TARGET BERLIN

USAAF B-17 breaks up in flames over German target

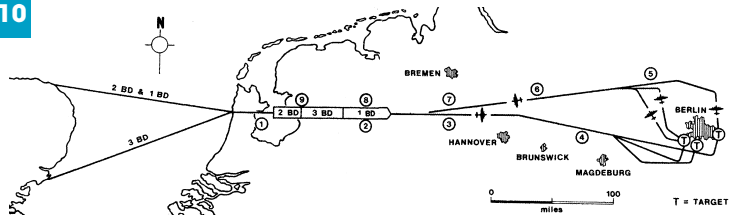
The US bomber offensive against Germany sparked off some of the hardest-fought air actions in history. On 6 March 1944 the 8th Air Force launched its first maximum effort daylight attack on Berlin. That action would prove to be the hardest-fought of them all, with heavy losses on both sides.

By March 1944 the US 8th Air Force based in England considered itself sufficiently strong to take on the ultimate challenge, a daylight maximum-effort strike on the most heavily defended target in Germany – Berlin. After a couple of false starts, the first large scale daylight attack on the enemy capital took place on 6 March.

A total of 563 B-17 Flying Fortresses and 249 B-24 Liberators were assigned to the Berlin mission. The 1st Bomb Division, with 301 B-17s in five Wing formations, was to attack the V.K.F. ball-bearing factory at Erkner, the third-largest plant of its kind in Germany. The 2nd Bomb Division, with 249 B-24 Liberators in three Wing formations, was to bomb the Daimler-Benz works at Genshagen turning out more than a thousand aero engines per month. The 3rd Bomb Division, with 262 B-17s in six Wing formations, was to strike at the Bosch factory at Klein Machnow manufacturing electrical equipment for aircraft and military vehicles.[1]

For such a lengthy penetration into enemy airspace, 600 miles from the Dutch coast to Berlin and back, much would depend on the ability of the escorting fighters to ward off the inevitable attacks by German fighters. Fifteen Groups of P-38 Lightnings, P-47 Thunderbolts and P-51 Mustangs of the US 8th Air Force, four Groups of Thunderbolts and Mustangs of the US 9th Air Force and three squadrons of R.A.F. Mustangs – a total of 691 fighters – were to support the operation. After they had covered the bombers' initial penetration, the plan called for 130 Thunderbolts to return to the base, refuel and re-arm, then return to eastern Holland to cover the final part of the bombers' withdrawal.[2]

The B-17 Flying Fortress made up the bulk of the raiding force during the attack on Berlin, and units operating the type suffered the heaviest losses.



The Escort Plan

The plan for escorting the bombers on 6 March, using a total of nearly 700 P-38s, P-47s and P-51s. The 94-mile long bomber stream, to be flown during the route to the target, is drawn to scale and shows the order of the three bomb divisions. During the return flight the bomb divisions were to fly in line abreast. In each case the fighters flew with the bombers approximately 100 miles along the route.

1. Two groups of P-47s were to join the bombers at this point and escort the 1st and 3rd Divisions.
2. Two groups of P-47s were to join the bombers at this point and escort the 1st and 2nd Bomb Divisions.
3. Two and a half groups of P-47s were to join the bombers at this point, one group escorting the 1st Bomb Division, one escorting the 3rd and a half group escorting the 2nd Bomb Division.
4. Three groups of P-51s were to join the bombers at this point, one escorting each bomb division.
5. Three groups of P-38s were to join the bombers in this area, one escorting each bomb division.
6. Three squadrons of Royal Air Force P-51 Mustangs were to join the bombers at this point.
7. Two and a half groups of P-47s were to join the bombers at this point.
8. Three groups of P-47s, one flying its second mission of the day, were to join the bombers at this point.
9. Two groups of P-47s, both flying their second mission of the day, were to join the bombers at this point.

ESCORT DIFFICULTIES

Numerically the escorting force was formidable, but various factors conspired to limit the number of escorts in position to protect the bombers at any given place or time. The first constraint was the limited radius of action of the escorts: with drop tanks the fighters could penetrate deep into Germany, but only if they flew in a straight line. When they accompanied bombers the escorts had to maintain fighting speed while matching their rate of advance with that of their slower charges. That meant flying a zig-zag path, which added greatly to the distance flown. Also, the escorting fighters had to retain a reserve of fuel in case they needed to go into combat. Those factors limited the time a fighter Group could spend with bombers over Germany to about half an hour, or 100 miles of the bombers' penetration. Then, hopefully, another Group of fighters would relieve it. Thus the escort of a deep penetration attack resembled a relay race, with some fighter units moving out to join the bombers, some with the bombers and others heading for home after completing their time with the bombers. At any one time only about 140 Allied fighters would be flying with the bombers, less than one-sixth of the number of sorties flown that day.[3]

