

# Pre-Emptive Strike

By Dr Alfred Price FRHistS

**S**hortly before dawn on 22 June 1941, without the courtesy of a formal declaration of war, German forces launched a massive attack on the Soviet Union, Operation Barbarossa. On that first day one of the primary Luftwaffe aims was the destruction of the opposing air force. Its attack achieved complete surprise and found the Soviet Air Force completely unprepared. As a result, that service suffered the heaviest defeat ever inflicted by one air arm on another.

Although Germany and the Soviet Union had signed a non-aggression pact in August 1939, there was little trust between the two nations. Under

the terms of the treaty the Soviet government was free to extend its sphere of influence in Eastern Europe. In short order its army occupied Latvia, Estonia and Lithuania and seized parts of Rumania and Finland.<sup>1</sup>

To Adolf Hitler the non-aggression pact with the Soviet Union had been merely a diplomatic tactic to prevent Soviet interference, while he pursued his aim to invade Poland and recover territory lost in 1918.<sup>2</sup> Once that nation had been defeated, under the terms of a secret agreement Germany and the Soviet Union divided its territory between them.<sup>3</sup>

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As a long-term policy aim, Adolf Hitler sought to establish an empire for Germany by seizing large swathes of the territory of the Soviet Union. As early as July 1940, when the Battle of Britain was in its initial stages, he had the Operations Staff of the Army General Staff begin initial planning for an invasion of the Soviet Union. The planning staffs were kept as small as possible, and only those officers who had been sworn to secrecy and had a 'need to know' were involved in the discussions.<sup>4</sup> Hitler thought a campaign of three or four weeks would be sufficient to smash the Soviet Army, or at least seize sufficient Soviet territory to establish a German state in the Ukraine, organise a league of Baltic States and enlarge Finland.

By the spring of 1941, while the night blitz on Great Britain was in full swing, the planning for the attack on the Soviet Union was almost complete. At the end of April, with a minimum of fanfare, the first Luftwaffe combat units earmarked for the operation transferred to bases in Germany to reform. Others moved to bases in Poland for 'retraining'. The operation had been minutely planned to keep its true intent secret for as long as possible.

#### **Secrecy precaution**

Leutnant Dieter Lukesch, a Junkers 88 pilot with IIIrd Gruppe of Kampfgeschwader 76 based at Cormeilles-en-Vexin near Paris, described the elaborate subterfuge that attended the move of his unit to the east. The first indication he had that something was afoot came early in June 1941, when his unit was ordered to remove the temporary black distemper applied to the aircraft for night operations against Great Britain. Instead, the upper surfaces of the bombers were to be repainted in light brown camouflage. That suggested daylight operations in a desert area, but where? Before the work was completed, the order was countermanded. The planes were to be restored to their original colour scheme with the topsides camouflaged in two shades of green. Once that work was complete, most of the unit's technical personnel were suddenly ordered to leave for an undisclosed destination. Only a few men were left behind to look after the aircraft. In the days to follow the mystery deepened, as Lukesch explained:

*The aircrew were summoned to a meeting in the middle of the airfield, well clear of everyone else. There the Gruppe commander, Major Lindmayr, solemnly opened an envelope that contained our sealed orders. What followed only served to heighten our curiosity. Our planes were fuelled up. We were told to load our personal kit on the aircraft, then take off and form up by Staffeln behind Lindmayr who was to lead us to our still-secret destination. We took off from Cormeilles and flew over Holland and Germany before landing at Anklam [a Luftwaffe airfield on the Baltic coast]. After we taxied in and shut down the planes, we were driven to a barrack block where we were kept in isolation. Everything there had been prepared for us, our beds were made, the tables had been laid and a meal was ready.<sup>6</sup>*

The next day was a near repeat of the previous one. Again there was the briefing on the airfield, again the brown envelope was solemnly opened and again the crews were told to take off and follow Lindmayr to the undisclosed destination. Lukesch continued:

*This time, after a flight of two hours, we landed at Schippanbei just south of Koenigsburg. When we arrived we found that our technical people were already there, they marshalled us into prepared camouflaged dispersal points around the airfield. The aircraft were then carefully concealed under camouflage netting and branches cut from trees. Then the planes were refuelled and bombed up, but still we did not know where we were going.<sup>7</sup>*

The IInd Gruppe of Kampfgeschwader 3, also with Junkers 88s, experienced a similar pattern of events. It flew in stages from Oldenburg in Germany to Podlotowka near Brest-Litovsk in Poland. Rumour followed counter-rumour on the reason for the move as one of the unit's pilots, Feldwebel Horst Schulz, recalled:

*When we arrived at Podlotowka we saw a lot of army units there, infantry, artillery and tanks. Rumours were rife and the most popular was that the Russians were going to let a German force of two or three divisions with air support through their territory to attack the British oil fields and pipelines in Iran.<sup>8</sup>*

As part of the measures designed to conceal these moves, those units that had been operating against Great Britain left behind some of their radio operators to send spoof W/T transmissions, to give the impression that their unit was still in place. The final part of the transfer of Luftwaffe combat units to the east was accomplished within a space of about three weeks.<sup>9</sup>

#### German order of battle

For the opening of the campaign the Luftwaffe amassed 2,699 combat aircraft in the east, as listed in the table. It was a strong force, but considering it was about to launch on a campaign fought over a frontage of more than 1,000 miles, it was by no means lavish.

#### Luftwaffe order of battle assembled for attack on the Soviet Union, 21 June 1941<sup>10</sup>

The line up of Luftwaffe units in the east was as follows:

Luftflotte 1 under Colonel General Keller with 474 combat aircraft was to support Army Group North (26 divisions) during its advance along the Baltic Coast through Lithuania, Latvia and Estonia. Luftflotte 2 under General Field Marshal Kesselring, with 1,208 combat aircraft comprised the main part of the Luftwaffe striking power; it was to support Army Group Centre (51 divisions) during its advance on Smolensk and then on to Moscow. Luftflotte 4 under Colonel General Loehr, with 935 combat planes, was to support

	Luftfl. 1	Luftfl. 2	Luftfl. 4	Luftfl.5	Total
Single engined fighter	98	358	337	10	803
Twin engined fighter	-	78	-	-	78
Ground attack aircraft	-	51	-	-	51
Twin engined bomber	210	372	334	10	926
Dive bomber (Ju 87)	-	115	-	42	157
Long range recce	70	63	113	10	256
Short range recce	69	171	151	10	401
Coastal	27	-	-	-	27
<b>Totals</b>	<b>474</b>	<b>1,208</b>	<b>935</b>	<b>82</b>	<b>2,699</b>

Table shows the total numbers of combat aircraft on the strength of front-line units. Serviceability was about 60 per cent. The Luftflotten fully committed to the attack on the Soviet Union were Luftflotten 1, 2 and 4. Luftflotte 5 operated from airfields in Norway and was committed mainly to operations against Great Britain. In its case the table gives the approximate numbers of aircraft it contributed initially to the campaign in the east.

It can be seen that the Luftwaffe provided a powerful reconnaissance effort to support the land and air operations in the east, with 657 long range and short-range reconnaissance/army co-operation aircraft. These comprised almost a quarter of the Luftwaffe strength committed to the new campaign. Note the small number of Junkers 87 Stuka dive-bombers committed to the operation, 157 aircraft or about 6 per cent of the force. In the months to follow these units would punch well above their weight.

