
Alfred Price

The Last Year of the Luftwaffe

May 1944 to May 1945



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**THE LAST YEAR
OF THE LUFTWAFFE**
May 1944 to May 1945

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PREFACE

So much has been said and written about the Luftwaffe, but all previous accounts charting its path through the whole of the war seem to lose their thrust once they enter the final year. It is as if those writers, having delighted in describing the build-up of the force and its many triumphs, lost heart when the towering edifice began to come tumbling down. This book was written in an attempt to fill that gap, and it is directed particularly at those who already have a good general understanding of the history of the Luftwaffe but who wish to learn more about its demise.

A major problem facing anyone preparing an authoritative work on the Luftwaffe is the paucity of its official documents that survived the war. As the Soviet forces were tightening their grip on Berlin in April 1945, Hermann Göring ordered that all documents held in the archives of the Luftwaffe's historical branch were to be destroyed. In general that order was rigorously carried out, and as a result very few unit war diaries have survived - and those that did are all incomplete. There is a similar shortage of official documents describing air operations. Of the documents that survived, many did so only because they were held by individuals in official positions at the end of the war, who simply kept hold of their unit's records afterwards. The tracking down of such documents has been a 'hit-and-miss' business, though deeply rewarding when successful.

In writing this book I was able to draw on material and photographs from several good friends and archives. I am particularly grateful for the use of documents from the Bundesarchiv in Freiburg; as mentioned above, the collection held there is far from complete but it contains several gems, notably the detailed orders of battle for the entire Luftwaffe assembled at ten-day intervals throughout the war. J. Richard Smith allowed me to use material he collected during his own researches, while Hanfried Schliephake and Tom Willis kindly let me use photographs from their collections. The following ex-members of the Luftwaffe kindly gave me their time and allowed me to tape-record interviews which are used in this account: Horst Bucholz, Roderich Cescotti, Adolf Dilg, Hans-Ulrich Flade, Werner Gail, Horst Goetz, Gordon Gollob, Walter Hagannah, Willi Herget, Hajo Herrmann, Bernhard Jope, Diether Lukesch, Horst von Riesen, Oskar-Walter Romm, Horst Rudat, Erich Sommer, Max Wachtel and Helmut Wenk. I am most grateful to all of them.

Alfred Price

AUTHORS' NOTE

Luftwaffe ground fighting units During the war the Luftwaffe raised three types of unit for ground fighting. Numerically the largest part of this force comprised the 22 Luftwaffe Field Divisions raised during the mid-war period from redundant ground personnel combed from flying units. In many cases hastily formed, these were low-grade infantry units intended for static roles. When Luftwaffe field divisions got caught up in the ground fighting they usually suffered heavy losses, and one by one they were disbanded and the survivors incorporated into the Army. By the autumn of 1944 only a couple of the field divisions remained in existence.

On a quite different level were the paratroop units, the Fallschirmjäger, high-grade units which throughout the war were part of the Luftwaffe. Even after large-scale airborne operations were no longer being contemplated these units continued to be formed. During the war ten divisions of paratroops were raised and these units served as shock troops in several critical areas.

Finally there was the Hermann Göring Panzer Korps, another high-grade unit, which comprised one Panzer and one Panzer Grenadier division, both of which were raised and equipped by the Luftwaffe.

When they went into action the Luftwaffe ground fighting units almost invariably operated under the control of the local Army commander and fought in the same way as normal German Army units. Where this is the case the Luftwaffe ground units will not be considered further in this book. The sole exception was the airborne assault operation mounted in support of the Ardennes Offensive in December 1944. This paratroop attack was mounted solely under Luftwaffe control and it is covered in this book.

CHAPTER 1

MAY 1944

IN MAY 1944 the Empire forged by Adolf Hitler extended from the French Atlantic coast in the west to the Ukraine in the east, from the North Cape at the tip of Norway to Rome in the south. Although Germany was beset by enemies on all sides and her forces had suffered severe reverses during the previous eighteen months, militarily she was still extremely strong. Her army could field 295 combat divisions and retained a reputation for awesome fighting power. Moreover Germany's European allies - Finland, Rumania, Hungary, Bulgaria and the Italian Socialist (Fascist) Republic - all contributed armies of varying size and effectiveness to support her war effort. At sea the German Navy's surface fleet had suffered heavy losses, and its operations were now confined to areas close to its ports. Its U-boat arm had suffered heavily also, but was husbanding its strength to meet the long-expected Allied invasion of western Europe.

THE LUFTWAFFE

Grounds for optimism At the end of May 1944 the Luftwaffe had a total strength of about 2,800,000 men and women. The force possessed about 4,500 combat aircraft, and although it had recently taken hard knocks there were grounds for optimism for the future. Great hopes were placed on the Messerschmitt Me 163 and Me 262 jet fighters and the Arado Ar 234 jet bomber/reconnaissance aircraft, which were on the point of entering service in large numbers. After many vicissitudes the Heinkel He 177 heavy bomber was at last in large-scale production, and several Gruppen were in the process of re-equipping with the type. Mass production of the Fi 103 (V-1) flying bomb and the A-4 (V-2) bombardment rocket had begun and both weapons were within a few weeks of making their operational debuts. These and other new German aircraft and weapons will be described in greater detail in the next chapter of this book.

