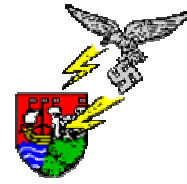




The Luftwaffe over the Bristol area, 1940-44

John Penny



Even before the outbreak of war the Luftwaffe had started the process of intelligence gathering, with clandestine photographic sorties being undertaken over the Bristol area by a special reconnaissance unit known as Gruppe Rowehl, after its commanding officer and father of German aerial photography, Oberstleutnant Theodor Rowehl. These flights carried out by Heinkel He 111's in civilian markings, on what were said to be route proving flights, operated mainly over local airfields and aircraft factories and the Parnall Aircraft plant at Yate is known to have been photographed in this way as late as August 29th 1939. Nevertheless, during the period known in Britain as the Phoney War RAF and Luftwaffe bombers had abstained from making deliberate attacks on each others towns and cities but this lull, which had existed in the West since war had been declared on September 3rd 1939, ended on May 10th 1940 when the German Army marched into the Low Countries. The following night British bombers commenced operations against German industrial installations, culminating on the night of May 15th with a raid by nearly 100 aircraft on the Ruhr area. This enraged Hitler who on May 24th stated "the Luftwaffe is authorised to attack the English homeland in the fullest manner, as soon as sufficient forces are available. This attack will be opened by an annihilating reprisal for English attacks on the Ruhr".

As the subjugation of France neared its completion the spheres of operation were defined for the two major Air Fleets facing Britain. Luftflotte 2, based in the Low Countries, was to attack targets on the eastern side of the country, while Luftflotte 3, whose aircraft were located west of the River Seine, was to concentrate its efforts on the west. The bomber units of Luftflotte 3 then moved their aircraft onto captured French airfields, which at last brought the Bristol area within range of their fully loaded bombers.

At first German air operations over Britain were carried out on a small scale, and these began with light probing raids by night, normally in Staffel strength, but sometimes carried out by as few as two aircraft on one target. These Störangriffe or harrasing attacks were, in the months that followed, directed against specific targets such as aircraft factories, dock installations, oil storage tanks, and specialised manufacturing plants.

The first such mission carried out against the West Country took place on the night of June 19/20th 1940 when the Bristol Aeroplane Company at Filton, as well as the docks at Avonmouth and Southampton, were targeted by about 7 He 111's of III/KG 27 flying from Merville airfield, near the Franco-Belgian border. Although the raiders claimed to have succesfully attacked the Filton plant the facts were somewhat different, and Portishead was as near as the German bombers came, 10 H.E.'s falling along the shore at about 02.15 hrs.

The following day German Radio proudly proclaimed, "Since May 10th enemy and chiefly British aeroplanes have uninterruptingly attacked open German towns. Last night again eight civilians fell victim to these attacks. The Luftwaffe has now begun reprisals against England. The revenge of the German Air Force for England's sly night piracy has begun. German forbearance is exhausted. The time for settlement has come".

Although the damage caused by these nocturnal raids was only slight, their nuisance value was considerable, with a few aircraft often causing sleepless nights over large areas of the country, as well as regularly disrupting production at factories engaged in essential war work. They were, in addition, a valuable way for the Kampfgruppen to learn the art of night navigation but, as a result of their premature use, the radio beams associated with the highly secret Knickebein bombing and navigation aid were quickly detected by the British enabling effective counter-measures to be put in hand.

Knickebein, named after a German folk tale magic crow who could see in the dark, was available to the entire bomber force, its signals being picked up on the 'blind' landing receivers fitted as standard to all German bombers. When used for navigational purposes only one beam was employed, but for radio

assisted bombing the system employed two transmitter stations which formed a beam intersection over the prescribed objective, allowing the attack to take place without reference to the ground below.

The next operation against the area was undertaken on the night of June 24th when five Heinkel He 111's of I/KG 27 were briefed to attack the Bristol Aeroplane Co. at Filton, which they again claimed to have successfully raided. The facts, however, were somewhat different, and at 00.17 hrs the first 1 kg I.B.'s fell in the St.Philip's area of Bristol, followed shortly after by the first H.E. which impacted at the corner of Lower Maudlin Street and Harford Street killing two people. Harassing attacks against local targets were now being undertaken almost every night, and during the course of a nuisance attack on the harbour installations at Bristol and Cardiff on June 30/31st, a transmission from the Kleve Knickebein transmitter was monitored for the first time over the West. On this occasion the beam was laid over Filton and St.Athan, near Cardiff, on a bearing of 84 degrees True.

In addition to the bombing missions, the Luftwaffe now embarked on a comprehensive photographic reconnaissance of Britain, the first sortie over Bristol being undertaken by an He 111 of the Aufklärungsgruppe Oberbefehlshaber der Luftwaffe, the successor to Gruppe Rowehl, on June 29th. The Aufkl.Gr.Ob.d.L. were joined in this work early the following month by part of the reconnaissance element of Luftflotte 3, the assorted Junkers Ju 88's, Dornier Do 17's and Messerschmitt Bf 110's of 3(F)/31, 4(F)/14, 3 & 4(F)/121 and 1,2 & 3(F)/123 subsequently flying regular photo-reconnaissance sorties over the area throughout the summer and autumn of 1940, sometimes dropping small bombs on targets of opportunity. Thereafter, however, as the British defences strengthened, they tended to restrict themselves to undertaking only immediate pre and post-raid coverage missions.

Meanwhile, on July 2nd the Luftwaffe had received instructions to gain and maintain air superiority over the English Channel, and this was quickly achieved. The victory, however, was tactical rather than strategic, because Britain's seaborne communications with the world were uninterrupted, the ships being loaded and discharged at ports on the western coast, difficult and dangerous for the Luftwaffe to reach in daylight. The harbour facilities such as those at Bristol, Avonmouth, Newport, Cardiff, Swansea, Liverpool, and Glasgow now assumed great importance to the British economy, and night harassing attacks against them, and the local aircraft industry, continued throughout the summer, the Bristol Docks complex and the Bristol Aeroplane Company at Filton each being targeted about 20 times between June 19th and the end of August.

In order to maintain the pressure on the defences it had also been ordered that during daylight hours precision pinpoint attacks were to be undertaken against specific important targets, usually associated with the local docks or aircraft industry. These surprise attacks were to be carried out by aircraft, either singly or in small groups, only with the aid of suitable cloud cover. The first such mission undertaken against a target in the Bristol area was that attempted on the Portishead Docks by three Ju 88's of II/KG 51 on the afternoon of July 3rd.

The following day a raid was carried out on the Bristol Aeroplane Company by a lone He 111 of III/KG 54, and although slight damage was caused to the roof of the Rodney Works the bomber was shot down by Spitfires of 92 Squadron on its return flight, crashing near Gillingham in Dorset, the first German aircraft to be lost on operations against the Bristol area.

From the fall of France until mid-July, Hitler had waited for word from London that the British were ready to negotiate a peace. He waited in vain and on July 16th issued 'Directive No. 16 on the Preparation of a Landing Operation against England'. The code name for the assault was to be Unternehmen Seelöwe or Operation Sealion, and preparations for it were to be completed in by early August.

The blockade of Britain was now tightened, and following the closure of much of the East Coast to British shipping, aerial minelaying operations were extended to cover the important shipping lanes and harbour entrances on the western side of the country. This included the Bristol Channel and Severn Estuary, which was first mined by the Heinkel 111's of I/KG 4, based at Soesterberg, in Holland, on the night of July 17th. In order to maintain the pressure on the defences, and to interrupt vital war production, these missions were usually flown on nights when no harassing attacks were taking place, thereby extending the amount of time an area remained under Red Alert, and on occasions, as with the reconnaissance aircraft, small bombs were carried, these often being aimed at searchlights or anti-aircraft gun sites.