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Army Group South (40 divisions) advancing along the northern shore of the Black Sea. Luftflotte 5 under Colonel General Stumpff, operating from bases in Norway, was only partially involved in the new offensive and it contributed 82 combat planes.<sup>11</sup>

#### **Soviet air strengths, and weaknesses**

According to Luftwaffe intelligence sources, in June 1941 the Soviet Army Air Forces had 7,300 aircraft deployed in European Russia, about 3,000 in the interior and 2,000 in the Far East. In fact that massive total, 12,300, was an underestimate by nearly one-fifth and the actual figure was just short of 15,000 aircraft. Along its western border the Soviet Army Air Force 7,850 aircraft deployed, supplemented by 1,500 Home Defence fighters and 1,445 aircraft deployed with the Navy's western fleets. A further 4,140 aircraft were deployed in the Far East.<sup>12</sup>

Certainly the Soviets possessed huge numbers of aircraft, but the vast majority of these planes were obsolescent or obsolete types. The new mono-plane fighters just starting to come off the production lines in useful numbers, the LAGG 1, the LAGG 3, the MiG 3 and the YAK 1 were a great improvement over their predecessors, though only the last one was really a match for the latest Messerschmitt 109F which equipped many Luftwaffe fighter units.<sup>13</sup>

Compounding the weaknesses in equipment were the weaknesses in personnel, particularly at the higher levels. Joseph Stalin's purges of the officer corps had hit the Army Air Force hard. That force was now on its fourth commander in less than four years, the previous incumbent having been arrested in April 1941 (he, together with the erstwhile head of Long Range Aviation, would be shot in October). His successor, Lieutenant General Pavel Zhigarev, was inexperienced in the post as were most of his senior subordinate commanders.<sup>14</sup>

As if those problems were not serious enough, there was the added weakness of Stalin's propensity to leadership by whim. He discounted the reports coming in from various sources of a possible German attack as 'western propaganda', intended to sour the relationship between the two countries. He impressed on his military and air commanders the need to do nothing that the Germans might consider provocative. To that end, air force units were specifically forbidden to disperse or camouflage their aircraft. At many airfields they were set out on the ground in neat rows, as if for inspection.<sup>15</sup>

Stalin finally realised an attack was imminent at around midnight on 21 June. An order went out to all military units in the west to come to immediate readiness, and air units were ordered to disperse their aircraft and camouflage them. The Soviet communications system left much to be desired, however, and in many cases the new order failed to reach front line units before the initial blow fell.<sup>16</sup>

#### **The offensive opens**

During the evening of 21 June the units earmarked for the operation finally learned whom they were to attack, and when. The men were assembled and each commander read out an order of the day from Adolf Hitler. The order stated that, despite the treaty of friendship between the two nations, German intelligence had discovered that Soviet forces were massing along the border for a treacherous onslaught against Germany. It went on to say that the Fuehrer had now been forced to order the counter-stroke, to save European civilisation and culture.<sup>17</sup>

There was, of course, no Soviet strike in the offing. However, many German officers and men who heard the order would continue to believe the canard for many years after the war.<sup>18</sup>

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Shortly after 0300 hours Central European Time on 22 June, the German army opened its offensive on the Eastern Front. First there was a massive artillery bombardment then, in true *Blitzkrieg* style, armoured spearheads began thrusting forwards. Between the Baltic and the Black Sea 117 German divisions, of which 48 were armoured, plus 14 Rumanian divisions and a Hungarian army corps, swung into action. Facing them in the immediate battle area were 132 Soviet Army divisions of which 34 were armoured. Thus 7\_ million men were committed in the most ferocious armed clash in history.<sup>19</sup>

German Army commanders had decreed that the onslaught would commence before dawn, so their initial attacks could achieve maximum surprise. The Luftwaffe had to fit in with that timing as best it could. It therefore sent small numbers of Heinkel 111s, Dornier 17s and Junkers 88s flown by picked crews to attack the more important Soviet airfields shortly after zero hour. Their aim was to disrupt activity at the Soviet airfields, and delay the dispersal of aircraft until the larger German attack forces reached them when it was light.<sup>20</sup>

With the arrival of dawn, however, the majority of Soviet air units had not received the warning order and as a result they were taken by surprise. Even when they heard the thunderous German artillery bombardment commence to the west, many Soviet airfield commanders were too afraid of incurring Stalin's wrath to initiate moves to safeguard their aircraft. As a result, hundreds of Soviet fighters, bombers and reconnaissance planes were still sitting on the ground in neat rows close together.

