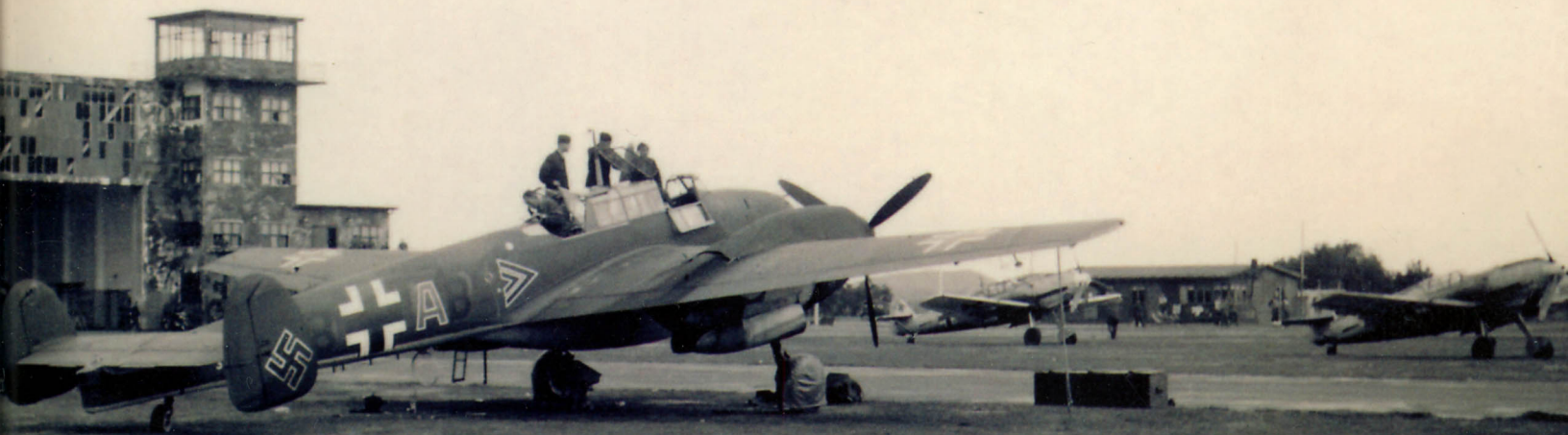




# Luftwaffe Fighters and Fighter-Bombers over the Far North

Units · Camouflage · Markings  
1940 - 1945



ANDREAS BREKKEN and KJETIL ÅKRA



The Luftwaffe's campaign in Scandinavia and the Far North – the 'Eismeerfront' – from 1940 to 1945 has long been regarded as largely 'uncharted territory' in terms of historical research. However, significant photographic material has slowly emerged and reveals a treasure-trove of fascinating, previously unseen and often unknown 'myth-busting' data.

Air operations over the Far North were demanding and intensive, with the two main German fighter units, JG 5 and II./JG 77, engaged against both the RAF and the Soviet Air Force. The aircraft of these units as well as lesser-known elements such as II.(J)/186, 11. and 12.(N)/JG 2, the Jagdgruppe Drontheim and Kommando Losigkeit and the heavy, twin-engine Zerstörer equipped with the Messerschmitt Bf 110, are examined in great detail. The far northern theatre of operations produced several leading Luftwaffe aces such as Heinrich Ehrler who claimed 200 victories, Günther Scholz, Theo Weissenberger, and Ofw Rudolf Müller, all of whom won the Knight's Cross and who flew a wide and fascinating range of Messerschmitt Bf 109 and Focke-Wulf Fw 190 sub-types, the camouflage and markings of which were often distinctive, unusual and of a type rarely seen on other battlefronts.

Focusing on the Luftwaffe fighter force in Denmark, northern Finland and Norway, the authors have spent many years collecting information and photographs for this exhaustive study, which not only focuses on camouflage and markings, but also examines the structure and organisation of the force, losses and accidents, unit commanders and junior officers. This study forms what can be regarded as the most comprehensive reference work on the subject ever produced, which is enhanced by more than ninety specially produced colour profiles making it an essential source for students of German aviation history and modellers.







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Kjetil Åkra



Andreas Brekken

## The Authors

**Kjetil Åkra** is curator at the Midt-Troms Museum (in zoology), but also studies Luftwaffe operations in Norway, especially fighters and their camouflage and markings as well as their technical state and development. A speciality is his research on Luftwaffe air operations on 12 November 1944 in connection with the sinking of the *Tirpitz*, and his book on the *Tirpitz* co-authored with Danish Kriegsmarine expert, John Asmussen, was published in November 2006.

**Andreas Brekken** is Chief Operating Officer of both development and IT-infrastructure related issues in a multi-company structure consisting of four companies. He also studies Luftwaffe operations, organisation and losses, especially in Northern Europe. He has written and implemented a database for the presentation of the world's most complete Luftwaffe loss list which will also serve as a tool for the integration of all kinds of archival material for easy retrieval and use.

## Acknowledgements

As usual with a complex and extensive book there are many individuals who have provided valuable contributions in various ways. These include gentlemen who have generously allowed their photographs from their collections to be published in this work; people who have helped us find the sources for photographs and people who have supplied us with documents of interest and relevance to our research. In no particular order these people include: Olve Dybvig, whose photographic contributions to this book are substantial and who also gave us access to his vast digital document collection; Rune Rautio, who contributed some crucial photographs; Horst Kube, who generously let us use many of his JG 5 photographs; Eric Mombeek, a true gentleman, who did the same; Bjørn Hafsten, who provided us with much information on IV./ZG 26 and other units detailed in this book; Hannu Valtanen, who kindly helped us in finding some important photographs from the Finnish Air Force archives; Axel Urbanke, whose photographs helped us illustrate some important chapters in the JG 5 history; Øyvind Leonsen, who let us use some new photographs of Schaschke's Bf 110; Ernst Knutson, whose photographs proved most welcome for inclusion in our book; Mark Sheppard who let us not only use his research on recovered JG 5 aircraft, but also sent us colour slides of some of these machines; Flemming Melin Christiansen who not only facilitated the acquisition of the very important photographs of 'Blue 17' but who also generously shared his research on JG 5 activities on Rygge as well as other relevant images; Heinz Schüller, a former member of 16./JG 5, who allowed us to use his wonderful photographs of his personal Bf 109 G-14/AS, 'Blue 17' and Rasmus Svihus and Inger Smith Olsen at Flyhistorisk Museum Sola (Sola Aviation Museum) for access to their photographic archive; other contributors include Mats Averkvist, Cato Guhnfeldt, Arid Kjæaas and Chrille Sjøgren.

There is also a large number of people who contributed in other, just as important, ways including our dear friend Erik Pilawskii who put us in touch with the 'right' people at Chevron Publishing in order to get our research published; Ole Bjørn Selensminde, who helped with crucial contacts and general information regarding the salvage of 'White 1' and 'Yellow 16'; Gerhard Stemmer, who provided information on various units and their aircraft; Halvor Sperbund who also helped with contacts and relevant information; the same must be said for Geir Tangen, who helped with information on Fw 190 A-2, 'Yellow 16.' Fellow enthusiast Johan P Petersen has provided a long-term companionship with regards to researching Luftwaffe units in Norway.

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Kjetil Åkra  
Andreas Brekken  
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## INTRODUCTION

Why yet another book on Luftwaffe aircraft and units? There can hardly be another aviation topic that has been better covered than this. Part of our motivation to write this book is that the Luftwaffe units operating in the Far North theatre (Norway and northern Finland), have received relatively little attention compared to more popular areas of operation and units. Fortunately, the major fighter unit, JG 5, has now received an up-to-date operational history through the three-volume series of Belgian historian, Eric Mombeek. However, there are still important aspects that remain to be clarified, such as the histories of other fighter units that operated within the area, and the fact that

new information on the structural organisation of JG 5 has recently come to light. Furthermore, the topic of the camouflage and markings of these aircraft is generally neglected, not much new material has been written and what does exist is usually spread between a number of publications. Besides, a lot of faulty or unsubstantiated information, what may be termed as 'myths' regarding this controversial subject, is still out there. Our desire is to collect all this information between the covers of a single book and thus provide the reader with up-to-date information on all the Luftwaffe fighter units operating in the Far North.

## GLOSSARY

Abteilung - Unit

Alarmstart - Scramble

Einsatzstaffel - Operational part of training unit with Staffel strength

Ergänzungsstaffel - Operational training unit of Staffel strength attached to an operational unit

Ergänzungsgruppe - Operational training unit of Staffel strength attached to an operational unit

Fliegerkorps - Tactical command designation - additionally identified by number or area designation, e.g.

II. Fliegerkorps or Jagdfliegerführer Norwegen

Führer der Seeluftstreitkräfte - Officer in command of operational maritime flying units

Führungsmaschine - Leading aircraft in a formation and or unit

Gefechtsstab - Operational staff

Generalstab der Oberquartiermeister der Luftwaffe - General Staff of the Luftwaffe Quartermaster

Generaloberquartiermeister - Designation of the officer in command of the General Staff of the Luftwaffe

Quartermaster

Gruppenkommandeur - Officer in command of a unit of Gruppe strength

Gruppenstab - Staff of a unit of Gruppe strength

Iststärke - Real strength of a unit with regards to aircraft and personnel at a given time

Jabo - Abbreviation of Jagdbomber - Fighter-bomber

Jagdgeschwader - Fighter unit of Geschwader strength

Jagdfliegerführer - Regional commander of fighter units - followed by number or area designation, e.g.

Jagdfliegerführer 3 or Jagdfliegerführer Norwegen

Jagdgruppe - Fighter unit of Gruppe strength

Jagdstaffel - Fighter unit of Staffel strength

Kriegsmarine - German Navy

Lehrgeschwader - Unit of Geschwader strength for tactical and operational evaluation and testing

Luftflotte - Lit. 'Air Fleet': Regional command, followed by number or area designation, e.g. Luftflotte 5 or

Luftflotte Reich

Luftwaffenbefehlshaber Mitte - Regional Command Mitte

Oberquartiermeister Reserve - Reserve aircraft and or personnel of a given quartermaster within a given regional area

Sollstärke - Establishment strength of a unit with regards to aircraft and personnel at a given time

Sonderstaffel - Special unit of Staffel strength

Staffel - Designation of the smallest tactical unit in the Luftwaffe, usually consisting of 9 to 16 aircraft and crew

Staffelkapitän - Officer in command of a unit of Staffel strength

Staffelstammbau - Unit organization chart detailed to Staffel level

St.Kz - Stammkennzeichen - Aircraft identification code, also referred to as radio code

Übungs-Alarmstart - Training scramble

Werknummer - Aircraft serial number assigned at the production plant

Werkstattflug - Test flight after aircraft repair or overhaul

Zerstörer - Direct translation 'Destroyer' - in this context heavy fighter aircraft usually multi-engine





AS indicated by its title, this book deals with Luftwaffe fighters and fighter-bombers operating in the extreme north of Europe or what came to be known to the Germans as the 'Eismeerfront' (lit. 'ice sea front')<sup>1</sup>. In geographical terms this refers mainly to the actual front line running along the Litza River, but in a wider sense it encompasses northern Europe, i.e. Norway, Finland and the Kola Peninsula. We have defined the scope of this book to include the area assigned to Luftflotte 5 during the war, that is, occupied Norway, northern Finland (roughly from Pori and northwards), occupied areas of the Soviet Union (mainly on the Kola Peninsula) as well as the Spitzbergen islands (although no fighters were stationed there). In terms of units this includes I./JG 77, II.(J)/186, the four Gruppen of JG 5, III. and IV./JG 1 as well as Jagdgruppe Drontheim and a few other short-lived semi-autonomous units or units that only briefly operated from the region covered.

In order to better 'acquaint' the reader with the units in question, we have divided the respective sections on units into three components. One deals with the organisation, structure and brief operational history of each unit in question. This component will provide overviews of the command structure down to Staffel level, as well as all major organizational changes that invariably took place during the course of the war. We also present a new Staffelstammbau for JG 5, based on the latest material available which we believe is the most correct, indeed, the only correct one, to date. The second component deals with the aircraft and aircraft sub-types delivered to the units, various strength returns and notes on the technical state of the aircraft. The strength returns are presented in tabulated form. The last component deals with the markings and camouflage. Finally, we have also chosen to present extended essays on selected topics in independent information boxes.

As the operational Jagdstaffeln and Ergänzungsstaffeln used to form JG 5 in the first half of 1942 are such an integral part of the early history of the unit and their aircraft were simply taken over by JG 5, the

camouflage and markings of these aircraft will be briefly dealt with in this book. Conversely, as I. and II./JG 5 left Norway in August-October 1943 and April 1944, respectively, their subsequent service on other front areas does not form part of this book, neither do the units formed from these Gruppen in Germany in late 1944. As for the camouflage and markings system of the Bf 109T this has been dealt with in detail by Åkra & Kjæraas (2004) and will be dealt with only briefly in this volume. The same applies to the relatively few Me 410s that served in IV./ZG 26 in 1944-45; for information on their camouflage and markings we refer you to Åkra & Brekken (2008). Dedicated night fighter units also fall outside the scope of this book (except when operating in a day fighter capacity).

This is not a book about Luftwaffe aces, but rather a book about their units, aircraft, markings and camouflage (not forgetting the large number of pilots who were not aces in the technical sense of the word, but nevertheless contributed valuable services to their unit and country, often with equally important stories to tell). Even so we will, of necessity, sometimes touch on the subject of number of kills scored – a topic which has generated considerable controversy in recent years, not least because records of Soviet losses have become available (See for instance [www.eismeerfront.com/eis\\_html/poteri.htm](http://www.eismeerfront.com/eis_html/poteri.htm)). Judging by these as well as research carried out by others, it is quite clear that several of the famed JG 5 aces over-claimed to a considerable degree. We would like to stress that we do not in any way want to diminish the accomplishment of these pilots by stating this. Our intention is simply to make it clear that when describing an ace and the kill markings on his aircraft, we will use the term 'claim' instead of 'kill', the reason being that many of the kills cannot be verified by Soviet records.

Over-claiming was a phenomenon that took place on all fronts and by all combatants. Current research would seem to indicate that it was particularly frequent amongst members of JG 5, but

*A Bf 109 F curves in over the Eismeerfront – a vast expanse of seemingly endless tundra. This was the combat zone for JG 5 and the other units fighting in the far north from mid-1941 until November 1944 (Coll. Brekken).*





*Typical conditions on an airfield during winter in the North, possibly Petsamo. The snow lies thick and heavy and tarpaulins are used to provide the fighters with some protection against the harsh elements (Coll. Brekken).*

even so it is obvious that the unit produced a large number of aces.

### Material and photographs

The analysis and aircraft profiles presented within these pages are, to a great extent, based on published photographs and narratives, but photographs and documents from private collections have kindly been made available for study by a large number of people (see Acknowledgements). We have also been fortunate enough to have some 270 photos from a private photograph collection made available to us, some of these which have been published before and are generally available, while others have not previously been seen in print.

### Aircraft designations and sub-types

As the Luftwaffe expanded, the need for ever increasing performance for its aircraft and armament was an accelerator for the aircraft industry, with regards to both development and production numbers. At the same time, the high number of operational sorties being flown made the quantity of aircraft damaged both due to pure mishaps and combat increase. In addition to the airframes repaired at unit level, the Reichsluftfahrtministerium built an extensive system for retrieving and repairing damaged aircraft. As the different aircraft models evolved, the repair facilities and aircraft factories also expanded their organizations, in order to not only repair, but also upgrade aircraft.

All the main aircraft models covered in this book were more or less suitable for upgrading, and in many instances this led to an airframe changing its sub-type designation. Discussion on this topic has been running in various forms and in different forums for as long as the authors have been involved in researching the Luftwaffe. As authors, we have decided to use the following strategy when identifying aircraft sub-types and using these in the text and captions:

If the aircraft Werknummer is known, reference to the aircraft will be made using its initial designation at time of build. If visual inspection of photographic

evidence suggest that there were upgrades to the airframe, these will be noted. If further information such as a loss record is known to us, we include any discrepancies between the reported sub-type and the original, which could point to the fact that the aircraft had been upgraded at a given time.

If the Werknummer is unknown to us, we refer to the aircraft by the sub-type as identified by visual inspection of available photographic evidence, or written sources.

The authors have been able to use extensive written records from the Luftwaffe repair facilities as a basis for this work.

The nomenclature adopted by the authors with regard to aircraft models and sub-types follow the system as seen in the majority of Luftwaffe documents, with one important exception – the sub-types are written with a dash between the sub-type series letter, and the sub-type series number, in order to enhance readability. For example, the wartime designation 'Bf 109G6' will be written as 'Bf 109 G-6'.

### The profiles

There are few subjects more controversial to enthusiasts of Second World War aviation than Luftwaffe colours. We do not claim to have access to the universal truth regarding this topic (anyone who think they do are fooling themselves), but we believe that in the pages that follow we present the most likely colours used on these various machines. Each subject has been carefully analysed based on photographs, contemporary documents and in a few cases, actual pieces of wreckage. Conjectural details or guesswork will be clearly identified as such in the accompanying text.

The profiles themselves have been produced using Photoshop software. It should be noted here that every attempt has been made to ensure that they convey the most accurate representation of the subject possible using current knowledge. The majority of the aircraft profiled were chosen as subjects because of their interesting schemes, historical significance or importance in illustrating key points mentioned in the text. Most of them are sufficiently documented photographically to ensure a high level of confidence, although a few have been included despite only partial photographic views being available.

Modellers should note that the exact hues seen on the profiles do not correspond exactly to any digitalized RLM colours, nor has any attempt been made to adapt colours from any recently issued RLM colour chips (e.g. Ullmann 2000, Merrick 2004, 2005). The basic idea behind our profiles is to show the aircraft as it appeared, complete with weathering and oil spills and other imperfections. The profile artist has also made extensive use of shadows and highlighting to convey a sense of 3-dimensionality to the subject and this would, in any case, distort the actual colours used. In effect, an attempt has been made to portray the colours with the strength and hue they would have had on a real aircraft under real lighting conditions.



## Luftwaffe unit strengths and unit strength reports

The Luftwaffe used a system based on a unit 'Sollstärke' or what the strength with regards to numbers of aircraft and personnel of the unit should be, and 'Iststärke', the number of aircraft and personnel that was actually available to the unit at the time of the report. We will use 'establishment strength' and 'serviceable strength' respectively when referring to these concepts in the text.

Strength reports were reported to higher headquarters on a daily basis, and every Saturday to the statistical unit in the Reichsluftfahrtministerium, the so called 'Generalstab der Oberquartiermeister der Luftwaffe, 6. Abteilung', until late April 1942. From 20 April 1942, the regime was changed, and the reporting days for the strength reports became every 10th, 20th and last day of the month. The numbers reported were:

Total number of aircraft on strength
Total number of aircraft serviceable
Total number of crew on strength
Total number of crew serviceable

Later, an additional crew reporting number was added, where all crew that were on leave, ill, transferring aircraft or for other reasons not available for immediate action were reported as 'bedingt einsatzbereit' or conditionally ready for action.

By the time of the invasion of Norway and Denmark, the establishment strength of a Luftwaffe fighter Gruppe was 39 aircraft, plus 12 in reserve and 39 crews. This establishment was divided between the Gruppenstab, with 3 aircraft and crew, and three Staffeln, each with 12 aircraft (with 3 in reserve) and 12 crews.

This was changed in June 1940, as reported in the introduction to the strength report of 8 June 1940, where the strength of a standard fighter Gruppe was reduced with regards to aircraft from 48 to 39, and at the same time a heavy fighter, or Zerstörer Gruppe, was reduced from 36 to 30; bomber units were reduced from 36 to 30, and in typical German fashion, an exception was made for Gruppen equipped with the Junkers Ju 88 which retained an establishment of 32 aircraft!

The next minor change came about in May 1941. The introduction to the strength reports of 10 May 1941 noted that the establishment strength for the Gruppenstab of a fighter unit was enhanced by one aircraft, making it four, and the total establishment strength of a fighter unit at 40 aircraft. This would then become the standard for a normal Jagdgruppe for more than two years, with the exception of JG 2 and JG 54, which had fighter-bomber or 'Jabo' Staffeln attached to their Gruppen from early 1943.

In late May 1943, the first of the new large fighter Gruppen were introduced, a unit with a four-aircraft Gruppenstab flight, and 16 aircraft in four Staffeln, making the total number of 68 aircraft for such a Gruppe. Most units still kept the old three Staffeln organization until 20 May 1944 when the change from 12 to 16 aircraft in each Staffel was put into effect. The establishment strength of Gruppen with three Staffeln became 52 aircraft and aircrew.

In June 1944 a large expansion with regards to the number of fighter Staffeln took place. This was accomplished by adding a fourth Staffel to most of the existing Gruppen, and thus the establishment strength for the new standard Gruppe rose to 68 aircraft.

It is of interest to note the change from the fighter force at the time of 'Operation Weserübung' the peak of Luftwaffe fighter strength in November 1944. Using the numbers from 13 April 1940 the total establishment of the Luftwaffe fighter force stood at 1,459 fighter aircraft and 1,171 crews. 1,338 aircraft and 1,121 aircrew were with units, but the number of serviceable aircraft was merely 946, and the number of pilots ready for operation was 954. On 10 November 1944, the establishment was more than doubled, at 3,976 aircraft and crews, with the number of aircraft and crew in the units 3,117 and 3,000 respectively. The operational readiness was 2,491 aircraft and 2,804 pilots.

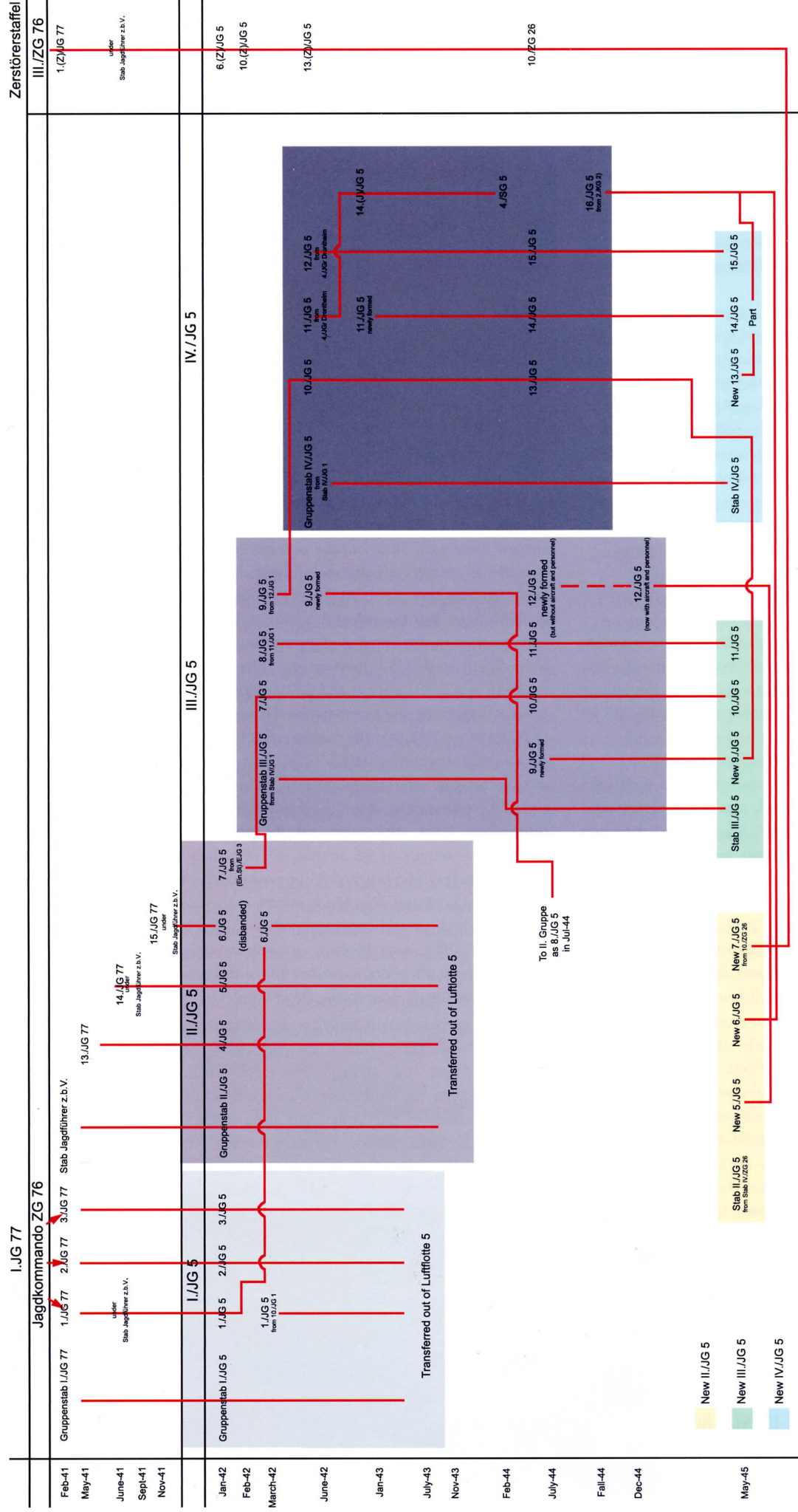
If we examine the numbers for the units deployed to Norway, we find that the numbers for 13 April 1940 are an establishment for II./JG 77 of 48 aircraft, with 32 in the unit, but only 21 operational, reduced from 37 and 28 respectively since 6 April 1940. On 10 November 1944, the units in Norway had an established strength of 68 aircraft, 37 of which were deployed to the unit, but just 23 operational. It should have caused no major concern however, as the number of pilots which should have been 68 was 15! Thus in November 1944, with Norway entirely occupied by Germany, only 15 pilots were defending the coastline from the Swedish border to the Polar Circle!

*One of the more important airfields during the campaign against Allied forces in North Norway in 1940 was Værnes. Here the airfield is seen under construction during the summer of 1940. Much of this work was done by Norwegian workers and contractors, who earned substantial amounts on bulding this and other airfields as well as other facilities for the Germans during the Second World War (Coll. Brekken).*





# Staffelstammbau 1./JG 77 and JG 5 – 1941–1945



This chart shows the organisational and structural changes taking place within JG 5 and its parent units from early 1941 until the end of the war. Red lines show the relationships between the various Staffeln and when and how changes and redesignations took place. The grey areas demonstrate the extent of the four Gruppen of the Geschwader. The three coloured areas at the bottom show the substantial reorganisation taking place within JG 5 during the last week or so of the war, when in essence three new Gruppen were formed. This was mainly a reshuffling of the units conducted at an administrative level and the personnel did not take notice of this, nor were there any changes in markings on the aircraft associated with this. It has mostly been ignored in written sources so far, but that it was in effect can be seen in personal files and Soldbücher (Chart: Kjetil Åkra).



# Camouflage, Markings and Unit Histories



## II./JG 77

### Organisation and Structure

THE II. Gruppe of Jagdgeschwader 77 was the only single-engine fighter unit on strength in the X. Fliegerkorps order of battle for 'Operation Weserübung', the invasion of Denmark and Norway in April 1940. The unit itself, however, can trace its origin all the way back to the first units formed during the early years of national socialist rule in Germany.

Originally planned as a fighter unit of Gruppe strength for the protection of German coastal waters by the Kriegsmarine, the first Staffel of the new unit was born as Fliegerstaffel (J) 1 Kiel-Holtenau in October 1934. The next Staffel was formed in April 1935, and named Fliegerstaffel (J) 2 Kiel-Holtenau. As a consequence of the current regulations for unit designations, the Staffeln were redesignated 1./136 and 2./136 sometime between September and December 1935. As the new airfield at Jever, strategically placed north-west of Wilhelmshaven, was completed in April 1936, the 2./136 moved there. In the autumn of 1936 the formation of the unit was completed, as the Gruppenstab I./136 and the third and last Staffel, the 3./136, was formed in September and October respectively. The 3./136 took up residence at Garz airfield on the island Usedom in the Baltic Sea.

It was during this period that the debate between Hermann Göring, the enigmatic commander of the new Luftwaffe, and the leadership in the Kriegsmarine over the command of the flying units of the combined German armed forces took place, and the famous quote 'Alles, was fliegt, gehört mir!' ('Everything that flies belongs to me!') was attributed to Göring. The power struggle was won by the Luftwaffe, and by the end of 1937, command of the former fighter and bomber units of the Kriegsmarine was transferred, including both flying and ground personnel.

As the German armed forces expanded and reformed, so did the I./136. A new 3./136 was formed in Jever in the spring of 1937, and the old 3./136 at Garz redesignated 4./136 and placed under direct

command of the Führer der Seeluftstreitkräfte. It was thus, in reality, no longer a part of the I./136 and the Staffel was subsequently used to form the I.(leichte Jagd)/Lehrgeschwader from the beginning of October 1937. A new 4./136 was formed in Jever as part of the I./136, until it was included in the II./186 (T) where the T stood for Träger or aircraft carrier, in November 1938.

The next change in unit designation came at the same time as the unit prepared for the participation in the annexation of Sudetenland, the western part of Czechoslovakia with predominantly ethnic German inhabitants. The new name would be II./JG 333, and the unit moved to Eger, after brief spells in Fürth and Weiden, where it remained during the winter months of 1938-39. As the Protectorate of Bohemia and Moravia was occupied by Germany in March 1939, the Gruppe moved to Pilsen, the airfield which would continue to be the home base of II./JG 77, the name the unit obtained on 1 May 1939, and retained while it participated on all major fronts in the Second World War.

In addition to this brief unit history, it is worth illustrating the level of experience the pilots of the unit had by the time of 'Operation Weserübung'. Several of the pilots that would arrive in Norway in April 1940 had experienced aerial combat as early as 1937 and 1938 as part of the Legion Condor in the Spanish Civil War. They had also had their first experiences fighting the RAF during the so-called 'Phoney War' period, deployed in the same role the unit was created for as early as 1934 – protection of the German coastline from airfields such as Wangerooge and Westerland on the Frisian Islands as well as the mainland airfields at Jever and Nordholz.

Two Bf 109 E-3s from II./JG 77 seen at Værnes in summer/early autumn of 1940. The Messerschmitt to the left was flown by the Adjutant of II. Gruppe, Horst Carganico, who went on to become one of the most well-known JG 5 pilots. Marked with a single chevron, his machine seems to have received additional mottling of RLM 71 on its fuselage sides (compare with a photograph later in this section of the same machine before this additional camouflage was applied). Of particular note is the non-standard size of the under wing cross which overlaps the aileron - compare with the similarly mottled machine to the right. In the background are some He 111s, presumably from KG 26, and immediately behind the Bf 109 to the right, a Bf 110 of I./ZG 76, most likely a D-version (Photo Ernst Knutson).



A rare photograph of Robert Menge asleep during a sightseeing trip – it was not all war and horror for the invading forces (Coll. Brekken).

It would not be an understatement to say that the unit consisted primarily of well trained and experienced combat veterans, something that can be further supported by the fact that many of the pilots that were active in II./JG 77 as early as 'Weserübung' had long careers in the wartime Luftwaffe.

At the start of 'Operation Weserübung' the unit consisted of:

Gruppenstab

4. Staffel

5. Staffel

6. Staffel

This structure was retained during the unit's period in Norway.

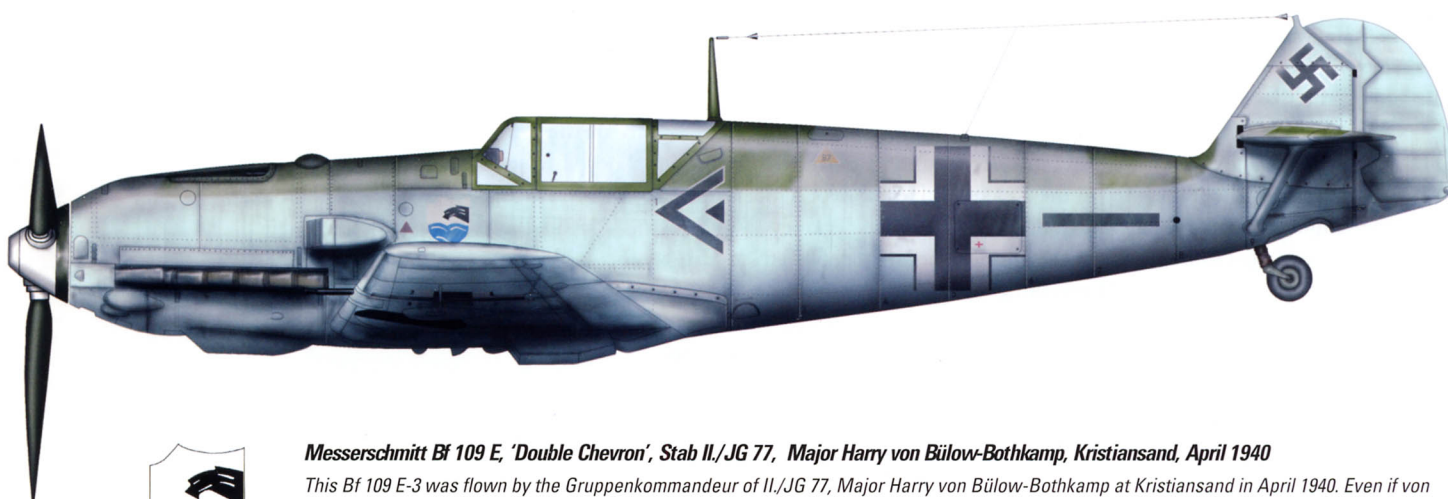
II./JG 77 arrived in Norway on 11 April 1940, two days after the start of the operation. Via Fornebu, the airfield close to the capital, Oslo, the unit flew on to Kjevik near Kristiansand. Later the unit would occupy the airfields along the Norwegian coastline, primarily using Mandal, Kjevik, Sola and Værnes, but also the newly erected airfield at Herdla, as well as Fornebu, Gardermoen and Lade.

The main operational task for the unit while stationed in Norway would be protection of the Norwegian coastline from attacks by British forces, including air cover for Kriegsmarine units operating in Norwegian waters and the Skagerrak.

The unit would stay on in Norway for about seven months. The transfer to France for participation in the Battle of Britain commenced on 10 November 1940.



Above and right: the machine of Gruppenkommandeur, Major Harry von Bülow, at Kjevik on 14 April 1940 just after its arrival in Norway showing off its resplendent, clean finish of RLM 71/02/65. In the background above, can be seen the Adjutant's aircraft of Lt. Horst Carganico (Coll. Brekken).



**Messerschmitt Bf 109 E, 'Double Chevron', Stab II./JG 77, Major Harry von Bülow-Bothkamp, Kristiansand, April 1940**

This Bf 109 E-3 was flown by the Gruppenkommandeur of II./JG 77, Major Harry von Bülow-Bothkamp at Kristiansand in April 1940. Even if von Bülow-Bothkamp officially had left the Gruppe in March to take over command of JG 2, he participated in the opening stages of Weserübung flying this machine. Its finish is entirely standard for the day and features RLM 71/02 upper surfaces with 65 on the ventral surfaces and fuselage sides. The chevron marking is quite small and placed well forward of the fuselage cross. Spinner is white with a RLM 70 backplate.





'Yellow 9' from 6./JG 77, reportedly photographed at Westerland/Sylt in early spring 1940 (see Mombeek et al. 2000: pg 355) with the penguin emblem visible below the windshield. This emblem was used by the Staffel in Norway, but can be hard to spot if placed on the rudder (Coll. Brekken).



Two photographs of Lt. Georg Schirnböck's 'White 12', the first (left) probably showing aircraft at Kjevik shortly after the invasion, while the second (below) shows the same aircraft after a serious emergency landing at Værnes on 23 April 1940. The Messerschmitt suffered 70 per cent damage. As can be seen, it was finished in the early 1940 scheme (Coll. Brekken).



#### Aircraft of the unit

Messerschmitt Bf 109 E-1	04.1940	11.1940
Messerschmitt Bf 109 E-3	04.1940	11.1940
Messerschmitt Bf 109 E-4	04.1940	11.1940

In early April 1940, the establishment strength of the unit was that of a standard contemporary fighter Gruppe at 48 aircraft (including 9 in reserve). The entire unit was equipped with the Messerschmitt Bf 109 E's three sub-types, the E-1, E-3 and E-4.

It cannot be stated for certain the exact mix of sub-types at a given time since the unit reported the aircraft only as 'Bf 109' or 'Bf 109 E' in strength returns. The loss reports offer only limited information for the period from April to August 1940, with only aircraft model and partial sub-type reported for most cases, and no Werknummern which would have enabled further identification of the aircraft sub-types during the early part of the stay in Norway. The first aircraft which offers Werknummer information from the loss record is reported as Bf 109 Werknummer 5262, which should

A typical Bf 109 E from 4./JG 77 in the early scheme and with a full complement of unit badges. The 'Seeadler' Gruppe insignia is below the windshield, followed by the 4. Staffel insignia below the cockpit section. Note the remnants of the Stammkennzeichen 'CK+' in front of the fuselage cross. This may have been simply sprayed over using RLM 65, part of which is also covering the 71/02 on the fuselage spine and even parts of the canopy framing (Coll. Brekken).



identify it as being an E-4 aircraft built at the Wiener Neustädter Flugzeugwerke GmbH. Earlier works have stated that the unit had one or more Bf 109 E-7 on strength during its stay in Norway, but no conclusive evidence has been found with regard to this. The aircraft which can be identified with Werknummern are all of E-1 and E-3 subtypes, although the photographic evidence show that the E-4 was in extensive use also. One Messerschmitt Bf 109D was reported as lost by the unit during its stay in Norway, but that could have been an error.

### Camouflage and Markings

When II./JG 77 and its Stab arrived in Norway on 11 April 1940, their Messerschmitts all carried the standard finish for such aircraft at the time, i.e. a RLM 71/02/65<sup>1</sup> scheme with the fuselage sides in plain 65

with the demarcation line being level with the cockpit or higher. The upper wing pattern on those aircraft where it is visible corresponds to the Type 5 pattern of Merrick (2004: pg. 78).

The three Staffeln of the Gruppe used the following Staffel colours:

- 4./JG 77 – white numbers with black outline
- 5./JG 77 – black numbers with thick white outline
- 6./JG 77 – yellow numbers with black outline

The Gruppe bar was always present in the same colours. During their stay in Norway, the Gruppe used a number of yellow tactical markings, the exact purpose and meaning of which is not clear. One consisted of a yellow upper tail fin section, as seen on 'White 13', the Emil of 4./JG 77's Staffelführer, of Oblt. Helmut Henz (pages 15-16).

Another tactical marking, which seems to have gone largely unnoticed, is the use of yellow outer wing panels as later used for aircraft serving on the Eastern Front, except that the yellow was applied to both upper and lower surfaces. This marking most likely originated from an order issued by Luftflotte 2 and 3 on 10 August 1940 which stipulated that fighters were to apply a 50 cm broad light yellow band on the wings tips both above and below, as well as 30 cm broad bands in the same colour on the elevators and rudder<sup>2</sup>. Even if II./JG 77 did not belong to these Luftflotten it is clear



Left: a fine photograph of the 4./JG 77 insignia. The over-painting of the wing root fillet with RLM 65 is an interesting detail – this was applied to several aircraft of II./JG 77. The above photograph shows how the 4./JG 77 insignia was applied in white on Emils finished in a 70/71 scheme, but also when the aircraft received the additional mottling of RLM 71 on the fuselage sides. Note the detail differences in the two markings, these differed from aircraft to aircraft (Coll. Brekken).

<sup>1</sup>. According to Merrick (2004: pg. 95), eyewitness accounts describing an aircraft from II./JG 77 that made an emergency landing on 11 April near Mandal, state that it was grey. However, as this is anecdotal evidence only, it must remain speculation.

<sup>2</sup>. BA/MA RM 35/I





*Bf 109 E-4, W.Nr. 5262, 'Black 3' at Ålborg in August 1940 being serviced and showing how the censor has erased the 'Zylinderhut' (top hat) insignia of the Staffel from the photograph (Coll. Brekken).*



***Messerschmitt Bf 109 E-4, 'Black 3', W.Nr. 5262, 5./JG 77, pilot unknown, Værnes, September 1940***

*Bf 109 E-4 'Black 3' from 5./JG 77 suffered a serious accident at Værnes, Trondheim, airfield on 13 September 1940 when it collided with a truck. The pilot of the aircraft is not known but he was not hurt, although according to German loss lists five Norwegian workers lost their lives in the accident. The Messerschmitt was finished in the modified RLM 71/02/65 scheme with heavy mottling of the former colour on the fuselage sides carefully avoiding the Gruppe and Staffel badges, the Gruppe bar and the individual number. The spinner was white with a yellow tip and RLM 70-coloured backplate.*



*A clear view of the Staffel top hat emblem seen on the censored 'Black 3' at the top of this page, this time after a landing accident at Værnes on 13 September 1940. Five Norwegians working on the airfield lost their lives in the accident (Coll. Sven Ludvigsen).*



Another view of the crashed 'Black 3' (seen on the previous page) after its collision with a truck (Coll. Sven Ludvigsen).



that the order found its way to this Gruppe as well, (or was issued by the Luftwaffe HQ in Norway) as photos of 'Black 2' and other machines (reproduced in this section) show these clearly in place. II./JG 77 seem to have limited their yellow tactical markings to the wing tips however, as the tail planes mostly seem to be devoid of yellow paint (but see 'White 13' page 17).

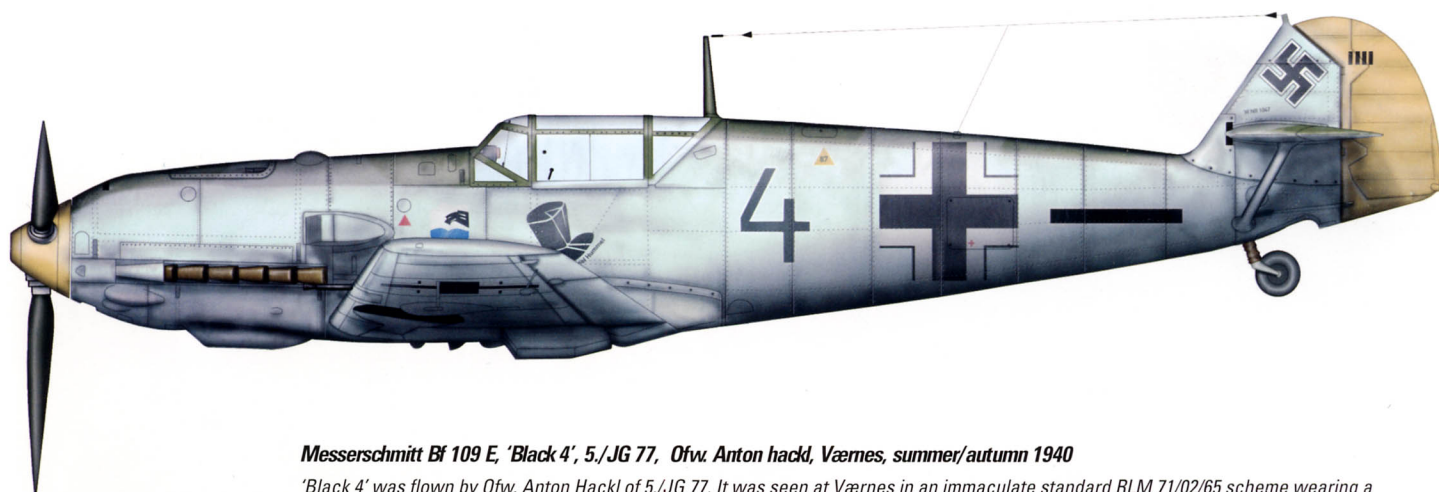
The use of emblems within the Gruppe was widespread, both in regards to Gruppe, Staffel and more personal emblems and markings. Most, if not all, aircraft featured the characteristic 'Seeadler' Gruppe badge below the port side of the cockpit. Additionally, most aircraft within 4. and 5. Staffeln also employed their own Staffel insignia<sup>3</sup>, these being as follows:

4./JG 77 - Skeleton on a scythe catching an umbrella, black on RLM 65, white on RLM 70/71 combination, carried on both sides of the fuselage below the cockpit.

5./JG 77 - 'Zylinderhut' (Top Hat) emblem carried on the port side of the aircraft below the cockpit on some aircraft.

The Staffel insignia of 6./JG 77 was a penguin 'doing the unmentionable' on the initials 'WC' (of the English Prime Minister). It was seen in use on aircraft at Westerland/Sylt in the spring of 1940 just prior to the invasion of Norway, and has also been seen on at least one aircraft of the Staffel serving in Norway. The penguin was situated either on the rudder or the below the port side of the wind shield.

At some time in the late spring/early summer of 1940, II. Gruppe started to apply supplemental camouflage to their machines. This took the form of a fine mottling on the fuselage sides, obviously in an attempt to conceal the aircraft on the ground as the threat of RAF attacks on Luftwaffe airfields in southern Norway was a very real one at the time<sup>4</sup>. Photographic evidence suggests that the three Staffeln of II./JG 77



**Messerschmitt Bf 109 E, 'Black 4', 5./JG 77, Ofw. Anton Hackl, Værnes, summer/autumn 1940**

'Black 4' was flown by Ofw. Anton Hackl of 5./JG 77. It was seen at Værnes in an immaculate standard RLM 71/02/65 scheme wearing a presumably all-yellow spinner and yellow rudder. The 5. Staffel 'Zylinderhut' badge is present and there are four black victory bars on the rudder. Hackl had claimed two Hudsons on 15 June, a Blenheim two days later and a Beaufort on the 21st of the same month, so the photograph on which the profile is based must have been taken after the latter date. The style of the number '4' is noteworthy.

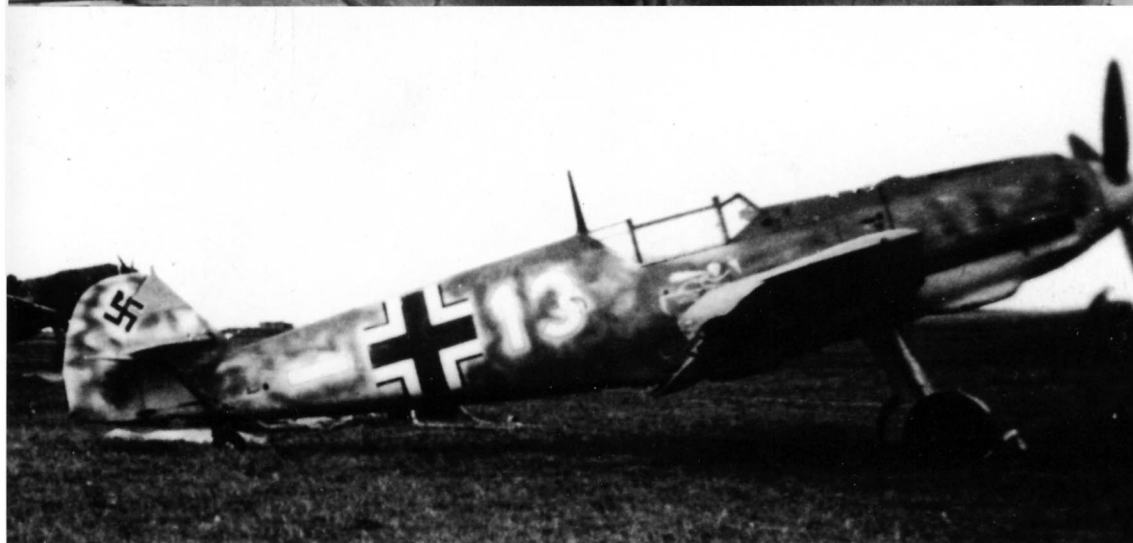
<sup>3</sup> The 6. Staffel 'penguin' emblem not having been seen in use at Norway.

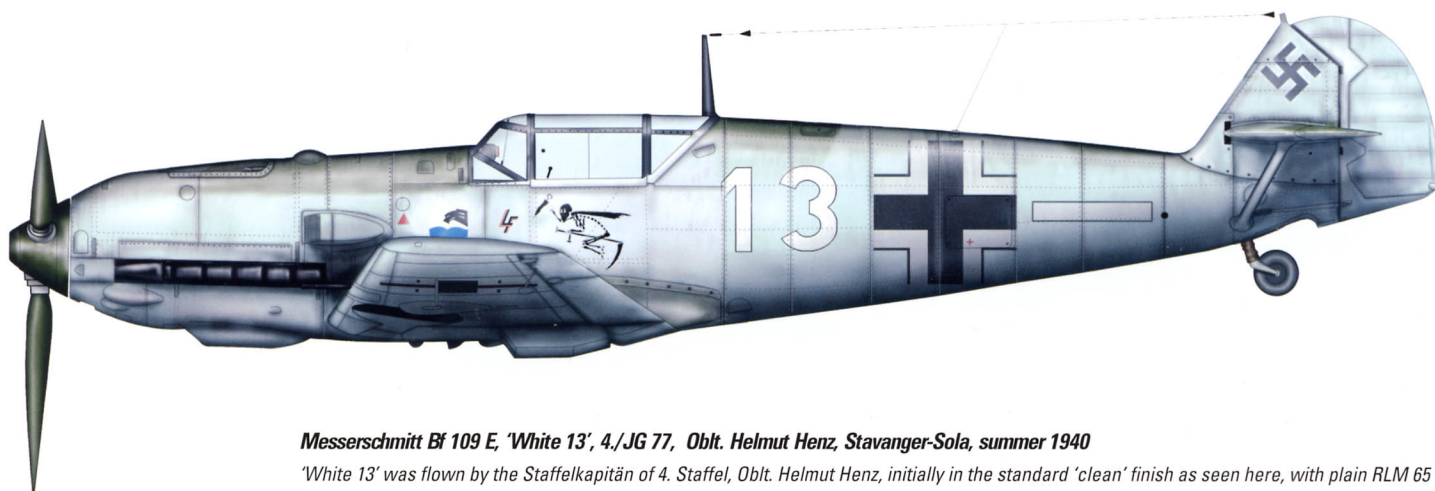
<sup>4</sup> Also see David Wadman's excellent treatise on the subject of Bf 109 E camouflage and evolution of thereof during the Battle of Britain at [http://109lair.hobbyvista.com/articles/camo/bob/bob\\_camo.htm](http://109lair.hobbyvista.com/articles/camo/bob/bob_camo.htm).





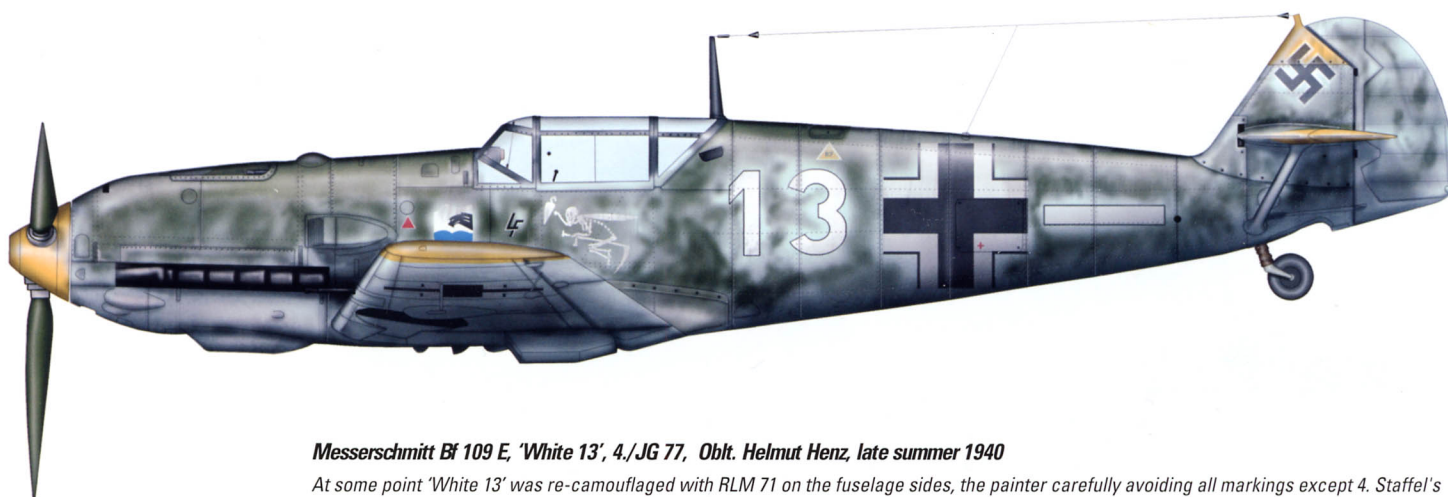
Three photographs of Oblt. Helmut Henz' 'White 13', before and after the application of the supplemental fuselage camouflage in RLM 71. Note how the individual number and Gruppe emblem has been carefully avoided during the spraying process; this also applied to the Gruppe bar (see photograph below). Henz' personal emblem, the letters 'LF' have been reapplied, the red line having been deleted and replaced with a white one to make it stand out better against the now dark green background. The letters were the initials of his girlfriend, Liesel Faulhaber (Coll. Brekken).





**Messerschmitt Bf 109 E, 'White 13', 4./JG 77, Oblt. Helmut Henz, Stavanger-Sola, summer 1940**

'White 13' was flown by the Staffelführer of 4. Staffel, Oblt. Helmut Henz, initially in the standard 'clean' finish as seen here, with plain RLM 65 fuselage sides. Henz' personal emblem, the initials 'LF', was carried beneath the cockpit section in black and thinly outlined in red along with the Gruppe and Staffel insignias. As can be seen on several other Bf 109 Es from II./JG 77, parts of the canopy framing have been over-painted with RLM 65. This probably stemmed from the application of colours at the factory or painted in the field.



**Messerschmitt Bf 109 E, 'White 13', 4./JG 77, Oblt. Helmut Henz, late summer 1940**

At some point 'White 13' was re-camouflaged with RLM 71 on the fuselage sides, the painter carefully avoiding all markings except 4. Staffel's skeleton insignia. This has been reapplied or over-painted in white to enhance the contrast against the dark green. The 'LF' has also been slightly altered, the red lines have been replaced with white thicker lines, again to enhance contrast. Another important change introduced in mid-August were the yellow recognition markings on the tail and wings. It is also possible that the spinner was painted yellow as depicted in this profile.

Another view of 4./JG 77 machines at Herdla in August 1940, possibly taken during the re-camouflaging process. The aircraft in the foreground has had RLM 71 applied as irregular splotches, and all individual markings and emblems have here been removed prior to this (unless it is a new aircraft?). The Emil in the background is still in its early 1940 scheme; the Gruppe insignia can be clearly seen. The upper wing crosses have been covered by canvas and the mottled machine has what appears to be two victory bars on its tail fin. This may have been the replacement aircraft of Lt. Schirmböck. The wing tips of both aircraft as well as the one just visible in the foreground are yellow (Coll. Brekken).







The same location as in the previous photograph (opposite page bottom) seen from atop the small hill on the north-eastern edge of Herdla airfield (compare position of the three aircraft, the canvas covering over the upper wing crosses, the fuel drum and the aircraft's relative position). The houses in the foreground were originally civilian houses taken over by the Germans and used for accommodation. This photograph also confirms that all three Bf 109s featured the yellow wing tips and outer tailplanes. Note how the wings of the centre Emil (which received additional camouflage) appears darker than the other two (Coll. Brekken).

applied this mottling with some minor, but distinct intra-unit differences.

4./JG 77 took great care in masking off or spraying around both unit insignia and personal markings. This can be seen on e.g. Oblt. Henz' 'White 13' (opposite page). From these photographs it is clear that the colours used for the mottling process was RLM 71.

Machines from 5. Staffel received the same heavy mottling as seen on many 4. Staffel Messerschmitts, also carefully avoiding emblems and individual numbers as well as the Gruppe bar. Some of the re-camouflaged Emilis received a conspicuously dense, almost solid overspray of RLM 71.



A mottled machine probably from 5. Staffel. The mottling is quite restrained compared to other machines from this unit (Coll. Brekken).



'Black 2' of 5./JG 77 photographed in late summer 1940 at Værnes. The aircraft has received a dense application of RLM 71 with care having been taken to avoid the Gruppe insignia whereas the numeral seems to have been painted anew on top of the new mottle. Several interesting aspects are visible on this aircraft, in particular the yellow wing tips, a recognition feature introduced on 10 August 1940. The spinner has an extreme yellow section, followed by a white and a RLM 70-coloured backplate (Coll. Brekken).



**Messerschmitt Bf 109 E, 'Black 2', 5./JG 77, pilot unknown, Værnes, late summer/autumn 1940**

'Black 2' of 5. Staffel was another machine that received full side mottling and new tactical markings consisting of yellow bands on the wing tips (above and below) and presumably also on the tail fin (as depicted here). The spinner was white with a yellow tip and black-green RLM 70 backplate. Note the considerable petrol residue around the fuel filler hatch.

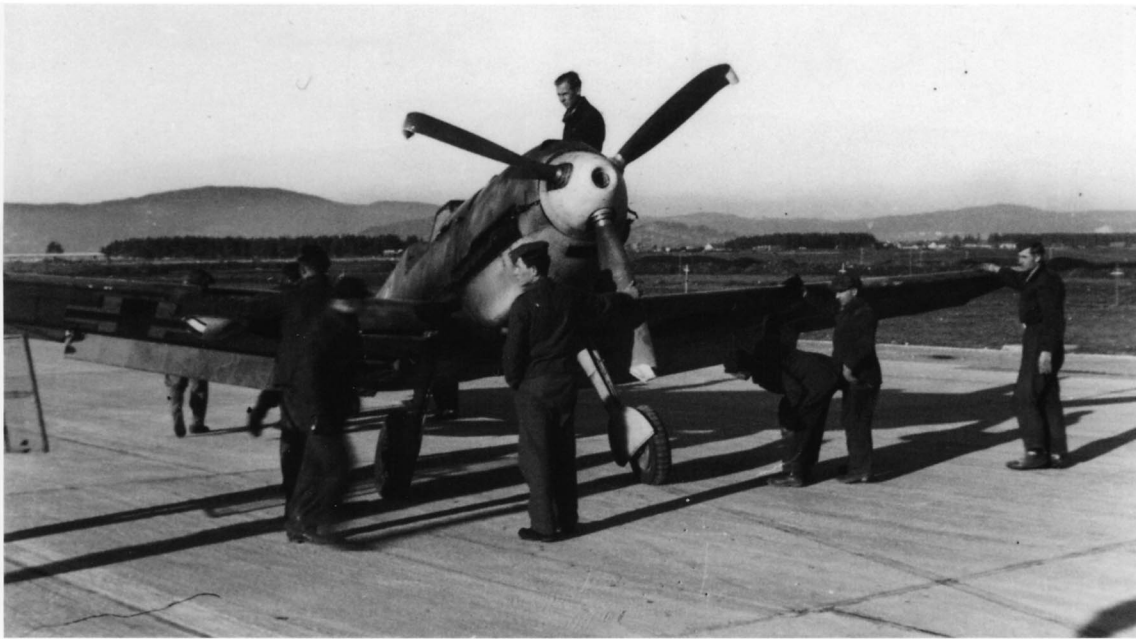
Another photograph of 'Black 2' as seen on previous page. Noteworthy is the fuel spillage stains on the fuselage (Coll. Brekken).



On 23 October 1940, 'Black 8' flown by Gfr. Heinrich Brunsmann made a wheels-up landing at Værnes. The dense, almost solid application of RLM 71 on the fuselage sides was typical for 5. Staffel, only the tail fin has been left more or less clear. The spinner was white (Coll. Brekken).







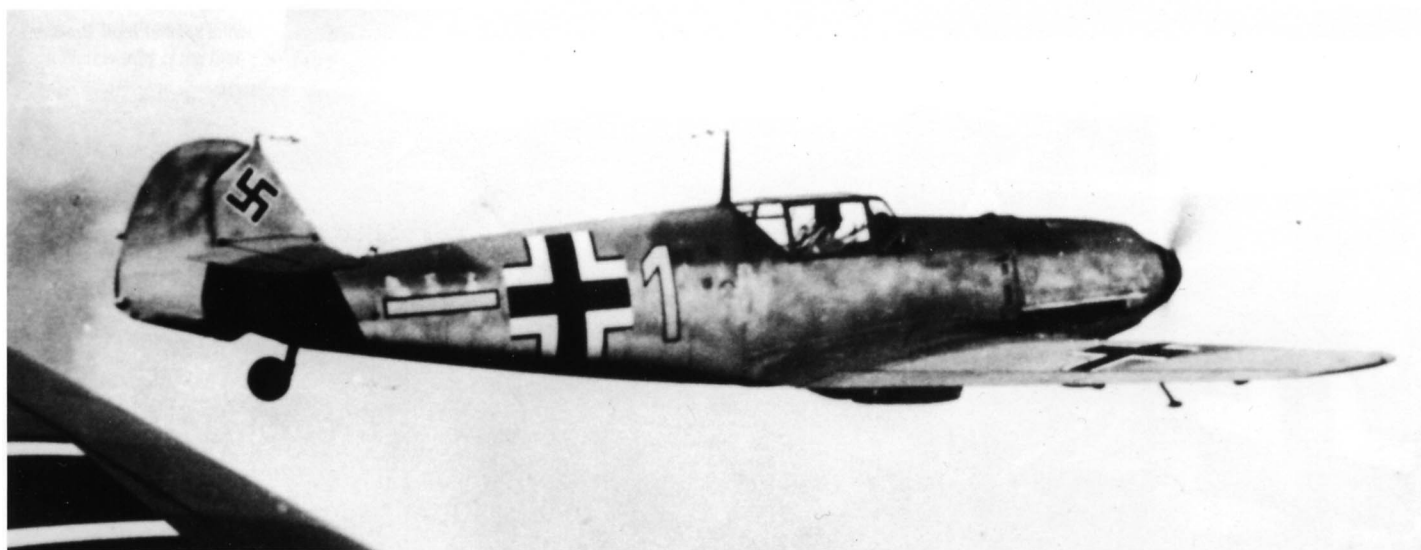
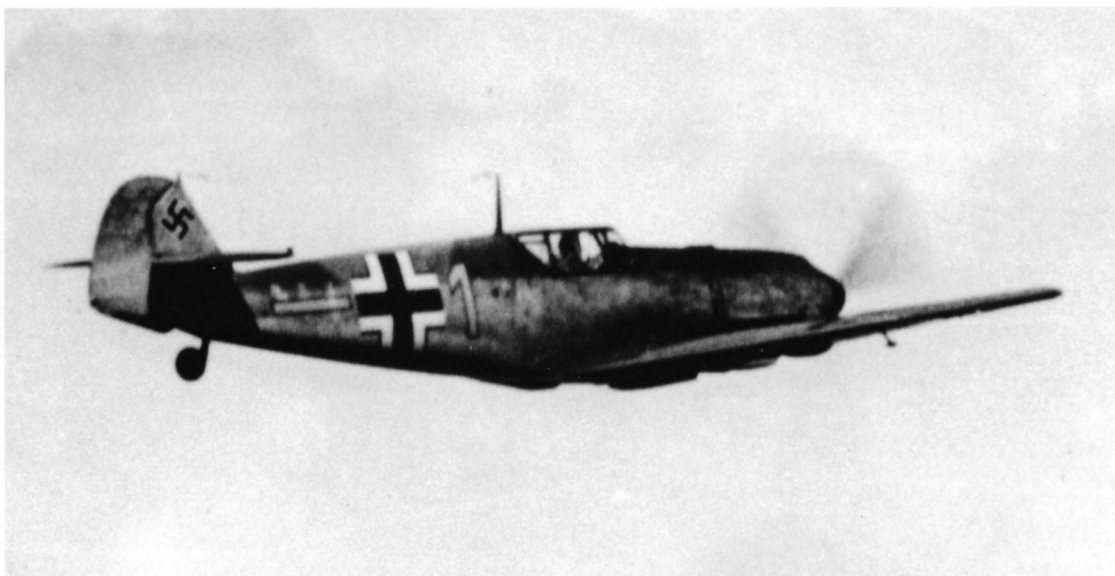
Another photograph of 'Black 8' seen after it had been raised on to its undercarriage (Coll. Brekken).

Bf 109 E-3, W.Nr. 0833 flown by Gfr. Rudolf Schmidt after having suffered damage on 26 September 1940 at Oslo-Fornebu. The camouflage of this 5. Staffel Emil is lighter than that applied to 'Black 8'. This machine also has the yellow wing panels (inset) and a white spinner (Coll. Brekken).



A Bf 109 E from 6./JG 77 showing the Gruppe emblem in place and the noticeably light side mottling applied to this Staffel's aircraft. This may in fact be Moritz' 'Yellow 1' as there is evidence of a penguin emblem on the rudder, the lower half of which appears not to be mottled, and the pattern of 71/02 is identical (compare with the in-flight photographs overleaf of the starboard side). This photograph was possibly taken at Øysand just south of Trondheim (Coll. Brekken).

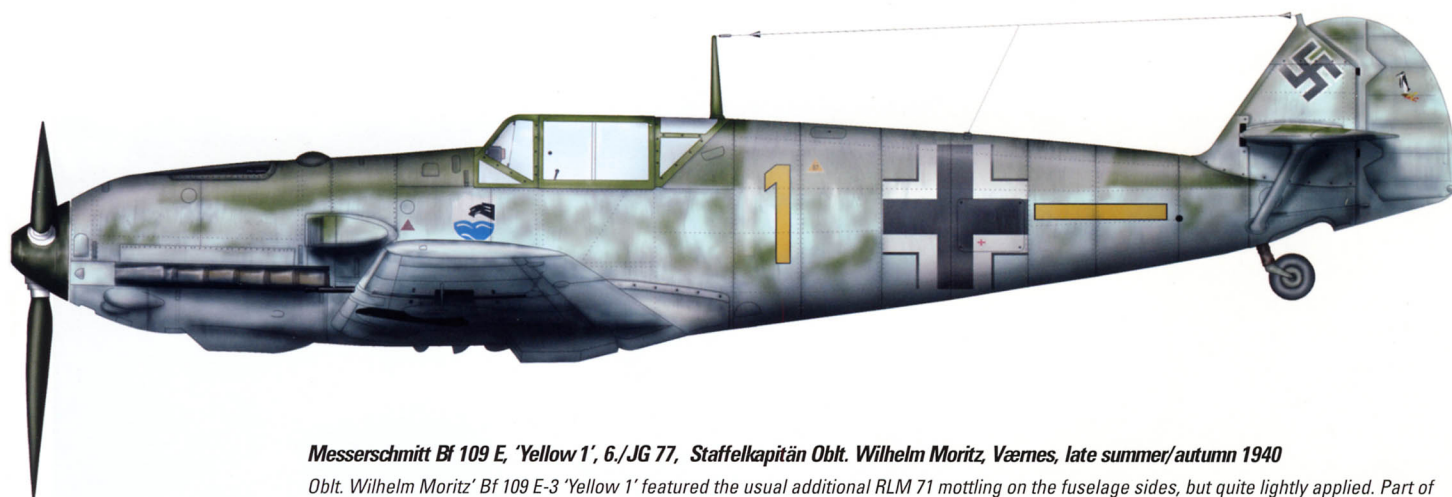
Messerschmitt Bf 109 E-4 'Yellow 1' from 6./JG 77 flown by Oblt. Wilhelm Moritz. The relatively light mottling compared to aircraft from the other two Staffeln is noteworthy, as is the considerable amount of exhaust staining. The Stammkennzeichen. 'NI+ZW' can still be made out on the fuselage sides. Only the upper half of the rudder has been mottled and there is no trace of the 6. Staffel penguin insignia on this side of the rudder, although it was present on the port side (Coll. Brekken).



'Yellow 1' seen from the port side, showing clearly the light mottling. An enlargement of the tail section indicates that the penguin badge is present. The port side of the fuselage also show remnants of the Stammkennzeichen 'NI+ZW' (Coll. Brekken).