The beginning of August saw the use of an unusual tactic by the Luftwaffe, when German bombers dropped aerial leaflets on various parts of Britain. These were reprints of Hitler's speech before the Reichstag on July 19th, his "Last Appeal to Reason". The first such sorties were carried out on the night of August 1st when Bristol and Southampton were the targets for the four Heinkel 111's of II/KG 55 flying from Chartres. Due, however, to a combination of bad navigation and poor visibility over the target area the majority of the leaflets intended for Bristol fell in South Wales and rural Somerset. That night also saw the Parnall Aircraft plant at Yate targeted for the first time, but again neither of the two He 111's of II/KG 55 succeeded in locating any of their objectives at Yate, Filton or Avonmouth.

As a prelude to the German invasion, the vital elimination of the RAF and its associated aircraft industry was scheduled to begin early in August, and the day for its launching was given the code name of Adler Tag , or Eagle Day. The plan required that the the fighter defences located to the south of a line between London and Gloucester be beaten down, a process that it was hoped would not require more than four days, while the total destruction of RAF Fighter Command should be achieved within four weeks, after which the invasion itself could begin.

Meanwhile, as part of the same plan, a day and night bombing offensive was to be directed against the British aircraft industry and to assist in this the He 111's engaged in mielaying were temporarily switched to conventional bombing. Adler Tag was provisionally fixed for August 10th, but due to poor weather conditions was postponed until the afternoon of August 13th, when the full might of the Luftwaffe was at last unleashed against Britain. In mid-August 484 aircraft were available to the bomber formations of Luftflotte 3, comprising the Ju 88's of KG 51, KG 54, LG 1 and KGr 806 in addition to the He 111's of KG 27, KG 55 and KGr 100. This force was further bolstered towards the end of the month by the arrival of the 33 Dornier Do 17's of KGr 606.

The following day German bombers ranged far and wide over the West of England and Wales, engaged in armed reconnaissance against RAF airfields and aircraft factories. During the afternoon, however, three Heinkel 111's of III/KG 27 were shot down over the Severn Estuary by Spitfires of 92 Squadron, with two coming to earth in Somerset. These, and other losses suffered that day proved to the Germans the inadvisability of sending unescorted bombers in daylight soties over those parts of England which were out of range of the single engined Messerschmitt Bf 109 fighters. The mammoth battles of mid-August, thereafter took place mainly over South East England.

Over the Bristol area, owing to bad weather, a period relative calm set in on the 19th, and this lasted until the evening of August 22nd. It was then that conditions improved enough to allow KGr 100, the only unit in the Luftwaffe to be equipped with the sophisticated X-Verfahren electronic navigation and bombing aid, to carry out their first precision attack under Luftflotte 3, the target being the Bristol Aeroplane Company at Filton.

X-Verfahren was a complex system employing a main and three cross beams which gave the pilot aural indications 50 km, 20 km and 5 km out from the target. It's chief disadvantage, however, was that it was only able to operate in conjunction with specially-equipped aircraft manned by crews trained in its use.

The operation against Filton involved 23 He 111's which were dispatched from their newly established base at Vannes in Brittany flying along an approach beam radiated from the X-Beam transmitter at Cherbourg. Over Bristol it was a clear moonlight night up to 02.00 hrs after which some cloud developed at 3000 metres. During the attack, which took place between 23.19 and 02.50 hrs, the 16.65 tonnes of H.E.'s and 576 I.B's caused considerable damage to the works, in particular at No.4 Factory and No.11 Test Bed, and resulted in four people being injured. All the German aircraft, however, returned safely to base.

As part of the Luftwaffe's modified strategy, which now involved the concentration of forces over South East England, by August 24th the majority of Luftflotte 3's fighters had been redeployed to operate over that area. The problem now existed of what to do with the surplus bomber force, which being stripped of all its effective fighter cover, was unable to carry out daylight attacks, and night operations were the obvious answer. Accordingly Luftflotte 3's bombers were ordered to attack the next most important targets in Britain, the vital West Coast ports of Liverpool and Bristol.

Operations started immediately and that night the He 111's of I, II and III/KG 27, together with the Ju 88's of I and III/LG 1, a total of 44 aircraft, were dispatched to attack the harbour installations at Bristol. 41 crews subsequently reported over the City claiming to have dropped 27.2 tonnes of H.E.'s, 13 tonnes of Oil Bombs and 5364 I.B.'s in a raid which lasted from 21.40 to 05.09 hrs. The attack, however, was not a success and although the weather over the Bristol area was fine, low cloud impeded visibility, with the result that the majority of the bombs fell fairly harmlessly in North Somerset.

Liverpool was now selected for the first really heavy raid of the war, and on the night of August 28th 160 aircraft were dispatched to attack the harbour installations, while a further 23 Do 17's of KGr 606 made for Bristol where they claimed to have dropped 9.5 tonnes of H.E.'s and 900 I.B.'s. Locally the weather steadily deteriorated throughout the night, with heavy cloud varying in intensity from 1000 to 3000 metres, and although the German crews claimed to have successfully attacked Bristol through the haze, few bombs fell anywhere near the City.

During the first week of September the bombers of Luftflotte 3 continued to attack Liverpool, with Bristol, including Avonmouth and Portishead, being targeted by 31 aircraft drawn from I,II, and III/KG 51 and I and III/KG 55 on the night of September 1st. Over the Bristol area the weather was fine, with good visibility up to about 23.00 hrs, after which severe ground mist arose, particularly in low lying ground. The attack itself took place between 20.15 and 03.30 hrs, with the Germans claiming to have dropped 22.9 tonnes of H.E.'s and 9 tonnes of Oil Bombs, but due to ground haze the effect was not seen. Not surprisingly the raid failed to cause any serious damage, with bombs being scattered from Avonmouth, across Stoke Bishop and the City Centre to Redfield. Bristol's casualties, however, amounted to 9 killed and 14 injured.

The raiders returned on the night of the 3rd when 21 He 111's from Stab, I, and III/KG 55 attempted a raid on the docks complex at Avonmouth, attacking between 21.45 and 01.22 hrs with 13.7 tonnes of H.E.'s and 7.75 tonnes of Oil Bombs. Although it was a clear starlit night with no moon, giving perfect visibility over Bristol, only minor damage was caused at Avonmouth, the raid having in fact spread itself along the North Somerset coast, with four people being killed and five injured at Portishead.

The last of the series of attacks took place the following night when 47 aircraft of I/KG 27, II/LG 1, I, II, and III/KG 51, along with I and II/KG 55 reported over Bristol and one over Avonmouth between 21.20 and 04.47 hrs, claiming to have dropped 45.05 tonnes of H.E.'s and 9.25 tonnes of Oil Bombs. Locally the sky was perfectly clear until the early hours of the morning when a ground mist arose which was particularly heavy in certain localities. On this occasion the majority of damage occurred in the Clifton, Redland, St.Anne's and Knowle areas of the City, while at the Bristol Aeroplane Company's premises at Filton an Oil Bomb caused a fire in No.2 Shop, which resulted in a request for the Bristol Fire Brigade to attend. Total casualties amounted to 4 killed and 6 injured.

A feature of these attacks on Bristol in early September was the complete reliance upon Oil Bombs for fire raising, with a total of 105 of the 250 kg weapons being employed during the three nights. The raids on the West Coast harbours were the heaviest yet experienced in Britain, and although Luftwaffe losses were minimal, no aircraft at all being lost against Bristol, the result were not particularly good, the bombing lacking the concentration required to cause any real disruption.

Meanwhile bombs had fallen on Central London for the first time during the night of August 24th, when several aircraft attacking Thameshaven inadvertently dropped their load too far west. In Britain this was seen as an extension of the indiscriminate bombing already experienced in the provinces for, regardless of intent, this was the effect of most German night raids. The following night, on Churchill's instructions, Berlin was attacked by the RAF, and although the British attempt at retaliation was weak and ineffective, it infuriated Hitler, resulting in London superseding RAF Fighter Command and its supply organisation as the primary target of the Luftwaffe.

Reichsmarschall Hermann Göring assumed direct command of the air offensive against Britain on September 7th, and that afternoon the Luftwaffe flew 372 bomber sorties against targets in East London starting large fires and causing considerable damage. This was the beginning of a series of raids that was to last for 65 days, and initially many of Luftflotte 3's aircraft, previously available to carry out attacks on the Bristol area, were ordered to re-direct their efforts to the Capital.