The German aircraft industry had taken a terrible pounding from American heavy bombers during the early part of the year, but, thanks to the efforts of the Jagerstab (Fighter Committee) set up under Albert Speer's Ministry of War Production, the industry emerged from this pummeling with fighter production higher than ever before and still rising. Production had been rationalized by reducing the number of aircraft types and subtypes being built. At the same time airframe production was being dispersed out of the 27 main complexes, into more than ten times that number of small factories distributed throughout the country. There was a similar dispersal of aero-engine production. Thus the industry was far less vulnerable to air attack than it had been earlier in the year.

Simultaneously, other important production facilities sought safety from the bombs by moving underground. The largest such underground factory was at Kohnstein near Nordhausen in the Harz Mountains. Originally constructed as a storage depot for oil and other strategic materials, its seven miles of tunnels gave a floor area of 1.27 million square feet. Protected from above by 140ft or more of solid rock, the complex was proof against the heaviest bombs. Speer's Ministry requisitioned the tunnels and allocated them to armament firms. The Mittelwerk GmbH was turning out V-1 flying bombs (less wings)

and V-2 bombardment rockets (less warheads). The rest of the complex was given over to the Junkers aero-engine company, which was setting up production lines for Jumo 004 jet engines and Jumo 213 piston engines. Furthermore, to provide the workforce necessary to secure the increased levels of production, large numbers of foreign workers and slave labourers had been drafted into the aircraft industry.

Acceptances of combat aircraft by the Luftwaffe, May 1944

The table shows the new combat aircraft accepted by the Luftwaffe from the manufacturers during May 1944, excluding repaired types returned to service. Examination of the figures reveals the parlous state of the Luftwaffe's equipment programme at that time, however. Three types in large-scale production, the Junkers Ju 87, the Messerschmitt Bf 110 and the Heinkel He 111, were obsolescent as combat aircraft but had been kept in production because of the slow development of their intended replacements.

The Heinkel He 177 four-engined bomber had at last overcome its teething troubles and was in full production. Of the new jet-propelled aircraft, the Messerschmitt Me 163 and Me 262 fighters were being prepared for large-scale production: the first production aircraft were flying, and these types were about to enter service. The Arado factory at Brandenburg was tooling up for mass production of the Ar 234 jet bomber/reconnaissance aircraft, but production aircraft had not yet flown.

Factories were tooling up to mass-produce the Dornier Do 335 heavy fighter and the Junkers Ju 388 bomber.

Aircraft	No	Remarks
Fighters		
Messerschmitt Bf 109	1,065	Includes tactical reconnaissance ver.
Focke Wulf Fw 190	841	Includes tactical reconnaissance and ground-attack versions
Messerschmitt Bf 110	158	Night fighter version
Messerschmitt Me 410	89	Includes reconnaissance version
Messerschmitt Me 163	1	First production aircraft
Messerschmitt Me 262	7	Early production aircraft
Heinkel He 217	17	Night fighter
Bombers		
Heinkel He 177	71	
Junkers Ju 88	268	Includes night fighter version
Junkers Ju 188	47	Includes reconnaissance version
Dornier Do 217	2	End of production
Heinkel He 111	100	
Junkers Ju 87	129	
Transports		
Junkers Ju 52	57	
Junkers Ju 352	6	
Gotha Go 242	20	Transport glider
DFS 230	1	Transport glider; end of production
Miscellaneous types		
Fieseler Fi 156	49	Liaison aircraft
Junkers Ju 290	2	Maritime reconnaissance aircraft
Henschel He 129	35	Ground-attack aircraft
Dornier Do 24	14	Reconnaissance/rescue flying boat
Arado Ar 196	8	Reconnaissance floatplane
Total	2,987	

As a result of these moves, during May 1944 deliveries of fighters of all types were 50 per cent greater than in the preceding January - 2,213 aircraft compared with 1,550. Göring was in a bullish mood when he discussed the new programme with senior officers and officials during a conference in Berlin on 23 May:

I must have two thousand fighters in the shortest possible time, even if the battle fronts get nothing at all... The schools will have to make do with repaired aircraft. And then I shall want the two thousand to be increased to two thousand five hundred. I must be in a position to meet any incursion into the Reich with two thousand fighters. Then heaven help you if you don't send the enemy to blazes!...

If we can stop these enemy incursions it will help the battle fronts. If the enemy is still contemplating invasion, we'll give him something to think about when he suddenly finds himself confronted with a thousand fighters within the next fortnight, just when he thinks he has settled accounts with our fighter force!

Otto Saur (in charge of the new fighter production programme): We shall be turning out a thousand aircraft during the next eight days alone.

Göring: Every one shall go to defend the Reich.

Hindsight has shrivelled the Reichsmarschall's jaunty predictions, but it is important to note that at the time they appeared to point the way to the future.

The Luftwaffe had other grounds for satisfaction. The production of aviation fuel, which had imposed a brake on air operations from time to time, had reached an all-time high during March 1944 at just under 200,000 tons. Since then it had fallen back slightly but, coupled with the seasonal fall in air operations, this enabled stocks to rise to 580,000 tons - greater than at any time since the summer of 1941.

Elements of weakness Although there were some grounds for optimism for the future of the Luftwaffe, that service also suffered from several deep-seated weaknesses. Every German city or industrial complex wrecked by an Allied air attack gave further proof that the Luftwaffe was unable to fulfil its primary duty of protecting the Reich. One result was that the immense personal popularity and prestige enjoyed by Reichsmarschall Göring earlier in the war, both within the military and outside it, had dwindled almost to nothing. The rotund leader was now the butt of many jokes, and with increasing frequency the failures of the Luftwaffe placed him on the receiving end of outbursts from the Führer. The vast range and depth of the problems facing Göring defied solution, and his self-awarded periods of leave became increasingly frequent. Thus at the very time when the Luftwaffe most needed imaginative and energetic leadership from the top it received neither.