The initial target for Dieter Lukesch's Gruppe was the airfield at Krudziai south of Riga in Lithuania. Although he had flown several combat missions previously against Great Britain, this one was quite unlike any other:

*The skies were beautifully clear, with visibility almost unlimited. Soon after we took off we could see the front line quite clearly, marked by fires and the smoke from bursting shells. Once we had passed the front, however, there was no flak. We did not have, not did we expect to need, an escort for the first attack. As we passed other airfields we saw Russian fighters taking off, but they climbed somewhat slower than our cruising speed so we soon left them behind.<sup>21</sup>*

The Ju 88s cruised at 10,000 feet, each carrying the standard load of four 250 kg and ten 50 kg general-purpose bombs. At the target the bombers moved into line astern and released their bombs in shallow dives. Although this was some hours after the start of the artillery bombardment, there were more than a score of the Tupolev SB-2 bombers drawn up in line along one side of the airfield. Lukesch continued:

*There was no flak, and even though the war had been in progress for about three hours it seems that we had achieved surprise. As we approached for the first attack we could see ground crewman standing on the wings refuelling the aircraft, looking up in curiosity as we ran in. As the bombs started to explode they made hasty retreats into the nearby forest.*<sup>21</sup>

The Ju 88s attacked in line astern, but there was some jockeying for position. As Lukesch was about to release his bombs he saw another aircraft converging on him from the right as it released its bombs.

*I had to break away, make a circuit and attack at the end of the force. I ran in as the last aircraft in the Gruppe to attack. By then several aircraft on the ground were burning and there was quite a lot of smoke, but the line of trees behind the aircraft helped me to line up on some planes that had not been hit before. During the attack my observer fired at the enemy planes with his machine gun. As we pulled away after the attack some Russian fighters appeared on the scene, Ratas and Gulls [Polikarpov I-16s and I-15s]. Although they got close they did not fire at us, perhaps they did not have any ammunition. With my greater speed I soon left them behind.*<sup>22</sup>

The Luftwaffe compendium report on the day's action gave details of attacks on individual airfields, excerpts from which are given below.<sup>23</sup>

*0320-0355 hours. Attack on Kowno I by 11 bombers with 48 SC 250 [general-purpose 250 kg] and 60 SD 50 [semi-armour piercing 50 kg] bombs, from altitudes between 2000 and 2500 m [about 6,500 and 8,000 feet]. Along the west side were parked aircraft, some of which were destroyed with direct hits. Numerous parked aircraft as well as one hangar on the north side observed to*

*be on fire. [Defensive Reaction] inaccurate medium Flak, ineffective. Attack by three I-16 [fighters] without result. [Post strike reconnaissance] 25 destroyed aircraft, mostly single-engined types. 20 single-engined aircraft not destroyed.*

*0348-0400 hours. Attack on Poniewesch by ten bombers from an altitude of 25 m [about 80 feet] with 3,600 SD 2s [small bombs, see below]. The bombs fell amongst a large number of aircraft. Six aircraft were observed for certain on fire. [Defensive reaction] Weak light Flak. [Post strike reconnaissance] 50 aircraft destroyed, 5 multi-engined aircraft seriously damaged, 25 single-engined aircraft not destroyed.*