**Messerschmitt Bf 109 E, 'Yellow 1', 6./JG 77, Staffellkapitän Oblt. Wilhelm Moritz, Værnes, late summer/autumn 1940**

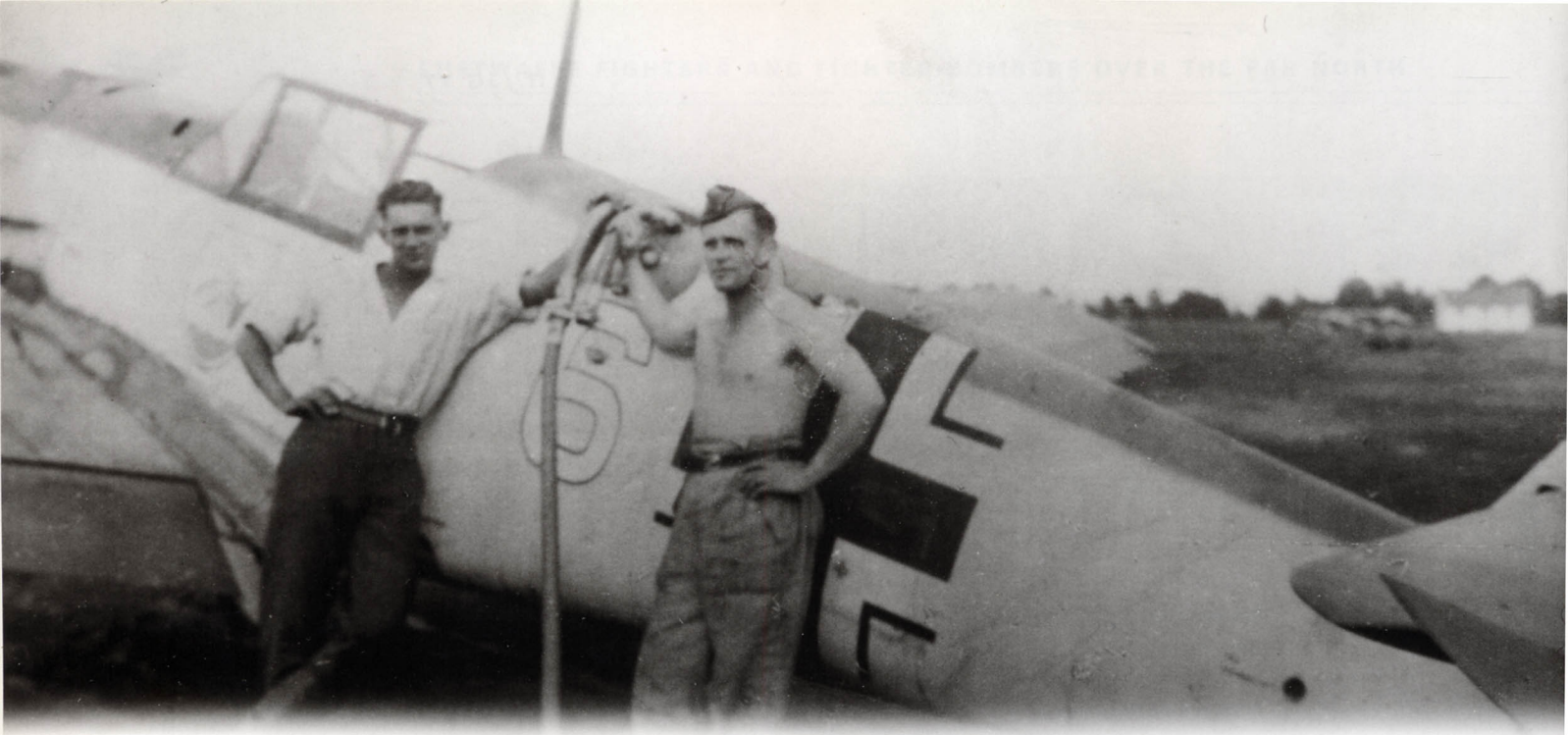
Oblt. Wilhelm Moritz' Bf 109 E-3 'Yellow 1' featured the usual additional RLM 71 mottling on the fuselage sides, but quite lightly applied. Part of the washed-off Stammkennzeichen 'NI+ZW' can still be discerned. This profile shows the aircraft with 6./JG 77's famous penguin insignia, although it is hard to make out in the accompanying photographs.



'Yellow 12' prior to the addition of RLM 71 on the fuselage sides. The wing pattern is of the Type 5 (see Merrick 2004: pg. 78). The extensive soothing suggest heavy use. One of its pilots was the (in)famous SS-Obergruppenführer Reinhard Heydrich (Coll. Brekken).

A Bf 109 E from 4. Staffel, possibly at Herdla. 'White 11' still has the old scheme in RLM 71/02/65 and a small individual number in an unusual style, both of which may indicate that this was a machine taken over from 4.(J)/186 at the end of July. The non-standard small size of the fuselage cross and the short II. Gruppe bar should also be noted. Furthermore, both the top of the tail fin and the wing tips are yellow. The photograph also shows why the 4. Staffel insignia was usually black on machines with this finish. There seems to be some kind of over-painted emblem on the engine cowlings. Note how the aircraft has been secured to the ground with wires and the construction of the hardstand and runway which consisted of so-called 'Eierkisten' - wooden boxes filled with sand. These were constructed locally (Coll. Brekken).





*Bf 109 E-3, W. Nr. 5198, 'White 6' of 6.(J)/186 photographed just prior to Weserübung as the Trägergruppe emblem (witch-on-a-bird), clearly visible here was probably over-painted on most aircraft just before the invasion of Norway commenced. The fighter is in the standard 71/02/65 scheme. The small size of the individual number is noteworthy (Coll. Brekken).*



*The Trägergruppe emblem (witch-on-a-bird) of II.(J)/186.*

## II.(J)/186

### Organisation & Structure

IN course of the Kriegsmarine's expansion in the years following the National Socialist seizure of power in Germany, plans were made to include aircraft carriers in the naval inventory. Aircraft carriers needed aircraft, and on 1 November 1938, the first units for the aircraft carrier Graf Zeppelin, which was already under construction, was established.

6./186 (T) was formed by renaming the 4./136 stationed at Jever, and a new Stukastaffel named 4./186 (T) was formed at the same time. Upon its formation, the unit consisted of these two Staffeln only, with no Gruppenstab nor was a 5./186 (T) formed. Rather, 5./186 (T) was formed eight months later by splitting the 6./186 (T) into two separate Staffeln.

In mid-September 1939, the order was given to reform the II./186 (T), by forming a new bomber and dive-bomber Gruppe to be known as I./186 (T) and by transforming the remaining two Staffeln from the existing II./186 (T) into a pure fighter unit, with the option of adding a third Staffel. The formation of the third Staffel followed in mid-October 1939, along with a Gruppenstab.

At the start of 'Weserübung', the II.(J)/186 (T) had already gathered experience protecting the western border of Germany as well as the German Bight during the 'Phoney War' period. Operating from the same airfields as used by II./JG 77, such as Nordholz and Jever and Westerland on the island of Sylt, the unit had experienced combat with RAF bomber formations.

II.(J)/186 arrived in Norway on 4 June as reinforcement for II./JG 77. It seems 4. Staffel remained at Gardermoen, while 6. Staffel went to Værnes, near Trondheim, to provide additional fighter strength to the defence of the damaged battleship *Scharnhorst* stationed in the Trondheimsfjord. It is uncertain if 5./186 ever went to Norway, indeed the unit might have stayed behind in Aalborg.

Further uncertainty with regards to how long 4./186 was in Norway in its intended role surrounds the introduction to the strength report of 29 June 1940 which mentions the fact that the crews of the unit had arrived with Gruppe 210 in order to be included on its strength, but are still reported as being part of the former unit.

There were more changes on 1 July: in fact, the number of changes were so many that the Generaloberquartiermeister's office made a note of the fact that making a statistical comparison between the two strength reports of 29 June and 6 July was of no value.

One of the units that changed designation on this day was the II.(J)/186 (T), becoming III./JG 77. At the time this change was made, the strength report shows that the previous 4. Staffel, which would have become the 7. Staffel, was no longer with the unit.

For the new III./JG 77 – the former II.(J)/186 (T), operations in Norway ceased as the withdrawal of Allied forces was completed, and the unit left Norway early in July 1940, after a stay of about a month.

The organization of II.(J)/186 (T) was as follows at the time it arrived in Norway:

Gruppenstab  
4. Staffel  
5. Staffel  
6. Staffel

The organization of III./JG 77 was as follows at the time it left Norway:

Gruppenstab  
8. Staffel  
9. Staffel

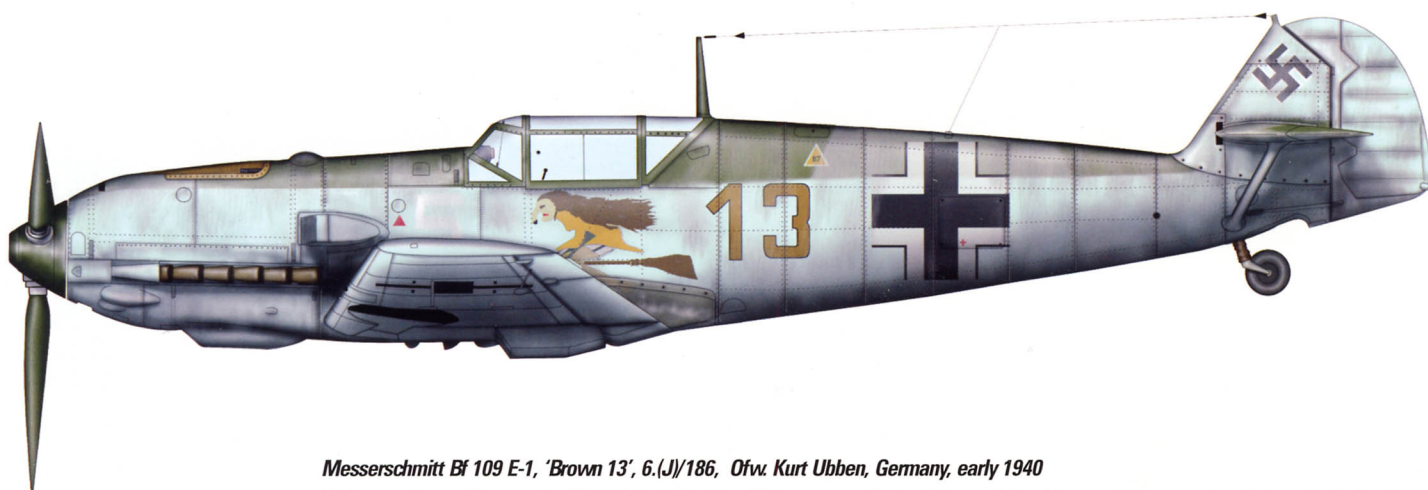
### Aircraft of the unit

Messerschmitt Bf 109E 06.1940 07.1940

### Camouflage & Markings

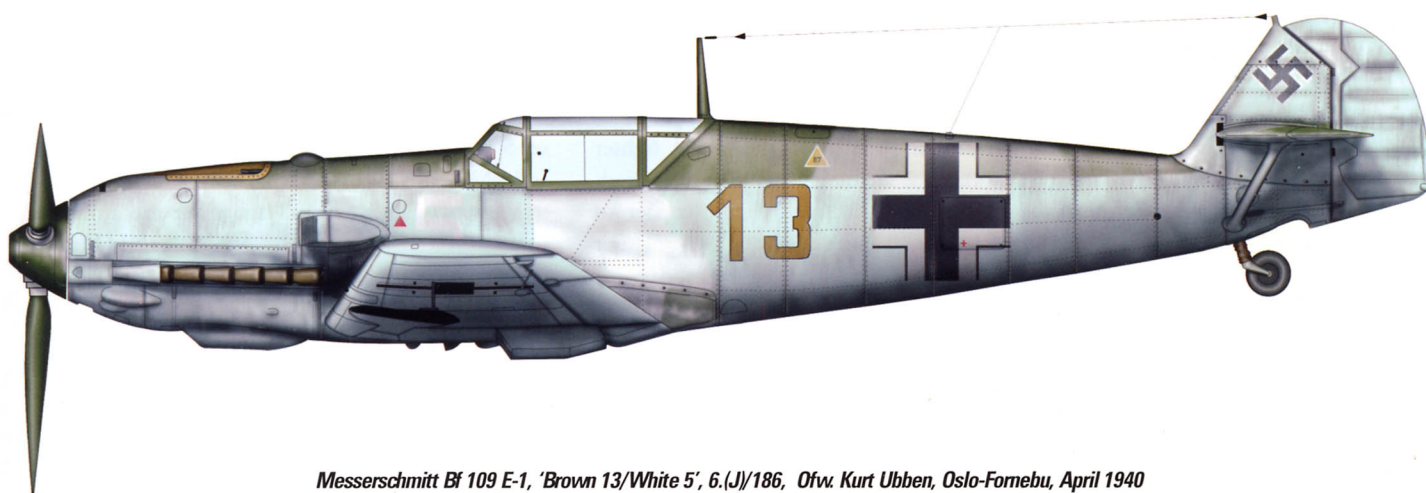
When 6.(J)/186 arrived in Norway in early April 1940,





**Messerschmitt Bf 109 E-1, 'Brown 13', 6.(J)/186, Ofw. Kurt Ubben, Germany, early 1940**

Before moving to Norway, the Bf 109 E-1 of Ofw. Kurt Ubben was marked as 'Brown 13' and featured the exceptionally large insignia of 6.(J)/186 below the cockpit comprising a witch on a broomstick. The finish was the regular RLM 71/02/65 and the gun troughs were either light grey or yellow, as depicted in the profile.



**Messerschmitt Bf 109 E-1, 'Brown 13/White 5', 6.(J)/186, Ofw. Kurt Ubben, Oslo-Fornebu, April 1940**

Some time prior to, or just after Weserübung commenced, the witch emblem was painted out using fresh RLM 65 (which appeared slightly whiter than the older coat of RLM 65). Another change was seen in the addition of a second individual number just ahead of the cockpit section, this being in plain white as the figure '5'. The exact hue of the original number has been a matter of some discussion, some authors depicting this as yellow. If that is the case, the hue is definitely substantially different than the one used for the fuel triangle as evidenced from photographs and it is quite possible that a dark brownish colour was used, as seen on the profiles.

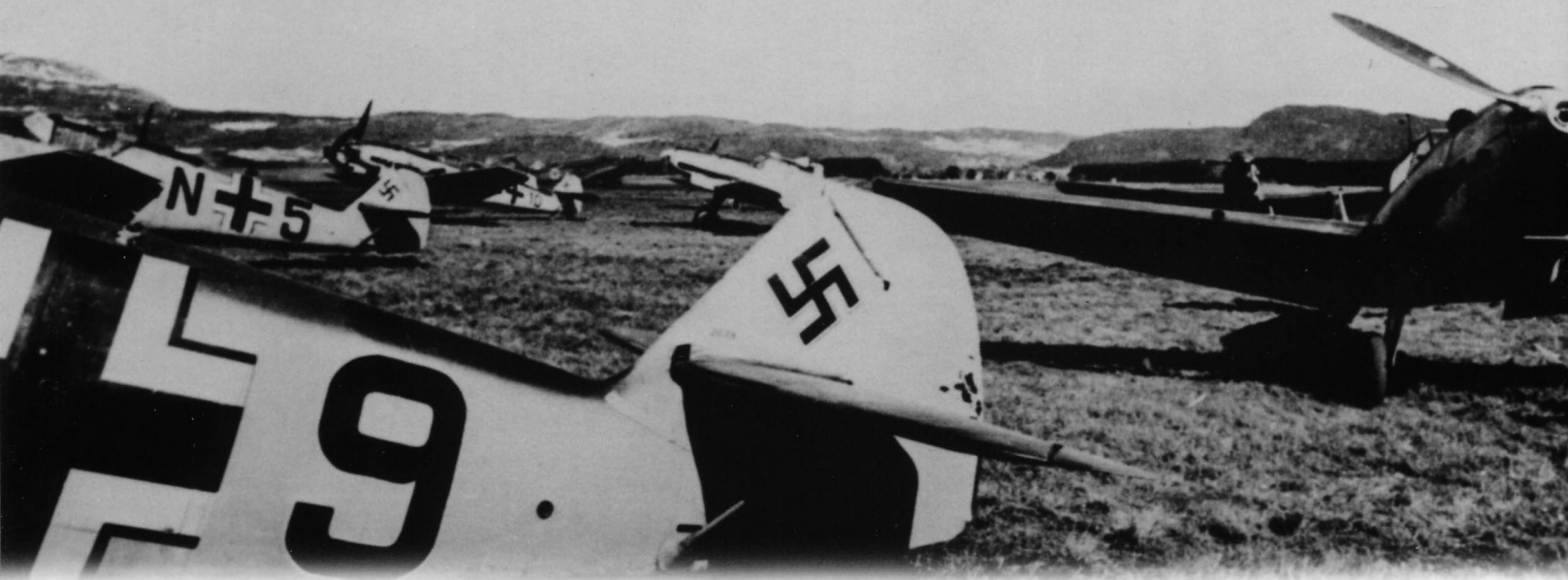
followed by the rest of II.(J)/186 on 2 June, its Bf 109 Es were camouflaged in the same standard colours as those of II./JG 77, i.e. RLM 71/02/65. The demarcation line followed the standard pattern and there was no mottling on the fuselage sides. Originally the following codes were used:

- 4.(J)/186 – white number
- 5.(J)/186 – black numbers (?)
- 6.(J)/186 – yellow numbers with black outline

Some time just prior to or immediately after their arrival in Norway, some important changes, or rather additions, to the markings system were implemented. In addition to the regular individual number in the normal position (i.e. in front of the fuselage Balkenkreuz), an additional number in plain white was

added, this time below the windshield area on both sides. The reason for this unique and strange marking system is unknown.

Prior to Weserübung, 6.(J)/186 had used one of the more spectacular emblems in the Luftwaffe: a very large witch on a broomstick which covered most of the area below the cockpit on the port side. There were numerous variations of this, no two renditions being the same (see Mombeek et al 2000: pg. 279). Emblems of the other two Staffeln are not known. However, at the same time, the second set of codes was painted on the Gruppe's aircraft, the witch on a broomstick was painted out. This is clearly seen on Ofw. Kurt Ubben's Bf 109 E-1, marked 'Yellow 13/White 5' where before and after photographs exist. The emblem was painted out using a colour slightly lighter in hue than the RLM 65, which was most probably freshly mixed 65.



*Bf 109 D-1s from 11.(N)/JG 2 seen at Værnes in the autumn of 1940. The white outline of the numerals is visible on the closest machine 'N+9' (Coll. Brekken).*

## 11.(N)/JG 2 and 12.(N)/JG 2 Organisation and Structure

AS a reinforcement for the Luftwaffe fighters stationed in Norway after the initial success of 'Operation Weserübung', two of the night fighter Staffeln of IV.(N)/JG 2 seemingly spent short periods in Norway during the spring and early summer of 1940. As with both II./JG 77 and II.(J)/186, this unit can trace its heritage back to the early days of the Luftwaffe.

The designation used during operations in Norway was a result of the expansion of the night fighter Staffel of Jagdgeschwader 2, with the honorary name Richthofen, to Gruppe strength in February 1940. The 10.(N)/JG 2 was included in the new structure consisting of a Stab IV./JG 2 formed from scratch, and 11.(N)/JG 2 previously known as 10.(N)/JG 26, as well as 12.(N)/JG 2 which was formed by renaming 10./JG 72.

The low-key start of the Luftwaffe night fighter force took place in the last months of 1938 with the formation of two experimental Staffeln, one as 10.(N)/JG 132 and attached to the Richthofen Geschwader from the start, and the 11.(N)/LG 2 or Lehrgeschwader 2. In February 1939, the first of several redesignations took place, as 10.(N)/JG 132 became 10.(NJ)/131, ending up as 10.(N)/JG 2 in May 1939, while the 11.(N)/LG 2 was renamed 10.(N)/JG 26. After a late June 1939 order from the Luftwaffe High Command, several new night fighter units were formed, many of them short-lived in this role and subsequently redesignated or transformed into ordinary day fighter units. Only one of the initially ordered twelve Staffeln, the 10./JG 72, was to survive the autumn of 1939 as a night fighter unit, ending up as the third Staffel of the new IV./JG 2 in February 1940. 11.(N) and 12.(N) moved from their bases at Jever and Hage, and took up residence at Aalborg in Denmark on 23 and 24 April 1940. A strength report from X. Fliegerkorps dated 29 April stated that 11.(N)/JG 2 was on its way to Stavanger, and it is thought that the unit

made a stop-over at Fornebu. On 5 May, the 11.(N) was reported at Værnes, but the details regarding when and where the unit were located after that is uncertain. Some sources state that after less than a month in Norway, the 11.(N) moved back to Köln in Germany on 5 May, while others place the unit at Værnes as late as 10 May. It is also stated that the 12.(N)/JG 2 moved to Værnes when their colleagues left the airfield, and that a new switch took place as the month of May drew to an end. The only aircraft identified on contemporary photographs seems to be from the 11.(N) Staffel, and an examination of the loss record attributed to 12.(N)/JG 2 in otherwise excellent studies by Jochen Prien (*Jagdfliegerverbände der Deutschen Luftwaffe 1934-1945*) show that this loss located at Lindesnes on 2 June 1940 was actually a loss for 11.(N)/JG 2. The original record of 4 June is very blurred and the Staffel number can be read as 12, but the correction dated 21 July clearly show that the Staffel number is 11.

### Aircraft of the unit

Messerschmitt Bf 109 D      04.1940   06.1940

The establishment strength of the unit was changed during the transfer to Denmark and later Norway. On 20 April, the unit had an establishment strength corresponding to a Gruppenstab and 6 Staffeln of 12 aircraft, but pilots for only three Staffeln! The additional 36 aircraft consisted of Arado Ar 68s, these aircraft taken out of the establishment strength by 27 April, while the number of Bf 109D was adjusted to standard establishment strength for a fighter Gruppe of 48 aircraft. The establishment strength and aircraft type was retained during the period the unit operated in Norway and Denmark.

This unit used a number of Bf 109D-1s as its principal equipment. These were modified with the addition of E-style exhausts.



### Camouflage & Markings

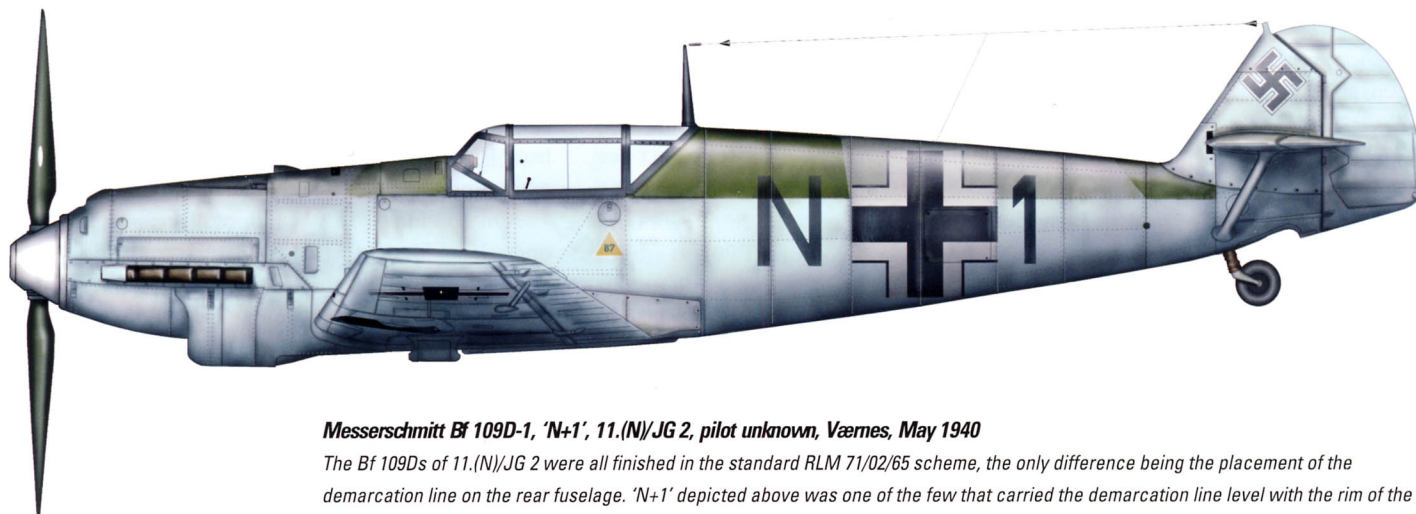
As far as can be determined from photographs, all aircraft of 11.(N)/JG 2 were finished in the standard RLM 71/02/65<sup>1</sup> scheme without any mottling on the fuselage sides. The extent of the blue colouring on the fuselage sides varied, although the majority seem to have carried this fairly high up on the fuselage spine (see profiles), a few machines (e.g. 'N+1') had the demarcation line level with the lower cockpit line but this seems to have been the exception. Spinners were either RLM 65 or RLM 70 with the former being more common. The entire exhaust area was painted black on many machines.

Markings consisted of the letter 'N' and an individual identification numeral in black. What is not usually appreciated by profile artists and modellers alike is that in most cases these markings were thinly outlined in white, something which requires high-quality photographs to see due to the low contrast with the RLM 65 base colour. In some cases the letter 'N' seems to have been rather crudely applied.



Some machines carried the unit insignia (an owl perched on a branch) on the starboard side of the cowling combined with the JG 2 Richthofen Geschwader emblem fuselage beneath the cockpit. It is not known if this was present on all machines as the majority were photographed from the port side.

Another view of 'N+9' and 'N+5' at Værnes. As can be seen, most D-1s from this unit carried their demarcation line quite high on the fuselage spine (Coll. Brekken).



**Messerschmitt Bf 109D-1, 'N+1', 11.(N)/JG 2, pilot unknown, Værnes, May 1940**

The Bf 109Ds of 11.(N)/JG 2 were all finished in the standard RLM 71/02/65 scheme, the only difference being the placement of the demarcation line on the rear fuselage. 'N+1' depicted above was one of the few that carried the demarcation line level with the rim of the cockpit. Individual number and letter were plain black on this aircraft.



**Messerschmitt Bf 109D-1, 'N+7', 11.(N)/JG 2, pilot unknown, Værnes, May 1940**

'N+7' differed from the previous machine on several counts. The demarcation line was considerably higher and it also featured the JG 2 insignia and the 11. Staffel owl badge on both sides of the fuselage. Two black victory bars could be seen on the tail fin, but it is not known if these represented victories claimed in Norway or previous claims by the unknown pilot. The letter and figure were both outlined in white, which is difficult to see on photographs due to the bright appearance of the RLM 65.

<sup>1</sup> Merrick (2004: 95) describes the colours of the single C-1 operated by 11.(N)/JG 2, lost in June 1940, which according to Norwegian researcher, William Berge, carried a modified scheme of RLM 74/75/76. If this is the case it was probably the only one so camouflaged as photographic material from the unit only show aircraft in the 71/02/65 scheme.



## Jagdschwärme III./ZG 76 and I./JG 77

### Organisation and Structure

Two photographs (above and below) of Bf 109 E-3, W.Nr. 1623 'White 1', from I./JG 77 after its landing accident near Haugesund on 16 February 1941. The dark overall finish is very evident as is the port side inscription 'Memsura Wambu'. The large numeral may hint at this being an ex-Jagdschwärm ZG 76 machine (Coll. Brekken).

### Jagdschwärme III./ZG 76

FOR a description of the unit strength and organisation of the Jagdschwärme III./ZG 76 (also referred to as Jagdkommando III/ZG 76), see Organisation and Structure under the section dealing with Early Zerstörer units.

### I./JG 77

As the Messerschmitt Bf 109-equipped Jagdkommando of III./ZG 76 was parted from the mother unit on 1 February 1941, the nucleus of a fighter unit that would stay in the area for the rest of the war was formed.

At the time of formation, the unit consisted of the following elements:

#### Gruppenstab

1. Staffel
2. Staffel
3. Staffel

As the unit consisted of only five aircraft and seven pilots at this time, it is unlikely that it had a defined Staffel structure. It seems that this came later, and research into the personnel files has shown that the

formal appointing of Staffelkapitäne in the unit happened much later in 1941.

On 10 May, the number of Staffeln in the unit was increased by one. This unit was given the number '13', as the numbers 1 through 12 were occupied by other Staffeln of the Geschwader. The next change occurred towards the end of May as the Zerstörer transferred from III./ZG 76 were attached to the unit as a separate entity under the command of I./JG 77.

On 6 June, 13. Staffel was reported to be operational for the first time, a natural conclusion being that the influx of personnel and aircraft to the Gruppe as preparation for the upcoming 'Operation Barbarossa' were used to create these separate Staffeln.

In early June 1941, the unit consisted of the following elements:

#### Gruppenstab

1. Staffel
2. Staffel
3. Staffel
13. Staffel

#### Zerstörerstaffel I./JG 77

In mid-June the excess number of pilots and aircraft destined for the attack on the Soviet Union were used to form a new Staffel: the 14. Staffel, by Luftflotte 5 – thus it was not a unit based on a command from the Luftwaffe high command, but a makeshift unit organized by the local Luftflotte, with personnel and aircraft taken from units already under their command. This unit does not appear in the Generalquartiermeister's strength reports until 22 November 1941, when the 15. Staffel also appears.

Thus, at the time of the attack on the Soviet Union, the unit was organized as follows:





**Gruppenstab**

- 1. Staffel
- 2. Staffel
- 3. Staffel
- 13. Staffel
- 14. Staffel

**Zerstörerstaffel I./JG 77**

The Stab Jagdführer z.b.V. was formed based on an order of 17 September 1941. The new unit's task was to command I./JG 77, 14./JG 77 and Zerstörerstaffel I./JG 77 for the duration of the war in the east. The organization of the unit would be as follows on or about 17 September 1941:

**Gruppenstab I./JG 77**

- 2. Staffel
- 3. Staffel
- 13. Staffel

**Stab Jagdführer z.b.V.**

- 1. Staffel
- 14. Staffel

**Zerstörerstaffel I./JG 77**

At the end of 1941, according to the strength returns and by the time the next large transformation occurred, the unit consisted of the following units:

**Gruppenstab I./JG 77**

- 2. Staffel
- 3. Staffel
- 13. Staffel

**Stab Jagdführer z.b.V.**

- 1. Staffel
- 14. Staffel
- 15. Staffel

**Zerstörerstaffel I./JG 77****Aircraft of the unit****Jagdschwärme III./ZG 76**

The single-engine fighters attached to III./ZG 76 were a mixture of Bf 109 E-1, Bf 109 E-3 and Bf 109 E-4 series aircraft. From existing records it seems that the majority were Bf 109 E-1. The first strength report of the unit that took over the five aircraft by the time of its redesignation reported 1 Bf 109 E-1, 1 Bf 109 E-1B, 1 Bf 109 E-3 and 2 Bf 109 E-4B. The maximum number of aircraft at one time in the unit was reported as 11 out of the 12 establishment strength, and of these 9 can be positively identified by Werknummer, giving the following aircraft assigned to the Jagdkommando:

<b>Aircraft model and subtype</b>	<b>Werknummer</b>
Messerschmitt Bf 109 E-1B	3212
Messerschmitt Bf 109 E-1	3540
Messerschmitt Bf 109 E-1	6005
Messerschmitt Bf 109 E-1	6066
Messerschmitt Bf 109 E-1	6172
Messerschmitt Bf 109 E-1	Unknown
Messerschmitt Bf 109 E-3	1534
Messerschmitt Bf 109 E-4	959

(originally built as E-3)

Messerschmitt Bf 109 E-4 1441

(originally built as E-3)

Messerschmitt Bf 109 E-4 1623

Messerschmitt Bf 109 E-4 Unknown

**I./JG 77**

In the case of I./JG 77, it is possible to identify the exact number of subtypes at the time the unit was established.

As the unit took over the aircraft from the Jagdkommando or Jagdschwärme of III./ZG 76, there were only 5 aircraft and they were 1 Bf 109 E-1, 1 Bf 109 E-1B, 1 Bf 109 E-3 and 2 Bf 109 E-4B. The large influx of aircraft to the unit over the following months was, as evident from the loss records of the unit, a mix of E-3, E-4 and E-7 aircraft, in addition to what seems to be almost unbelievable at this stage of the war – a few Bf 109 E-1s in original configuration. In addition, the Bf 109 T was introduced in June 1941.

The units participating in 'Operation Barbarossa' on the northern front, were the 1. and 14. Staffel. They took their mix of Bf 109 Es and went north to fight on the Eismeer front, while the 2., 3. and 13. Staffel used the Bf 109T series aircraft alongside several Bf 109 Es in southern Norway.

The Bf 109 T was withdrawn by an order of 23 December 1941, and most of them were probably grounded from this date. However, the last loss records for the Bf 109 T with I./JG 77 indicate that a few were still used for the next few weeks awaiting the transfer back to Germany.

Messerschmitt Bf 109 E-1	02.1941	01.1942
Messerschmitt Bf 109 E-3	02.1941	01.1942
Messerschmitt Bf 109 E-4	02.1941	0x.1941
Messerschmitt Bf 109 E-7	03.1942	01.1942
Messerschmitt Bf 109 T	06.1941	01.1942

**Camouflage and Markings**

The discovery of a series of photographs of Bf 109s having suffered accidents at Herdla in the autumn/winter of 1940 from the previously elusive Jagdschwärme III./ZG 76 allow us to make comments on the camouflage and markings of the initial equipment of what eventually became JG 5. It is quite clear that the Bf 109s carried the then standard RLM 70/02/65 scheme and at least one of them (White 4) had the Type 5 splinter pattern (see Merrick 2004: pg. 78). All documented Bf 109s seemed to have a dense but light mottle of RLM 02 or possibly thinly sprayed RLM 71 on the fuselage sides. All aircraft carried white identification numbers with a thin black outline, these being extraordinarily large with the top part reaching very high towards the spine of the aircraft. Known numbers are 4, 5 and 6, the latter number being of a very special shape.

The early Bf 109s of I./JG 77 seem to have carried variations on the 71/02/65 scheme, the variety consisting of various levels of mottling and over-spray on the fuselage sides. It should be noted that one



**Messerschmitt Bf 109 E-3, 'White 1', W.Nr. 1623, 'Memsura Wambu', 1./JG 77, pilot unknown, Herdla, February 1941**

Perhaps the most enigmatic of all early Bf 109 Es seen in Norway was 'White 1' of 1./JG 77. The mystery revolves around the unusual and large inscription on the port fuselage sides reading 'Memsura Wambu', the exact meaning of which is unknown. The finish of the aircraft is a heavily modified RLM 71/02/65 scheme with large amounts of dark mottle and overspray on the fuselage side, probably in RLM 71 and/or 70. There is also considerable wear and dirt on the airframe. The very large numeral indicates that this is an aircraft inherited from the Jagdschwarm ZG 76 (compare with 'White 6' below).



**Messerschmitt Bf 109 E-3, 'White 6', Jagdschwarm ZG 76, pilot unknown, Herdla, November-December 1940**

Like the other documented Messerschmitts of the Jagdschwarm ZG 76, 'White 6' was finished in the standard RLM 71/02/65 scheme with diffuse mottling/overspray on the fuselage sides in 02 and 71. This overspray was applied over the edges of the fuselage cross, which appear quite greyed-out when compared to the white numeral. The style of this number is very unusual as is its large size.

elusive photograph, seen on eBay, with accompanying text from an album stating it originates from 1941, indicates that at least some of these Bf 109 Es were in fact delivered without mottling, this presumably being applied in Norway, sometimes resulting in quite dark looking machines. This kind of finish is very evident on one well documented, but unusual machine, Bf 109 E-3, W.Nr. 1623 'White 1', which suffered the first recorded accident of 1./JG 77 on 16 February 1941. This aircraft carried very dark fuselage sides, presumably RLM 71, except for a somewhat lighter coloured engine cowlings and an unmottled panel in front of the engine on the starboard side. This was, in all likelihood, one of the initial machines delivered to Jagdschwärme III./ZG 76 as the numeral is very large. The enigma regarding this machine concerns the very unusual and large writing in black on the port fuselage side, immediately behind the cockpit which reads 'Memsura Wambu'. This could allude to an

ex-German African colony, but this remains speculation.

Most Bf 109s of 1./JG 77, however, had more lightly mottled fuselage sides and more normal-sized numerals, although the density and style varied. Staffel colours were:

- 1./JG 77 – White with thin black outline
- 2./JG 77 – Red with black outline
- 3./JG 77 – Yellow without black outline

At least 3./JG 77 painted its spinner tips or, on occasion, the whole spinner (see photographss of Yellow 4) in the Staffel colour.

Just prior to and following the move north in preparation for Barbarossa, it appears that at least some Emils received substantial segments of darker colouring on the fuselage sides (see for instance Valtanen 1998: pg. 61). Given the time, this could possibly be the





*Bf 109 E 'Yellow 4' of 3./JG 77 at Herdla in summer/autumn 1941. The individual number is not outlined and the aircraft features a rather heavy mottle on the forward part of fuselage sides, becoming more uniform towards the tail section. This darkening of upper surfaces was quite common on Bf 109s serving in Western Norway at the time. The finish is most likely the standard greys. The personnel in the photograph are from left to right: unknown ground crew, Staffelkapitän Oblt Wienhusen with dog, Hptfw. Schurig and Ofw. Jaacks (Coll. Brekken).*



*'Yellow 4' again, this time from the port side. The dense application of the dark colour is evident on this side, and note the style of the plain yellow individual numeral. Other photographs of this machine show that the spinner was yellow with a black-green (RLM 70) backplate (Coll. Sebastian Cordes).*

recently introduced RLM 74, but dark green (71 or 70) cannot be ruled out. During autumn, the Gruppe also received a large number of reinforcements and/or replacement aircraft, several of which were delivered carrying their Stammkennzeichen.

It seems all new deliveries arrived with yellow ventral outer wing panels (see for example Keskinen & Stenman 1998: pg. 12, and Stenman & Keskinen 2001; pgs. 20–21). Yellow fuselage bands, on the other hand, were often absent on Northern Front fighters and fighter-bombers, only a few being documented photographically, despite an order from 2.

Gebirgsdivision issued on 23 June 1941 (reproduced below) stating that all German aircraft operating over the Northern Front were to have yellow outer panels<sup>1</sup> beneath their wings and a yellow band on the ventral side of the fuselage below the position of the Balkenkreuz. This order was only half followed in that the yellow panels beneath the wings were always applied whereas the yellow 'Rumpfring' usually was not. There were even vigorous complaints from anti-aircraft units who accidentally shot down German aircraft that they did not carry the prescribed markings! In a few cases, the 'Rumpfring' was substituted by a

<sup>1</sup>. Described as 'Grellgelb' – bright yellow.

2.) Die für deutsche Flugzeuge bekanntgegebenen besonderen Kennzeichen:  
 grellgelber Anstrich des äußeren Drittels der Tragflächenunterseiten, grellgelber 1/2 m breiter Rumpfring auf Rumpfunterseiten in Höhe des Balkenkreuzes  
 gelten auch für finnische Flugzeuge.

Above: The 2. Gebirgsdivision order of 23 June 1941 prescribing the yellow tactical recognition markings to be used on German aircraft operating on the Northern Front. It reads 'For German aircraft the following special markings have been made known: bright yellow markings beneath the outer third of the wings; bright yellow half-metre broad band on the ventral part of the fuselage in the position of the national marking. Also applies to Finnish aircraft' (via Olve Dybvig).

complete fuselage band as seen on other sectors of the Eastern Front, but on fighters this always remained the exception in the far North.

One of the new deliveries to I./JG 77 was a converted Bf 109 E-1, NG+QP, which was seen at Kauhava on its way to the Northern Front on

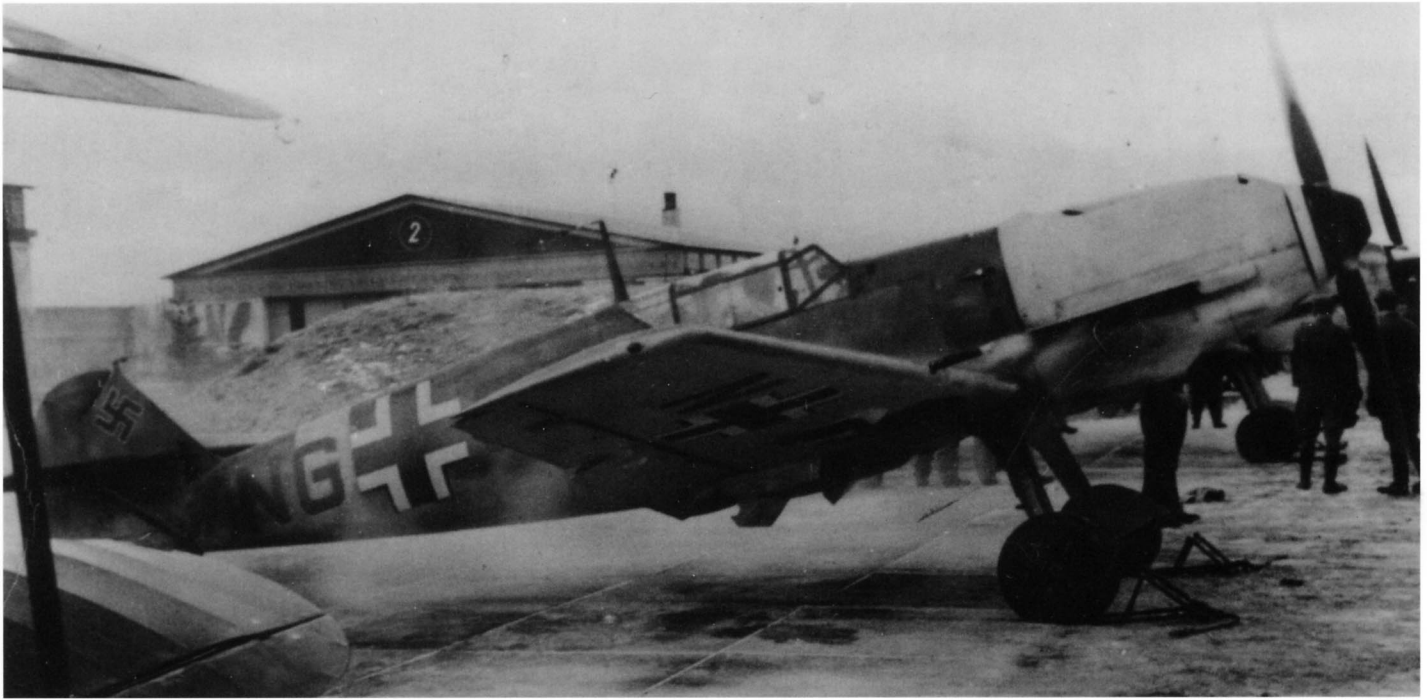
29 October 1941. This particular Messerschmitt also had a yellow nose section, but lacked the yellow rudder seen on the two Bf 109 E-7s accompanying it. The colours of these newly delivered and often refurbished or converted machines were in all likelihood the new standard greys, i.e. RLM 74/75/76. Photographs of several Bf 109 Es on their way north exist and as is evident, their markings and camouflage varied considerably. Many were delivered without Stammkennzeichen, others had them and the presence or absence of yellow theatre bands is inconsistent to say the least. Just about the only thing common to them all is the grey camouflage, although the style and application of this did vary.



Six photographs of Bf 109 Es en route to the North in the autumn of 1941. They show the very different schemes and markings used on the Messerschmitt during its transfers. Some feature Stammkennzeichen, while others had no markings at all (and were recorded by Werknummer only by the Finnish airfield authorities). However, as can be seen, they all featured yellow markings under the wings, and most featured yellow rudders with some even having yellow fuselage bands. Many of these aircraft came from Luftwaffe aircraft depots where they had been stored for some time, and early models had been converted into the E-7 standard before arriving there. It is therefore very likely, given the time frame, that these Emil's featured the new standard RLM 74/75/76 scheme (Coll. Brekken & Valtonen – upper right and lower left photo on facing page).









**Messerschmitt Bf 109 E-4, 'CK+CT', W. Nr. 3579, pilot unknown, Malmi, Finland, late May 1942**

Although photographed after the establishment of JG 5, 'CK+CT' is also representative of the Bf 109 Es delivered in 1941 to I./JG 77 in the north. Finish were by now the new standard RLM 74/75/76 greys and light blue and the Messerschmitt features a yellow spinner tip, yellow rudder, yellow ventral outer wing panels and a tail band in a paler yellow. Mottling on the fuselage sides is quite heavy, resulting in an almost uniformly dark appearance. Note that even if it was built as an E-4, 'CK+CT' has received a capped spinner which suggest conversion to E-7 standard, although it still lacks the armoured wind shield.

The polar bear (not wolf as is claimed elsewhere) insignia of 14./JG 77 on a Bf 109 E-7 belonging to 14./JG 77. The pilot is Lt. Heinrich Lesch. There is a name in yellow or red beneath the cockpit (Coll. Mombeek).

One noteworthy Messerschmitt seen in service with I./JG 77 at this time was Horst Carganico's 'Yellow 7'.

When the first snow fell, the fighter units in the north did not apply any form of snow camouflage to their Bf 109s. This was simply because white distemper was not available.

The Messerschmitts of 13. and 14./JG 77 were basically similar to those of the other Staffeln in I./JG 77, often with considerable mottling on fuselage sides. The information on these units is sketchy at best and few photographs exist of their aircraft. The ones that do seem to indicate that 14./JG 77 used red numerals with, or without, a black outline, which is supported by loss reports, whereas 13. Staffel used white numerals.

Regarding heraldry, only 14./JG 77 had a Staffel emblem (the Gruppe emblem of I./JG 77, a red eagle above a fjord, only being seen on aircraft operating in the south, principally on Bf 109Ts). This consisted of a white polar bear head on a blue diamond shield outlined with thin white and black lines. On several aircraft personal names, presumably in yellow or red, were placed on the port side beneath the cockpit. Victory bars were also applied to the rudder by successful pilots, one noteworthy example being W.Nr. 968, the Bf 109 E of Ofw. Hugo Dahmer, who had claimed a total of 22 aerial victories by 30 July 1941.





## Messerschmitt Bf 109 E-7 'Yellow 7'

Oblt. Horst Carganico, Staffelfkapitän I./JG 77  
Petsamo, 25 September 1941

On 25 September 1941, Oblt. Horst Carganico, Staffelfkapitän of I./JG 77 then stationed at Petsamo, northern Finland, received the Ritterkreuz for 27 aerial victories. At the time he was one of the highest scoring aces on the so-called 'Eismeerfront'. Carganico's personal mount during the summer/early autumn of 1941 was a Bf 109 E-7 marked 'Yellow 7'.

Despite having the older E-1 style canopy framing, 'Yellow 7' is an E-7. I./JG 77 was wholly equipped on this type in 1941 (along with a few E-4s) and the capped spinner also points to this sub-type. It is established that many Bf 109 E-1s were converted to E-7 standard and quite a few of them were delivered to JG 77 and JG 5, but the installation of the older type of canopy framing is not caused by a 'partial' E-1 to E-7 conversion (quite often these conversions retained the older canopy framing, but usually with the extra windshield armour glazing added). In fact, Carganico seems to have preferred the older type of framing, and it is certain that he used it on his Bf 109 E when he was Adjutant in II./JG 77 and he even had this early framing retro-fitted to all of his Bf 109 F-4s (at least three different examples). It may have been because of the better visibility or perhaps the earlier type was easier to open in an emergency!

'Yellow 7' is finished in the standard fighter scheme of RLM 74 Dunkelgrau and RLM 75 Grauviolett over RLM 76 Lichtblau. The fuselage spine seems to be quite heavily covered in RLM 74 with a segment of slightly lighter colour beneath this (probably RLM 75). Only the forward fuselage and rear fuselage back to the national insignia is photographically documented, but it is likely that the rest of the fuselage and the tail fin were finished mostly in RLM 74 as seen on several other aircraft of the Staffel at the time. The lower half of the fuselage appears to be have been in RLM 76 with only hints of mottling. This division of the fuselage into three distinct horizontal segments of different colours gave the aircraft a characteristic appearance.

The rudder appears to be finished in a solid colour which is closer to RLM 75 than RLM 76. It is too dark to be RLM 02 or Yellow (RLM 27 or 04). The entire engine cowling is finished in yellow, probably RLM 04. Judging by the photographs this was a fresh application when the aforementioned pictures were taken on 25 September. Yellow-nosed Bf 109 Es from I./JG 77 are rarely seen in photographs and were much more common on JG 5 Emils in 1942. It is possible that yellow noses were introduced as an easy recognition marking in early autumn 1941 or sometime later. The currently available photographic material is too scarce to make a final judgement on this. A very unusual feature of 'Yellow 7' is the highly polished natural metal spinner. It is not known why the spinner was not painted as it must have been highly reflective and visible in sunny weather. The spinner backplate remains in RLM 70 so the answer may be that the spinner is a very recent replacement which has not yet been painted. It is known that the spinner was later painted in RLM 70 with a yellow tip (see over) so this explanation seems to be valid.

Carganico's 27 victories are shown on the rudder as white bars with a roundel or a red star superimposed on top, signifying the nationality of each victory. A photograph of the rudder of Carganico's Bf 109 F-4, W.Nr. 10132, shows that the first five bars had British roundels while the next 22 had red stars and a close study of the rudder photograph mentioned above confirms that the same sequence was present on 'Yellow 7' as well.



It is not known when Carganico started to use 'Yellow 7' but it is likely it had been his personal aircraft for some time, perhaps even before I./JG 77 arrived on the northern front in early June 1941. What is certain is that the machine was his personal aircraft when he received the Ritterkreuz as a series of photographs show him in and about the aircraft wearing his characteristic light grey flight jacket and the newly awarded Ritterkreuz. One of these pictures also shows him with his victory stick with 27 white bands. A further, previously unpublished photograph, features other pilots and a ground crew member along with Carganico holding the rudder of 'Yellow 7' which has been detached from the aircraft. The rudder is marked with 27 white bars. This makes it very likely that the series of photographs showing Carganico and 'Yellow 7' together were taken on 25 September. Carganico probably continued to use 'Yellow 7' into the early autumn and winter of 1941 and perhaps as long as early May 1942, when he received his first Bf 109 F-4. A few photographs exist which show 'Yellow 7' later in its career. It later had what appears to be a partly overprinted (or heavily weathered) nose and a spinner in regular RLM 70 with the tip in the Staffel colour of yellow.

*Carganico with mechanic in front of Yellow 7 (above top) and with Hugo Dahmer and Florian Salvender, showing the yellow nose and highly polished spinner cap to advantage. The top photograph also shows the relatively pristine finish of the yellow paint (Coll. Brekken and Horst Kube).*



The final appearance of 'Yellow 7' is probably hinted at by a photograph showing a yellow-nosed Bf 109 E-7 at Alakurtti bearing the Russian bear head emblem of 4./JG 5 which may be 'Yellow 7' after it had been handed over to this Staffel. The aircraft displays heavy overprinting of a large insignia below the cockpit identical in shape, size and placement to Carganico's personal terrier insignia.

As a postscript to the story of 'Yellow 7', a photograph which appeared on the internet must be mentioned. This showed the fuselage of a Bf 109 E, marked 'Yellow 7' lying on a railway wagon surrounded by Swedish soldiers and civilians. This could have been Carganico's Emil on its way south through Sweden to be repaired.



Above: Two photographs of Carganico in the cockpit of his 'Yellow 7'. The left shows details of the early E-1 style canopy in detail. The right provides details of Carganico's personal emblem, a terrier on a diamond shaped background, probably in yellow (compare the hue with the yellow numeral). The dog is probably light brown with details in white and black. Also note the different tonal strength of the colours of the fuselage sides, probably RLM 74 (top) and 75 (below) as explained in the text. Note the shape of the numeral (Coll. Brekken).



Carganico with friends and the rudder of 'Yellow 7'. Note the relatively uniform colour of the rudder. This has the appearance of a solid application of RLM 75 (Coll. Mombeek).



This might be 'Yellow 7' in 1942, after Carganico had switched to the Bf 109 F. The main point of interest is the over-painted insignia below the cockpit. As far as is known, no Staffel of I./JG 77 or JG 5 used an emblem of the size and shape seen here. The bear head insignia belonged to 4./JG 5 and this Staffel continued to use the Emil up to at least late July 1942. The photograph was taken at Alakurtti as evidenced by the hangar with the number '2' in the background (seen on several other contemporary photos from the airfield). Note that the aircraft now has the extra armoured windscreen and the later type of canopy as fitted to the E-4. The spinner is now at least partly finished in RLM 70, something the pilot no doubt appreciated! (Coll. Mombeek).





The highly polished spinner leaves no doubt as to the identity of this Emil taxiing on a snow-covered airfield during the winter of 1941-42. The flaps are deployed and the aircraft is fitted with a 300-litre drop tank, indicating that this was taken just before take-off, or alternatively, after landing, in which case the mission was an uneventful one (Coll. Brekken).



'Yellow 7' as it appeared on 25 September 1941. Note the strange vertically segmented division of the RLM 74/75/76 colours.



'Yellow 7' sometime later, probably October-November 1941, this time with an all black-green spinner with a yellow tip and either a heavily weathered yellow cowling or a partly over sprayed one. The exact number of victories worn on the rudder at this time is unknown.



A machine reportedly belonging to Stab Jagdgr. z.b.V. in winter 1941/42. The name below the cockpit, probably in yellow, is 'Erika'. The numeral, which may be '1' or '4' is red (compare with the yellow fuel triangle) (Coll. Mombeek).

Left: Two Luftwaffe personnel admiring the scoreboard of Ofw. Hugo Dahmer's Bf 109 E, W.Nr. 968. Unfortunately, the individual number of Dahmer's aircraft is not known (Coll. Mombeek).



## Kommando Losigkeit

### Organisation and Structure

*Bf 109 E 'Yellow 25', from Einsatzstaffel JFS 1 coded NL+JJ, after suffering a ground loop. This unit was known briefly as 3./JGr. Losigkeit while in Norway from 20 February to 6 March 1942. Note the unusual position of the numeral '25' (Coll. Brekken).*

THIS special unit was put together in order to participate in just one operation in February and March 1942 – 'Operation Donnerkeil'. 'Donnerkeil' was designed as a support operation for 'Operation Cerberus', the breakout from the German fleet base at Brest through the English Channel and onwards to Norway, for the three major ships – the heavy cruiser *Prinz Eugen*, and the battleships *Scharnhorst* and *Gneisenau*.

The unit was commanded by Hauptmann Fritz Losigkeit, hence its name, and consisted of three Staffeln, namely the 8./JG 1, 2./JG 1 and Einsatzstaffel JFS 1. Until January 1942, 8./JG 1 was known as the Einsatzstaffel/JG 27 which was the operational Staffel of the Ergänzungsjagdgruppe 27, and 2./JG 1 was previously the Jasta Münster-Loddenheide. After the operation was completed on 20 March 1942, the unit was disbanded and the separate Staffeln returned to their former designations.



*A group of pilots from Kommando Losigkeit enjoying the spring sun at Værnes. The pilot on the far left is Heinz Knoke. All wear a variety of jackets (Coll. Brekken).*

## Aircraft of the unit

Messerschmitt Bf 109 E      02.1942    03.1942

The exact aircraft sub-types used by Jagdgruppe Losigkeit are not known, but the unit operated the Bf 109 E-series. Strangely, photographic evidence suggests that the aircraft were not equipped for using droptanks, but some did have the capped spinner, indicating that they might be E-7s.

## Camouflage and Markings

The Messerschmitts of Kommando Losigkeit were camouflaged in the standard RLM 74/75/76 scheme with considerable mottling on the fuselage sides on most aircraft. Those assigned to 3./JGr. Losigkeit carried their Stammkennzeichen on the fuselage sides combined with large yellow numerals without outline placed far forward, below the cockpit section, as befitting a training machine. The best known example is 'Yellow 25' Stammkennzeichen 'NL+JJ'. This machine also had a yellow fuselage band right behind its fuselage cross.

Emils from the 2. Staffel (i.e. 2./JG 1) featured black identification numbers. The best known examples of these are the three aircraft which force-landed in Eastern Norway on 6 March 1942 as the Jagdgruppe was travelling south to Germany after its brief stay in Norway<sup>1</sup>. Interestingly, the three aircraft, which were photographed extensively, all carried markedly different camouflage. 'Black 1', flown by Hauptmann Werner Dolenga, carried a normal RLM 74/75/76 scheme, neatly mottled on the fuselage sides without any other markings, appearing quite anonymous.

The second Emil of 2./JGr. Losigkeit, 'Black 16' flown by Unteroffizier Hans-Gerd Wennekers, was another matter. Apart from its high individual number, the camouflage of Hans-Gerd Wennekers' Messerschmitt set it apart from the others. It seems to have featured an almost uniform finish of RLM 74 on its top surfaces, making the aircraft very dark in appearance. The aircraft was also unusual in that it was



fitted with the Peil G IV homing indicator device, this taking the shape of a oval dome placed on the ventral side of the Messerschmitt, just aft of the wing trailing edge.

The third well-known Bf 109 of Jagdgruppe Losigkeit is 'Lilo' or 'Black 3' flown by Lt. Heinz Knoke<sup>2</sup>. This aircraft also carried a special type of camouflage, taking the form of a regular RLM 74/75 pattern on the top surfaces and plain RLM 76 fuselage sides up to the line of the cockpit, the latter area being covered by a dense application of small streaks and lines, possibly in RLM 71. The entire nose section was also painted uniformly in RLM 75 and prior to arrival in Norway the engine cowl carried the inscription 'Lilo' (Knoke's girlfriend) and a personal sun emblem. For security reasons these emblems were both painted out prior to the transfer to Norway. The numeral was quite small and broadly outlined in white. The spinner of Knoke's aircraft was RLM 70, as was that of Wenneker's.



*A group of pilots assigned to Jagdgruppe Losigkeit with a Bf 109 E-4, W.Nr. 5580, 'Yellow 25', 'KB+LS' behind them (Coll. Brekken).*



*Bf 109 E, 'Yellow 25', 'NL+JJ' again with the symbol of JFS 1 plainly visible below the cockpit. In the background is Dolenga's 'Black 1' which made a forced landing at Nesbyen on 6 March 1942. Both aircraft carry gentle mottling in RLM 74/75 on the fuselage sides, 'Yellow 25' with some streaks added for good measure. The spinner of 'Yellow 25' is white. 'Black 1' has the external armoured windshield whereas, serving as a training aircraft, 'Yellow 25' has not had this fitted (Coll. Brekken).*



*Hauptmann Werner Dolenga's 'Black 1' after the forced landing near Nesbyen on 6 March 1942. Camouflage is regular RLM 74/75/76 with gentle mottling on the fuselage sides (Coll. Brekken).*

<sup>1</sup>. There is more information and several photographs at <http://www.heinzknokewebsite.com/My-Site/Norway.htm>

<sup>2</sup>. The author of the well-known biography *I Flew for the Führer*.

Two photographs of Wenneker's Bf 109 E-7 'Black 16', the one on the right probably at Trondheim-Lade while the one below shows the aircraft after the pilot had made a very neat wheels-up landing near Nesbyen on 6 March 1942. Of note is the very dark finish of the aircraft, this being RLM 74. The ventrally-fitted Peil G IV homing indicator is clearly seen (Coll. Brekken).



**Messerschmitt Bf 109 E-7, 'Black 16', Kommando Losigkeit, Uffz. Hans-Gerd Wennekers, Værnes, early March 1942**

'Black 16' was finished in a very dark colour, most likely RLM 74 overall and was also probably an E-7. The Pfeil Gerät fitted ventrally set it apart from other known aircraft of Kommando Losigkeit.





**Messerschmitt Bf 109 E-7, 'Black 1', Kommando Losigkeit, Hptm. Werner Dolenga, Væres, early March 1942**

Finished in a standard RLM 74/75/76 scheme with dense mottling on the fuselage side, Dolenga's 'Black 1' is marked only with the numeral thinly outlined in white. The aircraft was most probably an E-7 with the capped spinner and armoured wind shield.

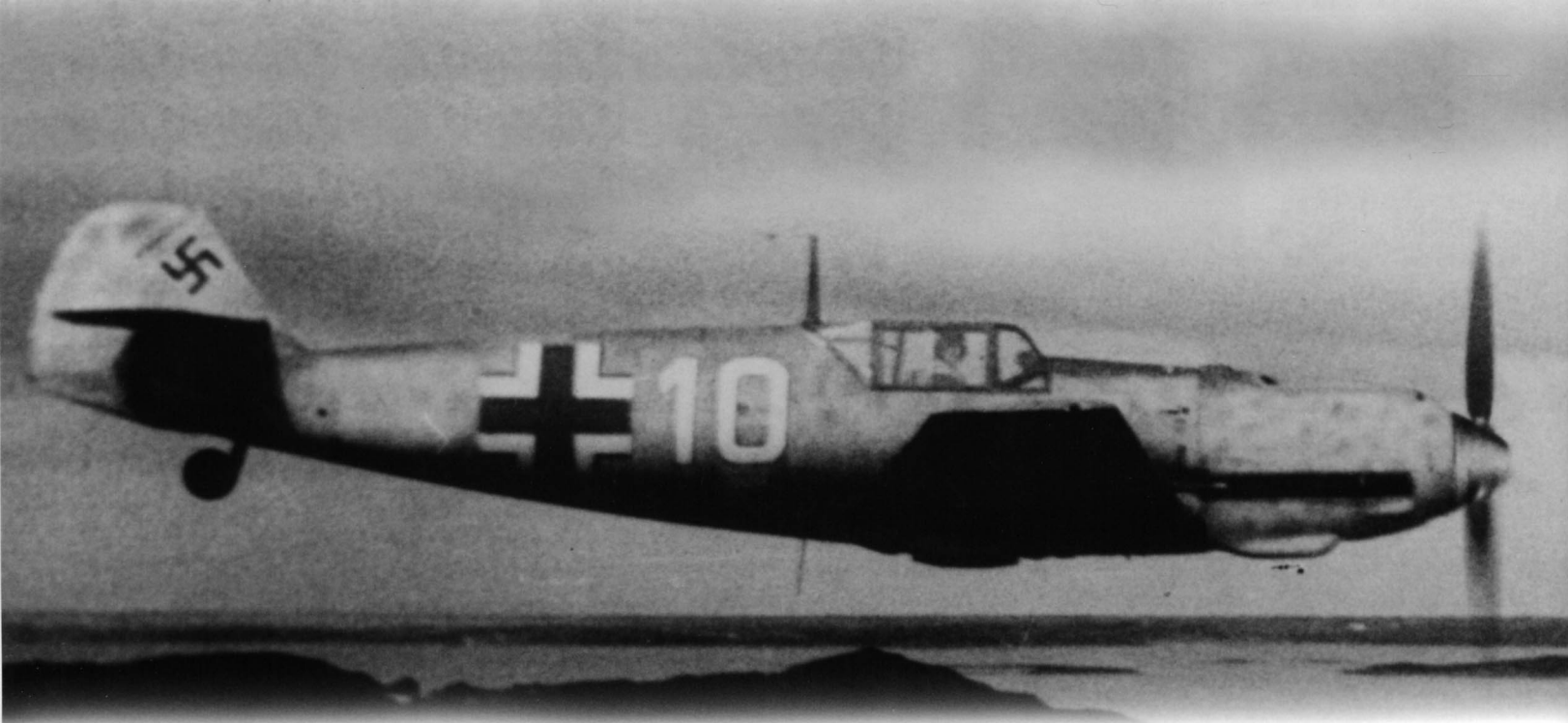


**Messerschmitt Bf 109 E-7, 'Black 3', Kommando Losigkeit, Lt. Heinz Knoke, Væres, early March 1942**

Knoke's 'Black 3' was configured similarly to Dolenga's 'Black 1' and was also probably a E-7. Its finish was markedly different however, consisting of a solid application of RLM 75 on the cowlings and RLM 74 and 75 on the fuselage spine extending about half way down the fuselage sides. The lower half of the fuselage was covered in small streaks of RLM 71 or 71. The small size of the individual number is noteworthy. During his stay in Norway, Knoke over-painted his special personal markings on the cowlings, which can be seen on the scrap view. These markings consisted of a yellow sun with a face and the inscription 'Lilo' in white.



Uffz. Hans-Gerd Wennekers with 'Black 7' from 2./JGr. Losigkeit. Above are two further aircraft from 3./JGr. Losigkeit, the one in the background carrying the Stammkennzeichen 'VO+CD' and a yellow fuselage band (Coll. Brekken).



## Jagdgruppe Drontheim

### Organisation and Structure

*A typical Jagdgruppe Drontheim Bf 109 T-2. This is 'White 10' usually flown by Ranwig. Of particular note is the very light fuselage sides which almost cover the RLM 74/75 segments on the fuselage spine. The FuG25a IFF is also clearly seen as is the black exhaust area. The external armoured windshield was not fitted to the Bf 109T. (Coll. Brekken)*

THE history of Jagdgruppe Drontheim starts with the fighter school at Stolp-Reitz which was formed in September 1939. Later renamed Jagdfliegerschule 3, it was moved to Grove in Denmark during the preparations for Operation Barbarossa. It was given the codename 'Jagdgruppe Drontheim' to conceal its location and purpose.

Shortly before the attack on the Soviet Union, the Kriegsmarine's submarine commanders' school was moved from Pillau in the Baltic to Trondheim. At the time, no fighter aircraft were available for fighter protection of the school and the Jagdgruppe Drontheim was tasked to provide this. The result was the formation of 4./JGr Drontheim, also known as Einsatzstaffel Jagdgruppe Drontheim. After the return of the submarine school to Pillau in late July 1941, Jagdgruppe Drontheim stayed on at Værnes, but also operated from other airfields along the Norwegian coast, until it was used to form parts of the new IV./JG 5 in July 1942.

#### Aircraft of the unit

Messerschmitt Bf 109 E-7	05.1941	06.1942
Messerschmitt Bf 109 T	06.1941	10.1941
Messerschmitt Bf 109 F-1	06.1942	06.1942
Messerschmitt Bf 109 F-2	06.1942	06.1942

As the Einsatzstaffel, or 4. Staffel Jagdgruppe Drontheim, arrived in Norway, it was equipped with the Messerschmitt Bf 109 E-7, and had an establishment strength equal to that of a Staffel at 12 aircraft and pilots. A large number of Bf 109 E-7 were refurbished aircraft originally built as earlier versions of the Bf 109 E-series.

Sixteen examples of the extended wingspan Messerschmitt Bf 109 T ('Toni') version were delivered in late June 1941, these forming the backbone of the unit with regards to aircraft for the next three to four

months. The Staffel used this model at least until mid-October 1941, but after that the long-winged Bf 109 T seems to have been withdrawn or more probably exchanged for more Bf 109 E-7s, as contemporary records show.

This situation was more or less static for the next eight months, until the introduction of the improved F-series in June 1942, and redesignation and expansion of the unit into 11. and 12./JG 5. To distinguish a Bf 109 T from a Bf 109 E see box on opposite page.

#### Camouflage & Markings

The Bf 109 Ts of 4./Jagdgruppe Drontheim mostly retained what can be termed the delivery scheme of the Bf 109 T, consisting of an RLM 74/75/76 combination of colours with gentle mottling of the fuselage sides extending part way up the fuselage spine. This mottling consisted of a combination of RLM 76 and the grey colours, possibly with RLM 02 (see Aakra & Kjæraas 2004 for further details). It gives the impression of very light fuselage sides (see photograph). In some cases there was mottling of some darker colour (RLM 75 or 72?) on the lower engine cowling. The Bf 109 T-2s carried white numerals outlined in black.

4./Jagdgr. Drontheim also operated a comparatively high number of Bf 109 Es alongside their Bf 109Ts. The camouflage and markings system of these machines was very variable. Photographic evidence shows that some of the Emils of Einsatzstaffel/Jagdgr. Drontheim probably came directly from 6./JG 5 in May/June 1942 when the latter Staffel received their first F-4s (see section on II./JG 5). The clover emblem of 6. Staffel can be seen on the extreme nose section of at least one of its machines, 'White 12', pictured on page 43. This emblem was combined with that of JFS 3 from which 4./Jagdgr. Drontheim (later Einsatzstaffel/Jagdgr. Drontheim) had formed.

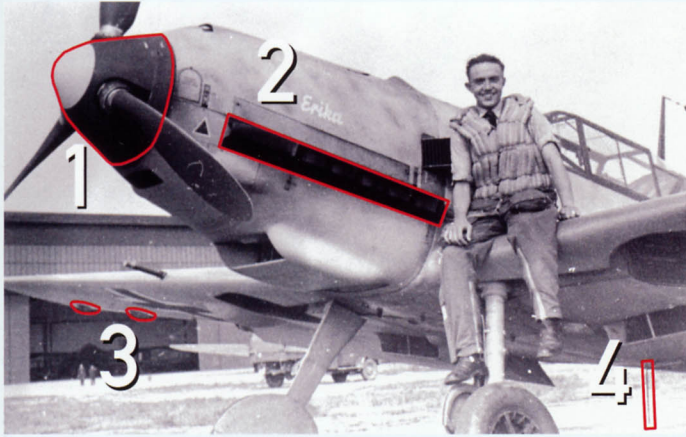
Other Bf 109s operating with Einsatzstaffel/Jagdgr. Drontheim at the time featured no emblems of any kind, but were still quite colourful, having yellow rudders and sometimes yellow fuselage bands. They were also all heavily mottled/repainted on the



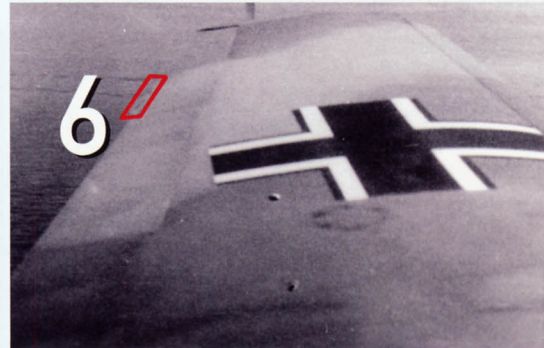
## How to distinguish a Bf 109 T from an E

There seems to be considerable problems for many in distinguishing a Bf 109 T (Toni) from a Bf 109 E, which is understandable since positive identification requires good photographs displaying the correct features of the airframe. On the other hand, these features are often visible and yet the Bf 109 T is not always recognisable. The opposite

misidentification is actually more common – often a Bf 109 T will be identified as such due to the seemingly long span wings when, in fact, what is displayed is nothing but distortions due to perspective or photographic anomalies or simply the viewer's impression of longer than normal wings being fitted. The three photographs below illustrate the salient features of the Bf 109 T which either differ from the corresponding features of the Bf 109 E, or must be present if the aircraft in question is a Bf 109 T.