The Chief of Staff of the Luftwaffe, General Gunter Korten, had assumed office the previous August after its earlier incumbent, General Hans Jeschonnek, had committed suicide. Like his predecessor, Korten was having a very bumpy ride as he found that the responsibilities that went with the post were not balanced by the powers to carry them out.

The most serious problem facing Korten was the declining fighting power of his force compared with that of its enemies. Each of the major enemy air forces facing the Luftwaffe in action - the Royal Air Force, the US Army Air Forces and the Soviet Air

Force - was numerically much larger, and each enjoyed the support of a much larger industrial base than did the Luftwaffe. (To put this inferiority into perspective, even at its peak the monthly output of the entire German aircraft industry - measured in airframe pounds - was far exceeded by three American plants, those at Boeing-Seattle, Douglas-Long Beach and Consolidated-San Diego.) Moreover, at this stage of the war the best of the aircraft operated by the Luftwaffe had little qualitative edge over those operated by their opponents, and many of the types flown by front-line units were obsolescent or obsolete. In the case of the single-engined fighter units, for example, the majority operated the Messerschmitt Bf 109G which was outclassed by the latest enemy fighters; the remainder were equipped with the Focke Wulf Fw 190, which had lost the edge in performance it had once had over Allied fighters. Thirteen bomber Gruppen operated the Heinkel He 111 and fourteen operated the Ju 88, both of which were thoroughly outdated.

Within the German aircraft industry, the increasing numbers of impressed foreign workers and slave labourers imposed new problems on the production process. As anyone connected with the building of aircraft will testify, it is difficult enough to achieve quality even when everyone in the organization is trying to attain that end. In the German industry a small proportion of the workforce was willing to sabotage products if an opportunity presented itself, despite the summary execution meted out to offenders if they were caught. Feldwebel Adolf Dilg had been wounded in action earlier in the war and was no longer fit for combat flying. During the final year of the war he served as a Focke Wulf Fw 190 production test pilot at the Arado plant at Warnemünde, and described the sort of things that happened:

Aircraft were sabotaged in all sorts of ways. Sometimes we would find metal swarf in electrical junction boxes, or sand in oil systems. On two or three occasions brand new Focke Wulfs took off for their maiden flights and as they lifted off the ground one of the wheels fell off; the pin holding the wheel retaining ring had 'accidentally' come adrift. Once, when I was delivering an aircraft, the engine suddenly burst into flames. I baled out and the aircraft crashed into a marshy area where the water rapidly extinguished the flames. When the wreckage was examined, it was found that somebody had jammed a couple of pyrotechnic flares between cylinders Nos 7 and 9, the two at the bottom of the rear row which became hottest when the engine was running. During the delivery flight the cylinders had duly heated up, 'cooked off the flares, and up went the engine. Every time we had such an incident the Gestapo would make a lot of fuss, but although they would take the odd scapegoat the problem of sabotage was one we had to live with.

The Luftwaffe possessed a core of battle-hardened aircrews and experienced combat leaders, but these were wasting assets. There were no replacements for experienced pilots or crewmen as they were lost, and each time that happened the operational effectiveness of their unit declined by a corresponding amount. New pilots emerging from the training organization were being sent to front-line units with only 160 hours' total flying time - about half that given to their British or American counterparts.

Oberfähnrich Hans-Ulrich Flade went through the Bf 109G conversion course at Rechenbach in southern Germany in the spring of 1944, and described the conditions he found:

I had almost completed my training as a reconnaissance pilot before I was posted to the fighter force, so my level of flying experience was well above the average for students. In general the standard of instruction at the school was low: the front-line units were desperately short of experienced and capable fighter pilots, so the training schools had to make do with what was left. Many of the instructors had been 'flown out' in action, and they were nervous, twitched and tired men who in many cases had spent up to three years in action and had crashed or bailed out many times.

In the hands of an inexperienced pilot the Bf 109G could be a vicious beast, especially at low speed. If the pilot opened the throttle too quickly during take-off, or if he attempted to lift the fighter off the ground before it had reached flying speed, the fighter was liable to roll on its back and smash into the ground. There was a high accident rate at the conversion schools, and of nearly a hundred students that started the course with Flade about a third had suffered death or serious injuries before the end. Another complicating factor was that each time an American attack force entered German airspace, the flying training programme had to be brought to a halt. Any student pilot who failed to hear or to heed the broadcasts ordering a return to base risked having to learn the finer points of air combat the hard way - from a flight of marauding Mustangs.

The Bf 109G conversion course provided only 30 flying hours on the type, barely sufficient to teach a pilot to take off and land the aircraft and carry out simple manoeuvres. In combat against a well-equipped foe, a pilot needed to operate his machine to the limits of its performance envelope. Putting pilots with such a sketchy training into action meant sending them to near-certain death - and that was the fate awaiting the majority of new pilots sent to German operational units during the final year of the war. The flak arm The greater part of this book is devoted to the Luftwaffe's flying units and their operations. Yet mention must also be made of the flak arm, the Flakwaffe, which at this stage of the war employed about half of the personnel strength of the Luftwaffe. More than 1,125,000 men, women and boys served in that huge organization, which by May 1944 deployed 17,500 heavy anti-aircraft guns, 40,000 light flak weapons, 10,000 searchlights and 4,000 balloons in the defence of potential targets. The Army and the Navy operated their own flak batteries to defend their depots and port installations in Germany, but taken together they amounted to only a quarter of those operated by the Luftwaffe.

