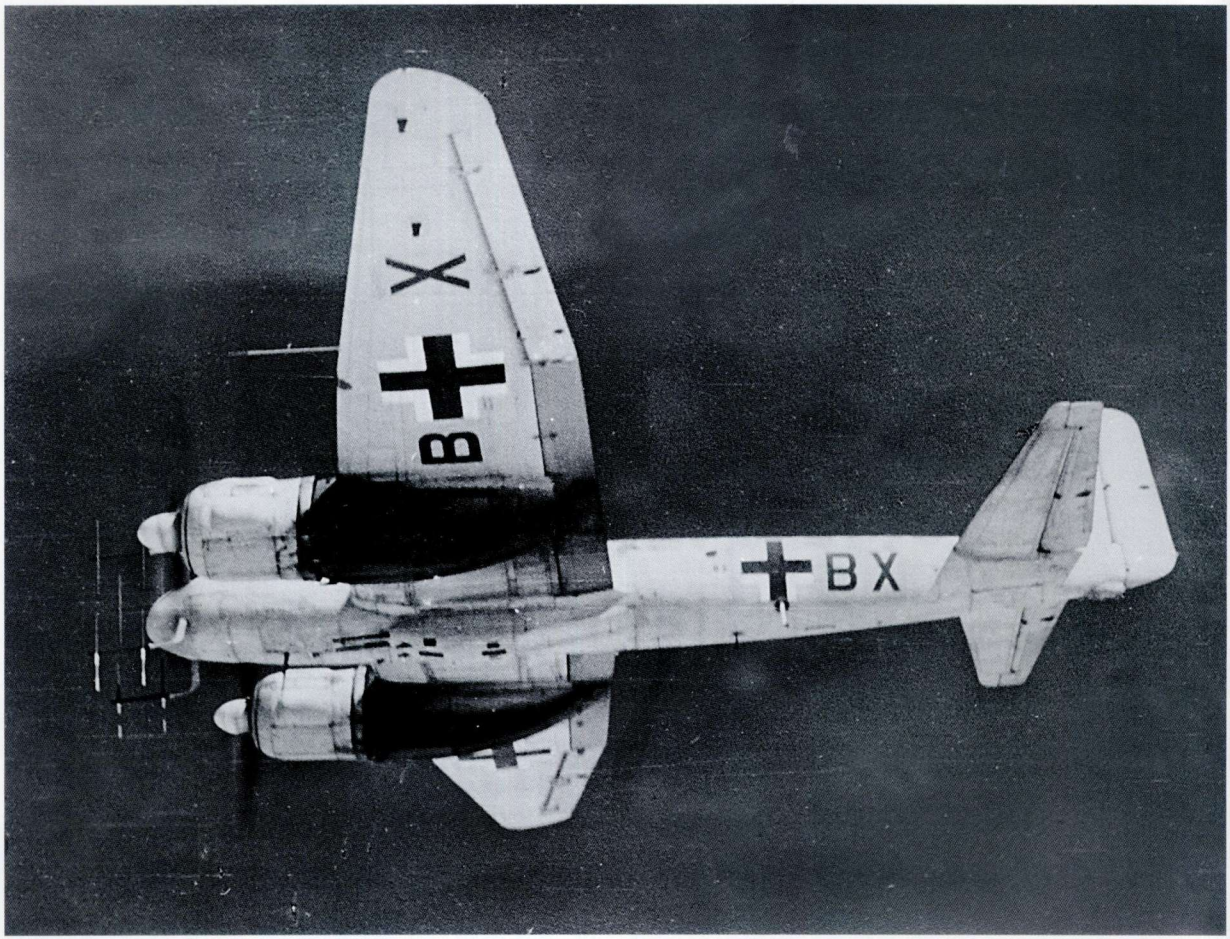
RIGHT: Night fighter personalities at St.Trond, probably in the early summer of 1944. On the far left is Obstlt. Helmut Lent, who was awarded the Diamonds on 31 July 1944 after 100 victories. Lent was killed in the following October when, with 102 victories, his aircraft crashed while landing after a routine daylight flight. Standing next to Lent is Heinz-Wolfgang Schnaufer, the Kommodore of NJG 3, who had recently been awarded the Swords. Second from the right is Wilhelm Gänsler, then Schnaufer's rear gunner, who was awarded the Knight's Cross on 27 July 1944.

BELOW: This ghostly image of a Bf 110 G-4 is unusual in that it was reportedly taken at midnight in the mid-summer of 1944. The aircraft is W.Nr. 110054 of NJG 6.



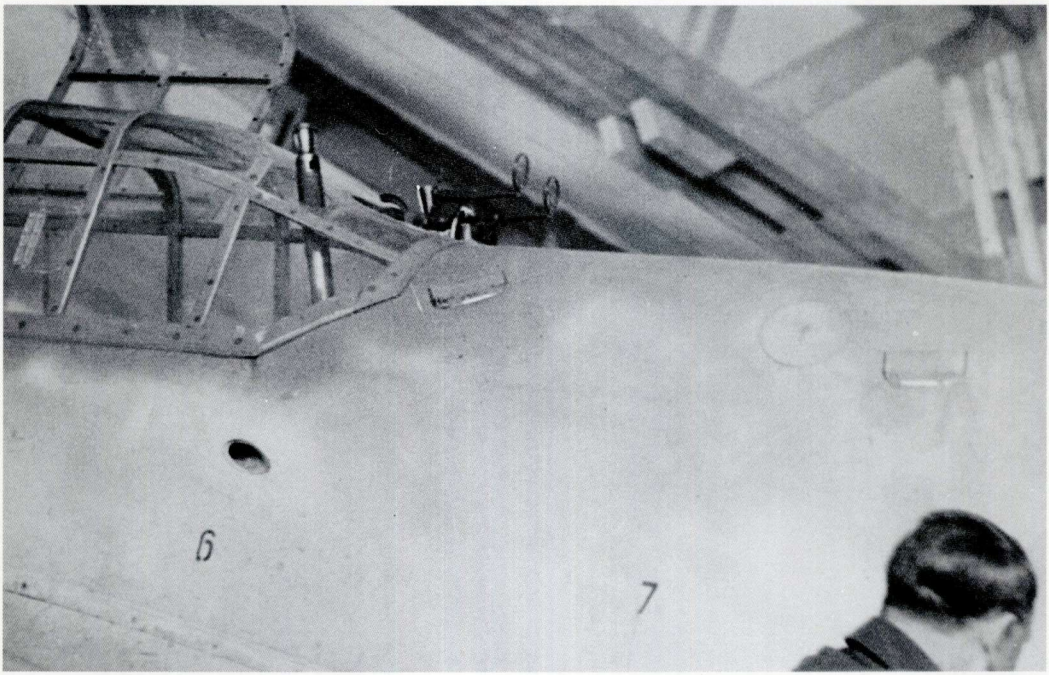


ABOVE: A detailed view of the flame dampers on a Bf 110 G night fighter. Whereas the starboard inner flame dampers directed the exhaust gases under the wing, the other three dampers led over the wings and often resulted in heavy black deposits, as shown on G9+CS of 8./NJG 1 (*LEFT*).



ABOVE: A heavily exhaust-stained Ju 88 G-1 fitted with a ventral gun pack. Just visible behind the training edge of the port wing on this otherwise RLM 76-painted aircraft is the 75 reverse mottling. Although the small Geschwader code ahead of the fuselage Balkenkreuz is indistinct, it is believed to be '4R' which, together with the last letter 'X' in the fuselage code, would indicate that this machine belonged to 13./NJG 2. Although it is not known exactly when or why NJG 2 began using the code '4R' in addition to its usual 'R4', this probably began sometime after the beginning of 1944. No lettering appears under the starboard wing although, unusually for the latter period of the war, the letters 'B' and 'X' of the fuselage code are repeated beneath the port wing, although, in letters of different style and size. The 13./NJG 2, part of V. Gruppe, was formed in December 1944 by redesignating the bomber Staffel 7./KG2.

RIGHT: A Ju 88 G-6 of 6./NJG 2 taxiing in daylight. Note the oversprayed swastika and, just visible on the upper surfaces of the fuselage, the mottled camouflage finish.

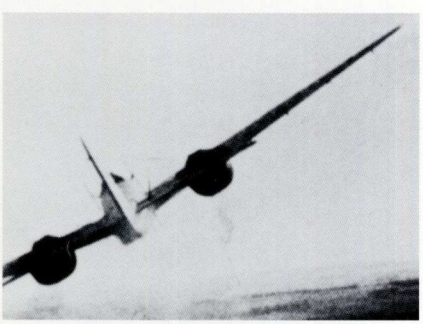


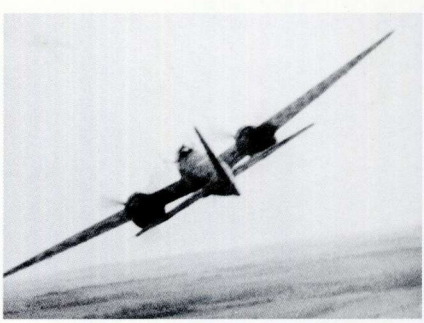
RIGHT: The twin MG/FF weapons of the 'Schräge Musik' installation may be seen protruding from the rear canopy of this Bf 110 G. Also visible in the extreme rear of the canopy are the sights for the 7.9 mm MG 81Z twin machine guns, although the weapons themselves have been temporarily removed. A flare pistol port is situated above station number 6. This close-up view also provides a good indication of the very soft overspray of 76 on the otherwise 75 fuselage.

A Great Coup for RAF Bomber Command

In early July, the British were just beginning to regain the edge over the *Nachtjagd* in electronic warfare when there occurred an event which, more than any other, finally swung the balance in favour of the RAF.

At 04.30 hrs on the morning of 13 July 1944, *Obergefreiter* Mäckle of 7./NJG 2, flying a Ju 88 G-1, became disorientated after engaging mine-laying Stirling bombers over the North Sea and landed at Woodbridge airfield in Suffolk (see following pages). Once the German crew had been taken prisoner, the Ju 88 was thoroughly examined and found to contain the latest SN-2 airborne intercept radar, as well as *'Flensburg'* and *'Naxos'* passive homing devices. Having noted that 'Window' was now apparently almost ineffective against German airborne intercept radar and that the success of their 'Serrate'-equipped Mosquitoes [1] had also fallen sharply as a consequence, the British had for some months suspected that the *'Lichtenstein'* BC sets fitted in German night fighters were being gradually replaced. As a result of examining Mäckle's Ju 88, British scientists were able to ascertain the frequency on which SN-2 operated and reconfigure the 'Serrate' sets to home on it. In addition, a new, concertina shaped type of 'Window' was also manufactured and put into service, and this proved highly effective in jamming SN-2.



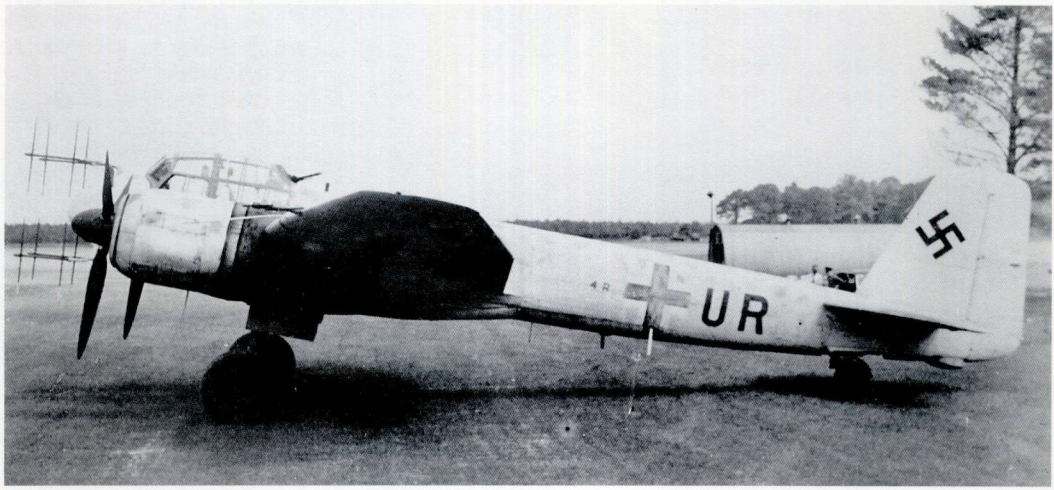


LEFT: Gun camera stills showing a Ju 88 night fighter under attack in daylight. Photographs such as these provided Allied Intelligence with their first clues regarding the nature of the SN-2 radar. Note the heavy exhaust staining over the rear parts of the engine nacelles. Sometimes this was sufficiently heavy also to stain the horizontal tailplanes.

1. 'Serrate' was a special receiving device first produced by the British Telecommunications Research Establishment that could detect and home in on the impulses given off by 'Lichtenstein' BC airborne intercept radar. The device proved to be very effective and was fitted to Mosquito Intruder aircraft who took a heavy toll on German night fighters.

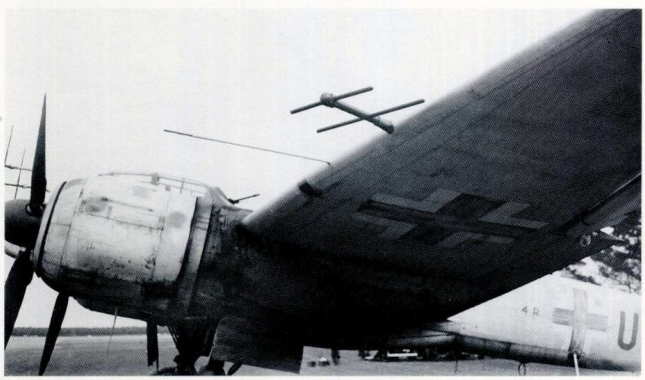
The seizure of a fully working example of *'Naxos'*, which had first entered service with the Nachtjagd in early 1944, was also a great coup for Bomber Command. The device had been manufactured following capture by the Germans of an 'H2S' set from a 7 Sqn. Stirling that had been shot down on 2 February 1943. After months of intensively studying the remains of the set, the Germans were able to build a device, code-named *'Naxos'*, that could detect the centimetric waves produced by 'H2S'. The discovery of the *'Naxos'* equipment caused such alarm that Harris ordered that 'H2S' sets were not to be switched on until the bombers were within 40 miles of enemy territory, thus reducing their chances of being detected by German ground radars or roving night fighters.

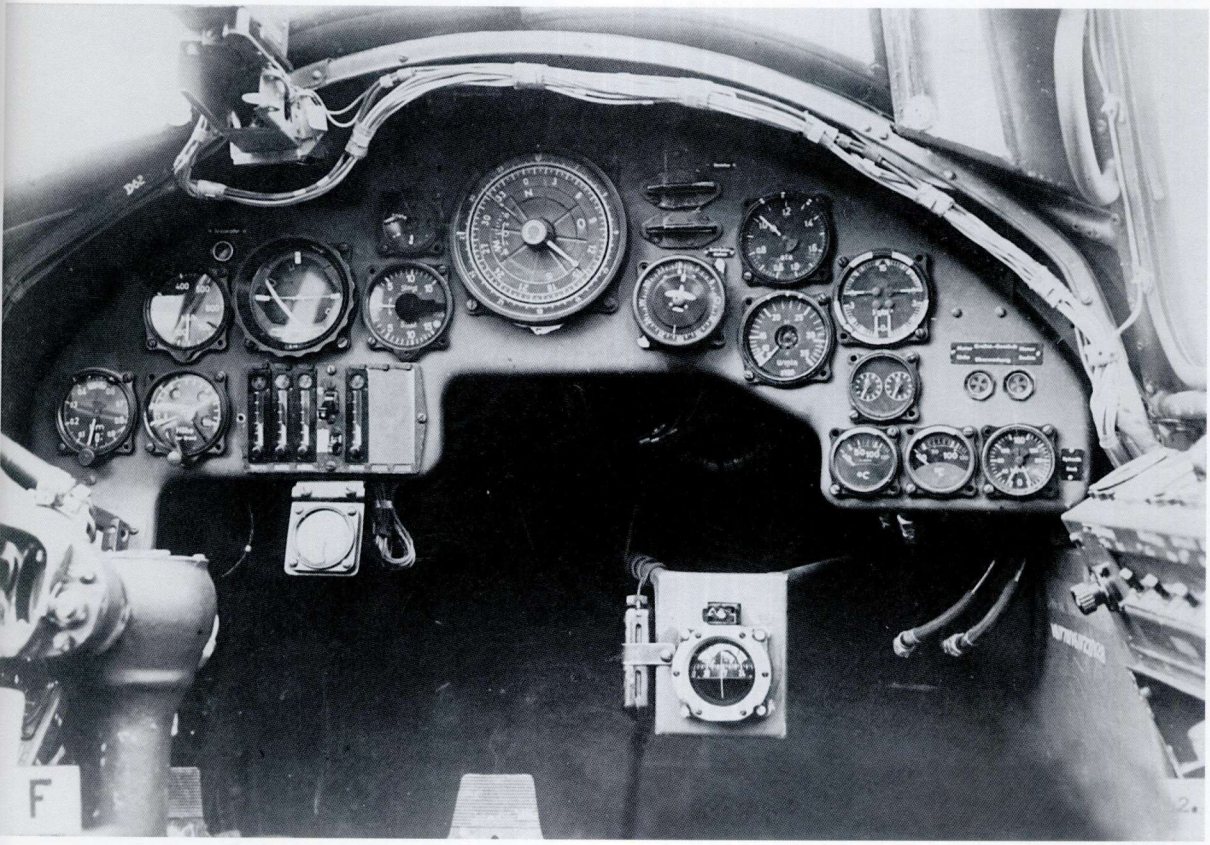
On examining the captured *'Flensburg'*, the British soon realised that German night fighters fitted with the device could detect and home directly on the radio pulses of 'Monica', a tail-warning device first fitted to RAF bombers in the spring of 1943. As of September 1944, 'Monica' was removed from all operational aircraft. Somewhat fortuitously, with the capture of this single Ju 88 night fighter, Bomber Command had been able to overcome the *Nachtjagd's* three principal airborne radar systems in one fell swoop.

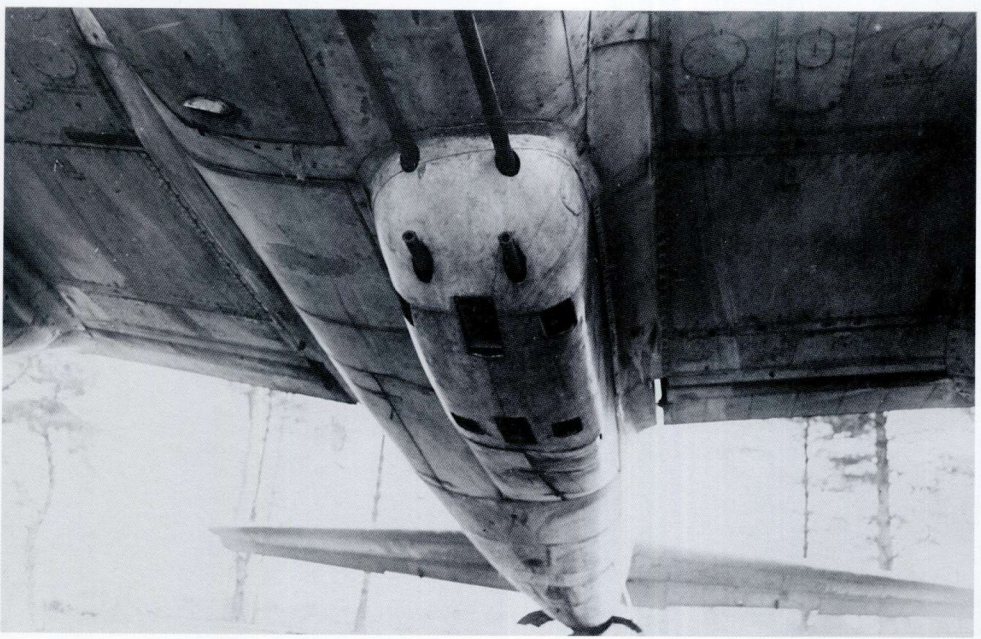


ABOVE: On the night of 12/13 July 1944, Uffz. Mäckle, Obgfr. Olze and Obgfr. Möckl of 7./NJG 2 were aboard this Ju 88G-1 when the pilot became completely lost and, instead of heading for Berlin as intended, apparently flew a reciprocal course which took him to the Suffolk coast of England. By this time, the aircraft was very short of fuel, so that when Mäckle sighted the emergency landing strip at Woodbridge, he made a wheels-down landing at 04.25 hrs on the 13th still believing he was near Berlin. The capture of this machine was of great importance to the British as it was one of the Luftwaffe's latest night fighters and was fully equipped with the most recent radar and radio equipment. The aircraft, W.Nr. 712273, carried the operational code 4R+UR and the camouflage was 75 and 76, being described in RAF AI2(g) Report No. 242 as 'duck egg blue on all surfaces with dark grey mottling on the top surfaces'.

BELOW LEFT AND BELOW: Just visible in the photograph *(BELOW LEFT)* are the aerials on the nose for the 'Lichtenstein' FuG 220 airborne intercept radar. Note the dorsal gun position with a single MG 131 and the annular flame damper at the rear of the engine cowling. Also visible on the wing, and seen again *(BELOW)* are the aerials for the FuG 227 'Flensburg' which detected and homed onto the emissions of the 'Monica' tail warning radar fitted to RAF bombers. Note that two of the FuG 227 aerials projected from the leading edge of each wing while the third was located above and below the starboard wing.



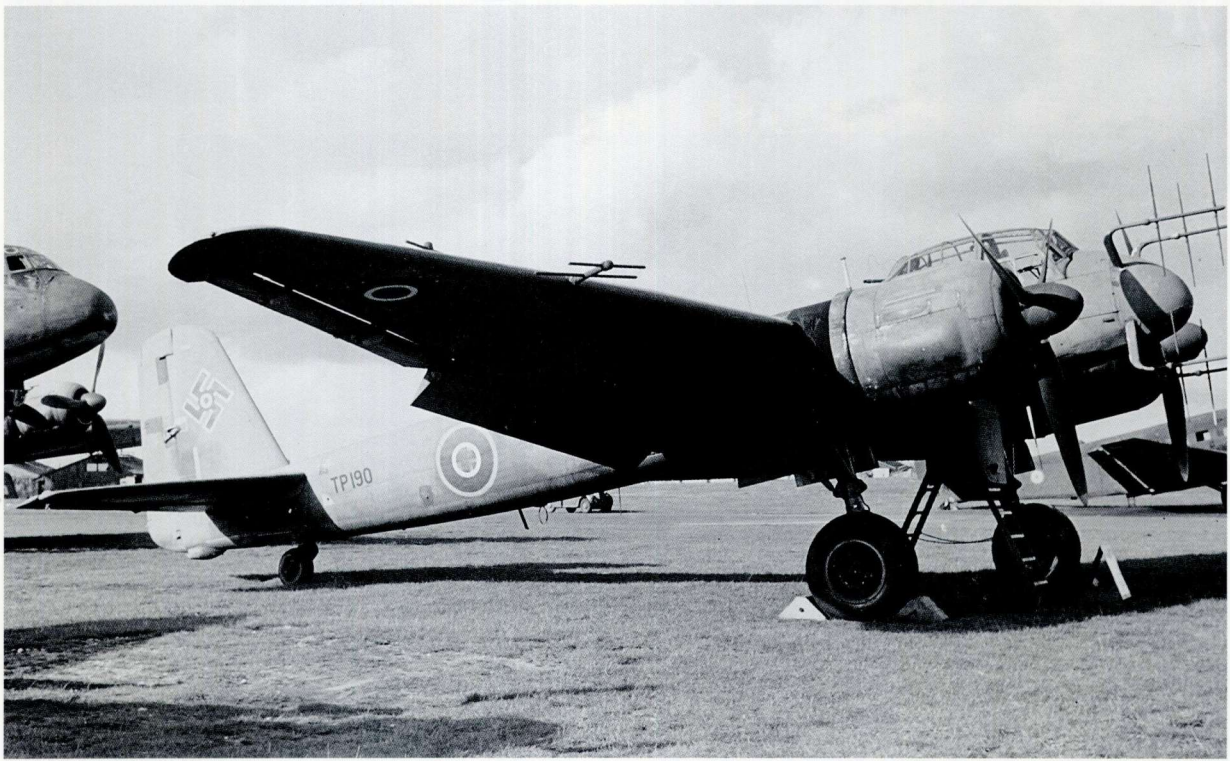




ABOVE AND LEFT: Although the Revi 16 D gunsight had been removed when the photograph was taken, it shows the pilot's instrument panel with standard flight instruments and, in the rectangular housing on the left of the panel, a rounds counter for the four 20 mm forward-firing MG 151 cannon mounted in a large streamlined fairing offset to port under the forward fuselage.

RIGHT: A front view of Uffz. Mäckle's Ju 88 G-1, now under armed guard and being examined by an RAF Technical Intelligence expert. When the machine landed, there was so little petrol and oil remaining in the tanks that it subsequently proved impossible for the RAF to obtain samples for analysis. An interesting feature of this aircraft was that the Werk Nummer was repeated on all control surfaces and detachable panels.

BELOW: After being extensively tested and evaluated, the same Ju 88 G-1 was allocated the British serial number TP190 and is seen here on display at Farnborough in October 1945.



"...there was the unmistakable thump of cannon fire, and I glimpsed tracers going up vertically on the port side of the bombardier's observation window"

SGT. THOMAS HARVELL, 514 SQUADRON, BOMBER COMMAND

A formal photograph of Sgt. Thomas Harvell of 514 Squadron showing the Flight Engineer's brevet on the left breast pocket of his tunic. During an attack on Stuttgart on 28 July 1944, Sgt. Harvell's Lancaster was attacked and shot down by a Ju 88. It is believed that the pilot of this night fighter was Hptm. Heinz Rökker of 2./NJG 2, who claimed two bombers that night.

I was the Flight Engineer of Lancaster LM206 that took off from Waterbeach at 21.40 hrs on the evening of 28 July 1944, destination Stuttgart. I occupied a seat next to the pilot, F/Lt. Robert Jones, carrying out the duties of a co-pilot. This was our twelfth operation, and the second to Stuttgart in three nights. We flew across France at 11,000 feet, skirting to the south of Paris in comforting cloud until we reached the area of Lorraine when we climbed to 14,000 feet into startling, bright moonlight. It was then that some Flak burst close to the aircraft and the skipper, Bob Jones, told me to go into the bombardier's compartment and release some bundles of 'Window'. I wriggled down through the small hatch of the bombardier's compartment and, as I was doing this, the voice of the rear-gunner, Sgt. Alfred Braine, came over the intercom reporting fighter flares being dropped some distance away and from above us.