Salient features of the Bf 109 T (Toni): **No. 1** refers to the spinner: all Bf 109Ts had the pointed type. **No. 2** shows the black painted exhaust areas which are a feature of Fieseler-built Bf 109 Es up to and including the T-version. All Bf 109 Ts had these, but they may also be seen on E-1s, E-7s and E-8s built by Fieseler-Werke, Kassel. **No. 3** refers to the three (as opposed to only two on the Bf 109 E) aileron hinge covers necessitated by the lengthened ailerons. **No. 4** indicates the FuG25a IFF antenna fitted to the Bf 109 T, often removed in the field. **No. 5** refers to the circular hatch for the Patin compass, identical to the one introduced on the Bf 109 F-series, and finally, **No. 6** refers to the mid-position aileron trim tab of the Bf 109 T. The aircraft also featured upper wing spoilers (see following page) but these were invariably disconnected and not used. Another aid is the camouflage: the aircraft usually had quite light mottling on the fuselage sides and some dark mottling on the lower engine cowling panel as seen on the aircraft featured on the first two photographs, 'White 7' from 13./JG 77. It should also be remembered that the Toni had the DB 601N and thus required 100 octane fuel, denoted by the 'C3' fuel triangle (Coll Mombeek and Brekken).

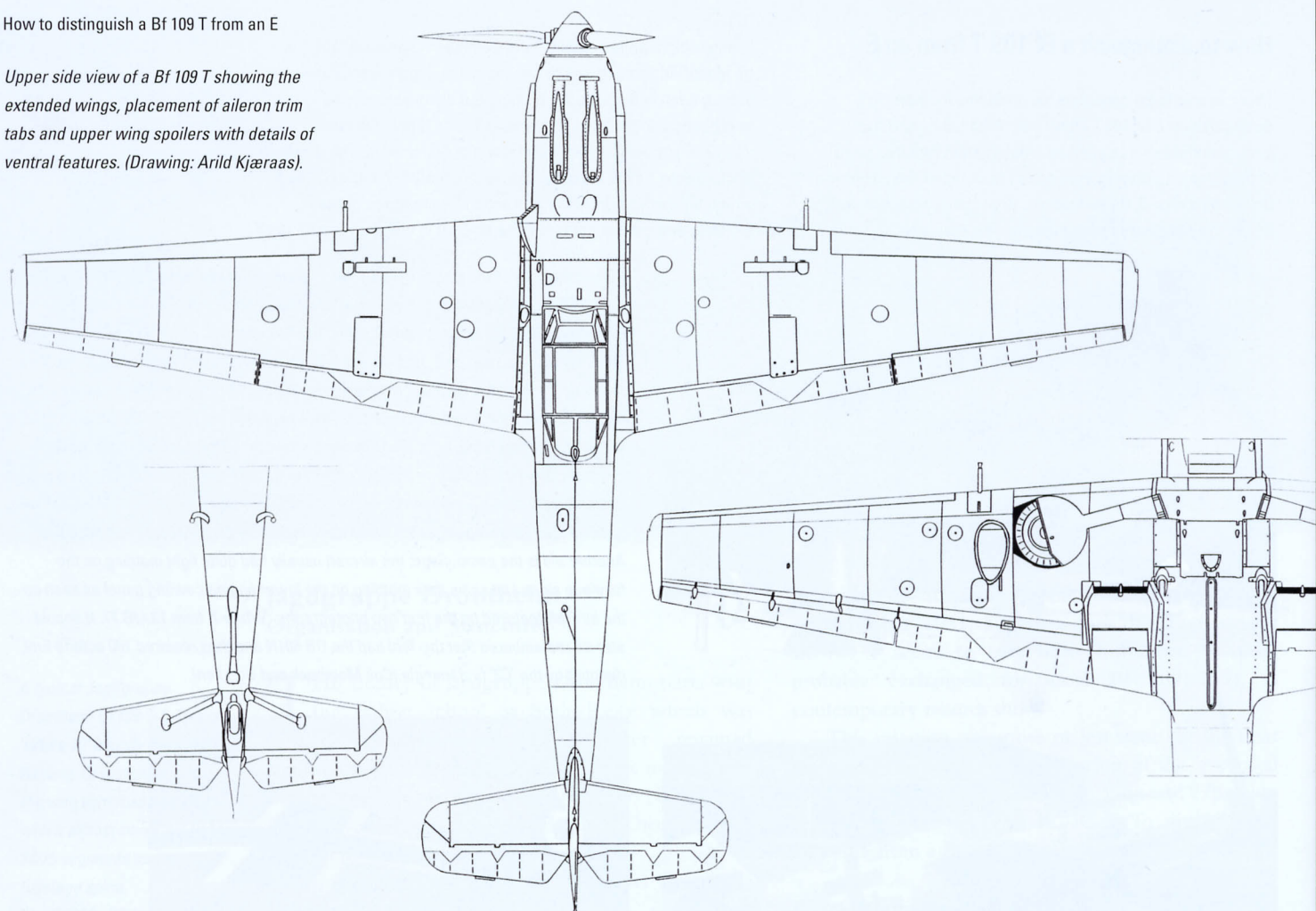


Bf 109 T-2, W. Nr. 7778, 'White 8' of Jagdgr. Drontheim at Værnes in summer/autumn 1941. The typical Bf 109 T camouflage of light mottling over the grey scheme can be seen, as well as the FuG25a IFF antenna and the round compass hatch, the latter two distinctive features of the Bf 109 T. Note also the fuselage frame numbers and the black painted exhaust panelling (Coll. Brekken).

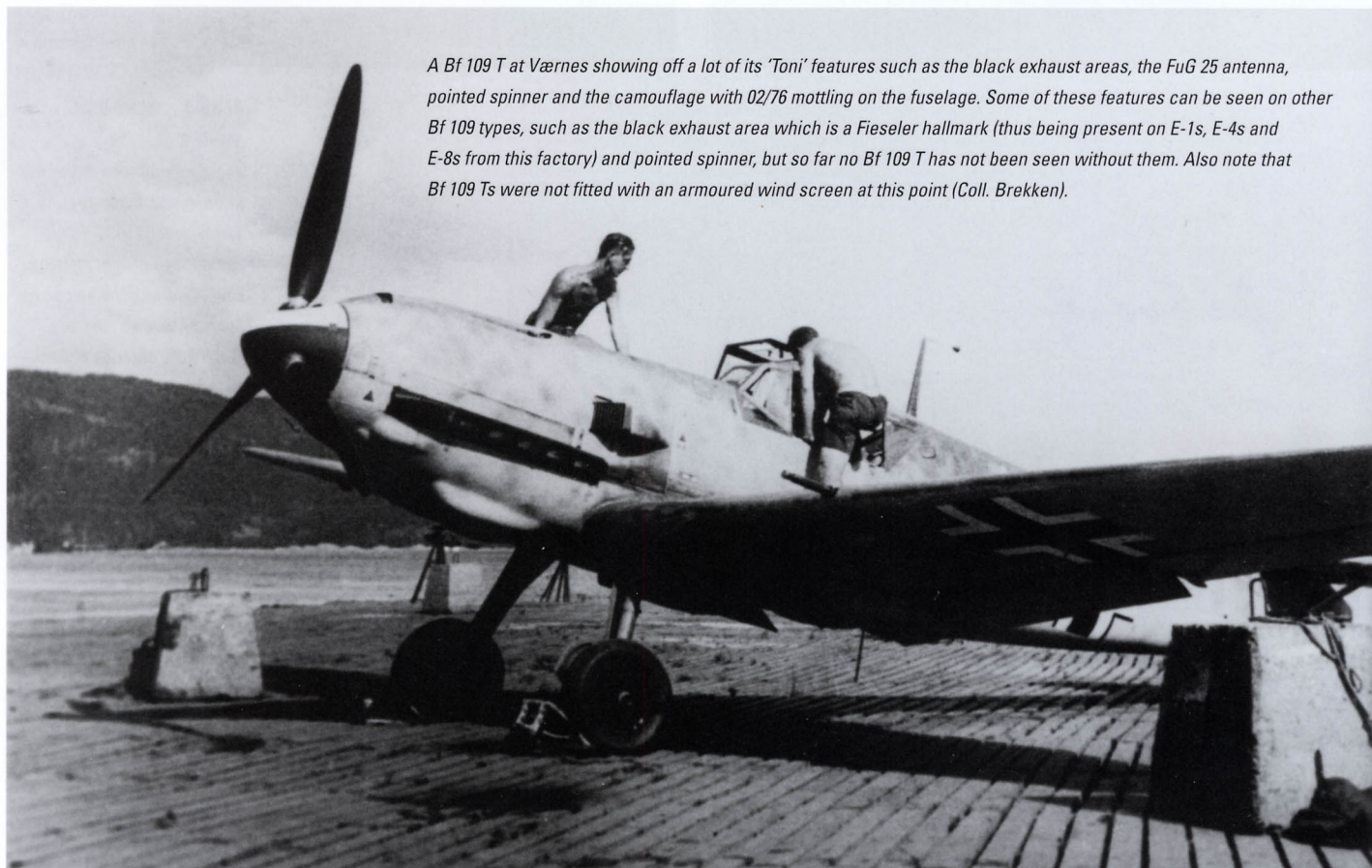


How to distinguish a Bf 109 T from an E

Upper side view of a Bf 109 T showing the extended wings, placement of aileron trim tabs and upper wing spoilers with details of ventral features. (Drawing: Arild Kjæraas).



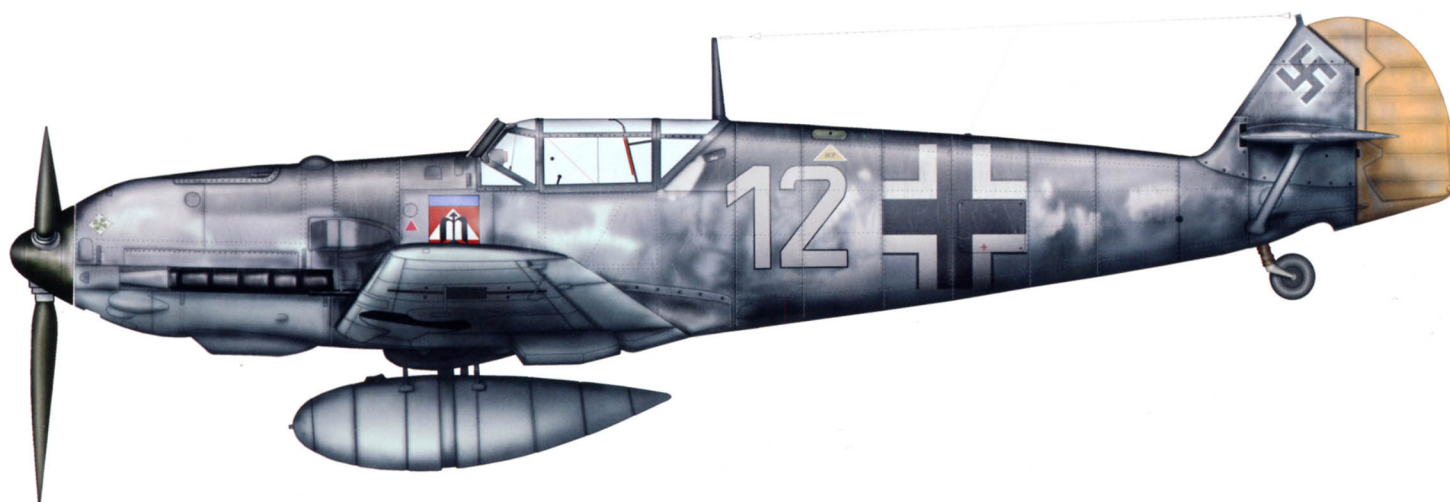
A Bf 109 T at Værnes showing off a lot of its 'Toni' features such as the black exhaust areas, the FuG 25 antenna, pointed spinner and the camouflage with 02/76 mottling on the fuselage. Some of these features can be seen on other Bf 109 types, such as the black exhaust area which is a Fieseler hallmark (thus being present on E-1s, E-4s and E-8s from this factory) and pointed spinner, but so far no Bf 109 T has not been seen without them. Also note that Bf 109 Ts were not fitted with an armoured wind screen at this point (Coll. Brekken).







'White 12' of Einsatzstaffel/Jagdgr. Drontheim at Værnes during May/June 1942. The clover emblem of 6./JG 5 on the nose is noteworthy. Camouflage is the regular RLM 74/75/76 with evidence of considerable repainting. The undercarriage legs and insides of the undercarriage doors are RLM 66. Despite appearances, the ventral engine cowling is not yellow (compare with undercarriage door). The lower photo shows 'White 12' at an earlier date before the JFS insignia was applied, in company with 'White 10', probably the machine of Fw. Dombacher. A 300-litre drop tank is fitted (Coll. Brekken).



**Messerschmitt Bf 109 E, 'White 12', Jagdgruppe Drontheim, pilot unknown, Værnes, early spring 1942**

Probably being an ex-6./JG 5 machine, as indicated by the clover insignia on the nose, 'White 12' wears a standard grey scheme in RLM 74/75/76 with large segments in the two greys on the fuselage sides. The rudder may have been yellow, but this is not confirmed. The JFS 3 emblem was present below the windscreen, this being blue, red, white and black. It should also be noted that the individual numeral was in all likelihood off-white or grey, certainly not matching the white in the fuselage cross. Yellow can be discounted as a probable colour, as it does not quite match the fuel triangle and it would have to be a very pale yellow if that were indeed the colour of the numeral.

Two photographs of Bf 109 E 'White 2' undergoing a thorough service at Værnes. Note the heavy mottling and repainting that has taken place on the fuselage sides and the black-painted wing fillet and adjoining fuselage section to hide exhaust staining. The rudder is yellow and there is no outline to the thick individual number. In the bottom photograph, note that the upper engine cowlings and forward fuselage upper gun cowlings are resting in the background - the engine cowlings are also heavily mottled but in a different style to the fuselage (Coll. Brekken).



fuselage sides. It seems that quite a few of Jagdgr. Drontheim's Bf 109 Es had provision for a 300 litre drop tank.

Many of the Emils feature a dirty white individual number with black outline, although at least one had plain white numerals (see 'White 2' above). It is also

known that others featured yellow numbers with black outlines, such as 'Yellow 13' and 'Yellow 7' flown by Friedrich Hammesfahr and Uffz. Kurt Kundrus, respectively.





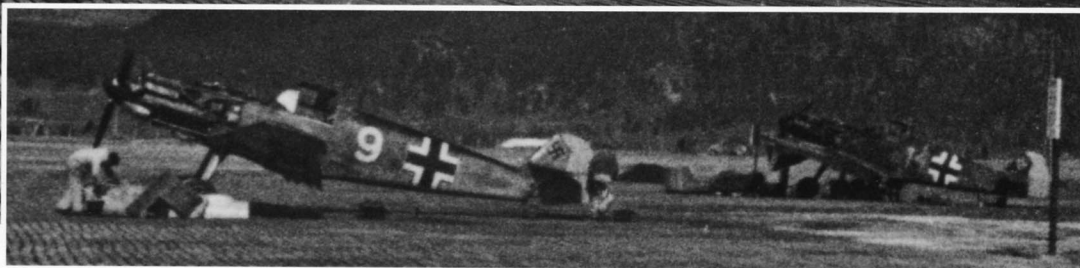
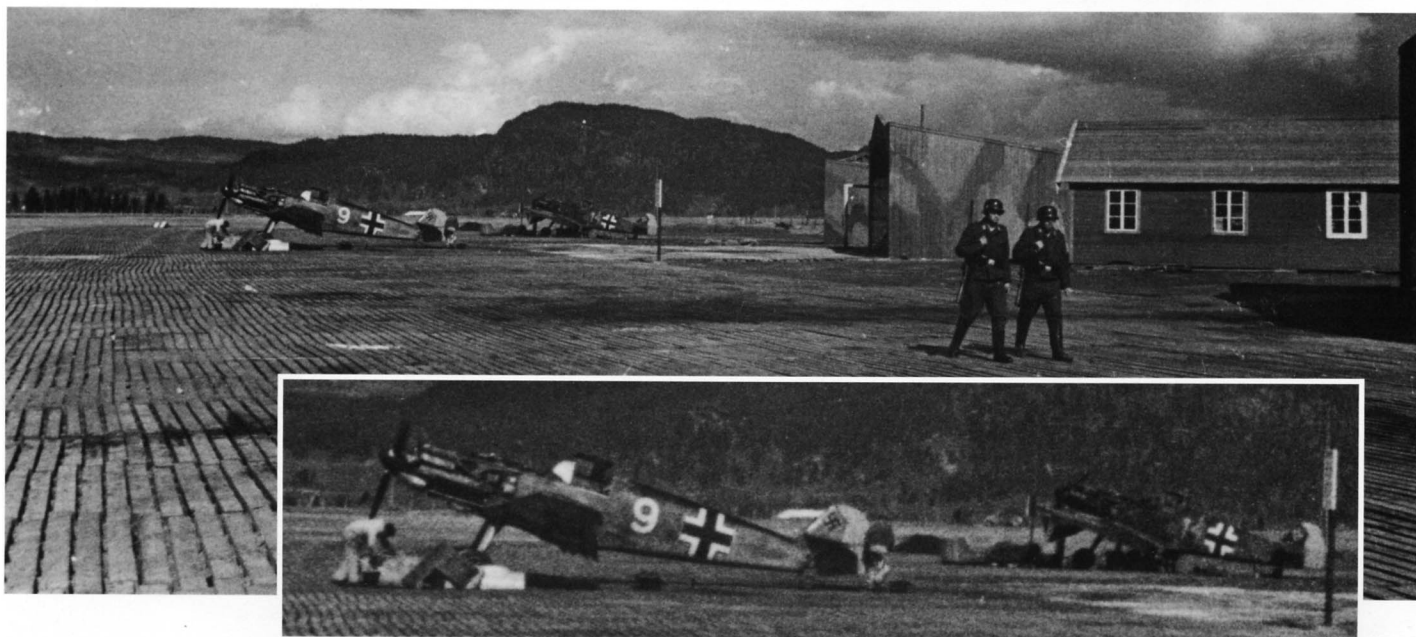
*A Einsatzstaffel/Jagdgr.  
Drontheim Bf 109 E again  
showing very heavy mottling,  
especially on the engine side,  
probably applied in RLM 74  
(Coll. Brekken).*



*Two revealing images of  
'White 7'. This machine  
carries well executed mottling  
in RLM 74 on its fuselage  
sides, leaving considerable  
areas of RLM 76 visible. Close  
scrutiny of the photographs  
reveal that the RLM 76 has, at  
one point, been reapplied on  
the fuselage sides and then  
mottled. The style of the '7'  
is somewhat unusual and the  
number has a thick black  
outline (Coll. Brekken).*



The photograph here is a very well and oft-published one usually attributed to Jagdgr. Drontheim, but the aircraft has never positively been associated with an individual aircraft number. The photograph below finally reveals it. As the inset shows the cowling panels on the wooden runway are arranged in an identical manner to the photograph at right and one can even see the same two guards walking away from the aircraft! The placement and location of the aircraft also fit nicely so it can be concluded that this long elusive aircraft is 'White 9'. The Messerschmitt in the background is 'White 14'. Both aircraft have yellow rudders (Coll. Brekken).



An interesting view of 'White 1' with both a yellow tail band and rudder. It also features the JFS 3 emblem below the port side of the cockpit section. Again, the fuselage sides appear to have been repainted with RLM 76 upon which mottling has been added. The entire spinner with the exception of the backplate is white. In the background a He 111 early-series with the stepped cockpit may be seen (Coll. Brekken).





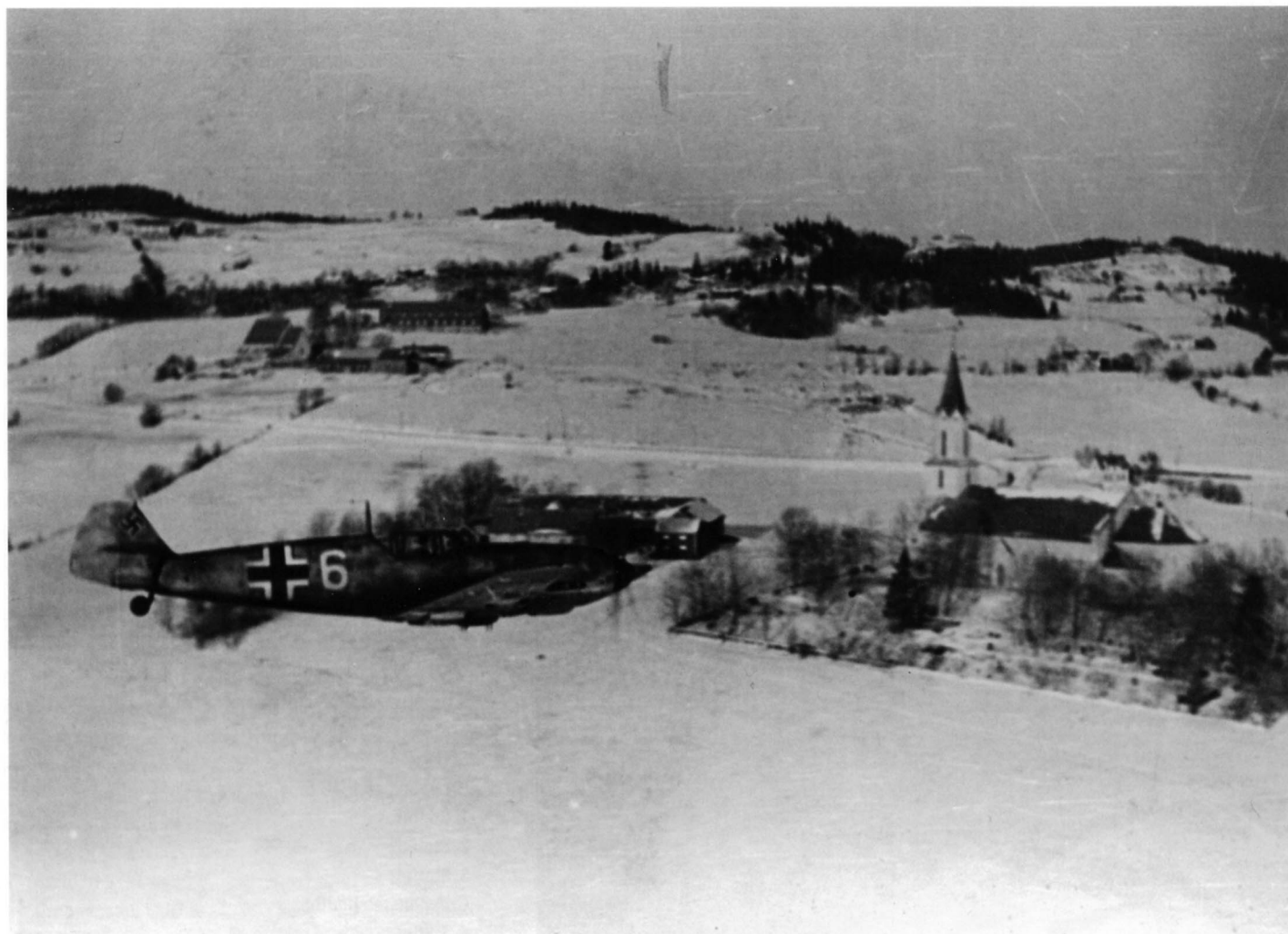


'Yellow 13' and 'Yellow 7' piloted by Friedrich Hammesfahr and Uffz. Kurt Kundrus as noted on the photograph. The photograph was taken over the Trondheimfjord in 1941. Both machines probably feature RLM 74/75/76 with much of the former colour on the fuselage sides. 'Yellow 13' is fitted with the external armoured windshield and both aircraft have provision for a 300 litre drop tank.

The position of the individual numbers is to be noted.

These aircraft may have just been received from I./JG 77, which may account for the yellow numbers (Coll. Hammesfahr via Brekken).

'White 6' is seen banking low over a church near Trondheim during the winter of 1941/42 (Coll. Hammesfahr via Brekken).







## Jagdgeschwader 5

*Messerschmitt Bf 109 E-7, W.Nr. 3523, 'Red 6' of 5./JG 5 was recovered in 2003 from a fresh-water lake some 20 km south-east of the old wartime airfield of Loustari. For the full story of its remarkable survival see pages 61-63 (Jim Pearce via Mark Sheppard).*

**J**AGDGECHWADER 5 'Eismeer' was, in many ways, a special unit within the Luftwaffe. Not only did its history reflect the Third Reich's two-front 'miniature war', but its component Gruppen were transferred long distances in 1943 and 1944 to cope with the ever increasing demands of the different fronts; it also had an autonomous Zerstörerstaffel permanently attached for almost three years which briefly included a night fighter component. Thirdly, for a short period in 1943-44, there was also a Jabo Staffel within the ranks of JG 5. Lastly, it had to cope with the freezing cold of the 'Eismeer' (Ice Sea or the Barents Sea). In fact, it was the only Geschwader that fought 24 hours per day in broad daylight during the summer meaning that pilots could fly missions at any time during the day (or 'night')!

*Ofw. Albert Brunner sitting on the engine cowling of Lt. Hans Döbrich's G-2/R-6, 'Yellow 10' (Coll. Döbrich).*

### Organisation and Structure

Early in January 1942 an entirely new unit was formed – Jagdgeschwader 5. By renaming I./JG 77, I./JG 5 was formed with a Gruppenstab and three Staffeln.



Following the same pattern, the Stab Jagdführer z.b.V. was renamed and made an official unit under the name II./JG 5, with 13., 14., and 15. Staffel becoming the new 4., 5., and 6. Staffel JG 5 respectively. The order stated that this organizational change was to be completed by 10 January 1942. A 7. Staffel was also formed by renaming the Einsatzstaffel Ergänzungsgruppe Jagdgeschwader 3, an operational training unit. By 10 January, the Jagdfliegerführer Norwegen had also been formed and given an establishment of four aircraft.

The organization of the unit at this point was as follows:

Stab/JG 5  
 Gruppenstab I./JG 5:  
 1. Staffel  
 2. Staffel  
 3. Staffel  
 Gruppenstab II./JG 5:  
 4. Staffel  
 5. Staffel  
 6./JG 5  
 6.(Z) Staffel/JG 5  
 7. Staffel/JG 5

For reasons unknown, the old Zerstörerstaffel I./JG 77 was reported as 6.(Z)/JG 5 in the first months of 1942, a fact that has caused some confusion, and from 7 February, this was changed, as II. Gruppe was reduced to two Staffeln, 4. and 5. Staffel, with a reference to the 6. Staffel as reported under Zerstörer.

The new organization was as follows:

Stab/JG 5  
 Gruppenstab I./JG 5:  
 1. Staffel  
 2. Staffel  
 3. Staffel  
 Gruppenstab II./JG 5:  
 4. Staffel



- 5. Staffel
- 6.(Z) Staffel/JG 5
- 7. Staffel

The new organization had one major flaw, namely the fact that the former 1. Staffel operating 'on paper' in the north was commanded by the Stab of I. Gruppe, located on the western coast of Norway. To make the command structures effectively 'fit the map', a new set of orders was issued on 10 March 1942, in which several changes were made including the formation of a new Gruppe within Jagdgeschwader 5. The 1. Staffel was renamed and became 6. Staffel, thus putting the Staffeln operating in the north under the control of the Stab II. Gruppe. The 6.(Z) Staffel was renamed 10.(Z) Staffel, while a new 1. Staffel was formed by renaming 10./JG 1. In addition, III./JG 5 with 7., 8., and 9. Staffel, was formed using the rest of the IV./JG 1, where Stab IV./JG 1 became Stab III./JG 5, 11./JG 1 became 8./JG 5 and 12./JG 1 became 9./JG 5. The old 7./JG 5 was included in the new Gruppe under the same designation. Thus, from this date, JG 5 was organized as follows:

- Stab/JG 5
- Gruppenstab I./JG 5:
  - 1. Staffel
  - 2. Staffel
  - 3. Staffel
- Gruppenstab II./JG 5:
  - 4. Staffel
  - 5. Staffel
  - 6. Staffel
- Gruppenstab III./JG 5:
  - 7. Staffel
  - 8. Staffel
  - 9. Staffel
- 10.(Z) Staffel/JG 5

I. and III. Gruppe operated in southern and central Norway, while II. and 10.(Z) operated in the north and Finland. Late in June 1942 a new change occurred in JG 5, as Stab III. Gruppe with 7. and 8. Staffel was ordered to Petsamo. For some reason the 9. Staffel was kept on the west coast of Norway. At about the same time, a IV. Gruppe was established, based on elements of Jagdgruppe Drontheim, the operational unit based at Grove in Denmark and Trondheim in Norway. 4./JGr Drontheim was renamed and reorganized into two Staffeln, the 11. and 12. Staffel, and the previous 9. Staffel was included in the new Gruppe as 10. Staffel. As the IV. Gruppe used the same number as the Zerstörerstaffel, this Staffel was renamed yet again, and finally assigned the Staffel number it retained until it was transferred out of JG 5.

JG 5 was thus organized as follows from the mid-summer of 1942:

- Stab/JG 5
- Gruppenstab I./JG 5:
  - 1. Staffel

- 2. Staffel
- 3. Staffel
- Gruppenstab II./JG 5:
  - 4. Staffel
  - 5. Staffel
  - 6. Staffel
- Gruppenstab III./JG 5:
  - 7. Staffel
  - 8. Staffel
  - 9. Staffel
- Gruppenstab IV./JG 5:
  - 10. Staffel
  - 11. Staffel
  - 12. Staffel
- 13.(Z) Staffel/JG 5

I. and IV. Gruppe operated in southern and central Norway, while II., III. and 13.(Z) operated in the north and Finland. After this rapid expansion and many transitions, the structure of JG 5 remained stable until January 1943, when a new unit emerged following the withdrawal of a dive-bomber unit which had been stationed in the north since the start of Barbarossa. Luftflotte 5 subsequently acted by reforming 11. Staffel into a special fighter-bomber unit, giving it the designation 14.(Jabo)/JG 5. The unit was not an official unit, but was intended to operate in this role for six months only. However, a new 11. Staffel was formed immediately and attached to the IV. Gruppe. The resulting organization shown on the strength report of 31 January 1943 was:

- Stab/JG 5
- Gruppenstab I./JG 5:
  - 1. Staffel
  - 2. Staffel
  - 3. Staffel
- Gruppenstab II./JG 5:
  - 4. Staffel
  - 5. Staffel
  - 6. Staffel
- Gruppenstab III./JG 5:
  - 7. Staffel
  - 8. Staffel
  - 9. Staffel
- Gruppenstab IV./JG 5:
  - 10. Staffel
  - 11. Staffel
  - 12. Staffel
- 13.(Z) Staffel/JG 5
- 14.(Jabo)/JG 5

I. and IV. Gruppe operated in southern and central Norway, while II., III., 13.(Z) and 14.(Jabo) operated in the north and Finland. The organizational structure remained for a long time, but for the first time since the formation of JG 5, a part of the Geschwader was moved out of the Luftflotte 5 operational area and thus out of the scope for this book, when I. Gruppe transferred to the operational area of Luftwaffenbefehlshaber Mitte in late July 1943. However, the I. Gruppe seems to have

operated from airfields in southern Norway until late October 1943. The next unit to perform a disappearing act was the II. Gruppe, moving to the operational area of Luftflotte 1 in early November 1943. The remaining units in Norway after this time were:

Stab/JG 5  
 Gruppenstab III./JG 5:  
 7. Staffel  
 8. Staffel  
 9. Staffel  
 Gruppenstab IV./JG 5:  
 10. Staffel  
 11. Staffel  
 12. Staffel  
 13.(Z) Staffel/JG 5  
 14.(Jabo)/JG 5

A change which affected the units in Norway and Finland took place in July 1944, as the plans for expansion of the Gruppen made a renumbering of the Staffeln necessary. The first change was that the number of Staffeln in II. Gruppe was enhanced by moving the existing 9. Staffel from III. Gruppe into II. Gruppe and renaming it as 8. Staffel. The old 7. Staffel of III. Gruppe was renumbered, becoming 10. Staffel, and 8. Staffel was renumbered becoming 11. Staffel. A new 9. Staffel was formed at this time, as well as a new 12. Staffel, but the 12. Staffel remained without personnel and aircraft. For the other Gruppe in Norway – the IV. Gruppe – this made the following changes necessary: 10. Staffel was renumbered, becoming 13. Staffel, the 11. Staffel became 14. Staffel, 12. Staffel became 15. Staffel. In addition, the long-established 13.(Z)/JG 5 was renamed and integrated into the new IV./ZG 26, becoming the 10. Staffel of this unit. After this change the component units of JG 5 in Norway consisted of:

Stab/JG 5  
 Gruppenstab III./JG 5:  
 9. Staffel  
 10. Staffel  
 11. Staffel  
 Gruppenstab IV./JG 5:  
 13. Staffel  
 14. Staffel  
 15. Staffel

The next change occurred as a large number of Luftwaffe bomber units were disbanded in the autumn of 1944. A new 16. Staffel was formed by the renaming of 2./KG 2. This Staffel was attached to the IV. Gruppe with the following composition:

Stab/JG 5  
 Gruppenstab III./JG 5:  
 9. Staffel  
 10. Staffel  
 11. Staffel  
 Gruppenstab IV./JG 5:  
 13. Staffel

14. Staffel  
 15. Staffel  
 16. Staffel

Towards the end of 1944, the III. Gruppe finally obtained a 12. Staffel as shown in the strength report of 10 December 1944. The structure of the JG 5 at this time was as follows:

Stab/JG 5  
 Gruppenstab III./JG 5:  
 9. Staffel  
 10. Staffel  
 11. Staffel  
 12. Staffel  
 Gruppenstab IV./JG 5:  
 13. Staffel  
 14. Staffel  
 15. Staffel  
 16. Staffel

This was the structure JG 5 retained until the end of the war. A new formation was ordered at command level, even if the pilots themselves never took notice of it. Stamps in some of the personnel's pay books and other documentation suggest that the paperwork for this last reorganization was concluded however, and the authors list it here for the sake of completeness. On 1 May 1945, it seems that the final changes were made, namely the formation of a new II. Gruppe, consisting of the Stab, formed from Stab IV./ZG 26; a 5. Staffel by renaming 12. Staffel and a 6. Staffel by renaming 16. Staffel, and finally a new 7. Staffel by renaming 10./ZG 26, the old Zerstörerstaffel. A partly new III. Gruppe, consisting of the existing units as of autumn 1944 in addition to a new 9. Staffel, was formed from 13. Staffel. Lastly, the new IV. Gruppe consisted of the existing 14. and 15., Staffel with parts of the old 16. Staffel becoming the new 13. Staffel:

The final order of battle for JG 5 thus, in theory, should have been as follows:

Stab/JG 5  
 Gruppenstab II./JG 5:  
 5. Staffel  
 6. Staffel  
 7. Staffel  
 Gruppenstab III./JG 5:  
 9. Staffel  
 10. Staffel  
 11. Staffel  
 Gruppenstab IV./JG 5:  
 13. Staffel  
 14. Staffel  
 15. Staffel

#### Aircraft of the unit

<b>Stab JG 5</b>			
Messerschmitt Bf 110 D or E	01.1942	03.1942	
Messerschmitt Bf 109 F-4	07.1942	04.1943	



Messerschmitt Bf 109 G-2	07.1942	05.1945
Messerschmitt Bf 109 G-6	03.1944	05.1945
Messerschmitt Bf 109 G-14	01.1944?	05.1945

The initial establishment strength for the unit was supposed to consist of four Bf 109 Es, but it is possible that it never had any of them on strength. The unit did however have a few aircraft on strength from the start, and the authors believe that these were the Bf 110s initially operated by Stab ZG 76. These initial aircraft soon became unserviceable and disappeared from the strength reports by mid-March 1942. The unit was then without any aircraft for a period of time, until it received two Bf 109 F-4s taken over from another unit in July 1942. The Bf 109 F-4 was replaced by the Bf 109 G-2 by July 1944, and it is a distinct possibility that the Stab used the G-2 version to the end of the war, and that some of the Bf 109 G-2s, G-6s and G-14s located at Lade and registered under Oberquartiermeister Reserve at the end of hostilities, were in fact the aircraft of the former Stab JG 5. A single Bf 110 C-1 is reported as lost by Stab/JG 5 in the spring of 1943, but in the authors' opinion this aircraft was operated by either the Luftflotte 5 Gefechtsstab in Kemi, or as a courier aircraft by one of the Gruppenstäbe located in the area.

#### I./JG 5

Messerschmitt Bf 109 T	01.1942	03.1942
Messerschmitt Bf 109 E-7	01.1942	07.1942
Messerschmitt Bf 109 F-2	04.1942	08.1942
Messerschmitt Bf 109 G-1	01.1943	08.1943
Messerschmitt Bf 109 G-2	03.1943	10.1943
Focke-Wulf Fw 190 A-2	06.1942	08.1943
Focke-Wulf Fw 190 A-3	06.1942	07.1943
Focke-Wulf Fw 190 A-4	02.1943	08.1943

Taking over the aircraft of their predecessors, I./JG 5 had mostly Bf 109 E-7s on strength in its first months, starting out with a total of 51 aircraft of this type. There seems to have been a transition period early in January 1942 when the unit still reported losses as 'I./JG 77', but strength reports were filed under I./JG 5. One indication supporting this is that the reported inventory of Bf 109 T aircraft with I./JG 5 was documented at three on 3 January, and two on 10 January. The only Bf 109 T loss was recorded in Norway during this period, filed by I./JG 77 on 7 January as Werknummer 7784, which was 65 per cent damaged during a bombing raid against Solar airfield.

Until June 1942, the unit retained a number of Bf 109 E-7s, all loss records for Bf 109 E aircraft from the period showing them to be E-7s. This is further substantiated by documents from repair facilities showing that several of the airframes were upgraded from earlier versions. At the same time, new Bf 109 F-2s, plus a number taken over from other units, were introduced, leaving an almost equal number of Bf 109 E-7s and Bf 109 F-2s by July 1942, simultaneous to the Focke-Wulf Fw 190 A-2 and A-3 being

introduced, and the unit started a conversion to the new model Staffel by Staffel. By August, the last Bf 109 had been transferred out of the unit and the Fw 190 would be the aircraft used for the rest of 1942 and the first part of 1943.

A single Bf 109 G-1 was reported in the Gruppe in January 1943, and it is possible that this was used for conversion training, as the unit started to convert to the Bf 109 G in March and April 1943. The Gruppe also continued to receive new Fw 190s, (six factory-new Fw 190 A-4s were delivered in February 1943, the only aircraft of this type, with one exception, to operate under JG 5 control in Norway).

The spring and summer months of 1943 saw the unit operating a mixture of Bf 109s of the G-2 subtype, together with a single G-1, in addition to Fw 190 A-2s, A-3s and A-4s. As the unit prepared to leave the Luftflotte 5 operational area in July 1943 it reported receiving two factory-new Bf 109 G-6s, but these aircraft never arrived in Norway, and were taken over as part of the transfer to the operational area of Luftflotte Mitte.

#### Camouflage and Markings

##### I./JG 5

By the time JG 5 was formed, the standard Luftwaffe camouflage scheme for fighters and Zerstörer was RLM 74/75/76 and it is quite likely that this was the scheme carried by the machines of the Gruppe at the time of formation. However, there were a number of variations on the theme in existence, the style and level of mottling varying considerably.

This can be seen clearly on a several photographs showing Bf 109 E-7s of I./JG 5 in May 1942. One of these machines, W.Nr. 4219, still carrying its Stammkennzeichen 'GA+QI', carried quite heavy mottling of RLM 74/75 on its fuselage sides, this obviously being the factory scheme as stenciling and Werknummer were plainly visible. Next to this machine can be seen another Emil from I./JG 5, 'White 3', and this carried an extremely dark scheme, almost uniform in application. Most likely this resulted from a heavy and gradual application of RLM 74 on all top surfaces, considerably toning down the RLM 75 and 76. 'White 6' also carried an interesting variation on the 74/75 scheme with what appears to be stripes on the engine cowling.

W.Nr 4219 had a rather short but very interesting career. The machine was quickly transferred to 8./JG 5 in the north and used by the Staffelführer, Oblt. Hermann Segatz, as 'Black 3' and shortly thereafter (presumably following 8./JG 5's conversion to the Bf 109 F) by 7./JG 5 where it was lost, the pilot, Lt. Bodo Helms, being taken POW. Another interesting aspect of this machine is the fact that it was fitted with the GM-1, making it an E-/7Z. See accompanying camouflage and markings detailed on the following two pages.

Apart from the more 'normal' looking machines, there were a few special camouflage schemes in use by I./JG 5 at this time. Most notable was the streaked



### The changing faces of Bf 109 E-7, W.Nr. 4219



This aircraft was built as a Bf 109 E-7 at the Erla Maschinenwerk at Leipzig (production block 4091-4222, which also included a large number of E-4s). It came to 1./JG 5 in May 1942, probably after having spent some time in an aircraft depot, then was stationed at Herdla. Its pilot at the time was probably Uffz. Siegfried 'Siggi' Lösch. At the time of its delivery, the Emil carried the standard RLM 74/75/76 scheme and its Stammkennzeichen, 'GA+QI', in black on both fuselage and beneath the wings. The mottles on the fuselage and tail were fairly large, and on the engine cowlings there were two large characteristic triangular blotches of RLM 74.

What number the aircraft used while with 1. Staffel is not known, but it was quickly transferred north and first served with 8. Staffel where it became the personal mount of the Staffelführer, Oblt. Hermann Segatz, as 'Black 3'. This aircraft features in a well known colour photograph (reproduced below), but the exact identity of Segatz' machine has never been published before. Close scrutiny of the camouflage, and in particular the triangle shapes on the nose, will confirm the identity of 'Black 3' as does the rare GM-1 installation.

Segatz apparently did not use this aircraft for long as it was lost while on a transfer flight on 5 August 1942, being flown by Lt. Bodo Helms of 7./JG 5. At that time it carried the tactical number 'White 8'.

*Left: W.Nr. 4219 just after its delivery to 1./JG 5. The letter 'Q' of its Stammkennzeichen is visible on the ventral MG FF drum fairing. A 300 litre drop tank was fitted (Coll. Mombeek).*

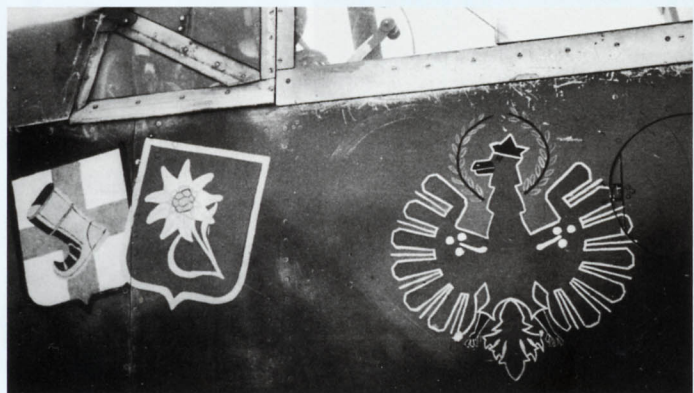


*The photograph to left shows the characteristic shapes on the cowlings (the significance of which will be seen in the colour photograph below), the large number of stencillings, including frame numbers as well as the two oval hatches of the GM-1 installation. The photograph above shows the Werknummer in very small script on the tail fin and the general light tail and rudder with large blotches. Note that the trim tab is in red (Coll. Mombeek).*



*This colour photograph has often been published before, but the fact that this is W.Nr. 4219, 'GA+QI', has, to our knowledge, not been acknowledged before. Compare the camouflage demarcation lines behind the cockpit with the photograph of 'GA+QI' above left, and in particular the special triangular shapes on the engine cowlings, which leaves no doubt as to the identity of 'Black 3'. Note also that the black stencillings are still present, but that the aircraft now features a yellow ventral engine cowlings and probably ventral outer wing panels. The rudder was also probably yellow. An external armoured wind shield has been fitted. The red spread-eagle insignia below the cockpit was allegedly the personal emblem of Oblt. Pomaska, the Staffelführer of 6./JG 26, who was shot down and killed in France on 1 June 1940. It was most probably a Polish eagle emblem, a reference to the region in Poland (then in Germany) where both Pomaska and Segatz came from. Even if this aircraft had the hatches for the GM-1 boost system, it was clearly deactivated by this time as the fuel triangle reads 'B7' and the GM-1 required 'C3' fuel (Coll. Brekken).*





Above left and above: Two further photographs of 'Black 3' taken shortly after the colour shot. The cowling area has been completely repainted with RLM 74 or exchanged with another cowling (Coll. Mombeek and Horst Kube).

Left: Apart from Segatz, other pilots also used the Pomaska eagle. One of them was Fw. Heinz Beyer of 8./JG 5 who applied it to his Bf 109 F-4, 'Black 5', which is depicted here at left. There are faint traces of an overpainted Grünherz (green heart) emblem behind the eagle emblem which shows this to be an ex-JG 54 machine. Its camouflage has almost certainly been modified to JG 5 standard, i.e. with substantial amounts of either dark grey (74) or dark green (71) over the top surfaces. The canopy framing is left in a very light colour (Coll. Brekken).



Messerschmitt Bf 109 E-7, W.Nr. 4219, 'GA+QI', after delivery to 1./JG 5 in May 1942



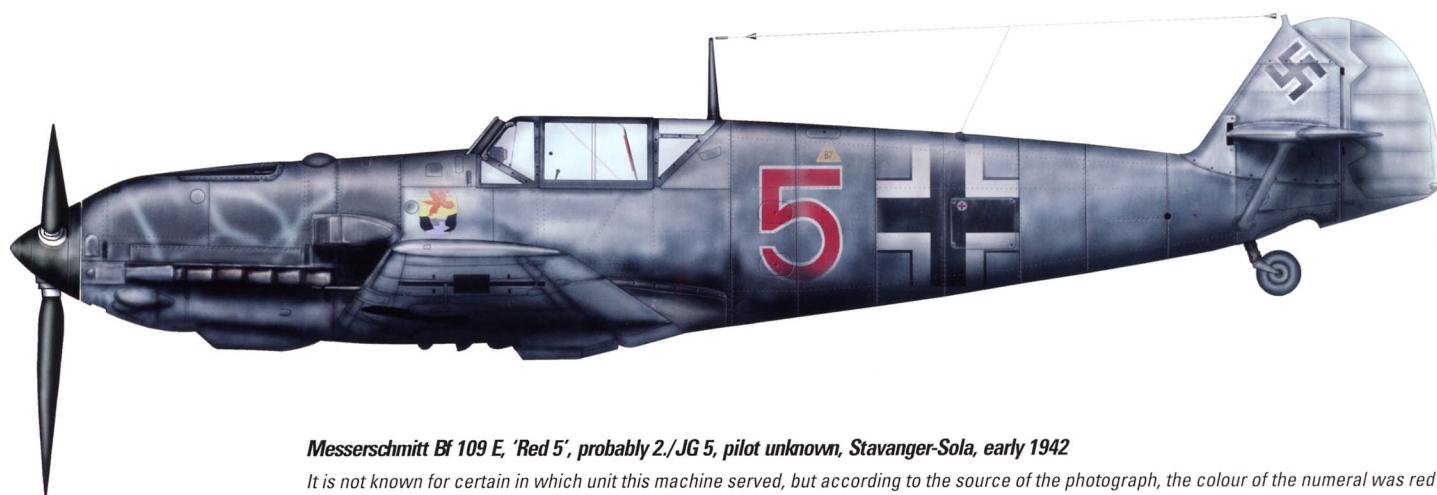
Hptm. Hermann Segatz



Messerschmitt Bf 109 E-7, W. Nr. 4219, 'Black 3', Hptm. Hermann Segatz, Staffelkapitän 8./JG 5



Bf 109 E, 'Red 7', of 1.(Eins.)/Erg.Gr. JG 2 at Brest, displaying the squiggle camouflage on its nose section. This style of camouflage was also seen on Bf 109s of the unit after its re-designation into 1./JG 5, as seen on 'Red 5' below (Coll. Mombeek).



**Messerschmitt Bf 109 E, 'Red 5', probably 2./JG 5, pilot unknown, Stavanger-Sola, early 1942**

It is not known for certain in which unit this machine served, but according to the source of the photograph, the colour of the numeral was red and the most likely unit would be 2./JG 5. Even so, it carries the emblem of 1./JG 77 below the cockpit which would indicate that it is either an older machine originally from that Gruppe, now in use with JG 5, or that it shows a machine from 2. or perhaps 3./JG 77. Be that as it may, it is probable that the finish was the standard RLM 74/75/76 greys on the fuselage, whereas the cowling features the characteristic light blue streaks over dark grey (presumably 74), seen on some machines formerly serving with JG 1 (see photographs in this chapter).

Bf 109 E 'Red 5' of 2/JG 5, seen in flight over southern Norway, showing the marked darkening of the camouflage on the cowling as compared to the rest of the airframe (Coll. Mombeek).







**Messerschmitt Bf 109 E, 'White 12', Lt. Hans Schneider, Staffelkapitän 1./JG 5, Kjevik, April 1942**

*Lt. Hans Schneider's 'White 12' was finished in a very individual scheme consisting of a uniform top coat of RLM 74 over which had been applied streaks in RLM 76 light blue, a finish also seen on some Emils of 10./JG 1. This would suggest that 'White 12' had previously served with that unit. It also seems as if the rudder was a replacement in RLM 02 or some other light colour.*

scheme seen on a few of the Emils of 1. and 2. Staffeln. These were first used on the aircraft of 1.(Eins)/Erg. Gr./JG 2 (which formed the basis for 10./JG 1, which later became 1./JG 5), and consisted of lightly coloured streaks over a dark top coating. One of these Messerschmitts, 'Red 7', photographed in Brest in the autumn of 1941, had this only on the cowling area, as did 'Red 5' seen in flight over southern Norway, but the Staffelkapitän's Emil, 'White 12', carried this scheme all over the fuselage, the base colour being quite dark and covering the entire top surfaces, including the wings. This base colour was probably RLM 74.

Unfortunately, very few photographs exist of the Bf 109 F-2s of I. Gruppe at this time, but it is highly likely they carried the usual greys schemes, probably not showing so much in the way of individual variations.

Staffel colours used by I. Gruppe at this time were:

- 1./JG 5 - white numbers with black outlines
- 2./JG 5 - red numbers with white outlines
- 3./JG 5 - yellow numbers with black outlines

When I. Gruppe converted to the Fw 190 A-2/3 in summer 1942, it received newly-built machines in standard schemes. Many had light mottling on the fuselage sides whereas others appeared to be more 'clean'. The camouflage was not extensively modified by the units at this time, although one of 2./JG 5's Focke-Wulfs, 'Black 9', carried a highly unusual 'tiger' scheme, presumably in standard greys which may have been added by JG 5. It certainly does not match any known factory scheme.

It was with the delivery of the Fw 190s that I. Gruppe started using the extraordinarily large individual numbers on fuselage sides, these being almost as tall as the fuselage cross in most instances. This is a recognition feature for I. and IV./JG 5 Fw 190s, only very few exceptions being seen in 1942-43. The Staffel colours used were the same for 1. and 3./JG 5, although 2./JG 5 shifted to black for its



*Lt. Hans Schneider's 'White 12' at Kjevik after a landing mishap on 10 April 1942. Schneider briefly led the so-called 'Kommando Kjevik' at the time, which was only in existence until 13 April. Schneider was not piloting the aircraft when the accident seen here occurred, but rather Uffz. Walter Hinsdorf. This machine may have been one inherited from 10./JG 1 which would account for the special camouflage, probably an adaptation to overseas operations which the original unit conducted while still based in France and northern Germany (Coll. Mombeek).*

individual numbers, outlined in white. A few Fw 190s may have still carried red numbers however, an example of this being Uffz. Rudolf Fenten's 'Red 12' used during the infamous Mosquito attack on the Gestapo HQ in Oslo on 25 September 1942 (see Guhnfeldt 1995: pg 81). This must have remained the



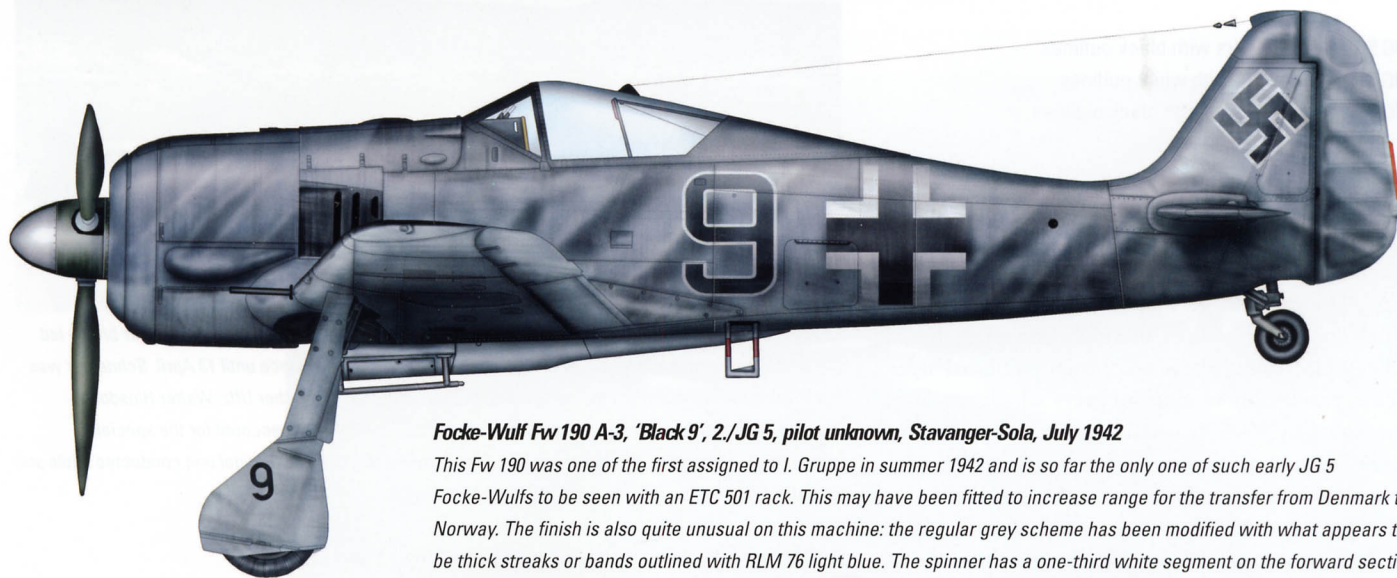


*Fw 190A-2, W.Nr. 20287, 'White 12', of I./JG 5 after a landing mishap at Herdla on 14 July 1942 in which it suffered 40 per cent damage. Note the oversized numerals (without outline) and the factory finish of RLM 74/75/76 (Coll. Mombeek).*

exception, however, as black numbers dominate in the photographic record. 3./JG 5 also shifted to using white outlines on its yellow numbers. The majority of these Focke-Wulfs were delivered with yellow lower cowlings panels, but there were no theatre markings. After some time in service, most of the Fw 190s seem to have had the tips of their spinners painted in the Staffel colour – sometimes the entire spinners were so painted. Most of the machines also repeated their individual number applied in black on each undercarriage leg.



*A quite unique Fw 190 from 2./JG 5 at Stavanger-Sola at the beginning of July 1942, just after the first aircraft of this type landed there. This indicates that the camouflage finish is fairly recent, consisting of streaks of RLM 74 and 75 over the basic grey factory scheme on fuselage sides and the rudder, these streaks being slightly accentuated on the fuselage by thin streaks of RLM 76. This special pattern was probably added locally, or in Denmark, just before hand-over to 2. Staffel. The individual number is again oversized and repeated in black on the undercarriage doors (Coll. Mombeek).*



**Focke-Wulf Fw 190 A-3, 'Black 9', 2./JG 5, pilot unknown, Stavanger-Sola, July 1942**

*This Fw 190 was one of the first assigned to I. Gruppe in summer 1942 and is so far the only one of such early JG 5 Focke-Wulfs to be seen with an ETC 501 rack. This may have been fitted to increase range for the transfer from Denmark to Norway. The finish is also quite unusual on this machine: the regular grey scheme has been modified with what appears to be thick streaks or bands outlined with RLM 76 light blue. The spinner has a one-third white segment on the forward section. Characteristic of I./JG 5 at the time were the very large numerals on the fuselage which were repeated in a smaller size on the undercarriage doors.*

Several of the Fw 190s of I./JG 5 were given individual names, usually painted below the port side of the cockpit. Examples are 'Tina' in white on Uffz. Fenten's 'Red 12' and 'Bärbel' on Lr. Max Endriss' 'Yellow 3' from 3./JG 5. Personal emblems are almost unknown within the Gruppe, the known exception being the famous monkey of Hptm. Wolfgang Kosse, painted on at least the starboard side of his Fw 190 A-3, 'White 10', when he served as Staffelkapitän of that unit in the autumn of 1942 (see Wadman & Pegg 2003: pg 58<sup>1</sup>). Apart from these personal markings, no Gruppe or Staffel insignia was in use.

I. Gruppe also took delivery of seven Fw 190 A-4s starting in February 1943, but nothing is known of their camouflage or markings. The survivors may have been transferred to IV./JG 5 in late summer/autumn of 1943 after having been sent for repairs (see section on IV./JG 5 at this time).

When conversion back to the Bf 109 began in March/April 1943, the Gruppe received a number of Bf 109 G-2s in factory camouflage. There seems to have been little individual application of camouflage in these and the same Staffel colours continued to be used. The first G-6s were received in August, but few photographs of these exist in Norway. They almost certainly carried

<sup>1</sup> However, this machine cannot have been an A-4 as maintained in said reference as these were not delivered to I. Gruppe until early 1943. This Focke-Wulf did not have the MG FF cannon fitted either.





*Lt. Max Endriss' Fw 190 A-3, 'Yellow 3', photographed at Herdla in the autumn of 1942. Endriss often led the Staffel in lieu of Oblt. Franz Menzel. The black exhaust has weathered the forward fuselage considerably, but otherwise the aircraft wears standard markings and camouflage for the time. The only special marking is the name 'Barbel' in black on the port side.*



***Focke-Wulf Fw 190 A-3, 'Yellow 3', Lt. Max Endriss, 3./JG 5, Herdla, autumn 1942***

*Often acting as Staffelkapitän instead of Oblt. Franz Menzel due to his experience, Endriss used this Fw 190 A-3 as his personal aircraft. 'Yellow 3' had suffered considerable weathering of its protective black exhaust area, but the finish, consisting of the RLM 74/75/76 greys, was otherwise in excellent condition. There was evidence of over-painting of a previous tactical number and of the name 'Bärbel' was painted on the port side of the fuselage below the cockpit. The individual number was repeated on the undercarriage doors. Endriss' Focke-Wulf also had yellow ventral cowling panels and most probably a yellow rudder, as seen on many I. Gruppe Fw 190s at the time.*

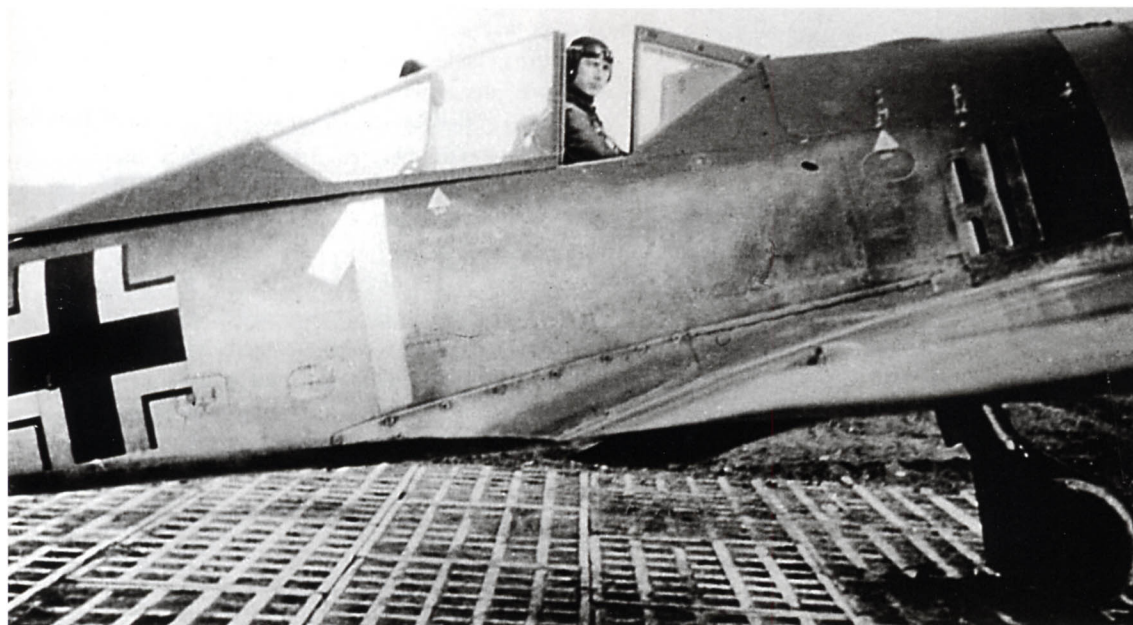
the standard camouflage and markings system as before. The Gruppe was transferred out of Norway and Luftflotte 5 in early August, only 2./JG 5 remaining until October, the Gruppe thus leaving the scope of this book.

Stab JG 5 used the normal markings for its early Bf 109 Es. An example is that of the Technical Officer, Oblt. Hans-Dieter Hartwein, which suffered damage at Stavanger-Sola on 17 April 1942. Later, when the Stab switched to the Fw 190, it used similar Stab markings.

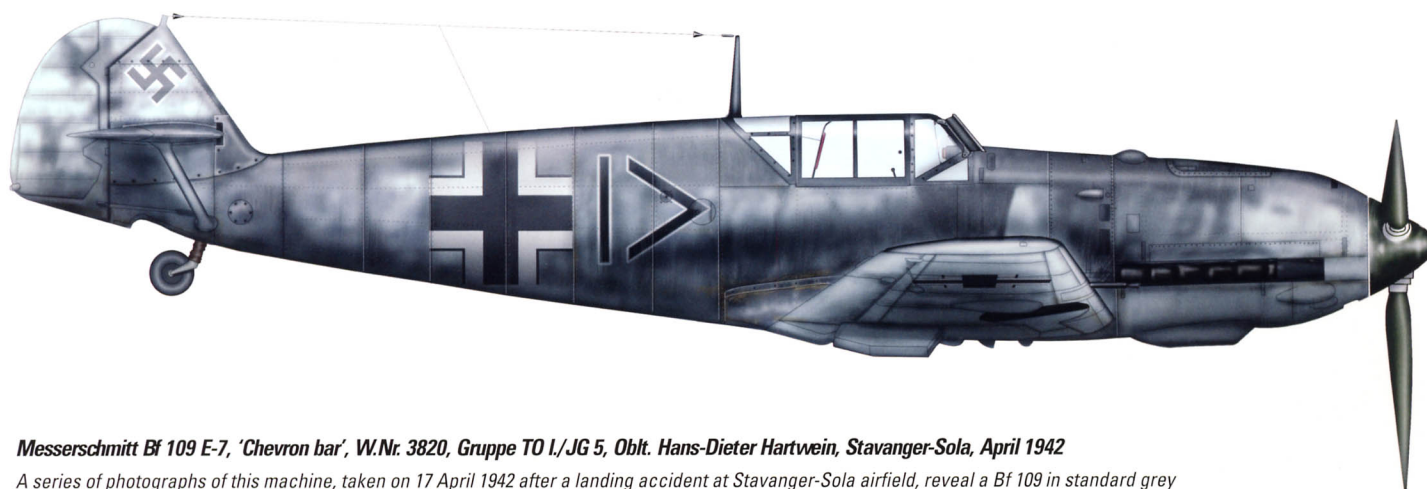
Two views of 'Yellow 5' from 3./JG 5 at Herdla in summer 1942. It features standard JG 5 Fw 190 hallmarks: the oversized numbers, factory style mottling (unmodified) on the fuselage sides, yellow spinner, ventral cowlings panels and rudder, and the individual number repeated on the undercarriage doors. This specimen seems to have had some repair work applied on said door (Coll. Mombeek).







Uffz. Siegfried Lösch flew this Fw 190 A-3 in mid to late 1942 with 1./JG 5. The numeral is plain white and the camouflage is an unmodified factory scheme with very little mottling on the fuselage side, except what appears to be a light application of grey or perhaps RLM 02 around the demarcation of the greys and the blue (Coll. Horst Kube).



Messerschmitt Bf 109 E-7, 'Chevron bar', W.Nr. 3820, Gruppe TO I./JG 5, Oblt. Hans-Dieter Hartwein, Stavanger-Sola, April 1942

A series of photographs of this machine, taken on 17 April 1942 after a landing accident at Stavanger-Sola airfield, reveal a Bf 109 in standard grey RLM 74/75/76 colours with diffuse mottling on the fuselage sides and the Stab markings in the regulation black outlined in white.

## II./JG 5

### Aircraft of the unit

Messerschmitt Bf 109 E-7	01.1942	11.1942
Messerschmitt Bf 109 F-4	05.1942	11.1943
Messerschmitt Bf 109 G-2	01.1943	11.1943
Messerschmitt Bf 109 G-4	08.1943	11.1943
Messerschmitt Bf 109 G-6	07.1943	11.1943

Like the I. Gruppe, taking over the aircraft of their predecessors, II./JG 5 seems to have had only Bf 109 E-7s on strength the first months of its existence.

Exchanging some of the war-weary Bf 109 E-7s, with a history of repeated repairs and upgrades (in some cases to before the invasion of Poland), the unit received 24 brand new Bf 109 F-4s in May 1942. These were tropicalized versions from the Werknummer block 10001 through 10290, a batch of aircraft discussed in detail under the section on camouflage and markings for this unit. A small number of

Bf 109 E-7s were retained on strength until November 1942.

The first Bf 109 G series aircraft came to the Gruppe around new year 1943, these aircraft being used in tandem with the F-4 series during the first half of 1943. By then, the even more powerful, but also heavier, Bf 109 G-6 was allocated to the unit, the first aircraft being delivered in July 1943.

A curiosity is the Bf 109 G-4; it seems that not only one (as stated by Valtonen), but at least two aircraft of this sub-type were used by the II. Gruppe. The first aircraft was delivered to the unit in August 1943, being damaged and stricken from the roster in September 1943. The second was received from another unit in October 1943 and then sent for overhaul in December 1943.

By the time the unit left Luftflotte 5 for the Continent, it still had a few Bf 109 F-4s, as well as a few Bf 109 G-6s, but the mainstay of the unit comprised the Bf 109 G-2.



A Bf 109 E-7 from the recently established 5./JG 5 at Petsamo in January 1942. Here loaded with an SC 250 bomb, W.Nr. 1093, 'Red 9', was usually flown by Oblt. Franz Menzel. The aircraft was lost barely a month later, on 26 February, being flown by Uffz. Dietrich Weinitschke (Coll. Horst Kube).

A yellow-nosed Bf 109 E at Alakurtti in April 1942. The demarcation lines are unusually sharp and carried halfway down the fuselage and also beneath the tailplanes. The pilot in front is Uffz. Ludwig Scharf (Col. Mombeek).