At the beginning of the war the Flakwaffe had been an élite arm of the Luftwaffe, but the demands of war had led to a steady drain of able-bodied men away from the static home defence units. At the same time the Allied bomber attacks on the German homeland had become progressively more powerful, leading to demands for a huge increase the number of batteries. The Flakwaffe tapped every possible source for personnel and by the spring of 1944 about a third of its strength was made up of auxiliaries, comprising Home Flak men (an organization rather like the British Home Guard, composed of factory workers who worked in shifts to man guns sited close to their places of work), the Reichs Labour Service (boys just too young for normal military service), Luftwaffe Assistants (15- and 16-year-old secondary school students who served as auxiliaries at gun and searchlight sites and who received their school lessons at the sites), female personnel engaged on staff duties, and foreigners (Croatian soldiers and volunteer Soviet prisoners).

THE LUFTFLOTTEN

Within the Luftwaffe the major air fighting formation was the Luftflotte, a combination of combat flying units of all types and their supporting services, based within a defined geographical area. At this stage of the war the combat units of the Luftwaffe were divided between seven Luftflotten, one Luftwaffenkommando and one independent Fliegerkorps. A detailed listing of the individual flying units in each major formation, and their equipment, is given at the end of this chapter.

For the moment things were relatively quiet on the battle fronts in the east, the west and the south, but when things hotted up the Luftwaffe was likely to find itself severely overstretched. In the absence of any reserve of combat units, one battle front could be reinforced only at the expense of one or more of the others.

Luftflotte Reich: By far the strongest of the Luftflotten, Luftflotte Reich was based at airfields in the area known as 'Greater Germany', comprising Germany itself and the annexed territories of Austria and western Czechoslovakia. This formation was responsible for the day and night air defence of the homeland and it controlled the lion's share of the fighter units. The commander of Luftflotte Reich, Generaloberst Hans-Jurgen Stumpff, had commanded Luftflotte 5 in Norway and Denmark during the Battle of Britain. Now the fates had placed him in the position of having to fight a 'Battle of Britain in reverse' against the huge formations of US heavy bombers, supported by swarms of escort fighters, that were systematically wrecking German industry.

With only 515 serviceable single-engined and twin-engined day fighters available at the end of May, the air defence forces of Luftflotte Reich were far too small to defend the German homeland against the increasingly heavy American daylight attacks. Moreover the fighters it had available, for the most part Bf 109Gs, Fw 190s and Me 410s, were outclassed by the latest versions of the P-47 Thunderbolt and the P-51 Mustang they met in combat. As a result, the defenders had suffered a fearful mauling.

The night fighter force controlled by Luftflotte Reich was smaller than its day fighter counterpart, with 421 serviceable aircraft. In addition it could call on three Gruppen of Jagdgeschwader 300, with 69 Bf 109s and Fw 190s; these aircraft, which have been included in the day fighter force listed above, were designated as day and night fighter Gruppen and went into action in either role.

On paper Luftflotte Reich also possessed 21 Gruppen of bombers, with 302 serviceable aircraft. But five of those Gruppen were converting to the Heinkel 177, and one more was re-forming with the type after suffering heavy losses in action. I./KG 66, a specialized pathfinder unit equipped with Junkers Ju 188s, had also suffered heavy losses during attacks on England and it too was in the process of re-forming. One Gruppe, III./KG 3, was converting to a version of the Heinkel He 111 modified to carry and launch a Fieseler Fi 103 flying bomb. A further thirteen Gruppen, the IV. Gruppe in each bomber Geschwader, were in fact operational training units which providing replacement crews for the operational Gruppen of their Geschwader. At this time, therefore, Luftflotte Reich did not possess a single combat-ready bomber unit. The sole ground-attack unit, III./SG 3, had returned to Germany to re-equip with Fw 190s and was earmarked to return to the Eastern Front as soon as it was ready.

Included in Luftflotte Reich were two special units under the control of the Oberkommando der Luftwaffe (Ob.d.L. - the Luftwaffe High Command) which included captured aircraft on their strengths. One of these, Versuchsverband Ob.d.L., conducted trials and demonstration flights with captured aircraft. The other special unit, I/KG 200, operated transport aircraft of various types to insert and supply agents in enemy territory. The unit operated several captured aircraft for this purpose, including a few B-17 Flying Fortresses, a Douglas DC-3 and some French-built Lioré et Olivier 246 flying boats; the captured aircraft were used because they had superior range and/or load-carrying abilities to available German types, rather than to deceive the enemy. All captured aircraft flown by Versuchsverband Ob.d.L. and I/KG 200 carried Luftwaffe markings and, contrary to what some accounts have suggested, none of them flew on operations wearing Allied markings. Luftflotte 3 in the West Luftflotte 3, responsible for air operations on the Western Front, was braced to meet the long-awaited Allied invasion of northern France that would be backed by overwhelming numerical and technical superiority in the air. The commander of the formation, Generalfeldmarschall Hugo Sperrle, had headed it since 1940 when it supported the spectacular Blitzkrieg campaign in the west.