*0305-0340 hours, 0558 hours and 0950 hours. Attack on Libau II by 34 bombers from an altitude of 500 to 4,100 m [about 1,600 to 13,000 feet] with 952 SD 50 bombs. Crews observed bomb hits amongst aircraft parked and taking off, predominantly I-15s [fighters] . . . Several aircraft set on fire in the western parking area. [Defensive reaction, second attack] Large amounts of medium Flak, accurate. Five single engined fighters seen but they did not attack. [Third attack] Between 15 and 20 fighters launched a weak attack, after opening fire each one immediately broke away.*

### **The devil's eggs**

That morning some Luftwaffe units employed a new weapon for the first time: the SD-2 fragmentation bomb (weight 2 kg, sometimes called the 'Butterfly bomb'). These small weapons were carried in large numbers in special magazines fixed to attacking planes. After release, the bomb's casing opened up to form a pair of 'wings' and the weapon spun to the ground like a sycamore seed. The 7-oz explosive charge detonated on impact, hurling high velocity fragments with sufficient force to damage to aircraft up to forty feet away. Dropped from aircraft flying low over Soviet airfields, the SD-2 proved highly effective against aircraft and other soft targets.<sup>24</sup>

The IIInd Gruppe of Jagdgeschwader 27 was one of the units using the new weapon that day. Each of its Messerschmitt 109E fighters carried 96 SD-2s in a magazine mounted under the fuselage. The unit sent thirty-one fighters to deliver a low altitude bombing and strafing attack on the airfield at

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Wilna. Mounted in conjunction with one by fifteen Junkers 87 dive-bombers, the attack destroyed 31 Soviet aircraft on the ground. The two raiding forces then attacked Lomza-South airfield and claimed the destruction of another forty planes. All the raiders returned safely.<sup>25</sup>

Kampfgeschwader 51 had a much less happy initial experience with the SD-2. That morning the Geschwader despatched all 91 serviceable Junkers 88s to attack six Soviet airfields on the southern part of the front. Each plane carried 360 SD-2s in magazines fitted in the bomb bay. The bombing and strafing attack on Stryj airfield, by eighteen Ju 88s, caused the destruction of about twenty Soviet bombers; the raiders then continued to Lemberg airfield where they destroyed about fifteen fighters.<sup>26</sup>

On their return to their airfield, however, the bomber crews learned that the new fragmentation weapon could be dangerous to friend as well as foe. During the attacks a small proportion of the bombs failed to leave their magazines, and the plane's crew was unaware of the hang-up. Moreover, due to a fault in design, if there was a hang-up the bomb's fuse sometimes became 'live' in flight. Thereafter, the slightest shock might detonate the weapon. Alternatively, on landing, a jammed SD-2 might jolt free and explode. On the first day of the campaign KG 51 lost fifteen bombers, most of them due to accidents with the SD-2s. That amounted to nearly half the total Luftwaffe loss on that day. The SD-2s immediately gained the grim nickname 'Devil's eggs'.<sup>27</sup> Within a few days the weapon was withdrawn from service. It re-appeared several months later adapted for release in containers, as a cluster munition.

#### **Other targets**

In addition barracks, military headquarters, artillery parks, munitions dumps and an oil storage depot also came under attack during the day. Bombers also flew armed reconnaissance missions along roads leading into the battle area. The compendium report<sup>28</sup> listed the results of some of these missions:

*0855-0913 hours. Attack on an enemy column on the road Tauroggen to Schaulen by four bombers with 8 SC 250 bombs, 8 SD 250, 20 SC 50 and 20 SD 50 from an altitude of 1,400 to 2,000 m [about 4,500 to 6,500 feet].*

*1145-1205 hours. Lorry columns on the northern and southern exits of Schaulen, vehicles on roads to the southwest of Schaulen, and a column on the road to Blianske, attacked by one aircraft from an altitude of 400-500 m [about 1,300 to 1,650 feet] using 2 SC 250, 2 SD 250, 4 SC 50 and 4 SD 50 as well as machine gun fire.*