### Camouflage and Markings

The initial equipment of this Gruppe consisted of Bf 109Es (predominantly E-7s) taken over from its founding units and both these and the newly delivered machines were camouflaged in the standard fighter greys, often with full yellow cowlings (sometimes delivered with these from the factory) and underwing panels. Yellow rudders were also common. One marking still missing from the majority of JG 5's Bf 109s serving on the Russian Front was the yellow fuselage theatre band, this only occasionally being used and only possibly as a result of having been delivered with these bands from the factory. It would appear JG 5 shunned them. There seems to have been little modification to the grey schemes, although one Bf 109E from 4./JG 5 was seen with what appears to be oversprayed white areas of the fuselage cross. Another exception to this appeared on at least one of 5./JG 5's Bf 109E-7s, specifically W.Nr. 1093 (showing this was a converted E-3), 'Red 9', flown by Staffelfkapitän, Oblt. Franz Menzel (see photograph at left). This aircraft carried what resembles a 1940-style camouflage

in that there was a sharp and even demarcation line on the spine level with the cockpit line. Beneath this what was presumably RLM 76, had been densely mottled with either RLM 71 or 74 using very small and short squiggles in a characteristic style. In fact, this mottling is so characteristic that it may very well have been applied by the same individual who mottled Heinz Knoke's Bf 109 E 'Black 3'.

A Bf 109 serving with 5./JG 5 that was lost on 4 April 1942 while being flown by Lt. Wolf-Dietrich Widowitz and recently rescued from a Russian lake, provides a glimpse into the painting and marking history of a Bf 109 of the Geschwader at this early stage of the Gruppe's existence. Its specifics are detailed on pages 61 to 63.

Like the preceding units, the newly formed Staffell of JG 5 did not apply winter camouflage to their Emils during this first winter of war on the Eastern Front. Perhaps the grey schemes provided enough cover, although it must also be taken into consideration that stocks of white distemper may not have been available to the units in the Far North. It certainly was used by other units fighting in the snow-covered areas of the Russian Front, such as JG 51 and JG 54 (see e.g. Mombeek et al. 2003).

Colours used by the Gruppe's Staffeln in early 1942 were:

4./JG 5 - white numbers outlined in black

5./JG 5 - red numbers without outlines or black numbers with white outlines

6./JG 5 - yellow numbers with black outlines

The Gruppe used a horizontal bar in the same colours as their Gruppe designator.

The three constituent Staffell of II./JG 5 started to use their own Staffell emblems at this time. 4./JG 5 painted a bear's head being severed by a knife on the port side of the cowlings of their machines, whereas 5./JG 5 adopted the polar bear's head insignia formerly used by 14./JG 77 (from which it was formed). The last Staffell of the Gruppe, the later so famous 6./JG 5, used a four-leaf clover on a diamond shape as their insignia, although very few photographs exist of its Emils. The few that are available indicate that the clover insignia was carried on the extreme nose section, being quite small. Of these emblems, that of 4./JG 5 seem to have been carried on Bf 109 Es only, although the lack of photographs showing the Staffell's Bf 109 Fs makes this a supposition only. 5./JG 5 continued to use the polar bear head on its desert-coloured Bf 109 Fs (quite a mismatch, indeed!), but the emblem was not seen after that. It thus seems that only 6./JG 5 continued to use its insignia right up to 1944, although there is a lack of hard data to make any firm conclusions on this matter.

Personal markings continued to make their appearance. Possibly a carry-over from 14./JG 77, names were still seen on at least one Bf 109 E-7 from 5./JG 5, this particular machine, 'Red 19', having the name 'Inge' in yellow below the port side of the





## Messerschmitt Bf 109 E-7 W.Nr. 3523, 'Red 6'

Lt. Wolf-Dietrich Widowitz, 5./JG 5, 4 April 1942

This aircraft was lost on 4 April 1942 while on a Bf 110 escort mission over the Litza front. Hit by machine gun and cannon fire from a Hurricane IIB of 2 GIAP (with Russian armament) it was forced to make an emergency landing on a frozen lake named Shonlgul-javr, some 20 km south-east of the airfield of Loustari. The pilot, Lt. Wolf-Dietrich Widowitz, was only slightly wounded and was later picked up by a rescue Storch. A recovery party later arrived at the crash site and removed important items of equipment from the Messerschmitt such as instruments, radio, MG 17s and ammunition, the compass and gun sight. The airframe however was left on the lake until the snow melted and the aircraft disappeared from view for the next 61 years.

In August 2003, 'Red 6' was finally rescued when it was raised from waters, 8 metres deep. A detailed analysis of the aircraft and its history was made (Sheppard 2004) and the findings of this research is presented below by kind permission of the author. The remarkable state of the airframe, and its paintwork, allows a rare glimpse into the paint and markings history of a long-serving Bf 109 E of JG 5 in service in 1942.

W.Nr. 3523 was manufactured by Arado GmbH at Warnemünde, being one of roughly 500 E-1s and E-1/Bs constructed by that factory. 3523 was most probably completed sometime between June 1939 and April 1940 and its first finish would thus have been the then standard dark greens with light blue ventral surfaces (RLM 70/71/65). The Stammkennzeichen 'CS+AJ' were in all likelihood applied to the fuselage sides and beneath the wings. W.Nr. 3523 was taken on charge by the Luftwaffe on 27 September 1939, a mere three weeks after the Second World War began. Unfortunately, it is not known with which unit, if any, 3523 spent its initial service life, but most probably it had a rather uneventful service.

Be that as it may, sometime after August 1940, 3523 was delivered to a major repair facility within the Reich in compliance with orders to return all E-1s to such facilities for a major upgrading. It is probable that most, if not all E-1s then in existence, were upgraded to the E-7 standard, a process which involved the following modifications:

- Wing MG 17s replaced with MG FF, MG 17 apertures faired over with circular metal patch
- Fitment of ventral ETC rack for carriage of bombs or drop tank, required rewiring in the cockpit



W.Nr. 3523 during the salvage process. Here substantial remains of paint can be seen, although much of the RLM 74 and 75 on the fuselage has peeled off, revealing the RLM 79 Sandgelb underneath (Via Mark Sheppard).



Several of the features of a converted E-1 can be seen in this photograph. The circular patch on the wing leading edge just inboard of the retro-fitted MG FF M covers the aperture for the MG 17. This Emil was therefore probably built as an E-1 and has also received a new canopy and the external armoured wind shield. Of interest is the canvas cover tied around the wing root to prevent excessive wear. This aircraft was 'White 8' of either 4. or 7./JG 5 (Coll. Brekken).



The two greys on the upper surfaces were badly deteriorated, but the RLM 79 had withstood time better. Note that the RLM 79 completely covers the fuselage sides. The fact that the canopy was closed gave cause for concern that the remains of the pilot were still in the cockpit, but fortunately that was not to be the case (Via Mark Sheppard).





A series of photographs showing the generally excellent state of preservation of the aircraft.  
(Via Mark Sheppard).



- Replacement of flat, open-point spinner with a pointed type (not always implemented)
- Fitment of later type of canopy (often not carried out)
- Fitment of armoured windscreen which necessitated a slot being carved in the cover in front of the wind shield measuring 75 x 400 mm in which the support rest for the armoured glass was fitted.
- Additional equipment if needed (desert survival gear, sand filters, etc)

After this overhaul it is very likely that 3523 was finished in the then standard scheme of RLM 71/02/65. Yet again nothing is known of its service life, but in mid-1941, the aircraft had been in use for some two years and was due for its mandatory full service. This included a complete removal of its paint scheme, which is why there was no trace of its earlier scheme on any parts of the recovered airframe.

Following this two-year service, 3523 was configured as an E-7/Trop and received a full coat of RLM 79 Sandgelb on the upper surfaces and RLM 78 Blau on the ventral surfaces. The cowling may have been painted yellow at this time while still fitted to the airframe as traces of the yellow paint had entered the cowling apertures and could still be seen on the engine block after recovery. However, it is possible it could have been applied later. After completion of this repainting, the Stammkennzeichen was reapplied on the fuselage sides and the Messerschmitt was sent to an aircraft depot awaiting delivery to an operational unit. Despite being finished in desert camouflage, there was no evidence of a white theatre tail band on the fuselage, but these were often applied in Italy when aircraft were en route to North Africa.

At this time in late 1941, the E-7/Trops were being phased out of service within the Jagdgeschwader serving in North Africa and the Emils were sent to other fronts. In 1942, it would seem that JG 5 became the main recipient of Bf 109 Es, at least for front line service, and 3523 was one of those destined to be delivered to the Geschwader in the far north. But before that, it was repainted with more appropriate colours, i.e. the then standard greys RLM 74/75/76. During this repainting process, the Werknummer on the tail and a few stencils on the gun cowling were masked off, and most probably the national insignias, although the Swastika was applied anew. The demarcation lines between the 74 and 75 were hard, indicating that a proper masking had been carried out. A heavy mottle of the grey colours was applied to the fuselage sides and it was probably at this time that the cowling was painted yellow. At the same time the rudder and underwing panels received this treatment.

The upper surface pattern was identical to a pattern used on Bf 109s in 1939-40, although with the new grey colours, and with an interesting variation; the starboard wing followed the standard pattern but the port wing had the colours reversed. There was also a large black area over both wing roots outlined in red, possibly an attempt to reduce wear on the wing root area.

In early 1942, W. Nr. 3523 was sent north, flying though East Prussia to Riga, Tallinn, over the Gulf of Finland to Malmi airport at Helsinki. Accurate Finnish records allow a good reconstruction of the following events: on 27 February 1942, two B 109 Es, 3523 and W.Nr. 3183, took off from Malmi and landed at 17.15 at Pori, the Luftwaffe Feldluftpark for Luftflotte 5. Here yellow was most probably added to the lower wing tips and the rudder while the aircraft were waiting for allocation to an operational unit.

That did not happen until nearly a month later, when on 20 March 1942, two pilots, Uffz. Arthur Mendl and Uffz. Ernst Koch from 5./JG 5, took off at 1355 hrs in W.Nr. 3523 and a Bf 109



E marked 'SF+BC', respectively. They landed at Kemi airfield at 1532 hrs and left for Petsamo the next day at 0945 hrs, arriving at the Luftwaffe base at 11:23 hrs.

What is interesting about these Finnish records is that while the companion aircraft was recorded with its Stammkennzeichen, 3523 was listed in the Finnish airfield records simply by its Werknummer. This is an confirmation that the aircraft did not feature its own Stammkennzeichen during the transfer. This is also confirmed by the examination of the recovered airframe, there being no signs of a Stammkennzeichen.

Probably the next day, 23 March 1942, 3523 became the new mount of Lt. Wolf-Dietrich Widowitz. The individual number of the Messerschmitt cannot be confirmed, but from the data in Mendl's log book and by checking what other numerals were in use in the Staffel at the time, it seems most likely that 3523 received the number '6', this being applied in red with a thin black outline as was standard practice within 5./JG 5 at the time. The previous 'Red 6' was lost the same day 3523 arrived at Petsamo, so this number would also have been vacant. A number '6' also fits with the remnants of red paint on the fuselage sides.

W.Nr. 3523 was definitely active in the days following its allocation to 5. Staffel. A bullet was found in the starboard wing, the damage from which had been repaired and repainted with grey paint. This damage was probably incurred on either 24th or 31st March. During the latter combat, Widowitz claimed his second victory which he believed was a Hurricane, at 0849 hrs hours, while flying 3523.

Then, on 4 April 1942, four Bf 109Es from 5./JG 5 were assigned to escort a Bf 110 over the front lines, including Widowitz in 3523. During the mission they encountered four Hurricanes from 2 GIAP and in the ensuing combat, 3523 received machine gun hits to its engine area. A single 20 mm

round also entered the starboard wing root, just missed the radiator and exploded, sending shrapnel through the airframe beneath the cockpit section. The hot pieces of metal ruptured the coolant pipes, thus essentially dooming 3523.

Having to act fast, Widowitz looked for a place to put his stricken fighter down and found this in the form of the frozen lake mentioned earlier. Thus the service life of 3523 ended after a very short period of time with JG 5, but hopefully the aircraft itself will remain with us for some time to come. Essentially complete, at the time of writing it is currently for sale for restoration.

*W.Nr. 3523 as she appears today in the UK. The airframe was for sale at the time of writing. The substantial areas of RLM 79 is evident, as is the all-yellow cowling (Jim Pearce via Mark Sheppard).*



*W.Nr. 3523 as it appeared after the renovation and conversion to E-7/Trop standard in late 1941*

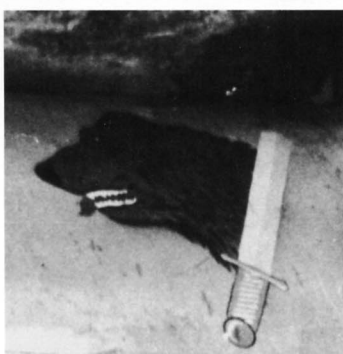


*W.Nr. 3523 during its brief but eventful service with 5./JG 5 in March/April 1942.*





Bf 109 E-7s of 4./JG 5 lined up at Alakurtti in the early spring of 1942, just after the thaw began. The machine in the foreground has been converted to E-7 standard. 'White 22' and 'White 14' both carry a narrow yellow band behind their Balkenkreuze. The high number seen on 'White 22' is very unusual. Also note that the two figures are parallel to the ground when the aircraft is at rest and not parallel to the datum line of the aircraft (Coll. Brekken).



The three Staffel insignia used by II./JG 5; from left: 4./JG 5, 5./JG 5 and 6./JG 5 (Coll. Mombeek, Horst Kube and Brekken).

cockpit. Another form of marking which started to develop as the air war got into its stride were victory markings. As usual, these took the form of variously coloured bars on the rudder, or occasionally, the tail fin.

When the new Bf 109 Fs arrived, these were, as mentioned in the previous section, fighters originally slated for service in the Mediterranean theatre. It is perhaps these machines which have caused the greatest controversy regarding JG 5 camouflage. The photograph seen below left showing Bf 109 F-4, 'Yellow 1', of 6./JG 5 in June 1942, illustrates the

problem fuelling this debate. As can be seen, the two top-surface colours were carried further down the fuselage sides than was normal on Bf 109s camouflaged in the normal greys (i.e. RLM 75 and RLM 74). Furthermore, the top colours were not broken down in the classic Luftwaffe style mottling, but consisted of solid areas of colour, highly unusual for Bf 109s at the time. The question of whether this was just an unusual application of the normal greys or a modified Sandgelb desert scheme has been debated for a considerable time, but as no colour photographs of these aircraft are

known, it has never been adequately answered. Arguments have been made supporting both viewpoints. The question of the nature of these colours is treated in detail on pages 66 to 69.

The majority of photographs from this period are of aircraft from 6./JG 5, which at this time began to acquire the sobriquet 'Experten-Staffel' due to the high number of Experten within its ranks. As the quite extensive photographic material clearly shows, this two- and sometimes three-segmented modified tropical scheme dominated the Bf 109 Fs of II./JG 5 from May 1942 and for the remainder of the year with the



Bf 109F-4, 'VE+TU' seen at Malmi airport on 23 May 1942 while on its way to JG 5, displaying the highly characteristic and unusual scheme featuring on the first examples of this type delivered to JG 5. This consisted of a basic RLM 79/78 desert finish with the demarcation lines roughly half-way down the fuselage, upon which bands of RLM 70 or 71 had been applied (via Hannu Valtonen).



exception of 4./JG 5 which continued flying its old Emils, often on Jabo missions. There are unfortunately very few photographs available of 4. and 5. Staffel Friedrichs from this time period, but the few that are available for study show that Bf 109Fs with the tropical finish also found their way into 5. Staffel, their two colour camouflage apparently being very similar to that seen on 6./JG 5 Fs. The Emils of 4. Staffel remained in the grey colour schemes. The majority of the Bf 109 F-4s serving with 6./JG 5 had yellow, or in some cases, even white wing tips. The ventral outer panels of the wings were yellow.

Mention must be made here of the Bf 109 F-4s flown by the Gruppenkommandeur of II./JG 5, Hptm. Horst Carganico. He used a number of Bf 109s during the summer/early autumn of 1942. These were initially camouflaged in the RLM 79/71 scheme and carried the double chevrons of a Gruppenkommandeur, without the Gruppe bar. Carganico placed his personal emblem, a small figure of Mickey Mouse, on the forward nose. He also had an extensive victory tally on his grey (RLM 02 or 77) rudder. Later, when his first F-4 was lost (W.Nr. 10132), he continued placing the small Mickey Mouse on the front part of the engine cowling on his new machine. Carganico later flew a number of F-4s, including one with quite dark upper surfaces and another which had a 'Yellow 7' over which the Kommodorewinkeln had been applied as well as a temporary winter finish.

Another well-known Bf 109 F-4 in service with II./JG 5 at the time was W.Nr. 10083, 'Yellow 3' flown by Robert Müller. This machine has been depicted on numerous occasions in various publications and some



new insights into the specifics of this remarkable aircraft are detailed on pages 72 to 75.

As the second war winter in the North arrived, temporary winter camouflage began to appear. The 'Experten-Staffel', for example, simply applied the white distemper over its desert-camouflaged Bf 109 Fs

*Lt. Ehrler's Bf 109 F-4 'Yellow 12' with 27 kill marks on the rudder. The modified desert scheme is clearly seen (Coll. Döbrich).*

*Right: One of the few known photographs of a desert-camouflaged F-4 in service with 5./JG 5. 'Red 14' was the mount of Uffz. Dietrich Weinitschke who is seen here returning from his 200th mission. There are segments of new paint, possibly RLM 75, beneath the individual numbers which probably cover the Stammkenzeichen. Otherwise this machine resembles the F-4s of 6. Staffel (Col. Mombeek).*



**Messerschmitt Bf 109 F-4, 'Red 14', Uffz. Dieter Weinitschke, 5./JG 5, Petsamo, July 1942.**

*One of the relatively few F-4s with the desert scheme photographically documented in service with 5. Staffel, 'Red 14' had what appears to be over-painted areas around the code, possibly in RLM 75. It also featured the 5. Staffel's polar bear head insignia below the windscreen.*



## Sandgelb RLM 79 on II./JG 5 Bf 109 Fs?

### What is known

Controversy centres around the approximately 45 Bf 109 F-4/Trops belonging to the 10001-10290 Werknummer block that were delivered to II./JG 5 from late April to December 1942, although desert-camouflaged machines from other blocks are known. These were delivered as follows<sup>1</sup>:

**May 1942:** 24 newly built machines (four of which were lost during the month)

**June 1942:** 19 newly built machines (four of which were lost during the month)

For the remainder of 1942, only low numbers of newly constructed F-4s were delivered (two in July, one in September and six in December), while other Bf 109 Fs received came either from repair centres or other units.

This makes a total of 52 new Bf 109 Fs delivered to II. Gruppe during the course of 1942. It is certain that the majority of these were from the 10001-10290 Werknummer block, a block that consisted of 290 F-4/Trops built by Erla between January and June 1942<sup>2</sup>. This was the last of the F-series built. The known machines from this block serving with JG 5 are shown in the table below.<sup>3</sup>

It is established beyond doubt that the vast majority – if not all – of these machines carried a factory finish of RLM 79 Sandgelb over RLM 78 Hellblau. Examples are W.Nr. 10037, W.Nr. 10079, (one of the machines flown by Lt. Marseille in North Africa in summer 1942) and W.Nr. 10237. The first and last machines mentioned belonged to I./JG 3 and carried the famous 'modified Africa scheme' so well documented in photographs (see references in footnotes for sample photographs). I. and III./JG 3 achieved their spectacular camouflage scheme by

W. Nr.	St.K.Z.	Unit	Code	Pilot	Fate
10 023		III./JG 5			Damaged 25 percent on 20.04.43
10 073		6./JG 5	Yellow 3	Lt. Rudolf Müller	Lost on 16.09.42 (?)
10 096					
10 099					
10 101		6./JG 5	Yellow 6	Hartwein	
10 112		II./JG 5			Damaged 25 percent on 15.08.42
10 121		II./JG 5			Damaged 85 percent on 30.06.42
10 122					
10 123		II./JG 5			Damaged 15 percent on 21.04.43
10 124					
10 128					
10 129		5./JG 5	Black 20	Fw. Walter Puhl	Emergency landing on 01.09.42
10 130		III./JG 5			Damaged 20 percent on 29.04.43
10 131		II./JG 5			Damaged 15 percent on 22.07.42
10 132	CD+LZ	Stab II./JG 5	Chevron	Hptm. Horst Carganico	Lost on 12.08.42
10 133		6./JG 5	Yellow 15	Uffz. Wilhelm Kuchling	Lost on 29.06.42
10 135		II./JG 5			Lost on 28.05.42 80 percent
10 136					
10 138		II./JG 5			Damaged 50 percent on 04.06.43
10 139		6./JG 5	Yellow 4	Uffz. Ludwig Scharf	Lost on 15.09.42
10 144		6./JG 5	Yellow 7	Fw. Albert Brunner	Lost on 05.09.42
10 145		6./JG 5	Yellow 3	Fw. Leopold Knier	Lost on 19.07.42
10 150		III./JG 5			Damaged 25 percent on 22.04.43
10 153		II./JG 5		Uffz. Martin Müller	Lost on 10.07.42
10 155					
10 157		II./JG 5			Damaged 55 percent on 21.04.43
10 160		7./JG 5	White 3	Uffz. Alfred Kern	Lost on 14.03.43
10 161		6./JG 5	Yellow 7 (?)	Fw. Albert Brunner	Lost on 21.08.42
10 164		II./JG 5			Take-off accident 15.05.42 50 percent
10 169		6./JG 5	Yellow 9	Uffz. Hans Döbrich	Lost on 19.07.42
10 170					
10 171		III./JG 5			Damaged 10 percent on 03.09.43
10 173	C1+MM				
10 174					
10 176		II./JG 5			Damaged 50 percent on 06.07.43
10 177		6./JG 5		Obfw. Willi Pfränger	Missing on 17.05.42 near Murmansk
10 180		6./JG 5	Yellow 2	Fw. Emil Stratmann	Lost on 29.06.42
10 183					
10 193					
10 195		II./JG 5		Uffz. Hans Enderle	Lost on 20.05.42 100 percent
10 151					
10 252		Stab II./JG 5	Chevron	Lt. Werner Kunze	Lost on 19.09.42
10 253		III./JG 5			Lost on 19.07.43
10 256		Stab II./JG 5	Chevron	Hptm. Horst Carganico	Emergency landing on 22.07.42, 100 percent
10 258					



adding two additional upper surface schemes onto the single RLM 79-coloured top surface of their Bf 109 Fs. Furthermore, the scheme carried was virtually identical from machine to machine. It appears that most of these carried the Hellblau halfway up the fuselage sides, whereas Marseilles' machine probably had the entire upper surface covered in Sandgelb, most likely the result of additional repainting.

#### Operational History

It is known that the Bf 109F-4/Trops carried a delivery scheme of RLM 79 over RLM 78. But this is not how they appeared when they arrived at the Feldflugpark Pori between April-June 1942. The photographs below and overleaf show two of these F-4/Trops at Pori as they appeared when they arrived at the aircraft depot.

Before dealing with the specifics of their camouflage and colours it is necessary to look at the history of these airframes prior to allocation to JG 5<sup>4</sup>.

In early summer 1942, large numbers of newly constructed Bf 109 F-4/Trops slated for service in North Africa became surplus to requirements as the new Bf 109 G-2/Trop was about to enter service with JG 27 and JG 53 serving in that theatre. These superfluous Messerschmitts were therefore assigned to two Jagdgeschwader serving on the Eastern Front, where the need for the latest models of the Luftwaffe's principal fighter

was not so pressing. I./JG 3 and II./JG 5 were the main recipients as far as is known.

After the obligatory Werkstattflug (factory test flight) the Bf 109 Fs were flown to a refitting and modification centre located at Anklam, near Leipzig. Here, the F-4/Trops were probably 'de-tropicalized'. This mainly consisted of the removal of the supercharger dust filter and it was probably here that the camouflage scheme was altered. After the modifications were finished the machines were stored before delivery to an operational unit.

#### Where guesswork begins

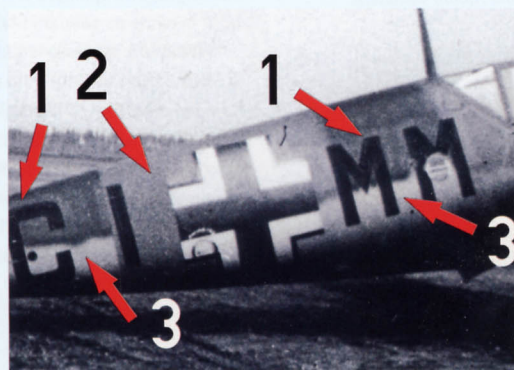
Both photographs reproduced here are revealing. Firstly, the white Mediterranean theatre fuselage band has been either



*Hans Döbrich in the cockpit of a recently delivered Bf 109F-4/Trop, 'Yellow 7' of 6./JG 5. This shows to advantage the solid application of the two upper surface colours going half-way down the fuselage. It is significant to see that the canopy frames completely finished in the lightest upper surface colour, which suggests this is the original colour, whereas the darker colour seem to be recently applied as the finish is somewhat uneven (Coll. Döbrich).*



*Bf 109F-4/trop, 'C1+MM', W.Nr 10173, at Pori on April 23rd 1943 en route to JG 5. It was probably not delivered to JG 5 before May as no Bf 109Fs are on record with II. Gruppe in April. Interesting points are over painted tail band and the drop tank. Also note heavy exhaust staining and recently applied service stencilling on fuselage (Via Hannu Valtonen).*



*Close-up of the fuselage of C1+MM. The following features are noteworthy: 1 – The Stammkennzeichen appear to have been reapplied over a slightly lighter colour (compared to the RLM 70 or 74 base colour). This could be the result of reapplication of the letters following re-camouflaging at Anklam or Pori. 2 – Tail band has been over painted, probably in RLM 74 or 75, most probably not RLM 79 (compare with light background colour around Balkenkreuz which is RLM 79). 3 – There is also evidence of repainting over the Hellblau on the fuselage sides, again after possible reapplication of Stammkennzeichen after the original Sandgelb was complemented with RLM 70 or 74 (Via Hannu Valtonen).*



*Bf 109F-4/trop, 'C1+MM', W.Nr 10173, in delivery markings, Pori, April 1943*





*Bf 109F-4/trop, VE+TU, at Malmi airport near Helsinki. It left for Pori on May 23rd 1942. Werknummer of this machine is not known for certain but it may have been 7534. Note the retention of the white North African theatre tail band and the similarity of its segmented upper surface scheme with CI+MM (Via Hannu Valtonen).*

over-painted (CI+MM) or retained (VE+TU). This means that there is a very high probability that the original desert camouflage colours were also retained; why else would the tail band be present or just over-painted? It is not known where the tail band was removed/over-painted, but both Anklam and Pori are possibilities. The latter is most likely as remnants of the tail band were present even on operational machines such as Hans Döbrich's 'Yellow 10'. The F-4/Trops do not appear to have had the white nose ring often seen on Bf 109s in the African theatre as there is no sign of over-painting there. This was probably not part of the factory finish anyway, as some Bf 109 F-4/Trops in Sandgelb with delivery codes were photographed without these markings<sup>5</sup>. The spinners were delivered in black-green 70 with 1/3rd in white as seen on CI+MM.

What is most likely is that the ventral colour was definitely RLM 78. This is evident from photographs where the fuselage frame numbers are still visible (again 'Yellow 10' of Hans Döbrich). On later photographs of Döbrich's aircraft (as well as others), repainting around the position of the tactical number is visible and a lighter colour has been applied over the RLM 78. This can only be RLM 76 Lichtblau. Detailed examination of the fuselage section of CI+MM reveals some of these features as



*A very revealing photograph of 'Yellow 10' of Lt. Hans Döbrich. As can be seen, there are at least three different upper surface colours; RLM 79 around the cockpit (note canopy frames are in original paint), a slightly darker colour (RLM 75) behind the number and a darker colour above and in front of the fuselage cross (thinned RLM 70 or RLM 71?) and RLM 70 on the nose and over the top part of the white tail band. The lower part of the tail band have definitely been retained and there are traces of a lighter colour around the numeral where it overlaps the blue under surface colour, this is almost certainly RLM 76. The fact that the frame numbers and black outline of the foot step are retained is significant, this proves that the bottom and part of the side surfaces are still finished in the factor-applied colour of RLM 78 (Coll. Döbrich).*

well as a few more of interest. The close-up on page 67 shows these in detail.

In regard to the colours making up the camouflage scheme, several possibilities present themselves. Accepting that the lightest colour is RLM 79 Sandgelb, two possibilities seem most likely in regard to the darkest colour. Being a fighter, RLM 74 would be a natural colour to use on these machines and the tonal contrast on 'CI+MM' and 'VE+TU' seem to be consistent with the appearance of this colour on black and white photographs. However, other photographs of II. Gruppe Bf 109 Fs from this period show what is definitely a much darker colour applied to the top surface. This was in all likelihood RLM 70 black-green. The best example is provided by W.Nr. 10073, 'Yellow 3', of 6./JG 5, flown by Rudolf Müller (see separate box on this aircraft). This machine is unusual in that the top side colours cover the entire upper and side surfaces of the



*Above: Two views of 'Yellow 10' after having received some repainting (possible after sustaining combat damage) around the fuselage below the numeral. This was applied with a darker colour which may have been RLM 02. Note that the circular compass hatch has also been replaced and the missing part of the numeral has not been repainted. These views also indicate that what appears to be a fourth colour around the fuselage cross on the spine is probably a rather thinly sprayed RLM 70. The photograph above shows part of the upper surface pattern in three colours RLM 79/75/70) and the white wing tips (Coll. Döbrich).*



fuselage. However, the general picture is complicated by the fact that a third upper surface colour has been applied. This is very light in appearance and is interpreted as RLM 75. That this is a third colour and not just RLM 79 is proved by the fact that it partly overlaps the fuselage Balkenkreuz and thus had been applied after the machine was completed, most likely when in service with or just prior to delivery to JG 5. Furthermore, the Werknummer of this machine is present on a lighter patch of colour. As the surrounding colour is definitely not RLM 70, it becomes evident that a third colour has been added and this could be RLM 75 as this would have been readily available to the ground crews of JG 5. Application of a third top surface colour has been seen on many F-4/Trops at the time, including 'Yellow 9' of 6./JG 5.

Müller's Messerschmitt is more of an aberration however, definitely not being typical of the F-4/Trops of II./JG 5. A more typical scheme is exemplified by 'Yellow 12' of Lt. Heinrich Ehrler. Available photographs of this machine show that the darker colour has already started to fade or its original application was not sufficient to completely cover the Sandgelb.

Two top surface colours appear to be most common, however. The typical scheme is characterized by the fact that the two upper surface colours are carried halfway down the fuselage sides. The schemes are also more or less identical from machine to machine, though not to the same degree as seen in I./JG 3. Although this scheme has been seen mostly on F-4/Trops from 6./JG 5, it is also known from 5./JG 5. The last Staffel of the Gruppe, 4./JG 5, continued flying Bf 109 E-7s for a considerable time and so far no photographs of Bf 109 Fs of this unit with what would appear to be a modified African scheme, have been located. The three Staffeln of III. Gruppe had differently camouflaged Bf 109 Fs as did IV. Gruppe.

During the last decade, some of the machines delivered to II./JG 5 have been recovered from their crash sites in northern Russia and restored. Most notable is W.Nr. 10132, a former mount of Horst Carganico. This has enabled an analysis of the remaining parts for paint samples and on this machine traces of RLM 79 were found<sup>6</sup>. Even if it has not unequivocally been proved that RLM 79 was a top side colour at the time of the crash, it at least establishes this colour as a part of the airframe's original colour scheme. When restored, 10132 was finished in a 74/79/78 scheme. The pilots also remember the desert scheme well<sup>7</sup> which is a further strengthening of the theory.

It should also be noted that traces of RLM 79 Sandgelb were found on Bf 109 G-1/R-1 W.Nr. 14141, 'DG+UF', 'Black 6', recovered from southern Norway and, at the time of writing, under restoration at Sola Aviation Museum. There has also been speculation that some of the G-2s delivered to JG 5 in early 1943 were finished in RLM 79 when delivered to JG 5. This scheme was subsequently modified by the application of RLM 70 and white spots to make the aircraft more suitably camouflaged for winter conditions<sup>8</sup>.

Finally, one of the arguments against the existence of a modified Africa scheme on these Bf 109s operating over the very untropical tundra of Northern Norway, Finland and Russia, has been that it would be unsuitable for the environment found there. This is not true – in autumn there is more than enough brown colour to be found in the nature of the North. It is therefore probable that the Sandgelb, when combined with greens and/or dark greys, would be quite suitable for the environment, especially during late summer and autumn.

### Summary and Conclusion

It would seem more than likely that the Bf 109F-4/Trops belonging to the W.Nr. block 10001-10290 delivered to JG 5 in



'Yellow 1' of 6./JG 5, a rather early delivery, showing off its modified desert scheme. The very dark second colour on the upper surfaces is either RLM 71 or 70 (Coll. Kees Mol).

early summer/autumn of 1942 (see list above) carried either a combination of RLM 79/707/78 or RLM 70/75/79/78, at least during their initial service. This is made all the more probable by the following facts:

At least the machines of W.Nr. block 10001-10290 delivered to JG 27 and I./JG 3 carried RLM 79 on their top surfaces, in the latter case supplemented by two other colours.

Traces of Sandgelb have been found on remaining pieces of JG 5 Bf 109F-4/Trops.

Detailed analysis of available photographs, several of which have never been published or generally been available, reveal that there are two, or sometimes three, upper surface colours on these F-4s. The style of application of the upper surface colours is not consistent with a factory-applied RLM 74/75/76 scheme due to its solid appearance.

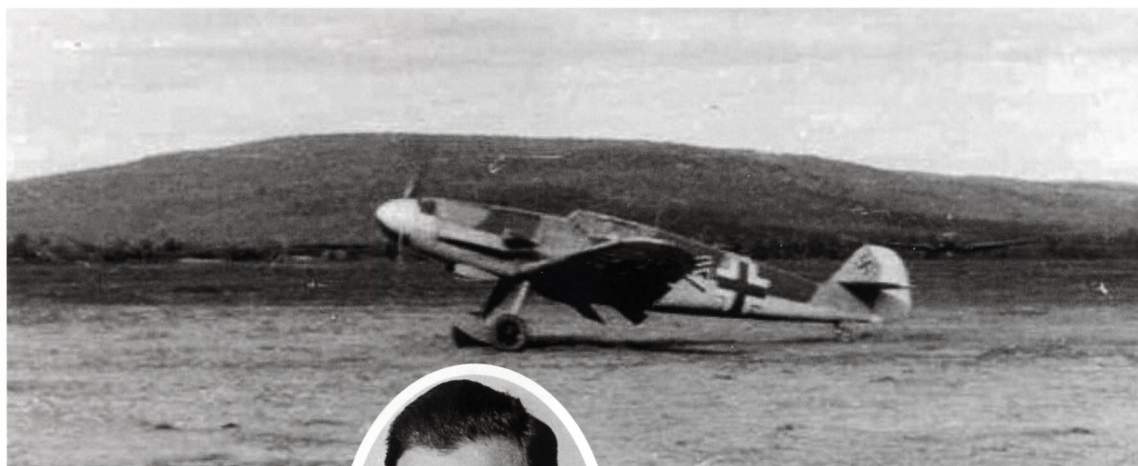
It is however, consistent with a modified Africa scheme as seen on machines of I./JG 3.

1. *Flugzeugbestand und Bewegungsmeldungen II./JG5, March 1942 – September 1944.*
2. Prien, J. & Rodeike, P. 1993. *Messerschmitt Bf 109F, G & K Series. An Illustrated Study.* Schiffer Publishing Ltd. 208 pp.
3. *Based on loss lists, photographs and various other documents in the possession of Air Historical Society, Norway and data from Andreas Brekken and Mark Sheppard.*
4. *Based on information provided by Mark Sheppard.*
5. *See page 43 in Reference 2.*
6. *Information from Mark Sheppard.*
7. *Interview with Walter Schuck, December 2005*



Bf 109F-4/Trop, 'Yellow 6', of 6./JG 5, possibly W.Nr. 10101. Two upper surface colours are visible. The wing tips are white, although the low contrast on this photograph makes them darker than they really are (Coll. Döbrich).





A series of photographs of one of several F-4s flown by II./JG 5 Kommandeur, Hptm Horst Carganico in 1942. This is W.Nr. 10132 which was lost on 12 August 1942. The scheme is the standard I./JG 5 modified desert finish, with fairly large segments of RLM 71 on the fuselage. The rudder is RLM 77 grey (or similar) and displays a total of 48 victories. Note the unusual retro-fitting of an E-1 style canopy to this aircraft (Coll. Döbrich).



**Messerschmitt Bf 109 F-4, 'Doppelwinkel', W.Nr. 10132, Stab II./JG 5, Hptm. Horst Carganico, Petsamo, July-August 1942**

The Bf 109 F-4 flown by the Gruppenkommandeur up to 12 August 1942 was finished in the modified desert scheme consisting of RLM 70 over RLM 79 with RLM 78 on the ventral surfaces and featured a small Mickey Mouse on its nose. As far as can be ascertained, the II. Gruppe clover insignia was not present on this machine. Carganico used this machine when he claimed his 49th and 50th victory, all of which were eventually marked on the pale grey rudder. The wing tips (both top and ventral surfaces) and ventral cowling were yellow.

with a spray gun, but the density and style of application could vary considerably. It must be assumed 5./JG 5 did likewise with its Fs. 4./JG 5 definitely camouflaged its old Emils with white distemper. The scant photographic material seems to indicate that 4./JG 5's Emils were quite 'stylishly' camouflaged with

white. In fact, it was during this second winter that JG 5 took the art of snow camouflage to hitherto unprecedented levels as far as Luftwaffe fighter units are concerned and theirs probably remained the most elaborate and interesting schemes of this type ever (to be detailed later in the text).





Another Bf 109 F-4 flown by Horst Carganico, probably in late summer/autumn 1942. It now has the II. Gruppe bar and again, Carganico's preferred early style canopy retrofitted as seen on W.Nr. 10132 (opposite page). The finish differs substantially from his earlier aircraft, and consists of two dark colours, possibly RLM 71 and 74, reminiscent of the finish seen on 8. Staffel machines at the time (see next chapter). The white in the fuselage cross has been overpainted with dark grey or green, probably to enhance concealment on the ground (Coll. Brekken & Mombeek).



**Messerschmitt Bf 109 F-4, 'Double Chevron', Stab II./JG 5, Hptm. Horst Carganico, Petsamo, autumn 1942**

In the autumn of 1942 Carganico used this F-4 which had very dark camouflage, possibly a combination of RLM 74 and RLM 70. Sometime during this period, a horizontal Gruppe bar came into use in II./JG 5, as can be seen on this machine. The early style Bf 109 E canopy is a Carganico 'trademark'. The overpainting of the fuselage cross was somewhat unusual within JG 5. It is not known if this particular Messerschmitt featured any victory markings on the rudder.







Oberfeldwebel Rudolf Müller.

### Rudi Müller's 'Yellow 3'

Oberfeldwebel Rudolf Müller's Bf 109 F-4/trop, W.Nr. 10073, 'Yellow 3', is one of the best documented machines of JG 5 and deserves special mention. A number of photographs and colour profiles have been published, notably in the now defunct magazines *Militaria* Vol. 1 (Zimny, unknown date), No. 4 and *Airfoil* No. 4 (Barbas 1986), but also in other periodicals, not to mention decal sheets. A comparatively large number of photographs of this machine has also been located in a private collection, some of which have not been published previously. Even though all of these photographs only show the port side of the aircraft, they allow a very accurate reconstruction of the camouflage and markings of this remarkable machine.

The aircraft is finished in the regular 70/79/78 scheme of 6. Staffel with overspray of 75 on some parts of the fuselage.



A detail view of the port wing root. There are three colours on the wings, a very light shade around the wing cross (to left), a very dark colour in the centre (RLM 70) and a lighter between these, probably RLM 79, 70 and 75 respectively. Note the very weathered state of the aircraft at the time the picture was taken (Coll. Horst Kube).

This is based partly on the photographs as well as the Werknummer (10073). The machine belonged to a large series of F-4/Trops W.Nr. Block 10001-10290) and it is known that some machines very close to 'Yellow 3' (i.e. Marseille's W.Nr. 10059) were delivered in a 79/78 scheme (see Prien & Rodeike 1993: pg 46).

The photograph above left clearly suggests that there were two light colours on the top surfaces and one very dark. The lightest colour, visible around the supercharger air intake and the fuselage cross, is presumably RLM 79 desert tan. A second light colour, being very similar in tonal strength, seems to have been sprayed on top of this around the cockpit, the top rear part of the engine cowling and also around the fuselage cross. In the latter case this colour is slightly overlapping the national marking, indicating post-production repainting. It is also noteworthy that the Werknummer on the tail seems to have been masked off during the repainting, leaving a small rectangle of RLM 79 while the rest of the tail section is finished in RLM 75 and 70. Quite revealing is the faint fuel triangle: it would appear that this has been partially over-painted with RLM 75 during repainting.

This second light colour is probably RLM 75 Grau-Violett as it is extremely unlikely JG 5 would have received stocks of desert tan paint. When repainting was necessary, RLM 75 was then used along with the RLM 70. In all photographs of 'Yellow 3', the stark contrast between the two upper surface colours is to be noted as well as the deep, strong saturation of the dark colour, reminiscent of black-green as seen on bomber and transport machines. It is also likely that the upper surface pattern consists of these three colours, as can be seen on the port wing root area on the photograph left and the one below.

However, despite this careful analysis, it is entirely possible that the very slight contrast between the two lightest upper-



The tail section of 'Yellow 3' showing how the Werknummer had been masked off during the re-camouflaging process leaving a strip of RLM 79. The rest of the tail is in RLM 75 and RLM 70. There were 50 white victory bars on the rudder at the time this photograph was taken (Coll. Horst Kube).



surface colours is simply the result of differential weathering or paint application. On balance, it is the authors' opinion that the three-colour pattern is most likely.

Müller's F-4 had several very special characteristics. Beginning with the camouflage pattern, this differed from the normal camouflage of F-4s belonging to the Expertenstaffel in that the upper surface colours (RLM 79, 75 and 70) were extended down the entire fuselage sides, leaving no trace of the light-blue (presumably RLM 78) under-surface colour. The pattern of the black-green colour obviously followed the general pattern seen on other F-4s within 6./JG 5 but with some modifications. For instance, the rudder was uniformly RLM 70. The photographs suggest that the wing tips were painted white and not yellow.

The machine also had a single air intake on both sides of the cowling. Two of these intakes were fitted on each side of the forward cowling in the G-series for the purpose of cooling the spark plugs. The usual explanation is that 'Yellow 3' was fitted with a G-type intake as a result of a simple exchange of the oil tank access cover during maintenance, but this can not be the case as no G-2s had been delivered to JG 5 at the time Müller was flying the aircraft (the first G-2s were received in January 1943). Besides, this particular intake differs in cross section from the standard intake seen on Bf 109 Gs, having a more oval cross section. The fact that there is a single-colour rectangle of darker colour around the intake suggests another local unit-level modification to Müller's Messerschmitt. It has also been maintained that these two intakes were a feature of F-4/Zs with the GM-1 installation, but as W.Nr. 10073 was an F-4/trop (built by Erla in early 1942), it is highly unlikely that it carried the GM-1 installation. It did have the deep oil cooler sometimes associated with GM-1, although this was also a feature of other F-4/trops within the same Werknummer block (e.g. Marseille's aforementioned aircraft).

The truth is that these two additional G-style intakes were a modification kit made available to field maintenance units, probably after experience based on the initial Bf 109 G aircraft and the purpose was the same as on the G-series – to aid cooling of the spark plugs. This modification has been spotted on a number of Bf 109 F-4s of JG 5, mostly from 6. Staffel, so it was definitely a common feature.

The substantial photographic material available on this fighter enables us to recreate 'Yellow 3' at three distinct phases of its operational history. The two almost identical photographs reproduced below show the machine as it appeared before and after a major repair, probably after the accident suffered on 21 August 1942.

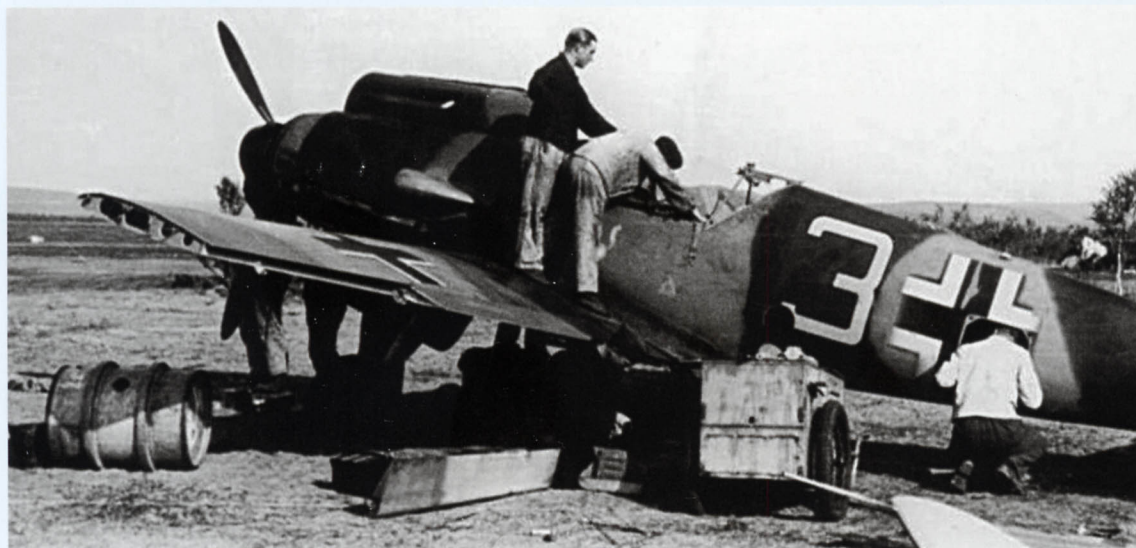


There were some small but distinct changes in the camouflage of the aircraft after this accident. Apart from minor differences around the port wing root, a patch of dark colour (possibly RLM 70) has been added forward of the cockpit, while some of the dark paint appears to have been over-painted on the port cowling, probably with RLM 75. For some reason the repairs have resulted in the port fuselage cross being damaged, a long strip of paint having been stripped off the black centre of the upper arm while the port arm of the cross has been partly clipped.

'Yellow 3' suffered another accident on 16 September 1942 at Petsamo, probably at the hands of another pilot. The two photographs of this accident (below) reveal that by this time 'Yellow 3' had finally received the horizontal II. Gruppe bar which was introduced in August/September. The camouflage pattern had not changed noticeably in the meantime.

'Yellow 3' was in all likelihood flown by Müller up until January 1943 as he marked six more victories on its rudder. This is proved by the fact that the rudder was later seen on Bf 109 F-4, W.Nr. 7230, 'Black 14' from 5./JG 5, with a total of 81 victory markings. W.Nr. 7230 was lost on 21 April 1943 at Alakurtti after a landing accident, suffering 70 per cent damage, but the identity of the pilot is unfortunately not known. 'Black 14' was snow-camouflaged and obviously flown by another pilot, possibly after Müller switched to the G-2 in January 1943.

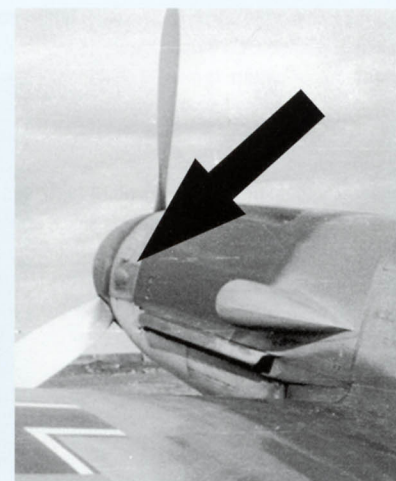
*Although Müller's 'Yellow 3' had a three-colour scheme, the RLM 70 and 75 dominated as can be seen in this view. This view also clearly reveals how the wingtips were painted white (Coll. Horst Kube).*



*'Yellow 3' during a major overhaul in the field. The wing tip has been removed (seen in the right foreground), as has the aileron and moving canopy section. Work is being carried out on the radio, engine and the cockpit. This view also shows the upper surface pattern and how the colour covered the entire upper and side surfaces of the fuselage (Coll. Horst Kube).*



Close-ups of the camera installation (right and below) on 'Yellow 3'. Another similar installation was present in the starboard wing. The aperture was surrounded by a light coloured framing and the camera, most probably a BSK 16, was removed by unscrewing a large ventral hatch which had a bulge to accommodate the camera installation (Coll. Horst Kube and Brekken).

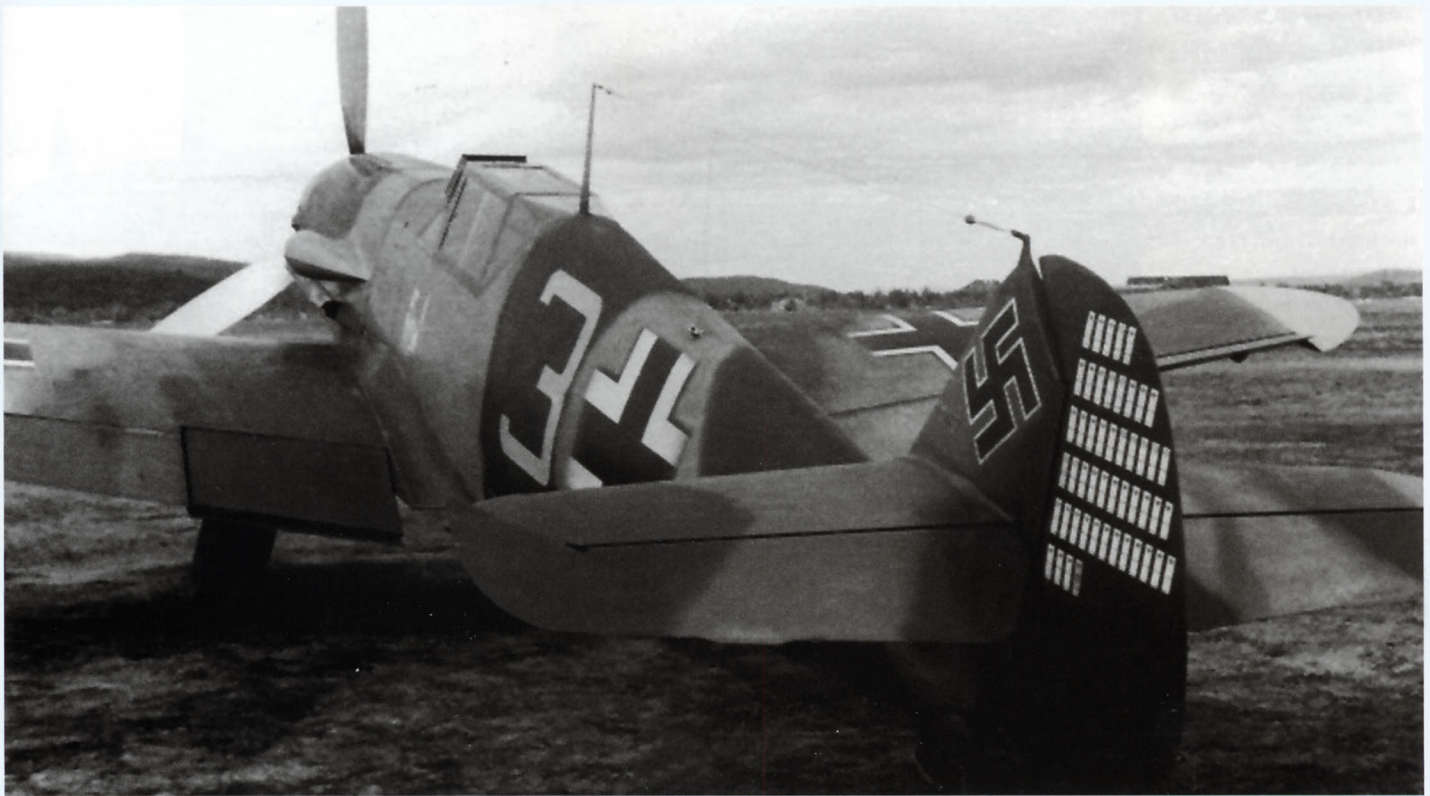


These two views (above and above right) show the extra air intake fitted to Müller's Messerschmitt. The dark patch of colour suggests this modification was carried out shortly after the aircraft arrived in the north. The photograph (above right) also reveals that the aircraft featured a white spinner spiral and also conveniently shows both camera installations (Coll. Mombeek and Coll. Horst Kube).

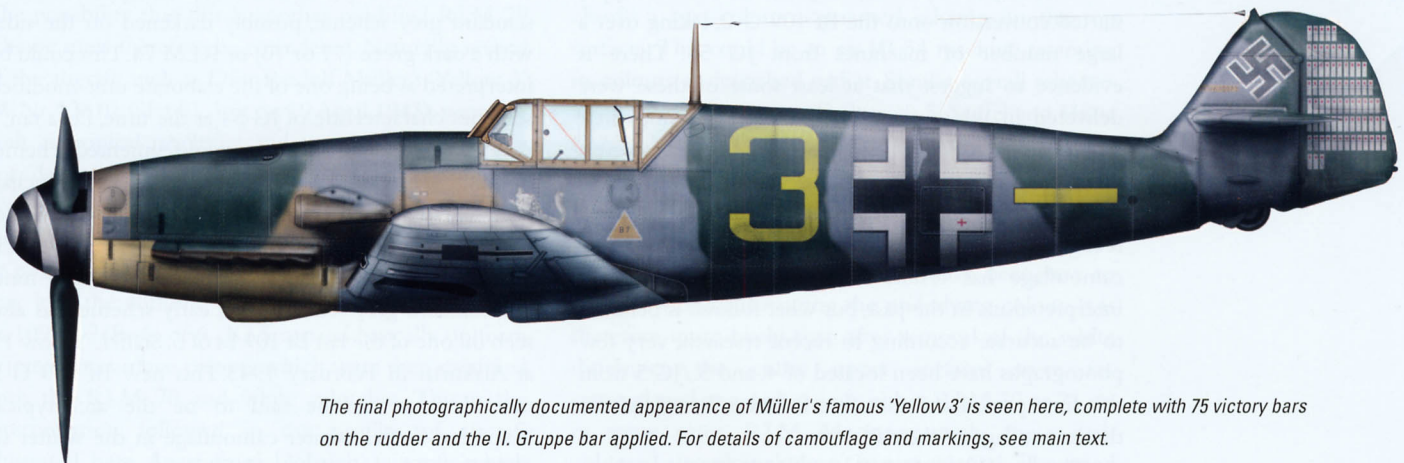


The added cooling intake on the Bf 109 F had a different cross section than those that became standard on the G-series as can be seen here on a Bf 109 F-4 flown by Fw. Walter Schuck from 6. Staffel, and (above) on an unidentified JG 5 Bf 109 G-2 (Coll. Brekken).





'Yellow 3' repaired following an accident on 21 August 1942 (left). Note the damage to the fuselage cross. There also appears to be small changes to the camouflage, especially on the area just forward of the cockpit which may have been resprayed RLM 70. The victory tally is 63 and 66. These two views also reveal valuable information on the upper surface pattern and the weathering on the wing root area (Coll. Horst Kube & Brekken).



The final photographically documented appearance of Müller's famous 'Yellow 3' is seen here, complete with 75 victory bars on the rudder and the II. Gruppe bar applied. For details of camouflage and markings, see main text.

Alfred Lehner on his 5./JG 5 Bf 109 F-4, 'Black 3' resplendent in winter camouflage. This was probably applied on top of a standard grey scheme. Note the clover insignia of 6. Staffel on the nose which was frequently used as a Gruppe insignia (Coll. Mombeek).



A somewhat unusual combination: Ehrler's desert camouflaged F-4, 'Yellow 12', is seen here in the winter of 1942/43 wearing a temporary white distemper carefully applied around all markings (Coll. Mombeek).



In early January 1943, II./JG 5 (and III. Gruppe) started conversion onto the Bf 109 G-2, taking over a large number of machines from JG 54. There is evidence to suggest that at least some of these were delivered in white overall camouflage sporting their Stammkennzeichen. It did not take long, however, before 6./JG 5 developed a very special and highly characteristic winter camouflage that would become a recognition feature of this unit. The exact nature of this camouflage has resulted in a number of different interpretations in the past, but what follows is believed to be accurate according to recent research; very few photographs have been located of 4. and 5./JG 5 from this time period and therefore little can be said about the camouflage of their Bf 109s.

The first Bf 109 G-2/R-6s of 6./JG 5 seem to have received a rather diffused application of large blotches

of white on all top surfaces, over what appears to be a standard grey scheme, possibly darkened on the sides with a dark green (71 or 70) or RLM 74. This could be interpreted as being one of the elaborate unit-modified schemes characteristic of JG 54 at the time, i.e. a tan, a dark brown and a dark green solid segmented scheme, but this seems unlikely when studying the principal representative of this early 6./JG 5 G-2/R-6 scheme, namely that of Fw. Hans Döbrich's 'Yellow 10'. What is visible between the large white splotches clearly hints at a standard grey scheme. This early scheme was also seen on one of the last Bf 109 Fs of 6. Staffel, 'Yellow 1', at Alakurti in February 1943. This new Bf 109 G-2 carried what can be said to be the archetypal 'Experten-Staffel' winter camouflage in the winter of 1943. It still had the large splotches of white on top of the wings and fuselage, but with somewhat harder





**Messerschmitt Bf 109 F-4, 'Doppelwinkel/Yellow 7', Hptm. Horst Carganico, Stab II./JG 5, Petsamo, winter 1942-43**

*Carganico flew several Bf 109 F-4s in 1942 and they were all modified with the older style canopy. One of them was this F-4, which appears to have had the Doppelwinkel Kommodore markings superimposed over a 'Yellow 7'. Otherwise, the fighter had a quite dark finish over which temporary winter camouflage had been applied. The basic scheme is interpreted as a modified desert scheme. Both the Mickey Mouse and the II. Gruppe badge were applied.*

borders. Among these splotches however, a very dark, almost certainly green colour (probably RLM 70 when comparing it to the propeller blades) had been applied in similar style to the white, thus forming a spotted effect which helped to break up the aircraft's outline. This scheme was applied in a very similar style to the vast majority of the G-2/R-6s of 6./JG 5 in the winter of 1943, the spots naturally differing from aircraft to aircraft. On some of these aircraft, there was space between the white and dark green, leaving room for the original undersurface colour to show through (Döbrich's second 'Yellow 10' being one of those with the most dense application of splotches). This is a point often missed by profile artists and modellers alike.

The second controversial point surrounds what colour this original finish consisted of. Many commentators jump to the conclusion that it was the normal grey, but close scrutiny of Oblt. Heinrich Ehrler's 'Yellow 12' seems to disprove this. The underlying colour is very light, thus hinting at RLM 75, but there is no trace whatsoever of RLM 74 as one would expect had this been an original grey scheme. Döbrich's second 'Yellow 10' also has the whole dorsal part of the engine cowling left in the original colour and this seems remarkably uniform in appearance, not giving the impression of a segmented scheme at all. The possibility that this is another modified RLM 79 scheme must therefore be considered. Naturally, several of the aircraft, such as Ofw. Rudolf Müller's 'Yellow 3' (W.Nr. 13810, GF+EL, lost on 19 April 1943), were not built as tropical machines and were in all probability not delivered with tropical schemes. Therefore the possibility exists that this was a grey scheme or a unit-modified scheme, either produced by JG 5 (most likely) or possibly JG 54. Pending further information either way, it is the authors' view that at least some of the Bf 109 G-2/R-6s of 6./JG 5 carried basically uniform original top surface colours which were then modified with the RLM 70 and white splotches. This is the interpretation followed in the profiles of aircraft illustrated here. Apart from Döbrich's aircraft, which carried a personalized marking under his first G-2 and



the 6. Staffel clover emblem on the nose (see profile), none of these specially camouflaged G-2/R-6s are known to have carried personal emblems. Victory markings were present on at least Ehrler's aircraft, applied over a light grey (02) rudder.

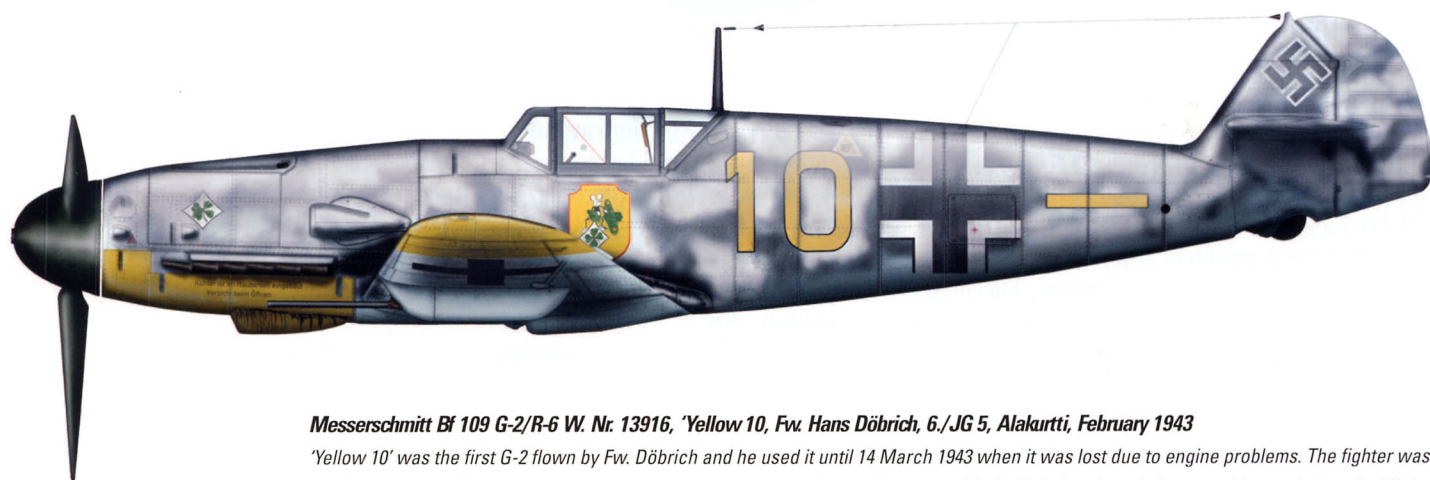
As the winter of 1942/43 finally slipped away, Bf 109 G-2/R-6s from 6./JG 5 were photographed finished in what appears to be a quite dark scheme, seemingly uniformly applied to the top surfaces of wings and fuselages, one example being a hitherto unknown aircraft of Lt. Heinrich Ehrler with what is clearly a two-colour segmented scheme on the top surfaces. This could be an ex-JG 54 machine retaining its colours as described earlier. Similar overall schemes were observed on a few G-2s from 5. Staffel and Horst Carganico's rare G-1 (W.Nr. 14015) from Stab II./JG 5. This may have been a dark green colour. It is highly unlikely that it is representative of the upper surface colour on the winter camouflaged G-2s described above as the RLM 70 would not have been easy to remove without damaging the underlying colour. It is therefore quite likely that, after removal of the white distemper, the entire upper surfaces were re-camouflaged in a dark colour, either RLM 70 or 71 or, in some cases, RLM 74. Interestingly, these dark coloured aircraft, including Carganico's G-1, all carried sand filters in a much lighter colour. This does not

*One of the first Bf 109 G-2s for JG 5 crashed on arrival. It was finished in an all-white scheme with the Stammkennzeichen still present (Coll. Döbrich).*





This series of photographs depicts the first Bf 109G-2/R-6 of Lt. Hans Döbrich in the winter of 1943. The light application of large splotches of white distemper on top of the normal grey camouflage can be seen to advantage, as well as the II. Gruppe emblem (a previous Staffel emblem and Döbrich's personal insignia) (Coll. Urbanke and Döbrich).



**Messerschmitt Bf 109 G-2/R-6 W. Nr. 13916, 'Yellow 10', Fw. Hans Döbrich, 6./JG 5, Alakurtti, February 1943**

'Yellow 10' was the first G-2 flown by Fw. Döbrich and he used it until 14 March 1943 when it was lost due to engine problems. The fighter was colourful, featuring both the II. Gruppe insignia on the nose and Döbrich's personal insignia below the windscreen, this consisting of a Mickey Mouse figure breaking the tail off an I-16 and the clover shield. 'Yellow 10' had a basic grey scheme over which temporary snow camouflage had been sprayed using quite large blotches with soft edges. The wing tips and lower cowling were yellow.





*Hans Döbrich's second Bf 109 G-2/R-6, coded 'Yellow 10'. As can be seen, the demarcations of the white and the RLM 70 blotches are harder and they are applied over what is in all probability a RLM 79/78 scheme (Coll. Urbanke and Döbrich).*



**Messerschmitt Bf 109 G-2/R-6 W.Nr. 14800, 'Yellow 10', 'GJ+QR', Fw. Hans Döbrich, 6./JG 5, Alakurtti/Salmijärvi, April-May 1943**

Following the loss of W.Nr. 13916, Döbrich picked up a new Bf 109 G-2/R-6 from Pori aircraft depot on 23 March. This was also marked as 'Yellow 10' as it was customary for many pilots in 6. Staffel to use the same number for all their aircraft, but it lacked the personal insignia and II. Gruppe emblem. The camouflage was also different in that the basic scheme was an unmodified desert scheme (RLM 79 over RLM 78) over which had been applied a mixture of white distemper and RLM 70 black-green hard-edged blotches. This pattern was quite tight, but the underlying RLM 79 showed through in places, and the spine of the fuselage forward of the cockpit appear to be uncovered by the additional colours. Wing tips and lower cowling were yellow, including the upper surfaces of the wing tips.





Ehrler's 'Yellow 12' which featured a scheme generally similar to Döbrich's 'Yellow 10'. Of particular note is the light base colour seen between the patches of white and RLM 70. The border between the two added colours are not as hard as on 'Yellow 10'. The rudder is light grey, quite possibly RLM 02 and is marked with Ehrler's victories. The centre of the fuselage cross seems to be greyed out (Coll. Mombeek).



Major Heinrich Ehrler



**Messerschmitt Bf 109 G-2/R-6 'Yellow 12', 6./JG 5, Oblt. Heinrich Ehrler, Petsamo, April 1943**

Perhaps one of the more well-known JG 5 aircraft, 'Yellow 12' was finished in what can be termed the standard 6./JG 5 winter scheme in widespread usage during the winter of 1943. This consisted of a basic desert scheme of RLM 79/78, or alternatively, the standard grey scheme, over which a quite dense application of white distemper and RLM 70 had been applied as well-defined blotches. The pattern and hardness of the blotches varied from aircraft to aircraft, those of 'Yellow 12' having somewhat soft edges. The ventral cowling and wing tips were yellow as customary. Ehrler was the only one of the 6. Staffel 'Experten' at the time who had a scoreboard on the rudder, which appears to be light grey, possibly RLM 02.

imply that the upper surface colour was RLM 79 – it appears much too dark for that to be true; indeed, it may not even imply that these were tropical aircraft as the northern airfields could get quite dusty in the spring following the thaw and JG 5 could very well have requested sand filters and installed them.

The delivery of new sub-types of the Bf 109 to JG 5 had always lagged behind those of other Jagdgeschwadern, often by six months or more. There were some signs of improvement in this regard when the first G-6s arrived at II./JG 5's bases during July 1943, this new version having first entered service with





Two photographs of Ofw. Müller's Bf 109 G-2/R-6, W.Nr. 14810, 'Yellow 3', photographed before and after Müller's emergency landing 5 km east of Murmansk on 19 April 1943. This aircraft is very close to Döbrich's second G-2 as far as its camouflage scheme is concerned. It still carries its Stammkennzeichen 'GF+GL' beneath its wings (Coll. Mombeek).