I had just pushed out two packets of 'Window' when there was the unmistakable thump of cannon fire, and I glimpsed tracers going up vertically on the port side of the bombardier's observation window. This was immediately followed by a bright glow of fire that emanated from the area of the port inner engine. Then I heard the rumble of the hydraulic system and I realised that the bomb bay doors were being opened. The aircraft reared up as the 8,000lb bomb load was released and the skipper's voice came over the intercom saying, "I have let the bombs go, Ken!" This was addressed to our bomb aimer, F/O. Kenneth Loader, who was back assisting the navigator, F/Sgt. George Robinson.

I felt frustrated at not being in my usual place in the cockpit and was attempting to get back when the aircraft started to go down. At this moment the skipper informed us, "You had better get out lads!" I re-entered the bombardier's compartment where there was an escape hatch in the floor. As I did so, I had a last look at Bob Jones, who was now out of his pilot's seat and was standing up in the cockpit. I sat on the glycol tank in the compartment and attempted to reach the release toggles of the escape hatch, but the g-forces were now so great that I could not do so. Then came the thump of another burst of cannon fire, followed by a rush of warm air and I was catapulted head first into the domed observation window in the nose of the bomber and blacked out.

When I came to, I realised that I was falling free of the Lancaster and I deployed my parachute. I saw that burning debris from the aircraft was falling towards the canopy of my chute, so I spilt some air out of it from one side so that I went into a sideways glide away from the debris. I landed in a field and badly twisted my right knee, and my scalp was bleeding from lacerations caused when the Lancaster exploded. I was now some distance from the burning wreckage of the aircraft and I later learnt that the only other survivor from the crew was the navigator, George Robinson, who had landed close to the wreckage and was taken prisoner. I evaded capture and, using the alias of Charles Hautier, continued fighting the war with a Maquis group, the guerrilla arm of the French Resistance.

The Invasion

BELOW: After joining I./NJG 3 in the spring of 1941, Rudolf Frank shot down seven bombers in his first six months with the Gruppe, and went on to increase his personal score in 1943 to 26. After shooting down his 42nd opponent he was decorated with the Knight's Cross on 6 June 1944, but was killed on 20 July during an attack against a Lancaster. He was posthumously promoted to Leutnant and awarded the Oak Leaves in recognition of his 45 victories.

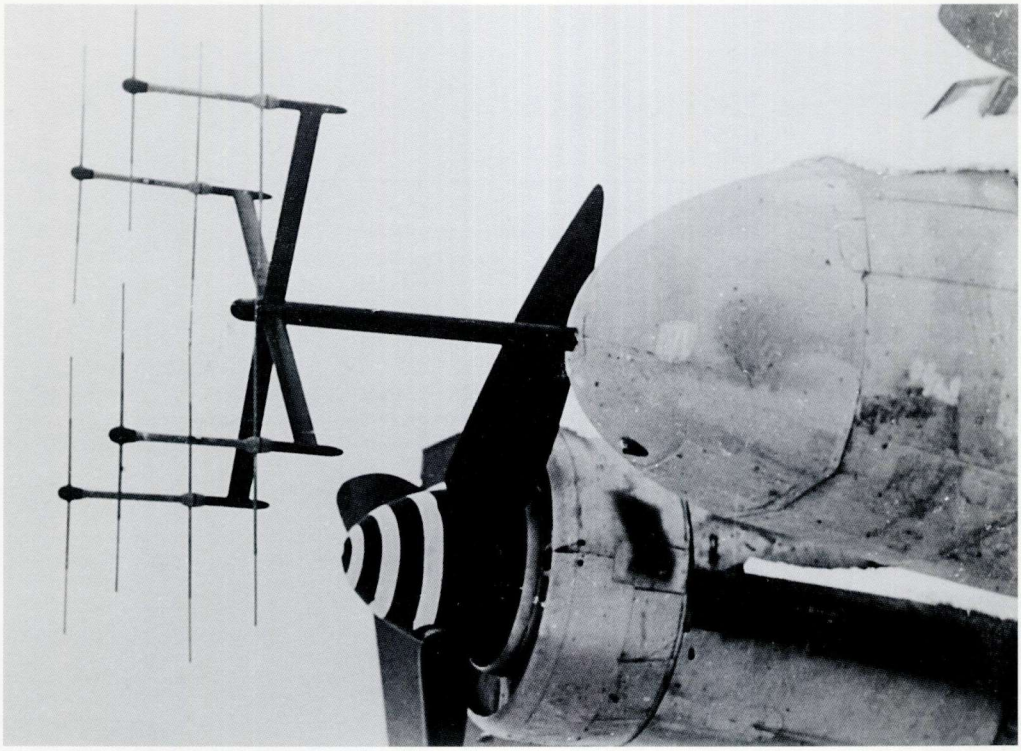
With the invasion of Normandy on 6 June 1944, the Allies soon gained air superiority during the day, and ground forces began steadily to push inland. As they did so, the *Luftwaffe* began to lose a growing number of its early warning stations and was, in effect, steadily becoming blind. The result was that *Nachtjagd* units closest to the front line also found that they had increasingly less time to take off and meet the bombers, particularly as the Allies were soon in a position to base tactical bombers on airfields in mainland Europe.

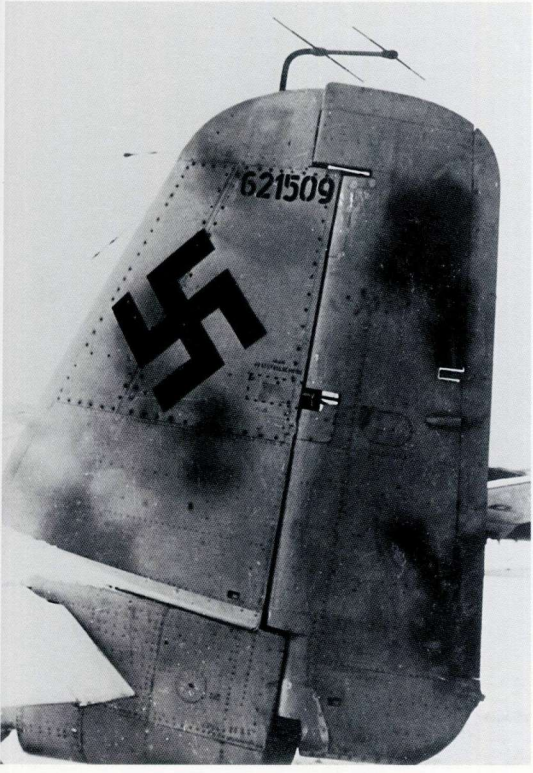
The most significant problem facing the *Nachtjagd,* however, and indeed the entire *Luftwaffe,* was the increasing shortage of aviation fuel. This began to take hold from August onwards when Soviet advances on the Eastern Front resulted in the loss of the Rumanian oilfields upon which the Germans were dependent for a large amount of their fuel requirements, and was accompanied by USAAF raids on the German synthetic oil refineries. At the same time, the Allied advance through France and into Belgium and Holland, forced the *Nachtjagd* to give up its airfields in these countries, and by the end of September 1944 all units had withdrawn to Germany and Denmark. This decrease in the size of the theatre of operations had a detrimental effect upon the night fighters' performance against the bombers, but in spite of the difficulties, those crews still able to fly continued to achieve some remarkable personal successes. Most notable of these was Heinz Schnaufer who shot down his 100th victory on 9 October 1944 and, by the end of the year, had increased his total victories to 106. He had surpassed Helmut Lent's total of 102 a month earlier on 6 November, making him the top-scoring night fighter pilot in the *Nachtjagd,* although by this time Lend had been killed in a landing accident at Paderborn on 5 October 1944.

BELOW: One of the most successful Bordfunkers in the Nachtjagd was Ofw. Johannes Richter, who participated in 67 kills and was decorated with the Knight's Cross on 30 September 1944. Richter joined 4./NJG 1 in the spring of 1941 and was crewed with Rudolf Schönert, with whom he flew for the remainder of the war.

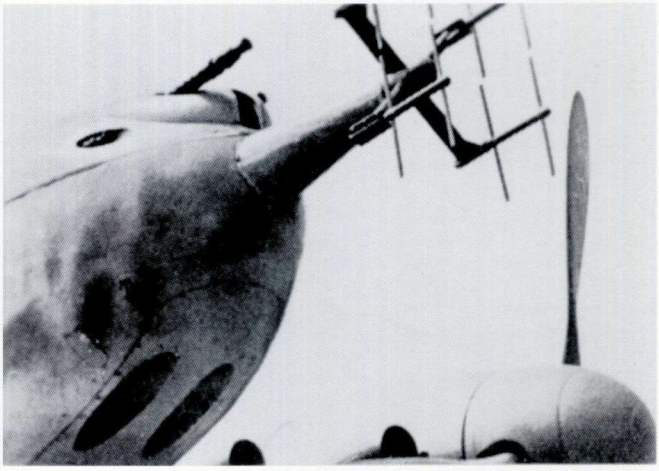
ABOVE: Georg Hermann Greiner (centre) qualified as a night fighter pilot in October 1941, and was posted to II./NJG 1 at Stade near Hamburg. He achieved the first of his 51 victories on 26 June 1942 against a Wellington bomber over north-west Holland. By the end of his career, Greiner had been decorated with the Oak Leaves to the Knight's Cross, as well as the Frontflugspange für Nachtjäger in Gold with Pendant, for having flown over 200 missions. He is seen here with his crew shortly after having received the Knight's Cross from Generalmajor Joseph Schmid on 27 July 1944. On Greiner's right is his Bordschütze, Uffz. Hans Maurer, and to his left is his Bordfunker, Fw. Rudi Hammerdörfer.

LEFT: Martin Drewes' military career started in November 1937 when he joined 6. Panzer Regiment at Neuruppin as an officer cadet. On being promoted to Leutnant he transferred to the Luftwaffe and received his pilot's badge in April 1940. After Zerstörer training at Schleissheim, he was posted to II./ZG 76 at Jever on 8 February 1941 and flew a number of operations in Iraq. Returning to Germany, he trained as a night fighter pilot and was posted to III./NJG 3, achieving his first night victory, a Stirling, during a raid on Berlin on 17 January 1943. In June of the same year he was posted to IV./NJG 1 and, by 1 March 1944, he was Gruppenkommandeur of III./NJG 1 at Laon-Athies in France. Drewes scored heavily throughout 1944 and was decorated with the Knight's Cross on 27 July after some 48 victories. The Oak Leaves to the Knight's Cross followed on 17 April 1945, by which time Drewes had been promoted to the rank of Major and had claimed the destruction of 50 bombers.





ABOVE AND BELOW: Two types of airborne radar are represented by these photographs of aerial arrays. The view above shows the FuG 218 'Neptune' aerial fitted to a Ju 88 G-6 while shown below are the aerials for the FuG 212 'Lichtenstein' C-1 wide-angle airborne intercept radar as fitted to a Bf 110.



LEFT: The aerial for a tail warning radar mounted on the tail of a Ju 88 G-6.

"...a bright tail of fire...."

LEUTNANT GERHARD WAGNER, III./NJG 5

Gerhard Wagner joined the Luftwaffe in November 1940, and was promoted to Leutnant on 1 February 1942. After night fighter training at Stuttgart-Echterdingen, he was posted to 8./NJG 5, based at Königsberg-Neumark in East Prussia, and flew his first operational night sortie on 3 October 1943. He achieved the first of his 14 victories on the night of 23/24 December 1943, but his career came to a sudden end on 2 August 1944 when he was shot down by Flak. Captured by the Americans and with serious burns to his face and hands, he underwent a number of operations before finally being released from captivity in February 1946.

From 15 May 1944, III./NJG 5, wholly equipped with the Bf 110 G, had been flying operationally from Laon/Athies in France, and I had been assigned as the Technical Officer of the 8. Staffel. At 01.00 hrs on 8 June 1944, we were scrambled against incoming bombers. As success always depended on calculated assumptions, we guessed that the target could be Paris and vectored to an area north of the French capital.

After some time my *Bordfunker, Unteroffizier* Gruner, suddenly picked up on his SN-2 set, a fast-moving target travelling from right to left at right angles to our own course. I made a steep turn onto a southerly course and, a short time later, Gruner located another target on his radar. We slowly crept up on it until I could see a shadowy form and the exhaust flames of a four-engined bomber. I attacked from astern and saw the burst of fire from the two-centimetre and three-centimetre cannon striking accurately into the port wing and engines. The bomber went down with a bright trail of fire and exploded on contact with the ground.

I saw my next target in the light of the fire from this explosion and flew towards it at full throttle. The second attack was almost a carbon copy of the first, ending with a crash in flames. It was clear that in both attacks the crews had no warning of my presence, because we had not been fired at by the rear gunners of either bomber.

In the light of the fire from the second crash I made out a further bomber, which I headed for at full throttle. In this case, however, streams of defensive tracer from the bomber's rear turret came towards me – poorly aimed, thank God! So I aimed at the rear turret and swept my fire from the left and into the port wing. This four-engined bomber went down with a long trail of flame. The glow of the fires from the third crash provided illumination to find target number four, behind which I positioned myself and attacked immediately. While all of this was going on, the bombing attack had intensified, which helped even further to light up the darkness. I had another success in this attack, during which I used all four forward-firing guns, despite the bomber's defensive fire. At the same time I could not help noticing in the course of all of this firing that the 2 cm cannon was firing intermittently and that only one of the 3 cm guns was still functioning, so that I released the firing button on the control column. Nevertheless, the effect on the bomber was sufficient to make it crash in flames.

I had already made out yet another bomber, even though it had already released its bombs and was turning onto a course for home. The brightness of the fires on the ground made it possible for me to remain at a distance and at the same time devote my attention fully to the functioning of my guns. The 2 cm cannon, which should have automatically reloaded after a jam, remained stubbornly silent. The task of reloading the 3 cm cannon (with a pressure button to activate the hydraulic firing) was equally unsuccessful. So, there I was, with a fifth prospective kill right in front of my nose, and with none of my guns working!

With gritted teeth we set course for our airfield at Laon. As we did so, our port engine began to falter and the water temperature rose to its maximum limit. Soon afterwards, sparks could be seen spraying from the exhaust and from this I assumed that a coolant pipe had been hit during the final two attacks. The only thing I could do was switch off the engine and attempt to reach the nearest airfield on the remaining one engine. In doing so, however, it soon became clear that we could not maintain our height, despite jettisoning our reserve fuel tanks. I had to maintain strong pressure on the rudder with my right foot but the gradual loss of height was slowly becoming critical.

Due to the air raid, airfields close to Paris were not yet illuminated, but the hope of finding one was what prevented me from giving the order to bale out. However, we had no luck and eventually it was too late, anyway! I could only maintain the pressure on the rudder with my right leg by pressing my right hand on my knee, and as the dark shadows of the hilly ground came ever closer, the only remaining option was to risk a blind landing before we collided with the next hill. I throttled back, switching on my landing light as I did so. Suddenly, I saw a church tower pass by me on the port side. I opened the throttle again and looked for the next suitable area. Throttling back, the aircraft stalled – I had by now pulled the control column right back into my stomach. The fuselage made contact with the ground and we skidded on for some considerable distance. These were the most tense seconds as I was sure some obstacle was bound to appear and we would thunder into it. But again, nothing happened! Everything was deathly silent until my crew jumped out of the machine and did a dance of joy. Only then was I able to ease the cramp in my right knee. Once again our guardian angel had flown with us to the very end!

1. III./NJG 5 was wholly equipped with the Bf 110 G at this time.

ABOVE: Kurt Welter, who evaluated the Me 262 as a night fighter in the summer of 1944 and later led 10./NJG 11.

An interesting event that occurred during the winter of 1944/45 was the formation of a new unit to hunt and destroy RAF Mosquitoes. Raids against German cities by the light and fast Mosquito bombers had featured since January 1943 but such attacks had increased in the summer of 1944 and *Lt.* Kurt Welter was tasked with evaluating the suitability of the Me 262 as a night fighter. Duly impressed by its performance, Welter began to fly experimental night sorties using a standard Me 262 A-1a single-seat version of the jet. As a result of these flights, an experimental night fighter unit, designated *'Kommando Welter'* was formed at Rechlin on 2 November 1944. A small number of suitably qualified pilots were transferred to the unit, which was initially subordinated to II./NJG 11 and then re-designated 10./NJG 11 on 25 January 1945. The Staffel, still operating single-seat Me 262s, flew *'Wilde Sau'* operations over Berlin, although towards the end of March 1945 it received a small number of the two-seat Me 262 B-1a/U1 version equipped with *'Lichtenstein'* SN-2 and *'Naxos'*. Although the unit claimed a total of about 42 Mosquito kills[1] with these two variants of the Me 262, there were too few of the night fighter version which, as with the day fighter variant, came into service too late to make any real difference to the final outcome of the air war.

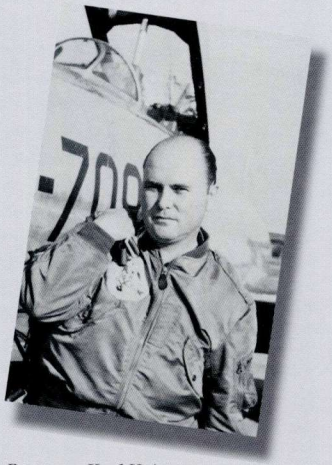
Meanwhile, the German aircraft industry had continued to manufacture increasing numbers of aircraft month on month until the end of 1944, by which time the numerical strength of the night fighter force had grown to its highest wartime level. At that time, although it had on paper an establishment of 1,319 aircraft, it actually possessed some 1,355 aircraft, of which 982[2] were available for operations. The fuel situation, however, was now so critical that the increase in aircraft production could have little effect on the outcome of the battle and, eventually, only the most experienced crews, ie. those which stood the best chance of shooting down bombers, were allowed to fly.

The result was that in December, while the night fighter crews fought on against almost insurmountable odds in an effort to stem the escalating bombing campaign against their homeland, in 1,070 operational flights they shot down just 66 bombers but lost 114 of their own aircraft in the process, mainly to Allied night fighters. Similarly, although the successes in January and February 1945 totalled 352 bombers shot down, 94 night fighter aircraft were lost. On various sorties flown on 21 February, Heinz Schnaufer, who had since become the *Kommodore* of NJG 4, shot down nine bombers during attacks against Dortmund and Duisburg, but such individual acts were unable to prevent the destruction of Dresden, Pforzheim and Worms, all of which occurred in the final months of the war.

BELOW: A captured Bf 110 G-4 of 2./NJG 5 coded C9+IK, photographed at St. Dizier in France in 1944. This machine was camouflaged in 76 on the under-surfaces with a plain 75 in a high demarcation line over all upper-surfaces. Note that the Geschwader code 'C9' – not to be confused with the 'G9' of NJG 1 – is in black, while the aircraft and Staffel letters are in grey.

1. Total taken from 'Night Fighter Combat Claims', by Foreman, Matthews and Parry.
2. Figures taken from 'History of the German Night Fighter Force' by Gebhard Aders.

Combat Reports Submitted by Feldwebel Karl-Heinz Becker of 10./NJG 11 for the 27 and 30 March 1945



Post-war, Karl-Heinz Becker joined the Bundesluftwaffe and is shown (ABOVE) in the US during a jet refresher course on the T-33.

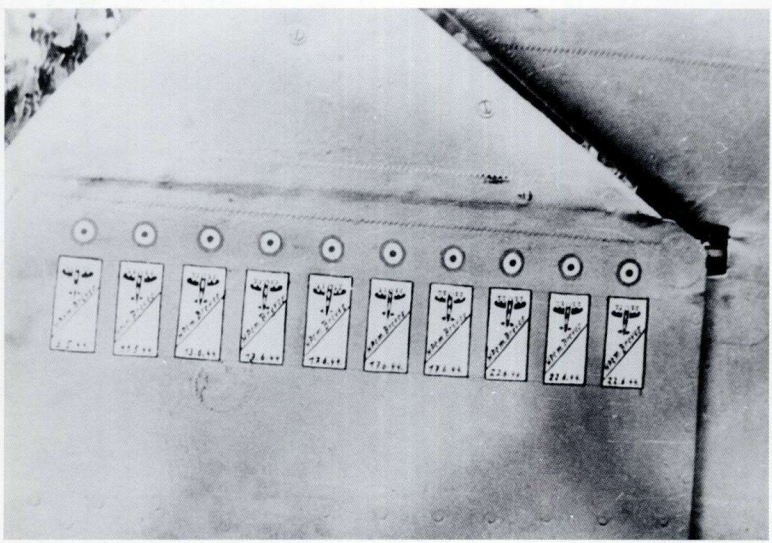
Note: *In the original Abschussmeldungen relating to the following actions, the type of machine flown is given as 'Aborn', the code name for the Me 262. Other reports in the same series, however, specifically mention the single-seat Me 262 A-1.*

At 20.58 hrs on 27 March 1945, I took off on a night sortie over Berlin. Illuminated conditions were poor, and so it was not possible to pick up targets caught in the searchlight beams. After these circumstances forced me to give up acquiring a target, I flew back into the target area.

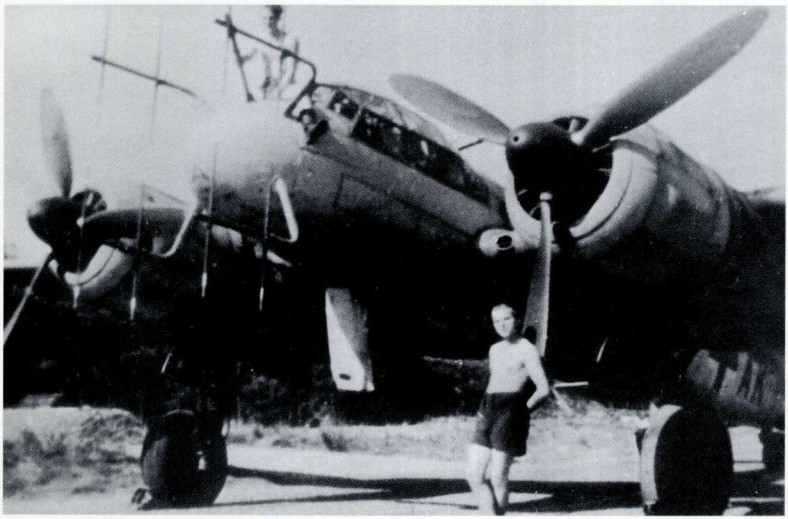
Above me, and flying on a reciprocal course, I recognised a Mosquito[1] that was trailing a strong contrail and which had released target markers. I carried out a climbing turn and closed slowly on the target. At 21.38 hrs, at a height of 8,500 metres, I clearly saw the target and fired at him while closing to 150 metres. I hit him full in the fuselage. While turning to port, I saw a number of burning fragments go down and scatter on the ground. According to my calculations the destruction of the Mosquito took place near Nauen in *Planquadrate* FF5.

At 21.29 hrs on 30 March 1945, I took off for a night sortie in the Berlin area. Over the target I immediately picked up a contact and attacked directly from astern at a height of 8,000 metres. The enemy aircraft escaped my fire by pulling up to port. I turned and again brought the enemy target into a good position. I then noticed a friendly aircraft alongside me and I pulled away to port. The friendly aircraft had not seen what was happening and he turned away to the left and behind me. I now attacked the enemy, which was flying to the right and above ahead of me. Recovering from my banking manoeuvre and going into a climb, I opened fire ahead of the enemy aircraft which flew into the burst and suffered a number of direct hits in the fuselage and starboard wing. Then the enemy machine turned over onto its back in a port spin and was followed down by the searchlights. I saw the impact with the ground, and according to my calculations, it crashed in *Planquadrate* FG 5/5 at 21.52 hrs, and from a height of 8,500 metres [2].

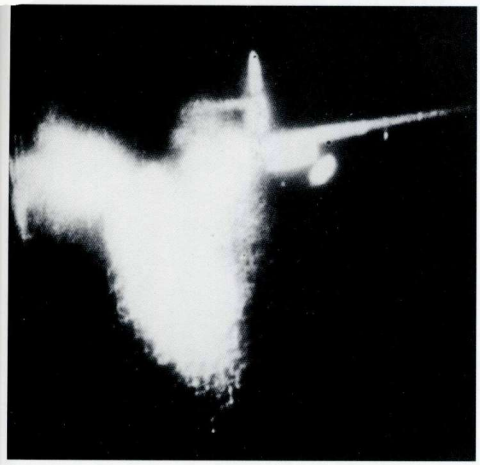
1. It is very likely that this aircraft was a Mosquito XVI, serial number MM131 and coded XD-J from 139 Squadron. The pilot, F/Lt. A.A.J. Van Amsterdam DFC was killed, while the navigator, S/Ldr. H.A Forbes DFC, RCAF, was taken prisoner.
2. Note: The destruction of this Mosquito was Fw. Becker's seventh victory.



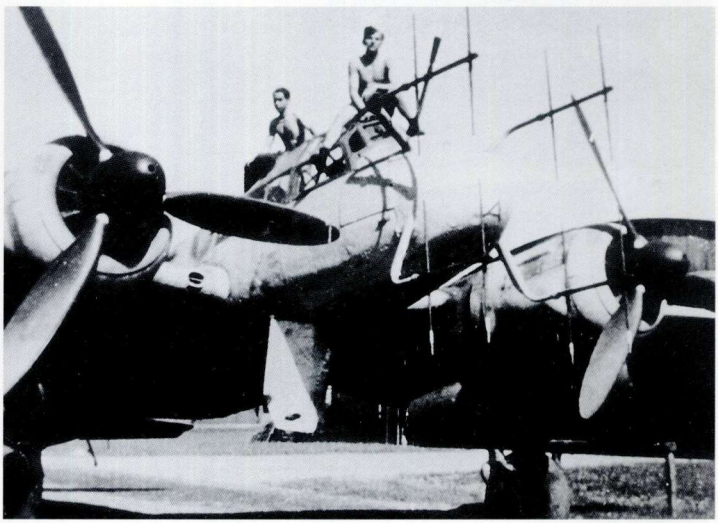
LEFT: The tail of Hptm. Adolf Breves' Bf 110 G night fighter showing his victory tally in June 1944. This pilot flew with Stab IV./NJG 1 and, on the night of 21/22 June, shot down three RAF Lancaster bombers which raised his tally to ten victories. Note the meticulous book-keeping, each victory being represented by a white victory bar, within which is a silhouette of a four-engined bomber together with a note of the type destroyed and the date of the victory. Hptm. Breves later flew with II./NJG 1, and although records exist showing he was finally credited with 17 victories, it is possible he may have destroyed another in the final months of the war which was not confirmed.