September also marked the start of a systematic series of daylight pinpoint raids carried out by a small force of twin-engined Messerschmitt Bf 110 fighter-bombers of Epr Gr 210, flying with long range Bf 110 fighter escort, on some of the most important British aircraft factories. The attack series opened with a raid on the Vickers plant at Weybridge on September 4th, shortly after which Epr Gr 210 and the long-range fighters of ZG 26, about 90 aircraft in all, were temporarily transferred to Luftflotte 3. The first operation under their new command was carried out against the Supermarine factory at Woolston, near Southampton, on September 10th, and it was not to be long before they were operating over the Bristol area.

Also on that day Göring ordered that if the weather situation prevented large scale operations against London, then surprise daylight attacks by individual bomber aircraft were also to be made on targets associated with the British aircraft industry. These were to be undertaken by crews specially selected for their skill and experience, and were only to be flown in low cloud and often appalling conditions in an attempt to prevent interception by RAF fighters.

These missions became known to the Luftwaffe crews as Pirateneinsätze or Pirate Attacks, and the first such operation carried out against a target in the Bristol area was the attempt, by a lone He 111 of I/KG 55, on the Bristol Aeroplane Company at Filton on September 16th.

It now seemed unlikely that full air superiority would now be achieved by the Luftwaffe before the onset of worse weather, and so on September 17th Hitler ordered the indefinite postponement of the invasion. Two days later, as a result of this change in strategy instructions were issued to increase the attacks against the British aircraft industry, both by night and day, by reducing the size of the formations engaged in raids on London.

Accordingly the bomber force of Luftflotte 3 was once again assigned the most important targets on the western side of Britain, and as part of a new strategy September 25th saw the start of a planned series of large scale daylight attacks, in Geschwader strength with long range fighter cover, on the aircraft industry in the West Country.

The target that morning was the Bristol Aeroplane Company at Filton, and the weather was perfect for bombing, with banks of thick cloud broken by patches of clear blue sky. As a result the works was successfully attacked at about 11.45 hrs by 58 Heinkel He 111's of KG 55, escorted by 52 Bf 110's of ZG 26.

The raiders were not intercepted by RAF fighters until they had left the target area, but the local anti-aircraft gunners scored their first success, an He 111 of II/KG 55 which was brought down at Failand during its run in to the target. A total of 6 German aircraft failed to return, which resulted in 8 crewmen being killed and 10 made prisoner, including 5 injured. In addition a further 2 aircraft crashed on return to France, adding 2 more injured to the casualty list.

Serious damage had indeed been caused at the Rodney Works, while here and at the Flight Shed and East Engine Works, the workers shelters were hit by a stick of bombs, causing many casualties. The attack which only lasted some 45 seconds also destroyed eight newly built aircraft, including two precious Beaufighter prototypes, and production was temporarily halted. Over Filton and surrounding districts 81.5 tonnes of H.E.'s and 6 tonnes of Oil Bombs had been dropped, which tragically resulted in the death of 132 people, of which 91 were Company employees, while a further 315 were injured.

The crew reports, and photographs taken by KG 55 during the attack, together with a reconnaissance mission flown over Filton later that day by a lone Bf 110 of 4(F)/14 proved to the Germans that the raid had been a great success. Accordingly the Luftwaffe's own magazine, Der Adler, soon after proudly proclaimed "this factory will not produce many more aircraft", while Major Friedrich Kless, the attack leader and Gruppenkommandeur of II/KG 55, was awarded the Ritterkruz on October 14th.

September 27th saw the return of German aircraft in daylight over Bristol, when 10 Bf 110's of Epr Gr 210 escorted by 42 long-range fighters undertook an unsuccessful pin-point attack on the Parnall Aircraft works at Yate. The weather during the morning was fair, with patches of cloud, and for the citizens of Bristol this offered the unique opportunity to witness a classic 'dog-fight' over the City. During this action two escorting Bf 110's of I/ZG 26 were shot down by the Hurricanes of 504 Squadron, which had only arrived at Filton the previous day. One of the Messerschmitts disintegrated over the Stapleton Institution at Fishponds, and was

the only enemy aircraft to crash within the Bristol boundary during the Second World War, while the other came down at Haydon, near Radstock.

During the raid Epr Gr 210 had lost about a third of its aircraft and a number of senior officers, including the Gruppenkommandeur, Hptm. Martin Lutz, and the Staffelfkapitan of 2 Staffel, Oblt. Willhelm Rössiger, both of whom were posthumously awarded the Ritterkreuz on October 1st. One officer who took part in the raid and did survive the devastating attack by RAF fighters, was Hptm. Wilhelm Makrocki the Gruppenkokommandeur of I/ZG 26, and he received his Ritterkreuz on October 6th.

A total of 10 German aircraft infact failed to return which resulted in the death of 14 crewmen, with 6 others being taken prisoner, 5 of them injured. The Luftwaffe obviously could not sustain the terrible losses of September 27th, and thus was brought to an abrupt end this type of fighter-bomber attack on West Country targets.

The large scale daylight bomber attacks, however, continued until October 7th when 25 Ju 88's escorted by 50 Bf 110 long range fighters, mounted a daylight attack on the Westland factory at Yeovil in which nine aircraft were shot down, seven of them Bf 110's, which were proving no match for the RAF's single engined Hurricanes and Spitfires. With such losses being suffered the time was now quickly approaching when any attempt at large scale daylight raiding would have to be abandoned, and on the 19th the poor weather gave Göring the excuse he needed to terminated these attacks.

During October London continued to be the principle target for the long range bombers, being raided every night. However with the planned invasion of Britain now shelved the Luftwaffe High Command ordered more bombing effort to be put into night harassing attacks on the harbour installations at Bristol, Liverpool and Glasgow, with the industrial centres of Birmingham and Coventry as alternative targets, while still maintaining the pressure on the Capital. As a result I Fliegerkorps was transferred to Luftflotte 3 adding to its inventory the He 111's of KG 1 and KG 26 as well as the Ju 88's of KG 76 and KG 77, although, a number of these units were to remain non-operational for some time.

Luftflotte 3 was also to continue pin-point Pirate daylight attacks by single aircraft against important centres of the British aircraft industry when weather permitted. The plants at Filton and Yate were once again prime targets, and operations commenced on October 6th when a lone He 111 of II/KG 55 attempted an afternoon raid on Yate. The Parnall Plant, however, was not attacked as the essential cloud cover started to break up, forcing the crew to bomb Bournemouth as an alternative.

These missions were also interspaced with more conventional operations by single night bombers, with Filton being targeted twice, and Yate once in unsuccessful attacks carried out by II and III/KG 55 between the 10th and 15th of October.

The daytime Pirate attacks had also resumed on the 15th, when Oblt. Speck von Sternburg of III/KG 55 made an abortive attempt against Filton, to be followed by three more unsuccessful efforts later in the month by the same crew. On the 19th the mission was again aborted, on the 24th the bombs fell at Yatton, and on the 31st of October the Royal Ordnance Factory at Glascoed in South Wales was bombed, being mistaken for Filton! For this attack the crew received a mention in the High Command of the Armed Forces Communique issued on November 2nd, in which it was stated that they had destroyed a factory near Bristol.

The first minelaying campaign to block the approaches to Bristol, Avonmouth and the South Wales ports had ended with the opening of the Adler offensive on August 13th, but in late October, with the abandonment of the planned invasion and a switch to a policy of blockade, it was resumed by the He 111's of KGr 126 flying from Nantes in Brittany. This unit, re-designated I/KG 28 in December 1940, was to continued this work on and off until July 1941, and during the one year period that aircraft were mining in and around the Severn Estuary a total of 10 British vessels were sunk, while a further 9 were damaged.

Meanwhile the Luftwaffe's attempt at battering London to produce a British surrender was not proving at all successful, as the the bombing was too scattered over the great area of the metropolis to produce any large scale destruction, or collapse of civilian morale. As a result the attacks were now to be directed more against Britain's manufacturing base, followed by a concentrated assault on the ports as part of the policy of blockade, which was also to be integrated with an all out submarine war at sea.