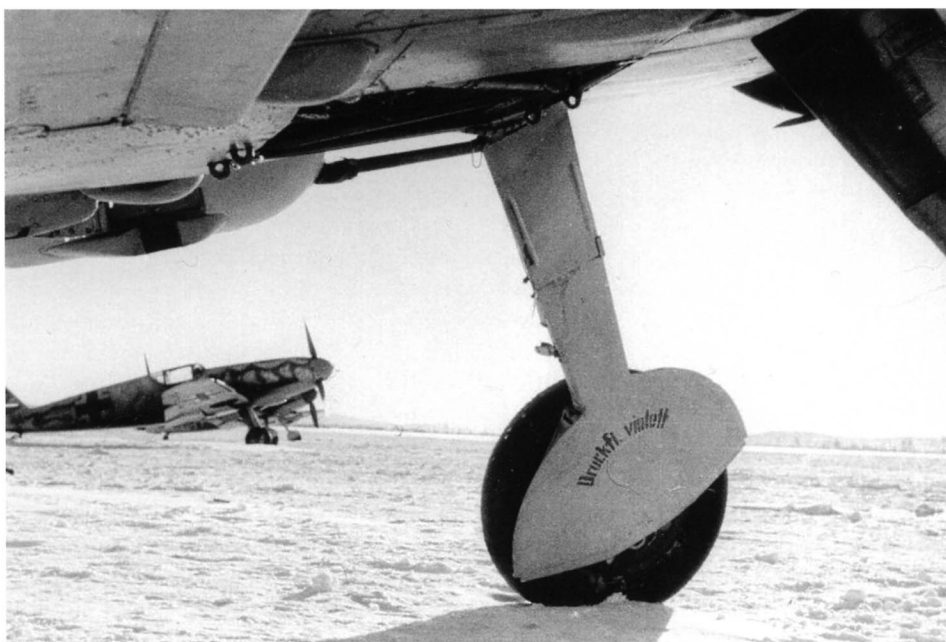
**Messerschmitt Bf 109 G-2/R-6 'W.Nr. 14810, 'Yellow 3', GF+EL', Ofw. Rudi Müller, 6./JG 5, Petsamo, April 1943**

This was the fighter in which the famous ace, Rudi Müller, was shot down and subsequently taken POW on 19 April 1943. The Messerschmitt was apparently captured by the Russians but its fate is not known. It is in the standard 6. Staffel G-2 winter scheme and still featured its Stammkennzeichen below the wings. Given the Werknummer, it is possible that this fighter was finished in the desert scheme, but the alternative interpretation is a grey scheme as depicted in this profile, since this particular machine came from a different batch than Döbrich's W.Nr 14800 according to their Stammkennzeichen.

Luftwaffe units in the Mediterranean in February. Relatively few G-6s were available to II./JG 5 during 1943, however, always being outnumbered by G-2s. These initial G-6s carried the normal grey scheme, the best known example being that of Ehrler's which he flew after taking over command of III./JG 5 in June 1943. Still bearing the markings of II. Gruppe and

Ehrler's number 'Yellow 12', this carried quite large mottling in both greys on the fuselage sides. Similar style camouflage was seen on 6. Staffel G-6s in the winter of 1943/44, with the possible addition of blotches of RLM 70 and white. (Valtonen 1998: pg 86). Interestingly, these G-6s started to re-apply the 6. Staffel insignia on their cowlings.





An unusual view of a Bf 109G-/R-6 showing some rarely seen details, such as the special marking on the undercarriage door calling for brake fluid of type «O-Öl» which were applicable to the 650x150 mm wheels of the G-2 series. Late G-2s and most G-4s used the «M-Öl» for their 660x150 mm wheels. The aircraft in the background is a Bf 109F-4 marked 'Yellow 2' (Coll. Döbrich).



Lt. Theodor 'Theo' Weissenberger flew a G-2/R-6 carrying his standard number '4', seen here in various situations. The style of the '4', the application of the two additional upper surfaces colours (white and RLM 70), the silicagel pellet in the windscreen and the RLM 66 interior are to be noted (Coll. Döbrich and Horst Kube).

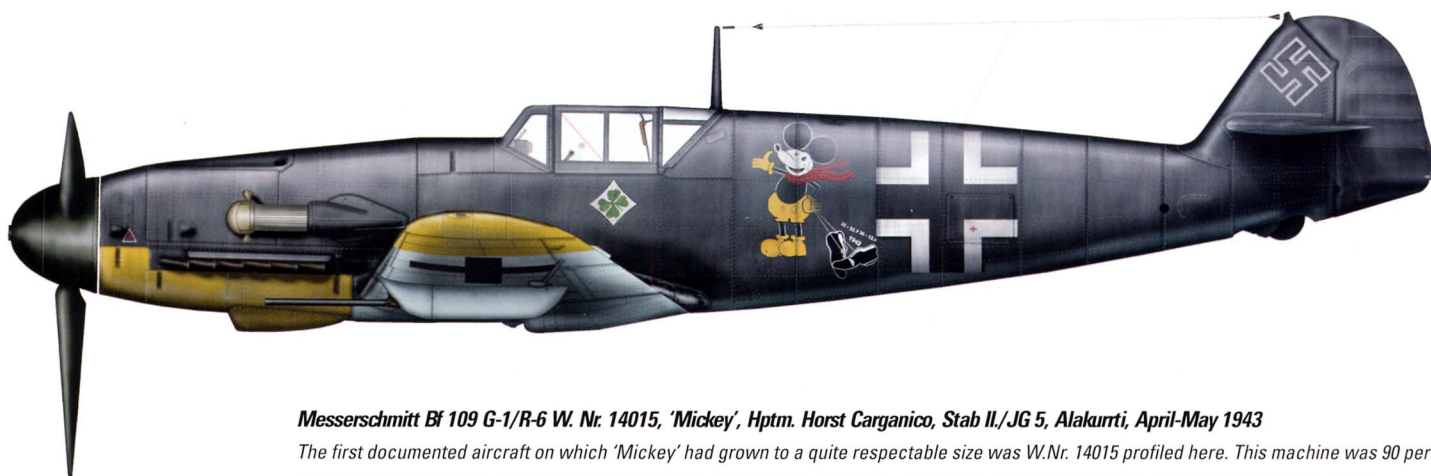
In August 1943, a single Bf 109 G-4 appears in the II./JG 5 strength returns. It has been stated previously that this was marked with a chevron and bar and reportedly carried snow camouflage on top of its rather dark upper surfaces (Valtonen 1998: pg 85), this even extending over its sand- (or perhaps snow?) filter. It is, however, the opinion of the authors, that there had been at least two aircraft of this type with the unit, the first lost in September, and a new example appearing in October. The previously reported W.Nr. 13728 is probably wrong, as there seems to have been confusion with regards to W.Nr. 15592 which according to Valtonen (1999) should be an Erla-built Bf 109 G-4/R3.

There is relatively little photographic material to support any conclusions regarding II. Gruppe's camouflage on its G-2s and G-6s throughout the winter of 1943/44. This period is also, strictly speaking, outside the scope of this book since the Gruppe transferred to Pleskau-Süd and other airfields on 3 November 1943, staying away until March 1944 when it made a return to Alakurtti (4. Staffel to

Pontsalenjoki). It remained there until 20 April when it finally left the Northern Front. During January, February and March 1944, large numbers of Bf 109 G-6s had found their way into the unit, finally outnumbering the G-2s, the last of which disappeared by the end of March. The majority of these were newly constructed machines and they probably received white distemper over their regular grey camouflage, as shown by a series of well-known photographs of the Gruppe's G-6s at Alakurtti in March.

One of the more special machines seen at this time was the Bf 109 G-6 of Hptm. Horst Carganico. During summer 1943, his grey-camouflaged G-6 had carried the enormously enlarged personal Mickey Mouse emblem behind the cockpit, as first seen on his G-1 described earlier; as winter came, this was supplemented by large blotches of white distemper as seen at Alakurtti in March/April 1944, but not covering Mickey Mouse. Carganico's G-6 was a rather early series, as evidenced by the tall antenna mast and lack of DF loop, in contrast to the G-6 of another ace, the Gruppenkommandeur of II./JG 5 from late March

*The first large version of Carganico's Mickey Mouse insignia was painted on this Bf 109 G-1, W.Nr. 14015, which suffered 90 per cent damage on 3 May 1943 during a take-off accident. It is evident the aircraft turned over as the tail has been removed, the cockpit section is dented and the propeller blades are bent. A large number of interesting features can be seen on what remains of the fighter, such as the sand filter, the overall uniform dark colour (probably RLM 74, although RLM 71 cannot be discounted), the yellow ventral engine cowlings and the II. Gruppe badge below the cockpit (Coll. Mombeek).*



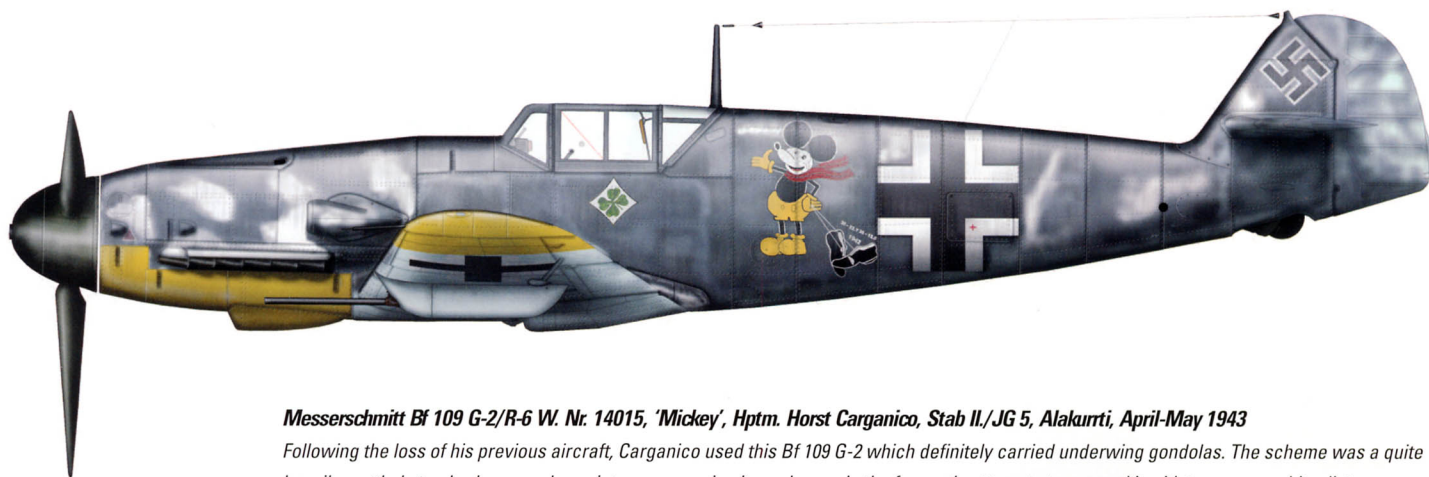
**Messerschmitt Bf 109 G-1/R-6 W. Nr. 14015, 'Mickey', Hptm. Horst Carganico, Stab II./JG 5, Alakurtti, April-May 1943**

The first documented aircraft on which 'Mickey' had grown to a quite respectable size was W.Nr. 14015 profiled here. This machine was 90 per cent damaged on 3 May and probably sent for reconstruction or scrapping. It featured a very dark uniform colour on the upper surfaces, probably RLM 74, an unpainted dust filter and yellow ventral cowlings. It is not confirmed that the aircraft had undergone MG 151 gondolas. The II. Gruppe badge was present, though sadly, photographs of the starboard side of any of Carganico's large 'Mickey' Bf 109s are unknown, so it is impossible to say for certain if he carried this very special form of individual recognition marking on that side; pending evidence, the most possible conclusion seems to be that he did, it being a recognition marking. This machine was originally built as a pressurized G-1, but was delivered to JG 5 as a standard G-2.





*As a replacement, Carganico received this Bf 109 G-2/R-6, also adorned with a large Mickey Mouse and overall dark finish, over which white distemper has been sprayed on the nose and parts of the wings. This scheme is probably an attempt to make the aircraft less conspicuous when the ground was only partially covered with snow. The base colour is a standard grey scheme with considerable overspray on the fuselage using RLM 74 (Coll. Mombeek).*



**Messerschmitt Bf 109 G-2/R-6 W. Nr. 14015, 'Mickey', Hptm. Horst Carganico, Stab II./JG 5, Alakurtti, April-May 1943**

*Following the loss of his previous aircraft, Carganico used this Bf 109 G-2 which definitely carried underwing gondolas. The scheme was a quite heavily mottled standard grey and as winter was nearing its end, even in the far north, attempts to conceal it with temporary white distemper were half-hearted at best – only the nose section and small areas on the wings received any such camouflage!*

1944, Oblt. Theodore Weissenberger and his 'Black 4'. Weissenberger also used his old number from his initial time in 6./JG 5, although in black. A photograph of Oblt. Günther Schwanecke's 'Yellow 1' (see Girbig 1975: pg 241) again shows a rather dark overall top surface colour with white splotches applied as large patches on top of this. This photograph, reportedly taken on 22 March 1944, shows a mid-production G-6 with a yellow ID number, probably outlined in white. As Schwanecke served with 4. Staffel at the time, this could indicate that this Staffel used yellow numbers or that it was an aircraft on loan from 6. Staffel.

The scant photographic material of II. Gruppe from this time period (autumn 1943–spring 1944) indicates the following use of Staffel colours:

- 4./JG 5 - white and/or yellow numbers, the latter probably with white outline
- 5./JG 5 - black numbers with white outline



6./JG 5 - yellow numbers with or without white outline.

In late April 1944, II. Gruppe left the north for good, becoming the second Gruppe of the Geschwader at that point to fall beyond the scope of this book.

*A wonderful close-up of one of Carganico's early G-series aircraft (see previous page and this page), providing excellent detail of his characteristic Mickey Mouse marking. The dates in white above Mickey's shoes refer to the two occasions Carganico went down behind enemy lines and had to walk back across the tundra. Mickey's clothing was probably pale yellow and the scarf red with black details. Overall finish of the aircraft seems to be RLM 74 (Coll. Horst Kube).*





When Major Ehrler became Gruppenkommandeur of III./JG 5 in June 1943, he continued using 6. Staffel markings on his new Bf 109 G-6, down to the numeral '12', as seen here. The finish undoubtedly comprises the regular greys with fairly large blotches on the fuselage sides. The numerals differed dimensionally and proportionally from his previous numbers (Coll. Horst Kube).



**Messerschmitt Bf 109 G-6 'Yellow 12', Hptm. Heinrich Ehrler, Stab III./JG 5, Alakurtti, June 1943**

Although not strictly an aircraft of II. Gruppe, the new Gruppenkommandeur of III. Gruppe used the colours and markings of this previous Staffel when he marked up his brand-new Bf 109 G-6 which he received in June 1943. The early model G-6 was finished in standard greys with quite large blotches of RLM 74 and 75 on the fuselage sides and rudder. Later, a personal scoreboard laurel wreath marking was painted on the rudder, as depicted here, with a total of 115 victories. This number indicated the laurel wreath was added sometime after August 1943. Note that the ventral cowlings of Ehrler's Kommodoremaschine was not yellow, but a dark patch behind the warning stencilling on the cowlings panel appears to have been.



### III./JG 5

#### Aircraft of the unit

Messerschmitt Bf 109 E-7	03.1942	11.1942
Messerschmitt Bf 109 F-1	03.1942	05.1942
Messerschmitt Bf 109 F-2	03.1942	05.1942
Messerschmitt Bf 109 F-4	03.1943	05.1944
Messerschmitt Bf 109 G-2	04.1943	02.1945
Messerschmitt Bf 109 G-6	04.1943	05.1945
Messerschmitt Bf 109 G-14	02.1945	05.1945
Focke-Wulf Fw 190 A-2	12.1944	02.1945
Focke-Wulf Fw 190 A-3	11.1944	02.1945
Focke-Wulf Fw 190 A-8	11.1944	05.1945
Focke-Wulf Fw 190 F-8	11.1944	05.1945

From the birth of JG 5 in January 1942, the 7. Staffel was the only unit with a designation appropriate for expansion to a third Gruppe. This Staffel with an establishment of 12 aircraft and pilots operated in solitude, equipped with Bf 109 E-7 aircraft during the first two months of its existence. As the expansion into a full Gruppe commenced in March, it seems that the parts of IV./JG 1 used to form the Stab as well as the 8. and 9. Staffel brought a mixture of Bf 109 E and F-series aircraft with them. Throughout the spring and summer of 1942, III. Gruppe standardized on Bf 109 E-7s and F-4s, transferring the small number of F-1s and F-2s left out of the unit by June that year.

The E-7s would stay in service until November 1942, the remainder of the year and the first three months of 1943, seeing the unit operating Bf 109 F-4s only, an aircraft sub-type the unit would continue to use well into 1944!

The very first Bf 109 G-2 was noted as entering service in April 1943, followed shortly by 16 more in May. Like II. Gruppe, III. Gruppe also received the first Bf 109 G-6 in July 1943, but the majority of aircraft remained G-2s until April 1944. A small anomaly occurs here as Bf 109 G-2, W.Nr. 14651, is reported as lost by III. Gruppe in March 1943, before the unit reported any G-2s on strength. It is possible that this was an accident related to a transfer flight and that the unit did not note the aircraft as on strength.

It would take until the end of the year before there were any major changes. The expansion of the Gruppen in July 1944 did not bring any changes with regards to aircraft in the unit, but in November the new 12. Staffel was finally equipped with aircraft and pilots, and received several Fw 190 A-3s, A-8s and two F-8s, equipping the 9. and 12. Staffel respectively.

A small number of old Fw 190 A-2s were apparently taken on charge from December 1944 onwards, these aircraft also being mentioned in the strength report of 10 January 1945. The unit kept the

mix of new and old Fw 190s as well as a mix of Bf 109 G-series aircraft, including some Bf 109 G-14s, until the end of hostilities in May 1945. As the war ended, the aircraft strengths reported for the units of the former III. Gruppe were (liaison and courier aircraft have been omitted and the organization as of November 1944 applies):

Unit	Aircraft type	Number of aircraft
Stab III./JG 5	Bf 109 G-14	1
9. Staffel	Fw 190 A-3	5
	Fw 190 A-8	4
10. Staffel	Bf 109 G-6	6
	Bf 109 G-14	6
11. Staffel	Bf 109 G-6	16
12. Staffel	Fw 190 A-8	9
(now 5. Staffel)	Fw 190 F-8	1

#### Camouflage and Markings

The initial equipment of this Gruppe originated from a selection of Ergänzungs units stationed on the (French) Channel Front. The first Bf 109 Es of 7./JG 5 carried the normal grey scheme with light mottling. They kept their old Staffel colour as well, the code/tactical numbers being in yellow with black outlines. On occasion these numbers have been described as white, more in keeping with regular Staffel colour coding (e.g. Keskinen & Stenman 1998: pg 13), but available photographs clearly show these to be yellow. Photographic evidence seems to suggest that 7. Staffel started to switch over to white numbers (outlined in black) in March 1942. No Gruppe bar was used on these machines. For some reason, some of 7./JG 5's Bf 109 Es seen at Bodø in February 1942 had yellow fuselage bands, but these were apparently quickly removed and not frequently seen on the Eismeer front. 7. Staffel also continued to use the emblem from its days as 1. (Einsatz) Erg. Gr./JG 3, a golden lion on a red and blue shield outlined in yellow. Regarding personal emblems at least one aircraft had the name 'Unkraut' (Weed) below the windscreen (Valtonen 1998: pg 66), this being the aircraft of Oblt. Franz Menzel.

*The 7. Staffel arrives at the front. It had started its transfer from Banak on 22 April 1942. This photograph shows the pilots gathered around a small dog which no doubt appreciates all the attention. The Bf 109 in the background is noteworthy for the extensive wear on its propeller blades and also provides an example of the extent to which the ventral wing surfaces were painted yellow (Coll. Mombeek & Brekken).*





Some examples of Bf 109 Es from the early history of III./JG 5. Above, a Bf 109 E-7 flown by Oblt. Franz Menzel of 7./JG 5 in early 1942. The Messerschmitt has a rather battered and patched up appearance and a name, 'Unkraut' (weed), below the cockpit, possibly referring to the unpopular fighter-bomber missions undertaken by the Staffel at the time. Above right, two further Emilis of 8./JG 5 are seen flying over the tundra, 'Black 5' belonging to Fw. Heinz Beyer and 'Black 9' flown by Uffz. Josef Kunz. Both have yellow noses and rudders. The lack of snow camouflage on the Emilis renders them quite conspicuous (Coll. Brekken and Mombeek).



The 8. Staffel also had Bf 109 Es in the normal greys, using black numbers with white outlines (a few aircraft did not have outlines) and no Gruppe designator. Tailbands were also absent, although all-yellow engine cowlings and yellow rudders were a common feature. Yellow cowling undersides were sometimes used. The emblem of 8. Staffel consisted of a white and yellow Edelweiss flower on a red shield outlined in yellow and was carried in the normal position on the port side below the windscreen area. A few of the Bf 109 Es of 8. Staffel also carried personal names below the port side of the cockpit, such as that of future ace, Uffz. Jakob Norz 'Black 11', the name in this case being 'Annemarie' written in black. Another example was Uffz. Otto Herzog's 'Black 5' with the name 'Heli' in white lettering. Herzog's Emil carried a rather dark overall scheme with large areas of RLM 74 on the fuselage sides. A personal emblem, the so-called 'Pomaska' spread eagle, was applied to the port side of 'Black 3', the aircraft of the Staffel leader of 8./JG 5, Oblt. Hermann Segatz.

There are few photographs of Bf 109 Es from 9./JG 5, but they seem to have carried over a special type of camouflage from their previous designation as 12./JG 1. This consisted of a very dark overall upper surface colour over which streaks of a lighter colour (RLM 76?) were applied, much like that seen on some 1./JG 5 Emilis. This may have again been a scheme stemming from the time 12./JG 1 (and the other two

Staffeln of IV./JG 1) carried out coastal patrols and escort work over the North German sea lanes. Staffel colour was yellow with white outlines, no Gruppe insignia being seen on these early aircraft. 9. Staffel did not have its own emblem, but later some of its aircraft carried the Lapp boot Gruppe insignia of III./JG 5.

Stab III./JG 5, commanded by Hptm. Günther Scholz, seems to have flown Bf 109 Es camouflaged with a single colour on their top surfaces. Analysis of photographs indicated this was RLM 71, although RLM 74 cannot be discounted. Scholz' 'Double Chevron' has often been depicted and he used a personal emblem below the port side of the cockpit – a small, standing girl figure as well as the III. Gruppe insignia. Photographs of other Stab II./JG 5 Bf 109 Es are rare; one such machine was flown by the Gruppenadjutant, Oblt. Lüder, and was very similar to Scholz' machine, down to the special, curved segmented white/black-green spinner, the yellow cowling panels and the dark uniform upper surfaces. Lüder's Emil probably bore a single chevron befitting a Gruppenadjutant and probably had a yellow rudder, similar to Scholz' Emil.

When Scholz changed to the Bf 109 F, it carried a similar dark upper surface colour, and it also was seen later with winter camouflage.

At this juncture it would be appropriate to comment on the later usage in III. Gruppe of a Gruppe designator which is normally associated with



Another future ace was Uffz. Heinrich Bartels seen here leaving (above right) his Bf 109 E-7, 'Black 13' with the 8. Staffel insignia below the wind shield. The photograph to the left shows Lt. Hans-Joachim Bahr in the same machine a little earlier on 17 June 1942 after having claimed one kill in the machine (Coll. Mombeek).





**Messerschmitt Bf 109 E-7, 'White 14', Uffz. Arthur Beth, 8./JG 5, Petsamo, late summer 1942**

Sometimes identified as 'Yellow 14', this Emil was actually 'White 14', although the colour of the number was admittedly darker than the white of the fuselage cross. Comparison with the fuel triangle leaves no doubt as to the colour however. The finish was regular RLM 74/75/76, with heavy overspray on the fuselage sides. The rudder was yellow and although not visible, the ventral cowling was probably yellow as well.

The Edelweiss insignia was present below the cockpit.



The two known Stab III./JG 5 machines were flown by Hptm. Günther Scholz and Oblt. Rudolf Lüder, the former is seen here. The two machines were very similar in appearance, both featuring very dark upper surfaces which may have been RLM 71, bright yellow ventral engine cowlings and rudders and a 1/3rd white spinner with a curved demarcation line. Scholz' 'Doppelwinkel' carries his personal emblem, a little girl, beneath the cockpit. Of particular interest is the yellow band seen below the fuselage cross on Scholz' Emil, in exact compliance with the 2. Gebirgsdivision marking order quoted earlier. Lüder's Stabmachine was marked with a single chevron (Coll. Brekken and Horst Kube).

the IV. Gruppe of a Jagdgeschwader, namely a disk. Having caused much confusion amongst other authors when trying to assign aircraft with this disk to a Gruppe within JG 5, the circle is reported to originate directly from the IV. Gruppe designator of IV./JG 1, from which III./JG 5 was formed. A few photographs reportedly showing Bf 109 Fs from 7./JG 5 indicate

that at least initially this disk had a hole in the centre (see Valtonen 1998: pg 74), but due to the scarcity of photographs showing this and the prevalence of photographs showing a solid disk, this style must have been rather short-lived and rare. The Gruppe disk was not seen on all III./JG 5 aircraft however.



**Hptm. Günther Scholz**



*After his Emil, Scholz adopted a very similarly marked Bf 109 F-4, with the same dark upper surface colour. It did not feature his personal emblem, however, instead having the I. Gruppe Lapp boot insignia in the same location. The upper surfaces were either RLM 71 or RLM 74 (Coll. Brekken).*

III./JG 5 did have a few Bf 109 F-1s, F-2s and F-4s from the start of its service on the Northern Front, but until September 1942, Bf 109 E-7s remained in the majority. As the Friedrichs started to take over, three distinct camouflage schemes developed in 7. and 8. Staffel. At least one machine from 8. Staffel was seen with a distinct three-coloured segmented scheme on all upper surfaces. One of the colours is very light, the others much darker. This could be a modified desert scheme or, alternatively, a carry-over scheme from F-4s taken over from JG 54 (a theory advanced by Valtonen 1998: pg 74), the colours then most likely being a tan, a brown and a dark green. In the absence of firm evidence, such as colour photographs, it is impossible to judge the hues of these colours, even if a high-quality photograph of 'Black 10' is available. Even so, the latter possibility definitely has some merit as it is known that



*This interesting view shows a selection of III. Gruppe aircraft, probably at Petsamo in winter 1942/43. To the left (above) is the Bf 109 F-4 of Scholz, now resplendent in winter camouflage while in the centre, a newly delivered Bf 109 F-4 still carrying its Stammkennzeichen 'FH+AT', can be seen. It was later photographed carrying a SC 250 bomb (right). The most interesting fighter amongst those (above) however, must be the one to the right, which is a Bf 109 E-7 marked 'Yellow 8' of 9./JG 5, surely one of the last in use. This dates the photograph to no later than the end of November 1942, which was when the last eight E-7s were transferred out of III./JG 5 (Coll. Rune Rautio).*



a number of F-4s were received from other units in September and October 1942.

The second scheme was seen on a limited number of 7. Staffel F-4s. Only two colours seem to have been used here; one quite light, the other considerably darker and the latter colour is applied in a very special style. The demarcation lines are very wavy and irregular. It is impossible to say what the colours were, but they could be non-standard applications of the regular RLM 74 and 75, although other combinations such as 79/74 or 75/71 cannot be excluded. Examples of this scheme are seen on 'White 7' and 'White 9' from 7. Staffel. At least 'White 7' carried the yellow wing tips as usually seen on aircraft of 6./JG 5.

The third scheme was seen on a comparatively large number of Bf 109 Fs of 8. Staffel. It consisted of two low-contrast colours applied over virtually all upper surfaces, including the fuselage side. A good example is 'Black 13' flown by well-known Experten, Uffz. Heinrich Bartels, in the autumn of 1942. A series of close-ups of the cockpit section clearly show that two different colours make up the camouflage and that they are very similar in tone. The overall effect is that of a much darkened aircraft. These colours do not resemble the standard greys and since at least some of these aircraft can be shown to be ex-JG 54 machines (the Grünherz-emblem being overpainted but still discernible), it is clear that that these colours represent an over-painting having taken place after delivery from JG 54, particularly as there is no remnant of previous codes or the characteristic JG 54 yellow fuselage band. These colours could be a combination of RLM 74 and 71, which would produce such a low-contrast scheme. In any case, this scheme is only seen on Bf 109 Fs from 8. Staffel and quite a large number are photographically documented. In any case, this dark scheme would have made an excellent base for the very elaborate and artistic winter schemes that appeared on some 8. Staffel Bf 109 Fs the following winter (see later). Interestingly, several of these aircraft carried names in quite elaborate yellow writing below the port side of the cockpit, such as 'Rita' ('Black 9') and 'Anny' ('Black 10'). Other Friedrichs of 7. and 8. Staffel however, carried the normal greys with mottling on the fuselage sides, appearing in a much more standard manner.

In the summer/autumn of 1943, it seems a dual unit shield had found its way onto almost all of 8. Staffel's machines, this consisting of the Lapp boot





A group of III. Gruppe pilots by their Messerschmitts, from left to right: Oblt. Kalischek, Oblt. Lüder and Uffz. Link. To the right is a close-up of the Bf 109s showing the special two-colour scheme and 'hollow' III. Gruppe disc on a Bf 109 F-4 from 7./JG 5. White 2 behind it probably carried the same type of disc (Coll. Horst Kube).



A rather unusual scheme seen on Bf 109 F-4 'Black 10' from 8. Staffel. It has the appearance of a three-colour scheme consisting of two light and one quite dark colour, but the exact hues are very difficult even to speculate upon. It could be a modified desert scheme or an F-4 inherited from JG 54 and bearing one of that Geschwader's innovative tan, brown and green finishes (Coll. Brekken).



'White 7' of 7. Staffel again showing the special scheme. The irregular demarcation lines and haphazard pattern is noteworthy (Coll. Horst Kube).



**Messerschmitt Bf 109 F-4, 'White 7', 7./JG 5, pilot unknown, Petsamo, summer 1942**

'White 7' is representative of the first Bf 109 F-4s delivered to 7. Staffel and features the III. Gruppe disc with a hole in the centre (in white, outlined in black), the hole so far only seen in use within 7. Staffel. The camouflage is also very distinctive consisting of two colours, one dark and one quite light, but the exact hue of these is impossible to determine with any degree of certainty. This could be another form of modified desert scheme, i.e. dark green (RLM 71 or 70) over RLM 79, or alternatively, a unit-specific colour combination using RLM 75 and a dark green, as seen in the profile. The style of application was unique to 7. Staffel as far as is known, which suggests a unit-specific finish. The combined Gruppe and Staffel insignia was painted below the cockpit and yellow panels featured in the normal places.



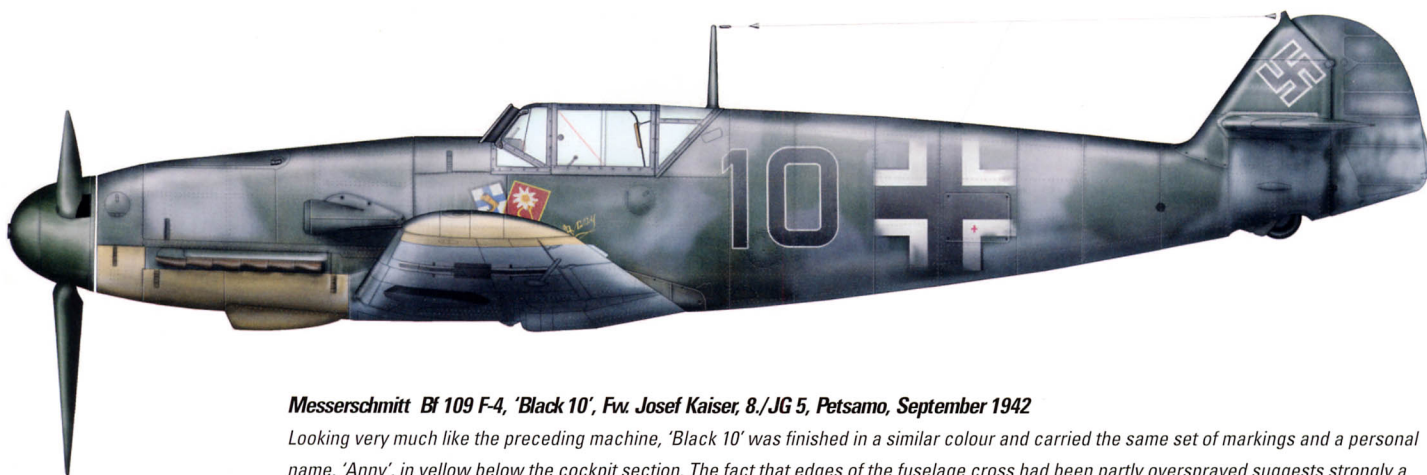
*Bf 109 F-4s from 7./JG 5 showing both the III. Gruppe disc with a small hole in the centre and the special two or three tone scheme carried by some Friedrichs of the unit in 1942. Note blobs of darker colour on 'White 7', especially on the tail (Coll. Brekken).*



**Messerschmitt Bf 109 F-4, 'Black 9', 8./JG 5, pilot unknown, Petsamo, September 1942**

8. Staffel developed its own camouflage when it received its first Bf 109 F-4s in the summer of 1942. The application is similar to that seen on 7. Staffel Friedrichs in that the two colours were applied in a segmented pattern, reminiscent of RAF camouflage. However, the two colours were much closer in hue than those used by 7. Staffel – perhaps RLM 74 and a dark green (RLM 70 or 71). It is known that several of these F-4s were ex-JG 54 machines (the Grünherz emblem being visible through the new coat of paint), but the finish does not bear much resemblance to the dark green/tan/brown schemes seen on many JG 54 machines and was certainly modified when JG 5 took them over. Many 8. Staffel pilots applied small names in yellow below the port side of the cockpit which, along with the camouflage pattern, and combined Staffel/Gruppe insignia and dark colours, resulted in a quite distinctive-looking fighter. 'Black 9' named 'Rita' featured here, and the two profiles opposite, show how similar these Messerschmitts appeared. The IV. Gruppe disc was in all probability not used on this or the other 8. Staffel machines seen below.





**Messerschmitt Bf 109 F-4, 'Black 10', Fw. Josef Kaiser, 8./JG 5, Petsamo, September 1942**

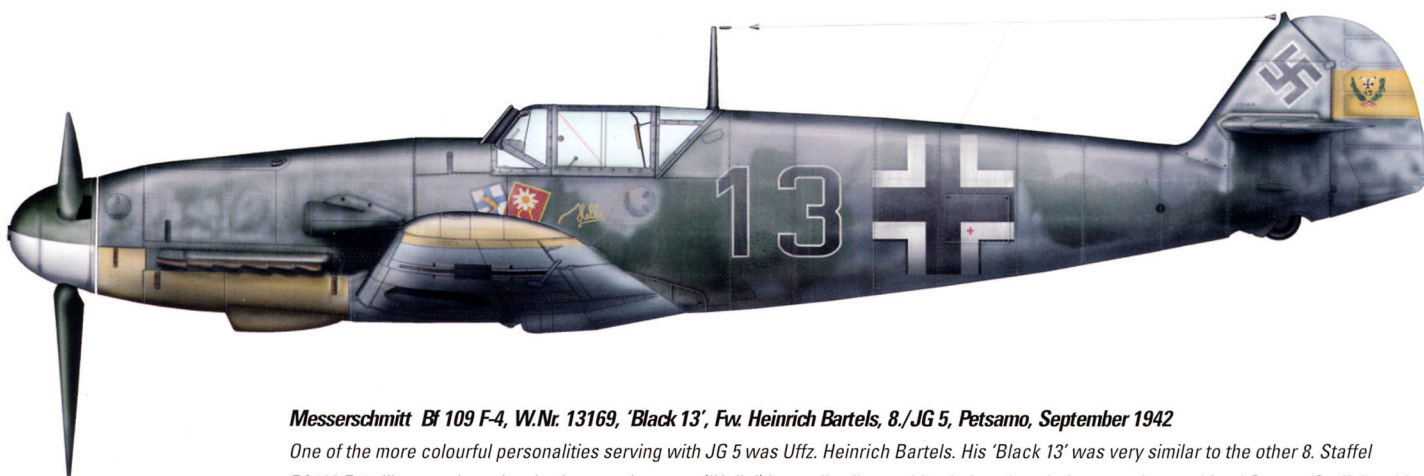
Looking very much like the preceding machine, 'Black 10' was finished in a similar colour and carried the same set of markings and a personal name, 'Anny', in yellow below the cockpit section. The fact that edges of the fuselage cross had been partly oversprayed suggests strongly a new finish had been applied to these F-4s after they were received from an aircraft depot or directly from JG 54.



The special dark two-colour scheme used by 8. Staffel in the summer/autumn 1942 can be seen on these photographs of three F-4s; 'Black 9' (opposite page), 'Black 10' (above) and Heinrich Bartels' 'Black 13' (above right), named 'Rita', 'Anny' and 'Hella', respectively. Apart from the camouflage and names they also have the dual Gruppe-Staffel insignia in common. As is evident from these pictures the two upper surface colours are very close in hues, but still distinct (Coll. Mombeek).



**Major Heinrich Bartels**

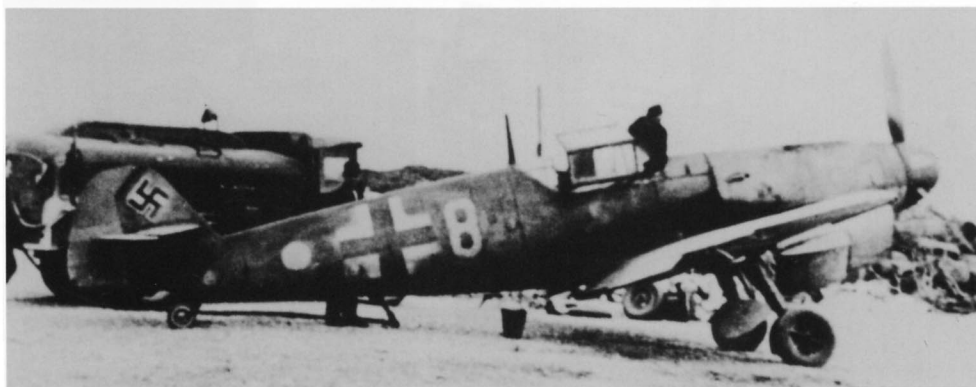


**Messerschmitt Bf 109 F-4, W.Nr. 13169, 'Black 13', Fw. Heinrich Bartels, 8./JG 5, Petsamo, September 1942**

One of the more colourful personalities serving with JG 5 was Uffz. Heinrich Bartels. His 'Black 13' was very similar to the other 8. Staffel Bf 109 F-4s illustrated previously, down to the name ('Hella') in small yellow writing below the windscreen, the combined Gruppe/Staffel emblem and the two low-contrast dark upper surface colours. The style of victory markings depicted in this profile was seen on his F-4 in November 1942, but it is not certain that it was the same aircraft he was pictured with in September as the former appears to be finished in a mottled grey scheme (at least the rudder is). A coloured band had been painted across the rudder, most probably yellow.



The combined Gruppe/Staffel emblem seen within 7. and 8./JG 5 could take on two main forms, with either of the Staffel or Gruppe insignia being forward, as seen here on 'White 4' from 7. Staffel (left), reportedly flown by Hptm. Dörr, and Oblt. Segatz' 'Black 3' on the right (Coll. Horst Kube).



Good views of both sides of an aircraft are rare, but they do exist for Bf 109 F-4, 'Yellow 8' of 9./JG 5. The two pilots in the lower right photograph are Lt. Fritz König (left) and Uffz. Oskar Günthoth, one of them probably the pilot of 'Yellow 8'. The machine features a very dark finish, no doubt resulting from liberal use of RLM 74 and a spray gun. The lower left photograph appears to show a 'Black 8', but it is otherwise very similar to 'Yellow 8', and the dark colour of the numeral may be caused by the use of orthochromatic film or a faulty exposure (Coll. Horst Kube).

Gruppe insignia and the Staffel's Edelweiss emblem. A similar combination was seen on 7. Staffel machines, such as 'White 4', the Staffel insignia naturally being that of the 7. Staffel. The order of the Staffel and Gruppe insignia could vary as the accompanying photographs demonstrate.

An interesting scheme was seen on the F-4s of Stab III./JG 5 in summer 1942. The Stab flight seems to

have taken delivery of a few machines with the modified desert scheme, one example being 'Double Chevron' flown by the Adjutant, Lt. Rudolf Lüder. His fighter resembled the F-4s of II./JG 5, although the two upper surface colours were carried all the way down the fuselage sides.

With the onset of the winter of 1943/43, snow camouflage was quickly applied to the Gruppe's



Bf 109s. This took many distinct forms in III. Gruppe of either a light overspray with white distemper or a stronger overspray with areas of the upper surface colour visible. Quite unusually however, a few machines received a solid coat of white distemper on their top surfaces, barely leaving code numbers, emblems and national insignia free. This solid coat

seems to have been applied by brush. It was also at this time that the most stylish and elaborate winter scheme ever seen on Luftwaffe fighters appeared. The painters of JG 5 seem to have been masters at devising such schemes. Rather than describing these with the written word, the following selection of winter-camouflaged III. Gruppe Bf 109 F-4s should illustrate the point!



*An elaborate squiggle pattern on 'White 7' of 7./JG 5 (Coll. Brekken).*



*The painter was evidently 'creative' on 'Yellow 3' of 9./JG 5 (Coll. Brekken).*



**Messerschmitt Bf 109 F-4, 'Yellow 3', 9./JG 5, pilot unknown, Petsamo, winter 1942-43**

*The Gruppe disc appears to have been commonly adopted by the winter of 1942-43, as seen here on 'Yellow 3', another elaborately painted F-4, this time from 9. Staffel. The basic colours were dark uppersurfaces, probably painted to serve as an effective undercoat for additional winter camouflage, together with white swirls and complex shapes.*



Spots, small stripes and a zig-zag pattern on the wings are combined on Uffz. Alfred Kern's 'White 11' from 7./JG 5 ((Coll. Horst Kube).



Stripes on Lt. Horst Berger's 'Black 14' from 8./JG 5 (Coll. Horst Kube).

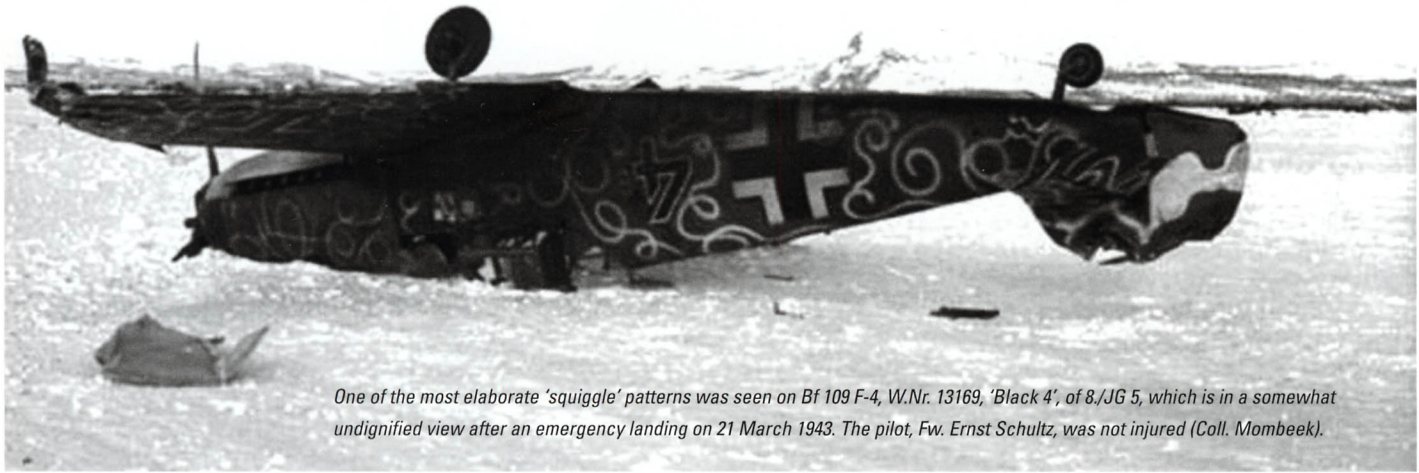


Bf 109 G-2, 'Black 13' of Heinrich Bartels from 8./JG 5 with a carefully applied winter scheme (Coll. Horst Kube).



Some aircraft came delivered in winter schemes such as Bf 109 F-4 'KJ+TP' photographed at Pori on 11 January 1943 (Coll. Brekken).





One of the most elaborate 'squiggle' patterns was seen on Bf 109 F-4, W.Nr. 13169, 'Black 4', of 8./JG 5, which is in a somewhat undignified view after an emergency landing on 21 March 1943. The pilot, Fw. Ernst Schultz, was not injured (Coll. Mombeek).



**Messerschmitt Bf 109 F-4, W.Nr. 13169, Fw. Ernst Schultz, 'Black 4', 8./JG 5, Petsamo, March 1943**

Actually being the same machine Bartels had flown in the latter part of 1942 (see profile on page 93), W.Nr. 13169 changed identity to 'Black 4' after Bartels ceased using it. The camouflage also changed drastically: the upper dark camouflage colours were probably retained, but they were supplemented by one of the more 'artistic' snow camouflage schemes ever seen on a JG 5 aircraft. Very elaborate and complex swirls and curves were applied, probably using white distemper. There was a solid wavy segment of white on the rudder.



### The Winter Schemes of JG 5 1942-43

These Geschwader painters do not appear to have been so eager to camouflage aircraft belonging to 9./JG 5 however. A few of the Staffel's aircraft did receive these spectacular snow camouflage finishes, but others flew without any winter camouflage at all, a good example of this being 'Yellow 19' of Fw Richard Luy. Luy's Friedrich (W.Nr. 8625) wore a rather battered standard

grey scheme with quite delicate mottling. Other aircraft from 9./JG 5 seem to have received a kind of a compromise winter finish, this consisting of white distemper in quite small patches and blobs over only parts of the upper surfaces of the fuselage and irregular streaks of white on the wings, leaving much of the original grey scheme uncovered. The finest example of this is Walter Schuck's 'Yellow 9'. Similar schemes were

In contrast to III. Gruppe the aircraft painters of II. Gruppe (or at least 6. Staffel) were a little more conservative as seen on 'Yellow 1' of 6./JG 5 after an accident at Alakurtti on 21 February 1943. This Bf 109 F-4 featured the early-style 6. Staffel winter camouflage consisting of large irregular blotches of white over what is presumably a heavily mottled grey scheme or possibly a uniformly dark grey scheme. The aircraft was Werknummer 7537 and suffered 90% damage due pilot error on take-off (Coll. Horst Kube).



Uffz. Heinrich-Friedrich Wiegand from 9. Staffel flew a distinctive Bf 109 F-4 during the winter 1942/43. His 'Yellow 5' was obviously an ex-JG 54 machine, but instead of painting out the Grünherz emblem as was done with most machines, Wiegand adopted this for his personal marking, a name in yellow writing superimposed on the Grünherz, apparently with a patch of white distemper as well. The finish of his aircraft is very dark, probably a mix of greens – the original JG 54 scheme. However, this has been modified with two distinct applications of white distemper, the first using a spray gun, the second a brush (Coll. Brekken).



Bf 109 G-2, 'Black 14', from 8./JG 5 in the air during transfer to Petsamo in mid-April 1943. The finish comprises the standard greys with white squiggles added. Obviously this was done at Pori. The III. Gruppe disc does not appear to have any white outline. The fuselage cross does not have a black centre but seems to have been painted on a patch of RLM 75 (Coll. Mombeek).



Fw. Jakob Norz

also seen on some Stab III./JG 5 Messerschmitts such as Bf 109 F-4 'Chevron 3' of Lt. Rolf-Viktor Sadewasser.

III. Gruppe received its first G-2s in mid-April 1943, these being collected by fighter pilots from Pori. These machines were to be finished in winter schemes at the aircraft depot in Pori, as evidenced by a note in the log of the Kommandeur of Feldflugpark 3/XI Pori<sup>2</sup> on 10 April 1943. He wrote that 'Die Kalkfarbe muss in einwandfreien zustande abgelautet sein. Flugzeuge fuer JG 5 werden von den Verbänden neu bespritzt<sup>3</sup>'.

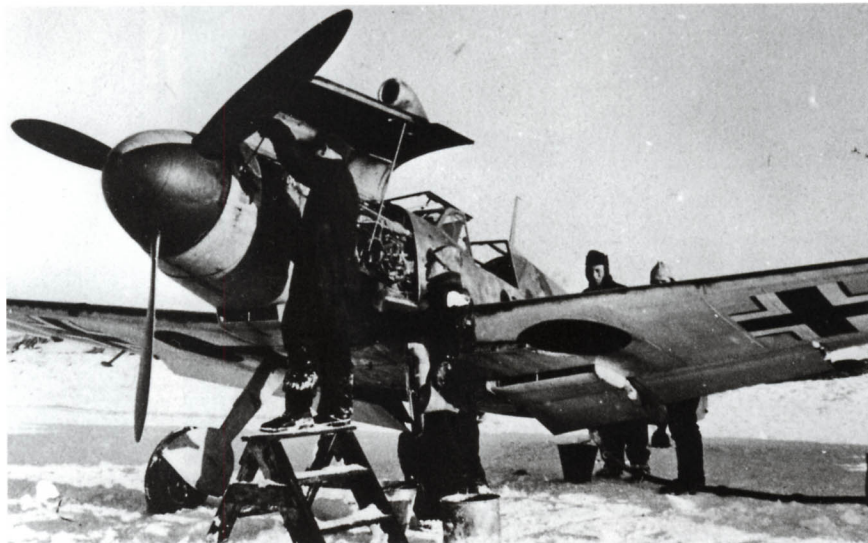
This is also confirmed by a photograph (reproduced above) taken between 17 and 19 April 1943 during the transfer flight to Petsamo, which clearly shows a meander scheme on two of the Messerschmitts, this being applied directly over the standard factory finish of RLM 74/75/76. Fw. Jakob Norz flew a similarly adorned G-2, 'Black 8' in spring 1943 (see Valtonen 1998: pg 85).

This winter scheme was quickly removed as summer 1943 commenced in earnest, exposing the normal greys. Norz was seen flying such a G-2 in the summer of 1943, still marked 'Black 8', but judging by

<sup>2</sup> BAMA RL 25/88.

<sup>3</sup> 'The chalk colour must be delivered in flawless condition. Aircraft for JG 5 shall be newly painted by the unit.'



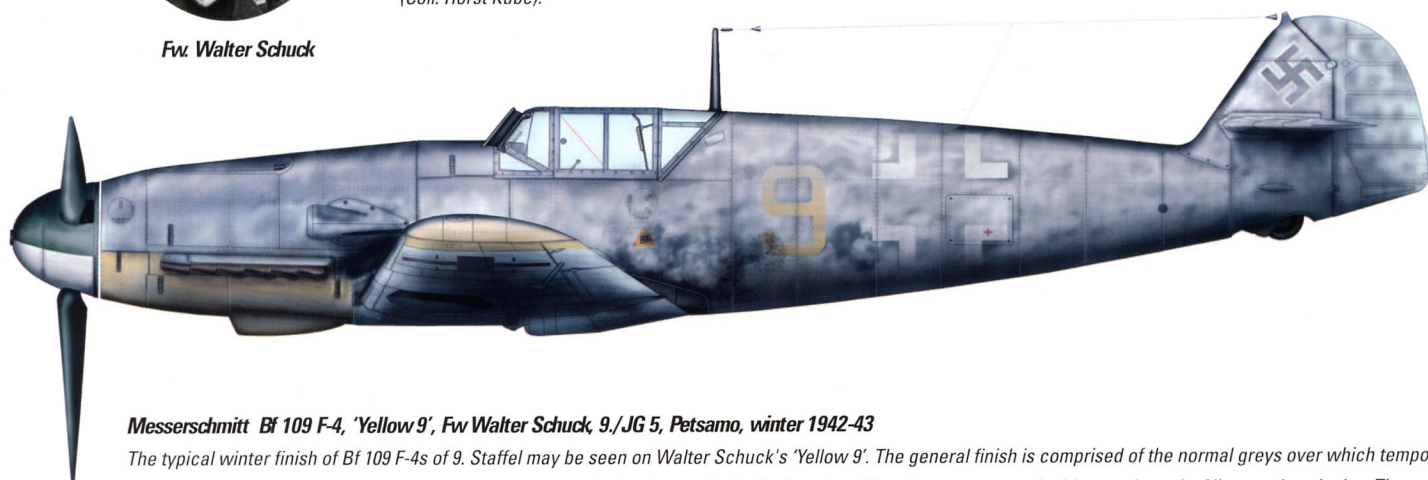


Above left and above:  
A Bf 109 F-4 finished in a rather worn grey scheme. 'Yellow 19' was flown by Fw. Richard Luy who later went to 14.(J)/JG 5. The round wheel wells are noteworthy, as is the combination of old type crosses beneath the wings and the white outline-only cross on the fuselage. No Gruppe disc is present (Coll. Mombeek (top) & Brekken).



Fw. Walter Schuck

Fw. Walter Schuck in his 'Yellow 9' in the winter of 1943. This aircraft had a partial winter camouflage over the rear section of the fuselage and the wings had been sprayed with white distemper, whereas the front fuselage seem to be devoid of this. Once again the fuselage cross is white-outline only, but the distance between the angles is greater than usual (Coll. Horst Kube).



**Messerschmitt Bf 109 F-4, 'Yellow 9', Fw Walter Schuck, 9./JG 5, Petsamo, winter 1942-43**

The typical winter finish of Bf 109 F-4s of 9. Staffel may be seen on Walter Schuck's 'Yellow 9'. The general finish is comprised of the normal greys over which temporary white distemper has been sprayed, but only over parts of the fuselage, principally the spine. The wings are covered with a mesh work of lines and squiggles. The fuselage cross has obviously been reapplied but only in the white outline style and the proportions are non-standard. The individual number lacks an outline.





Above: Lt. Horst Berger by his 'Black 11' which was finished in a very fresh-looking grey scheme with a white outline-only fuselage cross.

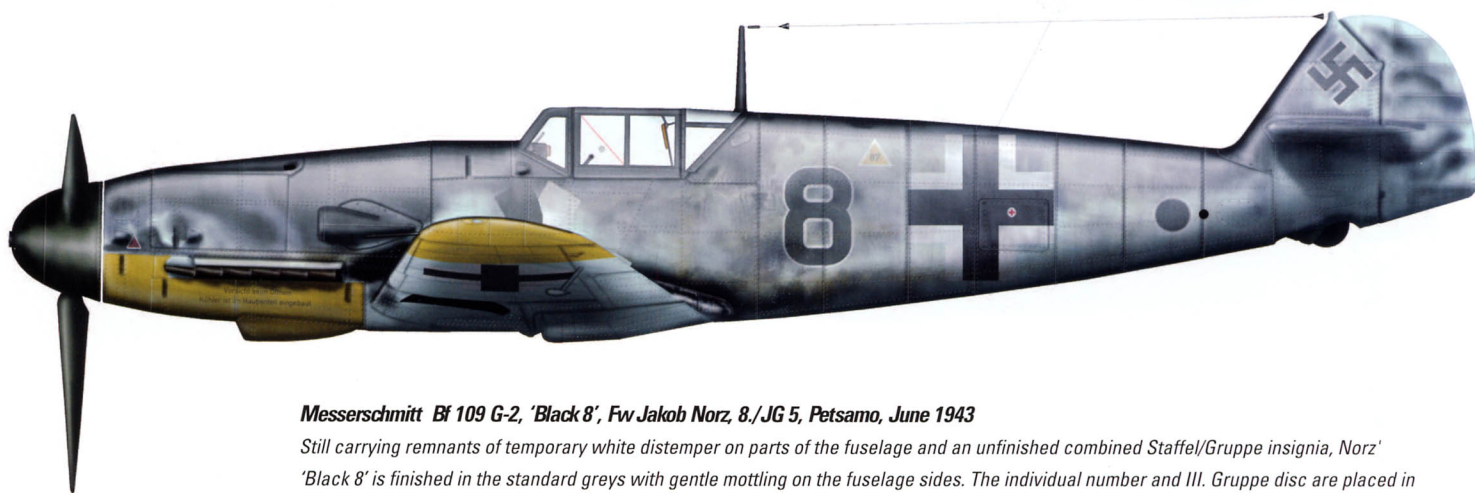
The photograph was taken on 13 March 1943 and there is still no Gruppe disc present (Coll. Horst Kube).



Above: Uffz. Jakob Norz photographed in spring 1943 by his faithful 'Black 8'. Note what appears to be remnants of white distemper over the fuselage and the lack of black outlines to the fuselage cross (Coll. Mombeek).



Left and below: Two further photographs of Norz' 'Black 8' showing the remnants of white distemper and the unfinished Gruppe and Staffel insignia below the cockpit (Coll. Mombeek).



**Messerschmitt Bf 109 G-2, 'Black 8', Fw Jakob Norz, 8./JG 5, Petsamo, June 1943**

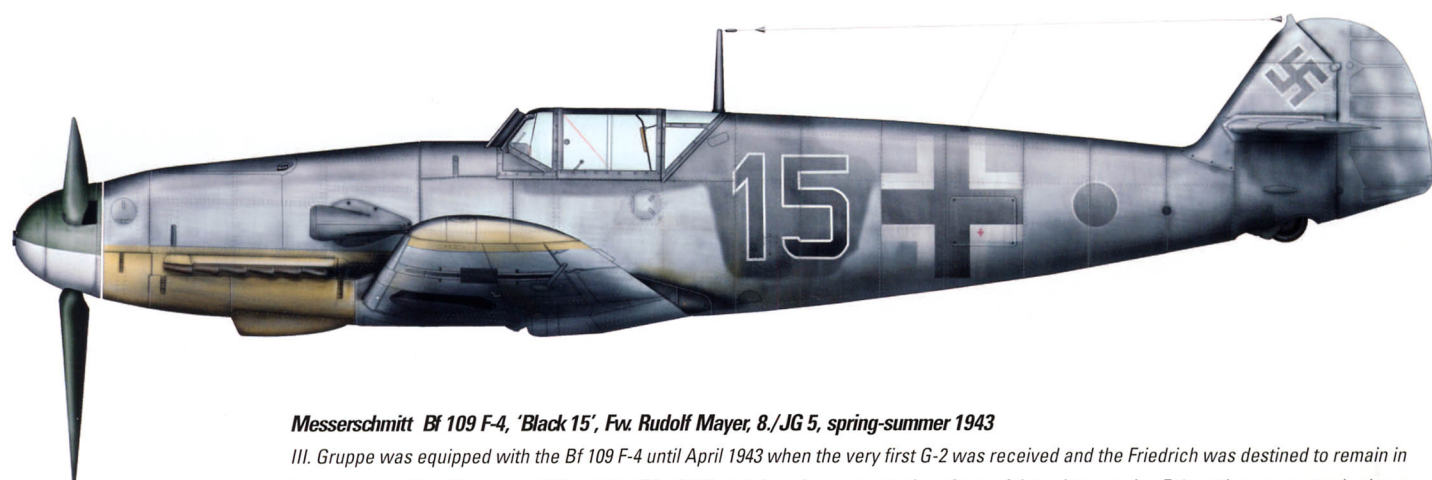
Still carrying remnants of temporary white distemper on parts of the fuselage and an unfinished combined Staffel/Gruppe insignia, Norz' 'Black 8' is finished in the standard greys with gentle mottling on the fuselage sides. The individual number and III. Gruppe disc are placed in rather odd positions, and the style of the '8' is noteworthy.





**Messerschmitt Bf 109 G-2, 'Black 4', Lt. Rudi Linz, 8./JG 5, Petsamo, summer 1943**

*Wearing a completely different and non-standard scheme, Lt. Linz' 'Black 4' is uniformly coloured, probably using dark grey (RLM 74) as seen on this profile, but the colour could just as well be one of the dark greens (RLM 71 or 70). Linz' personal emblem, a red heart with the word 'Gretel' superimposed, is featured below the port side of the cockpit. This emblem was reportedly green on his Fw 190 A-8 'Blue 4', which he flew in early 1945, and the possibility exists that it was green on this Bf 109 G-2 as well.*



**Messerschmitt Bf 109 F-4, 'Black 15', Fw. Rudolf Mayer, 8./JG 5, spring-summer 1943**

*III. Gruppe was equipped with the Bf 109 F-4 until April 1943 when the very first G-2 was received and the Friedrich was destined to remain in the inventory of the Gruppe until May 1944. 'Black 15' seen here is representative of one of these late-serving F-4s and wears a standard grey finish which has apparently seen some repainting and modification. The nose and cockpit section is virtually devoid of mottling and the area around the individual number has been over-painted with a hard-edged patch of RLM 74. The demarcation line of the upper surface greys is also unusually hard on the nose section. The extent of the yellow ventral cowlings panels appears to be quite unusual, being higher than normal. By this time the III. Gruppe disc was virtually standard on the Gruppe's aircraft.*

the detail of the fuselage cross (specifically the position of the first aid markings) this was a different machine from the winter-camouflaged one, although the particular style of the figure '8' was similar. His grey G-2 also bears evidence of a winter finish having been washed off the fuselage sides, so the possibility that this and the winter-camouflaged machine was the same exists. Norz' 'Black 8' in grey camouflage was photographed extensively and carried unfinished emblems below the cockpit at the time.

The grey scheme seems to have been the most common finish on III. Gruppe G-2s from summer 1943 onwards, and was also seen on those F-4s that remained with the Gruppe (the last Friedrich did not disappear from the Gruppe's inventory until May 1944). One exception that can be verified was the G-2



*Fw Rudolf Mayer's interesting F-4, 'Black 15', from 8./JG 5 with a somewhat retro camouflage scheme. This is in the normal greys, but there is virtually no mottling on the nose and a straight demarcation line, whereas the rear fuselage has light mottle and the individual number is painted on a large patch of RLM 74.*

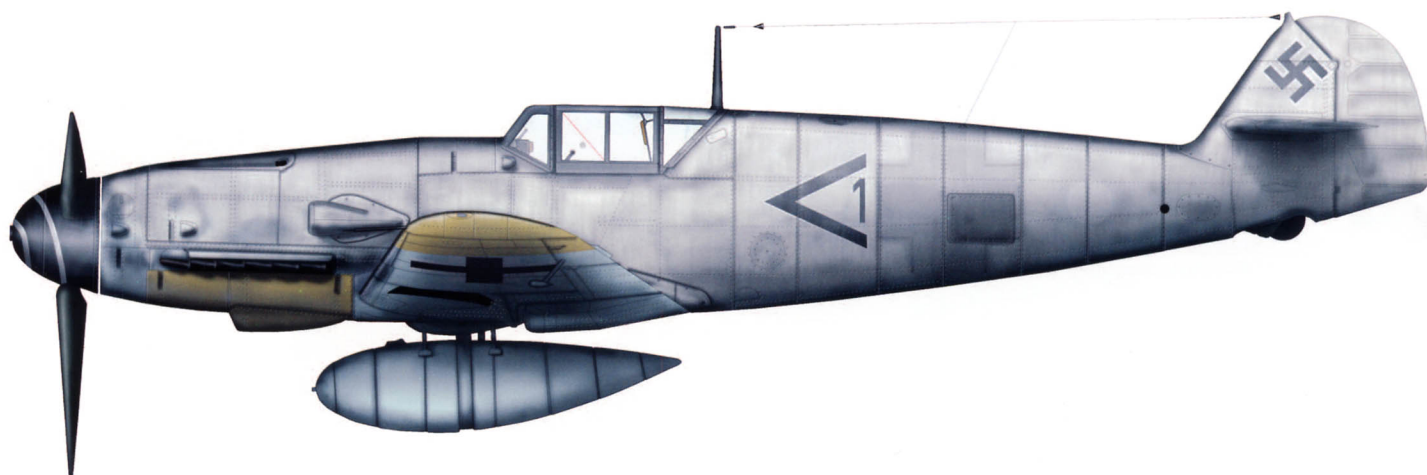
of Lt. Rudi Linz of 8. Staffel. His 'Black 4' adorned with his personal red heart emblem with the name 'Gretel' in yellow, was finished in a very dark uniform finish, possibly RLM 74 (Murawski 2002: pg 49).

One quite distinctive grey-painted Bf 109 F-4 of 8./JG 5 was 'Black 15' flown by Fw Rudolf Mayer in the autumn of 1943. This has the appearance of an overhauled and repainted machine. The rear half was lightly, but densely, mottled in the two regular greys, but the forward half was reminiscent of a 1940-style camouflage in that there was virtually no mottling on





*Bf 109G-2 'Chevron 1' from Stab III./JG 5 serving as a prop during fun times with a reindeer sleigh. The aircraft has a carefully applied winter finish and the fuselage cross has been obscured to a considerable degree. 'Yellow 7' may be seen in the background on the photograph top left. (Coll. Horst Kube).*



**Messerschmitt Bf 109 G-2, 'Chevron 1', Stab III./JG 5, pilot unknown, Petsamo, winter 1943-44**

*As the winter of 1943-44 approached, the Bf 109s of III. Gruppe were for the most part winter camouflaged once again. The Stab flight of III. Gruppe also camouflaged its machines, and at least one of them featured a quite extensive modification of the standard scheme. 'Chevron 1' has received an almost completely uniform coat of white paint on all upper surfaces and the fuselage Balkenkreuz has also been over-painted, and the same seems to have applied to the III. Gruppe disc. For some reason, the radio hatch was finished in a darker grey colour, perhaps denoting a replacement item. The Messerschmitt also featured a thin white spinner spiral.*

the fuselage sides and the upper surface colour (RLM 74) had a very straight and sharp demarcation line. The fuselage beneath the number was solidly over-painted with RLM 74. A further interesting fact is that the entire ventral part of the engine cowlings and part of the cowlings sides up to a point just above the exhaust area was finished in yellow and the entire exhaust area plus a part in front of this had been painted black.

The first Bf 109 G-6 came to the Gruppe in July 1943 but this single machine was transferred out almost immediately as were the seven G-6s delivered in August. Not until the end of September 1943 did III./JG 5 report G-6s on its inventory. There are unfortunately few photographs available of these G-6s, but as quite a number of them were factory-fresh machines they were finished in the standard grey scheme.<sup>3</sup> One well-known and extensively photographed G-6 from this period is 'Yellow 12', flown by the new Kommandeur of III. Gruppe from

June 1943, Hptm. Heinrich Ehrler. Although marked with the colours of 6./JG 5 and the Gruppe bar of II. Gruppe, the machine belonged to Stab III./JG 5. Its scheme consisted of the regular RLM 74/76/76 with large blotches of 74 and 75 on the fuselage sides and rudder. Initially this interesting Messerschmitt carried no personal markings, but later, elaborate rudder markings were applied, complete with an eagle holding a Swastika, a laurel wreath and the number '100' in gold. A row of 15 victory bars appeared below this decoration.

As the third war winter in the North opened, winter camouflage was once again applied to the Messerschmitts of III. Gruppe, Ehrler's aforementioned G-6 being one of these (Valtonen 1998: 87 and Keskinen & Stenman 1998: 24). 'Yellow 12' received a dense application of white on its top surfaces, these being quite close together and applied with a spray gun. The rudder, now adorned with two rows of 15 and

<sup>3</sup>. For a photo of one of these early G-6s still with its St. K. Z. on its way to JG 5 see Valtonen 1998: 90).



14 bars beneath the decoration itself, was not sprayed white.

During the winter of 1943/44, the large number of G-2s still on III. Gruppe's inventory was similarly camouflaged. The style of the white distemper varied, those of 9. Staffel's G-2s received a very dense application of blobs and splotches leaving little of the undersurface greys exposed, a good example being 'Yellow 10' flown by Hptm. Hans H. Schmidt who was shot down by AAA on 11 January 1944 (see Valtonen 1998: 88). Other painters preferred a more 'loose' application, such as the one seen on Bf 109 G-2 'Black 13' from 8./JG 5. In this instance a sample of different application techniques had been used, including soft splotches and harder wavy lines and streaks, resulting in a very odd looking aircraft with even some of the national markings and the figure '3' being partially overpainted. Yet other G-2s received only a partial white winter scheme, such as 'Yellow 7' of 9. Staffel.

Two photographs (opposite page) showing personnel from Stab and III./JG 5 having fun with a reindeer sleigh in winter 1944, may serve as an example of a typical Bf 109G-2 still in front line service in winter 1943/44. The application of the white distemper was quite delicate, obviously being applied with a spray gun and covered most of the upper surfaces. For some reason, the national markings on the fuselage has been rendered indistinct by applying white distemper over the black areas. The black spinner with a thin white spiral is also of interest. The Stab markings are in black with a thin white outline. Other Stab aircraft were probably similarly marked, only with different numbers.

It should also be mentioned here that at least some of III. Gruppe's aircraft continued the practice of applying yellow to the upper wing tips; this was seen on Bf 109 G-6s and G-2s. The undersurfaces of the wings tips were also yellow, but at this time a yellow theatre fuselage band was not adopted by JG 5.

During winter and early spring 1944, III. Gruppe continued using both the G-2 and G-6 in approximately equal numbers. Interestingly, a very few F-4s were also on the inventory of the Gruppe until May. This must be one of the very few times, if not the only time, that the F-4 and G-6 saw front line use with the same Gruppe as evident from the photograph reproduced at top of next page.

During the summer, the white distemper gave way to the normal greys, often with considerable over-painting with RLM 74 on the fuselage sides, presumably in an attempt to make the aircraft blend in with the monotonous colours of the tundra. A typical example of this is the Kommandeur's aircraft, the G-6 flown by Oblt. Franz Dörr, during the summer months of 1944 (see Keskinen & Stenman 1998: 27). It carried the regular double chevron of a Gruppenkommandeur and there seems to be small remnants of white distemper left on the aircraft. At this time Dörr was flying a mid-series production G-6 with the short antenna mast and a DF loop.