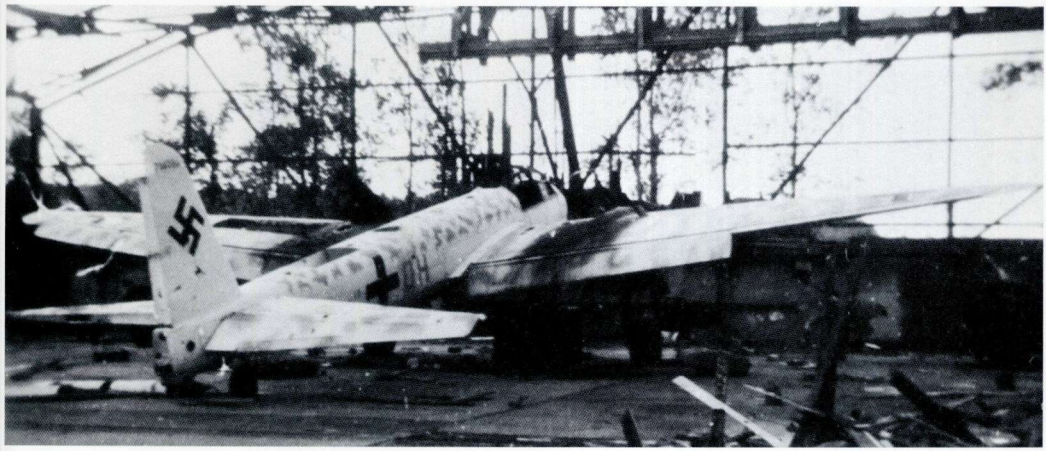


LEFT AND BELOW: A Ju 88 shown in the summer of 1944 with a single experimental obliquely-mounted MG 151 fitted in the nose. It is not known how this armament installation fared in combat, nor how effective the flash suppressor on the barrel of the MG 151 was in preserving the pilot's night vision. This particular aircraft was coded 4R+AK and was flown by Ofhr. Johannes Strassner of 2./NJG 2.



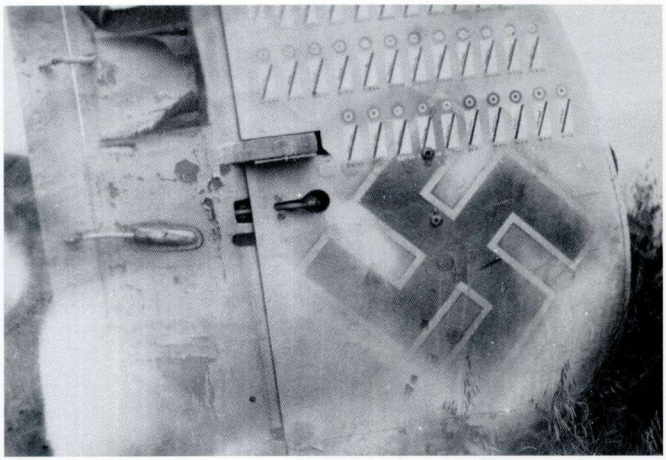
ABOVE: A still from gun camera footage showing a Bf 110 of an unknown unit under fire from an RAF night fighter.



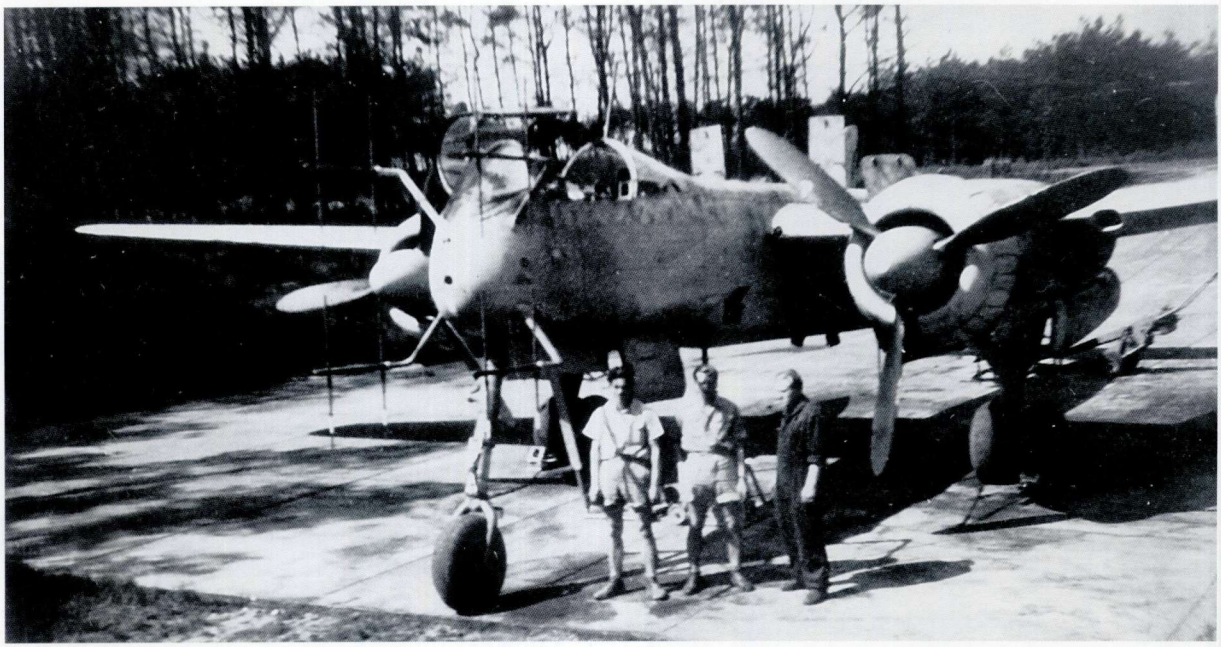


LEFT: This Ju 88 G-1, W.Nr. 714084, was photographed at St. Dizier in France in September 1944 and had belonged to 1./NJG 5. Note the differences in the finish between the fuselage and tailplane and that the 76 on the wings has been applied over the 75 in broad swathes. The operational code on this machine was 'C9+OH'.

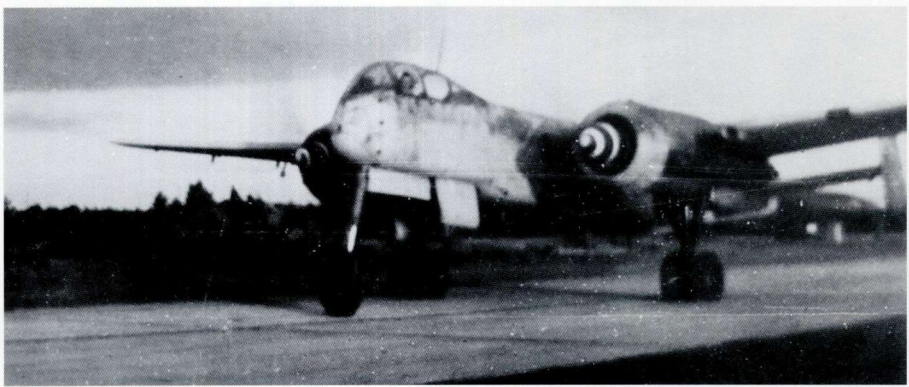
RIGHT: The tail of the Bf 110 G flown by Hptm. Martin Becker while Staffelkapitän of 2./NJG 6. Although not all victory bars are visible in this photograph, the tail was marked with 43 bars, and beneath each was written the type of aircraft destroyed. The last two bars represent two Lancasters destroyed on 12 September 1944. After these victories, Becker was promoted to Hauptmann and on 20 October 1944 he was appointed Kommandeur of IV./NJG 6. At that point, Becker left his machine with I./NJG 6 and this photograph shows a detail of the aircraft as found at Munich at the end of the war. As Becker had received the Ritterkreuz on 20 April 1944 after his 26th victory, it is possible that a representation of the decoration was painted above the top row of victory bars.



BELOW: An He 219 A-6 of 1./NJG 1 at Venlo in the summer of 1944. Note the small port in the wing root for one of the aircraft's MG 151/20 cannon.

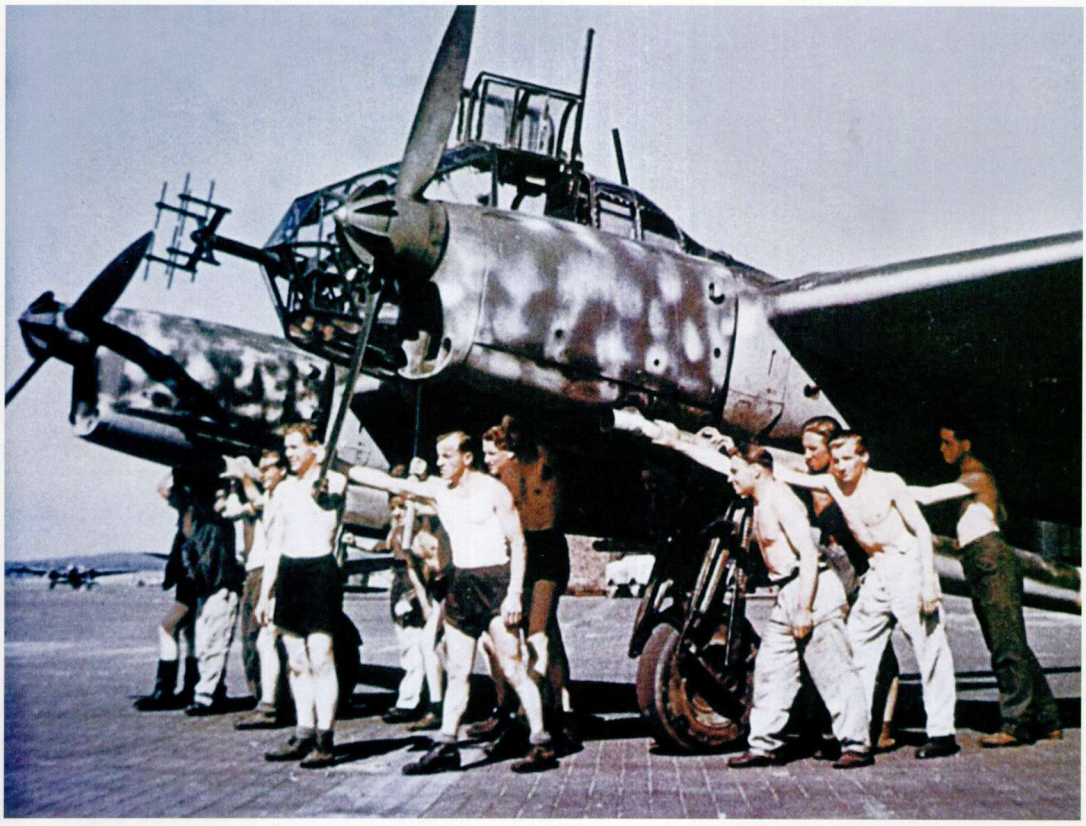


RIGHT: This He 219 A-0 photographed taxiing at Grove in the summer of 1944 belonged to NJG 1. No radar aerials have been fitted to the nose as this aircraft was used for training former Bf 110 and Ju 88 pilots converting to the type.

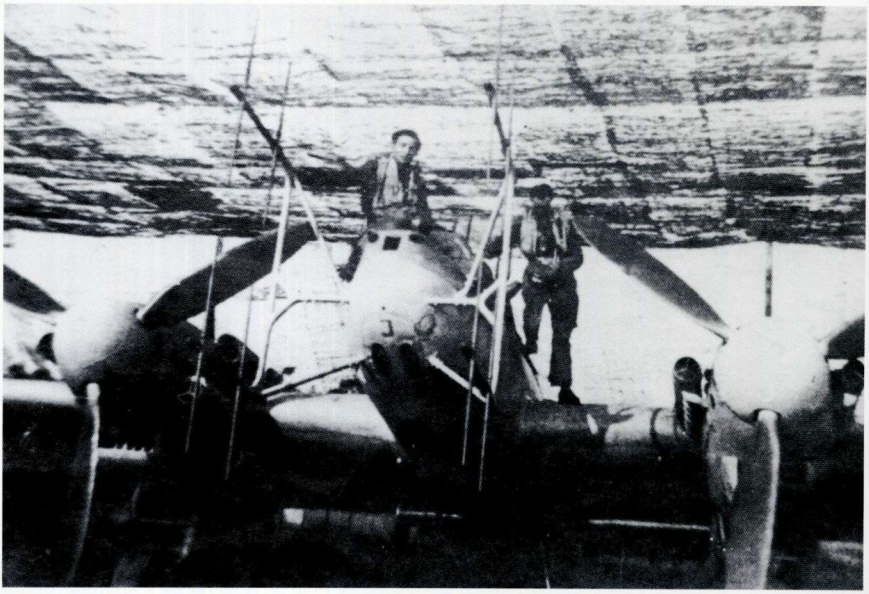


LEFT: Ground personnel preparing a Ju 88 G-6 aircraft of NJG 100 for a sortie in the autumn of 1944. This aircraft almost certainly belonged to 5. Staffel which, at the time the photograph is thought to have been taken, was stationed in Hungary. Note the radar aerials angled at 45 degrees and the 76 spinners.

BELOW: Another Ju 88 G-6, almost certainly coded W7+LN, of 5./NJG 100. Note that as with the machine shown (*LEFT*), no 'Naxos' equipment was installed as both aircraft were operating on the Eastern Front where 'Naxos', which homed onto the 'H2S' emissions from RAF aircraft, would not normally be required. This aircraft differs from that shown in having green 70 spinners and propeller blades.



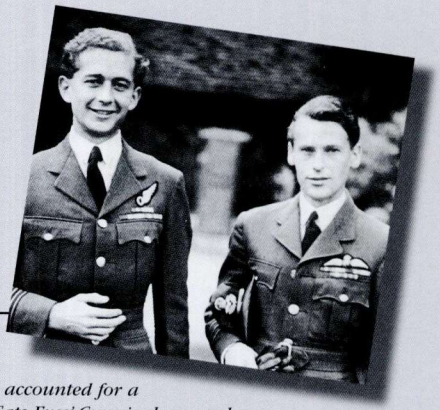
ABOVE: One of the more unusual types provisionally employed in the night fighter role by NJG 100 on the Eastern Front was this Fw 189 A. This machine was fitted with FuG 212 radar and a single, obliquely-mounted MG 151 in the rear of the cockpit and which may be seen protruding from the canopy. Up to six Fw 189s were employed by I./NJG 100 between March and December 1944, while II. Gruppe had a similar number but only used them up to October. Although the operational code cannot be seen on the aircraft shown here, known codes are W7+CB, +DB, +EB, +MB, +NL and W7+WM, most of these being Fw 189 A-4s with a 20 mm MG FF cannon in each wing root in addition to the oblique MG 151. On this aircraft, the standard factory 70/71 uppersurface scheme has been modified with an overspray of 76 mottles.



ABOVE: This Bf 110 G-4 of 6./NJG 1 was photographed at Kaiserswerth-Düsseldorf in October 1944. Pictured with the aircraft is the pilot, Uffz. Gustav Sarzio, and his W/T operator, Heinz Conrands. Their machine was coded G9+JP and was lost in the evening of 4 November 1944 when it was shot down over Mönchengladbach, possibly by an RAF Mosquito. Sarzio, who then had five victories, was wounded, but Conrands was killed.

"The enemy aircraft slowly turned onto its back in a shallow dive from 7,000ft with both engines burning well"

S/LDR. BRANSE BURBRIDGE, DFC, 85 SQN. RAF



Wing Commander Branse Burbridge (right) pictured with his navigator and best man, Squadron Leader 'Bill' Skelton (left) on his wedding day in 1946. In a period of just ten months, this crew accounted for a total of 21 German aircraft shot down at night, more than John 'Cats Eyes' Cunningham and 'Bob' Braham.

The following is the Combat Report submitted by S/Ldr. Burbridge on returning from a high-level Intruder Support Patrol to Brunswick on the night of 14/15 October 1944. The sortie was flown in a Mosquito Mk. XIX.

After an uneventful patrol we decided to follow the bomber route home. We had flown south-west for about seven minutes when we saw the recognition procedure being carried out near a flashing white beacon to the west of us. We lost height to 2,000 ft. in this direction and F/Lt. Skelton reported a contact at a range of four miles, 30 degrees to starboard. There followed a ten minute climbing chase, during which the target was taking considerable corkscrew evasive action. A visual was finally obtained on a Ju 88 at a range of 1,000 ft. F/Lt. Skelton confirmed this with the aid of binoculars.

I opened fire with deflection at a range of 600 ft and saw strikes. A second burst produced no visible result before the enemy aircraft dived hard to port and visual was lost. F/Lt. Skelton regained contact at a range of 6,000 ft well off to port and we again closed into visual range. This time a long burst from a range of 500 ft started a large fire in the starboard engine, illuminating the tail unit, so that we could identify it as a Ju 88G. The enemy aircraft turned onto its back in a shallow dive from 7,000 ft with both engines burning well. It went down to explode on the ground at 03.30 hrs, about five miles north-east of the beacon. One parachute was seen.

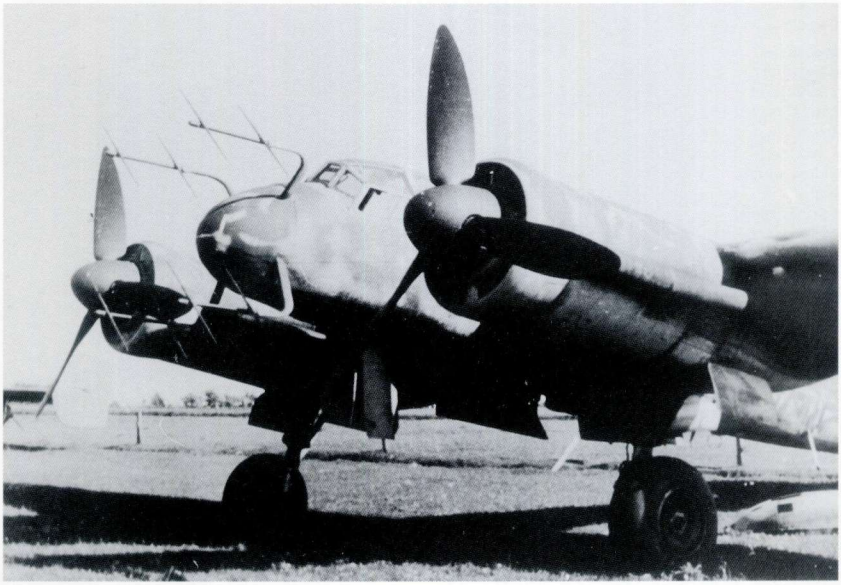
Five minutes later, another contact was obtained in the same manner, 90 degrees to port, range two and a half miles. After a similar chase, this was converted to a visual on a Ju 88 at a range of 1,000 ft. at 03.45 hrs. I opened fire at a range of 500 ft with deflection, observing strikes and a bright flash. The second burst showed results and then the guns stopped firing. The enemy aircraft was last seen turning steeply to starboard in a southerly direction with sparks and a dull flame coming from the starboard engine. Assuming that we were out of ammunition, we calculated our approximate position and set course for base.

No. 157/T reported an aircraft exploding and burning on the ground approximately ten miles south of Gütersloh at 03.52 hrs. In view of this report it is requested that consideration be given to stepping up the second claim from probably destroyed to destroyed.

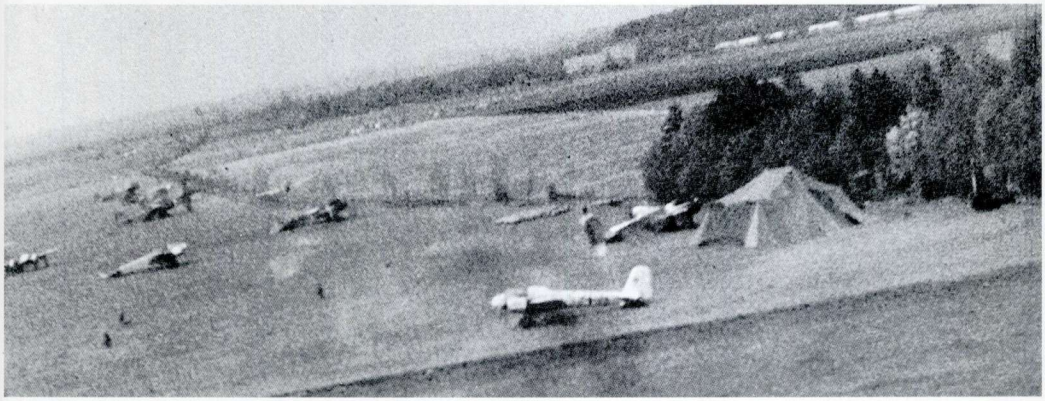
Note: Branse Burbridge finished the war as a Wing Commander and the highest scoring British night fighter pilot with 21 victories, two probables and one damaged. After leaving the RAF in December 1945, Burbridge DSO*, DFC* studied at Oxford, while his navigator, Squadron Leader F.S. 'Bill' Skelton, DSO*, DFC* studied at Cambridge. Interestingly, both went on to enter the Christian ministry.

LEFT: This Ju 88 G-6 was one of the few aircraft equipped with FuG 220 SN-2 radar with a 'Morgenstern' aerial. In this instance, the aerial has been left uncovered, but it was sometimes faired over within a long, tapered housing. It is thought that this particular machine was photographed in late 1944, at which time the operational code C9+AC on the fuselage side would indicate that it was flown by Major Hans Leickhardt who, from 3 May 1944 to 6 March 1945 was the Kommandeur of II./NJG 5. Note the light area around the 'C' in the fuselage code and what is believed to be the corner of a Kommandeur's double chevron just visible behind the trailing edge of the starboard wing.

Junkers Ju 88 G-6 flown by Major Hans Leickhardt, Kommandeur of II./NJG 5, Stubendorf, late 1944
The camouflage on this machine provides a good example of how the overall grey 75 on the uppersurfaces, which was found unsuitable for night operations, was lightened with an overspray of 76 but in such a manner that irregular patches of the original 75 remained as a result of the method of overspraying. As the accompanying photograph shows what is thought to be part of a Kommandeur's double chevron just ahead of the letters 'AC' on the fuselage, this profile has been completed accordingly.

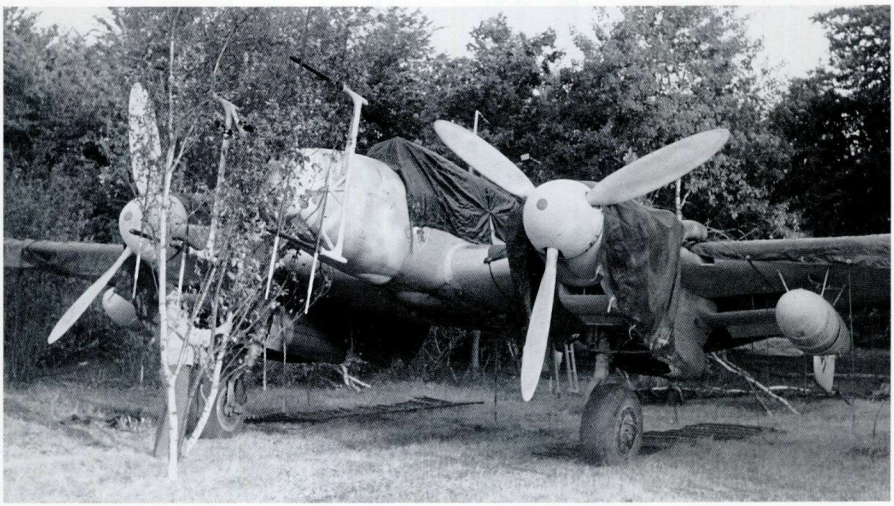


LEFT: Aesthetically less attractive was the modified camouflage on this Ju 88 which consisted of roughly applied patches of medium grey, probably in 75 over an otherwise 76 fuselage. Unfortunately, the bright sunlight renders impossible any further description of the camouflage on this aircraft.

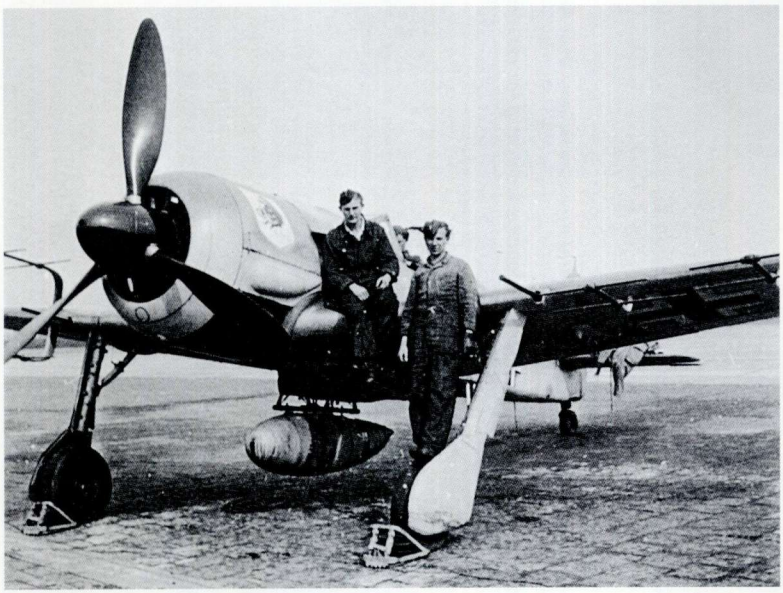


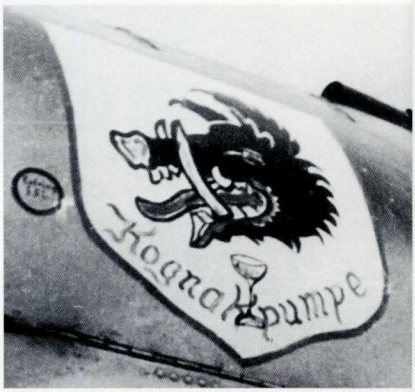
ABOVE: Towards the end of the war, Luftwaffe airfields became a prime target for roaming Allied fighters, and while the light colours of the standard night fighter finish were ideal for aircraft operating in the hours of darkness, such aircraft were clearly visible when parked on the ground in daylight. This is well illustrated by this gun camera still showing a Ju 88 night fighter of an unknown unit under attack.

RIGHT: One partial remedy was to carefully cover the aircraft with foliage, as seen on this Bf 110 night fighter, although removing and replacing the branches when the leaves wilted or the machine had to be moved, became a laborious chore. Note that on this aircraft the grey camouflage finish on the aircraft itself has been applied to the propeller blades which were normally finished in RLM 70 green.