Accordingly instructions were issued on November 8th ordering preparations to be made for attacks on Coventry, Birmingham, and Wolverhampton, to be lead by the X-Verfahren equipped He 111's of KGr 100. The first attack of the series, that against Coventry, took place on the night of November 14th, and was carried out by 449 long-range bombers. On November 21st the Luftwaffe High Command issued targeting instructions ordering Luftflotte 3 to attack the larger harbours in their operational area, starting with a raid on Southampton on the night of the 23rd.

During these operations the Germans considered that any lack of training in night navigation and bomb aiming would be more than compensated by the employment of their radio bombing beams. The premature use over England from June onwards had, however, compromised the secrecy of Knickebein, the only system available to the whole bomber force, and enabled the British to build jammers to counter it. These were to prove very successful and the Luftwaffe was soon deprived of a simple and efficient bombing aid. Sadly for the inhabitants of many British cities efforts were much less effective against X-Verfahren , and the Germans' latest development Y-Verfahren, which was about to make its operational debut over the area.

Y-Verfahren employed a highly complex single directional radio beam to provide track guidance to the target, while associated with this was a range measuring facility. Since it required only one ground transmitting station, and left minimum latitude for human error, Y-Verfahren was technically the most advanced of the German systems. The one serious disadvantage, however, was that unlike Knickebein and X-Verfahren, only one aircraft at a time could use the system because of the communications and other signals involved, and consequently an interval of five to ten minutes usually separated each attacking aircraft.

The two specialist units, KGr 100 equipped with X-Verfahren, and III/KG 26 operating Y-Verfahren , became collectively known as Beleuchtergruppen or Firelighters serving as pathfinders for the main bomber force. Their aircraft were employed to start fires during the early stages of an attack, which helped to guide the normal bomber units to the target area.

They were assisted by a third unit II/KG 55, which although not officially recognised as a Beleuchtergruppe, had considerable operational experience and had displayed particular skill at finding targets at night. It was this unit, employing standard navigational techniques, that dropped parachute marker flares and very high calibre bombs at the commencement of major attacks on the West Country during the winter of 1940/41.

The H.E.'s carried externally on their aircraft were used not only to create fires, but also in an attempt to damage the water mains in the target area and so hamper the fire-fighters activities. In Bristol these 1800, 1700 and 1400 kg weapons were often mistaken for Land Mines, few of which were in fact ever deployed against the City.

Because of the weak British defences concentration of effort in time and place was not considered necessary, and so the attacking aircraft operated singly over the target, at about four minute intervals. The various Gruppen involved were also ordered to attack at widely spaced times, to cause the maximum disruption, not only to the area actually under attack, but also to the country as a whole, by placing much of it under a Red Alert. As a result the attacks could last from dusk to dawn, although on occasion poor weather on the Continent necessitated operations to cease before midnight.

The orders for the night of November 24th were for the first major attack on Bruder, the German code name for Bristol, but as there had been a good deal of fog over Northern France earlier in the day, and a chance that it might return, it was decided operations should be completed by midnight. A total of 148 aircraft were ordered to the City, 135 of which claimed to have attacked between 18.30 and 23.00 hrs with 156.25 tonnes of H.E.'s, 4.75 tonnes of Oil Bombs and 12,500 I.B.'s.

The Concentration Point was centered on the harbour and industrial plant on both sides of the City Docks, with the intention of "eliminating Bristol as an importing port supplying much of the Midlands and South of England". The aircraft involved in this operation were drawn from I/KG 1, III/KG 26, LG 1, I and III/KG 27, KGr 100, KGr 606, I, II, and III/KG 51, Stab, I, II, and III/KG 55.

Late in the afternoon the RAF's Radio Monitoring Service reported that there were slight indications that X-Beams were aligned over Bristol, but KGr 100 subsequently claimed to have bombed only by Dead

Reckoning and Knickebein. III/KG 26, however, attacked using Y-Verfahren, and the Cherbourg transmitter was monitored on 45.7 mc/s. In addition the Cherbourg and Dieppe Knickebein stations laid beams over the City during the evening.

The wind in the target area was moderate to gentle WSW, and parachute flares were successfully dropped by II/KG 55 at the commencement of the raid. Initially, however, because of broken high cloud bombing was undertaken mostly by radio and Dead Reckoning methods, but as the attack progressed the sky cleared and it became possible to bomb visually, guided by the fires which could be seen from some 250 kilometers. In general the line of run-up to the target was from south to north, but later in the evening large cumulus clouds developed over the City, as a result of numerous fires, and some raiders were tracked flying round Bristol and approaching from the north.

At about 19.13 hrs the small gasholder at Marksbury Road, Bedminster had exploded and the high jet of flame this produced was noted by both KGr 100 and II/KG 55, although the latter assumed it to be a gasometer at target GB 52 52, the St.Philip's Gasworks. The general impression given by participating airmen was that results were similar to those achieved at Birmingham and Coventry. As a distributing centre and important railway junction Bristol, it was announced, had been wiped out. "Of all the ports on the West Coast, Bristol WAS the nearest and best situated for the Midlands, London and the South Coast". For the Germans it had been a very successful night and only 2 aircraft failed to return, as a result of which 4 crewmen were killed and a further 4 made prisoner, including one who was injured.

The attack, however, resulted in the death of 200 Bristolians, and injuries to a further 689. It had concentrated on the central area, with further damage occurring in Clifton, Temple, Knowle, Barton Hill and Eastville, but greatest destruction took place in the heart of the City from Broad Quay to Old Market, while St.James' Barton and St.Philip's suffered severely. Exceedingly large calibre bombs were reported as having fallen at Eastville, Speedwell, Temple and Totterdown, while for the greater part of the night the City was blazing furiously and many well known buildings were totally destroyed and others gravely damaged.

Extensive fog on the Continent ruled out any more large scale raids for the next few days, but with good weather still prevailing at Vannes airfield, an X-Verfahren assisted attack was mounted by KGr 100 against the docks at Avonmouth on the night of November 25th. Nine aircraft participated, but with thick cloud over the target area only one serious incident resulted, this being a fire at the Shell Canning Factory at the Royal Edward Dock.

The next night, with fog still widespread on the Continent KGr 100 returned to Avonmouth with 7 aircraft, all operating with X-Verfahren, again against targets in the Royal Edward Dock. On this occasion there was thick cloud at 1200 metres with only occasional clear intervals, and no significant damage was caused, the majority of the bombs falling harmlessly on open ground in the Avonmouth and Shirehampton areas.

Bristol was the target for a second major raid on the night of December 2nd, but once again the operation was restricted to the first half of the night to allow the bombers to return to base before the onset of widespread fog on the Continent. Participating aircraft were drawn from 1 and III/KG 1, II/KG 77, II and III/LG 1, 1 and III/KG 27, KGr 100, KGr 606, I and II/KG 54, KGr 806, 1 and II/KG 55.

The attack, which the Germans claimed was to complete the work of destroying the industrial and port installations at Bristol, was carried out by 121 aircraft between 18.20 and 22.30 hrs, with 120.9 tonnes of H.E.'s, a tonne of Oil Bombs and 22,140 I.B.'s. Prior to the raid the RAF had correctly identified X- Beams laid over the City, and just before nightfall the Knickebein transmitter at Dieppe, previously deployed over London, suddenly swung round and to be re-aligned over Bristol.

In the target area at the start of the raid there was nearly 10/10ths cloud cover in two layers, the lower lying between 300 and 1000 metres, and the upper between 2500 and 3000 metres. Underneath, surface visibility was bad and down to 1000 metres, with the result that initial bombing was by Knickebein and Dead Reckoning methods. The general line of approach by the raiders was from the south, though a few aircraft were tracked in from the north-west.

Parachute flares and I.B.'s were dropped at the start of the raid by II/KG 55, but due to the exceptionally overcast conditions many initially fell over Clifton and the northern parts of the town. However, immediately

after this opening attack Oblt. Otto-Bernard Harms, Staffelkapitan of 4/KG 55, dived through both layers of cloud to an altitude of 300 metres to check on the positioning of the Gruppe's target marking fires. Despite the poor visibility he confirmed the accuracy which his Gruppe had achieved using Knickebein and Dead Reckoning, aided by the flares. This was undertaken with complete disregard to the Balloon Barrage and strong Anti-Aircraft defences.