In contesting an Allied seaborne invasion, much would depend on the effectiveness of Fliegerkorps X, the specialized anti-shipping force. At the end of May this possessed 93 serviceable aircraft and was based in central and southern France. Two-thirds of the aircraft were Focke Wulf Fw 200s, Heinkel He 177s and Dornier Do 217s modified to carry Henschel 293 and Fritz X guided missiles. These radio-controlled weapons had proved their effectiveness in earlier operations over the Atlantic and the Mediterranean. The remainder of the aircraft were Junkers Ju 88 torpedo-bombers. In addition to the specialized anti-shipping units, Luftflotte 3 included Fliegerkorps IX with 137 conventional bombers, Junkers 88s, Ju 188s and Dornier 217s. Based at airfields in eastern France, Belgium, Holland and western Germany, this force was within range of any likely invasion point.

Considering the magnitude of the task ahead, the anti-shipping and bomber units attached to Luftflotte 3 were grossly inadequate. Yet these were the more effective components of Sperrle's force. His greatest weakness was in single-engined day fighters, with only six Gruppen, with 115 serviceable Messerschmitt Bf 109s and Fw 190s, in place. He also had two Gruppen of Junkers Ju 88 long-range fighters for the protection of U-boats passing through the Bay of Biscay, but these aircraft were too unwieldy to operate in areas where they might meet enemy single-seat fighters.

The Luftwaffe had laid elaborate plans for the transfer of fighter Gruppen from Luftflotte Reich to northern France as soon as the invasion began. Designated landing grounds had been stocked with fuel and munitions, so that the incoming units could go into action immediately on arrival. This shift of units would leave the homeland almost unprotected but it was expected, correctly, that during the initial phase of the landings the Allied heavy bombers would shift their attack to support the troops ashore. In the beach-head area Luftflotte 3 would also have to provide close air support for a major land battle, and Sperrle's other great weakness was in specialized ground-attack units. Thanks to the insatiable demands of the Eastern Front, he possessed only two Gruppen of these aircraft, with 48 serviceable Focke Wulf Fw 190F fighter-bombers. With reconnaissance aircraft, night fighters and other types, Luftflotte 3 possessed just over 500 serviceable combat

aircraft at the end of May 1944. Nearly every one of its units had taken a battering during the previous six months, and it showed. All were short of experienced crews, average serviceability was below 50 per cent.



Luftwaffe Command Areas, May 1944

That there would be an invasion was not in doubt; the only questions that remained were the precise time and place where the blow would fall. Nor could there be any doubt that once Allied forces had been committed to such a venture, the fight to establish a bridgehead would probably decide the outcome of the war. If the invasion succeeded, the Germans faced the chilling prospect of being squeezed between major battle fronts in both the east and the west. Yet Luftflotte 3 was, in every respect, in poor shape to meet its great test.

Luftflotten 1, 4, 5 and 6 on the Eastern Front On the Eastern Front the spring thaw had reduced the ground to a muddy morass, rendering land operations virtually impossible over much of the area during May. There was, however, no shortage of pointers that the Soviet Army was gathering itself for a powerful offensive once the ground hardened.

Four Luftflotten in the east were deployed along a battle front of more than 1,500 miles, extending from the Arctic Ocean to the Black Sea. Luftflotte 5, based in Norway and Finland, operated over the northern part of the front; Luftflotte 1 flew from bases along the southern shore of the Baltic and operated in the Leningrad area; Luftflotte 6 operated over the central part of the front; and Luftflotte 4 operated over the southern part of the front down to the Black Sea. Because of the steady withdrawal of fighter units during the previous nine months for the defence of the homeland, by the end of May the four Luftflotten had between them only thirteen Gruppen of single-engined fighters to cover the entire front.

Commanded by General Josef Kamhuber, Luftflotte 5 possessed only 193 serviceable aircraft and was so weak that it did not really warrant the title of Luftflotte. Its day fighter force comprised just two Gruppen of Bf 109s and a Staffel of Bf 110s, and it possessed one Gruppe with Fw 190s and Ju 87s for ground-attack and a further Gruppe of Ju 87s for night harassment operations. There were three Staffeln of Ju 88s and Ju 188s operating in the long-range reconnaissance role, a Staffel of Fw 189s for short-range reconnaissance and a transport force comprising a Gruppe of Junkers 52s and a Staffel of Ju 52 floatplanes.

With 317 serviceable aircraft, Luftflotte 1, commanded by General Kurt Pflugbeil, was little better off. It possessed two Gruppen of single-seat day fighters, two Staffeln of night fighters, a Staffel of Heinkel He 111 bombers, two Gruppen of Junkers Ju 87s for ground-attack and three Gruppen for night harassment operations. In addition there were specialized units for long-range, short-range and night reconnaissance.

Commanded by Generaloberst von Greim, Luftflotte 6 controlled Operations over the central area, by far the largest part of the Eastern Front. Even so, that Luftflotte also possessed only two Gruppen of day fighters, plus two Staffeln of night fighters. In terms of offensive aircraft it was somewhat better off, with eleven Gruppen of Heinkel He 111 bombers, three Gruppen of Fw 190 and Ju 87 ground-attack aircraft, and a single Gruppe of Ju 87s operating in the night harassment role. Its remaining units comprised three long-range reconnaissance Staffeln, three Gruppen and two Staffeln of short-range reconnaissance aircraft and a Gruppe of Ju 52 transports.