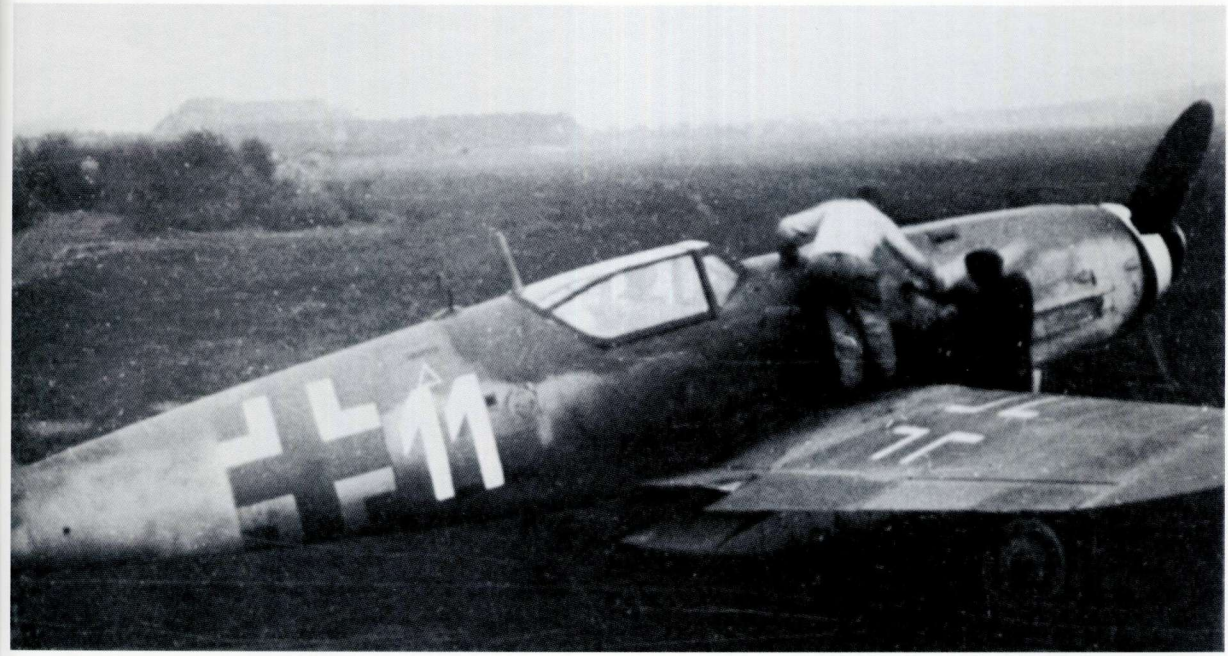


RIGHT: Fw. Günther Migge, in the dark overalls, claimed his first four victories in the last three months of 1943 while flying the Bf 109 G with 2./JG 300. When NJGr 10 was established in early 1944, he transferred to 1. Staffel and, according to some sources, eventually accumulated a total of eight victories. This cannot be confirmed, however, and the only record of any further victories claimed by this pilot after he left 2./JG 300 is a Lancaster shot down late on 12 September 1944 when he was with 1./NJG 11.





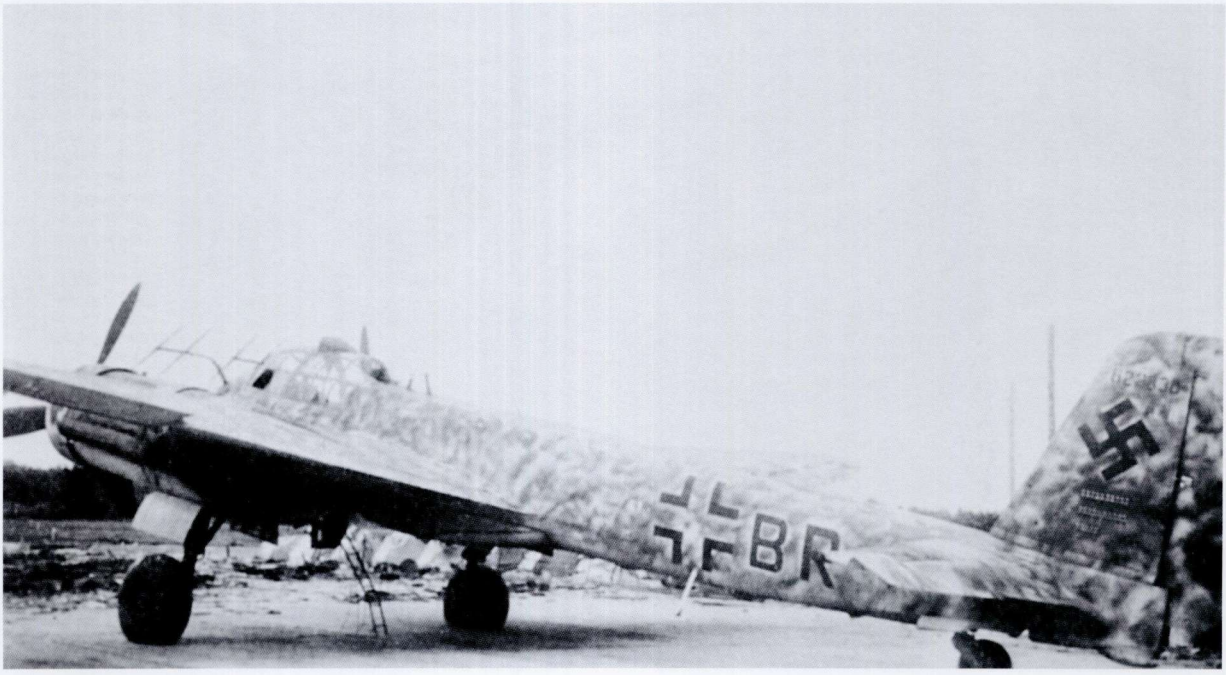
ABOVE, LEFT AND BELOW: Migge's Fw 190 A-8 'White 9' of 1./NJG 10 showing the aerials for the FuG 217 radar mounted on the starboard wing and the anti-glare shield over the exhaust. The badge on the cowling originated with JG 300 and symbolised the unit's 'Wilde Sau' tactics. It appeared in various forms and was also used by NJGr 10. The photograph above shows the particular variation of the badge carried on the engine cowling of Migge's 'White 9'.



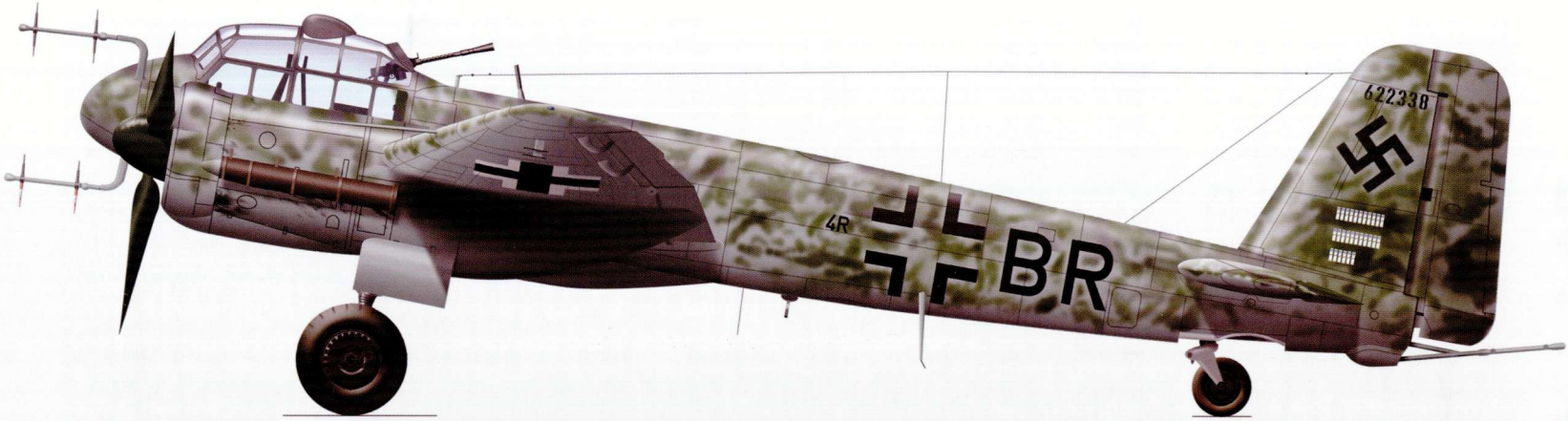
ABOVE: A late-production Bf 109 G-10 of I./NJG 11 at Bonn-Hangelar. This aircraft, 'White 11', was finished in a late war camouflage scheme of 81 and 82 on the uppersurfaces with 76 on the undersurfaces. Although not visible in the photograph, this aircraft had a long tail wheel and tall rudder.

LEFT: The Messerschmitt Bf 109 G-10 was also employed by NJGr 10. This example belonged to the Gruppe's 1. Staffel and was painted 76 overall. This unit operated in the anti-Mosquito role and, in order to reduce drag and thereby ensure every speed advantage, the machines are believed to have been highly polished. The spinner on this aircraft would certainly seem to confirm this.

ABOVE: An He 219 A-2 of I./NJG 1 at Münster-Handorf in the winter of 1944/45. Note the black undersurface of the starboard wing, the spiral spinners, and the small Roman VI below the canopy which indicated that this aircraft was equipped with 'Lichtenstein' FuG 220d radar.



OPPOSITE PAGE BOTTOM AND RIGHT:
This Ju 88 G-6, W.Nr. 622338, was flown by Oblt. Walter Briegleb, the Staffelkapitän of 7./NJG 2, pictured *(RIGHT)* as a Hauptmann seated in a Bf 110. The aircraft had a 'Naxos' housing mounted on the canopy and the SN-2 aerials mounted on the nose were canted at 45 degrees in order to widen the angle of interception. This photograph was almost certainly taken just before or just after Operation 'Gisela' when, on the night of 3/4 March 1945, German night fighters mounted a long-range intruder mission over England. Before this operation, Oblt. Briegleb had 24 confirmed victories, as represented by the victory bars on the tail of his machine, but obtained his 25th and 26th during 'Gisela' itself when he destroyed two Lancaster bombers. For the operation, the aircraft involved were fitted with extra fuel tanks and the oblique armament was reduced to a single 20 mm MG 151, as shown here.



Ju 88 G-6 flown by Oblt. Walter Briegleb of 7./NJG 2, March 1945
This aircraft was originally finished in RLM 76 overall with mottles where the base 75 was left exposed. Later, the uppersurfaces and fuselage sides had been oversprayed with a blend of mottles and Wellenmuster type meandering lines in the late war colours 82 and 83. Although 25 victory bars were painted on the fin, Oblt. Briegleb's official tally was 24 victories before 'Gisela' and 26 afterwards.

Operation 'Gisela'

An unusual operation took place on the night of 3/4 March 1945 when the night fighters mounted a long-range intruder operation. Code named *'Gisela'*, the operation involved about 100 night fighters from NJG 2, NJG 3, NJG 4 and NJG 5 which flew to England in three waves in order to make surprise attacks on British bombers landing at their home airfields after an attack against the synthetic oil refinery at Kamen and the Dortmund Ems Canal at Ladbergen. However, the raid did not bring the success that had been hoped for, and was indicative of just how desperate the *Nachtjagd* had become in attempting such a mission. Although the German night fighters claimed 22 aircraft destroyed for the loss of 33 of their own, the mission proved a costly failure and, although two more intruder operations were carried out in March, both were on a much reduced scale and met with little or no success.

"My part in Operation 'Gisela'"

LEUTNANT GÜNTHER WOLF, 9./NJG 5

Lt. Günther Wolf was transferred to III./NJG 5 in May 1943 as the Gruppe's Technical Officer, and spent the rest of the war with this unit. He flew a total of 64 operations, was credited with four victories, for which he received the Iron Cross First Class and survived being shot down on three occasions. He was captured by the British at Flensburg on 1 May 1945.

On 3 March 1945, we moved from our airfield at Lüneburg to Wittmundhafen where we landed at 17.49 hrs. We immediately received a thorough meteorological briefing for a very special intruder mission to England and then, at 23.21 hrs, I took off in my Ju 88 G6. My crew comprised my *Bordfunker, Feldwebel* 'Hein' Schmitz; my *Bordschütze, Unteroffizier* 'Jupp' Horosiewicz; and my *Beobachter, Unteroffizier* Unbereit[1].

After crossing the German coastline, we descended to an altitude of 100 metres to avoid being detected by British radar. As we were approaching the English coast we could see ships to the south of our position that were heading north. This was only possible because the moon had come out and visibility was very good. These ships were of no interest to us, or at least, so we thought at the time!

A short time later we climbed to the cruising altitude of our aircraft and in the distance, along the Wash and the Humber, we saw searchlights probing the night sky. In order to avoid being detected, I looked for an area of sky where the searchlights were not moving and after passing through this area, reduced power and descended to a lower altitude. Shortly afterwards I saw some lights in the distance and flew in that direction. Whilst approaching this location I found an airfield that was fully illuminated. Its approach lights, as well as its runway lights and blue taxiing lights were on high intensity, as if in peacetime.

I began to descend and saw a four-engined bomber in front of me but, being too fast and in order to approach at the correct angle and speed, had to first lower the flaps. Seconds later, as our speed was still too high, I also had to lower the landing gear. At this moment the bomber started to turn and make its final approach. Suddenly, the airfield lights were switched off and from the bomber's blue exhaust flames we could see that the aircraft in front of us was beginning to make another circuit. Retracting the landing gear, we came in closer and the first rounds hit the bomber's right wing, which immediately burst into flames. The bomber began to climb and the tail gunner started to fire like hell. As we passed below him, I fired our *'Schräge Musik'* and a few seconds later the bomber crashed and exploded.

I intended to return to the same airfield but a lot of anti-aircraft guns were firing and we decided to head north. We were surprised to find many lights on in the docks of Hull, and even the cars on the streets were driving with their lights fully on. We intended to cause some damage to the docks but the lights were extinguished and so we turned for home instead. Knowing that there were some anti-aircraft balloons in the area I descended to a very low altitude and flew down the middle of the Humber. Visibility was improved by the presence of the moon.

We passed the lighthouse at Spurn Head so low that its light was above us! We took a deep breath and hoped that the worst was behind us. Wrong! We had climbed to about 5,000 ft when suddenly we were showered with gunfire and the bullets flew around our ears like glow-worms! Remember those ships? It was a convoy heading north and we had just flown through the middle of it. I immediately descended to a lower altitude and successfully passed through this armada unhurt.

We set a course according to the predicted winds and crossed the coastline. I asked Heinz Schmitz for a QDM from Wittmundhafen but he tried on several occasions without success. After seeing a light beacon glowing through a hole in the clouds, we identified its code but did not believe it. This was Leeuwarden in Holland and we had intended to be near Borkum! So, from our present position, we set a course to Wittmundhafen and, after a short time Hein made contact with our airfield where we landed safely at 02.56 hrs. This was Operation 'Gisela' as I remember it.

1. Respectively, Wireless Operator, Gunner and Observer.

The Final Capitulation

ABOVE: One of the pilots taking part in Operation 'Gisela' was Lt. Arnold Döring of 10./NJG 3. On 17 April 1945 he was officially awarded the Knight's Cross, but in the general confusion of the last weeks of the war the decoration itself was not presented. Some 20 years later, a German aviation historian discovered the award documents and Döring finally received his Ritterkreuz in 1965, albeit in the de-Nazified 1957 form which lacked the swastika.

As far as night fighting was concerned, the most remarkable event in March 1945 was the individual performance of one pilot who shot down nine bombers during a raid against the synthetic oil refinery at Lützkendorf on 14/15 March 1945. When he took off that night, Martin Becker had 48 victories and a reputation for being a phenomenal multi-scorer who achieved all of his kills without the use of *'Schräge Musik'*. On this night he infiltrated the bomber stream and shot down six Lancasters in 22 minutes, after which he ran out of ammunition. Determined to carry on, he ordered his Bordfunker, Leutnant Karl-Ludwig Johanssen, to man the twin, rearward-facing machine-guns as they continued to look for other targets. Over the next 37 minutes Johanssen shot down a further three bombers, one of which was a B-17 from 214 Sqn. on 'Jostle' duties[1]. In this action, Becker thus became the only night fighter pilot to achieve such a score in a single mission. On the night of 16/17 March, Becker shot down a Lancaster near Nuremberg as his 58th and final kill of the war, and on the 20th was duly awarded the Oak Leaves while Johanssen received the Knight's Cross.

Becker's success was almost matched on the night of 16/17 March when *Oblt.* Erich Jung of I./NJG 2 shot down eight Lancasters while defending Nuremberg, but despite these last bold acts of heroism, nothing could now prevent the final collapse of the Third Reich. As the Allied armies pushed deeper into Germany, Bomber Command found that it had virtually run out of targets and strategic bombing operations were wound down accordingly. By the end of April 1945, virtually all night fighter units had surrendered to the western Allies, although a few did fight on into May. The last recorded *Nachtjagd* kill of the war was claimed by *Oblt.* Fritz Brandt of IV./NJG 3, who reported shooting down a Halifax to the north of Hamburg on the night of 2/3 May.

By 8 May 1945, it was all over. Although the terms of the final, unconditional surrender stipulated that aircraft were to be left intact but disabled by removing rudders and propellers, many crews risked punishment and deliberately destroyed their machines rather than allow them to fall into Allied hands. Elsewhere, aircraft which had not already been destroyed in combat or during attacks on their airfields were disabled in accordance with the terms of the surrender. Subsequently, a number of the more interesting aircraft were taken to Britain and the US for examination, while the remainder were scrapped. As for the night fighter personnel, most were held as ordinary PoWs until released, but for the more experienced pilots who had survived there was often detailed interrogation by the RAF.

In the end, the *Nachtjagd* had been beaten by an enemy which had enjoyed an overwhelming superiority in men and material. The German crews had fought tenaciously to try and protect the civilian population, but in the end sheer courage and determination was simply not enough. The *Nachtjagd* had suffered, just as the rest of the *Luftwaffe,* from inept leadership that went to the very top of the organisation. Internal squabbles within the High Command had also robbed the *Nachtjagd* of suitable numbers of the He 219, which had performed remarkably well against Bomber Command. Since the time of its formation, the night fighter force had sorely needed an all-purpose night fighter but had instead been forced to adopt and adapt aircraft that were not wholly suitable for the role. Had the He 219 been produced in sufficient numbers when first manufactured, this aircraft may have had a greater impact on the battle, but the seeds for the defeat of the *Nachtjagd* had in fact been planted even before the war had begun. When the *Luftwaffe* was formed in March 1935, no planning or contingency had been made for the type of defensive war which subsequently developed between 1939 and 1945, and in such fields as radar and electronic counter-measures, the Germans were always trying to catch up with developments on the British side.

What the *Nachtjagd* was able to achieve in spite of these problems, however, was indeed most remarkable and earned the healthy respect of Bomber Command. Certainly, if after more than 60 years, the names and the exploits of the men of the *Nachtjagd* still invoke a great deal of interest, then their place in the history of aviation is assured.

1. 'Jostle' was an electronic airborne jammer that could completely blank out the whole spectrum of VHF frequencies used by the German ground controllers. Due to its size, it was fitted into the bomb bays of B-17s that were used by 100 Group, of which 214 Sqn. was a part.

Heinz Schnaufer

Heinz Wolfgang Schnaufer was born in Stuttgart on 16 February 1922, the first of Alfred and Martha Schnaufer's four children. Three years earlier, in 1919, Heinz's father and grandfather had together established a wine distribution business in Calw, the success of which ensured the Schnaufer children were brought up in comfortable and secure surroundings.

At the age of six, Heinz attended the local *Volksschule* where it quickly became apparent that he was an academically bright and musically gifted child. From an early age, Schnaufer also showed an interest in all things military, and at the beginning of 1933 he became a member of the local *Jungvolk*[1]. Due to his academic performance, he was selected at the age of 16 to attend a *Nationalpolitische Lehranstalt* or National Political Educational Establishment, which had been formed by the National Socialists in 1933 to educate and train the elite of German youth.

ABOVE: The Schnaufer family at their home in Calw in 1940. Heinz Schnaufer's father, Alfred, is standing at the rear while, seated in the foreground are, from left to right, Heinz's mother, Martha, Heinz, his brother Manfred, his youngest brother, Eckart, and his sister, Waltraut.

In early 1938, Heinz attended the *Napola*[2] at Backnang in Wurttemberg where, in addition to academic studies, the pupils participated in military exercises and were taught the principles of leadership. The following year, having already submitted a request to join the *Luftwaffe* as an officer cadet, Schnaufer was transferred to a *Napola* in Potsdam where he began flying gliders from the nearby Güterfelde Hills.

On passing his *Abitur* he joined the *Luftwaffe* on 15 November 1939, and was sent to *Fliegerausbildungsregiment* Nr. 42 at Salzwedel in northern Germany for basic infantry training. From Salzwedel he was posted to A/B *Schule Nr.* 3 at Guben near the Polish border, where, after qualifying for his pilot's badge in August 1940, he was selected to receive further training on multi-engined aircraft at Alt-Lönnewitz. After being promoted to *Leutnant* on 1 April 1941, Schnaufer underwent blind-flying training at Schwäbisch Hall in Bavaria, followed by a further ten weeks of *Zerstörer* training on the Me 110 at Wunstorf, near Hanover.

ABOVE: Schnaufer was decorated with the Knight's Cross by Generalmajor 'Beppo' Schmid on 31 December 1943. As many night fighters had received the Ritterkreuz after only 25 victories or less, approval of this award was somewhat belated and occurred only after Schnaufer's 42nd victory.

It was at Wunstorf that he first met Fritz Rumpelhardt, the man who was to become his *Bordfunker* for the next four years. Towards the end of the *Zerstörer* training the two men decided to join the *Nachtjagd* and, together with two other crews, they were sent to Schleissheim to complete their night fighter training. The training was rather rudimentary and consisted of cross-country flying, night flights and practice sorties flown in close cooperation with local searchlight batteries. In November 1941, Schnaufer and Rumpelhardt were posted to II./NJG 1, based at Stade in northern Germany.

After taking part in Operation *'Donnerkeil'* in February 1942, the *Gruppe* transferred to the new airfield at St.Trond, in Belgium. In April, Schnaufer was appointed the *Gruppe's* Technical Officer, in which position he was responsible for ensuring the unit's aircraft were serviced and ready for operations. After many frustrating months of watching the more experienced pilots increase their personal tally of kills, Heinz Schnaufer finally claimed his first victory of the war during Bomber Command's second 'Thousand Bomber Raid' against Essen on 2 June 1942. Following this success, he shot down a further three bombers on 1 August 1942, and eventually finished the year with a total of seven victories.

ABOVE: Heinz Schnaufer in flying gear during training at A/B Schule No. 3 at Guben on the German-Polish border. After almost two years of training, Schnaufer was posted to his first front-line night fighter unit, II./NJG 1, based at Stade in northern Germany.

During the opening months of 1943, Bomber Command made the most of the longer, darker nights by sending their bombers deeper into Germany against such targets as Hamburg and Berlin and, in the south, Nuremberg and Munich. This resulted in the bombers flying predominately over the North Sea and through France, thereby circumnavigating the airfields in Belgium and presenting the night fighter units based there with far fewer opportunities to shoot them down. Schnaufer finally achieved his first victory of the year on 14 May 1943, when he destroyed a Stirling and a Halifax during a raid against Bochum. As the attacks against the Ruhr increased, he scored steadily throughout the remainder of the month, a trend which continued into June and July. He was promoted to *Oberleutnant* on 1 July 1943 and, on 20 July, he shot down his twentieth opponent.

1. A youth organisation for German boys aged between ten and 14. At age 14 it was then usual for boys to transfer to the *Hitler Jugend*.
2. *Napola*: a colloquialism for *Nationalpolitische Lehranstalt*, the National-Political Educational Establishment.

Disappointed with the small number of opportunities he had to shoot down bombers with II./NJG 1 at St. Trond, Schnaufer requested a transfer to Leeuwarden, situated in north-west Holland, where he believed he would stand a better chance of increasing his personal score. The request was quickly approved and he joined IV./NJG 1 at Leeuwarden on 13 August 1943, becoming *Staffelkapitän* of 12./NJG 1 in the process.

In the same month, Air Chief Marshal Sir Arthur Harris began his offensive against the German capital, with the first of 19 raids taking place on the night of 23/24 August, during which Schnaufer scored his first kill with IV./NJG 1. To counter the growing threat of being shot down by RAF intruders, a third crew member was added to the German night fighters to help defend the aircraft against any such attack, and in September, *Uffz.* Wilhelm Gänsler became the third member of the crew as *Bordmechaniker.* Over the next four months, Heinz Schnaufer shot down a further 20 four-engined bombers to finish 1943 with a total of 42 confirmed kills. On the last day of the year, he was awarded a long-overdue Knight's Cross, receiving the decoration from the Commanding General of XII. *Fliegerkorps, Generalmajor* Josef Schmid.

ABOVE: Following his first night fighter victory on 2 June 1942, a Halifax from 76 Squadron, Heinz Schnaufer scored steadily throughout the remainder of that year and, by the end of 1942, his number of victories had risen to seven. He is seen here preparing to alight from the cockpit of his Bf 110 after a test flight.

By the time the so-called 'Battle of Berlin' came to an end on 24/25 March 1944, Schnaufer had increased his number of victories to 51 and was fast becoming the rising star of the Nachtjagd. This was evident from the fact that on 1 March 1944, he was made *Kommandeur* of IV./NJG 1 at the age of just 22. Almost immediately following this appointment, the *Gruppe* was transferred from Leeuwarden back to Schnaufer's former airfield at St. Trond in Belgium.

ABOVE: After shooting down his 89th bomber on 29 July 1944, Schnaufer (second left) was awarded the Swords to his Knight's Cross with Oak Leaves. The decoration was presented a few days later by Hitler himself. On the far left is Erich Hartman, who would end the war with 352 confirmed victories, while on the far right of the line, waiting to be presented with the Oak Leaves, is Lt. Adolf Glunz of 6./JG 26.

April 1944 proved to be the most successful month of his career to date and he succeeded in shooting down ten bombers, four of these being achieved on the night of 24/25th. This run of successes continued at an even greater pace into the following month, and during attacks against cities such as Duisburg, Dortmund and Aachen, *Oblt.* Schnaufer claimed the destruction of a further 13 enemy aircraft, including five on 25 May.

By the time he was awarded the Oak Leaves to the Knight's Cross on 24 June 1944, his number of victories stood at 84, second only to Helmut Lent, the leading night fighter pilot in the *Nachtjagd* with 100 kills. It is interesting to note, however, that the Knight's Cross and Oak Leaves were only awarded to Schnaufer after he had attained a very high number of victories. Previously, pilots such as Lent, Meurer and Gildner had received their decorations for approximately half the number of victories achieved by Schnaufer. However, as if to make up for this anomaly, after achieving his 89th victory on 30 July, he became the fifth and final night fighter pilot to receive the Swords.