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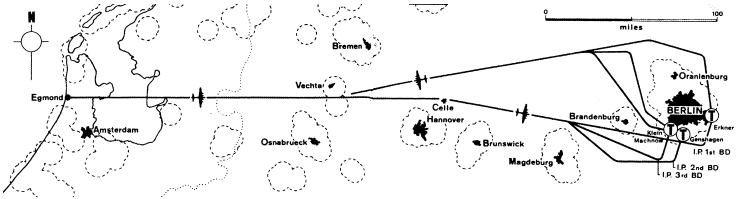

The Planned Route, 6 March 1944, Showing the Flak Zones

As was usually the case, the bombers were routed to avoid flak zones wherever possible, without having to make too many turns on the way to the target. Apart from the target area, the planned route crossed only one flak zone, the moderately defended area round Vechta. The raiding force was to cross the Dutch coast at Egmond and fly due east to Celle, then east southeast to the Initial Points each 18 miles down-wind of the targets at Erkner, Klein Machnow and Genshagen. At the Initial Points the bombers were to turn into wind for their bomb runs. After attacking, the bombers were to leave the Berlin flak zone as quickly as possible, then reassemble with the other bomb divisions northwest of the city for the return flight.

The second major constraint on the escorts was the huge length of the bomber stream: 94 miles during this attack. Had the 140 available escorts been spread out evenly throughout that distance, there would have been just three fighters to cover every two miles of the bomber stream. Tactically that would have been a useless distribution. The solution was to concentrate about half of the escorts around the one or two Combat Bomb Wings at the head of the bomber stream, the part most likely to come under attack from German fighters. The remaining escorts were split into eight-plane flights that patrolled the flanks of the rest of the bomber stream.[4] This arrangement meant that at any one time most bomber Wing formations had no escorts in a position to respond immediately, if they came under attack from German fighters. Until help arrived, the bombers had to rely on their own defensive fire power to hold off their attackers.

THE RAIDERS ASSEMBLE

Starting at 0750 hours[5] the bombers of the 8th Air Force began taking off from their bases in eastern England. Once airborne they assembled into Group formations then the Groups joined up to form Combat Bomb Wings. As the Bomb Wings crossed the coast of England at designated places and times, they slotted into position to form Divisions. At 1053 hours the vanguard of leading Bomb Division, the 1st, crossed the Dutch coast a little over three hours after the first plane had taken off.[6]

As they assembled into formation, the bombers came under the attentive gaze of *Mammut* and *Wassermann* long range early warning radar stations in Holland and Belgium. Their reports were passed to the fighter control bunkers from which the air defence of the German homeland was managed. The action about to open would be controlled from headquarters 3rd Fighter Division near Arnhem in Holland, that of 2nd Fighter Division at Stade near Hamburg and the headquarters 1st Fighter Division at Döberitz near Berlin.[7]

With the three Bomb Divisions in line astern, the 1st and the 3rd with B-17 Flying Fortresses then the 2nd with B-24 Liberators, the bombers thundered eastward over Holland at three miles per minute at altitudes around 20,000 feet. The aerial armada took more than half an hour to pass a given point on the ground. To those watching from the ground, it presenting an awesomely impres-sive spectacle of military might.

Some commentators have likened the US heavy bomber actions over Germany to those fought over England during the Battle of Britain in the summer of 1940. Both led to large scale daylight actions, in which a numerically inferior defender strove to protect their homeland against attacks by enemy bombers with strong fighter escorts. However, the far greater distances to the targets in Germany meant that the later campaign was quite different in character. The defenders had far more time to assemble their forces, and they could deliver a more measured response than had been possible for the RAF in 1940. During the Battle of Britain the German raiding forces took half an hour to reach London, one of their more distant targets, from the south coast. In 1944, the US bombers had often to spend four times as long over hostile territory to reach their targets in Germany. In contrast to the hectic British fighter scrambles of 1940, the German fighter controllers had ample time to prepare their riposte and direct their fighters into position. Certainly that would be the case on March 6, 1944.

At airfields throughout Germany, Holland, Belgium and northern France, fighter units were brought through the different stages of alert, until the pilots were at cockpit readiness awaiting the order to take off. As the raiding force headed due east across Holland, the German fighter controllers could see that it was probably heading for a target in northern Germany.

Messerschmitt 110G was the main type of bomber destroyer operated by the Luftwaffe. This example carried two 30-mm cannon, four 20-mm cannon and four launchers for 21-cm unguided rockets under the outer wings.