*2030 to 2100 hours. Column of armoured vehicles on the roads Uzventis to Schaulen and Kursenai to Schaulen, attacked by 16 bombers dropping 25 tons of bombs. About 40 armoured vehicles were destroyed.*

While the bombers went about their work of destruction, packs of German fighters swept over the battle area hunting for any Soviet planes that had got airborne. Again, it was a one-sided battle. The Luftwaffe units involved had considerable fighting experience, while most of their opponents had none at all. Moreover the superior German tactics, training and level of aggressiveness gave the attackers a considerable edge.<sup>29</sup>

The Luftwaffe pilots also enjoyed a high degree of technical superiority. Close to the ground the

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Polikarpov I-16 Type 24, the main Soviet fighter type, was almost as fast as the Messerschmitt 109F. But the I-16's radial engine was optimised for low altitude operations, and as height increased its performance fell markedly. At 20,000 feet the I-16 was about 100 mph slower than the German fighter.<sup>30</sup> The Soviet fighters were the more manoeuvrable, but in air combat the faster fighter always held the initiative. The Luftwaffe pilots used the same tactics against the Soviet fighters that had proved effective during the Spanish Civil War four years earlier: patrol at higher altitudes, attack from above in the dive, then zoom climb to regain altitude before setting up the next attack. Pilots were advised that on no account should they slow down and attempt to engage the Soviet fighters in manoeuvring combat.<sup>31</sup>

That day Luftwaffe fighter losses were minimal. One notable loss was the commander of Jagdgeschwader 27, Major Wolfgang Schellmann. He pressed to short range his attack on a Soviet I-16 fighter, and following an accurate burst his victim exploded. Debris struck Schellmann's fighter, inflicting serious damage. He baled out and was taken prisoner, but it appears that his captors shot him soon afterwards.<sup>32</sup> Such savagery would be a feature of the war on the Eastern Front, in which neither side gave quarter nor expected it from the enemy.

From mid-day small forces of Soviet bombers attempted to deliver retaliatory attacks on Luftwaffe airfields, but with little success. About a dozen Tupolev SB-2s, without fighter escort, carried out a high level bombing attack on the airfield at Biala-Podlaska just inside German-held Poland. The airfield was base for the Junkers 87 dive-bombers of 1st Gruppe of Sturzkampfgeschwader 77, which were being refuelled and re-armed after their initial mission. In contrast to those of their opponent, however, the German planes were well dispersed and

camouflaged. A flak battery positioned nearby engaged the raiders and, although some bombs burst across the airfield, no Stuka was damaged. The bursting flak shells summoned several German fighters to the scene, and in the action that followed the Soviet bomber formation lost about three-quarters of its aircraft.<sup>33</sup>

#### **Results of the attacks**

That morning, up to 1000 hours, Luftwaffe twin-engined and dive-bombers flew 637 sorties and struck at 31 airfields.<sup>34</sup> The effect of those attacks is described in the official Soviet post-war publication *History of the Great Patriotic War of the Soviet Union* - not a source likely to exaggerate German successes:

*During the first days of the war enemy bomber formations launched massive attacks on sixty-six airfields in the frontier region, and in particular those where the new Soviet fighter types were based. The result of these raids and the violent air-to-air battles was a loss to us, as at noon on 22nd June, of some 1,200 aircraft, including more than 800 destroyed on the ground.<sup>35</sup>*

By sunset on the first day of the campaign against the Soviet Union, the Luftwaffe had flown 1,766 sorties by single-engined and twin-engined bombers, and 506 by fighters. The operations cost the Luftwaffe thirty-five aircraft. Official German sources claimed the destruction of 1,489 Soviet planes destroyed on the ground and a further 322 shot down in air-to-air combat or by AAA fire during the entire day.<sup>36</sup> Normally such a claim would be treated with considerable reserve. However, given the Soviet admission that up to noon they lost 'some 1,200 aircraft, including more than 88 destroyed on the ground', the German claim has a ring of truth.