BELOW: Schnaufer in conversation with his Adjutant, Oblt. Georg Fengler, an operational night fighter pilot who finished the war with 16 victories. Post-war, Fengler married Schnaufer's sister, Waltraut, and helped to manage the Schnaufer family's wine business until his death on 8 March 2003.

This was a momentous time not only for Heinz Schnaufer, but also for the two crew members who had assisted him so ably during his career. Gänsler, who had flown with Ludwig Becker before joining the Schnaufer crew, was awarded the Knight's Cross on 27 July 1944, whilst Rumpelhardt's Knight's Cross followed 12 days later on 8 August.

In comparison to the previous four months, August was quiet by Schnaufer's standards. Although he shot down four of the 20 bombers lost by the RAF during an attack on the Opel factory at Rüsselheim on the night of 12/13 August, these were his only successes of the month. Another five victories in September brought his total to 98 and, during the evening of 9 October 1944, he destroyed two four-engined bombers to become the second of only two night fighter pilots to achieve 100 victories. A week later, a telegram from Hitler arrived at Schnaufer's airfield at Dortmund-Brakel, informing him that he had become the 21st soldier of the *Wehrmacht* to be awarded the Oak Leaves with Swords and Diamonds.

3. Helmut Lent had died on 7 October 1944, following a landing accident at Paderborn two days earlier.

ABOVE: The most successful Luftwaffe night fighter crew of the war. It is believed that this publicity picture was taken in late 1944 when Schnaufer was the Kommodore of NJG 4, stationed at Gütersloh. From left to right are Ofw. Wilhelm Gänsler, Major Schnaufer and Lt. Fritz Rumpelhardt.

On 6 November 1944, Schnaufer surpassed Helmut Lent's total of 102 victories[3] when he destroyed three of the 235 Lancasters which took part in a Bomber Command attack against the Dortmund-Ems Canal. In further recognition of his achievements, he was appointed *Geschwaderkommodore* of NJG 4 on 14 November, whilst still aged only 22, and two weeks later, on 1 December, he was promoted to *Major*.

The most successful day of Schnaufer's entire operational career occurred on 21 February 1945, when he shot down nine bombers in a single day. His first two victims fell during the early hours of the 21st but then, on the evening of the same day, he took off against a force of 514 Lancasters which had set out to destroy the southern half of Dortmund. In the space of only 19 minutes, *Major* Schnaufer dispatched seven more Lancasters to take his total to 116. His last victories of the war took place on 3 and 7 March 1945, bringing his final tally to 121.

When the final, unconditional surrender of Germany was announced on 8 May 1945 Schnaufer was at Eggebek. After bidding his comrades of NJG 4 farewell, he was interrogated by the RAF and became a prisoner of war. While still a PoW, he contracted diphtheria and scarlet fever and became seriously ill. Although his condition was critical, he recovered, however, and when finally released sometime before the end of 1945, returned to his home in Calw to begin a new life as a civilian. He subsequently took over the family business, which had become almost bankrupt as a result of the war, and over the next four years he worked hard to restore the company's prosperity.

Tragically, during a wine-buying trip to France on 13 July 1950, Schnaufer was driving towards Biarritz when a lorry loaded with gas cylinders pulled out from a side road and collided with his sports car. It is believed that one of the cylinders was dislodged and struck the 28 year old German on the back of his head. He was taken to a hospital in Bordeaux with a fractured skull and died there two days later on 15 July 1950. His body was returned to Germany and Heinz Schnaufer, still only 28 years of age, was buried in the family's plot at the local cemetery in Calw.

ABOVE: Heinz Schnaufer and his crew photographed shortly after he was awarded the Diamonds to the Knight's Cross on 16 October 1944. Schnaufer was only the second night fighter pilot to receive this decoration, the first being Oberstleutnant Helmut Lent, killed in a flying accident a few weeks earlier.

LEFT: Heinz Schnaufer (IV./NJG 1), far left, with the Kommodore and other Kommandeure of NJG 1 at St.Trond in 1944. From the left are: Hptm. Martin Drewes (III./NJG 1); Major Hans-Joachim Jabs, the Kommodore of NJG 1; Hptm. Paul Förster (I./NJG 1); and Hptm. Eckart-Wilhelm von Bonin (II./NJG 1).

LEFT AND ABOVE: Two views of a Ju 88 G-1 of 2./NJG 4 in January 1945. From August 1944, the parent I. Gruppe, to which the 2. Staffel belonged, was subordinate to Jafü Mittelrhein, but in January 1945 was controlled by the 2. Jagddivision. Note the crew entry hatch offset to starboard and the heavy exhaust staining on the rear of the engine nacelles.

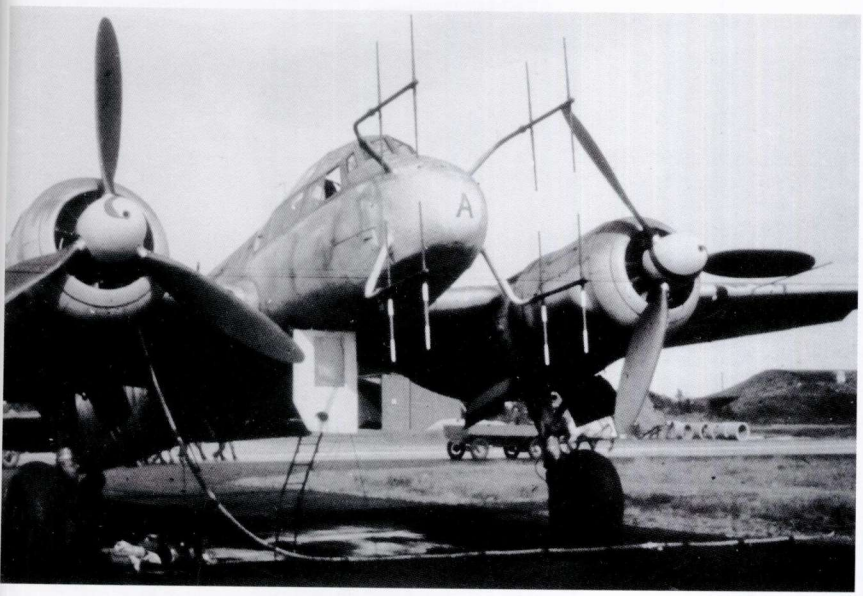
Junkers Ju 88 G-1 3C+FK of 2./NJG 4, January 1945

The finish on this machine consisted of 76 overall with 75 reverse mottling on the uppersurfaces of the wings, fuselage, engine cowlings and horizontal tail surfaces. The canopy framing was in grey 75 and the spinners and the propeller blades are thought to have been green 70, albeit considerably faded. The Werknummer 714255 appeared in black on the upper tail and a small letter 'D', thought to be an earlier individual aircraft letter, remained on the nose. As no 'Schräge Musik' installation is visible in the photographs, that shown in the profile is speculative and consists of two MG 151/20 cannon mounted side by side.

LEFT: A Ju 88 G-6 of 11./NJG 3 taxiing at Grove in early 1945. The unit code 'D5' has been applied in smaller characters than the remaining letters, while the individual aircraft letter 'A' indicates that this was probably the aircraft flown by the Staffelkapitän.

Junkers Ju 88 G-6 of 11./NJG 3, Grove, early 1945

In addition to the standard 76 undersurfaces and grey 75 patches on the uppersurface of the wings and the mottled 75/76 on the fuselage, tail surfaces and engine cowlings, the underside of the cowlings on this machine were yellow. The 'D5' of the operational markings on the fuselage sides were black, but the remaining letters were in dark grey and an unreadable Werknummer was carried at the top of the fin in black.



LEFT: This Ju 88 G-6 with the individual aircraft letter 'A' on the nose is believed to have been photographed at Grove in 1944 and was probably flown by the Kommandeur of II./NJG 3, or perhaps the Kapitän of one of the Staffeln which comprised that Gruppe. The machine was equipped with SN-2 radar and had spiral spinners.

ABOVE: Major Martin Drewes, the Kommandeur of III./NJG 1 (left) with his crew shortly after his 47th victory, a Lancaster, which he shot down in the early hours of 3 March 1945. Drewes flew two Bf 110s, the one in the background here being G9+WD which earlier, in January 1944, when night fighter crews were ordered to attack US bombers in daylight, had been stripped of its radar and 20 mm cannon pack beneath the fuselage in order to increase its speed. In these daylight attacks, Drewes destroyed four US bombers, but for night work he flew his other Bf 110 G-4, G9+MD, which retained its radar but had no victory markings. The G9+MD was eventually destroyed when the bomb load of a bomber attacked with 'Schräge Musik' exploded and debris so severely damaged Drewes' Bf 110 that the crew were forced to bale out. Thereafter, the G9+WD was restored to the night fighter role, although in various post-war correspondence and interviews, Drewes maintains that he had his nose armament changed to machine guns as the 30 mm heavy cannon blew such large pieces off the bombers that he feared his own aircraft would be damaged. Unlike other Bf 110s of the period in which the 'Schräge Musik' was mounted in the rear gunner's position, on G9+WD it was positioned behind the pilot's seat. This machine carried the Nachtjagd badge on the nose and a design on the tail featuring the Knight's Cross and ribbon in natural colours with the number '25' in yellow outlined in black. Major Drewes was awarded the Oak Leaves on 17 April 1945 and finished the war with 52 victories.

LEFT: This Ju 88 G-6 was flown by Major Berthold Ney, the Kommandeur of IV./NJG 3, who led this Gruppe from November 1944 to 4 March 1945. During this time, the Nachtjagd units began to adopt the same system of staff markings as employed since before the war by the single-engined fighter units. The aircraft shown here therefore carries a Kommandeur's double chevron on the fuselage as well as the operational code D5+AE. This aircraft was equipped with FuG 220d and FuG 350 'Naxos' and, clearly visible protruding from the upper fuselage over the Balkenkreuz, are the twin barrels of the MG 151/20 'Schräge Musik' installation. These were usually mounted at an angle of 70 degrees so that they fired forwards and upwards, allowing the pilot to position his aircraft beneath his target and open fire in a zero-deflection burst. Before becoming Kommandeur of IV./NJG 3 in November 1944, Major Ney had led III./NJG 2 since January of that year but details of his victories and awards are believed to be incomplete. Thus although surviving records indicate eight victories, he may have had as many as 19 and possibly received the German Cross in Gold.

Junkers Ju 88 G-6b flown by Major Berthold Ney, Kommandeur of IV./NJG 3, early 1945
The undersurfaces on this aircraft were overall 76, and an unusual feature of the uppersurfaces was that, although the uppersurface of the fuselage and tailplane showed where the fuselage grey 75 had been oversprayed with 76 to leave 75 patches, the uppersurface of the wings are believed to have remained overall 75. In addition to the normal operational markings on the fuselage side, the aircraft was marked with the double chevron of a Kommandeur. All national insignia were in the late-war simplified style, with the outline type crosses on the uppersurfaces of the wing in white.

"My last victory had almost sealed our fate"

HPTM. HEINZ RÖKKER, 2./NJG 2

In the cockpit of his Ju 88 night fighter and wearing full flight gear, Heinz Rökker prepares for a night sortie. Rökker flew 161 such sorties and claimed 63 victories at night plus one day victory. During a three-year operational career with I./NJG 2, this pilot flew operations in the Mediterranean, Africa and Western Europe.In the following account, Hptm. Rökker and his crew were flying a Ju 88 G night fighter.

At 18.30 hrs on 15 March 1945, I took off from Twente with my crew, *Funkmess-Funker* Carlos Nugent, *Boden-Bordfunker* Hanns Mattar and *Beobachter* Fritz Wefelmeier, on a night operation against a British bomber attack on Hagen. It was not until the attack was almost over that we knew the target. At 20.50 hrs, after a long period of searching, we found a four-engined aircraft with twin rudders at an altitude of about 4,500 metres. I fired at it from below with my *'Schräge Musik'* and it caught fire, went into a dive and crashed in flames.

Immediately afterwards, at 20.52 hrs, we picked up another four-engined bomber with twin rudders at the same height. He too was dispatched from below with *'Schräge Musik'* in the tried and tested way, and crashed in flames. The bombers were on their way back home from the target, flying in a south-westerly direction, and they attempted to evade the German defenders by diving at high speed. In pursuing the bombers towards the south-west we soon found ourselves over Belgian and French territory, which was already occupied by the Allies. Suddenly, we saw beneath us a brightly illuminated airfield. It could not be a German airfield, because we saw two aircraft flying around it with their navigation lights on.

Towards the end of the war, the British often switched on their navigation lights when taking off, forming up or landing because, during mass attacks by up to a thousand bombers, they were afraid that aircraft might collide. At this time, the risk of being shot down by a German intruder was less than that of a collision. In order to avoid becoming a target for a British intruder, we never switched on our navigation lights during the whole war.

It goes without saying that I immediately positioned myself under this aircraft, which was flying at about 1,000 metres and was probably waiting for permission to land. It was a twin-engined machine with twin rudders. We did not recognise the type. One burst with *'Schräge Musik'* and it caught fire and crashed in flames at 21.26 hrs[1].

I turned my attention to my second victim, who seemed not to have seen the other aircraft go down and kept on flying straight ahead, still with his navigation lights switched on. The machine was coming into land, and when we caught up with him we saw that it was a Mosquito. It had already lowered its undercarriage and was just crossing the airfield boundary. As I could no longer get beneath it to shoot it down with *'Schräge Musik'*, I quickly switched on the forward gunsight and shot it down with my four forward-firing cannon. The burning aircraft came down on the airfield at 21.34 hrs and crashed in flames. To our surprise we saw no anti-aircraft fire. We later discovered that this airfield was St. Trond, which the Allies had occupied and were using as an operational base.

As there were no more enemy aircraft to be found, we turned on a heading for home. Suddenly, I saw that the temperature gauge for the starboard engine had risen to its maximum level. When we shot down the Mosquito, a piece of debris must have hit the radiator. I switched the starboard engine off straight away so that I would be able to switch it on again for landing. Hanns Mattar established contact with Twente and told our unit that we would be landing in a short time with only one engine. However, our airfield was covered in ground fog and we were told to divert to Vechta. Nevertheless, I flew on to Twente so that I could confirm for myself whether a landing was possible. Old pilots are always drawn to their home base, just as horses are drawn to their stable, but the airfield was indeed covered in a milky soup and a normal landing was out of the question.

We were not wildly enthusiastic about being diverted to Vechta, because swanning about in the darkness on one engine is no fun, but at 22.45 hrs we made good visual contact with the airfield. Hanns Mattar informed the field by radio that we were coming in with only one engine and we received immediate landing clearance. Once we were on the circuit, I restarted the starboard engine and came in over the approach lights and towards the runway with my undercarriage down. Just when I had almost reached the airfield boundary, I was alarmed to see that, just ahead of me, another aircraft was making a belly landing on the concrete runway. The aircraft slid along the runway spraying sparks like a comet, and at the same moment the airfield lighting was switched off. Now what? To try and overshoot with a faulty engine was too risky, but in critical situations such as this, one acts instinctively. I was already so low that I could see the ground by the light of my landing lamp, and with mixed feelings I decided to make a blind landing parallel to the runway.

After a few bounces, our machine came to a halt on the periphery of the airfield, but then small flames appeared from the starboard engine. The fire crews arrived at high speed, but there was nothing for them to do, however, because when I switched off the engine, the flames extinguished themselves.

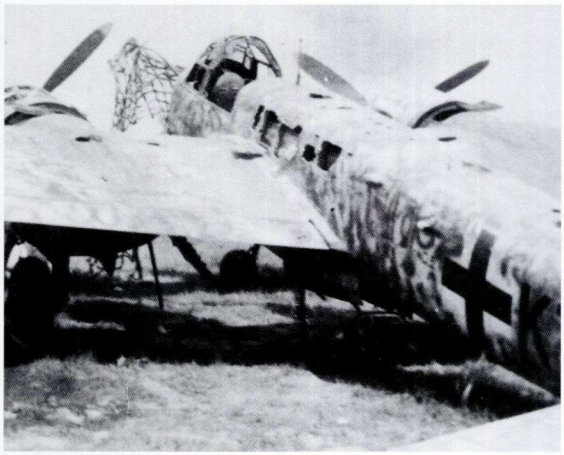
What had happened was that the aircraft that had made the belly landing had been unable to contact Vechta by radio and, of course, the control tower thought that it was we who had made the belly landing. They therefore immediately switched off the airfield lighting as a precaution against English intruders, and thus my last victory had almost sealed our fate!

1. Heinz Rökker was subsequently credited with destroying a B-25. The Mosquito shot down on the same night was Rökker's 64th victory and proved to be his last of the war.

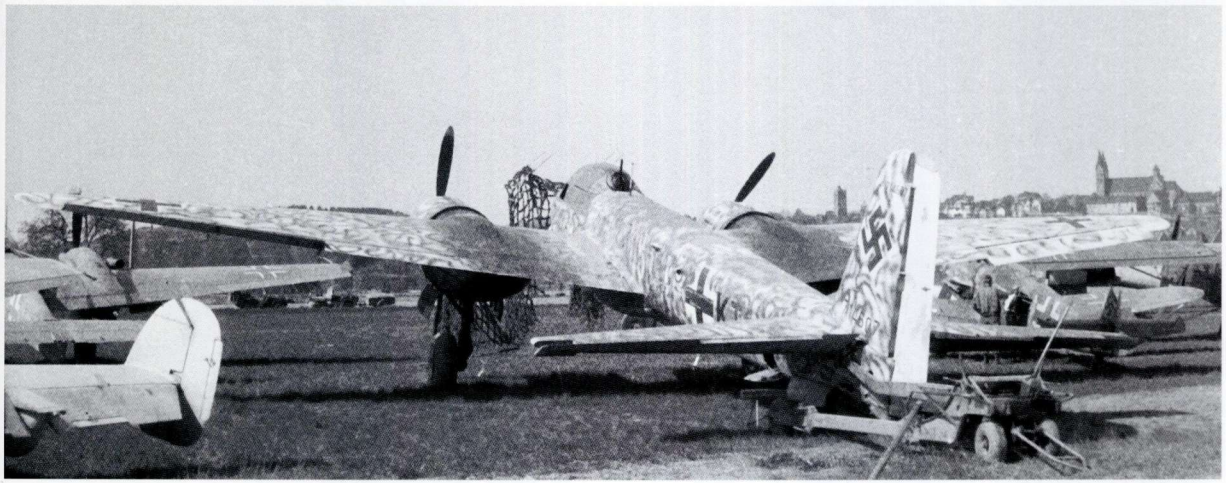
RIGHT: The rear fuselage of a Ju 88 G-6, W.Nr. 620788, with an unusual SN-2 aerial configuration. The aerials were mounted in this fashion in an experiment to determine whether the SN-2 would be less sensitive to 'Window' jamming, more effective in detecting high-flying bombers, and more efficient in detecting Mosquitoes approaching from behind and below. This particular aircraft, coded C9+AA, was assigned to Eichenlaubträger Major Rudolf Schönert, the Kommodore of NJG 5 at Lubeck-Blankensee, who is thought to have flown the machine with this installation only once. On that occasion, during a sortie east of the Elbe on 27 April 1945, an electrical fault rendered the radar unserviceable and the Ju 88 was shot down by a Mosquito. Schönert survived and was rescued by German troops. He died in Canada in 1985.

LEFT: An unusual feature of this Ju 88 G-6 of 7./NJG 5 which landed at Dübendorf on 30 April 1945 was the particularly dark uppersurface camouflage and the light colour of the swastika and unit code. It is believed that the original factory finish was 75 on the uppersurfaces and 76 on the undersurfaces, although the uppersurfaces were later modified with what was described in a Swiss report on the aircraft as moss green with dense olive mottles, almost certainly 82 and 81 respectively. Note that all markings are either in white or possibly RLM 77.

LEFT: A Ju 88 G-6 of Stab I./NJG 2 at Braunschweig in May 1945. This machine carried the operational marking 4R+FB and the 75/76 uppersurfaces have been darkened with a field-applied overspray which appears to be in two colours, possibly in 82 with 81 or 83. The fact that this extends well down the fuselage sides would suggest that this was an attempt to find a compromise scheme suitable for concealment on the ground as well as in the air.

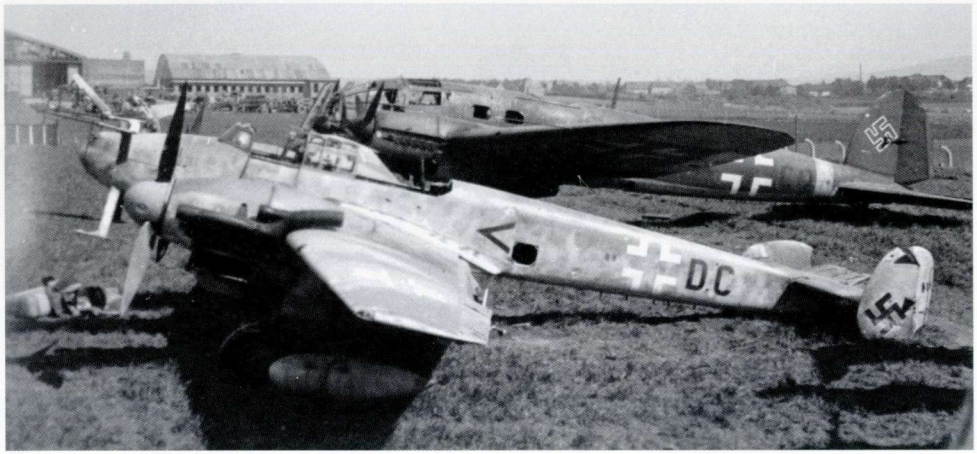


LEFT AND BELOW: A similar finish (as to 4R+FB opposite page bottom) was applied to this Ju 88 G-1, W.Nr. 714607, photographed at Fritzlar at the end of the war. The operational markings were D5+KT in black indicating an aircraft of 9./NJG 3. The meandering sprayed lines on this machine are only one colour, however, and may have been in 81, 83 or 75.



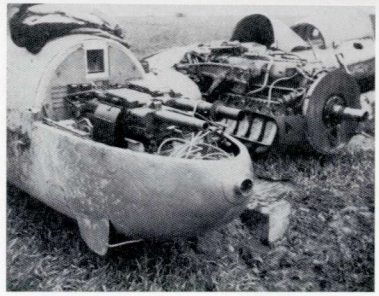
LEFT: Photographed at Fritzlar in Germany in 1945, this Ju 88 G of 6./NJG 2 with the operational code 4R+EP had a most unusual camouflage. Disregarding the dark patch on the tail, which is merely a piece of camouflage netting, the rest of the machine visible in this view has been camouflaged in a disruptive pattern of what is probably 76 and 75. Very few examples of this scheme have been observed, but it is thought that the uppersurface of the wings and tailplane were finished in a similar manner.

RIGHT: This derelict Bf 110 G-4 belonged to Stab II./NJG 1 and was photographed at Langensalza in April 1945. Just visible ahead of the fuselage Balkenkreuz is the Geschwader code 'G9', while the single chevron suggests this aircraft was assigned to the Gruppe Adjutant.



Messerschmitt Bf 110 G-4 'G9+DC' of Stab II./NJG 1, 1945

The camouflage on this aircraft was the standard day fighter and Zerstörer scheme of 74 and 75 on the uppersurfaces with 76 on all undersurfaces. On the upper fuselage, tailplane and wings, the 74 and 75 had been applied in the form of a splinter pattern but with softer, less angular demarcation lines separating the two colours. The operational markings and the single chevron were in black.

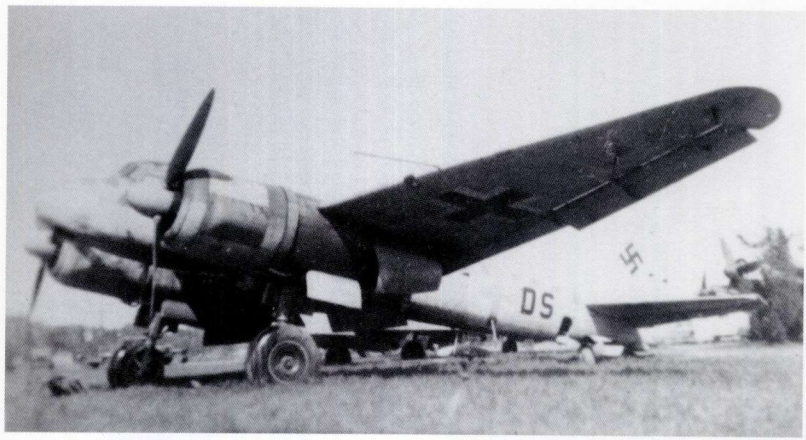


ABOVE AND RIGHT: This crash-landed Bf 110 was the machine normally flown by Obstlt. Hans-Joachim Jabs, the Kommodore of NJG 1, shown in the centre of the photograph *(RIGHT)* by a crash landed P-47 with his Bordfunker Oblt. Erich Weissflog on the right and the Kommandeur of IV./NJG 1, Oblt. Heinz Schnaufer, on the left, in early 1944. However, on 1 May 1945, two members of the Geschwader were ordered to fly the Kommodore's Bf 110 from Lüneburg to Schleswig, but with the end of the war clearly in sight, neither the pilot, Uffz. Siegfried König, an Estonian, nor his Bordfunker, Fw. Fritz Hrachowina, who was Czech, wished to become prisoners of the Soviets. They therefore decided to defect to Sweden and the aircraft crashed while landing at Hammerlov where they were interned. Unfortunately for them, it would seem their defection resulted in the very situation they wished to avoid, for it is believed they were later handed over to the Soviets. Ironically, had they flown to Schleswig as ordered, they would almost certainly have become prisoners of the British. The aircraft in which they defected was a Bf 110 G-4, W.Nr. 140655, coded G9+AA, equipped with FuG 218 combined airborne interception and tail-warning radar. The aircraft was armed with two MK 108 cannon in the upper nose position and carried oblique 20 mm weapons firing though the rear canopy.

ABOVE: Another view of Obstlt. Jabs' Bf 110 showing the aircraft's two 30 mm MK 108 cannon and the hole in the nose where the centrally mounted aerial for the FuG 218 'Neptune' radar has been removed. The small, semicircular plate on the lower nose prevented expended cannon cases falling from the ejector slot from striking the propeller. On each side of the nose, two patches covered the locations where an SN-2 antenna had been removed.