On this day the Luftwaffe had just over nine hundred serviceable fighters available for the defence of the Reich. The heavyweights were the eighty twin-engined Messerschmitt 110s and Me 410s, specialized bomber destroyers armed with batteries of heavy cannon and launchers for 21-cm unguided rockets. In addition there were nearly six hundred Messerschmitt 109 and Focke Wulf 190 single-engined fighters. Also there were more than two hundred night fighters, Messerschmitt 110s and Junkers 88s, that could be sent up to assist with daylight air defence operations.[8]

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Just as there were operational constraints limiting the proportion of the escorting fighters available to protect U.S bombers at any one time, so other constraints limited the proportion of the defending fighter force that could be put into action against them. The tyranny of distance imposed its will on attacker and defender alike. The defending fighters had to be disposed to protect a huge area of France, Holland and Belgium as well as almost the whole Germany. To bring into action those units based far from the bombers' route, for example in eastern France or southern Germany, called for a degree of prescience on the part of the fighter controllers. Moreover, although the twin-engined bomber-destroyers had the range to reach any part of Germany, these large and unwieldy machines were liable to suffer heavy losses if they were caught by the escorts. Because of this, the twin-engined fighters were limited to engagements east of the line Bremen – Kassel – Frankfurt. The night-fighters, slowed by the weight of their radar equipment and the drag from its complex aerial arrays, were to be used only to pick off wounded stragglers.

The Messerschmitt 109G formed the bulk of the defending figher force on 6 March 1944. This example was armed with three 20 mm cannon and two 13 mm machine guns.

The fact that the bombers were accompanied by escorts presented a severe problem for the German fighter pilots. The answer was for the defenders to deliver their attack *en mass*, to overwhelm the escort at a chosen time and place. Also, to reduce effectiveness of the bombers' return fire, the defending fighters were to deliver their initial attack from head-on. That required careful direction from the ground controllers, and skilful tactical handling from the formation leader.

At 1100 hours, seven minutes after the leading bombers crossed the Dutch coast, the first German fighter units began taking off: one hundred and seven Messerschmitt 109s and Focke Wulf 190s drawn from Ist and IInd Gruppen of Jagdgeschwader 1, Ist, IInd and IIIrd Gruppen of Jagdgeschwader 11 and IIIrd of Jagdgeschwader 54.[9] Once airborne, the fighters assembled into Gruppe (25-30 plane) formations then commenced their climb to altitude. As they did so they headed for Lake Steinhuder near Hannover, the designated assembly point for the battle formation. Although this German 'Big Wing' was twice as large as any that Douglas Bader had led during the Battle of Britain in 1940, it would not suffer the same shortcomings of the earlier tactic. For one thing the American bomber formations occupied a much larger volume of

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airspace than their Luftwaffe counterparts in 1940. Also, the fighters would make their initial attack from head-on. These factors would ensure that defending fighters would rarely get into each others' way during the actual attack.

Escorting the bombers during the initial part of their penetration into Germany were one hundred and forty Thunderbolts from the 56th, 78th, and 353rd Fighter Groups.[10] Although the escorts outnumbered the German fighters now preparing to engage the bombers, the arithmetic of the ensuing engagement was not on their side. The German fighter pilots would focus their attack on one Combat Bomb Wing formation, but until the last minute the escorts would be ignorant of where the blow would fall. As was pointed out earlier, about half the escorts were concentrated at the leading Bomb Wing formations, with the remainder divided along the rest of the force.

Soon after the vanguard of the attacking force crossed the Dutch coast, the pathfinder B-17 at the head of the attack force suffered a radar failure (at this time only a few pathfinder bombers carried ground-mapping radar). As a result the leading formation flew a heading that took it a slightly south of the planned route.[11] The rest of the bombers in the 1st Bomb Division followed it, as did those at the head of the 3rd Division. Before the leader had deviated 20 miles from the planned track the error was discovered, and the pathfinder edged on to a more northerly heading to regain the planned route.[12] But by then the damage had been done. The 13th Wing, situated mid-way along the bomber stream, was a couple of minutes late at the Dutch Coast and it had lost visual contact with the 4th Wing ahead of it. Ignorant of the deviation from the briefed route by the bombers ahead of it, the 13th adhered to the flight plan. The unlucky 13th Wing would soon pay a terrible price for this accumulation of relatively minor errors.

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Vectored by controllers at the Luftwaffe 3rd Fighter Division at Stade, the leader of the German battle formation caught sight of the incoming enemy formation at 1155 hours. The ground controllers had done their work well: the raiders were almost exactly in front of the defenders, and far enough away to allow a few small corrections as the defending fighters ligned up for the attack.

It was sheer bad luck for the American bomber crews involved that the formation now under threat was not that leading the bomber stream, where more than half of the escorting Thunderbolts were concentrated. It was the 13th Wing, that was heading the detached second half of the bomber stream and which was almost devoid of such protection. Lieutenant Robert Johnson of the 56th Fighter Group, flying a P-47, was to one side of the Wing when he suddenly noticed the enemy formation closing in fast:

> "I was on the left side of the bombers and going 180 degrees to them when I noticed a large box of planes coming at us at the same level. There were about forty or fifty to a box, and I saw two boxes at our level and one box at 27,000 or 28,000 feet. I called in to watch them, and then that they were FW 190s. There were only eight of us…'[13]

The Thunderbolts attempted to disrupt the attack but the German pilots simply ignored them as they streaked for the bombers. The opposing forces met at noon, 21,000 feet above the small German town of Haselünne close to the Dutch border.