Operating over the southern part of the Eastern Front, Luftflotte 4 was commanded by Generaloberst Desloch. This area would be the first to dry out after the spring thaw and it was therefore likely to see the earliest resumption of fighting, so the Luftflotte was the strongest in terms of day fighter and ground-attack units. It possessed seven Gruppen of single-engined fighters, ten Gruppen of ground-attack aircraft and two of night harassment aircraft. For reconnaissance there were three Staffeln of long-range reconnaissance aircraft and one of night reconnaissance aircraft, and two and a half Gruppen of short-range reconnaissance aircraft. There were also two Gruppen of transport aircraft, one equipped with Junkers Ju 52s and one an Italian-manned unit operating Savoia Marchetti SM 82s. Luftflotte 2 in the South Luftflotte 2 (Generalfeldmarschall Wolfram von Richthofen), based in Italy, was responsible for air operations over the central and western

Mediterranean. Starved or resources and operating in an area considered to be of secondary importance, this Luftflotte was, except in name, far removed from the force that had brought such devastation to Britain in 1940 and 1941. Now its combat strength comprised just four Gruppen of day fighters, three of bombers, two of ground-attack aircraft and one night harassment Gruppe. Backing these were two Staffeln of long-range and one of short-range reconnaissance aircraft, and a Gruppe of transport aircraft.

Luftwaffenkommando Südost was an ad hoc formation operating from bases in Yugoslavia, Albania and Greece. It possessed two Gruppen of day fighters and a Gruppe of night harassment aircraft, a Staffel of Junkers Ju 88 long-range fighters, a Staffel of Ju 88 night fighters, a Staffel of Ju 87 ground-attack aircraft and three Staffeln of short-range reconnaissance aircraft. The responsibilities of the Luftwaffenkommando included supplying the garrisons on the Greek islands, and for this purpose its transport element comprised a Gruppe of Messerschmitt Me 323s and two Staffeln of Junkers Ju 52 floatplane transports.

Fliegerkorps XIV (General der Flieger Cöler), a centralized pool of air transport units, completed the line-up of forces. It possessed nine operational Gruppen with 250 serviceable aircraft: four Gruppen of Junkers Ju 52s, one of He 111s, one of Me 323s, one of Savoia Marchetti SM 81s, one of SM 82s and one equipped with captured French Liore et Olivier Leo 451 bombers converted into high-speed transports. Fliegerkorps XIV detached transport aircraft to operational theatres as and when required, and maintained courier services between them.

By the end of May 1944 the problems heaped on the Luftwaffe during the previous four years of war placed that service in an intractable position. For the future the only hope lay in the deployment against the enemy of the range of 'secret weapons' - a threat long heralded by Adolf Hitler's propaganda machine. The weapons will be discussed in the next chapter.

TOTALS OF SERVICEABLE AIRCRAFT, 31 MAY 1944

Luftflotte	Reich	1	2	3	4	5	6	LK	FK	Total
Fighters (single-engined)	444	90	81	115	138	63	66	54	-	1,051
Fighters (twin-engined)	71	-	-	37	-	16	-	16	-	140
Night fighters	421	21	-	56	9	-	19	13	-	539
Bombers	302	8	48	137	34	-	312	-	-	841
Anti-shipping	-	-	-	93	-	-	-	-	-	93
Ground attack	25	51	15	48	302	19	106	7	-	573
Night ground-attack	-	100	21	-	70	22	48	24	-	285
Strategic reconnaissance	-	17	7	29	31	28	26	-	-	138
Tactical reconnaissance	2	30	8	24	28	8	67	20	-	187
Transports	9	-	35	-	76	37	44	104	250	555
Special units	74									74
Totals	1,348	317	215	539	688	193	688	238	250	4,475

DEPLOYMENT OF COMBAT FLYING UNITS, 31 MAY 1944

LUFTFLOTTE REICH

Geschwader	Unit	Aircraft	Total	Serviceable
Day fighter units				
JG 1	Stab	Fw 190	2	2
	I. Gruppe	Fw 190	44	15

	II. Gruppe	Fw 190	42	20
	III. Gruppe	Bf 109	48	21
JG 3	Stab	Bf 109	4	2
	I. Gruppe	Bf 109	26	9
	II. Gruppe	Bf 109	29	23
	III. Gruppe	Bf 109	31	9
	IV.(Sturm) Gruppe ¹	Fw 190	54	1
JG 5	I. Gruppe	Bf 109	43	36
	II. Gruppe	Bf 109	44	36
JG 11	Stab	Bf 109	4	3
	I. Gruppe	Fw 190	28	20
	II. Gruppe	Bf 109	31	14
	III. Gruppe	Fw 190	28	11
	10. Staffel	Fw 190, Bf 109	10	7
JG27	Stab	Bf 109	4	4
	I. Gruppe	Bf 109	41	31
	II. Gruppe ²	Bf 109	24	12
	III. Gruppe	Bf 109	26	20
	IV. Gruppe	Bf 109	18	12
JG S3	II. Gruppe	Bf 109	31	14
JG54	III. Gruppe	Fw 190	23	8
ZG 1	II. Gruppe	Bf 110	33	15
ZG 26	I. Gruppe	Me 410	20	6
	II. Gruppe	Me 410	52	24
	III. Gruppe	Me 262	6	1
ZG 76	I. Gruppe	Me 410	47	25
	II. Gruppe ¹	Me 410	36	0
JG 104	Einsatzstaffel	Bf 109	4	4 ³
JG 106	Einsatzstaffel	Bf 109	5	3 ³
JG 108	Einsatzstaffel	Bf 109	12	6 ³
JG 301	I. Gruppe	Bf 109	23	21
JG 302	I. Gruppe	Bf 109	27	11
JG 400	I. Gruppe ¹	Me 163	10	0
Day/night fighter units				
JG 300	Stab	Fw 190	2	1
	I. Gruppe	Bf 109	29	19
	II. Gruppe	Fw 190	32	24
	III. Gruppe	Bf 109	27	25
Night fighter units				
NJG 1	Stab	He 219	2	1
		Bf 110		
	I. Gruppe	He 219	33	26
		Me 410		
	II. Gruppe	He 219	21	16
		Bf 110		
	III. Gruppe	Bf 110	17	17
	IV. Gruppe	Bf 110	23	14
NJG 2	Stab	Ju 88	4	1
	I. Gruppe	Ju 88	31	21
	II. Gruppe	Ju 88	33	16
	III. Gruppe	Ju 88	28	18
NJG 3	Stab	Ju88	3	3
		Bf 110		
	I. Gruppe	Bf 110	26	23
	II. Gruppe	Ju 88	37	13
	III. Gruppe	Bf 110	29	20