Messerschmitt Bf 110 G-4 'G9+AA' flown by Obstlt. Hans-Joachim Jabs, Kommodore of NJG 1, 1945

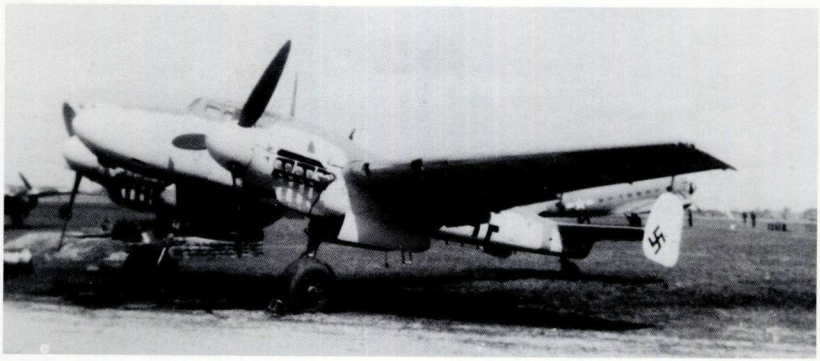
Obstlt. Jabs' aircraft was camouflaged in 76 with 75 mottles on the uppersurfaces and carried the triple chevron of a Kommodore and all fuselage code letters in grey. The individual aircraft letter 'A' was repeated on the nose and it is thought unlikely that the machine carried an 'Englandblitz' badge. Note that a single FuG 218 tail-warning radar aerial angled at 45 degrees protruded from the rear fuselage and that the two aerials for the FuG 101 radio altimeter may be seen under the port wing. The exhausts had been modified to accept the later type of flame dampers which led under the wings.



LEFT, BELOW AND BOTTOM LEFT: Although belonging to 8./NJG 1, this Ju 88G-6, W.Nr. 710430, carried no radar aerials. The aircraft was photographed at Fritzlar in May 1945 and was finished in the usual camouflage of 76 over 75 resulting in mottled uppersurfaces. The operational code on the fuselage was G9+DS in black. Note, however, the different camouflage colours on the engine cowling, probably a result of field repairs rather than mismatching of components during assembly at the factory.

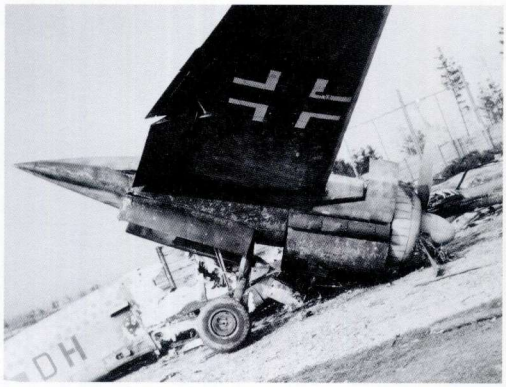
RIGHT: The tail of a Ju 88 G-6 clearly showing that the contours have been disguised to resemble a Ju 88 C. Several examples of this practice have been observed, but as the disguise was surely invisible to enemy bomber crews at night, the precise purpose of the intended deception is not known. Note that the Werknummer appears at the top and the bottom of the fin.

RIGHT: This Bf 110 G-4, W.Nr. 160791, at Braunschweig, is clearly a new aircraft still lacking any operational code, but the fact that it left the factory in this scheme suggests that the Wellenmuster in 76 normally sprayed over the 75 may have been carried out at unit level. The factory-applied yellow areas under the wingtips and the yellow band around the rear fuselage indicate that this machine was probably destined for the Eastern Front, a fact which may also account for the lack of radar aerials.

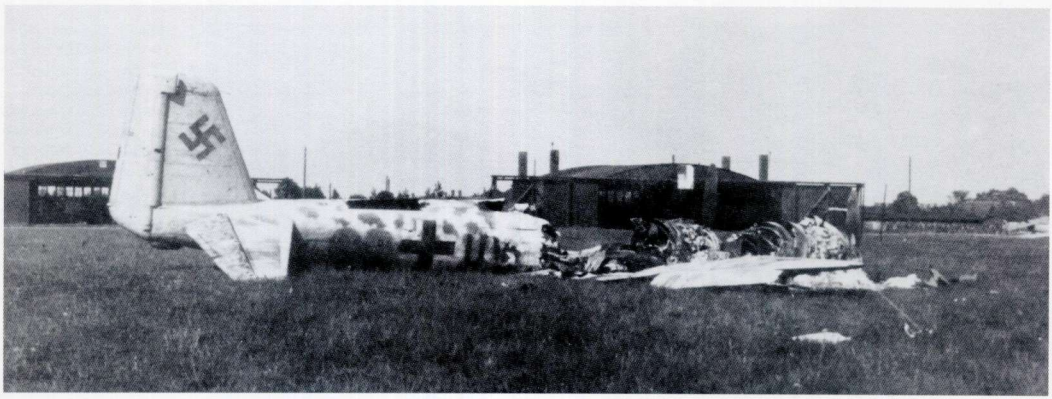


ABOVE: Several units received the He 219, but the only one to operate the machine in any strength was I./NJG 1 which, by October 1944, was under the command of Hptm. Werner Baake and based at Münster- Handorf. The unit remained there until 1 April 1945 when it moved to Westerland-Sylt, leaving behind a number of aircraft which could not be flown away. This example, which belonged to 1. Staffel and was still draped in camouflage netting when it was photographed some two weeks later, appears intact but has had the propellers removed.

LEFT: Other aircraft at Münster-Handorf had been more systematically destroyed, as may be seen by these burned-out aircraft of 3./NJG 1.



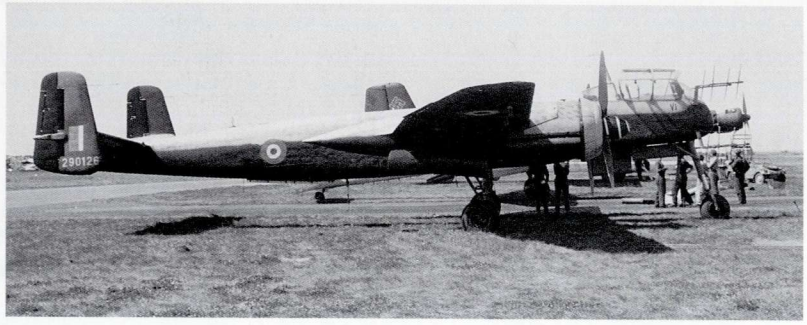
LEFT AND BELOW: This He 219, W.Nr. 290004, was found at Paderborn airfield on 10 April 1945 and was the first example of the type to be examined by the Allies. Although the nose, centre section and left wing were burned out, considerable information was obtained from an examination of the remains. Note that all the tactical code, G9+DH, was in black with the aircraft letter 'D' narrowly outlined in white.



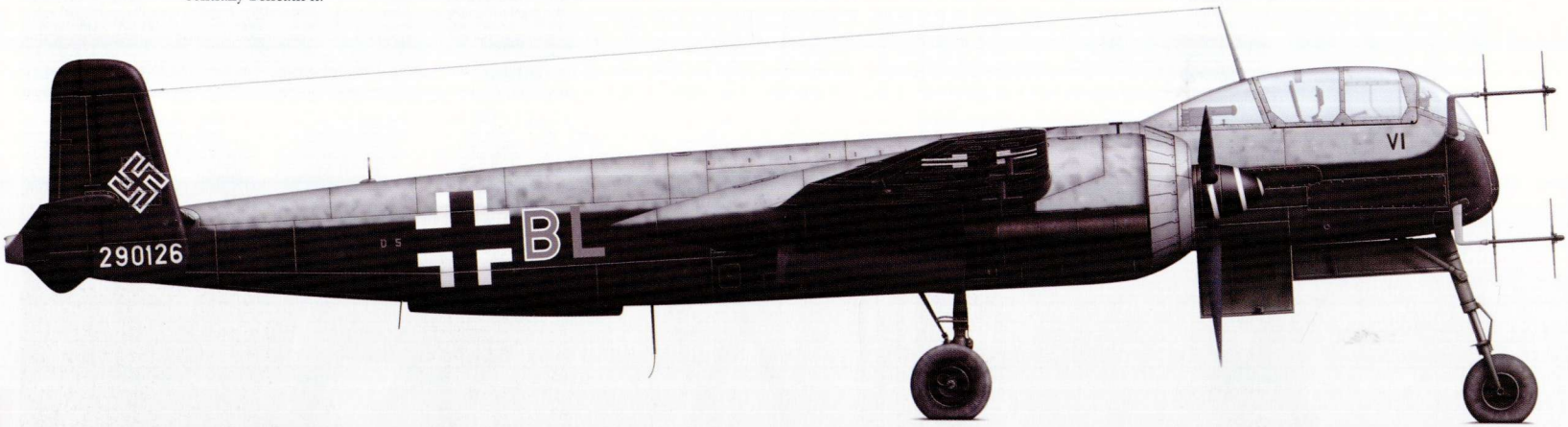
ABOVE: Photographed somewhere in Germany in 1945 was this burned-out Ju 88 G-6 of IV./NJG 3. The machine carried the operational code D5+UV or +UW and the Hakenkreuz on the tail does not seem to have a white outline. Most interesting, however, is the extent of the repainting on the fuselage. Although the fuselage mottles are very dark and appear as if they may have been applied by brush, they have in fact been created by spray painting, after which a dark patch has been applied adjacent to the Balkenkreuz and upon which is the Geschwader code 'D5' in black.

LEFT: It has been noted that three camouflage schemes were applied to the He 219. Having established that the overall black finish applied when the Nachtjagd was first created was unsuitable as a night camouflage, and having developed alternative and more effective schemes, it seems strange that in the last months of the war the use of black was revived for use on the undersurfaces and the outer surfaces of the twin fins and rudders of some He 219s. A possible explanation may be that the RAF's offensive caused such giant conflagrations in German cities that the light from the fires may have illuminated the night fighters' 76 undersurfaces to an unacceptable degree. As seen on this machine, however, where black was applied, uppersurfaces were usually finished in 75 and 76.

BELOW: This He 219 A-2 found at Hildesheim, almost certainly W.Nr. 290112, shows again the black finish on the undersurfaces. It would be tempting to associate the application of the black with the night strafing of Allied motor transport and other targets of opportunity, a task assigned to the Nachtjagd during the battle for Normandy in the summer of 1944 and which continued through to the battle of the Ardennes. Neither this, however, nor the suggestion put forward *(ABOVE)*, explains why such a finish appeared only on the He 219 and, later, the very few two-seat Me 262 night fighters to see operational service. In any event, the black scheme on these aircraft was a permanent, factory-applied finish, and it seems improbable that the industry would apply a scheme for use on aircraft where night ground-attack was only a temporary role.



ABOVE AND ABOVE RIGHT: The same 75/76/black finish as shown on page 173 may be seen on this He 219 A-2 which was surrendered at Grove in Denmark in May 1945. This particular machine, W.Nr. 290126, had served with 3./NJG 3 and carried the operational code D5+BL on the fuselage. This aircraft was selected for ferrying to the UK and, as shown *(ABOVE RIGHT)* all national insignia were painted out and replaced with RAF roundels. When later seen at Farnborough, the legend 'Air Ministry' had been painted on the rear fuselage in white capital letters with the white number '20' painted centrally beneath it.

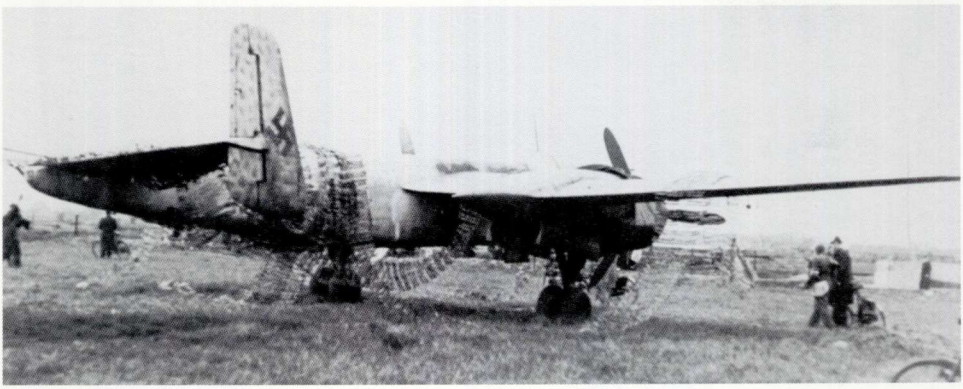


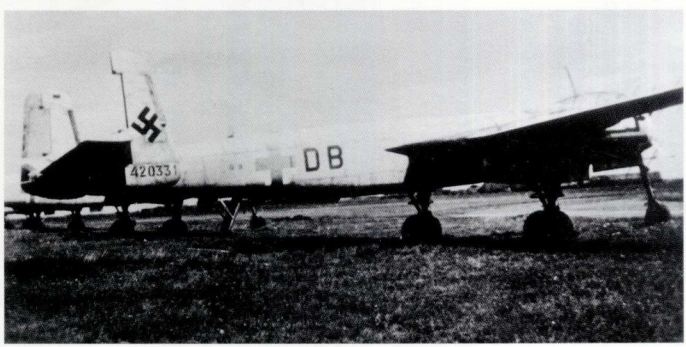
Heinkel He 219 A-2 W.Nr. 290126 of 3./NJG 1, Grove, May 1945

The uppersurfaces of W.Nr. 290126 were 76 with a reverse mottle of 75, while all undersurfaces and the vertical tail surfaces were matt black. The Werke Nummer appeared at the base of the fin in white, and the unit code D5+BL was applied to the fuselage sides in grey with the first two characters in reduced size and the 'B' outlined in white. While this profile has been reconstructed from the accompanying two photographs, it may be noted that when seen in its original Luftwaffe markings, the spinners had been removed and certain detail was hidden by the covers over the engines and cockpit. While the photograph of the machine in RAF markings shows most of these details, it is not certain if the aircraft's original spinners were refitted or whether those shown came from another machine. Similarly, all four dipoles for the FuG 220 SN-2 radar were angled at 45 degrees when the aircraft was first captured and painted black, although the two lower ones were later replaced with examples painted white/red/white. The vertical aerials under the fuselage were for the FuG 25 IFF equipment and FuG 16 radio communications equipment, while the long fairing situated between these is believed to be associated with the FuG 12F blind landing system. Note also that there was no tail antenna but the two aerials for the FuG 101 radio altimeter were fitted under the starboard wing and a loop aerial was mounted on the upper rear fuselage.

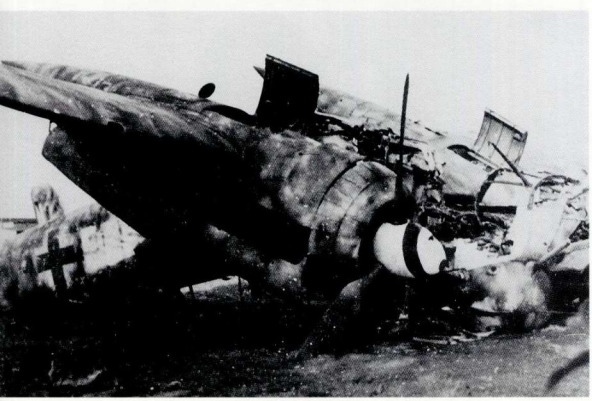
LEFT: This He 219 A-2, W.Nr. 290123, was surrendered at Westerland-Sylt and was camouflaged in the same basic scheme as W.Nr. 290126. This aircraft had flown with 1./NJG 1, and although the full operational code was G9+TH, it is not known if the smaller 'G9' was actually applied. Note that on all the aircraft shown on these pages with black undersurfaces, the front engine cowlings were finished completely in 76.

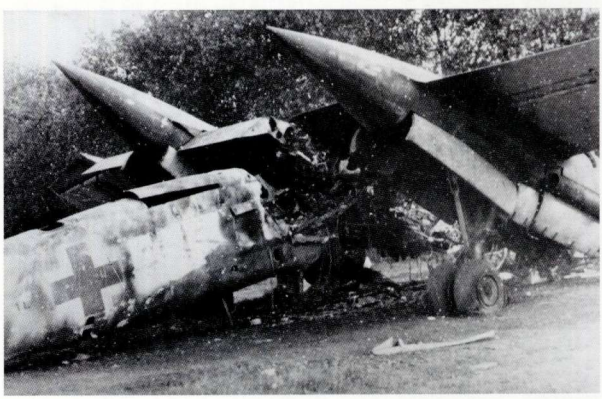
RIGHT AND BELOW: On these two He 219s, the undersurfaces are 76 while the uppersurfaces, including the twin fins and rudders, are 75 oversprayed with 76 to produce a reverse mottled effect. Typical of the He 219, the demarcation line between the upper and undersurfaces is high on the fuselage. The aircraft shown (*BELOW*), W.Nr. 420331, had served with Stab I./NJG 1 and carried the operational code G9+DB on the fuselage.



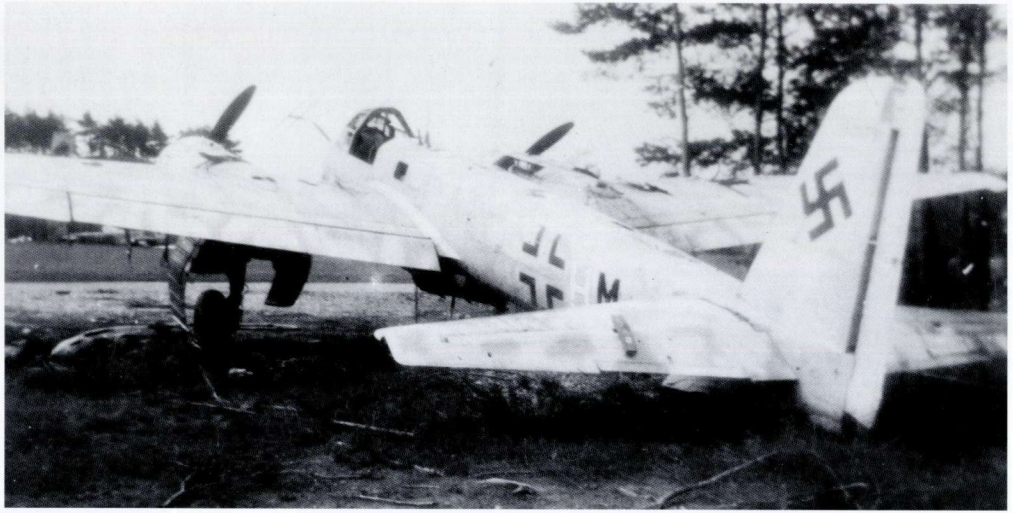


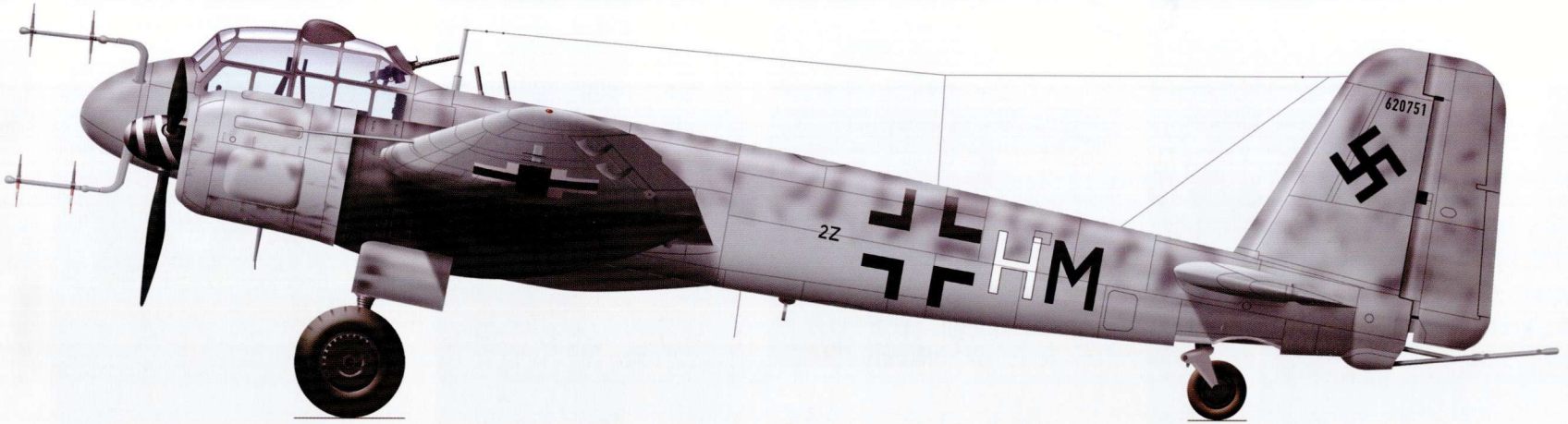
BELOW LEFT AND BELOW: The remains of an He 219 at Halle in 1945. Although the full operational code cannot be recognised, the unit code '1L' of NJGr 10 is just visible in small characters on the fuselage. The two photographs illustrate the third basic type of camouflage applied to the He 219, this example showing that most of the 76 uppersurfaces and fuselage sides have been oversprayed with 81 or 83, or possibly both of these colours. The undersurfaces were 76 but visible in the photograph (*BELOW*) is a hard demarcation line on the engine nacelles between the 76 and what is again probably either 81 or 83.





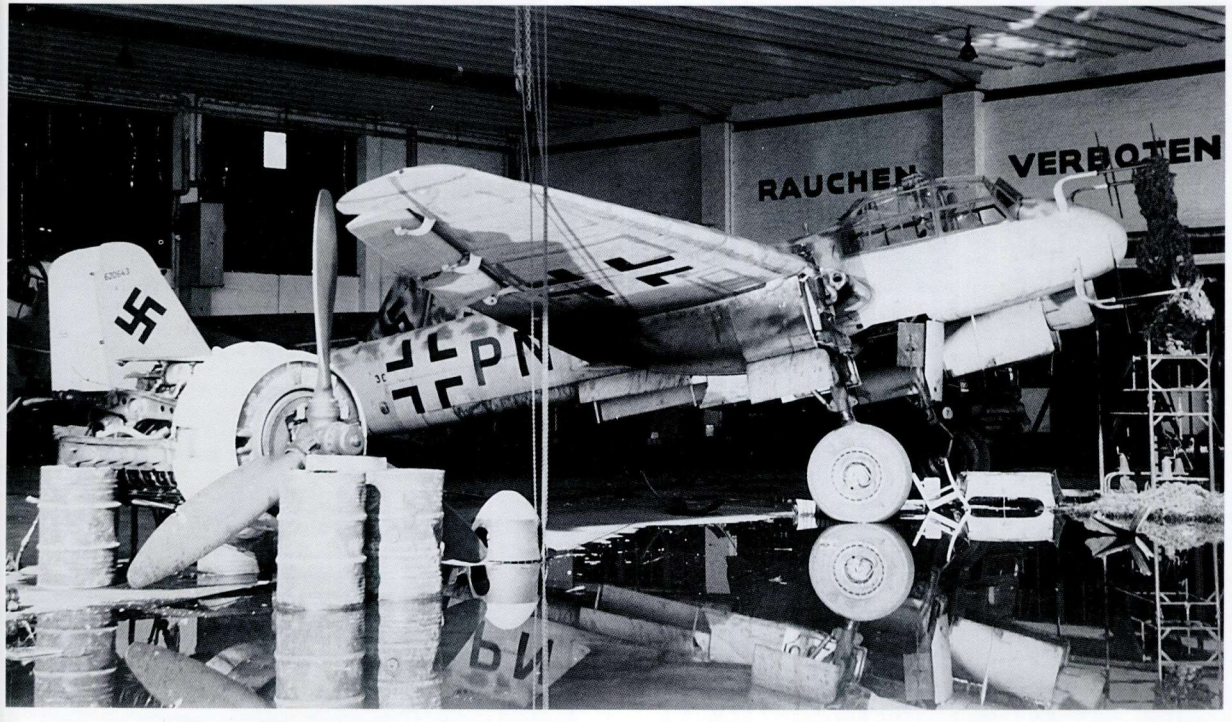
RIGHT: Captured at Aschaffenburg in 1945 was this Ju 88 G-6 of 4./NJG 6 with the port wing clearly showing the 76 sprayed over a solid application of 75.

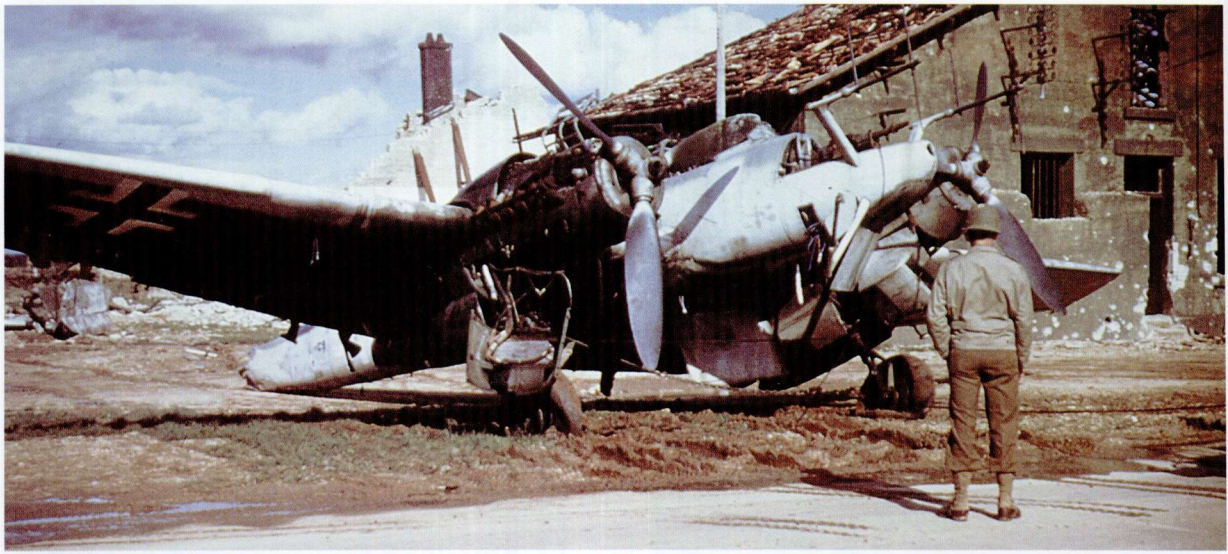




Junkers Ju 88 G-6 of 4./NJG 6, Aschaffenburg, May 1945
The operational markings 2Z+HM on this machine were in black with the individual aircraft letter 'H' in white outlined in black. The Werknummer 620751 was painted in black above the Hakenkreuz on the fin, and the aircraft was finished in the typical night fighter scheme of 75 and 76.