A head-on attack on an bomber required a high degree of skill from the fighter pilot if it was to succeed. Closing at a rate of 200 yards per second, there was time only a brief half-second burst from 500 yards before he had to ease up on the stick to avoid colliding with his target. For experienced pilots like Hauptmann Anton Hackl, the fighter ace leading the Focke Wulfs of IIIrd Gruppe of Jagdgeschwader 11 that day, that was quite sufficient. As he later commented:

> "One accurate half-second burst from head-on [on a four-engined bomber] and a kill was guaranteed. Guaranteed!"[14]

Feldwebel (Sergeant) Friedrich Ungar of Jagdgeschwader 54, flying an Me 109, saw his rounds exploding against the engine of one of the bombers and pieces fly off:

> "There was no time for jubilation. The next thing I was inside the enemy formation trying to get through without ramming anyone. Nobody fired at me then, they were too concerned about hitting each other. When we emerged from the formation things got really hot; we had the tail gunners of some thirty bombers letting fly at us with everything they had. Together with part of our Gruppe I pulled sharply to the left and high, out to one side. Glancing back I saw the Fortress I had hit tip up and go down to the right, smoking strongly."[15]

Sergeant Van Pinner, a top turret gunner in a B-17 of the 100th Bomb Group, recalled that he had far more targets than he could possibly engage:

> "There were fighters everywhere. They seemed to come past in fours. I would engage the first three but then the fourth would be on to me before I could get my guns on him. I knew our aircraft was being hit real bad – we lost the ball turret gunner early in the fight…"[16]

The initial head-on attack was over in much less than a minute. Then, almost in slow motion, a succession of mortally wounded heavy bombers began sliding out of formation. The 13th Wing comprised A and B formations flying almost in line abreast with a mile between them. The B formation comprised thirty-eight Flying Fortresses from the 100th and 390th Bomb Groups and its Low Box, with sixteen B-17s at the start of the action, suffered the worst. All six bombers of its High Squadron were shot down, as were two of the six in its Lead Squadron and two of the four in its Low Squadron.[17]

Lieutenant John Harrison of the 100th Bomb Group, captain of one of the bombers, gazed in disbelief as planes began to go down around him:

> "The engine of one Fort burst into flames and soon the entire ship was afire. Another was burning from waist to tail. It seemed both the pilot and copilot of another ship had been killed. It started towards us out of control. I moved the squadron over. Still it came. Again we moved. This time the stricken Fortress stalled, went up on its tail, then slid down."[18]

Following the initial firing pass, the German fighters split into twos and fours and curved around to deliver re-attacks on the same formation. Some overtook the bombers and sped ahead of them preparatory to moving into position for a further head-on attack. Other German fighters attacked the bomber formation from behind, yet others dived after damaged B-17s that had been forced to leave the formation and were trying to escape to the west.

Lieutenant Lowell Watts, captain of a bomber in the next formation in the stream, was an unwilling spectator to the unequal battle:

> "About two or three miles ahead of us was the 13th Combat Wing. Their formation had tightened up since I last looked at it. Little dots that were German fighters were diving into those formation, circling, and attacking again. Out of one high squadron a B-17 slowly climbed away from its formation, the entire right wing a mass of flames. I looked again a second later. There was a flash – then nothing but little specks drifting, tumbling down. Seconds later another bomber tipped up on a wing, rolled over and dove straight for the ground. Little white puffs of parachutes began to float beneath us, then fall behind as we flew toward our target."[19]

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From the moment the German fighters had first been sighted, the 13th Wing put out desperate radio calls to summon the escorts. Colonel Hub Zemke, commander of the 56th Fighter Group and heading an eight-plane flight of Thunderbolts, arrived at the beleaguered unit just as Oberleutnant Wolfgang Kretschmer of Jagdgeschwader 1 was lining up for another firing pass on the bombers. Zemke spotted the lone Focke Wulf below him and ordered one section of four aircraft to remain at high altitude to cover him, while he led his section down to attack.[20]

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Before opening fire at the bomber he had selected as a target, Kretschmer glanced over his own tail to check that the sky was clear. It was not. The German pilot was horrified to see Zemke's Thunderbolt closing in rapidly on him followed by three others. Kretschmer hauled the Focke Wulf into a tight turn to the left get out of the way but it was too late. By then Zemke was in a firing position and .5-in rounds from his accurate burst thudded into the wings and fuselage of the German fighter. As the Zemke pulled up to regain altitude he glanced back and saw the enemy fighter falling out of the sky enveloped in flames.[21]

Kretschmer extricated himself from the cockpit of his blazing aircraft, and jumped clear. He landed by parachute with moderate burns to his hands and face and splinters embedded in his thigh.