Later, isolated breaks occurred in the cloud cover enabling some visual bombing to be carried out, but the returning crews were unable to provide an accurate assessment of the success of the operation. Again the attack force's losses had been minimal and on this occasion amounted to just 4 men killed as the result of a single aircraft crashing on take-off. Unknown to the Germans the damage caused to Bristol was of a more widespread nature than on November 24th, but the main concentration was astride a line running about due east and west through Redfield, St.Paul's, Cotham and Redland. As result 156 people were killed and a further 270 injured.

Bristol's third large raid within a fortnight took place on the night of December 6th, when 67 crews reported bombing the City with 77.5 tonnes of H.E.'s, half a tonne of Oil Bombs and 5688 I.B.'s, between 19.20 and 22.45 hrs. This was smaller scale effort than the previous two attacks on Bristol as gale force west to north-west winds on the Continent had restricted the activity of the bomber force, and once again the attack was compressed in time.

The RAF Monitoring Service detected X-Beams which came on during the afternoon, but these were switched off before the evening's activity commenced due to KGr 100 being forced to cancel operations. However, Knickebein transmissions monitored during the early evening gave the British authorities an indication that Bristol was the intended target. The attack force on this occasion comprised I and III/KG 77, I and II/LG 1, II/KG 27, I and II/KG 51, I, II and III/KG 55.

As a result of the non-appearance of KGr 100 the raid undertaken without precision radio assisted pathfinders, and was opened by II/KG 55 dropping marker flares, a number of which were carried away to the east in the strong westerly wind. The direction from which the attack was made was quite different to that used in previous operations, the raiders following a line from Shaftesbury to Bath, and when east of Bristol turning due west to attack the City from east to west. In the target area the night was extremely cold, but fine and moonlit, with 1/10th cloud cover at about 750 metres. The good visibility with only a small amount of broken cloud therefore permitted visual bombing, and the operation was considered to have been carried out successfully.

Once again losses were acceptable, and although no aircraft failed to return 3 crashed on the Continent, resulting in the death of 6 crewmen with a further 6 being injured. Sadly in Bristol it was a different story, and during the course of this attack 100 people were killed and 188 injured, with much damage being caused by fire. The areas mainly affected that night being in the vicinity of St.Philip's Marsh, Temple Meads, the City Centre and Cotham.

At the beginning of January 1941 the forces of Luftflotte 3 deployed against the West Country received a boost with the decision to employ the bomber units of Luftflotte 2 in joint operations over Bristol. Thus both II Fliegerkorps and the anti-shipping IX Fliegerkorps joined the attacks on the area, bringing with them the He 111's of KG 4, KG 28 and KG 53, the Ju 88's of KG 30, and the Do 17's of KG 2 and KG 3. In spite of this German operations during January were seriously hampered by the bitterly cold NE winds, freezing conditions and snow which covered much of Britain and the Continent.

For Bristol the New Year started with a combined attack by 178 aircraft, their task being to complete the destruction of the harbour installations, large mills, warehouses and cold stores in the City, in order to paralyse it as a large trading centre supplying Southern England. During this raid, which took place on the night of January 3rd, the Germans claimed to have targeted Bristol with 152 tonnes of H.E.'s, 2 tonnes of Oil Bombs and 53,568 I.B.'s, the town centre on both sides of the River Avon being the concentration point. The aircraft from Luftflotte 3 were drawn from I and III/KG 1, I and III/KG 77, I and III/KG 26, I/LG 1, I and II/KG 27, KGr 100, I and II/KG 54, Stab, I, II and III/KG 55, while elements of KG 30, KG 4, KG 3, KG 2 and KG 53 operated under Luftflotte 2.

Before the raid started RAF radio intercepts had indicated that an attack was to be mounted against Bristol. It was known that navigational beams were to be in operation from 17.00 hrs, with the first raid expected to reach Bristol at 18.30 hrs on a beam transmitted by the Cherbourg Knickebein on a bearing of 335 degrees. In addition X-Verfahren was operating, while II/KG 55 were as usual to drop parachute flares early in the operation.

The attack was opened by Luftflotte 3 which operated 111 aircraft over Bristol between 18.35 and 00.38 hrs, with a second wave of 67 bombers from Luftflotte 2 attacking between 01.40 and 05.51 hrs. Many aircraft appeared to meander about after crossing the British Coast and some early arrivals circled the Bristol area before bombing. These were awaiting the arrival of the pathfinder aircraft from KGr 100 which were late departing Vannes because of weather conditions. III/KG 26 were even later arriving over the target and on this occasion bombed visually and not by means of their usual Y-Verfahren.

It was a bitterly cold night with a clear starlit sky and at the start of the raid the City itself with a covering of snow and the course of the River Avon, were both clearly visible in the moonlight. The amount of cloud cover increased as the night progressed, but breaks still permitted a degree of visual bombing, although recourse to Knickebein and Dead Reckoning bombing was at times necessary until the fires had developed sufficiently to be used as aiming points. In spite of clouds closing over the target crews operating after midnight were able to observe the fires burning at Bristol from a distance of 150 to 170 kilometres. For the Germans it was another successful night with only one aircraft crash-landing on return, and no crewmen killed or injured.

Once again Bristol suffered badly with casualty figures of 149 dead, and 351 injured. The principle areas affected that night were Bedminster, St.Philip's, Hotwells and Cotham, with both Temple Meads Station and the City Docks sustaining a certain amount of damage.

A follow-up attack by 103 aircraft was also attempted against Avonmouth on the night of January 4th, the concentration point being centred on the docks and industrial installations situated in the west and north west part of the town. The total bomb load dropped between 18.35 and 06.15 hrs was reported as 106.5 tonnes of H.E.'s, 1.5 tonnes of Oil Bombs and 27,722 I.B.'s. Participating units of Luftflotte 3 were II and III/KG 77, I/KG 26, I and II/KG 27, KGr 100, I, II and III/KG 51, I and II/KG 54, while from Luftflotte 2 came elements of KG 30, KG 4, KG 3, KG 2 and KG 53.

The RAF Monitoring Service were unable to give any early warning of an impending attack on Bristol and it was not until 18.45 hrs that the Klevé Knickebein was detected having laid a beam over the Thames Estuary area. In addition KGr 100 were discovered operating with X-Verfahren .

It was another very cold night, but the weather at the start of the attack was moderately good with 8/10ths cloud at 1500 metres and a bright moon, so the first formations arriving over the target were, in a number of cases, able to bomb visually. However, as the attack progressed thick cloud cover developed after which bombing was principally by Dead Reckoning and Knickebein, or by using the previously kindled fires as aiming points. The thick clouds made it difficult to assess the overall results, and only after midnight were light flickering fires reported in the Avonmouth Dock area. Again only one aircraft crash-landed on return and no crew casualties resulted.

Unknown to the Germans, the raid had actually failed to develop at Avonmouth, and although a number of fires were caused in buildings of national importance, most had been extinguished by 22.00 hrs. The bombing had, by this time, dispersed along the Bristol Channel coast, past Clevedon where a soldier was killed and three people injured, to Weston super Mare where a sharp attack took place. In the Bristol area only two people were killed and five injured, but sadly at Weston 34 died and a further 85 received injuries as a result of the five H.E.'s and an estimated 3000 I.B.'s which fell on the town.

On January 13th the High Command of the German Armed Forces issued new instructions for the prosecution of the air war against Britain by night and day. The attacks still being carried out against the industrial cities of Britain were to be scaled down in favour of an all out night time assault on the most important importing harbours, the approaches to which were also being mined. However, key points of the air armaments and aircraft industry were still to be subjected, whenever possible, to Pirate attacks by single aircraft during daylight hours.

In accordance with these plans Avonmouth was singled out for another large scale attack on the night of January 16th. It was to be centred on the town and northern half of the dock area and its industrial installations. Additionally single aircraft were briefed to attack Parnall Aircraft at Yate and Gloster's at Brockworth. The raiders, all from Luftflotte 3, were drawn from III/KG 26, I/LG 1, I, II and III/KG 27, KGr 100, I, II and III/KG 51, I and II/KG 54, KGr 806, Stab, I, II and III/KG 55.