ABOVE AND BELOW: When Allied troops occupied Wunstorf airfield in May 1945, among the many aircraft examined was this Ju 88 C-6, W.Nr. 640643. This machine carried the operational code 3C+PN with the individual aircraft letter 'P' in red and had flown with 5./NJG 4. Note the red and white markings on the spinner in the foreground of the photograph (*BELOW*) and that the two-tone appearance on the undersurface of the starboard wing is caused by reflections from the puddle on the hangar floor. In fact, the undersurfaces were 76 with the usual pattern of 75 mottles on the uppersurfaces, those on the fuselage being typically more distinct and hard-edged than on the wings and tailplane. All national insignia were in the late-war economy style in black. Oddly, although appearing fairly complete in these views, AI2(g) Report No. 269 lists this aircraft as being destroyed.



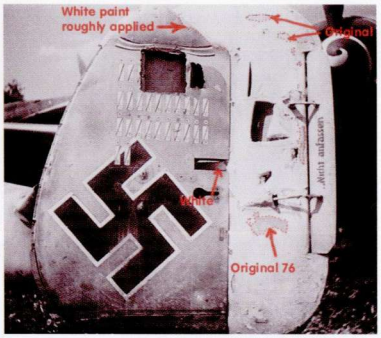


ABOVE: Although the use of black under the starboard wing of Luftwaffe night fighters commenced around March 1944 and was employed only for a few months, this finish still remains on this Bf 110 G-4 of NJG 5, even though the photograph was taken more than a year later. Similarly, the general camouflage was 74, 75 and 76, although 74 was also phased out in 1944. These features all point, therefore, to this being a relatively old aircraft. The black under the wing terminated in a straight line corresponding to the position of the front spar, and the engine panel above the wing, which also seems black, is unlikely to have been the result of fire damage when the aircraft was destroyed.

RIGHT: Photographed in Denmark at the end of the war, this Ju 88 C night fighter is finished in 76 overall with reverse mottles of 75 on the upper and side surfaces. Note the spinners have been painted with a white spiral in accordance with a general order issued on 20 July 1944 and applicable to twin-engined fighters based in western Europe. The white Balkenkreuz would suggest that the undersurface of the starboard wing was black, and this, together with the 'Englandblitz' badge on the nose, is an unusual feature on a machine photographed in May 1945.

LEFT: Also photographed in Denmark was this Bf 110, believed to be a G-4 although the square intake on the nose for the crew's air conditioning was typical of the 'F' series. It still carries the 'Englandblitz' badge of the Nachtjagd on its nose which was a very important symbol for night fighter aircrew. In some units new personnel were presented with a miniature version in enamel mounted on a long pin. This was worn on the lapel of the uniform jacket, and although an unofficial adornment, was so prestigious that it was considered sufficient punishment to have the badge temporarily confiscated for any misdemeanour.

LEFT AND BELOW: This Ju 88 C-6, W.Nr. 751065, was coded 7J+QK and originally belonged to 2./NJG 102. The aircraft was photographed at Copenhagen-Kastrup in May 1945, but as 2./NJG 102 had been disbanded in February, it is thought that this machine had been transferred to another unit but not repainted with its new owner's tactical code. The camouflage is clearly a hybrid scheme resulting from the mating of a replacement rear fuselage, finished in the standard 70/71 mid-war colours, to a nose section finished in the same scheme but with a Wellenmuster overspray in 76. Note the individual aircraft letter 'Q' in the 2. Staffel colour of red.



ABOVE AND ABOVE RIGHT: Among the aircraft photographed at Neubiberg in 1945 was this Bf 110 G-4 of 7./NJG 6. Although abandoned at the end of hostilities, that it was once the pride of the crews who flew and maintained it is evident from the port fin which had been painstakingly decorated with a Ritterkreuz, although when this photograph was taken it had been removed as a souvenir. Each of the 32 victory bars is marked with a date and the sequence of RAF and Soviet victories represented by the 21st to 30th bars confirms that this was the aircraft once flown by Oblt. Wilhem Johnen when Kommandeur of III./NJG 6. Note, however, that the sequence of bars does not exactly match Johnen's known victory tally as his first Soviet victory was his 23rd rather than the 22nd as shown. As on the C9+EN which he flew when with NJG 5 (see page 129), there is therefore one bar missing which results in the aircraft being decorated with 32 bars and a portrayal of the Ritterkreuz, whereas Johnen received this award after 33 victories. The four Soviet victories were all B-25s shot down over Hungary between 11 and 26 August 1944.

Messerschmitt Bf 110 G-4 '2Z+FR of 7./NJG 6, Neubiberg 1945

This aircraft was equipped with aerials for FuG 220 SN-2d mounted on the nose and with the dipoles angled at 45 degrees. Additional aerials for a FuG 101 altimeter were mounted under the port wing, straight 'Ebersbächer' flame dampers were fitted, and the 'Schräge Musik' installation was located further to the rear of the canopy than observed on other machines. A 90 mm armoured windscreen was fitted and, although unusual, the white rudder is confirmed by the detail photograph (*ABOVE RIGHT*). The uppersurface camouflage on the wings, horizontal tail and fuselage sides was 75 but oversprayed with 76 in such a way that small areas of the 75 remained.

Wilhelm Johnen

ABOVE: A very youthful 'Wim' Johnen poses for the camera.

ABOVE: Awarded the Knight's Cross on 29 October 1944, by war's end Wilhelm Johnen had been made Kommandeur of III./NJG 6 and finished the conflict with 34 confirmed kills.

Wilhelm 'Wim' Johnen was born in the small town of Homberg, situated on the western bank of the Rhine River and close to the industrial city of Duisburg, on 9 October 1921. He remained in Homberg until the outbreak of the Second World War in September 1939, by which time he had just completed his studies and obtained his *Abitur*. The following month, Johnen turned 18 and he applied to join the *Luftwaffe* on the basis of qualifications he had already attained as a glider pilot. His formal application to become an officer was accepted and he began his training as an officer cadet with *Fliegerausbildungsregiment Nr. 32* at Pardubitz (now Pardubice) in Czechoslovakia, where he received basic infantry training. Having endured several months of field exercises, marching and shooting practice, 'Wim' Johnen spent the next eight months learning to fly elementary and advanced single-engined aircraft and qualified for his pilot's badge on 21 September 1940.

Selected to fly multi-engined aircraft, he was then posted to *C-Schule* 11 at Zeltweg-Steiermark in Austria and, during a three-month training period, flew such twin-engined aircraft as the He 111 and Do 17 as well as the three-engined Ju 52. On obtaining the 'C' grading to his pilot's licence which allowed him to fly multi-engined aircraft, Johnen attended the *Blindflugschule* at Wien-Aspern before progressing to Schleissheim, near Munich, where he received *Zerstörer* training and, on 1 April 1941, was commissioned as a *Leutnant*.

It was at about this time, and due mainly to the RAF's intensified air attacks against Germany, that Johnen decided to join the *Nachtjagd*. The war, which he feared would be over by the time his training was complete, had now become more personal. His home-town, and particularly the surrounding area of Duisburg, with its Thyssen steel factories and large inland port, had been identified as an important, strategic target within the industrial Ruhr valley and had been specifically attacked on a number of occasions by RAF Bomber Command. As his home was in the outskirts of Duisburg, he naturally feared for the safety of his family and it was this concern that led him to apply to join the *Nachtjagd*. Accordingly, on 18 May 1941, he began his night fighter training at Stuttgart-Echterdingen. His regular *Bordfunker* was *Gefreiter* Albrecht Risop, whom he had first met during their training at Schleissheim. After six weeks of intense instruction, Johnen and Risop were transferred to the operational night fighter Staffel 3./NJG 1, arriving at this unit's airfield in Schleswig on 25 June 1941.

BELOW: Johnen with his overall black Bf 110 E at Schleswig in about July 1941, shortly after he joined 3./NJG 1, at that time commanded by Oberleutnant Walter Fenske. Note the Nachtjagd emblem, barely visible behind the port engine.

ABOVE: Johnen with an Fw 44 'Stieglitz', one of the most popular types of aircraft flown by trainee pilots at the A/B Schulen. This radial-engined biplane was first flown in the summer of 1932 and proved to be rugged and agile. It was produced in large numbers and established Kurt Tank and his Focke-Wulf Company as a serious aircraft manufacturer.

On 11 July 1941, after a brief period of familiarisation with the *Staffel*, Johnen flew his first operational mission, during which he encountered a Wellington bomber. However, he failed to shoot it down and thus became aware of the fundamental difficulties involved in fighting at night. Almost another eight months and a further 28 missions passed before, on the evening of 26 March 1942, he took off from Venlo[1] and, at 23.30 hrs, intercepted a Wellington which he shot down north-west of Wesel as his first victory[2]. A few minutes later, Risop spotted a four-engined bomber which he identified as a Short Stirling. After a brief exchange of fire between the aircraft, the cockpit and fuselage of Johnen's Bf 110 was raked with machine gun fire and the petrol tanks set ablaze. The same burst of gunfire also killed Risop and wounded Johnen, who then desperately fought to extricate himself from the burning cockpit. Nevertheless, the stricken fighter plunged 3,000 metres with Johnen still aboard before it exploded and threw him clear. Although he was then able to safely parachute to the ground, Johnen received second degree burns to his face and a large number of shell splinters in his left leg kept him from operational flying for two-and-a-half months.

A short time after his return to operations, during an RAF raid on Essen on the night of 16/17 June 1942, Johnen shot down a Wellington as his second victory. In recognition of this achievement, he was awarded the Iron Cross Second Class on 26 July 1942.

On 1 December 1942, 3./NJG 1 was re-designated 5./NJG 5 and transferred to Parchim in north-eastern Germany under the command of *Oblt.* Leopold Fellerer. Due to the airfield's location, 5./NJG 5 was less active than units stationed further westwards, and during the first five months of the new year Johnen flew only a small number of sorties. However, in May 1943, the *Staffel* was posted back to the west to help counter the increasing raids against the Ruhr, and in the early hours of 22 June 1943, after more than a year since his last

1. 3./NJG 1 transferred from Schleswig back to Venlo on 1 December 1941.
2. It is highly probable that this aircraft was Wellington X3589 KO-F from 115 Squadron, which crashed at Uedem, approximately 35 kilometres west of Wesel.

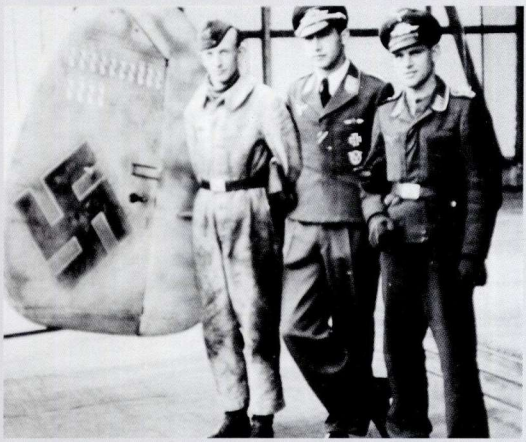
victory, Johnen finally increased his personal tally by shooting down two bombers during a raid on Krefeld. Three nights later, he intercepted and shot down a Halifax as his fifth confirmed victory, and on 1 July 1943, Johnen was promoted to *Oberleutnant*.

In August 1943, when Air Chief Marshal Sir Arthur Harris' prolonged offensive began against the German capital, later known as the 'Battle of Berlin' and which lasted until February 1944, 5./NJG 5 was once again operating from Parchim and found itself in the thick of the battle. On 24 August 1943, Johnen claimed a Stirling and a Halifax to the north-west of Berlin, and four days later he was awarded the Iron Cross First Class.

Later, with 18 victories, and a growing reputation as a capable night fighter with leadership potential, he was made *Staffelkäpitan* of 6./NJG 5 on 31 March 1944. The following month, II./NJG 5 was transferred to Leipheim in southern Germany, but when the airfield was badly damaged during a daylight raid, the *Gruppe* moved to Hagenau in western France.

At 00.48 hrs on 28 April 1944, Johnen took off from Hagenau with *Oberfeldwebel* Paul Mahle[3] and *Leutnant* 'Brinos' Kamprath, with orders to intercept 322 Lancasters that had been tasked to destroy armament factories in Friedrichshafen, a small town in southern Germany situated on the banks of Lake Constance. After shooting down one Lancaster, Johnen was hit by return fire from another which set fire to his fighter's port engine. Flying on one engine and with no other option, he was forced to land his aircraft at the nearest available airfield, which turned out to be Dübendorf in neutral Switzerland. Surrendering to Swiss soldiers, the three-man crew was interned and lengthy negotiations with the Swiss government followed. Naturally, as Johnen's aircraft was fitted with SN-2, *'Naxos'* and *'Schräge Musik'*, the Germans did not want it to fall into Allied hands, and in an agreement finally reached between the German and Swiss Intelligence Services, it was arranged that the machine would be destroyed. In exchange, the Swiss would receive 12 Bf 109 G-6 fighters from the *Luftwaffe* at a favourable price. The Bf 110 was subsequently blown up on 18 May 1944, and Johnen and his crew were released six days later.

ABOVE: After shooting down a Wellington bomber on the night of 26 March 1942, Johnen's aircraft was badly damaged by return fire from a Stirling. Johnen himself was able to parachute to safety but his Bordfunker, Obergefreiter Albrecht Risop, was killed by the first burst of gunfire from the Stirling. Risop's body was later recovered from the fighter and buried in Südlohn, close to where his aircraft crashed.



ABOVE: Wilhem Johnen *(CENTRE)* and his Bordschutze, Ofw. Paul Mahle *(RIGHT)*, shown towards the end of the 'Battle of Berlin' in early 1944. The fin of their Bf 110 is marked with 14 victory bars, Johnen's total after destroying a Lancaster on 27 January, one of three he shot down that night.

Meanwhile, however, as it was at first believed that the crew had defected, the families of the crew had been arrested and imprisoned by the Gestapo. Later, after it had been established that the crew had carried out an emergency landing due to combat damage, the families were released and the authorities hushed up the whole incident.

On 10 May 1944, II./NJG 5 was re-designated III./NJG 6 and Johnen was given command of 8./NJG 6. From June 1944 the *Gruppe*, under the command of *Major* Herbert Lütje, was transferred to Steinamanger in Hungary, close to the Austrian border. Operating from this airfield, III./NJG 6 was tasked with defending Vienna and Budapest from Allied bombers operating from Italy. Over a period of three months, between 26 June and 21 September 1944, Johnen shot down a further 14 aircraft[4] taking his number of confirmed victories to 33. A month later, on 1 October 1944, he was promoted to *Hauptmann* and, a few weeks later, on 29 October, he was awarded the Knight's Cross.

With the Russians advancing through Hungary, III./NJG 6 was forced to withdraw within Germany's own borders to Leipheim, Neubiberg and then to Bad Aibling, south of Munich. On 13 February 1945, Johnen became *Gruppenkommandeur* of III./NJG 6, and a month later, during a raid against Würzburg on the night of 15/16 March 1945, he shot down a Lancaster for his 34th and final victory of the war.

On the night of 30 April 1945, with the Americans in control of the area around Munich, *Hauptmann* Wilhelm Johnen gave the men of his *Gruppe* orders to destroy their remaining aircraft before they fell into enemy hands. When the war finally ended on 8 May 1945, Johnen was held for a short time in American captivity and later studied for several years at Munich University where he obtained an engineering degree in construction. He was then employed by a contractor working for Messerschmitt Pre-Fabricated Buildings, owned by Professor Willi Messerschmitt, and later formed his own construction company, which he managed for almost 40 years. Wilhelm Johnen died at his home in Überlingen on Lake Constance, on 7 February 2002.

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3. Paul Mahle had been a weapons technician at Parchim and, together with Rudolf Schönert, had developed the first operational *'Schräge Musik'* weapons installation. By the time of this particular operation, Mahle had been Johnen's regular *Bordschutze* for several months. Kamprath, the *Gruppe's* Signals Officer, was filling in for Johnen's regular Bordfunker who was away on leave.
4. Four of these aircraft were American B-25 Mitchell bombers, supplied to the Soviet Union via the Arctic convoy route.

LEFT AND FAR LEFT: Although of poor quality, the photograph *(LEFT)* of a Bf 110 G night fighter is historically interesting as it shows the aircraft flown by Obstlt. Herbert Lütje, a holder of the Oak Leaves and the last Kommodore of NJG 6. The machine was captured at Aschaffenburg in May 1945 and in addition to the operational markings 2Z+AA, carried a variation of the Kommodore's Stab markings consisting of a double chevron and a horizontal bar. Lütje *(FAR LEFT)* became a night fighter pilot in 1940, flying first with NJG 1, and after his 27th victory in May, he was awarded the Ritterkreuz and became Kommandeur of IV./NJG 6 in June 1943. He became Kommodore of NJG 6 in September or October 1944 and was awarded the Oak Leaves on 17 April 1945, finishing the war with 51 night and two day victories.

Messerschmitt Bf 110 G-4 2Z+AA flown by Obstlt. Herbert Lütje, Kommodore of NJG 6, May 1945

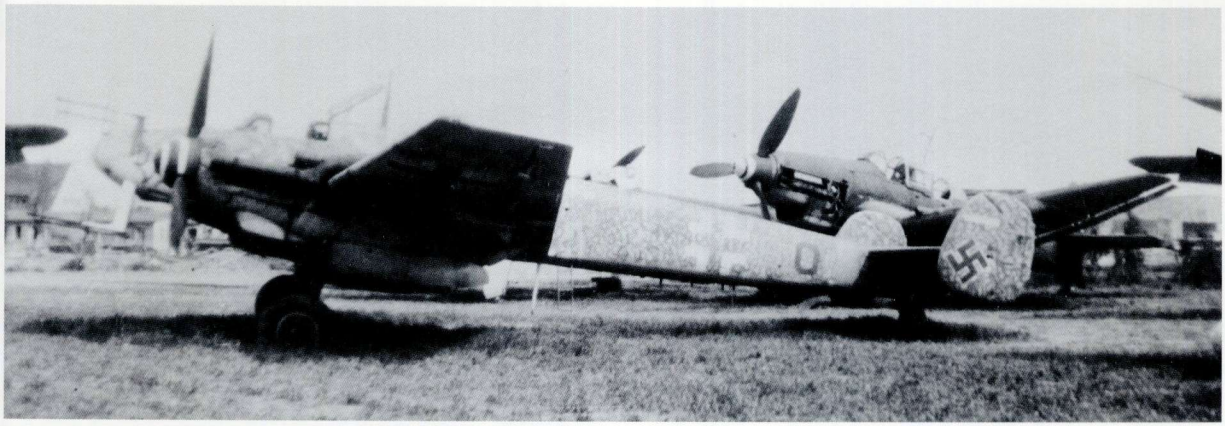
The uppersurfaces of this machine were camouflage in a simple, solid application of 75 over 76 undersurfaces with no additional mottling. The spinners were painted with a spiral design and, as no staining on the uppersurface of the wings is visible in the accompanying photograph, it is evident that the exhausts were the straight underwing type. The aircraft carried FuG 220 SN-2d radar equipment with the aerials on the nose being mounted in the vertical position, and a 90 mm armoured windscreen was fitted. Although the reference photograph shows what may have been some lettering on the starboard fin, this is believed to have been graffiti applied by US troops but, as the profile is intended to represent the aircraft as it would have appeared before capture, it has not been reproduced here.

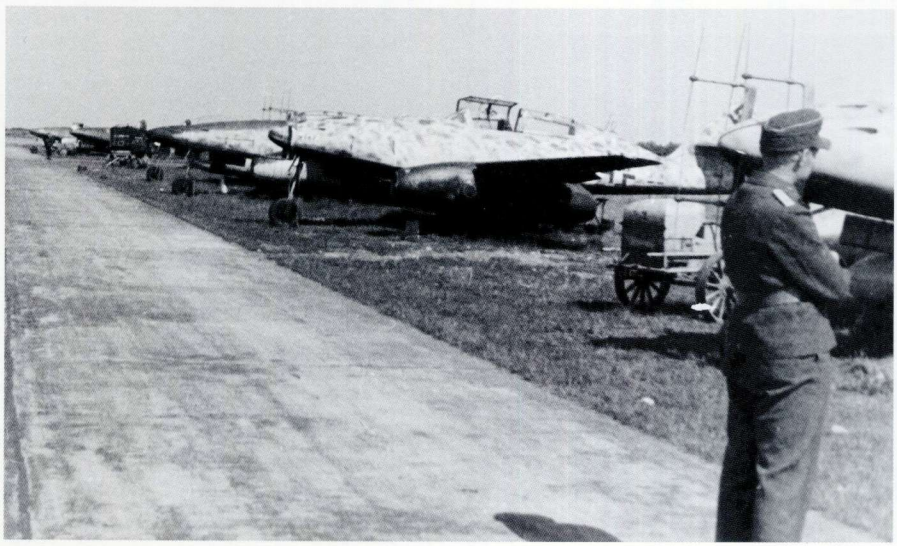
ABOVE, ABOVE RIGHT AND OPPOSITE PAGE TOP: In an attempt to provide a camouflage finish suitable for aircraft parked on the ground, uppersurface colours were sometimes darkened, as may be seen on this Bf 110 G-4 coded 9W+BO which, despite the 18. Staffel letter 'O', is thought to have belonged to 6./NJG 101. In late 1944, an Einsatzkommando from NJG 101 was operational in Hungary where, in September 1944, Axis aircraft were required to add a yellow band around the rear fuselage and a yellow Vee to the underside of the port wing. In early March 1945, these markings were ordered to be deleted, although on this machine, the fuselage band remained. It is thought that either 81or 83 was used to overpaint the Vee *(OPPOSITE TOP)* and that this was done almost immediately before the unit disbanded at Fritzlar in Germany in mid-March 1945. Although the fin carried victory bars representing victories over nine British and one Soviet aircraft, it is possible that the pilot may have been credited with the RAF victories before being transferred to NJG 101, perhaps as an instructor, where he was credited with destroying the Soviet aircraft.

ABOVE: The port tail fin detail showing the victory bars.

Messerschmitt Bf 110 G-4 '9W+BO' of 6./NJG 101, Fritzlar, 1945

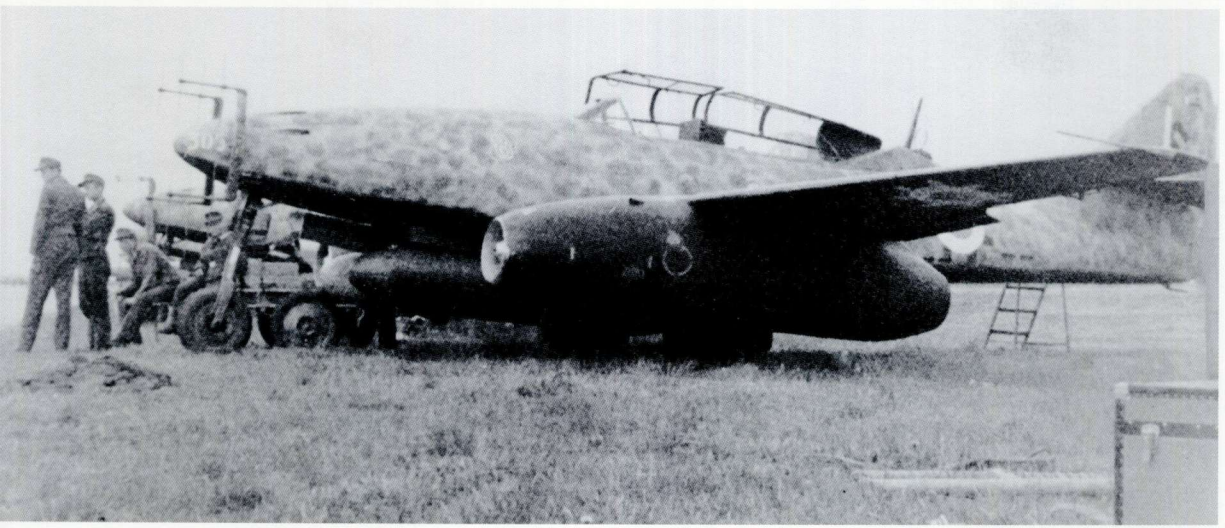
On this aircraft, the original base finish consisted of solid 75 on the uppersurfaces with 76 on the fuselage sides and undersurfaces. The uppersurfaces were then oversprayed with a Wellenmuster pattern in 83, this being more widely spaced on the uppersurface of the wings than on the fuselage. The pilot's victory bars were shown only on the port fin, and the machine had a narrow yellow band around the rear fuselage. As noted above, an earlier yellow Vee under the port wing was overpainted, probably in 81 or 83. The angle between the arms of the Vee was 45 degrees, and the arms, originally some 25 cm wide, extended for approximately 60 cm over the wing leading edge.

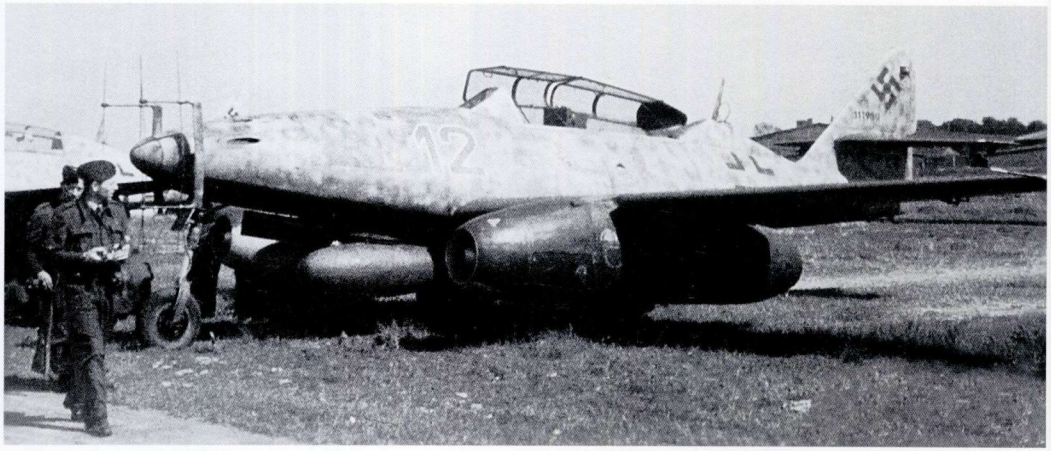


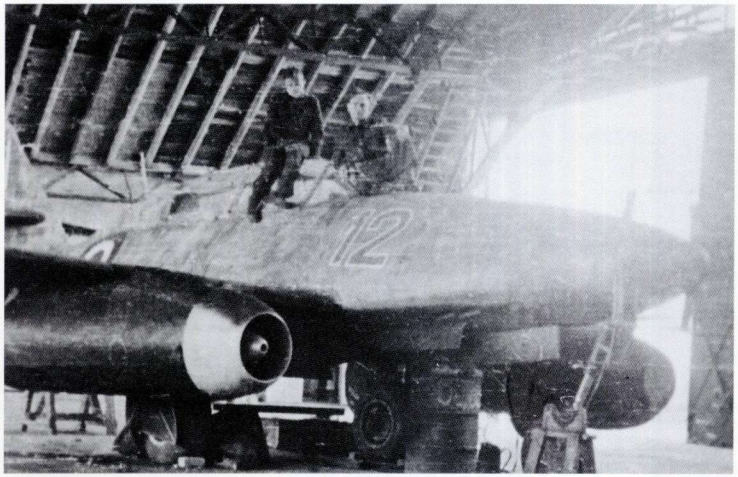


LEFT: Nearest the camera in this line-up of two-seat Me 262s at Schleswig-Jagel in June 1945, are two Me 262 B-1a/U1 night fighters of 10./NJG 11. The aircraft second from the right is W.Nr. 110306 which carried the small tactical number 'Red 9' on its forward fuselage and had the last three digits of the Werknummer repeated in white on the nose.