The main part of the initial action lasted about ten minutes. Then, as the German fighters exhausted their ammunition, they dived away from the fight to avoid the escorts.

Even as the initial action petered to its close, a second German battle formation was already moving into position to engage the raiders. From their bunker at Döberitz near Berlin, the controllers of the 1st Fighter Division had assembled every available fighter in that part of Germany. The core of the battle formation comprised the bomber destroyers, forty-two Messerschmitt 110s and 410s from IInd and IIIrd Gruppen of Zerstörergeschwader 26 and Ist and IInd Gruppen of ZG 76. Providing cover for these, though they were also expected to engage the bombers, were seventy Me 109s and FW 190s from Ist, IInd and IVth Gruppen of Jagdgeschwader 3, Ist of JG 302 and Sturmstaffel 1.[22]

Again a large force of German fighters charged almost head-on into a couple of formations of Flying Fortresses flying in line abreast. The 1st Combat Wing comprised fifty-one B-17s drawn from the 91st and 381st Bomb Groups. The 94th Combat Wing, with sixty-one Flying Fortresses from the 401st and 457th Bomb Groups, flew a couple of miles to the right of it. But these two Wings were in the vanguard of the bomber stream and were protected by a large proportion of the available escorts: eighty Mustangs from the 4th and 354th Fighter Groups.[23]

This time the escorts were in the right place, at the right time and in sufficient numbers to blunt the German attack. Watching from his P-51, Lieutenant Nicholas Megura of the 4th Fighter Group described the approach of the German formation:

"Twelve-plus smoke-trails were seen coming from twelve o'clock and high, thirty miles ahead. 'Upper' [the Group leader] positioned the Group up sun, below condensation height, and waited. Trails finally positioned themselves at nine o'clock to bombers and started to close. Six thousand feet below the trails were twenty-plus single-engine fighters line abreast, sweeping the area for twenty-plus twin-engine rocket-carrying aircraft. 'Upper' led Group head-on into front wave of enemy aircraft."[24]

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The superlative P-51B Mustang had the range to escort US bombers as far east as Berlin, and the performance to outfly the defending fighter types.

Either accidentally or deliberately, an Me 410 collided with or rammed head-on into a Flying Fortress of the 457th Bomb Group and tore away a large section of the bomber's tail. The stricken bomber, which had been flying on the right side of the High Squadron, went out of control and entered a steep diving turn to the left. After narrowly missing several bombers in the formation, it smashed into the aircraft on the far left of the Low Squadron. Only one man survived from the three crews involved in the incident, the tail gunner from the last aircraft to be struck.[25]

As the bomber-destroyers emerged from the rear of the bomber formation, other Mustangs pounced on them. The nimble single-seaters did great execution, shooting down fourteen of the twin-engined fighters in quick succession.

Hard on the heels of the heavy fighters came the main body of the attack formation, seventy single-seat Messerschmitts and Focke Wulfs. Leutnant Hans Iffland of Jagdgeschwader 3, flying a Messerschmitt Bf 109, recalled:

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> "During the firing run everything happened very quickly, with the closing speed of about 800 kilometres per hour [500 mph]. After firing my short burst at one of the B-17s I pulled up over it; I had attacked from slightly above, allowing a slight deflection angle and aiming at the nose. I saw my rounds exploding around the wing root and tracers rounds from the bombers flashing past me. As I pulled up over the bomber I dropped my left wing, to see the results of my attack and also to give the smallest possible target at which their gunners could aim. Pieces broke off the bomber and it began to slide out of the formation."[26]

The action around the leading formations lasted little over ten minutes and, thanks to the efforts of the Mustangs, the bombers's losses were much lighter than during the earlier attack: seven bombers destroyed immediately, or forced to leave the formation to be finished off as stragglers.

As the bomber formations closed on the capital and entered the inferno of flak, the German fighters broke off the action

Now, shortly after 1300 hours, the raiding units were moving into position to begin their bomb runs. Defending Berlin was the 1st Flak Division comprising the 22nd, 53rd, 126th and 172nd Flak Regiments with more than four hundred 8.8 cm, 10.5 cm, and 12.8 cm guns. As the bomber formations closed on the capital and entered the inferno of flak, the German fighters broke off the action.[27]

As they approached their targets the bombers split into their three divisions and lined up for their bombing runs. The first to feel the gunners' wrath were the Flying Fortresses of the 1st Bomb Division. Captain Ed Curry, a bombardier with the 401st Bomb Group, never forgot that cannonade:

> "I'd been to Oschersleben and the Ruhr, but I'd never seen flak as heavy as that they had over Berlin. It wasn't just the odd black puff, it was completely dense; not just at one altitude, but high and low. There was a saying that you see the smoke only after the explosion; but that day we actually saw the red of the explosions. One shell burst near us, and we had chunks of shell tear through the radio room and the bomb bay."[28]