	IV. Gruppe	Ju88	32	21
		Bf 110		
NJG 5	II Gruppe	Bf 110	19	13
	IV. Gruppe	Bf 110	18	12
NJG 6	Stab	Bf 110	2	1
	I. Gruppe	Bf 110	24	21
	II. Gruppe	Bf 110	10	8
	III. Gruppe	Bf 110	18	13
	IV. Gruppe	Bf 110	23	18
NJG 7	I. Gruppe	Ju88	21	9
NJG 101	I. Gruppe	Bf 110	39	39
		Ju 88		
	II. Gruppe	Do 217	38	28
NJG 102	I. Gruppe	Bf 110	39	14
	II. Gruppe	Bf 110	39	16
	Nachtjagdgruppe 10	Bf 109, Fw 190	25	16
		He 219, Ta 154, Ju 88, Bf 110		
Bomber units				
LG 1	IV. Gruppe	Ju 88	30	18
KG 1	Stab	He 177	2	1
	I. Gruppe ¹	He 177	30	11
	II. Gruppe ¹	He 177	29	0
	III. Gruppe ¹	He 177	30	12
	IV. Gruppe ¹	He 177	34	12
		Ju 88	12	9
KG 3	I. Gruppe ¹	He 177	0	0
	II. Gruppe ¹	He 177	0	0
	III. Gruppe	He 111	35	21
	IV. Gruppe	Ju88	23	14
KG 26	IV. Gruppe	Ju88	34	15
KG 27	II. Gruppe ²	He 111	15	12
	IV. Gruppe	He 111	39	33
KG 30	IV. Gruppe	Ju88	22	12
KG 51	I. Gruppe ¹	Me 410	0	0
	IV. Gruppe	Me 410	12	5
KG 53	IV. Gruppe	He 111	39	21
KG 54	IV. Gruppe	Ju88	13	9
KG 55	IV. Gruppe	He 111	34	17
KG 66	I. Gruppe	Ju 188	31	12
KG 76	III. Gruppe ¹	Ar 234	0	0
	IV. Gruppe	Ju 88	28	10
KG 77	II. Gruppe ²	Ju 88	31	21
	IV. Gruppe	Ju 88	38	24
KG 100	II. Gruppe ¹	He 177	30	0
	IV. Gruppe	He 177	38	13
		Do 217		
Ground-attack unit				
SG 3	III. Gruppe ¹	Fw 190	28	25
Strategic reconnaissance unit				
-	FAGr. 1222	Ju 188	11	0
Tactical reconnaissance unit				
-	NAGr.8	Bf 109	2	2
-	NAGr.14 ²	Bf 109	2	0
Transport unit				
TG 2	II. Gruppe	Ju52	12	9

Special units under control of Oberkommando der Luftwaffe

-	Versuchsverband	Ju88	7	3
	Ob.d.L.	Ar 240	1	1
		Ju86	3	0
		Bf 109	3	1
		Fw 58	1	1
		Fh 104	1	0
		Mosquito	1	0
		P-38 Lightning	1	1
		P-47 Thunderbolt	1	1
		Spitfire	2	0
		P-51 Mustang	3	0
		Typhoon	1	1
KG 200	I. Gruppe	Ju 290	2	0
		Ju 252	2	1
		Ju 352	1	0
		Ar 232	1	1
		Bloch 160/162	2	0
		Ju 188	4	2
		He 111	15	10
		He 59	2	2
		He 115	2	2
		Fw 189	1	1
		Ar 96	2	2
		Si 204	1	1
		Fw 58	1	1
		Boeing B-17	6	0
		Douglas DC-3	1	0
		Amiot 143	3	1
		Loire 246	3	1
		Various glider types	20	15
KG 200	II. Gruppe	Ar 96	7	7
		Hs 126	1	1
		Fw 44	2	2
		Bü 181	4	1
		Bf 108	3	3
		Kl 35	2	2
		Ju W34	1	1
		Si 204	2	2
		Bü 131	3	3