August 1944 was a month of reorganisation and reshuffling for the Jagdwaffe. Because of the increasing necessity of defensive fighter operations over all fronts, each Jagdgruppe was to be expanded by a fourth Staffel and for III./JG 5 the following changes took place to bring this about:

- 7./JG 5 became 10./JG 5 commanded by Lt. Schuck
- 8./JG 5 became 11./JG 5 commanded by Oblt. Glöckner
- 9./JG 5 became partly 8./JG 5 in II./JG 5 commanded by Oblt. Andrese and partly a 'new' 9./JG 5 commanded by Lt. Gayko

The III. Gruppe was completed by the formation of a new 12./JG 5 commanded by Lt. Linz, a very experienced 'Eismeerjäger'. Thus, by the end of August 1944, III./JG 5 consisted of 9., 10., 11. and 12. Staffel. This reorganisation necessitated new Staffel colours and they were as follows:

- 9./JG 5** - white numbers with black outline
- 10./JG 5** - black numbers with white outline
- 11./JG 5** - yellow numbers with black outline
- 12./JG 5** - blue numbers with white outline

The Gruppe disc continued to be used, with the Staffel colours as listed above.

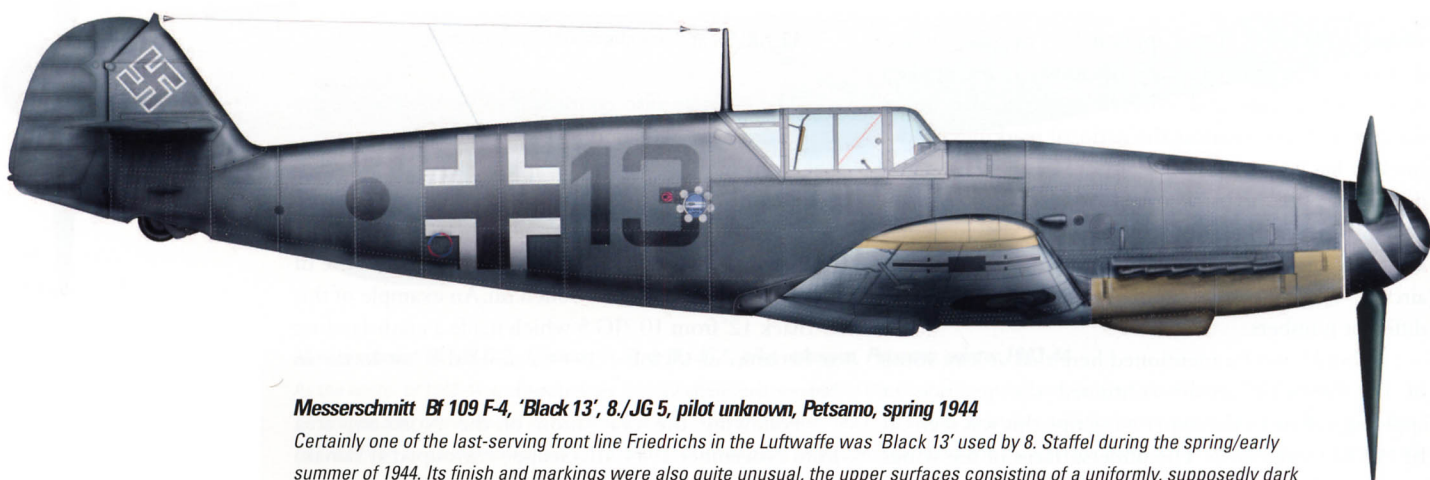
From summer 1944 the G-6 became the principal equipment of the Gruppe, although a few G-2s were kept by the unit until October. Some of the G-6s delivered to the Gruppe in the autumn of 1944 were of the later type with a tall wooden fin. An example of this is 'Black 12' from 10./JG 5 which made a crash-landing at Petsamo in October 1944, one of the last to do so before the airfield was evacuated.

Following the evacuation of the Northern area from November 1944, III. Gruppe regrouped at Banak, Altafjord and Bardufoss airfields where it was destined to receive both new pilots and aircraft. Elements of its component Staffeln were to convert onto the Fw 190 and training was to begin at these airfields. However, when the then Geschwaderkommodore, Major Heinrich Ehrler, paid a visit to Bardufoss on his way to Banak where he was to set up a temporary command post, he discovered that the new pilots left a lot to be desired as far as flying skills were concerned. He therefore decided to stay at Bardufoss to set up a training command and facilitate conversion onto the Focke Wulf Fw 190. Ehrler was at this time flying a Bf 109 G-6 with the Geschwaderkommodore's chevrons, but otherwise in standard colours and markings.

It was at this time that the tragic incident with the sinking of the battleship *Tirpitz* took place. III./JG 5 endeavoured to intercept attacking Lancaster bombers but failed – failure which cost Ehrler his position as Geschwaderkommodore and resulted in a court martial in December, following which Ehrler was temporarily demoted and eventually transferred to JG 7.

When the *Tirpitz*-incident occurred, III. Gruppe was flying a mixture of Fw 190s and Bf 109 Gs. The Gruppe received a total of 24 Fw 190s during

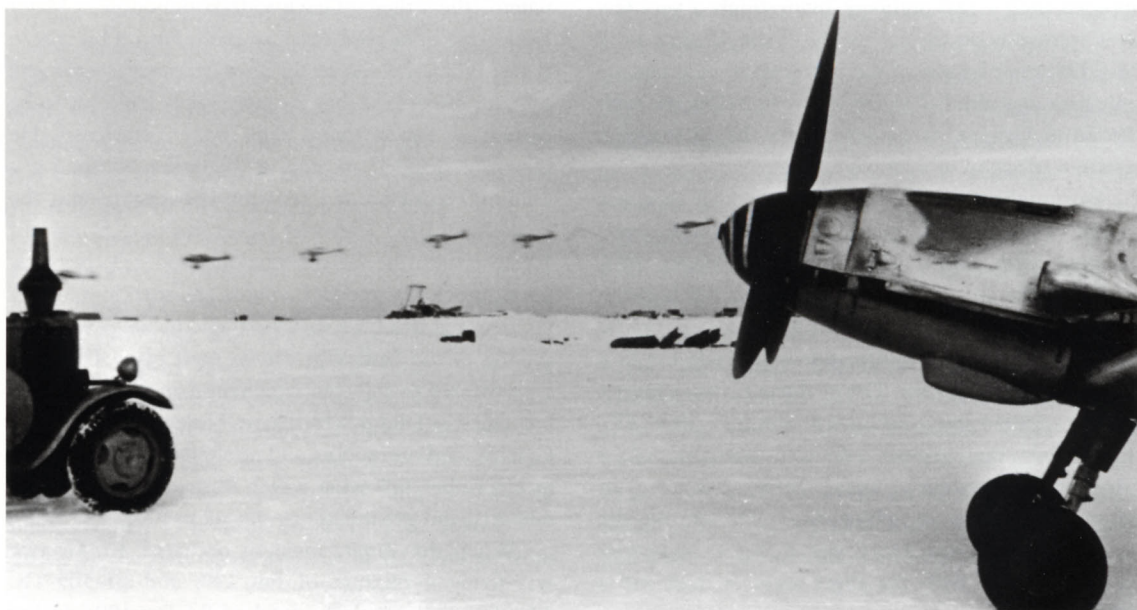
A quite remarkable photograph, showing a Bf 109 F-4, 'Black 13' from 8. Staffel in front line service along with a G-6, 'Yellow 4', from 9. Staffel at Petsamo in early 1944. The very dark and uniform upper surfaces of the F-4 is noteworthy. This is probably RLM 74. The ventral part of the cowl is bright yellow and there is a peculiar stencilling marking around the oxygen refill hatch. A plain black III. Gruppe disc is probably present. The G-6 carries the normal greys, although with considerable over-painting on the fuselage side and the wing tips are yellow (Coll. Horst Kube).



**Messerschmitt Bf 109 F-4, 'Black 13', 8./JG 5, pilot unknown, Petsamo, spring 1944**

Certainly one of the last-serving front line Friedrichs in the Luftwaffe was 'Black 13' used by 8. Staffel during the spring/early summer of 1944. Its finish and markings were also quite unusual, the upper surfaces consisting of a uniformly, supposedly dark grey (RLM 74) finish and the individual number applied in plain black. There was in all probability a III. Gruppe disc (not visible on the available photograph), also in plain black. The oxygen filler point stencilling has an unusual set of white circles around it, overlapping the individual number. The spinner has a thin white spiral.

A winter-camouflaged Bf 109 G-6, probably belonging to III./ JG 5, seen in the winter of 1943/44. Note that the lower portions of the undercarriage doors have been removed (Coll. Brekken).







*Allegedly showing Oblt. Kurt Schulze's 'Yellow 5' from 9./JG 5, this mid-production G-6 (note short antenna mast and DF loop base) was probably typical of III./JG 5 G-6s in the summer of 1944. The camouflage is in the regular grey with fairly heavy mottling on the fuselage sides. The spinner is probably black-green with a white spiral. Note the yellow outer wing panels (Coll. Horst Kube).*



*Although this photograph has been published a number of times, where it was taken is not known for certain. It shows what is probably a Bf 109 G-2 from 8./JG 5 in the north, although the possibility that this is a G-6 from 10./JG 5 at Gossen cannot be discounted. The most interesting feature is the white tail, which may have the same significance as the white rudders of 9. and 12./JG 5's Fw 190s at Herdla in 1945 – i.e. signifying Staffel or Schwarm leaders (Coll. Brekken).*



*'Black 12', the Bf 109 G-6 of Lt. Heinicke from 10./JG 5 after a forced landing at Petsamo on 17 October 1944. The aircraft was hit in the fuselage spine by a large calibre cannon, possibly a 37 mm round from an Airacobra, but still managed to reach the airfield and make a wheels-up emergency landing, whereupon the Messerschmitt broke its back. The aircraft has the tall tail fin and standard RLM 74/75/76 scheme with comparatively heavy mottling in the two greys. The spinner seems to have a very broad white spiral. Note that the older type of canopy is fitted, having been ejected next to the aircraft. Numbers and Gruppe disc are black with a thin white outline. The absence of any visible theatre markings is noteworthy (Coll. Brekken).*





**Messerschmitt Bf 109 G-6, 'Yellow 10', Fj.-Ofw. Walter Schuck, 9./JG 5, Petsamo, June 1944**

This was probably the aircraft used by Schuck during the famous shooting down of the reconnaissance Spitfire PR IV flown by Senior Lieutenant Popvichon of 118 ORAP on 18 June 1944, reportedly flown in British markings. 'Yellow 10' was a mid-production G-6 with short antenna mast, DF loop and the tall wooden tail fin. The finish was entirely in standard greys, although with quite heavy mottling on the fuselage sides. The Gruppe disc and presumably the individual number (not visible on photographs, but mentioned in combat reports) were plain yellow.

Bf 109 G-6, 'Yellow 10', which Fj.-Ofw. Walter Schuck used on 18 June 1944 when he shot down a Russian-flown reconnaissance Spitfire PR IV some 45 km north west of Murmansk. Schuck is seen here being interviewed by a Kriegsbericht, apparently for a radio programme. An experienced pilot with the best eyesight in his unit, Schuck only needed five 20 mm rounds and thirty 13 mm rounds to bring down his adversary. This was his 113th claim. The G-6 has the tall tail fin and is finished in standard greys (Coll. Horst Kube).



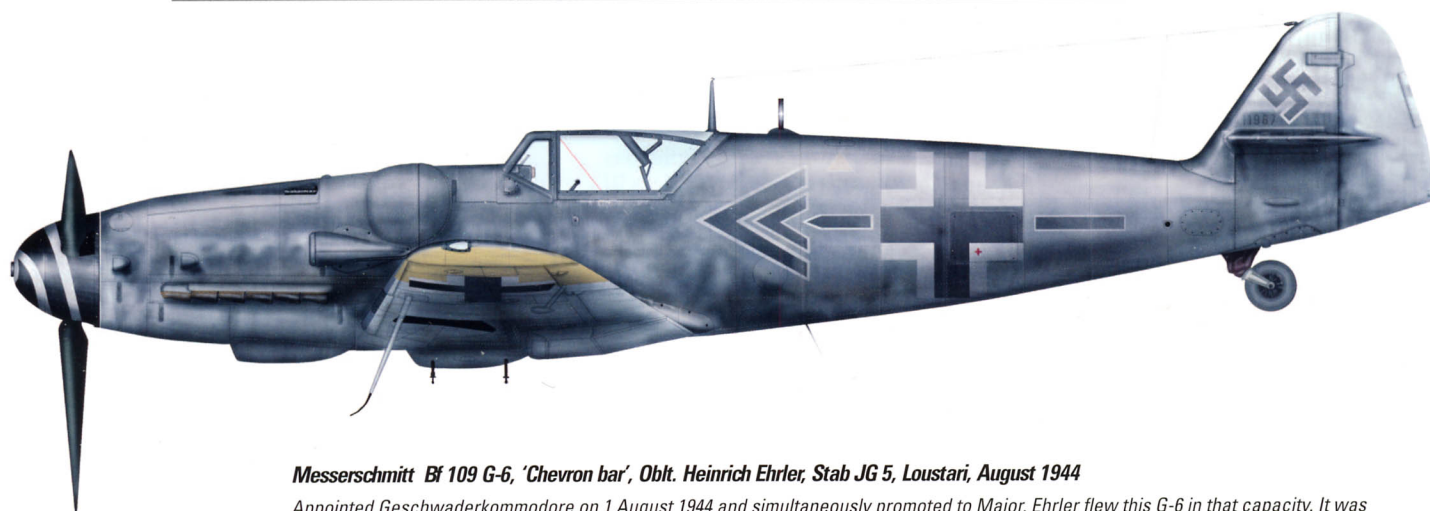
Major Ehrler and his adjutant, Lt. Lüder, at Loustari airfield, Finland, in the autumn of 1944. See opposite page top (Coll. Rune Rautio).







Major Ehrler's Kommodoremaschine can be seen in the background, complete with Geschwaderkommodore chevrons and bars. The colour is the standard RLM 74/75/76 and there does not appear to be any victory markings on the rudder (Coll. Rune Rautio).



**Messerschmitt Bf 109 G-6, 'Chevron bar', Oblt. Heinrich Ehrler, Stab JG 5, Loustari, August 1944**

Appointed Geschwaderkommodore on 1 August 1944 and simultaneously promoted to Major, Ehrler flew this G-6 in that capacity. It was another mid-production G-6 in the 411xxx block (block numbers are visible on the tail fin), with tall fin and short antenna mast. It is not known what kind of canopy the fighter featured, but the profile depicts it with the one-piece so-called 'Erla-haube'. However, if this was present it was probably a retro-fit. Ehrler's Kommodoremaschine was finished in standard greys with some over-painting around the area of the markings. There may have been some kind of victory markings or laurel wreath on the rudder, but the photographs available do not show this in sufficient detail to be included on the profile.



A photograph taken after the war at Bardufoss airfield showing various Luftwaffe aircraft wrecks. In the foreground, the wing of an Fw 190 is visible. As no Fw 190s were left intact at the airfield at the end of the war this must be the remains of one that was destroyed or damaged at Bardufoss<sup>4</sup> before III. Gruppe left the northern front. The type of underwing cross is noteworthy. The Bf 109 seen to the right is Yellow 1, probably from 11./JG 5, finished in the standard greys. The Ju 88 in the background is an ex-KG 26 machine (Coll. Midt-Troms Museum).

<sup>4</sup>. Candidates being:

Fw 190A-8, W. Nr 732167, 'White 4' from 9./JG 5, flown by Fähnr. Karl Amm – crashed during take-off.  
Fw 190A-8, W. NR. No codes from 9./JG 5, flown by Lt. Walter Peters – crashed during take-off.



A new Fw 190 A-8 on its way north to Bardufoss in October or November 1944 where it would be incorporated into III. Gruppe. The aircraft carries an unmodified grey scheme with light mottling and no identifying markings of any kind. Somewhat unusually for an Fw 190, the special 200 litre drop tank intended for the Bf 109 G-12 two-seat trainer is carried. Particularly noteworthy is that this Fw 190 is fitted with a full compliment of radio gear, including the FuG25a IFF (small ventral antenna), DF loop and FuG 16ZY. After entering service with JG 5, the FuG 16 ZY was occasionally removed, as was the FuG 25. The escort is Bf 109 G-6, 'Black 1', from 10. /JG 5 (Coll. Postlethwaite).

Fw 190A-8, W.Nr. 737435, 'White 20', from 9./JG 5 after an unfortunate incident on the shore at Herdla airbase. The dense mottling of the winter finish is noteworthy, most Fw 190s from 9. and 12. Staffel received lighter winter applications. Note also the partial over-painting of the fuselage cross and Swastika and also the fact that these markings are of the black outline only variety (Coll. Dybvig).

November, but these were a mixture of older, refurbished A-2/3s (7), A-8s (15) and even two F-8 fighter-bombers taken over from 13./JG 5 on 6 November 1944. The latter were used as fighters however. Photographic material from this period is scarce to say the least, but the Fw 190s were all finished in standard greys. During the winter of 1944/45, both the Bf 109s and Fw 190s received temporary winter camouflage. This took the form of various types of mottling, some consisting of large splotches over the upper surfaces while others were quite elaborate meander schemes. At least one received a very heavy coat of white distemper over all top surfaces, these even obscuring parts of the fuselage cross and Swastika.

In late November/early December 1944, III. Gruppe started to transfer south. At first it took up residence at Gossen and Værnes, from where it flew

missions against RAF aircraft making attacks on German shipping travelling along the Norwegian coast. Two of the Staffeln – 9. and 12. – were originally planned to transfer to Herdla just outside Bergen, but due to bad weather this was delayed until early January 1945. It is known that when these two Staffeln arrived, which were by now fully equipped on the Fw 190 (mostly A-8s, but also some A-2/3s in 9. Staffel as well as two F-8s), most, if not all of them still carried their winter camouflage. An example of this is 'White 20', an A-8 which made an emergency landing on the coast at Herdla. The Focke-Wulfs at Herdla will be described in more detail at the end of this chapter.

One of the two surviving F-8s mentioned above which was transferred to II. Gruppe on

6 November 1944, was to have a very interesting career in the Luftwaffe. This airframe, W.Nr. 931862, carrying the markings 'White 1' when it flew with 9./JG 5, was lost on 9 February 1945, but its history does not end there as – at the time of writing – it is under reconstruction to flying condition by the 'White 1' Foundation<sup>5</sup> in Florida, USA. Some fortuitous events and more research has allowed a detailed insight into the history of this Focke-Wulf, from the time it was assembled at the factory until its end of service in the Luftwaffe.

The other two Staffeln of III. Gruppe, 10. and 11., stayed at Gossen for the remainder of the war, flying both the G-6 and G-14 as well as a very few G-2s which were the last survivors of the 'glory days' on the Eismeerfront. Some of these G-2s must have seen almost two years of almost continuous service and were



5. <http://www.white1foundation.org/>



the last of their variant in front line service. Like the Fw 190s of 9. and 12./JG 5, the Bf 109s also received temporary white distemper on top of their otherwise regular grey camouflage. This took the form of a gentle meander of white streaks, in many cases barely enough to be distinguished from the RLM 76. There is even evidence to suggest that the white distemper was confined to the fuselage in some cases. No examples of substantially over-painted Bf 109s from this period are known.

Two further changes in markings took place in the last months of the war. Some time in late March or early April 1945, the famous 'Eismeer' insignia was applied to the port side of the engine cowling<sup>6</sup>. Furthermore, at about the same time the black-yellow 'Reichsverteidigung' bands allocated to JG 5 were applied to the tails of the Bf 109s (see profiles for placement), the black band preceding the yellow. The III. Gruppe disc was reapplied on top of this band (the



application and history of these markings are described in more detail at the end of this chapter).

Although all Bf 109s, including the G-14s, of III./JG 5 are believed to have been finished in the standard RLM 74/75/76 finish, post-war photographs suggest that the factory schemes were substantially modified on some of them. One image of a G-6, 'Black 3', shows that the entire port fuselage section below the cockpit has received a solid application of RLM 74, this also having occurred to the starboard side 'Black 7' visible in the same photograph (thus probably both sides was so treated). Why this was done is uncertain.

A series of photographs taken at the end of the war, or perhaps just after the cessation of hostilities since the aircraft have been cocooned with tarpaulins, reveal several points regarding their camouflage and not least the spinner markings. All aircraft with black numbers (i.e. 10. Staffel) have white spinners with thin black spirals (the reverse usually being the norm within the Luftwaffe). On the other hand, photographs of aircraft

Another view from Bardufoss airfield taken after the war.

The Fw 190 tail in the foreground probably belonged to 9./JG 5 as evidenced by its white disc marking (this may appear yellow but that is probably caused by weathering) and may have been one of the Fw 190s lost at Bardufoss prior to the transfer south and conversion onto the Bf 109. The camouflage is quite light with large splotches of 74/75 on the tail and 74 on the spine of the tail fin. The dorsal section of the fuselage appears to be in 75. Another Focke-Wulf may be seen in the background, this being the tattered remains of an Fw 58 Weihe (Coll. Dybvig).



*Bf 109 G, 'Black 12' from 11./JG 5 lost near Hjørundfjord on 16 February 1945. This is either Bf 109 G-6 W.Nr. 167233 or Bf 109 G-14 W.Nr 782249. The small white splotches on the grey camouflage fuselage are noteworthy, and the wings appear to be similarly painted. The ID number is comparatively small and thinly outlined in white. Note the greyed-out centre of the fuselage cross and the retracted tail wheel, the latter usually not being associated with this late series Bf 109s (Coll. Otherhals).*



**Messerschmitt Bf 109 G-14, 'Yellow 8', 10./ JG 5, pilot unknown, Gossen, March-April 1945**

*This snow camouflaged G-14 was photographed at Gossen in late March or April 1945 as evidenced by the presence of the black-yellow RV band on the tail. The finish was standard grey with a rather constrained winter camouflage consisting of gentle squiggles of white on the top surfaces. The number was probably an '8' but could also have been a '3' but was, in any case, thinly outlined in black, as was the III. Gruppe disc. The white spinner spiral was quite broad. At this time the aircraft would have featured the famous Eismeer Gruppe insignia on the port side of the cowl.*

<sup>6</sup> The time estimate is based on an extensive analysis of various photographs in a private collection.





**Messerschmitt Bf 109 G-6, 'Black 3', 11./JG 5, pilot unknown, Gossen, May 1945**

One of the 29 Bf 109s left at Gossen at the end of the war (comprising 21 G-6s and 8 G-14s), 'Black 3' featured the odd solid over-painting around the cockpit section seen on a number of these aircraft. The colours were the regular greys and markings were standard for the unit. The Eismeer emblem was featured on the port side of the engine cowling (this being detached on the photograph on which the profile is based) and the aircraft also had the thin black spiral on a white spinner which was an identifying feature for 11. Staffel aircraft.



A Bf 109 G-14 from 11./JG 5 photographed at Gossen in March/April 1945 still showing the temporary white colour on top of the greys. The individual number is either 'Yellow 3' or more likely 'Yellow 8' (Coll. Dybvig).

with yellow numbers have the more common black spinner with a rather thick white spiral. Therefore, the spinner marking was obviously used to distinguish the two Bf 109 Staffeln at Gossen. These photographs also show that some, but not all Bf 109s had their individual number repeated in black on the undercarriage door.

Without doubt the most spectacular Bf 109 left at Gossen was that of the Gruppenkommandeur, Oblt. Hans Dörr. His aircraft, Bf 109G-6, W.Nr. 411960, was not only marked with the double chevrons, but carried his total tally of 122 victories on the rudder, a practice that was becoming very rare at this stage of the war. The Messerschmitt featured the usual grey colours and comparatively little mottling on the fuselage sides.

When the war was finally over, the Bf 109s at Gossen were collected on one of the taxiways, plundered by the victors, and their armament, wheels and various other items of equipment removed before they were destroyed. The photographs on the following page show this process under way.

Mention must be made here of the Bf 110 G-2s assigned to Stab II./JG 5 at the very end of the war. When IV./ZG 26 was disbanded on 23 February 1945 not all its aircraft were placed in storage, with one each

of the Bf 110 G-2s being assigned to some of the Jagdstaffeln of JG 5! The lists made by the Germans showing the total inventory (that is 'total' except for non-operational machines) of the Luftwaffe in Norway on 10 May 1945 report the following dispositions of Bf 110 G-2s within Jagdgeschwader 5:

Unit	Base	No. and type	W.Nr.	Code
7./JG 5	Forus	1 Bf 110 G-2	710 008	?
9./JG 5	Herdla	1 Bf 110 G-2	120 167	3U+EW
10./JG 5	Gossen	1 Bf 110 G-2	210 087	4A+EU
13./JG 5	Lista	1 Bf 110 G-2	120 034	?
14./JG 5	Kjevik	1 Bf 110 G-2	210 008	?

According to a former pilot of JG 5, the Bf 110 G-2 stationed at Herdla was operated by Stab III./JG 5 and was the only aircraft placed at the disposal of the Stab! It is reasonable to assume that the Bf 110s were operated by the Stab of the other Staffeln as well.

Fortunately, the markings and camouflage of two of these Bf 110s are known. The Bf 110s assigned to 9. and 10./JG 5 at Gossen and Herdla, respectively, were photographed after the war. They reveal that both aircraft retained their codes from IV./ZG 26, these being '3U+EU' (Gossen) and '3U+EW' (Herdla). The most interesting aspect, however, is the fact that they received the black-yellow RV band – almost certainly the only instance where a Bf 110 was painted with these. Camouflage remained the usual RLM 74/75/76.

#### The Herdla Focke-Wulfs described

The Focke-Wulfs at Herdla were destined to become perhaps the most photographed of all JG 5 machines, possibly due to the static conditions and relative calm at this base for the last three months of the war, at least when compared to other fronts. Many of these photographs are not available for publication, but have, in part, been studied by the author. At the time of writing, a work devoted solely to these two units stationed at Herdla is due to be published by renowned Norwegian author, Cato Guhnfeldt.



*The final scene before total destruction at Gossen in the summer of 1945. Most of the 10. and 11. Staffel Bf 109G-6s and G-14s have had their engine cowlings, wheels, and armament removed. Visible aircraft include 'Black 2', 'Black 3', 'Black 13', 'Yellow 15' and Dörr's 'Doppelwinkel' machine (centre, with Erla Haube still on) (Coll. Oterhals).*



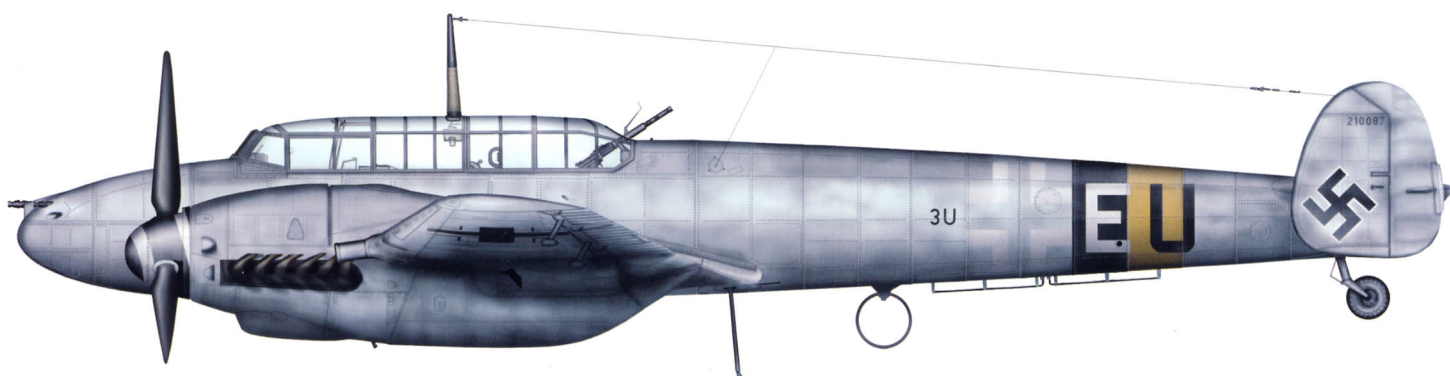
A more detailed analysis of these Focke-Wulfs is needed as much has been written and said about them in the past, not all of it entirely correct.

9./JG 5 was equipped from the outset with three different variants of this famous fighter including the A-2/A-3 and the A-8, as well as two F-8 fighter-bomber variants (which were used exclusively as fighters). The other Staffel, 12./JG 5, only used A-8s. Some of the A-8s were of the late production type with the bulged canopy of the F-8 and late-war markings, although most had the early-style canopy and fuselage and underwing crosses with white centres.

One aircraft was a hybrid; Heinz Orłowski's F-8, W.Nr. 931 832, marked 'White 1' of 9./JG 5, had an F-8 fuselage, but A-8 type wings. 'White 1' had only two MG 151s in the wings, even though the upper wing bulges for the mid-wing cannon were retained. The Staffelführer of 12./JG 5, Leutnant Rudolf 'Rudi' Linz, flew a Fw 190A-8, 'Blue 4', W.Nr. 732 183, that



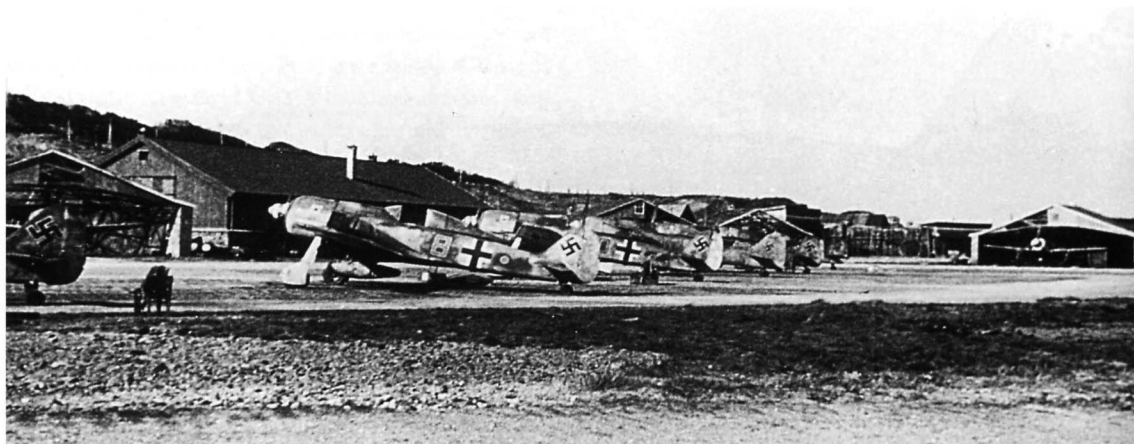
*Bf 110 G-2, W.Nr. 120167, '3U+EW' at Herdla with the RV bands clearly visible. Finish is deteriorated and faded grey. Note drop tanks (Coll. Dybvig).*



**Messerschmitt Bf 110 G-2, '3U+EU', W.Nr. 210087, Stab JG 5, pilot unknown, Gossen, May 1945**

*Most certainly one of the very few Bf 110s to feature an RV band, '3U+EU' was assigned to Stab /JG 5 around February 1945 following the disbandment of IV/ZG 26. It had previously served with 10./ZG 26 and retained its codes from this unit. The finish consisted of regular greys with light mottling on the fuselage sides. A white spiral on a black spinner was also featured and no ETC 50s or drop tanks appear to have been fitted.*

Perhaps the most famous photograph of the Fw 190s at Herdla – a line-up of 12. Staffel machines in late March-April 1945. The aircraft in the front is 'Blue 8' of Uffz. Dietrich, while behind it can be seen 'Blue 10' of Uffz. Dolge. Both Focke-Wulfs show extensive repainting in RLM 74 on the fuselage sides, behind and in front of the Balkenkreuze. These probably cover a previous identification number and the IV. Gruppe wavy line as some of the A-8s were taken over from this Gruppe in late 1944 (Coll. Dybvig).



Fw 190A-8 'Blue 4' taxiing on one of the numerous concrete taxiways at Herdla which led to the main runway. Features to be noted are the blue cowling ring, the blue spinner with white spiral, the individual number repeated on the undercarriage door, the FuG 16ZY and FuG 25a IFF antennas and the generic grey scheme. This may be Rudi Linz' personal aircraft, W.Nr. 732183, which fits with this aircraft apparently being in the process of leading 12. Staffel for take-off (Coll. Horst Kube).



Fw 190A-8, 'Blue 13', showing the partial radio fitment seen on some of the Focke-Wulfs at Herdla. The FuG 25a IFF (whip antenna) is present as is the FuG 16ZY Morane antenna, but the DF loop is missing. The camouflage appears quite fresh on this machine, indicating it is a recent delivery. The RLM 74 streaks on the cowling are comparatively new as the rest of the cowling is RLM 76 with only a small segment of original RLM 74 on top, this may indicate a recent engine change (Coll. Horst Kube).



had A-3 wings mated to an A-8 fuselage. These wings had apparently been re-manufactured to accommodate the MG 151 instead of the MG FF in the mid-wing position and presumably did not differ from the A-8 wings in external appearance. All A-2/3s had had their MG FFs removed.

According to photographs, the FuG 16ZY antenna was removed from most of the Focke-Wulfs at Herdla, probably some time after February 1945. This is evident from the fact that the antenna is visible only on Focke-Wulfs which did not have the famous Eismeer insignia on the port side of the engine cowling. This shield was applied in late March 1945 (see later) and is helpful in dating these photographs. All Focke-Wulfs with the antenna lack the insignia, supporting the view that the equipment was removed relatively early in the unit's

stay at Herdla. The exact reason is not known, but the fighters were led by the Jägerleitstelle situated at the mountain Fløyen in Bergen which possibly rendered the FuG 16ZY navigation system superfluous. The FuG 25a IFF, however, was fitted to all fighters. Initially, the A-3 used the FuG VII radio and it is not

known if all early series Fw 190s were re-equipped with more up-to-date radios. What is known is that one Fw 190A-2/3, 'White 12' of 9./JG 5, had a very unusual radio installation in its port fuselage side which, in all probability, was a local modification. This type of radio was not seen on any other Fw 190 at Herdla or anywhere else. A few Focke-Wulfs also had the loop antenna removed but kept the others, as seen on 'Blue 13' above.

### Camouflage and Markings

As far as can be ascertained, almost all Focke-Wulfs at Herdla were camouflaged in the standard RLM 74/75/76 camouflage scheme with standard patterns on wings and tail plane, (though with some notable exceptions as explained). This can be seen from the list





Spinner and propeller colours characteristic of 9. Staffel (left) and 12. Staffel (right). The photograph to the right also shows how the individual number often, but not always, was repeated on the undercarriage door (Coll. Dybvig (left) & Horst Kube).



Further views of Fw 190s of 12. Staffel being readied for take-off. Identifiable aircraft include 'Blue 12' which is seen in the foreground (Coll. Horst Kube).



'White 7' of 9. Staffel was an example in which the early national insignia was still used on 2-3 year-old A-3s at Herdla in 1945. A fresh patch of RLM 76 covers a previous numeral (Coll. Dybvig).

Uffz. Hein Birk and his  
Fw 190A-8, W.Nr. 732217, 'Blue  
5', named 'Ma'.

The finish is an unmodified  
factory grey scheme with  
some mottling with RLM 74 on  
the fuselage sides. The lack of  
an Eismeer emblem dates the  
photograph to some time  
between January-March 1945  
(Coll. Horst Kube).



Uffz. Siegfried Ballerstädt A-4,  
'White 4'. As can be seen, this  
Focke-Wulf featured a very  
dark upper surface scheme  
consisting of an almost  
uniform application of RLM 74.  
The style of the numeral is to  
be noted (Coll. Dybvig).

of Fw 190s left at Herdla at the end of the war, which were predominantly<sup>7</sup> from the 732001-732310 series (produced in August 1944) plus a few from the 350151-350300 block (August 1944) and 737920-737999 block (October 1944), probably well before the late war greens/brown became standard at these production centres.

9. Staffel used white as its Staffel colour whilst 12./JG 5 used blue (probably identical or comparable to RLM 25). 9. Staffel used a rather thick black outline on its numbers and Gruppe symbols, whilst 12. Staffel used a broad white outline. The cowl ring and spinner was also painted in the respective Staffel colour to ease identification. The spinners usually had a black (9. Staffel) or white (12. Staffel) spiral which varied greatly in complexity and length. It is known that at least one of the Focke-Wulfs had a spinner which had previously had a yellow spiral, indicating prior ownership.

Most Focke-Wulfs also had their individual numbers repeated in black on their wheel doors, in

about 15 cm high figures. For reasons unknown, they were over-painted later in the war with black, or dark grey (74?) paint.

The national insignia varied greatly. Some of the early series A-2/3s still used the crosses with black outlines whilst a few of the A-8s used black outline only crosses on the fuselage and under the wings. The top surfaces of the wings had the normal white outline only crosses, the exception being the A-2/3s, which had black in the centre as well as black outlines. The most common types of crosses, however, had black centres and white angles, but no black outlines. These aircraft still used white outline-only crosses on the upper wings. As expected, the colour and outlines of the Swastikas followed that of the other national insignia. Many of the Focke-Wulfs displayed their Werknummern on the tailfins.

Some Focke-Wulfs showed signs of extensive over-painting on the fuselage sides. They belonged mostly to 12./JG 5 and examples included 'Blue 8' and 'Blue 10'. The over-painting was in the area where the identity numbers and Gruppe disc would have been, clearly indicating previous ownership. On 'Blue 10', one can even discern the shape of a wavy band, thus making it clear that this was an ex-IV. Gruppe Focke-Wulf having been transferred to III. Gruppe in November/December 1944. Others were delivered new from the factories or aircraft depots. These 'new' Focke-Wulfs were characterized by a very fine, almost non-existent mottling on their fuselage sides and an generally 'clean' appearance. Some examples of the latter category were 'Blue 9' and 'Blue 5'.

The pattern on the wings was mostly standard, but photographs exist of one with a somewhat unusual pattern. 'White 19' had a pattern that was clearly based on the standard, but was modified in several ways. Even more interesting was the very large contrast between

<sup>7</sup>. (Excepting the early war A-2 and A-3s, of course.





*One of the more peculiar Fw 190s at Herdla: 'White 3' flown by Fw. Ullman. His A-8 had its upper surfaces completely covered in RLM 74 and it appeared quite worn and dirty (Coll. Dybvig).*

the upper surface colours. This might have been an example of a RLM 75/76 or 74/76 combination used on the upper surfaces, a combination that had been seen on JG 5 Focke-Wulfs in 1943 (Merrick 2004: pg 111). Another equally plausible explanation is that a light grey (77) or a light version of RLM 75 (perhaps a local 'mix') was used. A seemingly similar high contrast can also be seen on the tail plane of the burning 'Blue 1' (see photograph right), although this could be faded 75 and 74.

Three other Focke-Wulfs with slightly unusual camouflage were 'White 3' flown by Martin Ullmann, 'White 10', pilot unknown, and 'Blue 13', pilot unknown. Two often-published photographs of the former indicate that it had been extensively over-painted with RLM 74. All that remained of the original colours, apparently RLM 76, can be seen between the 'arms' of the Swastikas. 'Blue 13' had a type of winter camouflage in the form of light grey or white (or 76?) wavy bands painted over the grey upper surface colours. 'Blue 13' also had an F-8 type canopy. The last of this trio, 'White 10', was apparently over-painted with overall RLM 74 as well, but it did not look as dirty as 'White 3'. It also had the F-8 canopy. On the single published photograph of this machine, a unusual type of droptank can be seen. 'White 10' was one of the late war Fw 190s featuring black outline-only crosses on the fuselage and under the wings.

Many of the Focke-Wulfs at Herdla were given the names of girlfriends or wives and the following is a list of some of these (see Table 1 below right).

Judging by the photographic evidence these names were painted on the Focke-Wulfs at a fairly early date and all were applied using white paint.

Some Focke-Wulfs seen at Herdla employed protective black paint around their exhaust areas and wing roots as exemplified by Fw 190s of JG 2 in 1942-43. 'Blue 8' had the area painted as a straight-edge as can be seen on photographs of this machine. 'Blue 9' on the other hand, had a small vertical termination of the black area just after the trailing edge of the wing root. 'White 9', a Fw 190A-3, had a curved edge. It appears that in most cases the wing root fillet was also painted black. It is interesting to note that the black areas were apparently applied some time after the Focke-Wulfs



arrived at Herdla and two photographs of 'White 12' indicate this. The one taken before the war ended clearly shows that no black area was applied. The other, taken after the war just before it was blown up, show both this black area as well as the Reichsverteidigungs band (see later).

Personal emblems (apart from the aforementioned names) were not common. It is known that Rudi Linz had a small heart under his cockpit on the port side which may have been red, not green, as has often been assumed (no doubt due to the likeness of the heart with the JG 54 Geschwader insignia).

Victory markings were also used. Several Focke-Wulfs at Herdla had them and to date, the following have been identified:

**'Blue 4'**, Werknummer 732 183 – 55 or more black victory bars on the rudder, with red stars above.

**'Blue 5'**, Werknummer 732 217 – 12 bars, 11 in red with a red star on top, one black with a English roundel on top.

**'Blue 9'**, Werknummer 350 185 – 5 black bars, first and last with roundel, the three in the middle with red stars.

*And so it ends. The fate of the Focke-Wulfs at Herdla was an inglorious one at the hands of the British Air Disarmament Wing. After the propellers and armament had been removed they were towed to the centre of the airfield, charges were placed in the cockpit and then the Focke-Wulfs were all blown up. Much of the remains were either sold to local scrap dealers or dumped in the sea nearby. Fortunately, this photograph was taken and allows a view of the recently applied RV bands on 'Blue 1'. The rather light second upper surface colour seen on 'Blue 1's port stabilizer is noteworthy, this is probably faded RLM 75 (Coll. Kees Mol).*

Table 1

Type	Werknummer	ID number	Name	Pilot
Fw 190 A-8	Unknown	'White 3'	Ingeborg	Uffz. Martin Ullmann
Fw 190 A-3	Unknown	'White 4'	Annemarie	Uffz. Sigfried Ballerstädt
Fw 190 A-3	Unknown	'White 9'	Netty	Uffz. G. Eisermann
Fw 190 A-8	Unknown	'White 11'	Sigrid	?
Fw 190 A-8	Unknown	'White 19'	Waltraut	Uffz. Hans Steiner
Fw 190 A-8	732217	'Blue 5'	Ma	OFw Hein Birk
Fw 190 A-8	Unknown	'Blue 8'	Erika	Uffz. Dietrich





Uffz. Gerhardt Eisermann with pilots and ground crew in front of Fw 190 A-3, 'White 9' named 'Netty'. This photograph shows that this aircraft was an early model Focke-Wulf and not a late version as has sometimes been assumed. (Coll. Dybvig).

'White 10', Werknummer 732 197 – 19 bars, two of which were claims for Finnish Ju 88s<sup>8</sup>.

A few Fw 190s at Herdla featured white rudders. This signified a Staffel leader's aircraft. Focke-Wulfs with white rudders included 'Blue 9' of Lt. Koch and 'Blue 4' flown by Lt. Linz (not yellow has has often been depicted in profiles and by decal/kit manufacturers). 'White 1', lost on 9 February, also had a white rudder.

#### The 'Eismeer' Insignia

The 'Eismeer' insignia is something of an enigma given the fact that it has often been described as a Geschwader insignia (e.g. Ketley & Rolfe 2001: pg 49), yet it is documented in use only by III. Gruppe. Furthermore, it was only used during the last two

months (or less) of the Geschwader's three-year existence. It has never been seen on any aircraft other than the Fw 190s at Herdla and the Bf 109 G-6s from 11./JG 5 at Gossen<sup>9</sup>, a fact which leads to the conclusion that this was a Gruppe insignia for III./JG 5 and not a Geschwader insignia. There are some small detail variations between the renditions used by the Staffeln at Herdla and those used by the Staffeln at Gossen. In any case, the insignia was applied to the port side of the cowl only, in contrast to what some sources have stated.

#### The Reichsverteidigung Band

JG 5 was allocated a black/yellow defence of the Reich (RV) band (black preceding the yellow). However, what is not clear is exactly when JG 5 started to use these colourful markings. Several photographs exist of Bf 109 G-6/14s with these bands, most – but not all – having been taken following the cessation of hostilities. The bands were applied to the Focke-Wulfs some time before the end of the war, but not before late March/early April. Not all were painted simultaneously; this was apparently a continuous process. It is also very interesting to note that the bands were applied parallel not to the fuselage cross as was usual, but to the fuselage/tail empennage junction. For some reason the III. Gruppe disc was not re-applied over the RV bands on the Focke-Wulfs. This may be connected with the re-designation of the III. Gruppe into II. Gruppe late in the war, but it is worth noting that the Bf 109s of the Gruppe at Gossen did reapply the Gruppe insignia.

### The Herdla Focke-Wulfs in profile

9./JG 5



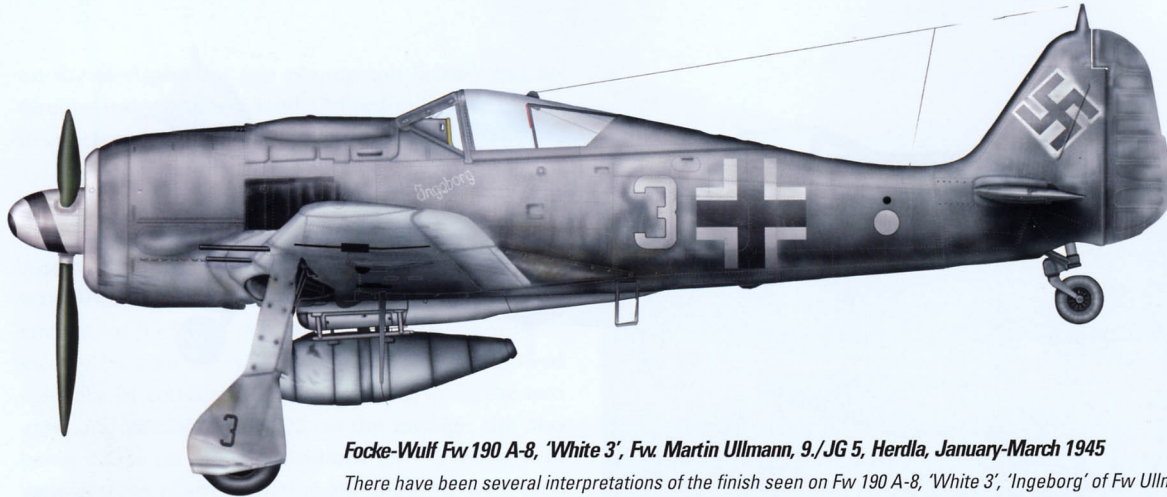
Focke-Wulf Fw 190 A-3, 'White 9', Uffz. Gerhardt Eisermann, 9./JG 5, Herdla, late March-April 1945

A typical representative of the older model A-series Focke-Wulfs still in service with 9./JG 5 at the end of the war, 'White 9' was finished in the standard III. Gruppe markings – white cowling ring, white spinner spiral, white number and Gruppe disc outlined in black, the Eismeer insignia on the port side of the cowl and the individual number repeated in small black figures on the undercarriage doors. Camouflage was a much modified and fairly dark finish consisting mostly of dark grey, RLM 74 and substantial areas of heavy mottling. These early A models still in use at the time had their MG FF/Ms removed, an ETC 501 installed and were usually fitted with FuG25a IFF aerals. Like many of the Herdla Focke-Wulfs, 'White 9' had been named, 'Netty' appearing in white lettering below the cockpit.

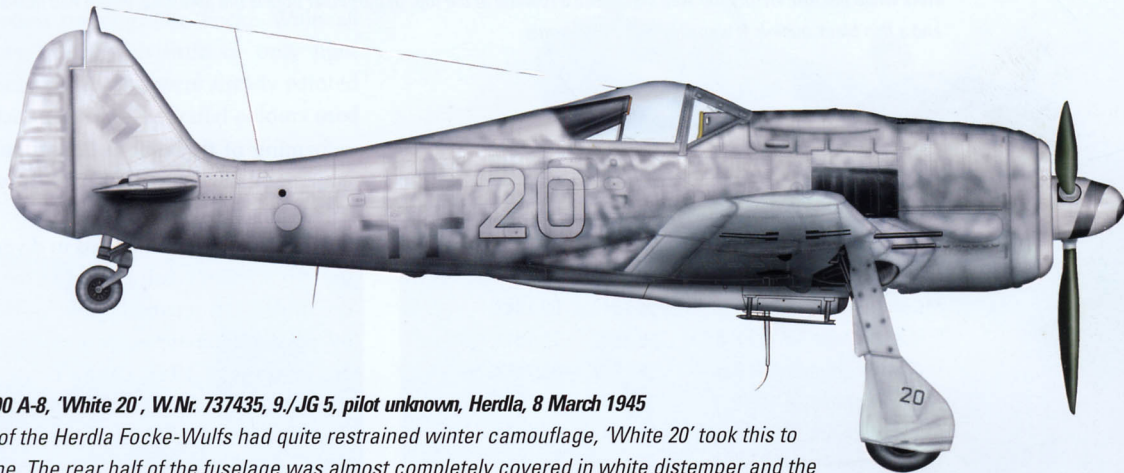
<sup>8</sup>. Only one can be verified, this was Ju 88A-4, W.Nr. 3860, JK256 of 1./PLcLv44 shot down on 10th October 1944.

<sup>9</sup>. The Ar 240A-02 GL+QB was once believed to have carried an early representation of this emblem, but it is now known that in fact it is the insignia of the ObH.d.L., not JG 5.

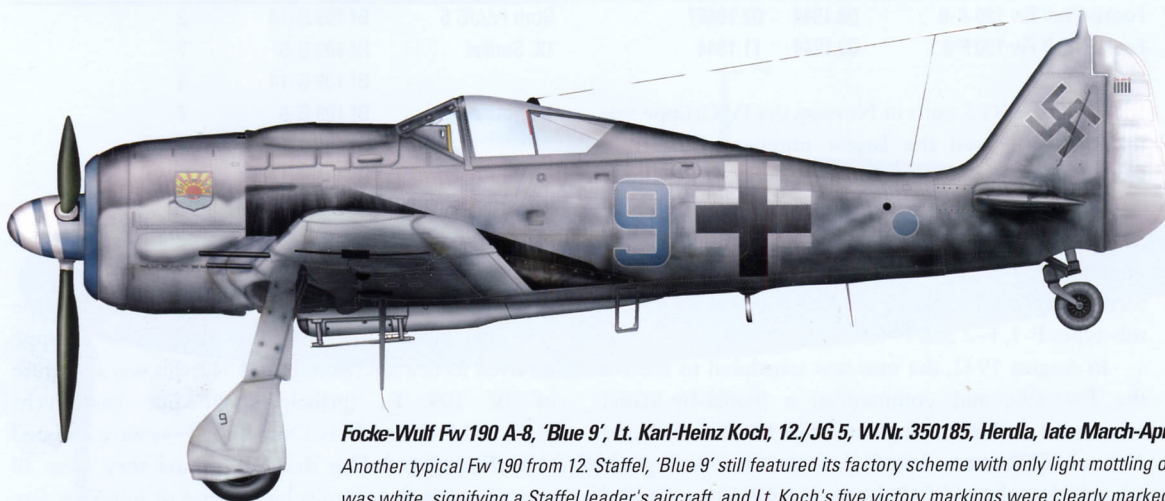


**Fw. Martin Ullmann****Focke-Wulf Fw 190 A-8, 'White 3', Fw. Martin Ullmann, 9./JG 5, Herdla, January-March 1945**

There have been several interpretations of the finish seen on Fw 190 A-8, 'White 3', 'Ingeborg' of Fw Ullmann. The one presented here is believed to be correct. What is known is that when the aircraft arrived at Herdla in early January 1945, it did have a temporary white snow camouflage, like the majority of III. Gruppe's fighters (both Bf 109s and Fw 190s), which was only later removed. The well known full view of this aircraft (see main text) shows what is again a more or less uniform dark grey upper surface colour (note how the painter has avoided the area around the Swastika where the original finish can be discerned), but there are traces of a lighter colour over this, which in all probability are remnants of the temporary white which was applied as squiggles and curves. The lack of the Eismeer insignia dates this photograph to earlier than late March. Interestingly, the aircraft features the FuG 16ZY, but lacks the FuG 25a IFF and the PR 16 Zielfugpeilrahmen (DF loop) below the fuselage.

**Focke-Wulf Fw 190 A-8, 'White 20', W.Nr. 737435, 9./JG 5, pilot unknown, Herdla, 8 March 1945**

Whereas some of the Herdla Focke-Wulfs had quite restrained winter camouflage, 'White 20' took this to the other extreme. The rear half of the fuselage was almost completely covered in white distemper and the forward section was also quite well covered. The white paint partially covered the all-black outline style fuselage cross and the black Swastika, making them appear almost grey. The aircraft suffered 60 per cent damage when it went beyond the short runway at Herdla on 8 March 1945. It would not, in all probability, have featured the Eismeer insignia on the port side of the cowl. The canopy was of the bulged type.

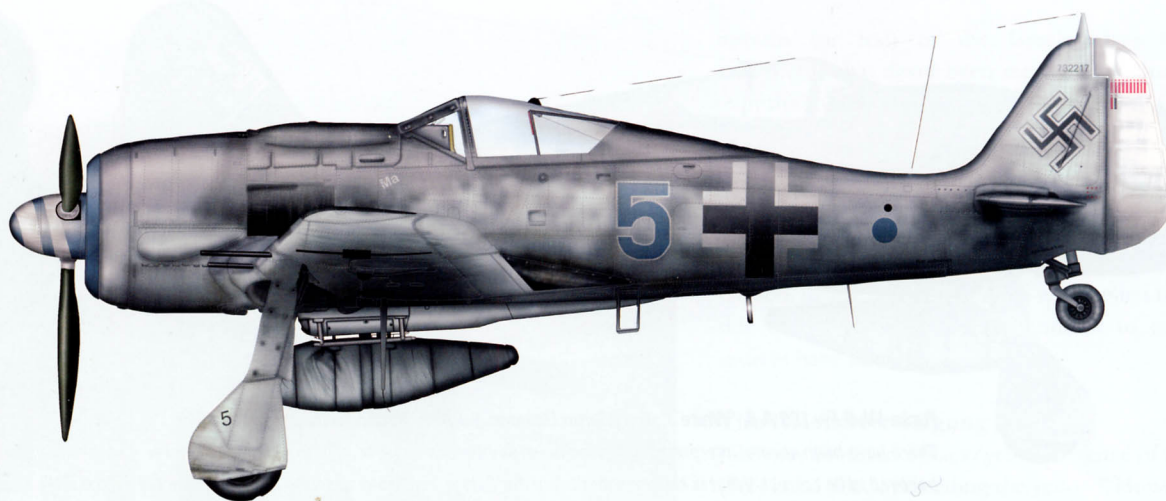


12./JG 5

**Focke-Wulf Fw 190 A-8, 'Blue 9', Lt. Karl-Heinz Koch, 12./JG 5, W.Nr. 350185, Herdla, late March-April 1945**

Another typical Fw 190 from 12. Staffel, 'Blue 9' still featured its factory scheme with only light mottling on the fuselage sides. Its rudder was white, signifying a Staffel leader's aircraft, and Lt. Koch's five victory markings were clearly marked on this. The exhaust area had been painted black and covered the wing root fillet. Several photographs of this aircraft exist, and the earliest was taken before the application of the Eismeer insignia, which shows it with a full suite of radio gear, i.e. FuG 16ZY, FuG 25a IFF and DF loop. The last photographs were taken after its crash in the quarry at Herdla at the end of the war and the Eismeer emblem was then present. The exact state of its radio gear cannot be determined from those pictures, however, and it is possible that some of the equipment detailed above had been removed, even if all are shown in place on the profile.





**Focke-Wulf Fw 190 A-8, 'Blue 5', Ofw. Hein Birk, 12./JG 5, W. Nr. 732217, Herdla, late March-April 1945**

Another popular photographic subject was Ofw. Birk's 'Blue 5', named 'Ma'. This machine also featured a factory finish with little mottling on the fuselage sides, at least initially. This finish may have been supplemented later with a denser mottling consisting of RLM 74 and/or 75. The figure '5' was quite thick and compact and this was another Fw 190 which had a white rudder. Birk had claimed 12 victories by early 1945, all but one of these over Soviet aircraft, the last one being an RAF machine. Appropriately, the Soviet victories were marked with red bars and stars while the RAF victory bar was black with a roundel at the top. Of particular note is the Swastika, which had non-standard proportions and a thin black outline. It was also slightly off-angle.

## IV. Gruppe

### Aircraft of the unit

Messerschmitt Bf 109 E-7	06.1942	08.1942
Messerschmitt Bf 109 T	06.1944	08.1944
Messerschmitt Bf 109 F-1	06.1942	08.1942
Messerschmitt Bf 109 F-2	06.1942	11.1942
Messerschmitt Bf 109 F-4	06.1942	07.1942
Messerschmitt Bf 109 G-1	10.1942	10.1943
Messerschmitt Bf 109 G-2	01.1943	11.1944
Messerschmitt Bf 109 G-6	07.1943	05.1945
Messerschmitt Bf 109 G-14	10.1944	05.1945
Focke-Wulf Fw 190 A-2	08.1942	06.1944
Focke-Wulf Fw 190 A-3	08.1942	02.1945?
Focke-Wulf Fw 190 A-4	08.1943	02.1944
Focke-Wulf Fw 190 A-8	08.1944	02.1945?
Focke-Wulf Fw 190 F-8	09.1944	11.1944

Of all the JG 5 units in Norway, the IV. Gruppe was the one that used the largest number of different aircraft sub-types, despite the fact that they used only two aircraft models. Utilizing aircraft inherited from Jagdgruppe Drontheim and 9./JG 5, the unit first operated Bf 109 E-7s like every other JG 5 unit upon formation, in addition to Bf 109 F-series aircraft of sub-types F-1, F-2 and F-4.

In August 1942, the unit was scheduled to receive the Fw 190, and commenced a Staffel-by-Staffel conversion in Denmark. Almost 50 Fw 190 A-2 and A-3 sub-types were delivered to the unit during the autumn months of 1942, but a few Bf 109 remained on hand. Even a few new Bf 109 G-1s were taken on strength in late 1942.

January 1943 saw 11. Staffel being used to form 14.(Jabo) Staffel, and III. Gruppe was without an 11. Staffel for about two months, awaiting the

reforming of this unit at Banak, at the same time as a large number of new Bf 109 G-2s were delivered to the unit, again via Denmark.

The unit was being used in diverse roles, both along the Norwegian coastline and in the defensive battles in the north, and retained a mix of Bf 109s and Fw 190s of different sub-types throughout 1944 and into the first months of 1945, before being equipped with the Bf 109 G-6 and G-14 only from February 1945 until the end of the war. The former IV. Gruppe reported the following aircraft on 8 May 1945 (liaison and courier aircraft have been omitted and the organization as of November 1944 used for simplicity):

Unit	Aircraft type	Number of aircraft
Stab IV./JG 5	Bf 109 G-14	2
13. Staffel	Bf 109 G-6	7
	Bf 109 G-14	8
14. Staffel	Bf 109 G-6	7
	Bf 109 G-14	9
15. Staffel	Bf 109 G-14	14
16. Staffel (now 6. Staffel)	Bf 109 G-6	16

IV. Gruppe was partly formed from Jagdgruppe Drontheim and partly from scratch. The Gruppe received its first aircraft in June 1942; this was a mixture of Bf 109 Es (principally, if not exclusively, E-7s) and F-2s and F-4s. Only three F-4s were assigned to the Gruppe during that month and they were all re-assigned to other units by the end of July. Very few photographs of this Gruppe's Messerschmitts from this early period are known, but what is available show that they were painted in the regular RLM greys. One such E-7 from 10./JG 5 seen at Trondheim or Bodø in summer 1942 shows quite extensive additional painting



on the fuselage sides (see photograph below) and no Gruppe insignia of any kind. Other Emils were similar in appearance.

The same applies to the F-2s of the Gruppe. One of these machines, 'White 6' of 10./JG 5, also had dense mottling consisting of RLM 74 on its fuselage sides. Another highly interesting Friedrich used by 10./JG 5, was 'White 1'. This machine carried the Geschwader emblem of JG 51 on its cowlings as well as seven black victory bars on the yellow rudder. Its finish showed evidence of considerable over-painting, using the two greys and possibly RLM 02 on the fuselage, this also being visible on the wings. Similar grey schemes with various styles of over-painting and mottling were seen on other Bf 109 Fs delivered to the Gruppe in summer 1942 at Værnes, but these photographs are sadly not available for publication.

These old Es and Fs were not to remain the principal equipment of the Gruppe for long, however. In August 1942 IV./JG 5 started conversion onto the Fw 190 A-2/3, a number of the pilots travelling to Værlose for conversion training. The Focke-Wulfs all had standard factory finish with little or only light mottling on the fuselage sides and were already painted with their individual numbers. The Staffel colours used by IV. Gruppe at the time were standard:



*The mysterious ex- JG 51 Bf 109 F assigned to 10./JG 5 in the summer of 1942. The finish is a patchwork of the regular greys, with what appears to be RLM 02 or 75 having been used to paint over previous identification numerals and a Gruppe symbol. The yellow rudder is marked with seven black victory bars, probably from the previous unit (Coll. Döbrich).*



**Messerschmitt Bf 109 F-2, 'White 1', 10./JG 5, pilot unknown, Værnes, summer 1942**

When IV. Gruppe received its first Bf 109 Fs in June 1942, all of them came from other units. One of these units was JG 51, as the Geschwader insignia on the nose of 'White 1' clearly shows. The aircraft had obviously seen some action with this unit, as seven black victory markings were retained on the yellow rudder. The finish was standard grey with evidence of much repainting and touching-up, but the area around the individual number was over painted, presumably with RLM 02. The presence of the external tail stiffeners suggest this aircraft was an F-2, which is in accordance with the Flugzeugbestand und Bewegungsmeldungen of IV./JG 5 from June 1942, where a total of 16 F-1/F-2s are listed as transferred to the Gruppe, whereas, only 3 F-4s were received during the same month.



Two Focke-Wulfs from 12./JG 5, 'Yellow 3' and 'Yellow 8', visiting Bardufoss airfield in the autumn of 1942. Both feature the regular grey colour scheme with mottling on the fuselage sides and yellow rudders, spinner tips and most likely yellow ventral engine cowling panels.

The identification numbers do not have any black outlines, quite contrary to aircraft from the unit photographed in 1943 (e.g. 'Yellow 15' in the next photographic series). The style of the number '3' is identical to the one seen on 'Black 3' from 11./JG 5 in the photograph below. There is evidence of over-painting of previous codes on both machines (Coll. Midt-Troms Museum).

Another view of the scene at Bardufoss during IV./JG 5's visit showing 'Yellow 7' and 'Yellow 6' from 12. Staffel and 'Black 3' and 'Black 11' from 11. Staffel. Of note is the very similar camouflage patterns on the fuselage (compare with those seen in the photograph above), the light mottling, the large numerals and the yellow rudders. There was no IV. Gruppe insignia at this time. Spinner markings were yellow for 12. Staffel whereas those from 11. Staffel seem to have had a white ring around their otherwise black-green spinners. 'Black 11' in the background is W.Nr. 2253 which was lost on 9 November 1942 at Alta airfield as seen in the photograph right (Coll. Midt-Troms Museum and Mombeek).







**10./JG 5** – white numbers with thin black outline

**11./JG 5** – black numbers with thin white outline

**12./JG 5** – yellow numbers with black outline

No Gruppe designator was used at this time, the Focke-Wulfs thus being virtually indistinguishable from those of I. Gruppe (which used the same Staffel colours on their machines), especially since IV. Gruppe also used the same over-sized identification numbers as described for I. Gruppe. Sometimes, but not always, the Staffel colour was applied to the first half of the spinner, and this seems to be especially common within 12./JG 5.

These large identification markings were even used on Stab machines, the Chevron and bars being black with white outlines as usual. Additionally, Stab machines carried a small number behind the Balkenkreuz. The colour used for these is uncertain but green is a plausible answer. The number was outlined in

white. The Stab machines were also apparently numbered consecutively within the Stabschwärm; known examples from summer 1942 are '<II+2' and '<+3'.

Jafü Norwegen also used a similar system. Fw 190 A-3, W.Nr. 2273, which was lost on 31 October 1942 while piloted by Major Joachim Seegert, had one black bar outlined in white painted on each side of the fuselage cross, the forward one being pointed, followed by a very small number 2 in black on what appears to

be a narrow yellow tail band. The spinner was colourful – a white tip followed by green Stab colour and then a narrow white ring.

At this time no unit emblems, personal markings or victory bars were known to have been applied to IV. Gruppe's Focke-Wulfs, their aircraft remaining quite anonymous.

The Fw 190s of 11. and 12./JG 5 were of the A-2 and A-3 variants. Like all Focke-Wulfs of the earlier series used by JG 5, no MG FF cannon were carried. The Fw 190s were finished in their regular factory schemes throughout 1942 and 1943. Doubtless there were repairs and some repainting was undertaken, but no special scheme was used. An example of considerable repainting using RLM 74 was seen on W.Nr. 2253, 'Black 11', which crashed fatally at Alta on 9 November 1942.

Other Fw 190A-2/3s seen at this time show the same standard grey schemes with no personal

Some Fw 190s from IV. Gruppe demonstrating the different styles of finish seen on these aircraft during 1942-43. 'Yellow 15' is from 12./JG 5 stationed at Gossen, whereas the top right is from 11. Staffel, probably seen at Herdla. Note that the latter has a yellow ventral cowl, probably used on most of IV. Gruppe's Focke-Wulfs. 'Black 3' is also from 11./JG 5: note that the fuselage cross lacks a black outline and the special form of the number '3'. The photograph bottom left shows a delegation from the Kriegsmarine visiting Gossen airfield sometime in 1943. The 12. Staffel Fw 190 in the revetment (and above right) has unusually clear and sharp camouflage demarcation lines and a white spinner tip. The lack of a Gruppe symbol on the two upper aircraft is also noteworthy (Coll. Brekken).

Some of the 22 Bf 109G-2/R-6s awaiting their pilots from 10./JG 5 and Stab IV./JG 5 in March 1943 at Copenhagen-Vaerløse airfield. Three different types of spinner markings can be seen. All aircraft are finished in RLM 74/75/76 with light mottle on the fuselage sides (Coll. Brekken).



markings. Mottling styles could vary: some carried quite large mottles on the fuselage sides, and others seem almost devoid of this. Examples are provided in the photographs on page 121.

It was believed that no Staffel insignia were in use by IV./JG 5 at this time, but the recent rescue of Fw 190 A-2, W.Nr. 5425, 'Yellow 16', of 12./JG 5 from the sea off Sotra in Western Norway has altered this view. This Focke-Wulf, which incidentally is the oldest extant Fw 190 known and which is currently under restoration for static display purposes, carried a hitherto unknown shield below the cockpit on the port side. This shield has been proved to be the Staffel insignia of 12./JG 5. Even so, it was probably applied late in 1943 and possibly not on all aircraft. In any case, W.Nr. 5425 evidently had a very interesting career before it was lost, and, as its camouflage and markings can be analysed in great detail, it provides an insight into how an aircraft of IV. Gruppe serving in Western Norway in late 1943 would have appeared. The details are provided on pages 124 to 125.

IV. Gruppe's constituent Staffeln were all based in central and south-west Norway during 1942 to the autumn of 1944, with occasional short-term temporary transfers to Northern Norway (Bodo, Elvenes and Alta) and also briefly in Denmark (Aalborg).

In October 1942, the Gruppe received another batch of newly delivered and rare aircraft. A number of Bf 109 G-1/R-2s<sup>10</sup> were assigned to the Gruppe – four in October, followed by three more in November, one more in January 1943 and the last in July. The version remained with the Gruppe until July. Exactly what these were used for is not currently known, but if they were indeed lightened high-altitude fighters (a fighter-bomber role would have been very unlikely given the fact the Staffeln were stationed in southern Norway at the time), it is possible that they

were to serve as high-speed 'Mosquito chasers'. Nothing certain is known of their camouflage and markings, other than that this must have been the regular RLM-greys. One of these machines was dragged out of the North Sea, and at the time of writing is under restoration at Stavanger-Sola Aviation Museum. This was W.Nr. 14141, 'DG+UF', marked 'Black 6', which was lost on 11 October 1943 when it belonged to 2./JG 5. At the time of its loss, the pressurisation system was most likely disabled.