That night a total of 126 aircraft reported over Avonmouth, and 15 over Bristol between 19.30 and 05.08 hrs, claiming to have dropped 158.2 tonnes of H.E.'s and 54,864 I.B.'s. Both X and Y-Verfahren were in operation although an X-Beam signal failure and winds stronger than forecast made KGr 100's bombing uncertain. Flares were again dropped at the beginning of the attack, and also at 01.45 hrs when a second phase began.

The first formations over the target encountered 8/10ths cloud cover with thick haze which only started to break up after about 23.00 hrs. Shortly after a lone aircraft from III/KG 55 dived down to an altitude of 1200 metres and reported that there was a very large fire in the target area. As a result of the poor visibility at the beginning of the action bombing was mainly by Dead Reckoning and Knickebein. However, by 02.00 hrs the weather had improved sufficiently to allow visual bombing through breaks in the cloud, although by then dense smoke covered the town. Losses were again small with only 8 crewmen being killed in the 2 aircraft which failed to return

Early in the raid numerous I.B.'s were released over the dock area and a number of fires were started, but with the assistance of military personnel they were speedily extinguished, and damage to vital buildings was confined to small dimensions. A further shower of I.B.'s fell in the early hours of the 17th, but on this occasion the fires started quickly got out of control, and damage done to docks' property and industrial buildings in the area was considerable.

Unknown to the Luftwaffe they had in fact succeeded in causing such serious damage at Avonmouth that January 17th was the only day during the entire war, that, due to enemy action, the Docks were prevented from working normally. Casualties were, however, mercifully smaller than in previous large scale attacks, with only 18 killed and 109 injured in the whole of the Bristol area.

Impossible weather for much of February, with many of the grass airfields on the continent waterlogged, severely hampered Luftwaffe offensive operations and for the first time in many months no major attacks were carried out. The poor weather did, however, permit a number of Pirate raids on aircraft manufacturing plants to be undertaken by low flying aircraft taking advantage of the overcast conditions.

These sorties became a feature of operations towards the end of the month, and on the 22nd an He 111 of II/KG 27 attempted a raid on the Parnall Aircraft factory at Yate. It successfully penetrated the defences as far as the Severn Estuary, but as it neared Avonmouth, in drizzle beneath the low scud, it was hit by AA gunfire and crashing on the mud at Portbury became the second victim of Bristol's Heavy Anti-Aircraft guns.

II/KG 27, however, returned and on the afternoon of February 27th when a particularly successful raid was made on the Parnall plant, by a single He 111 commanded by Oblt. Hermann Lohmann. Weather conditions again favoured Pirate operations with much low cloud and occasional rain and drizzle in the target area. The attack was carried out at 14.36 hrs, from a height of only 30 metres, with seven 250 kg H.E.'s some fitted with delayed action fuzes. Lohmann later reported that he had come in from the north, with the bombs being distributed over the whole length of the target. Five hits were observed on a workshop and an explosion was seen in the northern part of the target area.

At Parnall's factory considerable damage had indeed been caused, and tragically 53 workers died, with a further 150 being injured, many of them victims of the delayed action bombs. The aircraft itself was lucky to escape for as it had been successfully engaged by the Yate defences, with 8 rounds of 40mm Bofors, and 40 rounds from Light Machine Guns being fired.

During March, as the weather improved and with the bomber units reinforced and partly re-equipped, it became possible to resume the offensive against the principle British ports, while in daylight the Pirate attacks continued against aircraft factories and other associated industrial installations.

On March 6th it was the turn of the the Bristol Aeroplane Company to be targeted by a lone He 111 of I/KG 27 commanded by Oblt. Hollinde. The bomber's arrival caused the Bristol sirens to sound just after 18.00 hrs on that gloomy evening and after machine gunning the outskirts of the city seven H.E.'s were aimed at the Filton works. The weapons, however, missed the factory completely but it was assumed that serious damage had been caused, and for this achievement the crew were given special mention in the High Command of the Armed Forces Communique issued the following day.

By contrast the Yate plant of Parnall Aircraft was again successfully attacked by Oblt. Lohmann on the afternoon of March 7th, when he engaged the target with another seven 250 kg bombs from a height of just 25 metres! Lohmann reported that five bombs had made hits on assembly shops, with the other two falling on accomodation blocks and outbuildings in the southern part of the factory complex. For their actions during this, and for their previous attack on February 27th, this crew were also given a special mention in the High Command of the Armed Forces Communique issued on March 9th.

Happily for Parnall's employees, on this occasion only three workers were killed and 20 injured. However, as a result of the additional damage caused during the raid production came to a complete standstill and the total dispersal of the factory was immediately ordered.

On the night of March 16th the harbour installations at Bristol and Avonmouth were again selected for attack, and 164 crews from the bomber units of Luftflotte 3 subsequently reported over the area, claiming to have dropped a total of 164.25 tonnes of H.E.'s and 33,840 I.B's between 20.35 and 03.25 hrs. To guide the pathfinders X-Beams were aligned over Avonmouth and Y-Beams over Bristol, while flares were also dropped at the commencement of the attack.

At Avonmouth the Concentration Point was a rectangle covering the port area adjacent warehouses and industrial works, while at Bristol it was centred on the Floating Harbour, down stream of the Bathurst Basin. The attack force for the raid was drawn from I and II/KG 1, III/KG 26, I and II/KG 77, Stab, I, II and III/KG 55, I, II and III/KG 27, KGr 100, I, II and III/KG 51, I/KG 54 and II/KG 76.

Over the target areas the German crews initially encountered thick cloud, with mist later, and consequently bombing was predominantly by Knickebein and Dead Reckoning. However, towards the close of the attack intermittent improvements in conditions enabled some crews to bomb visually, but many used searchlight activity as an indication that they were over the city, sometimes additionally aided by the glow of fires seen through cloud or mist. A large detonation followed by a tongue of flame some 1000 metres high was observed a little after midnight, and this the crews correctly assumed was the explosion of a gasometer, although they thought it to be at the St.Philip's Gas Works, rather than at its true location at Stapleton Road.

German casualties on this night were higher than in previous attempts against the Bristol area, but none of the aircraft had been brought down by the defences. In all 5 crashed in France killing 12 men and injuring a further 6, while the one aircraft which did come down in England did so as a result of engine failure. This resulted in a further 4 crewmen being taken prisoner.

That night bombs fell in many parts of Bristol, but the main attack was roughly east to west of a line from Stapleton Road Station, through the City Centre to Clifton Down Station. In addition to the City Centre, the areas most affected were Fishponds, Eastville, Whitehall, Easton, St.Paul's, Montpelier, Kingsdown, Cotham, Redland and Clifton. Of all Bristol's major air attacks this was perhaps the worst as due to the poor visibility over the target area the raid had drifted into mainly residential parts, a number of bombers being attracted by the few large fires which had developed. As a result the City's casualty figures were higher than at any time during the war, with 257 killed and 391 injured.

Unknown to the suffering Bristolians things in the area could have been a lot worse, for it had been intended that the bomber units of Luftflotte 2 should also participate in the attack, but fog over their bases in the Low Countries, had prevented them from operating.

The reinforced bomber force in the West was not, however, to maintain its new found strength for very long, the Luftwaffe High Command having issued orders on March 26th transferring of some 600 combat aircraft from France, Germany and the Mediterranean, to bases in Bulgaria and Rumania, to fly operations in support of the imminent invasion of Greece and Yugoslavia due to start on April 6th.

Although poor weather set in during the latter part of March, a slight improvement in conditions over some bomber bases in North West France late in the day had allowed a sharp raid to be carried out against local harbour installations on the night of the 29th by III/KG 1, II/KG 76, III/KG 26 and KGr 100.

The targets were South-East Bristol, with the concentration point between the east end of the Floating Harbour and the two Gasholders situated 2 kilometres east-north-eastwards, and Avonmouth where the harbour and industrial installations were the objectives. To guide the pathfinders both X and Y-Beams were aligned on Avonmouth, and III/KG 26 later reported that the Y-Verfahren signals were well received.