In the course of the eighteen-hour period, between 0300 hours and sunset on 22 June 1941, the Soviet Air Force suffered the greatest defeat ever inflicted



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by one air force on another. Most of those aircraft had been caught on the ground. Yet it is also worth pointing out that the German claim of 322 Soviet aircraft destroyed in the air, by fighters or AA fire, was also the largest number of planes an air force had shot down in a single day.

During the weeks that followed the German armoured units thrust rapidly into the Soviet Union, over-running every one of the airfields the Luftwaffe had attacked on the first day. This compounded the effect of the earlier losses, for aircraft not airworthy due to battle damage or unserviceabilities had either to be destroyed or were left to be captured. The capture of the enemy's airfields by ground forces is the most effective way there is to reduce the effectiveness of his air force.

Yet, despite the enormous material losses suffered

by the Soviet Air Force during the early days of the war, their effect would not be crippling in the long term. By June 1941 the programme to re-equip the Soviet front-line units with modern aircraft had just begun to take effect. The great majority of the aircraft lost were obsolescent types, scheduled for replacement. Moreover, relatively few Soviet aircrew were lost during the attacks on the airfields, so when the modern planes became available there was no shortage of crews to fly them. Despite the ferocity of their initial onslaught, the German forces were unable to secure victory in the eastern front within the expected five months. When the ferocious Russian winter arrived, with it came an offensive by much-improved Soviet ground forces. This was not going to be a short war.

## Notes

- 1 Watt, Donald, 'Before the Blitzkrieg', Purnell History of the Second World War, p 63
- 2 Ibid
- 3 Antonov, G, 'Assault from the East', Purnell, p 83.
- 4 Plocher, Hermann, 'The German Air Force Versus Russia, 1941', Arno Press New York 1968, p 21
- 5 Erickson, John, 'The Wehrmacht before Barbarossa', Purnell p 663.
- 6 Interview Dieter Lukesch
- 7 Ibid
- 8 Interview Horst Schulz
- 9 'The Rise and Fall of the German Air Force', Air Ministry, London, 1948, p 165
- 10 Main source Luftwaffe Generalquartiermeister aircraft strength return, 21 June 1941. Freiburg document collection Ref RL2/III 724 series documents. Information on Luftflotte 5 from Plocher, p 34.
- 11 Details of Luftflotten assignments and commanders from Plocher p 30 et seq
- 12 Hooton, E, 'Eagle in Flames' Arms and Armour Press, London, 1997, p 93
- 13 Ibid, p 94
- 14 Ibid
- 15 Ibid, p 95
- 16 Bekker, Cajus, 'The Luftwaffe War Diaries', Macdonald, London 1966, p 218
- 17 Carell, Paul, 'Hitler's War on Russia', Corgi, London, 1964, p 4
- 18 Lukesch
- 19 Purnell, p 658 and 659
- 20 Bekker, Ibid
- 21 Lukesch
- 22 Ibid
- 23 Oberbefehlshaber der Luftwaffe, Lagerberichte 652, 653, Freiburg document collection Ref RL2 II/246
- 24 Bekker p 219, 220
- 25 Ring, Hans and Girbig, Werner, 'Jagdgeschwader 27', Motorbuch Verlag, Stuttgart, 1974, p 67, 68
- 26 Dierich, Wolfgang, 'Kampfgeschwader Eidelweiss', Ian Allan, Shepperton, 1975, p 59, 60.
- 27 Ibid
- 28 Lagerberichte 652, 653
- 29 Plocher, p 39
- 30 Green, William, 'Famous Fighters of the Second World War, Volume 2', Macdonald, London, 1962, p 5 et seq.
- 31 Interview Joachim Schlichting, ex-Condor Legion pilot
- 32 Ring, op cit
- 33 Bekker p 221
- 34 Lagerbericht 652
- 35 Quoted in Bekker, p 222
- 36 Lagerbericht 653





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