More is known about the G-2/R-6s that were delivered to the Gruppe commencing in January 1943. All of these were fresh from the factory. A series of photographs taken at Værlose in March 1943<sup>11</sup> show a large number of them neatly lined up, awaiting their new owners. All have the same light mottling on fuselage and tails, yellow ventral cowling panels and individual numbers already applied. Spinner tips were marked in yellow or three-quarter white, except for three machines intended for Stab IV./JG 5, which have had green spinner tips followed by a thin white ring.

Only white tactical numbers are visible, with black outlines, indicating their assignment to 10./JG 5. The numerals are of normal size, probably because they were applied at the factory or, most likely, at an aircraft depot and not by JG 5 personnel. Despite the

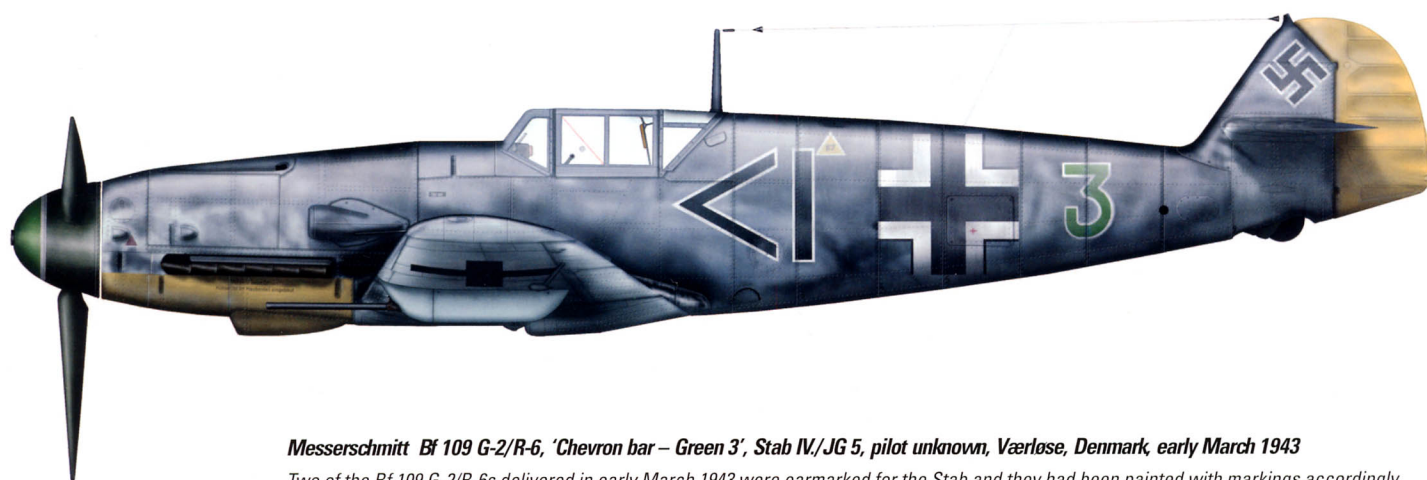
<sup>10</sup> The G-1/R-2 designation could mean two things according to Fernandez-Sommerau (2004:58-59), either a fighter-bomber with ventral bomb rack (1942) or a high-altitude fighter without armour (1943).

<sup>11</sup> As 24 G-2s (2 of which were new) were received this month, compared to only 4 from January and February altogether, and no other large batch were delivered to the Gruppe, these photographs must have been taken during this month.





The two G-2/R-6s intended for the Gruppenstab, again showing off the standard factory scheme and the special stab markings adopted by IV. Gruppe, previously having featured on the Fw 190s. The numeral is probably bright green outlined in white. The particular style of the number '3' is an exact match of the style used on the 11. and 12. Staffel Fw 190s pictured above (Coll. Brekken).



**Messerschmitt Bf 109 G-2/R-6, 'Chevron bar – Green 3', Stab IV/JG 5, pilot unknown, Værlose, Denmark, early March 1943**

Two of the Bf 109 G-2/R-6s delivered in early March 1943 were earmarked for the Stab and they had been painted with markings accordingly. One was marked with a chevron and two vertical bars (in standard black with white outline) and an unknown figure behind the Balkenkreuz, whereas the machine depicted here had a chevron and a single bar, and the number '3' in green outlined in white behind the national insignia. Finish was otherwise entirely standard and very similar to the other machines seen at Værlose at the time, except for the spinner which had a green tip followed by a thin white ring. It is interesting to note that the style of the green '3' was similar to the individual number of 'White 3'.



## Focke-Wulf Fw 190 A-2, W.Nr. 5425, 'Yellow 16'

Fw. Kurt Kundrus, December 1943

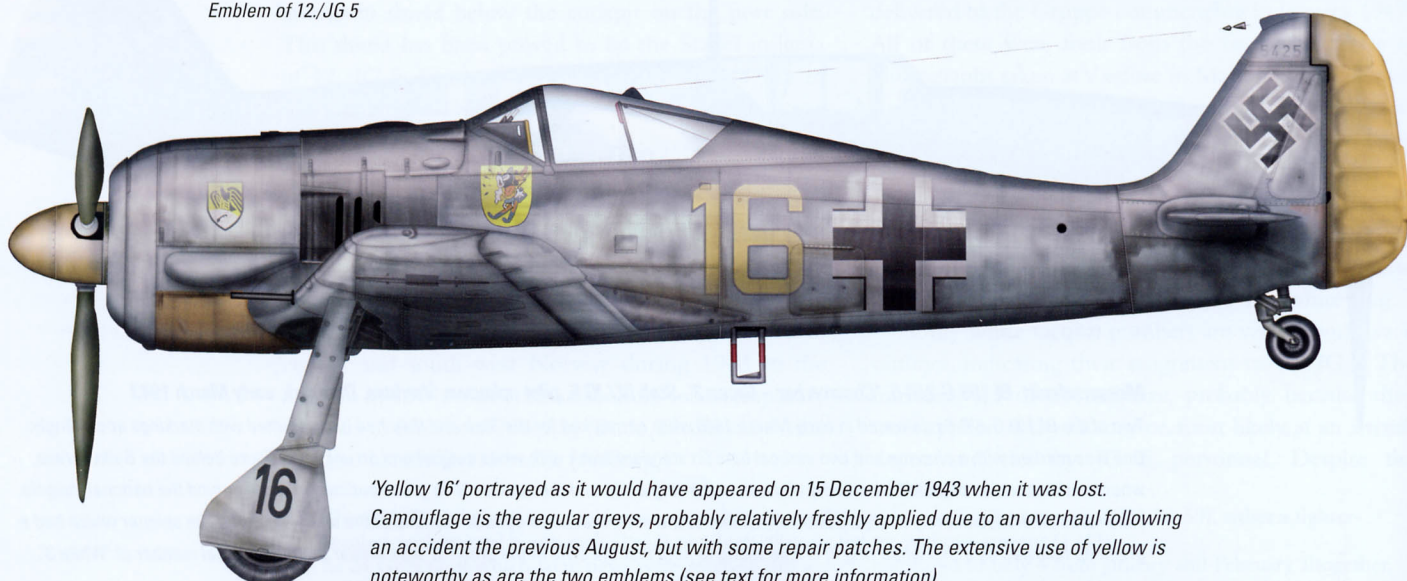
This aircraft ditched in the sea off the archipelago of Sotra on 15 December 1943. It belonged to 12./JG 5, then stationed at Herdla a little further to the north-east, and was on a coastal patrol at the time. Exactly what happened is not known but an engine failure of some kind seems most likely as local witnesses later commented on the sound of a rough engine just before the aircraft went down. The pilot jettisoned the canopy and was able to get out of the aircraft before it sank. The identity of the pilot is not known as there was no personal injury, but it is likely that it was Fw. Kurt Kundrus, a very experienced pilot who had previously served with Jagdgruppe Drontheim (see that section for a photograph of his Bf 109 E). Kundrus later went to 4./JG 3 and lost his life on 10 June 1944 in Normandy.

*Yellow 16' sees the light of day for the first time in nearly 64 years. Despite being virtually covered with various sea organisms, the upper surface cross and parts of the camouflage are visible (Coll. Dybvig).*



Emblem of 12./JG 5

*Right: Further views of the markings on the wing and tail. As can be seen, the wing pattern is standard with some variation. The colours are the normal grey, with RLM 75 having faded to a purple colour (Coll. Dybvig).*



*'Yellow 16' portrayed as it would have appeared on 15 December 1943 when it was lost. Camouflage is the regular greys, probably relatively freshly applied due to an overhaul following an accident the previous August, but with some repair patches. The extensive use of yellow is noteworthy as are the two emblems (see text for more information).*



It is clear that the aircraft was finished in greys with a standard upper surface scheme. This scheme was probably fresh since the aircraft had suffered a previous accident on 13 August 1943 in which it sustained 30 per cent damage after having turned on its back during landing. This level of damage was probably enough to warrant a more or less complete overhaul, possibly at Kjeller, and it is reasonable to suspect that at least parts of the airframe would have been repainted at that point. This is further supported by the fact that no fewer than three previous identification numbers were discovered beneath the top one. As there was no coat of paint covering these numbers, but rather the airframe as a whole, it is clear that this was a complete repaint. The recovery team also noted that there was considerable touching-up and brush-applied patches of paint on various parts of the airframe.

The previous numbers were 'Black 6', another 'Black 6' in a slightly different style, and 'White 1' or 'White 4'. As the accident happened while the aircraft was serving with IV./JG 5 it is likely that it belonged to 11. Staffel. The last number, '16', was repeated on the undercarriage doors.

The most interesting aspect regarding the markings were the two emblems discovered on the port side of the fuselage. On the cowlings was the recently identified IV. Gruppe marking. Another, previously unknown emblem was placed beneath the windshield. At first this was interpreted as a personal emblem, but correspondence from former JG 5 pilot, Heinz Orłowski, indicated that this was, in fact, the insignia of 12./JG 5. This emblem consists of a skiing Mickey Mouse on a yellow shield

(see previous page). So far this emblem has not been seen on any photographs of Fw 190s from this Staffel. It was probably only used from late 1943 until early 1944, a period from which there are precious few photographs of aircraft from this unit.

'Yellow 16' otherwise carried a full suite of tactical markings – yellow ventral engine cowlings, yellow rudder and ventral outer wing panels, as well as a spinner in the same colour.

Regarding the identity of this machine, W.Nr. 5425 is the only number that fits the time and location. It is therefore of interest to note that two different Werknummern seem to have been painted on the top of the tail fin, including '375' and '425' whereas the number '5429' was stamped on the internal side of the MG cover. This suggests a certain amount of cannibalization having taken place during repairs and overhauls.

Furthermore, the old slit-type exhaust outlets had not been exchanged for the flap-type slots. More about this machine can be read in Selensminde & Tangen (2007) and will also be available by contacting Herdla Museum.



*There were no fewer than three different numbers painted on the aircraft, in addition to the 'Yellow 16'. There were two differently sized black '6's and a white number (either '1' or '4') (Coll. Dybvig).*



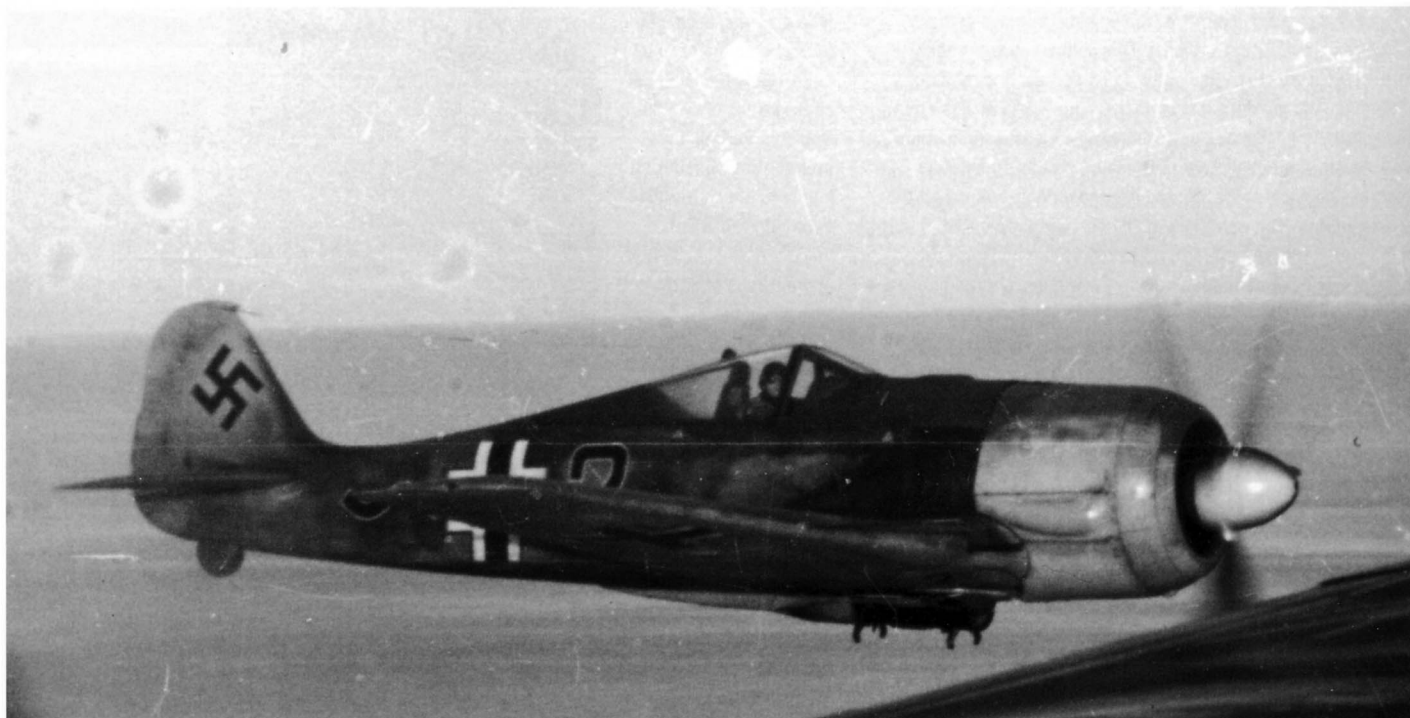
*Top and below: Further detail views showing the unmodified early type exhaust slots and the rudder framing devoid of fabric but still showing traces of yellow paint and the port inner cannon bay (Coll. Dybvig).*



*The IV. Gruppe badge, almost covered by metallic crust and sea growth. The previously unknown 12. Staffel emblem seen on the right was more easily discernible. Note that it extends partly over the forward cockpit section to which the windshield is attached (Coll. Dybvig).*







*'Black 2' from 11./JG 5, an A-3, flying escort for a Ju 88 in early 1944. Note the style of the Gruppe wave, the fuselage bomb rack (not adapted for carrying drop tanks, lacking the sway braces) and the yellow spinner (Coll. Urbanke).*



*The shield of IV. Gruppe seen on a Fw 190 A at Sola. The numeral on the undercarriage leg, presence of the shield and general likeness, suggest this is the very same aircraft as the Fw 190A-4 depicted on the opposite page. The lower engine cowling is yellow (Coll. Dybvig).*

considerable number of aircraft in this consignment (22) they were all probably intended for 10. Staffel and the Gruppenstab since these were the only units of IV. Gruppe flying Bf 109s at the time.

The two identifiable Messerschmitts assigned to the Gruppenstab featured the very same Stab markings as seen on the aforementioned Fw 190s in summer 1942. One is marked '<I+3', the numeral being of exactly the same style and presumably colours as used on the Stab Focke-Wulfs the previous summer, whereas the other was marked '<II+' with an unknown number<sup>12</sup>.

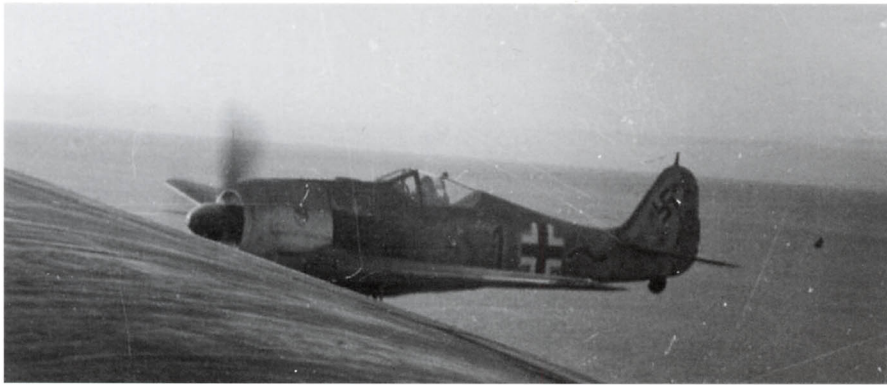
IV. Gruppe continued to fly a mixture of Bf 109 G-1 and G-2s and Fw 190 A-2 and A-3s, the former in the Stab flight and 10./JG 5, the Focke-Wulfs in 11. and 12. Staffeln. During the spring and summer of 1943, another interesting sub-variant was delivered to JG 5, this time of the Focke-Wulf variety. The first five A-4s were received in August 1943, but one was lost the same month. The other four lingered on with the Gruppe until the last was finally lost in February 1944.

It is likely that most, if not all of these A-4s, served with 11./JG 5. A series of photographs show one of these together with an Fw 190 A-3 of 11. Staffel flying escort for a weather reconnaissance Ju 88 from Stavanger-Sola in early 1944. Both fighters carry the normal grey colours with mottling on the fuselage sides and relatively clean engine cowlings. Their markings are interesting, as is the condition of the A-4. The aircraft, marked 'Black 1' (A-4) and 'Black 2' have the earliest known Gruppe marking known for IV./JG 5, this being a wavy band in the same colours as the individual number, but the 'amplitude' of the wave is not as pronounced as seen only a few months later on IV. Gruppe aircraft. There is also a very interesting emblem on the port side of the engine cowling which has previously been seen on one Fw 190 with the numeral '1' on its undercarriage leg (sadly not much more is visible on the photograph) and also on a surviving piece of engine cowling from a Bf 109 G-2.

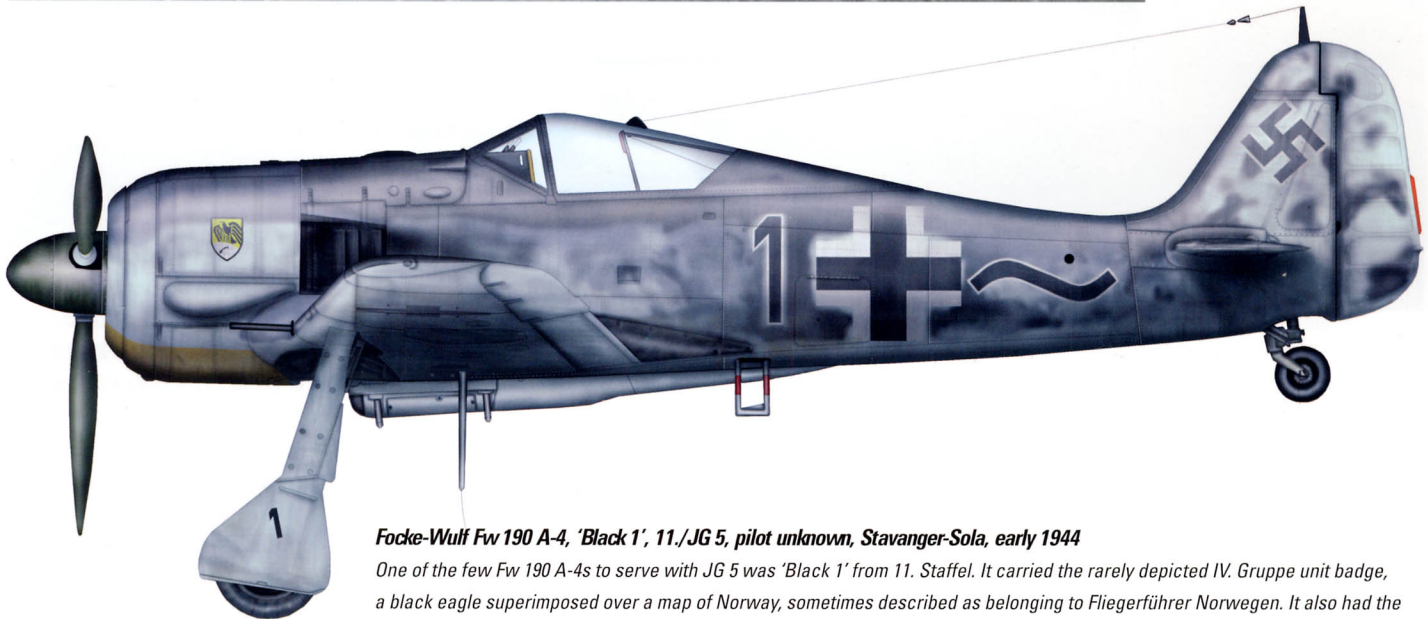
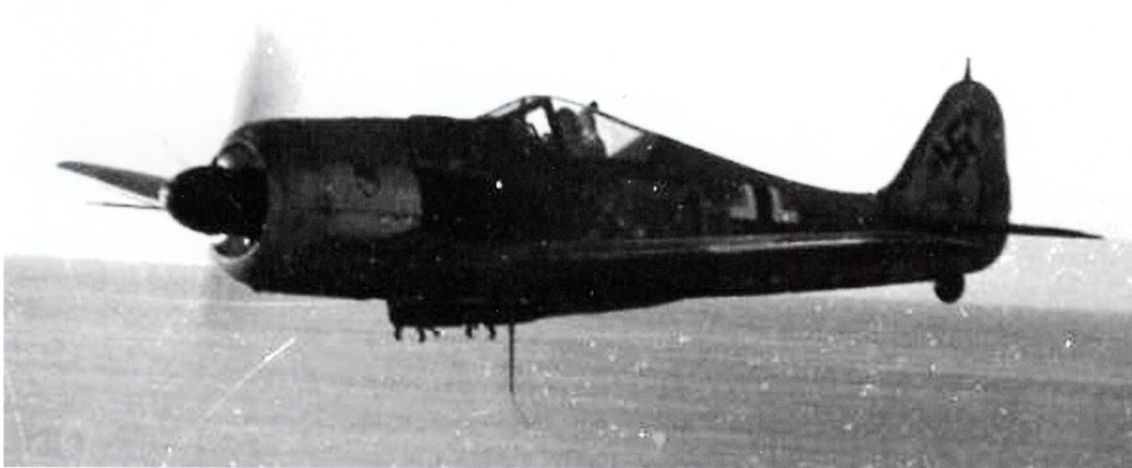
As for the A-4, the presence of the FuG16Z Morane antenna is of note. It may suggest a 'Führungsmaschine' role for the aircraft and would have been an important aircraft for the Staffel when flying escort missions over the vast North Sea area. Both of the escorting Focke-Wulfs are fitted with ETC 501 racks, but they both lack the sway braces normally

<sup>12</sup> As the similarly marked Stab Focke-Wulf Fw 190 from 1942 was numbered '2', it is tempting to suggest that this Stab Messerschmitt carried the same number.





Fw 190 A-4 'Black 1' taking up position the other side of the Ju 88. The tail fin antenna leave no doubt as to the version and, although of low quality, the lower photograph shows that the FuG 16Z was installed, making this an A-4/y version. Its Werknummer is most probably 5861 as it is the only one not accounted for in the loss list and the last remaining with JG 5 when the photographs were taken. Of particular note in the lower photograph is what is now believed to be the rarely seen shield of IV. Gruppe, applied to the port side of the cowlings only. Also the ETC 501 rack lacks sway braces for drop tanks. Compare the nose section of this aircraft with the one in the photograph reproduced on the previous page (Coll. Urbanke).



**Focke-Wulf Fw 190 A-4, 'Black 1', 11./JG 5, pilot unknown, Stavanger-Sola, early 1944**

One of the few Fw 190 A-4s to serve with JG 5 was 'Black 1' from 11. Staffel. It carried the rarely depicted IV. Gruppe unit badge, a black eagle superimposed over a map of Norway, sometimes described as belonging to Fliegerführer Norwegen. It also had the first version of the IV. Gruppe wave, the amplitude of which was different from that seen later in 1944. The finish consisted of the regular greys with some evidence of repainting on the fuselage. The ventral cowl area was painted yellow and the individual number repeated on the undercarriage door. 'Black 1' was an A-4/y, which means it was fitted with the FuG 16Z radio set for ground control. An ETC 501 was also present, but this lacked the sway braces usually associated with the carriage of external drop tanks. Note the small Swastika and placement of this.

associated with these racks when configured for drop tanks. This does not mean that they were used for Jabo missions (such a role was unnecessary at the time) but rather that they did not fly with drop tanks or bother with the sway braces.

In the meantime, initial deliveries of the Bf 109 G-6s had also begun. Six newly built machines

were taken on charge during July 1943 and more followed in August. Although photographic material is scarce it is clear these were finished in standard factory schemes.

After the Fw 190 A-4s disappeared from the inventory, the Bf 109 G-2, G-6 and Fw 190 A-2/3 remained the principal equipment of the Gruppe.

*This photograph probably shows one of the first Bf 109 G-6s delivered to IV. Gruppe. It carries the standard RLM 74/75/76 scheme with a white spiral on a black spinner. The Messerschmitt appears to be of an early series with the long antenna mast and no DF loop and the underwing cross is of the old style with the thin black borders (Coll. Heinz Arnold).*



*An ex-JG 11 Bf 109T at Lista in summer 1944, probably at the time it belonged to IV./JG 5. The finish of this, by now, quite rare aircraft appears to have been a rather recent application, possibly following a major repair or overhaul, and consists of the regular greys with fine mottling over the demarcation lines. The numeral, part of which can just be made out, was black. Note the stencilling on the undercarriage door (not present in 1941) and that the Fieseler trademark of black exhaust area is still present (Coll. Horst Kube).*

Then, in June 1944, six Bf 109 T-2s were transferred to the unit, one from a repair facility and five from 11./JG 11. A further five arrived the following month, but apart from one lost in an accident, these were all transferred to other units during August, probably going to training units on the Continent. By this time, the Bf 109 T-2s were camouflaged in a well-executed grey scheme with gentle fuselage mottling and carried black numbers thinly outlined in green. This was also the markings carried when they were used by 11./JG 11. The spinners were black with white spirals. For more details and photographs see Marshall (1994, 2000) and Aakra & Kjaeraas (2004).

By this time, 10./JG 5 had partially converted onto the Fw 190 as a series of photographs (see page 129) taken at Lista airfield sometime between June–August 1944 shows. One of the surviving Bf 109 G-2/R-6s, ‘White 4’, flown by Lt. Koch, was finished in regular greys with light, but dense, mottling on the fuselage sides and by this time carried what would be the standard Gruppe insignia of IV. Gruppe, a symmetrical wave, for the remainder of the war. Other photographs,

probably taken at the same time, show two Fw 190 A-3s from 10./JG 5, ‘White 7’ and ‘White 10’, both carrying the same wavy Gruppe symbol. Both Fw 190s are also in the standard greys, that of ‘White 10’ having very sharp demarcation lines between the two greys and the light blue fuselage sides, little mottling having been applied. It also carries the individual number repeated on the wheel door, something which probably was standard within the Staffel, indeed the Gruppe, at this time, probably also on the Bf 109s. White spinners with black spirals can be seen on ‘White 10’.

In August 1944, IV. Gruppe received the first Fw 190 A-8s, taking ten on strength. The time of delivery clearly suggest these were also finished in RLM greys, the new late-war colours not yet having been introduced on the Fw 190 production lines. No photographs are known of these A-8s in their early service with JG 5, but it is quite certain that a few did survive into 1945 and then they were much photographed along with their replacements, as related in the section on III. Gruppe. In September, a large number of A-8s and eleven F-8s (all but one fresh from the factory or aircraft depot) were taken on strength, this no doubt being connected with the expansion of the Gruppe into four Staffeln which commenced with the following redesignations of the three extant Staffeln in August:

10./JG 5 became 13./JG 5  
11./JG 5 became 14./JG 5  
12./JG 5 became 15./JG 5

In November, a new 16. Staffel was formed in Stavanger.

Identification colours for these new Staffeln were:





*Sometimes identified as a Messerschmitt from 7./JG 5 (due to the erroneous assumption that the wave denotes III. Gruppe), this is in fact a Bf 109 G-2/R-6 from 10./JG 5 at Lista in summer 1944, and flown by Lt. Karl Heinz Koch. It wears a standard grey scheme with mottling on the fuselage sides and somewhat straight demarcation lines. The all-black exhaust area is of note (Coll. Kees Mol).*



**13./JG 5** - white numbers with black outline  
**14./JG 5** - yellow numbers with no outline  
**15./JG 5** - black numbers with white outline  
**16./JG 5** - blue numbers with white outline

All Staffeln used the Gruppe wave in the corresponding colours, except 14./JG 5, which seems to have consistently used a black wave outlined in white.

From August to early November, IV. Gruppe had transferred to the North to help stem the tide that was the Soviet onslaught on the Eismeer front. Here it flew intense operations against the Soviets, losing a number of the A-8s and F-8s in the process. An example of how its aircraft appeared can be seen in the photograph on pages 130 to 131.

A large number of its Focke-Wulfs was then transferred to other units in October (a major recipient being III. Gruppe), at the same time receiving the first examples of what was to become its principal equipment, namely 18 Bf 109 G-14s. IV. Gruppe eventually left the Northern front in early November

and was back at Stavanger-Sola on the 6th of that month, receiving 16 more G-14s during November, simultaneously phasing out the few remaining G-2s and most of its G-6s. Several Fw 190s of various types were also transferred to other units at this time, but some A-3s and A-8s remained until the end of the year.

By early January, IV. Gruppe was completely equipped with the Bf 109 G-14. It is believed that at least some machines delivered to the Gruppe in the preceding months were finished in a 75/82/76 scheme; some of the photographs of these aircraft seem to support this. The amount of weathering varied considerably and most G-14s did receive at least some mottling and over-painting on their fuselage sides.

The re-equipment with new aircraft also brought personal emblems into use. One such aircraft was Uffz. Halstrick's 'Blue 8', which carried his personal emblem 'Kölle Alaaf'<sup>13</sup> below the port side of the cockpit.

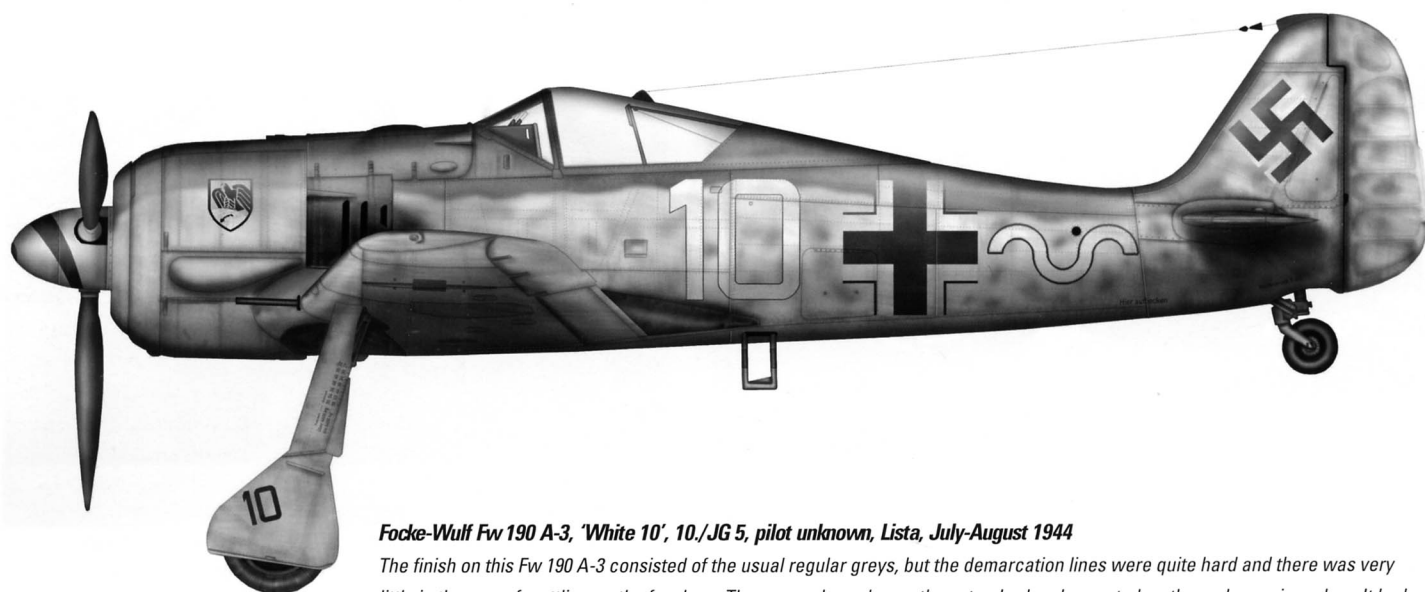
Relatively few photographs showing IV. Gruppe machines from 1945 are available for study, but those



*Taken at the same time and place as the previous photograph of the Messerschmitt 'White 4', these views depict Fw 190 A-3s of 10./JG 5 wearing the same markings as the Messerschmitt 'White 7' on the right features a curved black exhaust area and standard grey camouflage. 'White 10' to the left has rather hard demarcation lines on the cowl and fuselage and the wavy border on the wing leading edge. The individual number is repeated on the undercarriage door (Coll. Horst Kube).*

<sup>13</sup>. Lit. 'Kölle hurrah'!

A Fw 190 A-3 marked 'White 9' at Lista, with 'White 10' in the background as seen on page 129 (compare demarcation lines on the cowling). Between them can be seen a Bf 109 T (Coll. Horst Kube).



**Focke-Wulf Fw 190 A-3, 'White 10', 10./JG 5, pilot unknown, Lista, July-August 1944**

The finish on this Fw 190 A-3 consisted of the usual regular greys, but the demarcation lines were quite hard and there was very little in the way of mottling on the fuselage. The numeral was larger than standard and repeated on the undercarriage door. It had an interesting wave-pattern on the leading edge of the wings. The presence of the IV. Gruppe insignia is not verified, but may have been carried.

that are show that all Staffeln used their assigned colours, and that style and placement were quite consistent until the end of the war. At some time in late March/early April, probably coinciding with the same event in III. Gruppe, the RV band was painted on the G-14s. The Gruppe marking seems to have always been reapplied.

From the scant photographic material, as well as recollections of pilots, it is clear that personal markings and emblems were applied to some of 16. Staffel's aircraft. One of these was 'Blue 17' of Lt. Schüler. His G-14/AS, W.Nr. 785685, had a small rendition of the Berlin bear under its port windshield. Schüler's Messerschmitt had quite clean paintwork with the exception of the tail which seems to have been repainted to a considerable degree. The tail fin and

rudder were finished in a single colour with large splotches of a darker colour, reminiscent of the patterning seen on K-4s. More details are given in the profile below.

The photographic material also seem to indicate that both 13. and 14. Staffel used very small numerals on their Messerschmitts, whereas 15. and 16. Staffel used normal sized numerals. For more details on the markings and colours of these late war Bf 109s, see the photographs and profiles on pages 131 to 135.

It is perhaps fitting to conclude this narrative on the camouflage and markings of the fighters of JG 5 with a recently discovered, and quite spectacular, photograph. It depicts Bf 109 G-14, 'Black 13', at Lista, photographed by an Englishman just after the war. See page 134.





The only known photograph of a Fw 190 F-8 from northern Norway in late 1944, at the time serving with IV. Gruppe as denoted by the wavy Gruppe insignia. IV. Gruppe received a total of eleven F-8s in September, but this was reduced to only two by November due to combat attrition and accidents. III. Gruppe received both of these machines (and a number of other Fw 190s) from IV. Gruppe in early November. One of these two surviving F-8s was W.Nr. 931862, which is currently under restoration to flying condition in the USA. Camouflage is standard greys and the F-8 was used for regular fighter missions as evidenced by the lack of both wing and fuselage racks. Note the older non-blown canopy (Coll. Larstuvold).



According to its owner, this photograph depicts a Bf 109G from JG 5. Given the extremely snowy location and lack of any distinguishing marks, such as a spinner spiral, this may be one of the G-14s received by IV. Gruppe in northern Norway in October, although this does not fit well with the known weather conditions. Alternatively, it may have been taken in southern Norway some months later, during the winter of 1944-45, possibly at Sola. In any case, the camouflage application is of interest, as is the fact that this machine carries the large upper wing bulges normally associated with the G-10. Even so it has the earlier tail, making an intriguing configuration (Coll. Kees Mol).



A nondescript Bf 109G-14 from 13./JG 5, probably seen at Sola in early 1945. The black outline underwing crosses are of note (Coll. Kees Mol.)



*Bf 109 G-14, 'Blue 9' from 16./JG 6 flown by Fw. Hans Steiner seen at Stavanger-Forus in early 1945. Note the two wooden sticks under the wings. These were used to secure the aircraft instead of the more normal wires and have been seen on several photographs of aircraft from IV. Gruppe at Stavanger, Forus and Stvavanger-Sola in 1945. Camouflage most probably consisted of the regular greys. Other photos of this aircraft have been published before but it has never been positively identified as an aircraft from 16. Staffel (via Flemming Melin Christiansen)."*



**Messerschmitt Bf 109 G-14, 'Blue 8', Ofw. Heinz Halstrick, 16./JG 5, Stavanger-Sola, October 1944**

*After the expansion of the Gruppe in the autumn of 1944, the new 16. Staffel seems to have adopted a practice whereby personal emblems were painted below the cockpit on the port side. Ofw. Halstrick's 'Blue 8' was one of these; he painted the emblem of the city of Cologne on top of the so-called 'Jägerpfeil' and the exclamation 'Kölle alaaf' below this. His G-14 was finished in the standard greys with large blobs of both colours on the fuselage sides.*

*A most remarkable series of recently discovered photographs (right and opposite page) depicting the Bf 109G-14/AS, W. Nr. 785685, 'Blue 17', of Fw. Heinz Schüler of 16./JG 5 at Stavanger-Sola in March 1945. This special Messerschmitt (only three AS-engined G-14s are reported to have been issued to JG 5) was most probably painted in a RLM 75/82/76 scheme, and there's very little mottling on the fuselage sides whereas the entire tail seems to have been painted in a single colour, probably RLM 75, with hard-edged spots of RLM 82 on the tailfin and rudder. The aircraft also features a special personal emblem beneath the cockpit; this is the bear of Berlin in black on a white shield. The aircraft has the small wing bulges, full radio suite (FuG25a IFF, FuG 16ZY), the cowlings chin bulges and a beautifully applied white spiral on a black spinner. This aircraft received the RV bands before it was damaged on 27 March 1945 at Stavanger-Sola (Heinz Schüler via Flemming Melin Christiansen).*







**Messerschmitt Bf 109 G-14/AS, W. Nr. 785185, 'Blue 17', Lt. Heinz Schüler, 16./JG 5, Stavanger-Forus, March 1945**

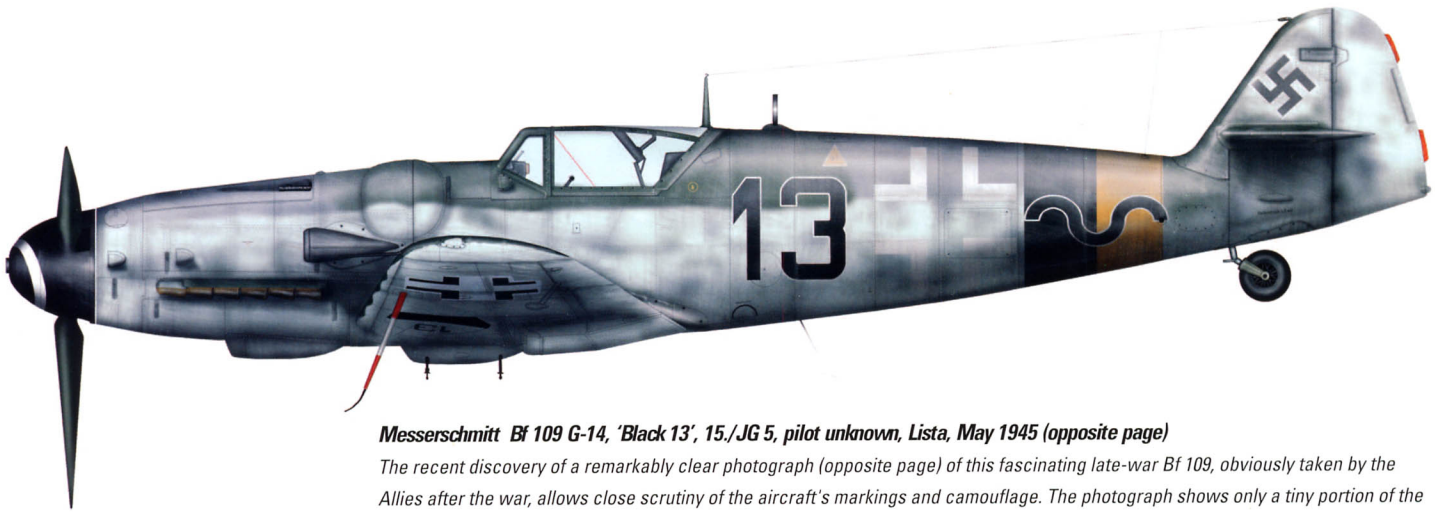
This most remarkable machine was one of the very few AS-machines delivered to JG 5 towards the end of the war and is the second example identified as such. The colours used are probably RLM 75/82/76, and while there is very little in the way of mottling on the front part of the fighter, the tail section appears to have been over-painted more or less completely with RLM 75 with hard-edged patches of RLM 82. Note how the centre of fuselage cross has been filled in with a dark grey, probably RLM 82. The individual number is also unusually thick, compared to the IV. Gruppe wave and repeated in black figures on the undercarriage doors. One of Schüler's mechanics also painted a personal emblem below the cockpit, this consisting of the Berlin bear on a shield in black and white (see detail). W. Nr. 785685 was lost on 27 March 1945 when Schüler crash-landed it at Stavanger-Sola and he was assigned a regular G-14 which was numbered 'Blue 18'.





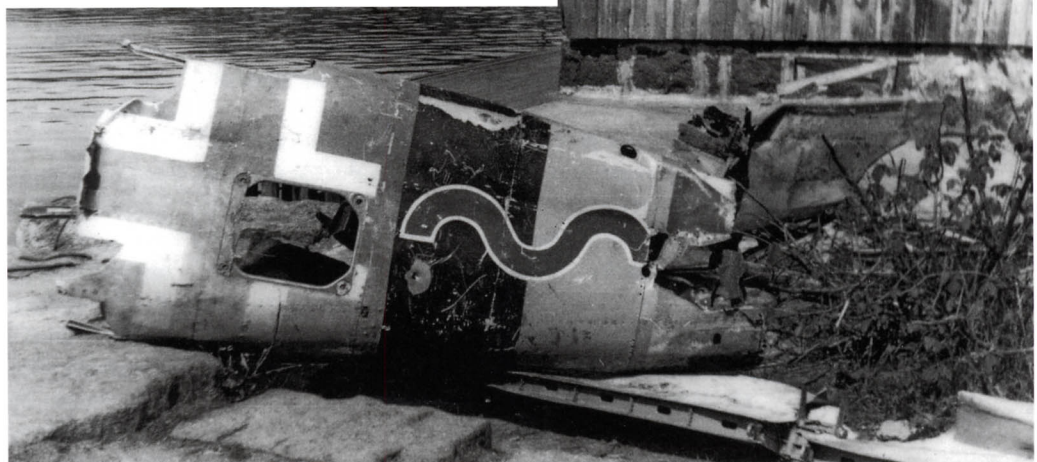
Perhaps the clearest photograph ever taken of a JG 5 fighter; this depicts Bf 109 G-14, 'Black 13', of 15./JG 5 at Kjevik just after the war. The individual number is repeated on the undercarriage door (see inset) and the black, outlined in white, numeral can just be made out above the wing. The finish is again probably RLM 75/82/76 with only some mottling on the fuselage sides. Of interest is the black outline cross beneath the wings with what appears to be natural metal in the centre and just outside the black angles. The cowling and MG cover have been only partially shut, probably in order for this photograph to be taken. Note the red/white markings on the Morane antenna for the FuG 16Zy (Coll. Averkist).





**Messerschmitt Bf 109 G-14, 'Black 13', 15./JG 5, pilot unknown, Lista, May 1945 (opposite page)**

The recent discovery of a remarkably clear photograph (opposite page) of this fascinating late-war Bf 109, obviously taken by the Allies after the war, allows close scrutiny of the aircraft's markings and camouflage. The photograph shows only a tiny portion of the individual number, but as this was repeated on the undercarriage door, a positive identification is possible. The finish of the aircraft was probably one of the late-war greens (RLM 82?) combined with RLM 75 and there was very little mottling on the fuselage sides. The Messerschmitt also carried a more or less full suite of stencillings, including the 'Glykol/Wasser' marking on the cowling, frame numbers and warning instruction on the tail. Interestingly, the supercharger air intake was finished in a dark grey colour, suggesting a replacement or repairs. The fuselage cross consisted of white angles only and was not filled in with a darker colour. The FuG 16 ZY antennae featured red and white warning markings.



On 11 April 1945, the Staffelkapitän of 16./JG 5, Lt. Adolf Gillet, was shot down and killed over Porsgrunn harbour during a large air battle with Mosquitos and Mustangs Mk IVs. His Bf 109 G-14 was shot down by a Mustang and hit several buildings in the harbour area during the ensuing crash. The main parts ended up a few metres from the shore, although wreckage was strewn over a large area. These two photographs show remains of his aircraft on the quayside after they had been collected by the Germans the following day. Of particular note is the blue, outlined in white, Gruppe wave on the JG 5 black and yellow bands and the diffuse application of paint on the fuselage side. The Balkenkreuz is of the white only variety. Parts of the radiator assembly, elevator, main landing gear and wing structure may be seen in the photograph top left. Beneath the Gruppe wave there is an impact hole from a .50 calibre machine gun round (Flemming Melin Christiansen).



*Messerschmitt Bf 110E-2, Werknummer 3761, 'M8+YE' from Stab III./ZG 76, flown by Hptm. Gerhard Schaschke, seen at Pori in the summer of 1941 (via Hannu Valtonen).*

## Early Zerstörer Units Organisation and Structure

### I./ZG 76

THE task of providing escort to transports and Stukas and of eliminating the small Norwegian fighter force on 'Wesertag' was assigned to I. Gruppe, Zerstörergeschwader 76, one of the 'elite' Zerstörer units. Like so many other units, I./ZG 76 was given its designation by the renaming of an existing formation, namely II./ZG 141 (earlier II./JG 141), when the flying units of the Luftwaffe changed from three to two digit number titles on 1 May 1939; yet it could trace its origins back to III./JG 132 which was formed in July 1938.

At the time of the Scandinavian campaign, before the vulnerability of the twin-engine heavy fighter aircraft was made obvious in comparison to the superior manoeuvrability and speed of modern single-engine fighters, the heavily armed Bf 110 proved a formidable opponent for the slow and lightly armed Norwegian Gloster Gladiators. Earlier, and operating under the control of Carl Schumacher's Stab/JG 1 in the German Bight area, I./ZG 76 had been involved in the aerial battles against RAF bomber units in late 1939.

After providing escort duty and coastal defense from Stavanger-Sola for about six months, the Gruppe was renamed and left Norway in September 1940, to be used to form the nucleus of several of the new night fighter Staffeln in Nachtjagdgeschwader 1. Some missions, such the one on 15 August, had shown just how vulnerable the early Bf 110 variants were, when seven Bf 110 Ds were shot down while providing escort for KG 30 and KG 26 to England.

The whole of I./ZG 76 was operating in Norway during the summer of 1940, and it consisted of:

#### Gruppenstab:

1. Staffel
2. Staffel
3. Staffel

This structure was retained during the unit's operations in Norway.

### Stab/ZG 76

Formed as an entirely new unit in April 1940, the unit is first mentioned in the introduction to the strength report of 13 April 1940, indicating that the order to form it came slightly earlier than the previously reported date of 15 April 1940. The Stab had an establishment strength of three aircraft at its formation, but did not receive any aircraft until the week of 20-27 April. Its commanding officer was no novice however, Generalmajor Walter Grabmann serving as a Gruppenkommandeur as early as 15 March 1937 when he took command of the newly formed I./JG 234.

Arriving in Norway in late October or early November 1940, Grabmann and his Stab took up residence at Stavanger-Sola. The Stab flight was by no means complete at this time, and in the establishment report of 11 November 1940, the unit consisted of only one aircraft that was unserviceable, and just one pilot, probably Grabmann himself.

The unit would stay in Norway for the rest of its existence and participate in the attack on the Soviet Union from the airfield at Kirkenes. However, Grabmann had taken up duty as the so-called 'Jagdfliiegerführer Norwegen' by this time, commanding all fighter units in southern Norway from June 1941. The rest of the unit, consisting of a Schwarm of four aircraft and crews as of 21 June 1941, went to the north with the rest of the fighter and heavy fighter force preparing for 'Barbarossa'. The unit finally ceased to exist on 6 September 1941, being renamed and integrated into the Stab/Jagdfliiegerführer Norwegen.

### III./ZG 76

After I./ZG 76 departed Norway, the only fighter unit left was II./JG 77. This experienced unit was in much need in the intensifying battles over the Channel Front, and as the plan was made to replace the single-seat Bf 109 – which had proven to be challenging to operate from the small Norwegian airfields – the choice



was made to transfer the III. Gruppe of ZG 76 to Norway.

Like the other units that operated in Norway in 1940, this unit was not a newly-formed one, although it had existed under its current designation for only some four months having arrived in Norway in late October 1940. There is a question with regards to this renaming, as it seems this was supposed to have taken place as early as 1 March 1940 according to the Generaloberquartiermeister strength reports. The unit still reported under its old designation, II./ZG 1, until the end of June 1940, the first report with the new designation dated 6 July 1940. Before it became II./ZG 1, the unit supposedly carried the name I./JG 54 for only about 10 days in May 1939, after the large renaming process on 1 May that year. Effective 1 November 1938, its old three-digit designation had been I./JG 333 and it could trace its origins all the way back to II./JG 135 in Bad Aibling on 1 July 1938.

Returning to Norway and 1940, we find that on a strength return dated 26 October 1940, 9. Staffel had already arrived and is listed under Luftflotte 5. On the same report, a note is appended to II./JG 77 stating that it was to leave for France as soon as the rest of III./ZG 76 arrived. As we know this transfer started on 10 November, it can be safely assumed that the entire III. Gruppe consisting of the following units were present at this date:

#### Gruppenstab

7. Staffel

8. Staffel

9. Staffel

At this point events become intriguing and a bit confusing and, in the opinion of the authors, one can find the reason for a number of erroneous assumptions in earlier works here. As mentioned, in the introduction to the strength report of 16 November 1940, at a time when the III. Gruppe was equipped with Messerschmitt Bf 110 C and Messerschmitt Bf 110 Ds, orders were issued that each Staffel was to have one Schwärm of four Bf 109s attached to it. The name assigned to this Schwärm, as far as can be deduced from contemporary documents, was Jagdschwarm III./ZG 76. It also seems evident from the changes in the returns between the reports, that the pilots for the newly created Jagdschwärme initially came from the crews of the Gruppe. A large build-up of both aircraft and crew then ensued; for example we see that the Zerstörer element of the Gruppe reported 53 Bf 110 on 30 November – 17 more than an entire Gruppe establishment strength. At the same time, the Jagdschwärme had almost reached a full complement of Bf 109Es, reporting 11 out of 12, (none of these serviceable), and 12 out of 12 pilots, of which 10 were reported as ready for operations.

On the introduction to the strength report of 1 February 1941, the Jagdschwarm are mentioned, as the Jagdkommando that had been attached to III./ZG 76 until then was detached from the unit and used as the

nucleus for a new fighter Gruppe, the new I./JG 77.

III./ZG 76 remained in Norway for nearly three further months, until renamed II./SKG 210. In the introduction to the strength report of 26 April, the change was mentioned, including the fact that III./ZG 76 was to leave one Staffel with 15 aircraft under the command of Luftflotte 5. The change was not made until K.Gr.606 could relieve the unit, and a date mentioned was 15 May. However, in the report of 10 May plans changed and II./KG 30 became the unit to relieve III./ZG 76, this evidently taking place between the report dates of 17 May and 24 May, ending the Gruppe's history in Norway.

### Aircraft of the units

#### I./ZG 76

Messerschmitt Bf 110 C-1	04.1940	05.1940
Messerschmitt Bf 110 C-3	04.1940	09.1940
Messerschmitt Bf 110 D	04.1940	09.1940

The first elements of the unit to enter Norwegian airspace on 9 April 1940 were equipped with the twin-engined Messerschmitt Bf 110 heavy fighter. As with the other units operating in Norway in the six months following the invasion, it is not possible at this time to provide an exact sub-type distribution for the aircraft due to lack of detailed information with regards to Werknummer and full sub-type designation from contemporary documents. The establishment strength of a Zerstörer Gruppe was 36 aircraft and crews in early April 1940, a number that was reduced to 30 in June.

The replacement aircraft being delivered to the unit from late April was of the D-series. By 5 May, the mix of aircraft sub-types consisted of 10 Bf 110 D and 28 Bf 110 Cs. With new Bf 110 Ds pouring into the unit, it reported almost twice its establishment strength on 1 June 1940, showing a total of 69 aircraft. Of these, 41 were Ds and 28 Cs. During the following week, all the Bf 110 Cs were transferred out of the unit and the establishment consisted exclusively of Bf 110 D series aircraft from this time, until the unit was moved from Norway and redesignated in September 1940.

#### Stab/ZG 76

Messerschmitt Bf 110 C	10.1940	02.1941
Messerschmitt Bf 110 D	10.1940	09.1941
Messerschmitt Bf 110 E-2	02.1941	09.1941

The unit had an establishment of three aircraft and crews when it was first formed in mid-April 1940, the addition of the unit to the total strength of the Zerstörerverbände being referred in the introduction to the strength report of 13 April 1940. The first aircraft was assigned to the unit by 20 April and most likely all three were Bf 110 C-series aircraft, as confirmed by the reports from the following weeks, the one of 15 May in particular showing a strength of 3 Bf 110 Cs.

By the time the unit arrived in Norway it was equipped with a single aircraft, the sub-type uncertain, although the strength report of 23 November reports one each C- and D-series aircraft. The change for the later E-2 series came in February and March 1941, but as later records show, the unit did not abandon all Bf 110 Ds.

It was this mix of Bf 110 Ds and Es that would remain with the unit as it travelled to the north-eastern part of Norway to participate in the attack on the Soviet Union. The strength had by then been stable at four aircraft for several months, the Sollstärke, plus one additional aircraft. This would be the norm until the unit was renamed, the last strength report showing four aircraft and three crews on 6 September 1941.

### III./ZG 76

Messerschmitt Bf 110 C	10.1940	05.1941
Messerschmitt Bf 110 D-0	10.1940	02.1941
Messerschmitt Bf 110 D-3	10.1940	05.1941
Messerschmitt Bf 110 E-2	04.1941	05.1941
Messerschmitt Bf 109 E-1	11.1940	02.1941
Messerschmitt Bf 109 E-3	11.1940	02.1941
Messerschmitt Bf 109 E-4	11.1940	02.1941

*Leutnant Helmut Lent's Bf 110 C-1 seen before the invasion of Norway. The proportions of the fuselage cross are noteworthy (Coll. Dybvig).*



The strength report from III./ZG 76 seems to indicate that the unit was equipped with the Bf 110 C when it moved to Norway in October and November 1940. Fortunately, the officer in charge of reports decided to list the aircraft sub-types in greater detail for parts of late 1940 and early 1941, thus offering a more detailed picture. Also, by this time, the loss reports contain more detail, which reveals that the unit had both Bf 110 C and Bf 110 D on strength by the time it transferred to Norway. The last loss recorded before the transfer was W.Nr. 4218, a Bf 110 D-3, on 29 October, signifying a few D-series aircraft in the inventory at that time.

For a researcher, a strength report such as the one filed for 23 November 1940 is a prime source. As a snapshot of the aircraft inventory of this date, it shows the following sub-type distribution (with the first number being the number of aircraft in the unit and the number after the slash being number of aircraft operational on this date):

2/1	Bf 110 C-1
1/1	Bf 110 C-2
15/10	Bf 110 C-4
1/1	Bf 110 C-7
5/3	Bf 110 D-0
3/3	Bf 110 D-3

The mix of aircraft sub-types swings towards a majority being Bf 110 D-0s and Bf 110 D-3s later in the year and into the new. For example, by 18 January the number of Bf 110 C-series aircraft has decreased to 17, while the number of D-series aircraft has risen to 29, the huge majority being Bf 110 D-3s.

By the end of April 1941, as the unit was disbanded, it still had a mixture of Bf 110 aircraft from the C and D series, in addition to a very small number of E-series. W.Nr. 3787, a Miag-built Bf 110 E-2, was a total loss after crashing into a small locomotive on the railway track from the docks to the airfield at Lista airfield on 23 April 1941.



**Messerschmitt Bf 110 C-1, 'M8+DH', 1./ZG 76, Lt. Helmut Lent, Fornebu, 9 April 1940**

*Lt. Lent's Zerstörer was finished in the regulation RLM 70/71/65 scheme, but had a strange marking on the extreme tail section (not visible on the profile), consisting of a small, wedge-shaped, light-blue patch. It was probably just a repainting of some kind and not a tactical or formation marking as has been suggested. The fuselage cross had non-standard proportions and the upper wing crosses were greatly over-dimensioned. The position of the Swastika across both tail fin and rudder is to be noted, as are the white spinner tips. It is not known if Lent's aircraft carried the Staffel insignia consisting of a red fox on a shield on the starboard side of the nose section. Lent had somewhat optimistically painted four-and-a-half white victory bars on both tail fins, but only three were officially recognized by this time.*





**Messerschmitt Bf 110 C-1, 'M8+HK', 2./ZG 76, pilot unknown, Stavanger-Sola, April 1940**

Seen in a dilapidated state at Stavanger-Sola immediately after the commencement of *Weserübung*, 'M8+HK' is representative of the Bf 110s of 2./ZG 76 participating in the opening stages of the invasion of Norway. The individual letter was red with a white outline and appeared to be more vibrant in colour than the rest of the code. The fuselage cross is standard, as is the camouflage.



**Messerschmitt Bf 110 C-1, 'M8+CH', W.Nr. 1365, 1./ZG 76, Lt. Hans Ulrich Kettling, Stavanger-Sola, May 1940**

The code of Kettling's Messerschmitt following the invasion of Norway is not known with 100 per cent certainty, but it is known that he used the individual letter 'C' both on 9 April and on the aircraft he employed on his last mission over England on 15 August 1940 (see main text), so it is very probable that W.Nr. 1365 seen at Stavanger-Sola around May was the same aircraft which was damaged when Kettling participated in the attack on Fornebu airfield, i.e. 'M8+CH'. The aircraft photographed at Sola featured two personal emblems, one being a silver swan on a blue circle (inspired by the swan in the church tower in Neroth, Germany, where Kettling was a member of a youth organisation), the other being a row of national flags and symbols of all nations where Kettling had fought or served in, those being Czechoslovakia, Poland and Norway.

### Camouflage and Markings

The first Zerstörer units to arrive in Norway comprised some of the first German aircraft to enter Norwegian air space when *Weserübung* commenced on 9 April 1940. These machines belonged to 1. and 3./ZG 76 and were tasked with securing the air space over Oslo and Stavanger, respectively.

These Bf 110s were of the C-1 variant, although it is possible a few C-2s were used also, but lack of records prevent a conclusion on this as losses were not recorded with *Werknummern* at the time. These two versions differed in the radio installed and can be discerned by examining the ventral antenna. It thus seems that the C-1 was the prevalent version. Notwithstanding the version, the Bf 110s were all finished in the standard RLM 70/71/65 splinter scheme. Markings were also standard, as they used the unit code 'M8' and Staffell letter 'H' or 'L'. The individual letter was white for 1./ZG 76 and yellow for 3. Staffell. As for units markings, some of 1. Staffell's aircraft featured the red

fox emblem on the starboard side of their noses. It is not known if 2./ZG 76, which arrived in Norway later, used the Staffell's Ladybug emblem during this first period of its stay in Norway, but it was later seen on some D-0s. 2./ZG 76 used red individual letters outlined in white.

Two types of nationality markings feature on these Bf 110s: some retained the cross with narrow white 'arms' on the fuselage, whereas others had the normal version. The Bf 110 C-1 of the later *Nachtjagd* ace, Helmuth Lent, 'M8+DH', featured a fuselage cross with non-standard proportions, as seen left. The Swastika was in the early position, spanning both the tail fin and the rudder.

A few personal emblems are known from this initial period of the war in Norway. A single aircraft, W.Nr. 1365, possibly Lt. Hans Ulrich Kettling's 'M8+CH' which he used during the attack on Fornebu, was photographed in May 1940 at Stavanger-Sola with a row of flags below the port side of the

<sup>1</sup> The first were Junkers Ju 52/3ms of KGr.z.B.V. 103.





A Bf 110 D-0 of I./ZG 76 seen at Stavanger-Sola in early summer 1940. The aircraft is finished in the regular 70/71/65 scheme, but there is evidence of some over-painting around the fuselage codes, probably of the Stammkennzeichen. The extended tail section housing a dinghy shows this to be a D version, but note that a Dackelbauch is not fitted (Coll. Brekken).

centre cockpit area and a special marking below the front cockpit section. The flags were Czech, Polish and Norwegian (counting from the front) and represented the countries which Kettling had served in. The other marking was a silver swan on a blue circle, inspired by the swan in the church tower of the town of Neroth, where a youth organisation in which Kettling had been a member, was founded.



A beautiful view of a Bf 110 D-0 belonging to Stab I./ZG 76 at Stavanger-Sola in early summer 1940. Again, the factory scheme is carried with over-painting around the unit codes. As was customary within the Stab at this time, fighter-style chevron markings are carried, these indicating the machine of a Gruppenkommandeur. The style of the letter 'A' is to be noted. Contrary to the aircraft featured in the previous photograph, 'M8+AB' is fitted with the Dackelbauch. In the background is a Bf 109 E from 5./JG 77 (Coll. Brekken).



**Messerschmitt Bf 110 D-0, 'M8+AB/Double Chevron', Stab/ZG 76, pilot unknown, Stavanger-Sola, May-June 1940**

This fascinating Bf 110 D-0, fitted with the Dackelbauch, featured the single-engined fighter style chevron markings used by Stab ZG 76 in 1939-40. The finish is otherwise the standard RLM 70/71/65 which appears quite fresh, except for the areas around the codes where some over-painting of previous codes has occurred. The white spinner tips were present on other Stab machines and therefore probably this one as well. The Werknummer, which belonged within the 3102 – 3202 blocks, was painted in white on the rear fuselage, but unfortunately this is not readable in full. The style of the individual letter is noteworthy; this was RLM 23 green with a white outline. A photograph showing a similarly coded Bf 110 D-0, including chevrons but without the Dackelbauch (published in the classic series 'Dora - Kurfürst und Rote 13'), may have been the same aircraft.

<sup>2</sup> Of the same type as later seen carried beneath each wing on the Ds and Es.





Another Bf 110 D-0 from Stab I./ZG 76, marked 'M8+DB' and with the single chevron of an adjutant. The camouflage is standard, but instead of the Dackelbauch, this Messerschmitt has been equipped with a ventral field-modified 900-litre drop tank installation (Coll. Dybvig).



**Messerschmitt Bf 110 D-0, 'M8+DB/Single Chevron', Stab/ZG 76, pilot unknown, Stavanger-Forus (?), summer 1940**

Looking very much like the machine on the opposite page, 'M8+DB' had a single chevron marking and had exchanged the Dackelbauch with the field-modified 900-litre ventral drop tank seen on some machines of I./ZG 76 in Norway in summer/autumn of 1940. Again the Werknummer is in white on the rear fuselage, but not readable, although it certainly was within the same Werknummer block as 'M8+AB'. This aircraft must have been a recent acquisition when it was photographed at Stavanger-Forus as the paintwork was pristine.

Bf 110s of Stab ZG 76 from this period are 'M8+AB' with a double chevron in front of the regular codes, and 'M8+DB' with a single chevron. The use of chevrons for the Stab flight dated back to the Polish campaign and were black outlined in white as per regulations. These and other D-0s in the Gruppe carried their Werknummern on both sides of the rear fuselage in white.

These long-range D-0s were designated as a Sonderstaffel and moved to Værnes at the end of May

to conduct escort and reconnaissance missions against Allied forces then operating in the Narvik area. This was the only fighter force available to the Germans in that region at this stage of the conflict. The Sonderstaffel probably embraced aircraft and crew from all three Staffeln. One of the Bf 110 D-0s that were lost on one such escort mission, was W.Nr. 3154, which still carried the St. Kz. 'NO+DS' at the time it was damaged by Swedish anti-aircraft fire on 24 May and had to make an emergency landing on a lake on the Swedish



**Messerschmitt Bf 110 D-0, 'NO+DS', W.Nr. 3154, 2./ZG 76, Fw. Neureiter, Værnes, 24 May 1940**

An even more recent acquisition was W.Nr. 3154, which had not had its Stammkennzeichen painted out when it was lost on 24 May 1940. Colours and markings were otherwise entirely standard and the aircraft carried the 900 litre ventral fuel tank and the Werknummer in white on the rear fuselage section.



Another Dackelbauch, this time of 3./ZG 76, with standard markings and camouflage. The location is probably Værnes (Coll. Brekken).



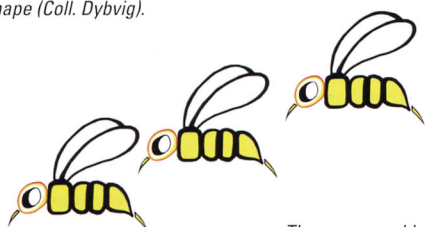
One of the seven Bf 110s lost on the fateful 15 August raid was 'M8+CH', flown by Lt. Hans Ulrich Kettling, the fuselage of which managed to wrap itself around a telephone pole in Great Britain. Again markings and camouflage are perfectly standard (Coll. Dybvig).



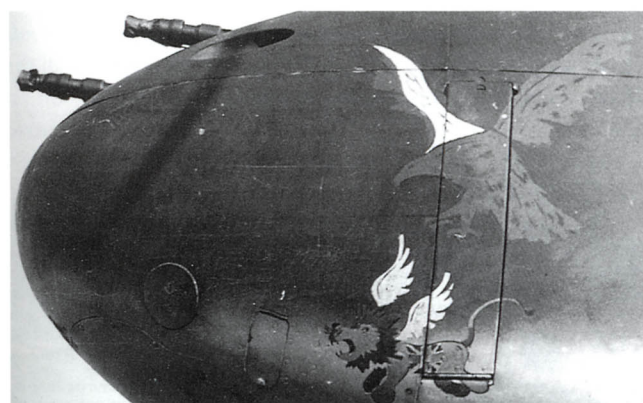
A Bf 110 E with the code letter '2N' showing its attachment to III./ZG 76 in Norway in the autumn of 1940 or early 1941. The three wasps on the nose denote the III. Gruppe. Three-hundred-litre drop tanks are fitted beneath the wings (Coll. Dybvig).



The wasps of III./ZG 76 on the nose of a 70/71/65 camouflaged Bf 110 D, possibly at Herdla in late summer 1940. The emblem is in colour below. In addition to the three wasps, there was often a stylised cloudscapes beneath, widely varying in shape (Coll. Dybvig).



The wasps emblem of III./ZG 76.

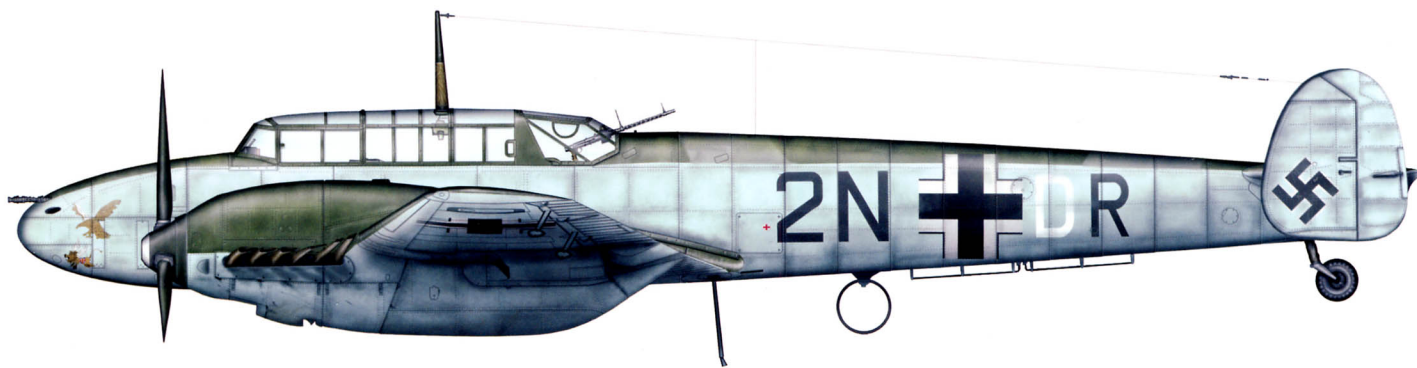


The emblem of 7./ZG 76 seen on the nose of a green-camouflage Bf 110 (Coll. Mombeek).