36 aircraft subsequently claimed to have dropped a total 33 tonnes of H.E.'s and 13,088 I.B.'s on Bristol and Avonmouth between 21.05 and 22.08 hrs. At Bristol only five crews bombed visually, the other 15 using Dead Reckoning and Knickebein because of the cloud and mist over the target. At Avonmouth fires were reported in the target area and these helped to guide following crews who also had some difficulty in locating the objective.

No German aircraft were lost and no incidents were reported in Bristol, but at Avonmouth a number of fires were started in the dock area, and three tanks belonging to the Anglo-American Oil Company burned furiously, the last not being extinguished until 16.30 hrs the following day. Casualty figures that night were low, with 6 people being killed and 17 injured.

Normal Luftwaffe operations finally re-started after nightfall on April 3rd, when taking advantage of the generally improved weather conditions, an attempt was made against the harbour and industrial installations at Avonmouth by some 76 aircraft of Luftflotte 3 drawn from III/KG 26, II and III/KG 1, II/KG 76, KGr 100, II/KG 27, I and II/KG 54 and KGr 806. Once again to guide the pathfinders, both X and Y-Beams were aligned over Avonmouth, and it was subsequently claimed that a total 79.8 tonnes of H.E.'s and 8938 I.B.'s were dropped over Bristol and Avonmouth, during the attack which lasted from 21.16 to 00.45 hrs.

At the beginning of the operation there was 7/10th's cloud cover which cleared to 2/10th's with a half moon between 22.00 and 23.00 hrs. Thereafter conditions deteriorated to 10/10th's cloud with rain by midnight. As a result only 49 aircraft actually reported over Avonmouth some crews bombing visually, but the majority using Dead Reckoning and Knickebein. The remaining 27 aircraft attacked, as an alternative, the Floating Harbour and industrial area of Bristol where the bombing was entirely by Dead Reckoning and radio methods due to the total cloud cover they encountered. German losses were again minimal, but the one aircraft lost was brought down by a Beaufighter of 604 Squadron based at Middle Wallop in Hampshire, and flown by the legendary Flight Lieutenant John "Cats Eyes" Cunningham. It crashed into the sea off the Isle of Wight with the loss of its 4 man crew.

During this raid the fire fighting services were so effective that although thousands of I.B.'s were dropped, particularly in the section of Bristol from St.Michael's Hill to Redland Green, no major fires developed. A little later, when the H.E. attack developed, it was on a line between the Horseshoe Bend and Filton, while in Avonmouth only a few scattered incidents were reported. That night in Bristol a total of 22 people lost their lives with a further 56 being injured.

The attack sequence continued, and the following night 85 aircraft drawn from I, II and III/KG 77, III/KG 26, II/KG 27, KGr 100, I and II/KG 54 and KGr 806 again targeted the harbour and industrial installations at Avonmouth, two raiding Bristol as an alternative. The operation against Avonmouth by the remaining 83 aircraft took place between 21.15 and 01.30 hrs with 80.4 tonnes of H.E.'s and 19,675 I.B.'s.

Just as on the previous night the pathfinder force of KGr 100 and III/KG 26 successfully operated with X and Y-Verfahren, although III/KG 26 were unlucky enough to have an aircraft shot down at Hewish, near Weston super Mare, another victim of a Beaufighter of 604 Squadron from Middle Wallop. This was the only aircraft to be lost that night and it resulted in the death of 2 of the crewmen, with the other 3 being taken prisoner.

It was initially a fine clear night with a half moon, although visibility did deteriorate slightly during the latter part of the operation. Not surprisingly the crews subsequently reported that the target area was visible for much of the attack, and at times was very clearly seen in the moonlight. As a result bombing was

predominantly visual and only a small proportion of crews found it necessary to use Dead Reckoning or Knickebein.

At the start of the operation the whole of Bristol was lit up by a large number of chandelier flares, 15 of which were counted in the air at one time, while H.E.'s and I.B.'s followed at regular intervals. However, the promptitude of the fire fighting parties and others once again helped to save the City from serious damage.

Avonmouth was principally affected, and to a lesser extent the Westbury and Whitchurch areas, but minimal damage was caused at Avonmouth Docks, many of the I.B.'s which fell in the vicinity burning out harmlessly on high ground in Shirehampton Park. The most serious incident that night occurred at the National Smelting Company, where production was seriously affected, particularly in the Fertilizer and Acid Works. Considering the scope of the raid and the number of H.E.'s dropped, casualties were small, with 3 dead and 21 injured.

The series of raids directed against the local harbour installations continued on the night of April 7th with a minor attempt against Bristol by 22 aircraft from KGr 100, I and II/KG 54, KGr 806, I, II and III/KG 55, nine of which subsequently attacked Avonmouth as an alternative. This operation was carried out in conjunction with large scale efforts against the Glasgow, Greenock and Liverpool areas.

In addition a further 11 aircraft from KGr 100, II and III/KG 1, I and III/KG 27 unable to locate their main targets also raided Bristol where nine people were injured, the most serious damage being reported in Horfield. A total of 29.2 tonnes of H.E.'s and some 6442 I.B.'s were reported dropped on Bristol and Avonmouth in this attack which lasted from 21.13 to 01.17 hrs. As it was overcast in the target area, with 10/10th's cloud at 1000 metres, the operation was carried out using only Knickebein and Dead Reckoning methods, and no German aircraft were lost during the operation.

The last of the major attacks on the Bristol area took place on the night of April 11th 1941, and is locally known as the Good Friday Raid, during which 15 aircraft from Luftflotte 2 and 138 from Luftflotte 3 reported dropping 193 tonnes of H.E.'s and 36,888 I.B.'s between 22.10 and 03.15 hrs. The designated targets were the harbour and industrial installations in South West and West Central Bristol over which Y-Beams were aligned, as well as Avonmouth and Portishead Docks, which was covered by X-Beams. Participating units from Luftflotte 3 were I, II and III/KG 27, KGr 100, II and III/KG 1, III/KG 26, I and II/KG 54, KGr 806, Stab, I, II and III/KG 55, while from Luftflotte 2 came I and II/KG 53.

In the target area the weather was generally fine with a full moon and a high layer of fleecy cloud. As a result, over Bristol, the bombing was carried out mainly with visual reference, however, from time to time thick cloud required the use of Dead Reckoning or other radio assisted methods. At 02.10 hrs the crews of I/KG 55 noted a large explosion followed by a flame rising 1500 metres into the sky, announcing the destruction of a gasometer at Canon's Marsh, the third to be lost at Bristol during the Blitz. The aircraft attacking Avonmouth also reported bombing visually, while at Portishead a considerable amount of smoke was encountered. The German attrition rate on night operations was now mounting and 5 bombers were lost, 3 which failed to return, including yet another shot down by the now Squadron Leader John Cunningham of 604 Squadron, and a further 2 which crashed in France. These losses resulted in the death of 17 crewmen, while a further 2 were injured.

In Bristol it was seen as a two phase attack, the first phase beginning shortly after 22.00 hrs when the majority of the incidents straddled a north and south line from Bristol Bridge to Horfield. The second phase, which commenced just after midnight, affected entirely different districts of the City, with St. Augustine's, Bedminster and Knowle, suffering badly, and to a lesser extent Avonmouth and Shirehampton. The total casualties in the Bristol area that night were 180 people killed and 382 injured.

Although it was not realised at the time, the main Blitz on Bristol had now ended, and although in early May German bombers attacked on a number of nights, it was only in relatively small numbers. These were aircraft which had selected the City as an alternative target, being unable to locate their main objectives in the Liverpool and Glasgow areas. The most serious of these raids took place on the night of May 7th, when as a result of 10/10th's cloud cover over Liverpool some 16 aircraft from II and III/KG 27, KGr 100, I, II and III/KG 55 attacked Bristol, causing much damage in the Knowle, Bedminster, Clifton and City areas, killing 20 people and injuring a further 84.