Now, however, the weather intervened to protect the primary targets more effectively than the defences ever could. At first it had seemed the lead bombardiers at the head of each Wing formation could make visual bomb runs on the targets through breaks in the clouds. But, at the critical moment, the aiming points were obscured and by then it was too late to revert to radar-controlled bomb runs. No planes hit the 1st Division's primary target at Erkner, and the attackers released their bombs on the Köpenick and Weissensee districts of the city which were clear of cloud.[29]

It was a similar story for the 3rd Bomb Division, whose Flying Fortresses missed the primary target at Klein Machnow and bombed the Steglitz and Zehlendorf districts instead. Lowell Watts was established on his bomb run when the gunners zeroed in on his formation.

> "They didn't start out with wild shots and work in closer. The first salvo they sent up was right on us. We could hear the metal of our plane rend and tear as each volley exploded. The hits weren't direct. They were just far enough away so they didn't take off a wing, the tail or blow the plane up; they would just tear a ship half apart without completely knocking it out. Big ragged holes appeared in the wings and the fuselage. Kennedy, the co-pilot, was watching nothing but the instruments, waiting for the tell-tale indication of a damaged or ruined engine. But they kept up their steady roar, even as the ship rocked from the nearness of the flak bursts… The flak was coming up as close as ever, increasing in intensity. Above and to the right of us a string of bombs trailed out from our lead ship. Simultaneously our ship jumped upwards, relieved of its explosive load as the call 'Bombs away!' came over the interphone. Our left wing ship, one engine feathered, dropped behind the formation. That left only four of us in the low squadron. A few minutes later the flak stopped. We had come through it and all four engines were still purring away."[30]

Only a few Liberators of the 2nd Bomb Division, the last to attack, put their bombs on their primary target, the Daimler-Benz aero-engine works at Genshagen; the rest of the attack also fell on secondary targets in and around the capital.

The vicious bombardment from the flak batteries knocked down only four bombers, but damaged several others sufficiently to force them to leave formation. Nearly half of all bombers that reached Berlin collected flak damage of some sort.

As the bombers emerged from the flak zones, a few German single-seat fighters tried to a press home attacks. Also, fourteen Messerschmitt 110 night fighters from Nachtjagdgeschwader 5 closed in bent on finishing off stragglers. The American

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escorts quickly took charge of the situation, however. They pounced on the night fighters and the latter, too slow to escape from their pursuers, lost ten of their number within the space of a few minutes.[31]

For the time being the German fighters had spent their force, and during the next half there was a lull in the fighting.

Relieved by fresh squadrons of Thunderbolts, the Mustangs peeled away from the bombers headed for home. As they were running out past Bremen, a section of Mustangs of the 357th Fighter Group came upon a lone Messerschmitt 109 and Lieutenants Howell and Carder shot it down. The German pilot, Oberleutnant Gerhard Loos of Jagdgeschwader 54, a leading ace credited with ninety-two victories, was killed.[32]

The air action around the bombers resumed at 1440 hours, with attacks by Me 109s and FW 190s that had landed, refueled and re-armed after taking part in the noon action near Haselünne. Other fighters came from units based in France and Belgium, that had missed the raiders on their way in.

The formation hardest hit during this engagement was the 45th Combat Bomb Wing. Once again Lowell Watts of the 388th Bomb Group takes up the story:

> "The interphone snapped to life: 'Focke Wulfs at 3 o'clock level!' Yes, there they were. What seemed at a hurried count to be about 30 fighters flying along just out of range beside us. They pulled ahead of us, turned across our flight path and attacked from ahead and slightly below us. Turrets swung forward throughout the formation and began spitting out their.50 calibre challenge. Some Focke Wulfs pulled above us and hit us from behind while most dived in from the front, coming in from 11 to 1 o'clock to level, so close that only every second or third plane could be sighted on by the gunners. Still them came, rolling, firing and diving away, then attacking again."[33]

He watched two bombers fall out of the formation, then his own aircraft came under attack:

> "Brassfield called from the tail position 'I've got one, I've got one!' Then, almost with the same breath 'I've been hit!' No sooner had the interphone cleared from that message when an even more ominous one cracked into the headsets: 'We're on fire!' Looking forwards I saw a Focke Wulf coming at us from dead level at 12 o'clock. The fire from our top and chin turrets shook the B-17. At the same instant his wings lit up with fire from his guns. The 20 mm rounds crashed through our nose and exploded beneath my feet amongst the oxygen tanks. At the same time they slashed through some of the gasoline cross-feed lines. The flames which started here, fed by the pure oxygen and the gasoline, almost exploded through the front of the ship. The companionway to the nose, the cockpit and the bomb bays was a solid mass of flame."[34]

Watts struggled to hold the bomber level while his crew abandoned the machine. The flames prevented him from seeing ahead and he could not know that his aircraft was edging towards another in the formation. With a crash of tortured metal the

bombers smashed together, then broke apart. Shedding pieces, the two planes began their long fall to earth.