BELOW: Another Me 262 B-1a/U1 night fighter found at Schleswig-Jagel was 'Red 8', W.Nr. 110305, shown here with RAF markings applied over the Luftwaffe insignia. Although not visible in the photograph, the demarcation line between the 82 uppersurfaces and the black undersurfaces on the engine nacelles was merged using 83.







ABOVE AND LEFT: Me 262 B-1a 'Red 12', formerly of 10./NJG 11, was also surrendered to the RAF at Schleswig-Jagel and is shown *(ABOVE)* still in its original markings being inspected by RAF officers. After being ferried to Gilze-Rijen, this machine overshot the runway and sustained minor damage. It was probably this incident which resulted in the starboard intake being damaged and replaced with the mismatched example shown in the photograph *(LEFT)*.

Messerschmitt Me 262 B-1a W.Nr. 111980 of 10./NJG 10, 1945

The camouflage on the fuselage of 'Red 12' was applied in such a way that the occasional meander pattern of 75 was applied over the 76. The uppersurfaces of the engine nacelles, wings and tailplane were almost certainly 83, as shown, and all undersurfaces, including the sides of the engine nacelles, were permanent semi-gloss black. Note that the intake on the starboard nacelle was natural metal but had been roughly oversprayed with 83 on the uppermost surface.

Recollections of a Nachtjäger Jet Pilot

LEUTNANT HERBERT ALTNER, 10./NJG 11

A few days after my final success with the Ju 88 on 8 February 1945, when I shot down three aircraft over Stettin, *Oberleutnant* Welter landed at Lübeck-Blankensee with his Me 262 A-1a. I engaged him in conversation about jet fighters, in which I had a special interest, and hardly three weeks later, *Oblt.* Welter had me transferred to his unit, which had the official designation of 10./NJG 11.

At that time, 10./NJG 11, which had been formed from *Kommando* Welter in January 1945, was equipped with only the single-seat version of the Me 262. With these, the few pilots of this unit flew *'Wilde Sau'* sorties over Berlin against Mosquitoes illuminated in the beam of the searchlights and which, because of their high speed, could not be intercepted by any other fighter.

Oblt. Welter told me that he was waiting for the two-seater Me 262 B-1a/U1, which was supposed to be fitted with the FuG 220 *'Lichtenstein'* SN-2. As I already had plenty of experience in flying *Dunkle Nachtjagd* with the Me 110, as well as having an excellent, experienced radar operator in Reinhard Lommatzsch, Welter selected me to fly the two-seater version.

My familiarisation training on the Me 262 was carried out in a single-seat version and, after a short period of theoretical instruction, with me sitting inside the aircraft and *Oblt.* Welter standing on the wing, I flew a few circuits with this fantastic aircraft. With great admiration I looked at my airspeed indicator and saw that it was registering 800 km/h. I can only repeat the words of Adolf Galland: *"It was as if an angel were pushing!"*

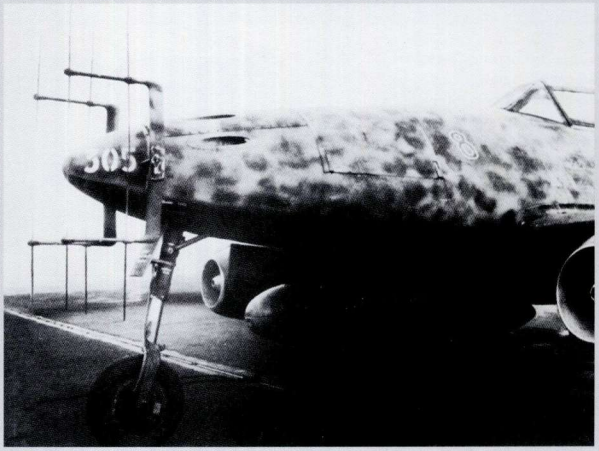
On 13 March 1945, after I had completed about 15 circuits with the Me 262, my practical training was finished and I obtained permission from *Oblt.* Welter for a cross-country flight to my former unit, NJG 5 at Lübeck-Blankensee. I shot across their airfield at about 800 km/h and, after landing, was greeted by my former *Geschwader* friends with enthusiasm and some respect.

On 22 March 1945, I flew an Me 110 to Staaken to collect the first two-seater Me 262 B-1a/U1, and to flight test it before ferrying it to my new unit. Overall, flying the Me 262 was not a problem, although the night fighter version with its *'Lichtenstein'* SN-2 and second crew member was a lot heavier and demanded a lot more concentration.

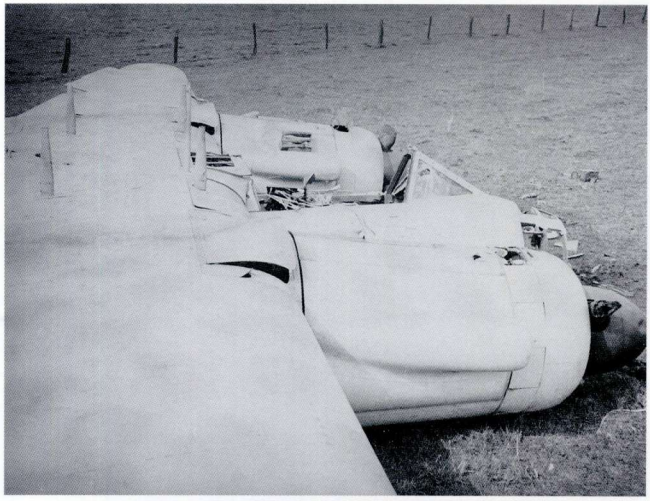
During a ferry-flight to Staaken I landed at Lübeck where my Me 262 was pushed into a wooden hangar. During the night the airfield was bombed and the next morning we found that the hangar roof had collapsed on top of the aircraft. As far as I remember, I ferried four two-seaters from Staaken to Burg, near Magdeburg and to Lübeck. These four Me 262 B-1a/U1 were the only ones that were used operationally.

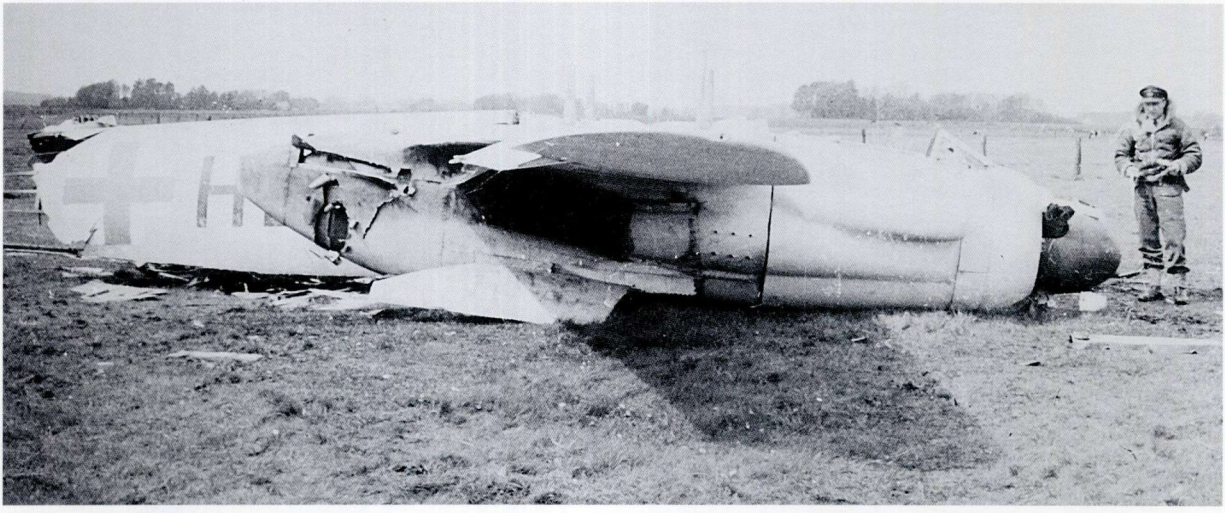
On 27 March 1945, I flew my first night sortie with this type. During the flight, my *Funker* picked up a contact, a Mosquito, on his radar, but due to my high speed I shot past it. I then throttled back too quickly and both engines stopped. As restarting the engines in the air was virtually impossible, our only option was to bale out. We both loosened our straps and, after discarding the canopy, I pulled the aircraft up and then shoved the stick forward so that we were both thrown out. Unfortunately, my *Funker,* Reinhard Lommatzsch, collided with the tail unit and lost consciousness. Thus prevented from opening his parachute, he fell to his death. This occurred near Havelberg.

At the beginning of April, while I was on my way to collect another aircraft from Staaken, the airfield at Burg-Magdeburg was bombed and became unusable. I was therefore obliged to fly this new aircraft to Lübeck from where, on 3 April 1945, I succeeded with my new Funker, Hans Fryba, in shooting down a Mosquito.

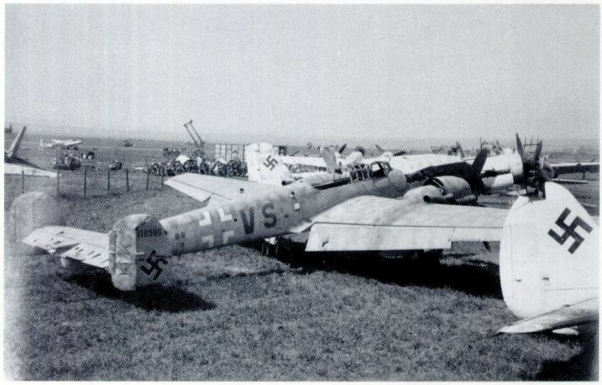


In order to be safe from bomb attacks during the day, we transferred to the Lübeck-Hamburg autobahn near Reinfeld. At dusk, we moved back to Lübeck for our night missions because the autobahn was not equipped with suitable runway lighting. On 6 May 1945, I flew my 'Red 12' from Reinfeld to Schleswig-Jagel where the last two Me 262 B-1a/U1s were handed over to the RAF. With that the war was finished for me and I had done my duty. I remember with pride that I had flown the first combat jet in the world and was the only *Luftwaffe* pilot who had been authorised to fly the two-seater version on night operations.





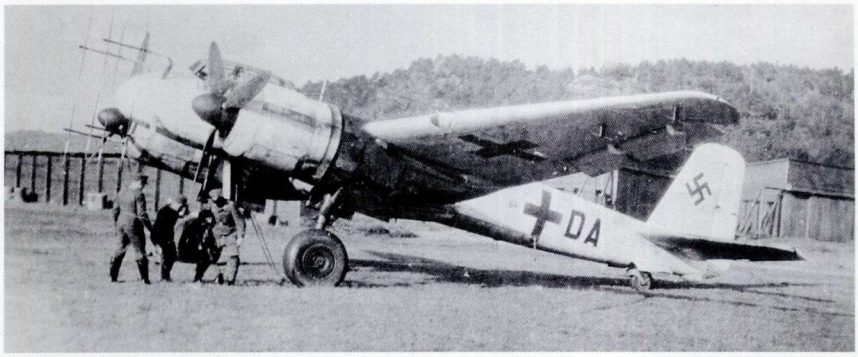
THIS PAGE: The first production Ta 154 A-1 two-seat day fighter, W.Nr. 320003, was completed in June 1944 and was followed by a further six machines before production was cancelled. However, at least one of the seven machines, W.Nr. 320008, was completed as a two-seat night fighter under the designation Ta 154 A-4. This machine was delivered to NJG 3 at Stade for evaluation, probably in early 1945. Marked with the tactical code D5+HD indicating that it has been assigned to Stab III./NJG 3, it is believed to have crashed in the evening of 30 April 1945. The fate of the crew is not known and the machine was not examined until early May. External differences between the A-4 and the A-1 included the engine cowlings, the blade aerials on the uppersurface of the wings and fuselage, and the slight dihedral to the wingtips. A contemporary RAF report described the camouflage as light blue overall with grey mottled uppersurfaces and was certainly 76 with a light mottle of 75. The mottle is best seen in the view of the tail *(TOP LEFT)*.



ABOVE AND ABOVE RIGHT: This abandoned Bf 110 G-4 was found by US forces at Bad Langensalza in April or May 1945. This particular machine, W.Nr. 110509, flown by 8./NJG 1, was coded G9+VS and lacked any radar aerials when photographed. On the starboard side, just visible protruding from the underside of the nose in the photograph (*ABOVE*) is the small plate which ensured that spent cartridge cases were deflected away from the propeller.

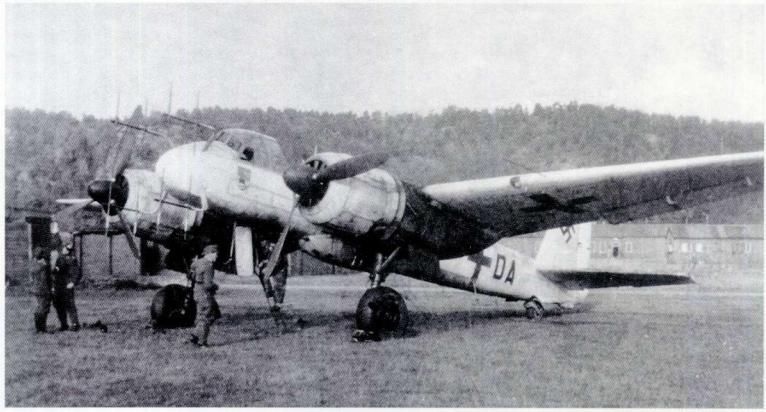
RIGHT: A Bf 110 G-4 of NJG 6 which surrendered at Munich in May 1945. Parts of NJG 6 and NJG 2 flew night ground attack missions when the practice was revived for night fighters in mid-April 1945. Missions involved road patrols when crews were briefed to strafe any motor transport or any signs of enemy movement observed. The results of these sorties, however, went largely unobserved by the crews taking part as only one strafing pass was made. On 15 April 1945, however, four of NJG 6's Bf 110s attacked enemy movements in the Karlsruhe-Rastatt area and claimed 15 vehicles destroyed. Similarly, seven aircraft from NJG 6 attacked transport south of Mannheim on 20 April and destroyed eight vehicles without loss, but such negligible results had no effect on the course of the war. Note that this aircraft is fitted with the new type of flame dampers, all of which led back under the wings.

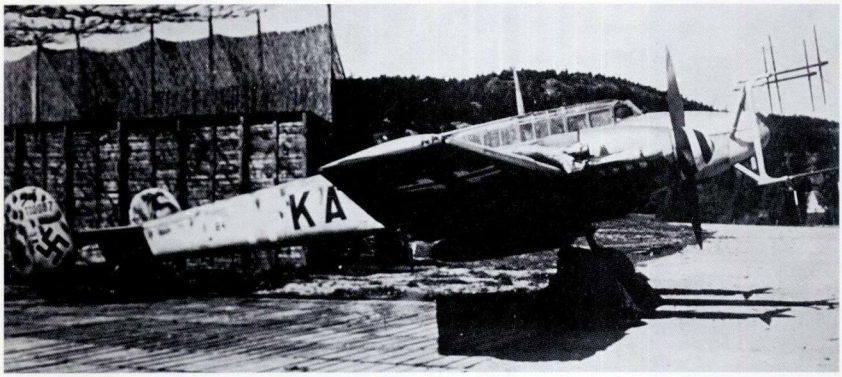
LEFT: This Bf 110 G, G9+AT, had 76 mottling clearly applied over 75 on all uppersurfaces, while G9+HT, W.Nr. 160128, was finished in 76 overall with a mottle of 75 over the uppersurfaces.



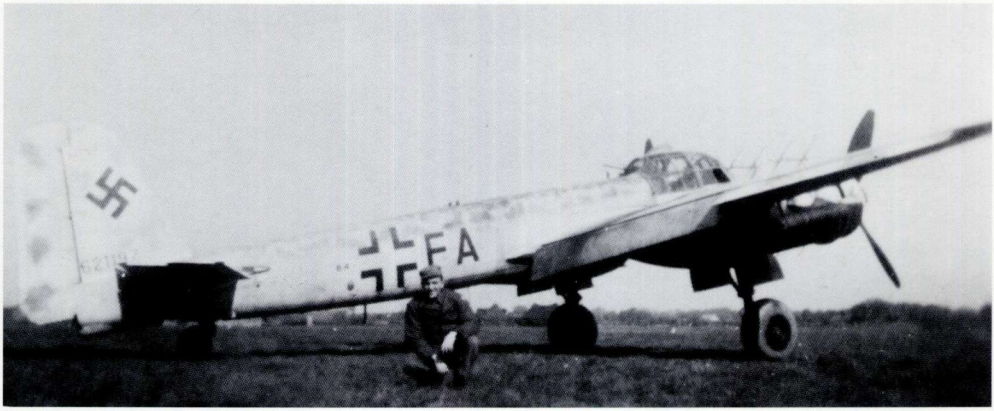
LEFT AND BELOW: A Ju 88 G-1 of the Nachtjagdstaffel Norwegen coded B4+DA. The origins of NJ-Staffel Norwegen can be traced back to November 1943 when a Nachtjagdkommando was attached to 13.(Z)/JG 5. In July 1944, this Kommando became Nachtjagdstaffel Finland, but did not become operational until August. In these photographs, taken in October 1944, the aircraft is shown at Kjevik shortly before a flight to Gardermoen where it remained until the end of the war. Unfortunately, details of the badge on the forward fuselage are not known.

BELOW: Meanwhile, in late November 1944, Nachtjagdstaffel Finland was redesignated and became once again Nachtjagdstaffel Norwegen, retaining the unit code 'B4' originally allocated to NJ-Staffel Finland, together with the earlier formation's Staffel letter 'A'. Finally, in March 1945 and while still based at Kjevik, the Staffel was again redesignated and became 4./NJG 3. With the end of the war on 8 May 1945, this Staffel was ordered to fly to Kurland to evacuate Army personnel, but this Bf 110 G-4, W.Nr. 110087, now of 4./NJG 3, remained behind in Norway where the photograph was taken. This aircraft had its operational code B4+KA in black, and the undersurface of the starboard wing was also in black. The uppersurface camouflage on the leading edge of the wing would indicate that this and the tailplane were overall grey 75, although the uppersurfaces of the fuselage are finished in a reverse mottle of 76 over 75. Note, however, that the mottles on the fin and rudder have a different appearance and are much darker, suggesting the finish here was 81 or 83 applied over 76 with little thinning.



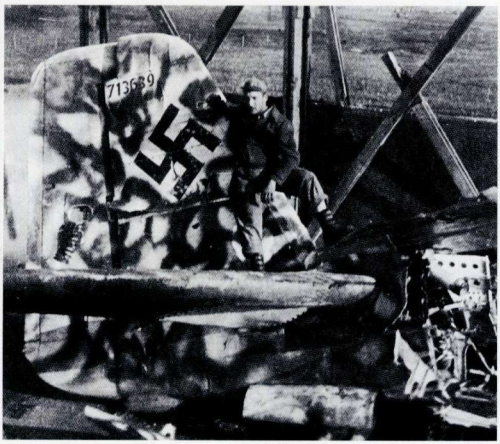


BELOW AND BELOW LEFT: Found in Czechoslovakia at the end of the war, Ju 88 G-1, probably W.Nr. 714891, was finished in a classic example of the Wellenmuster finish typical of NJG 101.



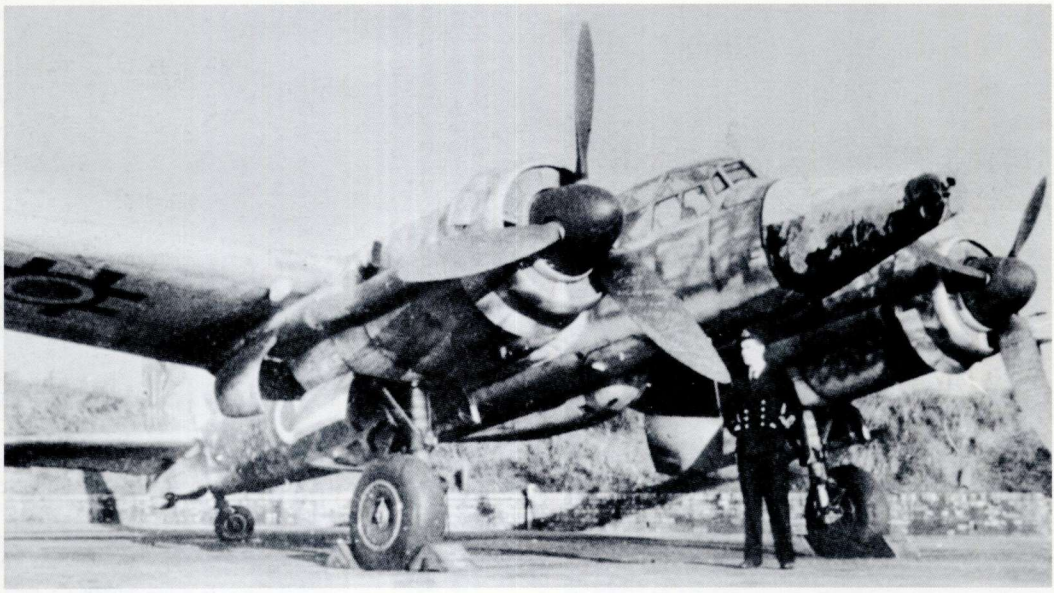
RIGHT: A post-war view of a Ju 88 G-6, W.Nr. 621197 which landed at Gütersloh on 8 May 1945. Although the aircraft is still marked with the operational code B4+FA of NJ-Staffel Norwegen, this unit had been redesignated 4./NJG 3 in March 1945.

LEFT: A Ju 88 G-6 with the tactical code D5+KV of 11./NJG 3 at Skrystrup in Denmark in 1945, possibly with the undersides of the engine cowlings in yellow. The propeller blades and rudder have been removed to comply with the terms of the surrender.

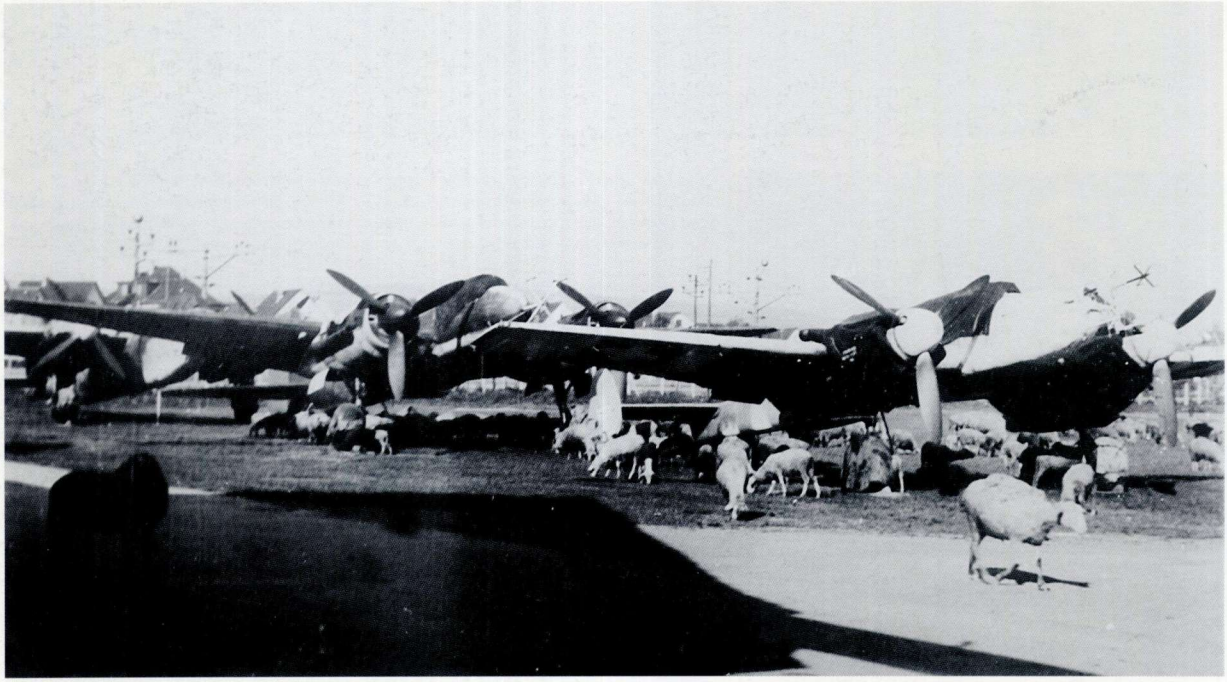


ABOVE: The vertical tail unit of this Ju 88 G-1, W.Nr. 713639, shown in Germany in 1945, clearly had its original 76 surfaces toned down with a darker colour, probably 81 or 83, with little thinning. Although appearing hand-painted, the additional colour was sprayed on with the spraygun nozzle set to a wide fan.

BELOW: This post-capitulation photograph shows a Ju 88 of NJG 7. The unit badge comprised a yellow shield, upon which was a white eagle with a sword and a flaming torch in its talons. The torch is said to have originated from the unit's tasks in 1944 and 1945 when it was employed as a Beleuchter, or illuminator unit.



ABOVE: After the war, several aircraft of particular intelligence interest were taken to Britain or the US for evaluation. One such specimen was this Ju 88 G-6 which is believed to be W.Nr. 622311, a machine which had previously served with Stab/NJG 4. If this is correct, then the original operational code was 3C+DA and the aircraft was surrendered at Eggebek and brought to the UK via Schleswig on 15 June 1945 where it became 'Air Min 16'. The most distinctive feature of this machine was that the 'Morgenstern' radar aerial was partially enclosed in a long, streamlined, plywood fairing which had a transparent Plexiglas nose. Although the aerial has clearly been removed from this example, the ends of the antenna would normally have protruded through this fairing. This photograph shows the aircraft at the Royal Navy Air Station at Ford.



ABOVE: A symbolic end to the Nachtjagd as sheep graze on what was once an operational airfield. The aircraft are, from left to right, a Do 217, a Ju 88 G-6 equipped with a FuG 218 'Neptune' aerial and a Bf 110.