The eagle and lion emblem of 7./ZG 76.





**Messerschmitt Bf 110 D, '2N+DR', 7./ZG 76, Oblt. Kriegel, Stavanger-Sola, February 1941**

*Carrying one of the more unusual Bf 110 schemes seen in Norway at the time, Oblt. Kriegel's Zerstörer was finished in a scheme equivalent of the pre-Battle of Britain Bf 109 scheme, with clean fuselage sides and RLM 71/02 on the top surfaces and fuselage spine. It also had the 7./ZG 76 British lion emblem as well as Kriegel's own personal emblem, the number '13', in a white circle outlined in black with the name 'DITA' above it. This was placed below the nose section and is not visible on the profile. '2N+DR' was very clean, suggesting a recent repaint at the time it was photographed.*

side of the border (see Chapman 1996 for more details). This machine had already been fitted with the 900 litre external tank which dates this modification to early in the service life of the Bf 110 D-0.

The Zerstörerstaffeln remained at Værnes until late June whereupon they took up residence at Stavanger-Forus, leaving only small elements at the former airfield. Here they only flew one major operation, acting as escort for the Heinkel He 111s of KG 26 and Ju 88s of KG 30 which attempted to attack eastern parts of North-England on 15 August 1940. Altogether 21 Bf 110 D-0s from I./ZG 76 participated and no fewer than seven were lost. The next month the Gruppe transferred out of Norway and was re-designated as a Nachtjagdgruppe (II./NJG 1). Throughout their time in Norway, the Zerstörer of I./ZG 76 used the 70/71/65 splinter scheme.

Norway did not remain long without Bf 110s however. The following month, October 1940, another Gruppe of ZG 76 was transferred there. This, the III. Gruppe, had been formed from II./ZG 1 on 31 July 1940, and continued to use this Gruppe's code: '2N'. The three constituent Staffeln had the following Staffel letters:

- 7./ZG 76 – Staffel letter 'M', individual letter white
- 8./ZG 76 – Staffel letter 'N', individual letter red
- 9./ZG 76 – Staffel letter 'P', individual letter yellow

These three letters were kept in use until the beginning of 1941 when the designation system were brought more in line with regulations, thus:

- 7./ZG 76 – Staffel letter 'R', individual letter white
- 8./ZG 76 – Staffel letter 'S', individual letter red
- 9./ZG 76 – Staffel letter 'T', individual letter yellow

However, it should be noted that this changeover was not complete, aircraft still being seen with the old Staffel letters well into 1941. Some aircraft carried their

individual letter repeated in white on top of both wings, outside of the cross (at least aircraft from 7. and 9. Staffel were so marked).

It was at the time of its formation from II./ZG 1 that III./ZG 76 started to use three small wasps on both sides of its aircrafts' noses as its Gruppe emblem. Sometimes these wasps were flying over two stylized clouds and there were small variations in the emblems from aircraft to aircraft. This emblem later became the famous Wespen insignia which covered the entire nose of the Bf 110<sup>3</sup>.

7. Staffel also employed its own insignia in lieu of the three wasps. This consisted of an eagle, with its wings spread, hovering above a panic-stricken lion with the British flag on its chest. It was carried on the port side of the nose.

As for the colours of the Bf 110s that II./ZG 76 operated after its transfer to Norway in October 1940, photographic evidence shows that the initial aircraft were painted in the 70/71/65 scheme. These probably included a mix of C and D versions.

At some time in late the summer/early autumn of 1940, Bf 110s finished in the new regulation colours of RLM 71/02/65 started to appear with the fuselage sides in RLM 65, but mottled to various extents with the two upper surface colours. The introduction of this new scheme was made around late May 1940 (Merrick 2001: pg 65) so it is highly likely that aircraft produced after this date were so painted. One interesting exception to this rule was Oblt. Kriegel's '2N+DR', which was finished in the same colours described above but completely devoid of any mottling, making it appear like a Bf 110 version of the pre-Battle of Britain Bf 109 Es. This Bf 110 was made all the more interesting by the two emblems painted on its nose – 7./ZG 76's emblem on both sides and a personal emblem at the extreme nose, just forward of the cannon openings. The latter consisted of the number '13' in a black-outlined circle over which was written the name 'Dita'. '2N+DR' is depicted in the profile on

<sup>3</sup>. For the entire history of this Gruppe, see Lächler & Lauser (1991).





*Bf 110 D '2N+GT' after a landing accident at Herdla. This was probably not the first accident at the end of the runway on Herdla and certainly not the last. The aircraft appears to feature the grey scheme, but given the time (late 1940), they are certainly the then standard RLM 71/02/65 (Coll. Urbanke).*

page 143 top, and is based on a series of photographs seen on the internet which sadly have not been available for publication.

What appears to be an interim scheme can be seen on a Bf 110 from 7./ZG 76 marked '2N+DM' and photographed on 9 September 1940 (see (Lächler & Lausler 1991: 53). Despite the low quality of the image, it is clear that the machine was finished in very dark upper surface colours, reminiscent of RLM 70/71. However, this scheme seems to have been over-painted with RLM 65 up to a position roughly half-way up the fuselage sides. It can be taken as an interim phase in the evolution of Bf 110 camouflage taking place at the time – from the dark overall green colours to the lighter mottled schemes in lighter greens and finally in greys.

One final marking change took place before III./ZG 76 left for Germany in preparation for 'Barbarossa' at the end of May 1941. A few of its aircraft were painted with the gigantic Wespen marking on

their noses, one such example being '2N+DP'.<sup>4</sup> However the departure of III./ZG 76 did not take place before yet another Zerstörer unit had been established in Norway, one that was to enjoy an extraordinarily long existence from January 1941 to July 1944, albeit with a number of designations.

Jagdkommando Kjevik was established on 10 January 1941 with Bf 110s. It was part of I./JG 77 then being formed in Norway and operated, as the name indicated, from the airfield near Kjevik in southern Norway. This unit inherited about eight Bf 110s from III./ZG 76, as is evidenced by the three wasps on their noses and the fact that most of them were finished in the RLM 70/71/65 scheme. Initially, the aircraft kept their unit emblems and their old ZG 76 codings as well; photographs show numerous machines with the wasps or the 7./ZG 76 emblem still in place and pilots reported flying Bf 110s marked '2N+AT' and '2N+BR' until April 1941 (see Mombeek 2000 for more details).



**Messerschmitt Bf 110 C, 'LN+DR', 1. (Z)/ZG 76, pilot unknown, Kjevik, early 1941**

*This early-model Bf 110 was photographed at Kjevik in early 1941 and sported the code 'LN+' on its fuselage, probably one of the first Zerstörer to feature this code. The individual letter was black, thinly outlined and white, and the Staffel-letter was in all probability 'R'. Although this machine had been taken over from III./ZG 76, clearly shown by the three small wasps on the nose, and the code partially repainted to indicate ownership, the Staffel-letter shows it had previously belonged to 7./ZG 76. Camouflage was RLM 70/71/65, but at least the port rudder was finished in RLM 02, probably the result of replacement following extensive repairs. The Werknummer could be seen on the starboard side of the rear fuselage, but is sadly not readable.*

<sup>4</sup> Note how the old Staffel letter was still in use.





**Messerschmitt Bf 110 C, '2N+BR', 1. (Z)/ZG 76, Lt. Felix Brandis, Herdla, June 1941**

Contrary to the previous Zerstörer, Brandis's RLM 70/71/65-finished Bf 110 probably retained the full code of its previous user, which the lion and eagle emblem and Staffel-letter 'R', (seen on a photograph – see Mombeek 2000: page 34) clearly show 7./ZG 76. The spinner tips were in the Staffel colour of white. Brandis used this aircraft to claim his third kill on 1 June 1941.

The small Kommando was transferred to Mandal on 27 February. It was probably at this time that the original '2N' codes on its Bf 110s started to be replaced with one of the most enigmatic codes used within the Luftwaffe during the Second World War, namely the 'LN' codes seen on the Zerstörerstaffel attached firstly to I./ JG 77 and then to JG 5. No plausible explanation has ever been put forward for this curious, decidedly non-standard Luftwaffe unit code which persisted for almost three years.

While the authors cannot claim to have hard evidence for the theory put forward which follows, they believe it holds some merit. The code was probably adopted simply because it would entail the least amount of work to change the existing codes into a new one! In effect, changing a '2N' into a 'LN' only means that the upper part of the '2' had to be removed or over-painted and replaced with a straightforward line. Excerpts from log books indicate that '2N' coded aircraft were present from late April, but the changeover may have started earlier. One of the the first LN coded aircraft was probably 'LN+D?' (the individual letter

being outlined in white), a 70/71/65-finished Bf 110 C with the three wasp insignia on its nose (see Keskinen & Stenman 1998: pg 44), photographed at Mandal in spring 1941.

There is still some mystery as to what Staffel letter the unit used in these first days. According to Mombeek (2000), the letter 'S' was used, possibly inherited from the original aircraft. There are few photographs to determine this and one of the above mentioned 'LN+D?' sadly does not show the Staffel letter. The first evidence of use of the letter that was finally adopted as standard for the remainder of the period the LN-code was in use, was seen on the Bf 110 of Lt. Brandis, which he used on 1 June 1941 to shoot down his third aircraft while flying from Herdla. A series of photographs of this aircraft, taken after landing, clearly show this to be an ex-7./ZG 76 machine (the eagle and lion emblem being visible). The Staffel letter 'R' can also be made out (see Mombeek 2000: pg 34), which conforms with the emblem. This may indicate that this was the same aircraft used by Brandis on 23 March 1941, when he suffered damage

*A newly discovered photograph of Schaschke's 'M8+YE', taken at Banak.*

*This view depicts his Bf 110 E-2 before he started his one-man campaign against the VVS SF. His technique was to wait at altitude above the Soviet airfields and dive upon the Russian fighters as they took off. Using this method, he claimed a total of 21 victories by 4 August 1941 when he was shot down in combat with LaGG-3s. He managed to down two of his opponents before he succumbed. Of note are the elaborate spinner markings, the main part of which is green with a white tip and a part white, part black-green backplate (Coll. Øyvind Leonsen).*





Another view of Schaschke's Bf 110 at Banak just before the commencement of hostilities against the Soviet Union. The single white victory bar is clearly visible as are the three ship silhouettes (Coll. Øyvind Leonsen).



**Messerschmitt Bf 110 E-2, 'M8+YE', W. Nr. 3761, Stab ZG 76, Hptm. Gerhardt Schaschke, Pori, June-July 1941**

Perhaps the most well-known Bf 110 used in the north during the first year of operations against the Soviet Union was Hptm. Schaschke's Bf 110 E-2, which he used to claim some 21 opponents during the period June-early August 1941. Known as 'Rishij' (apparently referring to his red hair) by the Soviets, Schaschke developed a fighting style whereby he circled enemy airbases at altitude and dived upon his opponents as they took off. This tactic worked until 4 August when he was shot down by a large number of LaGG-3s from 145 IAP after having shot down two of them. A photograph of the tail of Schaschke's Bf 110 taken after this combat shows 19 white victory bars on it, in addition to three ship silhouettes. The latter were probably ships he had attacked or spotted, not sunk. The photograph above shows, Schaschke had claimed only one kill when he arrived in the north, this being represented by a white bar. The three ships were also there by then, showing that these were attacked or more likely spotted while he served in the south, perhaps during reconnaissance missions against Scapa Flow or other British bases, which it is known Stab ZG 76 aircraft conducted. All these markings, victory bars and silhouettes alike, were present in very similar form on both tail fins. The individual letter 'Y' was green with a white outline and given the time of production of this aircraft, it was certainly finished in a RLM 71/02/65 scheme, with substantial overpainting and mottling on the fuselage sides.

after a friendly fire incident, and which carried the codes '2N+BR'. By 1 June, it is highly likely that the codes of this machine had been changed to 'LN+BR' but it is depicted as '2N+BR' in the profile on page 145.

Stab ZG 76 also operated Bf 110s in Norway during this period and even flew a few of them in the north against the Russians. The most well-known of these is the Bf 110 E-2 flown by Hptm. Gerhardt Schaschke, W.Nr. 3761, coded 'M8+YE', the individual letter being green, thinly outlined in white. Being an E-2 produced between December 1940 and March 1941, it would have been finished in the standard RLM 71/02/65 scheme, the fuselage sides and tail fins having a very heavy mottle of the two colours. Schaschke operated for a time in the north and had the yellow

theatre markings on the ventral wing tips. His victory tally, which totalled 21 aerial claims and three ships (?) were marked on both fins.

Another Stab ZG 76 machine was evidently later turned over to the Zerstörerstaffel JG 5. This was 'M8+ZE' which was lost on 11 March 1942, still with the codes of its former unit. This machine was later recovered (see Chapman & Guhnfeldt 1993 for a more complete story).

Another well-known aircraft which operated briefly in the north was Bf 110 E-1, W.Nr. 3863, 'M8+KC', flown by Major Erich Groth from Stab II./ZG 76, the individual letter being plain green. His aircraft featured a camouflage pattern which seems to have been a very modified RLM 71/02/65 scheme with heavy application of RLM 02 on all vertical sides



of the airframe upon which thick streaks and squiggles of RLM 74 had been applied. Groth had also marked his 13 claims with white bars on the tail fin and, to top this off, the nose was adorned with the shark's mouth of II./ZG 76.

In February 1942, two other Bf 110-equipped units made their brief appearance in Norway after having acted as escort during the break-out of German capital ships through the British Channel<sup>5</sup>. These were Staffeln from III., IV./NJG 1 and III./NJG 3 equipped with D and E-models, which stayed at Lista for several days and also visited Herdla. A few photographs of these night fighters show that the majority of them were painted in the then standard night fighter scheme of overall black, featuring RLM 77 codes with individual letters outlined in white and white tail bands of varying width. Identifiable machines include 'G9+DU' from 10./NJG 1 and 'G9+MT' from 9./NJG 1. A single machine from NJG 3 is also seen, and the scheme of

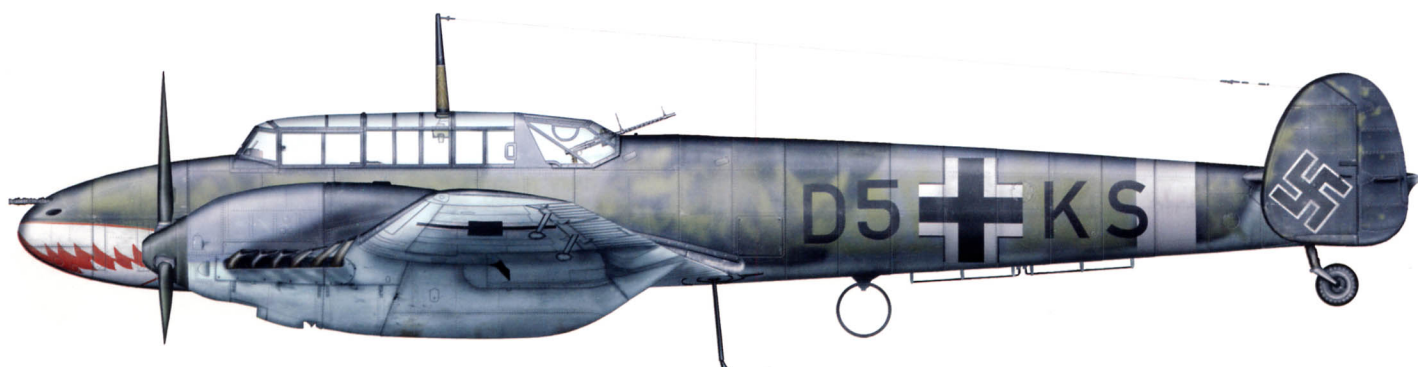
this has intrigued modellers and decal manufacturers since the earliest publications. Their interpretations notwithstanding, it is shown here as a segmented scheme of RLM 74 and 75 over all top surfaces with heavy overspray of RLM 02 on the fuselage sides. Codes were all black and the aircraft also featured quite a narrow tail band and the shark's mouth adornment of II./ZG 76, 8./NJG 3 having been formed from 5./ZG 76 on 1 November 1941. The painting of the codes of this Bf 110 seem to have been done in some haste as the number and letter in the alpha-numerical code are not properly aligned (see profile) and the Swastika is also not positioned according to standards.

One of these fighters, 'G9+HM', which crash-landed on the shore of Herdla airfield, featured a string of small flags beneath the cockpit, but other than that and the 'Nachtjagdblitz' emblem which a few aircraft had painted on their noses, no special markings were carried.



**Messerschmitt Bf 110 C, 'G9+DU', 10./NJG 1, pilot unknown, Lista, 25 February 1942**

Forming part of the strong aerial escort for the Kriegsmarine during 'Operation Donnerkeil', when the *Scharnhorst*, *Gneisenau* and *Admiral Hipper* broke through the Channel, 'G9+DU' was finished in a scheme similar to most night fighters assembled for this operation, i.e. black over all with RLM 77 grey codes and a white tail band.



**Messerschmitt Bf 110 D, 'D5+KS', 8./NJG 3, pilot unknown, Lista, 25 February 1942**

Seen at the same place and time as the previous Bf 110, 'D5+KS' was finished in a markedly different scheme. There have been many interpretations of this finish, but here it is presented as a segmented grey finish using large areas of RLM 74/75 on all top and side surfaces, over which a mottle of RLM 02 has been sprayed on the fuselage sides. The aircraft still retained the 'Haifischmaul' of II./ZG 76, from which III./NJG 3 had been formed. A white tail band was also featured by this aircraft and the codes were all black.

<sup>5</sup>. Unternehmen Donnerkeil.





A Bf 110 F-2 of 13.(Z)/JG 5 photographed from a companion aircraft out over the coast in 1943 (Coll. Brekken).

## Zerstörerstaffel JG 77 and JG 5

### Organisation and Structure

#### I.(Zerstörer)/JG 77

THE Zerstörerstaffel or Zerstörerschwarm of the new JG 77 was formed by using those aircraft and personnel ordered to stay behind from III./ZG 76, which subsequently returned to Germany under its new name.

First appearing as a separate entity in the strength report of 24 May 1941, it had an establishment of 12 aircraft and crews. As the preparations for the attack on the Soviet Union commenced, the unit moved to Kirkenes, where the airfield at Høybuktnoen would become home to the unit under the present and successive designations for a considerable period of time. Operating alongside the single-engine fighter aircraft of JG 77, the Bf 110s were often used as fast bombers or for harassment attacks on the railway line known as the 'Murmanbahn'.

In January 1942, the unit was renamed and became an integral part of the new Jagdgeschwader 5, and its subsequent designations are covered in that section.

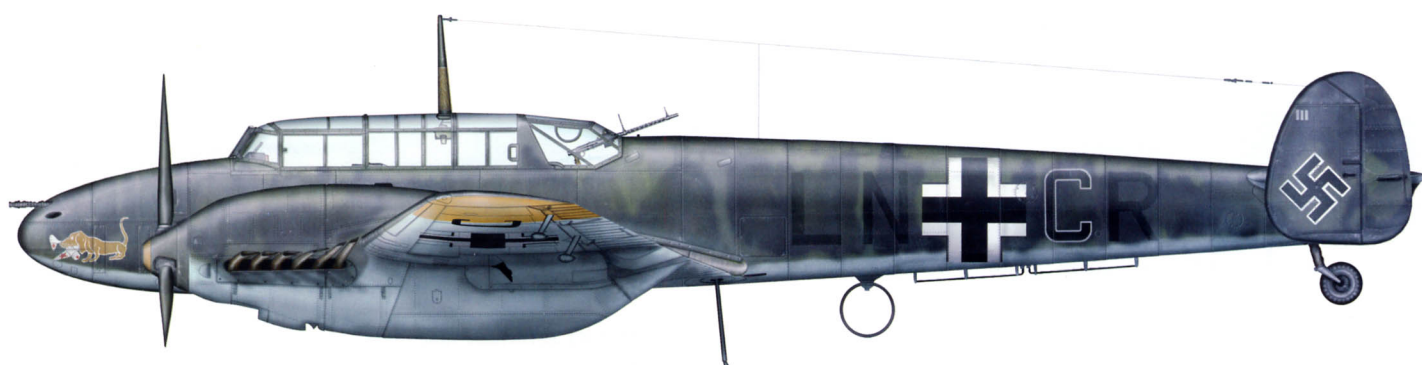
#### Aircraft of the unit

The Zerstörer element of I./JG 77 and later JG 5 used the Messerschmitt Bf 110 as its operational aircraft from formation until disbandment. We can't be entirely sure of the mixture of aircraft subtypes in the unit from the start in 1941, but it was primarily the Bf 110C and D-series, with the possibility of a few Bf 110E.

The mixture of these three subtypes were used until May 1942, when the first F-2 arrived. During the summer of 1942 the C and D series aircraft disappear from the strength of the unit, the same happening to the E-series aircraft in the autumn of 1942, in time coinciding with the introduction of the G-series.

For the rest of the unit's history, the frontline aircraft would be a mixture of Messerschmitt Bf 110F and G-series, with one single Junkers Ju 88C-6 used for training the crews for subsequent night-fighter operations from March 1944.

Messerschmitt Bf 110C	05.1941	07.1942
Messerschmitt Bf 110D	05.1941	07.1942
Messerschmitt Bf 110E	05.1941	09.1942
Messerschmitt Bf 110F-2	05.1942	06.1944



Messerschmitt Bf 110 C, 'LN+CR', 6.(Z)/JG 5, unknown pilot, Petsamo, spring 1942

'LN+CR' was an older C model which still retained its RLM 70/71/65 scheme, but this had been heavily modified and altered by the addition of large areas of a dark grey, probably RLM 74. It was otherwise representative of a Bf 110 from the JG 5 Zerstörerstaffel in that the Dachshund emblem was present and the individual letter was outlined thinly in white. There were three white victory bars on both tail fins.



Messerschmitt Bf 110F-3	09.1943	10.1943
Messerschmitt Bf 110G-0	02.1943	06.1944
Messerschmitt Bf 110G-2	03.1943	06.1944
Messerschmitt Bf 110G-4	11.1943	06.1944
Junkers Ju 88C-6	03.1944	06.1944

### Camouflage and Markings

When the Zerstörerstaffel<sup>1</sup> transferred north in late June 1941, its aircraft carried the LN code as recounted in the previous section. Photographic evidence suggests that the majority of its Bf 110s were finished in a scheme consisting of two colours on the upper surfaces and usually substantial mottling on its fuselage sides. A few of the earlier Bf 110 C-models still in use did use the old splinter scheme of RLM 70/71/65, however. One of these machines was 'LN+CR' (see Keskinen & Stenman 1998: pg 45). It is conceivable that this particular machine used a heavily repainted scheme with RLM 71 or possibly RLM 74, but the low demarcation lines suggest otherwise. This is further substantiated by the scheme seen on one of the last C models used by the Zerstörerstaffel, W.Nr. 3271, a C-2 coded 'LN+DR', which was destroyed in a Soviet attack on Kirkenes airfield on 7 July 1941 (see Mombeek 2000: pg 47). This machine had a 70/71/65 scheme as evidenced by the very sharp demarcation line on the nose between the two upper colours and the light blue on the ventral sides, and a very dark appearance in its upper colours. Two photographs of 'LN+CR' showing it after an accident (Mombeek 2000: pg 101) reveal that this aircraft had been repainted extensively, especially on the tail fin, the area around the codes and also on the top surfaces, using a very dark colour. It is difficult to assess the colours used, but given the time and the solid base colours with the same demarcation lines as a 70/71/65 scheme, it is most likely that 'LN+CR' featured a very old and weathered original scheme in the two dark green colours, over which RLM 74 had been applied.

The majority of the Staffel's Messerschmitts were finished in mottled schemes, however. What colours they were is difficult to determine from black and white photographs, but it can be elucidated from existing records, if a few assumptions are accepted. The first assumption is that the introduction of the grey colours, i.e. RLM 74/75/76, took place around March/April 1941 within the German aviation industry, as suggested for the Bf 109F-2 series (see Merrick 2004: 147). That roughly the same timespan for the introduction of the new colours applies to the Bf 110 can be assumed with some certainty. The second assumption is that the introduction of an RLM 71/702/65 scheme was made around late May 1940, according to Merrick (2001: pg 65) as noted in the previous section. Finally, if it is then assumed that the different Bf 110 production blocks as presented in Mankau & Petrick (2001: pg 323-327) followed these two camouflage changes, an understanding can be



reached of what the delivery scheme of a given Bf 110 was, provided that the Werknummer is available.

It thus seems that all Bf 110 C and the initial deliveries of the D-series (mainly the D-0) were originally finished in the 70/71/65 colours, whereas the later C and D series were delivered with the 71/02/65 scheme. Following the same reasoning it also seems that all but one block of the E-1s also were delivered with the latter scheme, the exception being the block 4013-4116 which, being produced between May and August 1941, in all probability was finished in the grey scheme. Conversely, very early E-2s were delivered before the introduction of the greys on the production lines and thus may have been finished in the 71/02/65 scheme, but this number was probably relatively low.

Later series Bf 110 day fighters in use with the Zerstörerstaffel, i.e. the F and G-series, were all delivered in the 74/75/76 scheme.

This seemingly straightforward scheme is muddled by the fact that many of the Bf 110s on the inventory of the Zerstörerstaffel would have been quite old and had seen much service at the time period under discussion (summer to winter 1941) and it is only fair to assume that several of them had gone through major overhauls since their initial delivery to the Luftwaffe. During such overhauls, depending on the degree of the repairs/modification needed, older machines were usually partially or completely repainted and that would have been done in whatever colours were stipulated at the time. That this took place and altered

*The nose of an early series Bf 110 (probably a D) after the so-called Unternehmen 'Salla' at Rovaniemi on 25 August 1941. This makes this image the earliest dated photograph of a Bf 110 with the Dackel emblem (BA).*

*The Zerstörerstaffel at Petsamo in October 1941. Most of the colour schemes appear to be RLM 74/75/76, although it cannot be stated categorically that the 71/02/65 scheme was not used on a few aircraft at this stage. Identifiable aircraft on this photograph are 'LN+AR' flown by Lt. Brandis, (in the foreground) and 'LN+LR' of Lt. Schlosstein to the right of it. Interestingly, at least the former aircraft has a yellow band below the fuselage cross as stipulated in the 2. Gebirgsarmee order mentioned earlier. Note that the Dackel emblem has not been painted on these aircraft (Coll. Horst Kube).*

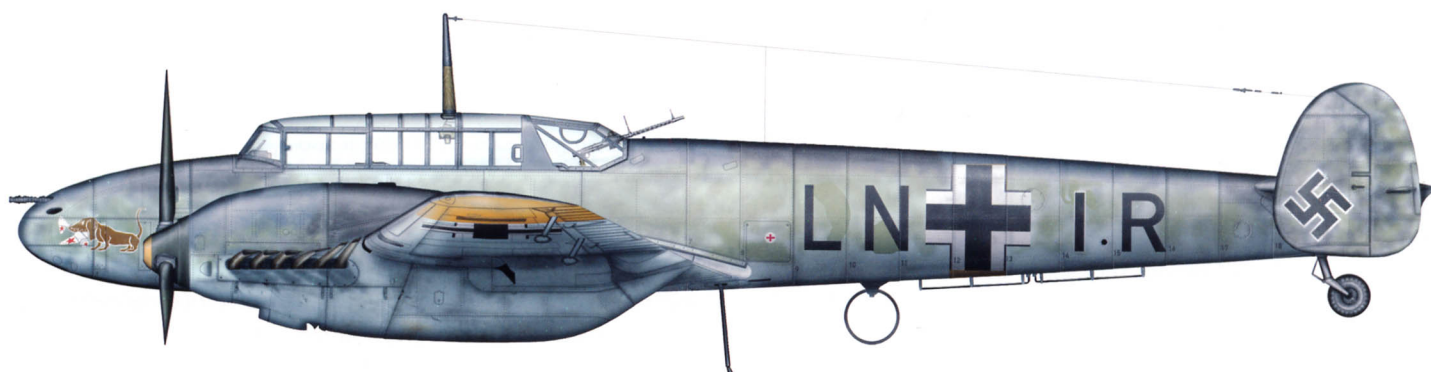


<sup>1</sup> The term is used here to denote the Bf 110-equipped Staffel attached to JG 77 and JG 5 in 1941-44 for ease of reference. The Staffel went through numerous re-designations in 1941-42, which had no impact on its markings, and rather than confuse the reader it is easier to simply use this term. For details on these re-designations see Staffelstammbau on page 8.





*The fuselage of Bf 110 C-2, W.Nr. 3026, 'LN+IR' after coming to grief at Kirkenes airfield on 12 October 1941. This view clearly shows the frame numbers and what is probably the over-painted Stammkennzeichen, presumably using RLM 02. This aircraft was produced some two years previously and had definitely been repainted at least once since then. The colours used were RLM 74/75/76 with substantial mottling in RLM 02 on the sides. A ventral yellow fuselage band may have been present, but it is difficult to ascertain in this view (Coll. Dybvig).*



**Messerschmitt Bf 110 C-2, 'LN+IR', W.Nr. 3026, 1.(Z)/JG 77, Lt. Karl Koch, Kirkenes, October 1941**

*As recounted in the main text, the finish of this machine was probably a relatively fresh finish of RLM 74/75/76 with considerable mottling and over-painting on the fuselage using RLM 02. It is not confirmed that the Dackel was featured on the nose, but it is likely.*

the initial delivery scheme of Bf 110s assigned to the Zerstörerstaffel is quite clear. For example, Bf 110 C-2, 'LN+IR', W.Nr. 3026, which suffered an accident at Kirkenes on 12 October 1941 (see photograph above), had a mottled scheme with clear segments of the two

upper surface colours on the fuselage spine and a light gentle mottle with one of the colours on the fuselage and engine sides, carefully blended with the upper colours using RLM 02.

As far as can be ascertained all Bf 110s of JG 77 and JG 5 used the yellow identification bands beneath the outer wing panels, while a complete rear fuselage band never seems to have been used. One such band was seen on Bf 110 E-2, 'VN+CV', during a stop at Kauhava while en route to the north, the band being quite far behind the fuselage cross. A partial band seems to have been used frequently, at least in 1941-42, and confined to the ventral part of the fuselage below the position of the fuselage cross. Its use stemmed from the 2. Gebirgsarmee order mentioned earlier.

This aircraft was produced some time between September 1939 and January 1940, thus unquestionably being finished originally in the then standard



*A Bf 110 E running up its engines. Note the extra air intake on the nose which was a distinguishing mark for the E-series and the external armoured wind shield. The spinners are not the usual type seen on the early series Bf 110s with an open type, but reminiscent of the capped spinner seen on the later Bf 109E-series (BA).*





As the enlarged oil cooler and sand filter on the supercharger intake show, this is a Bf 110 E modified for tropical service. This is, in fact, the only tropical early series Bf 110 known to have served with JG 5, but unfortunately the code is not known. The sub-type can be determined by the air channel just discernible on the dorsal part of the MG cover lying on the ground beneath the aircraft. This was part of the new heating system introduced in the Bf 110 E series. The camouflage comprises the normal greys (BA).



RLM 70/71/65 scheme. The visible remnants of the Stammkennzeichen and the presence of all frame numbers indicate that the machine had been recently delivered presumably from an aircraft depot. Some time between its initial delivery and this accident, it was completely repainted. The colours could very well be RLM 71/02/65, but comparing them with other Bf 110s in service at the time, the finish bears a marked resemblance with aircraft known to have been finished in the grey scheme. It is thus not unreasonable, given the time frame, to suggest that 'LN+LR' had received a new application of the new grey standard colours, with a gentle mottle on the fuselage sides of RLM 02 to blend it all in.

Another example of such repainting may be seen on Bf 110 E-2, W.Nr. 3759, 'LN+LR', flown by Lt. Brandis and later Lt. Harry Krippahl. One of a batch of seventy-eight E-2s delivered between December 1940 and March 1941, it was most likely finished in the

71/02/65 colours, but the photograph of this machine strongly hints at the greys being used. This is also supported by the unusual mottling, consisting of a dense application of the lightest upper surface colour (RLM 75?) on all side surfaces below the unusually straight demarcation lines on the fuselage. This apparently non-standard finish thus suggests a repaint using the then standard greys.

Other Bf 110s of the unit definitely featured repainting. One such example is Bf 110E, 'LN+GR', flown by Oblt. H-H. Schmidt (see Valtonen 1998: pg 101). The application of what is most likely RLM 74 has resulted in a very dark, almost solid finish on the upper surfaces and fuselage sides. Its companion aircraft, Bf 110C, 'LN+CR'<sup>2</sup>, featured a virtually identical finish.

One of the most photographed Bf 110s in history, Lt. Felix Maria Brandis's E-1, W.Nr. 4114, 'LN+FR', which landed in Sweden on 1 September 1941, had

Messerschmitt Bf 110E-2, Werknummer 3759, 'LN+LR' was at one time flown by Lt. Brandis and featured his 14 victory bars on the tail. These were noticeably thicker than those seen on several photos of a Bf 110 also marked 'LN+LR' with Brandis and his gunner standing next to it. This may have been the same aircraft, but if that is the case it must have been substantially repainted, something the finish seen on this photograph suggests. See profile overleaf for further details. The photograph was taken at Malmi in early 1942 (via Hannu valtonen).

<sup>2</sup> Lacking the extra nose air intake of the E-series.



**Messerschmitt Bf 110 E-1, 'LN+FR', W. Nr. 4114, 1.(Z)/JG 77, Lt. Felix Brandis, Rovaniemi, 1 September 1941**

Brandis's 'LN+FR' was in all likelihood finished in a standard grey scheme (RLM 74/75/76), but this had been modified with the addition of large dark green (RLM 70 or 71) splotches and streaks on the fuselage sides and tail fins. At the time of its well-known emergency landing in Sweden, there were eight victory bars on the tail fin, as shown in the profile. It is somewhat unusual that the white in the fuselage cross had been lightly oversprayed with the dark green colour.



**Messerschmitt Bf 110 E-2, 'LN+LR', W. Nr. 3759, 10.(Z)/JG 5, Lt. Felix Brandis, Malmi, January 1942**

There exists some confusion as to both the pilot of 'LN+LR' and where and when the two known photographs were taken. This was probably the machine used by Lt. Brandis in late 1941/early 1942 as the victory markings on the tail indicate. It was later flown by Lt. Harry Krippahl and lost on 18 June 1942, but its appearance by then is not known. The profile shows it as it appeared in January, and as can be seen, the standard grey scheme was crisply applied, with a rather sharp demarcation line between the upper grey colours on the fuselage spine and the RLM 76-coloured sides, this being supplemented with a well executed mottle of RLM 74 and 75 (the latter mostly on the nose section). This finish points to a recent repaint, hence the grey colour being used, even if the original finish was RLM 71/02/65 (as the airframe was produced between December 1940 and March 1941). The victory bars, as seen here, are thicker than those seen on a photograph of a 'LN+LR'-coded Bf 110 flown by Brandis (see Mombeek 2000: pg 84), which may show the same aircraft before the repainting was done. Strangly, the aircraft seems to have had a peculiar style of mottling on the rudders on both these photographs. The Dachshund-emblem was present as confirmed by a frontal shot of this aircraft (see Mombeek 2000: pg 94).



**Lt. Felix Brandis**

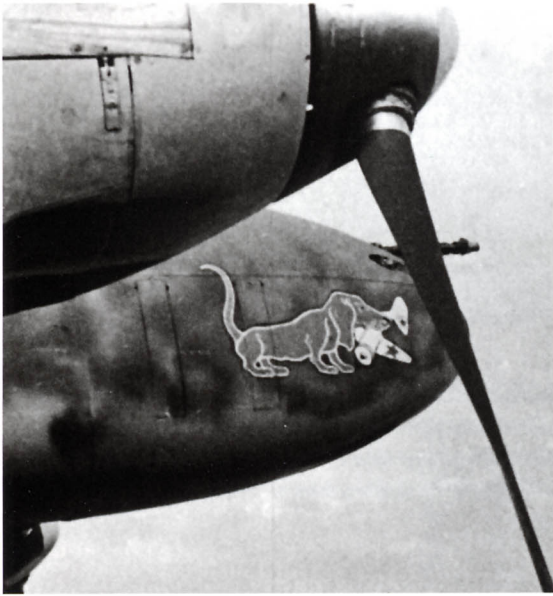
also received additional camouflage on its sides, consisting of very broad and dense streaks over the lighter upper surface colour with a rather dark colour, this even extending to the tail fins and partially over the fuselage cross. As this was a recently produced aircraft<sup>3</sup>, it was certainly finished in RLM 74/75/76. The extra dark colour, almost certainly done in the field, may have been recently mixed 74 or even 71 or 70.

The codes of the Zerstörerstaffel were applied in plain black with the individual number usually outlined thinly in white, although some aircraft did have this letter in plain black as well. At least one aircraft was seen with white codes, but this C-1 (W.Nr. 0965), coded 'LN+ZR', was operated by Stab JG 5 at the time

of its accident on 24 March 1943 (see Valtanen 1998: pg 203), and the white codes were probably applied to denote its non-combat role. It was finished in a worn and faded grey scheme. Yellow theatre markings were usually applied to the outer ventral wing panels, but very rarely to the fuselage. One of the few aircraft to feature this was the aforementioned 'LN+FR' which had a small band on the ventral part of its fuselage, beneath the Balkenkreuz. A complete tailband has so far only been seen on Bf 110 F-2/trop, Werknummer 5052, 'LN+NR' (see Chapman 1994, pg 14). Spinners mostly featured a yellow tip, but occasionally this tip was followed by a white segment covering almost all of the remainder of the spinner except for the black-green

<sup>3</sup> Probably just delivered in August as it was the last but two of its production black which ran from May to August 1941.





Two examples of the famous Dackel emblem. It was always applied to both sides of the nose, one side being a mirror image of the other. As can be seen, the position differed slightly from aircraft to aircraft (Coll. Horst Kube)



backplate. Other, more elaborate spinner decorations consisting of yellow tips and a white/black-green segmented main part, have also been observed during the early period on the Eastern Front.

Exactly when the Staffel's famous unit insignia, the 'Dackelhund' ('Dachs') was introduced is not known, but it must have been some time after the relocation to the northern front as it is very unlikely that a unit operating against the RAF in southern Norway would have adopted an emblem featuring Russian aircraft. Once adopted, it quickly appeared on the nose sections of the unit's aircraft, featuring on both sides.

The lack of temporary white paint within JG 5 is also reflected in the fact that the Zerstörerstaffel did not camouflage its Bf 110s during the first winter of the war in the north. There was, in fact, no attempt whatsoever to make the aircraft better suited for operations over the endless white plains of the tundra, even the dark mottled aircraft described above being seen in such camouflage during the winter.

When the first eight Bf 110 F-2s were delivered to the Staffel in May 1942, these featured the regular grey colours. There is evidence showing that these and many subsequent F-2s had a considerable amount of RLM 02 applied to the fuselage and engine sides to blend the grey colours in, as seen in a rare colour photograph of the new F-2s in flight during the summer of 1942 (see

Stenman & Keskinen 2001: 11). 'LN+SR', which is in the foreground of this photograph, features the two grey colours on the spine of the fuselage and the top surfaces of the wings, but the fuselage and engine cowlings sides are almost completely covered by RLM 02, which has been mottled again with RLM 74 in vertical stripes. This photograph also confirms that the spinner tips were yellow, whereas the individual letter was outlined in white.

Some of these early Bf 110 F-2s show evidence of very heavy repainting of RLM 74 on the areas around the codes, no doubt being used to paint out the Stammkennzeichen. Sometimes other areas of the fuselage, and even the tail fins, have been darkened using the same colour. An example of an aircraft with what appears to be a solid finish of RLM 74 on all top surfaces in 'LN+MR' is seen on the next page.

There was otherwise little variation in the colour schemes, the standard Bf 110 upper surface pattern being used. But when the second winter of the northern war arrived, the Bf 110s finally received an application of temporary white distemper. This was not as elaborate as seen on their single-engined cousins, but a few variations were seen. Some, like Bf 110 F-2, 'LN+RR', had very broad curvy lines applied over their top surfaces, almost obscuring the greys beneath, whereas others, such as F-2 'LM+FR', had a



Bf 110 F-2, W.Nr. 4580, coded 'LN+AR', at Kirkenes on 28 June 1942 following a battle with enemy fighters. The light appearance of the RLM 75 on the fuselage (just behind the gunner's position) and on the wings is noteworthy (Coll. Horst Kube).



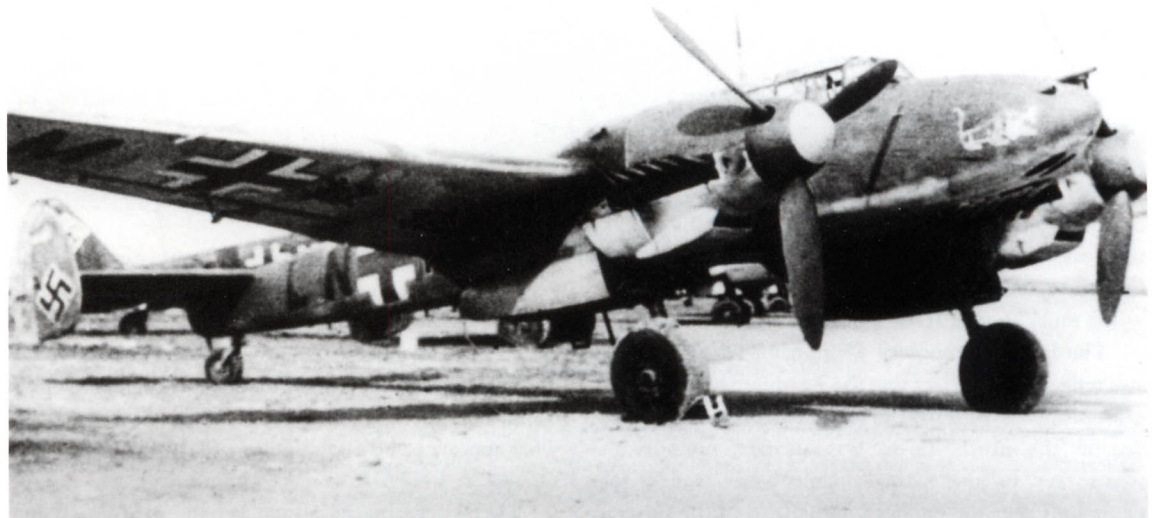


**Messerschmitt Bf 110 F-2, 'LN+SR', 10.(Z)/JG 5, Hptm. H. Schmidt, Petsamo, summer 1942**

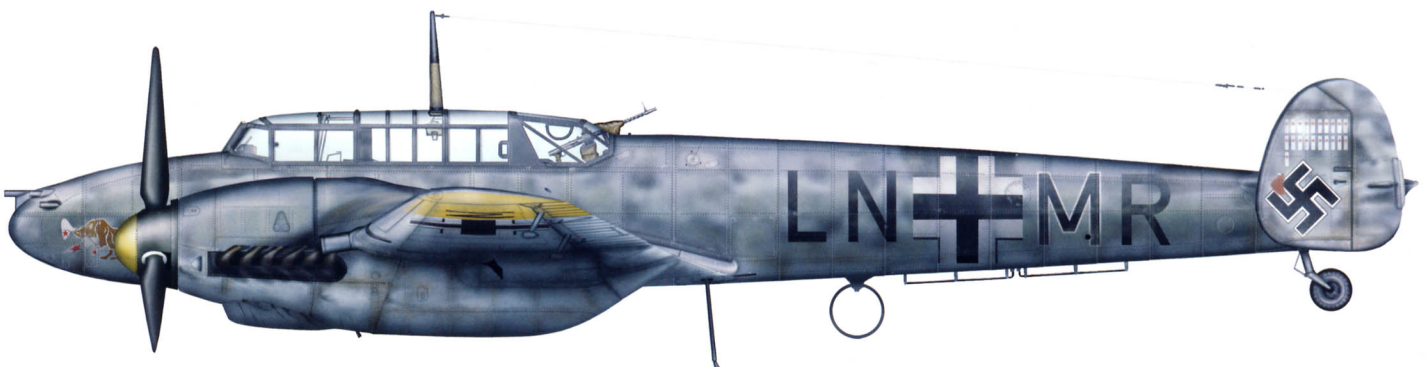
Seen on a well-known series of colour photographs, there can be little doubt that this recently delivered F-2 was finished in a standard grey scheme which had been considerably modified by overspraying the fuselage sides and engine nacelles with RLM 02, over which streaks of RLM 74 had then been applied. Spinner tips were yellow and the individual number, which style is noteworthy, outlined in white. There were five white victory bars on the tailfin.



**Ofw. Theodore Weissenberger**



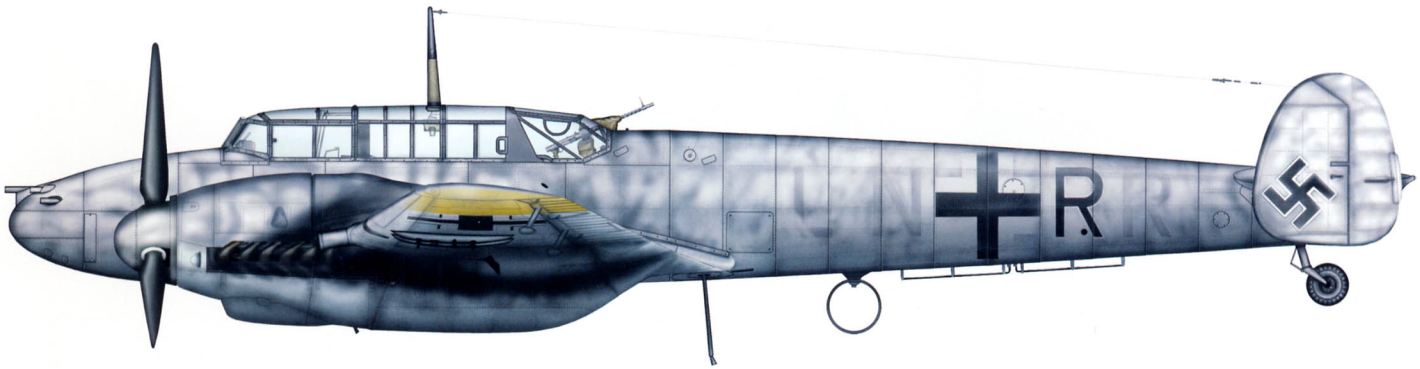
Bf 110 F-2, 'LN+MR', features a very dark upper surface colour, probably a solid application of RLM 74. The configuration of the aircraft is otherwise quite standard, with ventral ETC 50 racks. It is not known if this is the same aircraft profiled below (Coll. Horst Kube).



**Messerschmitt Bf 110 F-2, 'LN+MR', 10.(Z)/JG 5, Ofw. Theodore Weissenberger, Petsamo, early June 1942**

Although the subtype is not confirmed as the photo of this machine only shows the tail and rear fuselage, it is definitely one of the several Bf 110s Weissenberger flew, as evidenced by the 21 victory markings on the tail, and the code is also visible. As the photo had to be taken after 1 June given the number of victories and 10.(Z)/JG 5 got their hands on the Bf 110 F subtype in May, it is very likely that their top ace got the latest version. Finish was the regular greys with mottling. The dark patch on the tail fin could have been a repair patch.





**Messerschmitt Bf 110 F-2, 'LN+RR', 13.(Z)/JG 5, pilot unknown, Kemijärvi, winter 1942-43**

*Serving as an example of a winter-camouflaged Bf 110 F, 'LN+RR' has had its upper surfaces almost completely covered with thick spraylines of white distemper on the forward fuselage and continuous cover on the rear fuselage. The code has been almost obliterated in the process, leaving only the individual letter 'R' clearly visible. The white distemper even covers the spinners. Note ETC 50 bomb racks.*

continuous white layer of paint applied, completely covering the greys underneath. In both cases, the spinners were also painted, but on the latter aircraft, the distemper partially covered its code letters, except for the individual one. Even the Dackel emblem was partially covered.

The first three G-0 machines were delivered to the unit in February 1943 and these were also finished in the regular grey scheme, the same naturally applying to the G-2s which were delivered subsequently. At least some of these initial G-2s received temporary white winter camouflage, although the number must have been rather limited as most of the G-2s were received from May 1943 onwards. There was little change in markings and camouflage up to April 1943 when the LN codes were replaced with a standard alpha-numerical code, the Zerstörerstaffel receiving the combination '1B'. Having been referred to as 13.(Z)/JG 5 since 30 June 1942 (as the four Gruppen of JG 5 had by then already allocated Staffel numbers 1.-12. inclusive), the unit was assigned the Staffel letter 'X'. The unit code was applied immediately at roughly one fifth the normal size. The individual letter was sometimes, but not always, outlined in white.

Most of the G-2s seem to have used the factory finish, although '1B+AX' flown by Lt. Wollenweber, shows evidence of heavy additional application of RLM 74 on its top surfaces, this almost taking the appearance of a segmented scheme (see Mombeek 2000: pg 174).

The use of names on Bf 110s within JG 5 was extremely rare, the sole known example being the G-2 of Maul/Gunzelmann, which carried the name 'Liesbeth' on the starboard side of the nose, just above the Dackel emblem. Spinner markings still varied, with some aircraft retaining the yellow spinner tips while quite a few used a segmented scheme with roughly one-third of the spinner in white, the demarcation line being curved.

After the transfer south to Herdla in late January 1944, the Dackel emblem finally vanished from the unit's aircraft, appropriately enough, the RAF and FAA

now being the primary antagonists. During spring of 1944, the G-2s of the Zerstörerstaffel otherwise looked much the same as they did before. There were some configuration changes in that a few G-2s were fitted with the ventral 'Waffenwanne' with two extra 20 mm MG 151s (Rüstsatz M2), but contrary to some reports, there is no evidence to suggest that any of the Zerstörerstaffel's Bf 110s ever used MK 108s in the nose. The extra armament was no doubt needed as the Staffel occasionally encountered the large and heavily armed Liberators of Coastal Command.

According to photographic evidence it was at this time that spiral spinners started to appear on the aircraft, these being white on black, but the diameter of the spiral however, could vary.

After the redesignation into 10./ZG 26 on 17 July 1944, as part of the newly established IV./ZG 26, the Staffel continued to use the same coding and there was no other change in markings and the camouflage (see section on III. Gruppe for more information about the Bf 110 G-2s later transferred to the Stab of this unit for use as hacks).

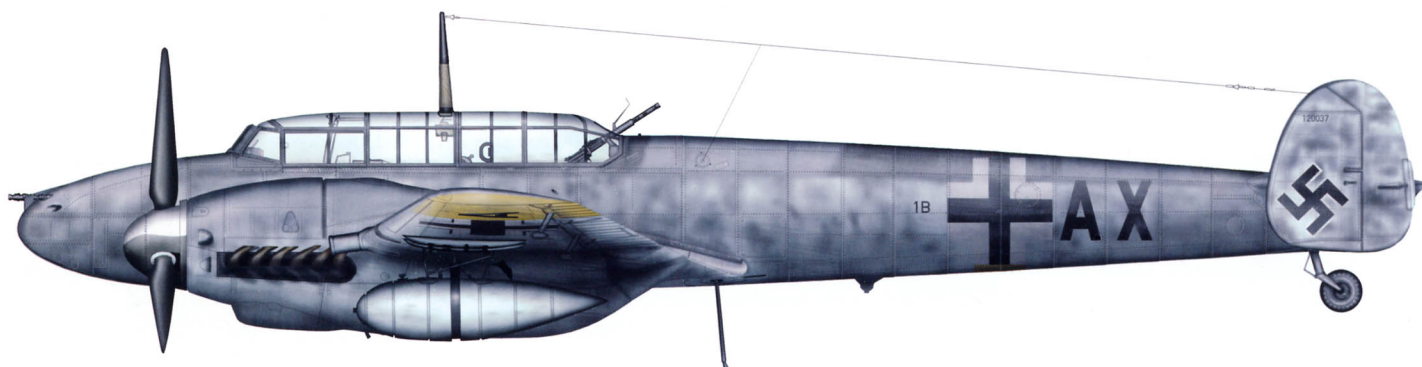
*A collection of Zerstörer pilots in front of one of their aircraft, probably an E-model.*

*The yellow spinner tip is noteworthy. In the centre wearing a white jacket is Ofw. Kurpiers with one of the famous Zerstörerstaffel dogs; this particular one is called "Lockheed" (Coll. Horst Kube).*



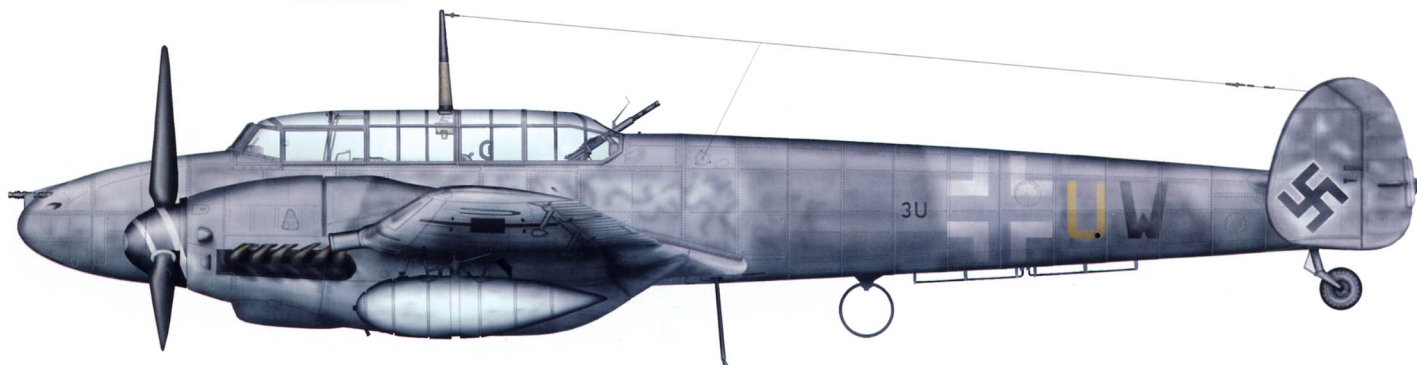


*Bordfunker Gfr. Gunzelmann in the rear cockpit of a Bf 110G-2, showing the new access hatch characteristic of this model. Note the wooden section of the antennae mast, which constituted a breakage point in case the pilot hit it when bailing out (Coll. Brekken).*



**Messerschmitt Bf 110 G-2, '1B+AX', W.Nr. 120037, 13.(Z)/JG 5, Hptm. Herbert Treppe, Kirkenes, autumn 1943**

This Bf 110 G-2 has often been described as the personal aircraft of Hptm. Treppe, although during spring 1943, Lt. Wollenweber also flew a similarly coded G-2. This however, was apparently painted in a different manner than W.Nr. 120037, and therefore not the same aircraft. Treppe's Messerschmitt was finished in a factory scheme of RLM 74/75/76 with light mottling on the fuselage sides. The markings followed the standard practice after the introduction of the '1B' code, i.e. the alpha-numeric code was roughly one fifth the size of the rest of the code. The individual number was plain black and there was a yellow band beneath the fuselage cross. The Werknummer was written in very small black letters on the tail fin and one third of the spinner was white with an attractive curved demarcation. A full suite of underwing stores was carried, consisting of four ETC 50 bomb racks and two 300 litre drop tanks, but for some reason the ventral antenna and DF loop had been omitted.



**Messerschmitt Bf 110 G-2, '3U+UW', 12./ZG 26, unknown pilot, Stavanger-Forus, May 1945**

Photographed at Stavanger-Forus just after the end of the war, '3U+UW' was one of eleven Bf 110 G-2s left at Stavanger-Forus, having previously served with 12./ZG 26. The finish consisted of the regular greys, with quite heavy mottling and overspray on the fuselage sides. The individual letter was plain yellow and the alpha-numeric code one fifth the size of the remaining code, as usual. A fine white spiral had been painted on the black spinners.





## IV./ZG 26

### Organisation and Structure

IN the summer of 1944 not much remained of the former 'elite' units of the mighty Luftwaffe – the Zerstörergruppen. Most had been stood down, or were in the process of converting to single-engined fighters to combat the increasing number of daylight bomber raids over Germany. The Zerstörer aircraft, the venerable Bf 110 and its only marginally successful replacement, the Me 410, were no longer able to hold their own against the numerically superior and more manoeuvrable escort fighters of the US Eighth Air Force. Yet, at this time a completely new Zerstörergruppe was being formed in Norway, receiving the designation IV./ZG 26.

The Gruppe was formed officially in July 1944 from three previously existing Staffeln. Each have their own unique and interesting story, and for the sake of completeness, they will be related briefly here. The units and the redesignations were:

**10./ZG 26** was formed from 13.(Z)/JG 5 based in southern Norway.

**11./ZG 26** came from Greece and was a remnant of the old ZG 26.

**12./ZG 26** was formed from Küstenstaffel Krim which had operated over the Crimean Peninsula.

#### 11./ZG 26

This Staffel spent a large part of its existence in Greece operating Ju 88 C-6s, after having been formed in February 1943. The Staffel was not transferred to Norway until September 1944, arriving by the 14th. Not much else is available on the unit, other than a few details regarding the camouflage and markings of the Ju 88s.

#### Küstenstaffel Krim

This unit too had a chequered and interesting service history. It was first formed with Fw 58s in July 1942 at Tutow, Germany. Its first (more or less unofficial)

designation was 'Sonderstaffel IV. Fliegerkorps'. In June 1943, it was partly equipped with Bf 110s when stationed at Bagerovo, Crimea. At about the same time, several He 111 Hs were transferred to the Staffel. The following month the unit was finally designated Küstenstaffel Krim. The unit stayed in the Crimea until May 1944 when heavy Russian attacks forced it to leave its bases. Briefly stationed at Zilistea in Rumania, the Bf 110-equipped component of the Staffel was then ordered to Stavanger-Sola in Norway on 26 May 1944. Küstenstaffel Krim was officially disbanded on 19 June 1944 (31 May according to other sources). Finally, on 20 July, 12./ZG 26 was formed, using aircraft and personnel from the unit.

#### Stab IV./ZG 26

The Stab of IV./ZG 26 was formed on 5 September 1944 from Stab/SAGr. 125. According to available Luftwaffe records the Stab was never issued with any aircraft.

#### Aircraft of the units

At the time of the formation of the different Staffeln, they had the following aircraft on strength.

##### 10./ZG 26 as at 1 July 1944

Bf 110 F-2	1
Bf 110 G-0	1
Bf 110 G-2	14
Bf 110 G-4	1
Ju 88 C-6	1

The Bf 110 G-4 and Ju 88 C-6 formed a part of the Nachtjagdkommando of 13.(Z)/JG 5, which was based at Lister by 17 July 1944. In July, 10./ZG 26 lost one Bf 110 F-2 in an accident, and a Bf 110 G-2 was transferred out for repairs.

11./ZG 26 arrived in Ørlandet, Norway with 23 Ju 88C-6s, of which seven were given to other units (not in Norway) during September, leaving it with 16. The unit was destined to stay at Ørlandet until

When IV./ZG 26 was disbanded on 23 February 1945, the personnel were transferred to the new II./JG 5. The Bf 110s were transferred to the reserves and those of 12. Staffel ended the war at Stavanger-Forus. A total of eleven G-2s and two F-2s were reported there on 10 May. They were lined up at the so-called 'Löwenstrasse', the huge taxi-way linking Stavanger-Sola and Stavanger-Forus airfields. One of these surviving Zerstörer was '3U+KW', the individual letter being yellow. It is finished in the normal grey scheme with quite substantial mottling on the fuselage and darkened tail fins. Two 300 litre drop tanks were fitted, but like most of the Bf 110s of 12. Staffel, the ETC 50s do not appear to have been fitted. The rudders were removed on all aircraft in compliance with the surrender terms (Flyhistorisk Museum Sola).

18 November when it went to Gardermoen for conversion to the Me 410.

12./ZG 26 was formed using nine Bf 110 G-2s from Küstenstaffel Krim. At first the unit was known as



Above and right: Bf 110 G-2s and crew from 10./ZG 26 (previously 13.(Z)/JG 5) photographed at Trondheim-Lade airfield in late 1944/early 1945. The Bf 110s are by now quite anonymous, with no unit emblems or personal markings of any kind. The finishes are in the standard greys, although the colours look quite faded. The spiral spinners were a feature of most of the aircraft by this time (Col. Horst Kube).



14.(Z)/JG 5 while it was still at Gossen. To the best of the authors' knowledge, this unit designation has not been published before and seems to have eluded most previous research. This is understandable as the designation lasted only from 19 to 25 July! Its existence has been verified through the examination of the Soldbuch of a former ground crew member of the unit. In addition to the nine Bf 110 G-2s, the Staffel received two Bf 110 F-2s, one Bf 110 G-2 and three Bf 110 G-3s during July. But it also lost one G-2 and one G-3 in non-operational accidents during July, thus giving the following strength by August 1944:

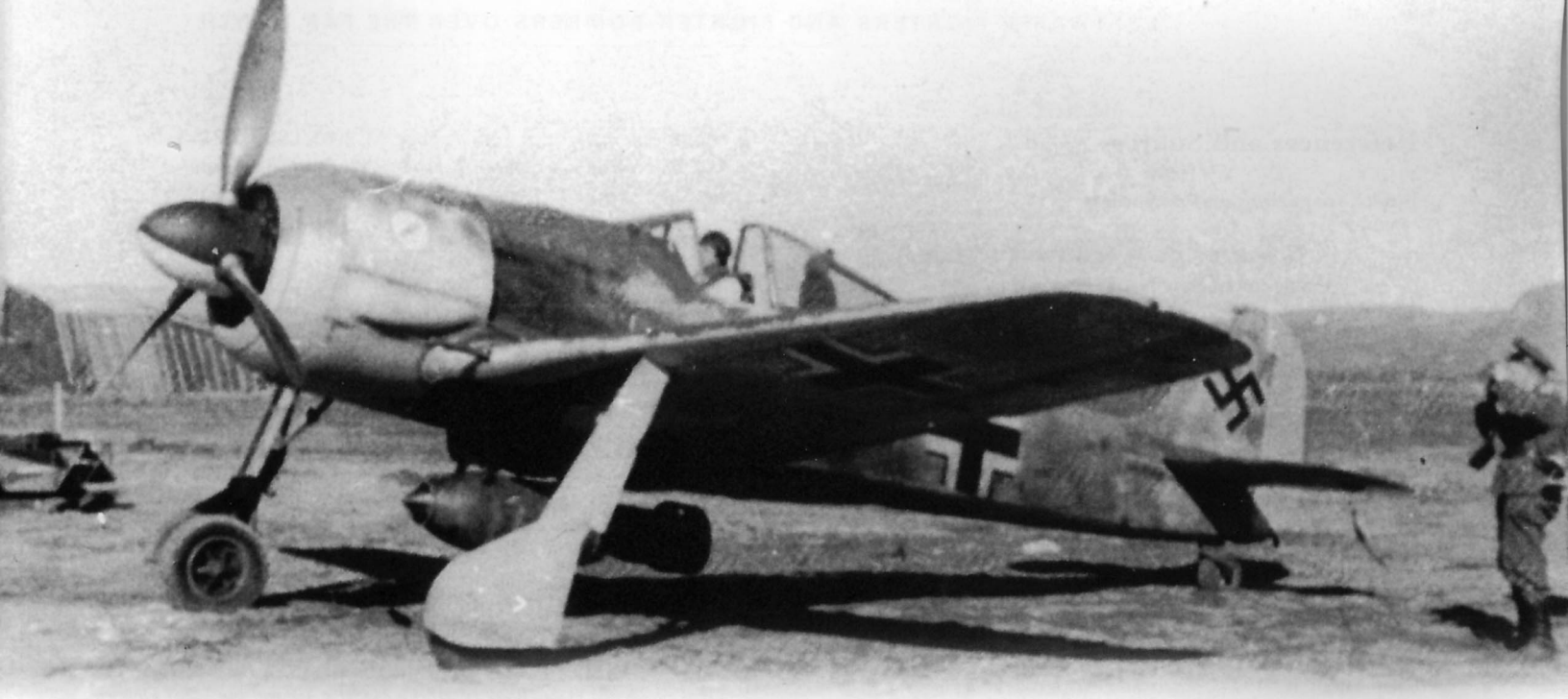
Bf 110 F-2	2
Bf 110 G-2	9
Bf 110 G-3	2

12. Staffel was at Gossen by 27 July 1944, but was soon to be found at Orlandet. Here it stayed for two months before it was transferred to Herdla.

This photo shows more of the line-up of former 12./ZG 26 Bf 110s at the 'Löwenstrasse'. The aircraft visible at the far right is '3U+KW' seen in the photograph on the previous page (compare camouflage demarcation on the nose and the aircraft next to it), which appears to be '3U+AW'. Other known codes of Bf 110s at Forus include '3U+GW', '3U+UW' and '3U+YW' (Coll. Brekken).







## 14.(J)/JG 5

### Aircraft of the unit

Focke-Wulf Fw 190 A-2	03.1943	01.1944
Focke-Wulf Fw 190 A-3	01.1943	01.1944

THE aircraft used by the specialist fighter-bomber unit of JG 5, which was formed from an internal reorganization within Luftflotte 5, were the Fw 190 A-2 and A-3. The establishment strength of the unit was 12 aircraft and pilots, with the real number of aircraft varying between seven at the lowest and 17 at the highest point.

The Fw 190s used by the Jabo Staffel were all modified for the fighter-bomber role. The modifications were several: the fitment of an ETC 501 bomb rack was mandatory. In order to make room for this rack, the small undercarriage doors had to be removed and the Jabos received a small, circular fairing in their place, making the wheel wells similar to those of the A-7 and A-8. This also resulted in another type of undercarriage door being fitted. A further modification involved the replacement of the A-3 type open cooling slits with flaps as seen on the A-4 and subsequent series. This seems to have been standard on the majority of JG 5 Fw 190 Jabos, except a very few machines which instead used a smooth side panel without any cooling slits whatsoever, similar to the one seen on A-1s. This early panel has also been observed on some Fw 190s just after their arrival in Norway in 1942, although these were standard fighters.

### Camouflage and Markings

The Staffel used black numerals with white outlines, but no Gruppe markings of any kind were used. The numerals followed the previous JG 5 practice in that they were much larger than standard, being very similar to those seen within I./JG 5 in style, size and execution.

14.(J)/JG 5's familiar emblem consisted of a black bow and bomb emblem on a white circle outlined in

black (it was not blue as has often been portrayed by decal manufacturers). The insignia was carried on both sides of the cowling, with the bomb, which was quite small, always facing forwards. Yellow theatre markings were carried on the outer ventral wing panels, but as was the usual JG 5 practice, a yellow fuselage band was not used. Yellow underwing cowling panels also seem to have been the norm, while white and yellow rudders featured on many aircraft. Spinners were usually one quarter white, but occasionally other designs could be seen, such as yellow tips followed by a white ring and a black green rear half.

The camouflage applied to the Jabos of 14.(J)/JG 5 was the standard RLM 74/75/76, usually with only light mottling on the fuselage sides. An exception to this was the Staffelkapitän's aircraft, which for a period of time had virtually clean fuselage sides and rather hard demarcation lines. This was later oversprayed with a rather dark and dense mottle over the RLM 76, probably using RLM 74. Another was 'Black 13' which had most of the upper and side surfaces of the fuselage resprayed with RLM 74, with the exception being the tail fin and the forward nose section. These aircraft remain the only examples from this Staffel with a markedly modified camouflage scheme.

*A bombed-up Jabo in typical camouflage and markings, including yellow ventral cowlings and rudder and a three-quarter white spinner (Coll. Brekken).*



*Fw 190 A-3, 'Black 4', seen just after landing with an empty bomb rack. The camouflage comprises the standard greys, while the rudder is yellow (Coll. Horst Kube).*

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II./JG 77

II.(J)/186

11.(N)/JG 2 and 12.(N)/JG 2

Jagdschwärme III./ZG 76 and I./JG 77

Kommando Losigkeit

Jagdgruppe Drontheim

Jagdgeschwader 5

Early Zerstörer Units

Zerstörerstaffel JG 77 and JG 5

IV./ZG 26

14.(J)/JG 5



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