Unaware that there had been a collision, Watts knew that his bomber was no longer under his control. Also, seemingly for no good reason, almost the whole of the cabin roof above his head had suddenly vanished. He struggled clear of the plunging bomber and parachuted to safety.[35]

During this sharp engagement the 388th Bomb Group lost a total of seven aircraft. The losses were not all on one side, however. Hauptmann Hugo Frey of Jagdgeschwader 11, a fighter ace credited with the destruction of twenty-six US heavy bombers, was killed when his FW 190 was shot down by return fire from the bombers.[36]

THE RECKONING

On 6 March a total of 814 Flying Fortresses and Liberators set out from England, of which 672 attacked primary or secondary targets in the Berlin area. Sixty-nine B-17s and B-24s failed to return, including four planes with serious damage that put down in Sweden. A further sixty bombers landed at airfields in England with severe damage, and 336 more returned with lesser damage.[37] Of the bombers that failed to return 42 were certainly or probably lost to fighter attack, 13 to flak, five to fighters and flak, and five in collisions with friendly or enemy planes. The causes of the remaining four losses cannot be ascertained.[38] A total of 691 escorts took part in the operation, of which eleven were destroyed and eight returned with severe damage. Ten escorts fell to fighter attack and one to flak.[39] Of those US aircraft that penetrated into enemy territory, one bomber in ten and one fighter in 75 were lost.

The hardest hit unit, the 100th Bomb Group, lost fifteen of the thirty-six aircraft that crossed the Dutch coast; most of those during the initial clash near Haselünne

In a concentrated fighter-versus-bomber action of this type, it was usual for the heaviest losses to be confined to a few unfortunate units. As luck would have it on this occasion, all of them flew B-17 Flying Fortresses. The hardest hit unit, the 100th Bomb Group, lost fifteen of the thirty-six aircraft that crossed the Dutch coast; most of those during the initial clash near Haselünne. The 95th Bomb Group, which with the 100th made up the 13B Wing formation, lost eight bombers. The 388th Bomb Group lost seven planes and the 91st lost six planes.[40] Those four unlucky Groups lost more than half of the heavy bombers that failed to return.

By its nature, an account such as this focuses on the areas of heaviest fighting and the units that took the heaviest losses. To put things into perspective, it should be noted that the remaining thirty-three bomber losses were spread evenly across nineteen Bomb Groups. Six Bomb Groups flew the mission without suffering a single loss.[41]

Of the US personnel engaged in the raid, 701 men failed to return immediately or at all. Of these, 229 were killed or missing and 411 were taken prisoner. Thirteen men came down in Holland, made contact with the resistance and evaded capture. Eight men were picked up from the North Sea by the RAF rescue service. Finally, the forty men aboard the four planes that landed in Sweden were all repatriated during the next few months.[42]

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That day the Luftwaffe flew 528 fighter sorties, of which 69 probably made contact with the raiders.[43] Sixty-two German fighters, 16 per cent of those that made contact, were destroyed and thirteen damaged. The twin-engined fighter units took the heaviest losses. Nachtjagdgeschwader 5 lost ten of the fourteen Messerschmitt 110 night fighters it sent up. Zerstörergeschwader 26 lost eleven of its eighteen Messerschmitt 110 and Me 410 bomber-destroyers. Altogether the Luftwaffe lost forty-four aircrew killed, including two leading aces. A further twenty-three aircrewmen were wounded.[44]

As an attempt to curtail production at the three primary targets in Berlin, the 6 March attack was a failure. None of those objectives was hit effectively. Only the Genshagen aero engine plant came under attack at all, from a quarter of the force assigned to it, and there the bombing was scattered and ineffectual.[45]

From other viewpoints the attack on Berlin was a resounding success, however. It demonstrated that from now on there was no target in Germany, no matter how far it lay from England or how strong its defences, immune from daylight bomber attack accompanied by a powerful fighter escort.

The 8th Air Force was quick to drive home that lesson. Two days later, on 8 March, it sent 539 bombers to Berlin. It did so yet again on the 9th (490 bombers) and the 22nd (657 bombers). And on those occasions the weather did not shield the German capital. Altogether, during March 1944, the US 8th and 9th Air Forces in England, and the 15th Air Force in Italy, mounted eighteen large scale incursions to attack targets in German-held territory at a cost of just over four hundred bombers and fighters.[46] Yet, thanks to the well-resourced US supply and aircrew training organisations, these losses were immediately made good.