LUFTFLOTTE 3 IN THE WEST

Geschwader	Unit	Aircraft	Total	Serviceable
Day fighter units				
JG 2	Stab	Fw 190	3	0
	I. Gruppe	Fw 190	19	14
	II. Gruppe	Bf 109	13	11
	III. Gruppe	Fw 190	29	19
JG 26	Stab	Fw 190	2	2
	I. Gruppe	Fw 190	33	23
	II. Gruppe	Fw 190	32	25
	III. Gruppe	Bf 109	37	21
ZG 1	I. Gruppe	Ju 88	30	25
	III. Gruppe	Ju 88	22	12
Night fighter units				
NJG 4	Stab	Bf 110	2	0

	I. Gruppe	Ju 88	16	7
	II. Gruppe	Bf 110	20	12
		Do 217		
	III. Gruppe	Bf 110	18	9
NJG 5	Stab	Bf 110	15	9
	III. Gruppe	Bf HO	18	8
NJG 6	II. Gruppe	Bf 110	13	11
Bomber units				
KG 2	I. Gruppe	Ju 188	12	9
	II. Gruppe	Ju 188	5	0
	III. Gruppe	Do 217	7	1
	IV. Gruppe	Ju 188	31	15
		Do 217		
KG 6	I. Gruppe	Ju 188	22	15
	II. Gruppe	Ju 88	3	2
	III. Gruppe ¹	Ju 188	25	5
	IV. Gruppe	Ju 88	33	18
KG 26	II. Gruppe ⁶	Ju 88	37	27
	III. Gruppe ⁶	Ju 88	35	14
KG 30	I. Gruppe ²	Ju 88	2	1
	II. Gruppe ²	Ju 88	0	0
KG 51	II. Gruppe	Me 410	24	17
KG 54	I. Gruppe	Ju 88	11	5
	III. Gruppe	Ju 88	14	8
Anti-shipping units				
KG 40	I. Gruppe	He 177	30	21
	II. Gruppe ⁷	He 177	30	26
	III. Gruppe ⁷	Fw 200	29	1
	IV. Gruppe	He 177	17	7
		Fw 200		
KG 77	I. Gruppe ⁶	Ju 88	28	17
	II. Gruppe ⁶	Ju 88	25	8
KG 100	III. Gruppe	Do 217	30	13
Ground-attack units				
SG 4	III. Gruppe	Fw 190	34	29
SKG 10	I. Gruppe	Fw 190	33	19
Maritime reconnaissance unit				
-	FAGr.5	Ju 290	11	4
Strategic reconnaissance units				
-	FAGr.33	Ju 188	7	3
		Ju 88		
-	FAGr.121	Me 410	9	3
-	FAGr.122	Ju 188	8	2
		Ju 88		
-	FAGr.123	Ju 88, Bf 109, Fw 190, He 111, Ju 188, Do 217	36	17
Tactical reconnaissance unit				
-	NAGr.13	Bf 109	42	24

LUFTFLOTEN 1, 4, 5 AND 6 IN THE EAST

Geschwader	Unit	Aircraft	Total	Serviceable
<u>Luftflotte 1</u>				
Day fighter units				
JG 54	Stab	Fw 190	4	4

	I. Gruppe	Fw 190	42	36
	II. Gruppe	Fw 190	54	50
Night fighter unit				
NJG 100	II. Gruppe	Ju88 Do 217	29	21
Bomber unit				
KG 55	14. Staffel ¹	He 111	11	8
Ground attack units				
SG 3	Stab	He 111	1	1
	I. Gruppe	Ju 87	27	24
	II. Gruppe	Ju 87	30	26
Night ground-attack units				
-	NSGr.1	Go 145 He 46	32	25
-	NSGr.3	Go 145 Ar 66	36	34
-	NSGr.U	He 50 Fokker CV	22	19
-	NSGr.12	Ar66	16	14
-	1. Ostfliegerstaffel	Go 145 Ar66	9	8
Strategic reconnaissance units				
-	FAGr. 22	Ju 188	6	2
-	FAGr.122	Ju 188	7	7
-	4. Nachtauf. Staffel	Do 217	12	8
Tactical reconnaissance units				
-	NAGr.8	Bf 109	30	24
-	NAGr.31	Fw 189	12	6
<u>Luftflotte 4</u>				
Day fighter units				
JG 51	IV. Gruppe	Bf 109	35	22
JG 52	Stab	Bf 109	1	1
	I. Gruppe	Bf 109	31	10
	II. Gruppe	Bf 109	23	18
	III. Gruppe	Bf 109	26	23
JG 53	I. Gruppe	Bf 109	33	30
JG 77	III. Gruppe	Bf 109	31	24
JG 301	II. Gruppe ⁴	Bf 109	11	10
Night fighter unit				
NJG 100	²	Bf 110	15	9
Bomber units				
KG 4	I. Gruppe	He 111	34	27
KG 27	14. Staffel	He 111	12	7
Ground-attack units				
SG 2	Stab	Ju 87	1	1
	I. Gruppe	Ju 87	31	18
	II. Gruppe ¹	Fw 190	42	22
	III. Gruppe	Ju 87	39	27
	10. Stoffel ⁸	Ju 87	12	12
SG 3	10. Staffel ⁸	Ju 87	12	12
SG 9	IV. Gruppe ⁸	Hs 129	67	66
SG 10	Stab	Fw 190	5	2
	I. Gruppe	Fw 190	26	9
	II. Gruppe	Fw 190	25	15
	III. Gruppe	Fw 190	34	24
SG 77	I. Gruppe ¹	Fw 190	28	26