During the same period Luftwaffe units defending the homeland lost 356 fighters destroyed and 163 damaged.[47] With difficulty, those could be replaced also. The loss of 219 aircrew killed and missing, and 103 wounded,[48] almost all of them pilots, was a quite different matter. The Luftwaffe flying training organisation was short of aircraft, flying instructors and fuel. Even by sacrificing quality for quantity, it was quite unable to replace losses on that scale.[49]

Early in May Generalmajor Adolf Galland, the Inspector of Fighters, was forced to write, in a grim report to the Reich Air Ministry:

> "Between [the beginning of] January and [the end of] April 1944 our day fighter units lost over 1,000 pilots. They included our best *Staffel*, *Gruppe* and *Geschwader* commanders. Each incursion of the enemy is costing us some fifty aircrew. The time has come when our [force] is in sight to collapse."[50]

When Allied troops stormed ashore in Normandy on D-Day, 6 June 1944, the Luftwaffe fighter arm was a spent force that was quite unable to intervene effectively. The air supremacy over France, necessary to secure the invasion, had been won during the hard-fought campaign of attrition over Germany itself during the preceding five months.

Taken from "Target Berlin, Mission 250, 6 March 1944", by Jeffrey Ethell and Alfred Price, published by Arms and Armour Press, London, 1981.

NOTES

1. Headquarters 8th Air Force, Field Order Operation No 250, 6 March 1944.
2. VIIIth Fighter Command Narrative of Operations, 6 March 1944.
3. Ibid.
4. Ibid.
5. Times are given in British Summer Time, in use by the USAAF in Britain. This coincided with the Middle European Time in use in Germany and in the Luftwaffe.
6. 8th Air Force Narrative of Operations, 6 March 1944.
7. Air Ministry ACAS(I) "The Rise and Fall of the German Air Force", London, 1948, p 295.
8. Einsatzbereitschaft der deutschen Jagdverbaende, 5. 3.44, Freiburg document RL2/1704; also Genst.Gen.Qu.6 Abt, Stand der Einzatsberitschaft am 29.2.44, Freiburg document RLIII/729.
9. Freiburg document Kart 44/1632-1633 gives the times of take-off, number and type of planes and airfields of each air defence units taking part in the action on 6 March 1944.
10. VIIIth Fighter Command Narrative, op cit.
11. 1st Bombardment Division, Report of Operations, 6 March 1944.
12. Ibid.
13. Personal Combat Report Lt Johnson, 56th Fighter Group, 6 March 1944.
14. Interview Anton Hackle.
15. Interview Friedrich Ungar.
16. Interview Van Pinner.
17. 100th Bombardment Group, Narrative of Operations, 6 March 1944.
18. Interview John Harrison.
19. Transcript of day's events written by Lowell Watts, made available to writer.
20. Interviews Hub Zemke and Wolfgang Kretchmer.
21. Ibid.
22. Freiburg document Kart 44/1632- 1633, op cit.
23. VIIIth Fighter Command Narrative, op cit.
24. Personal Combat Report, Lieutenant Nicholas Megura, 4th Fighter Group, 6 March 1944.
25. Narrative of Operations 457th Bomb Group, 6 March 1944.
26. Interview Hans Iffland.
27. Correspondence Goetz Bergander.
28. Correspondence, Ed Curry.
29. 8th Air Force Narrative, op cit.
30. Watts transcript.
31. Kriegstagebuch NJG 5, 6 March 1944.
32. Obermaier, Ernst, "Die Ritterkreuztraeger der Luftwaffe", Verlag Dieter Hoffmann, Mainz, 1966, p 165.
33. Watts Transcript.
34. Ibid.
35. Ibid.
36. Obermaier, p 121.
37. VIIIth Bomber Command Narrative, op cit.
38. Missing Aircrew Reports.
39. VIIIth Fighter Command Narrative, op cit.
40. Missing Air Crew Reports.
41. Operational Research Section, Headquarters Eighth Air Force, Combat Damage Report, 6 March 1944.
42. Missing Air Crew Reports.
43. Freiburg document Kart 44/1632- 1633, op cit.
44. Luftwaffe casualty figures supplied by the Deutsche Dienstelle, Berlin.
45. VIIIth Bomber Command Narrative, op cit.
46. Freeman, Roger "Mighty Eighth War Diary", Jane's, London, 1981, p 189 et seq; also Rust, Kenn, "The 9th Air Force in World War II", Aero Publishers, Fallbrook, 1967, p 60 et seq; also Rust, Kenn, "Fifteenth Air Force Story", Sunshine House, Terre Haute, 1976, p 16).
47. Gruppe I (IC) General der Jagdflieger "Grosseinfluege in das Reichgebiet (Tag) Januar 1944 – Juni 1944", copy of report in possession of the author.
48. Ibid.
49. "Rise and Fall", op cit, p 314 et seq.
50. Quoted in Bekker, Cajus, "The Luftwaffe War Diaries", Macdonald, London, 1967, p 351.