From mid-May onwards the Luftwaffe was preoccupied with the forthcoming invasion of Russia, but the basic plan still called for a continued assault on Britain's war economy, industrial capacity and importing docks, in order to camouflage the movement of German aircraft to the East. As part of this strategy the use of the minelaying units operating against England was reviewed, and by the end of the month instructions had been issued detailing their temporary deployment against selected land targets, where they were to assist the remaining bomber Gruppen by dropping Land Mines.

In a final effort on the night of May 30th 34 aircraft attacked Liverpool, while a further 15 (units not recorded) made for Bristol, where the crews claimed to have dropped 4 tonnes of H.E.'s and 12 Land Mines. As a result damage occurred in the Clifton, Westbury, Sea Mills and St.Anne's areas of Bristol where 12 people were killed and 29 injured, and although no Land Mines actually fell on the City that night, two came down at Kingston Seymour, including one which failed to explode.

According to German records very few other Land Mines were ever aimed at Bristol, but on the night of June 11th a lone He 111 of I/KG 28, the unit normally employed in sea mining around the West Country's coastline, dropped two on the Bedminster area killing 16 and injuring 77. This aircraft unable to locate its assigned target in the Birmingham area, had again selected Bristol as a suitable alternative.

With few German bombers left in France the raids on the West Country all but ceased, although KGr 100, employing X-Verfahren, continued to carry out small scale night attacks on local airfields and aircraft factories. The Bristol Aeroplane Company at Filton being their objective on the night of June 14th, while the Gloster Aircraft Company at Hucclecote was targeted on the 16th.

By mid-June 1941, however, the Air Battle for England as German historians refer to the period since the fall of France, had finally drawn to a close. The whole of Luftflotte 2, with the exception of IX Fliegerkorps, together with the majority of the bomber units of Luftflotte 3, had now completed their move East in readiness for the attack on Russia, which opened shortly before dawn on June 22nd.

During the period August 12th 1940 to June 26th 1941 Bristol had suffered badly at the hands of the Luftwaffe. According to German figures issued in 1944 it was the fourth most heavily bombed city in the country, with only London, Liverpool, and Birmingham receiving more attention, while Coventry, synonymous in Britain with widespread destruction, was in seventh place. It was claimed that 1237 tonnes of H.E.'s and Oil Bombs, plus 248 tonnes of I.B.'s had been aimed at the Bristol during the course of 10 significant attacks on the City, in which 50 or more tonnes of high explosives had been used.

Towards the end of July a bizarre incident took place locally concerning a Ju 88 of I/KG 30, which was flying back from an attack on Birkenhead Docks. This aircraft became the victim of electronic countermeasures directed by the RAF against German navigational beacons, resulting in the crew becoming hopelessly lost. Low on fuel and thinking they were over France, at 06.20 hrs on the morning of July 24th they successfully landed at RAF Broadfield Down, an airfield which was still under construction. So it was that a Ju 88 became the first aircraft to land on what is now the main runway of Bristol's Lulsgate Airport, and subsequently saw service with the RAF as EE205!

With the majority of German bombers now operating on the Eastern Front, by August 1941 only about 120 bomber and minelaying aircraft remained to continue to enforce the blockade of Britain. Nevertheless, the hope remained that Russia would be crushed before the end of the year, thereby releasing the Kampfgruppen for another winter campaign against Britain.

With so few aircraft available for operations over Britain very little activity was experienced over the Bristol area in the latter part of 1941, although minelaying around the coasts of Southern England re-started during September, with the transfer of the Ju 88's of III/KG 30 from the Balkans to Melun in France. The unit extended its operations to the Bristol Channel and Severn Estuary area in early October, before removing to Northern Norway in December 1941. Locally, as a result of these activities six ships were sunk, and a further one damaged, while one man died at Oldbury Naite on the night of November 25th, a victim of a stray mine which fell on land.

During late November 1941 the pathfinder units KGr 100 and III/KG 26 had been declared non-operational and temporarily returned from the Eastern Front. Shortly after, on December 15th 1941 at Märkisch-

Friedland, an experimental test range in Germany, KGr 100 and III/KG 26 combined to form KG 100 and the following month 2/KG 100 was detached as an experimental and training flight under the title Erprobungs und Lehr Kommando X-Y. Although this unit was to undertake development work on both types of bombing aid it was particularly involved with bringing into operational service a new variant of X-Verfahren known as Taub which left the old modulation frequency on the transmissions so that the British would continue to jam it, whilst superimposing a supersonic frequency above the limit of human hearing. Ergr.u.Lehr Kdo X-Y, commanded by Hauptmann Siegfried Langer, took up residence at Amiens, in France, in mid-February 1942 and began experimental operations against Britain with an attempt against Hull by ten aircraft on the night of March 8th.

This was followed, when cloud cover of a suitable character allowed, by experimental daylight precision attacks using X-Verfahren, these being carried out during the first ten days of the April, and included missions to the Bristol Aeroplane Company at Filton, on the evening of April 3rd and Gloster Aircraft at Brockworth, near Gloucester, on the afternoons of April 4th and April 9th, by which time the unit had been re-titled Erprobungs und Lehr Kommando 100 and was operating from Chartres.

A most difficult situation arose when, following a successful RAF attack on Lübeck on the night of March 28th, German public opinion demanded heavy reprisal attacks against British cities. Although few aircraft could be spared from the Russian Front a small formation was assembled for which the He 111's of Ergr.u.Lehr Kdo 100 were to act as pathfinders. The main bomber force, comprising some 80 aircraft, was drawn from II and III/KG 2, and II/KG 40 equipped with Dornier Do 217's, as well as Kü Fl Gr 106, an anti-shipping unit equipped with Ju 88's, while I/KG 2 with around 25 Do 217's joined the battle a little later. The attacks were planned to start during the moonlight period at the end of April, and copying the tactics so successfully employed by the RAF against German towns, were to be concentrated and of short duration in order to minimise British defensive action.

The series of RAF raids on Rostock, which began on April 23rd, really brought things to a head and as a result the Germans threatened eradication of all British cities listed in Baedeker's tourist guidebook. The raids, thereafter became known in both Germany and Britain as the Baedeker Raids. For the first time in the war the Germans clearly stated that "besides raids on ports and industry, terror attacks of a retaliatory nature are to be carried out against towns other than London", the campaign opening with operations against Exeter on the night of the 24th.

Bath was the target on the following two nights with all bomber units of Luftflotte 3 being called upon, including for the first time the training crews of the fourth Gruppen, of which IV/KG 2, IV/KG 3, IV/KG 4, IV/KG 30, IV/KG 55 and IV/KG 77 were available flying an assortment of obsolete Do 17's, He 111's and Ju 88's. Once the aircraft arrived over the City they would be able to fly around at will, make extensive use of shallow dive bombing and machine gun the streets, as the City possessed no Anti-Aircraft guns or Balloon Barrage protection.

On the night of April 25th the Luftwaffe flew a total of 151 bomber sorties to Bath, with most aircraft making two flights, the crews claiming to have dropped 206 tonnes of H.E.'s and 3564 I.B.'s on the City in the biggest effort against Britain since July 1941. The pathfinders from Ergr.u.Lehr Kdo 100 were operating that night with Y-Verfahren, successfully leading in the other participating units from II and III/KG 2, II/KG 40, Kü Fl Gr 106 and Kü Fl Gr 506, in addition to the assorted aircraft from the fourth Gruppen.

The Red Alert went out in Bath at 22.59 hrs, and shortly after, the sky, which had been clear with a bright half moon, was filled with the light from chandelier flares, which were quickly followed by I.B.'s, the first fires developing in the west of the City in the Upper and Lower Bristol Road areas. Then came the H.E.'s, one of the first of which destroyed No.3 Gasholder at the Gasworks, while others caused serious damage to the Kingsmead area, at the Abbey Church House and Circus Tavern. In addition a serious fire developed at the Midland Railway Goods Yard. Some of the bombers, however, mis-identified the target completely and bombs also fell on the Brislington area of Bristol, where 18 were killed and 41 injured. This, the first phase of the attack, ended with the sounding of the All Clear at 00.11 hrs.

The German aircraft then returned to their French bases to refuel and rearm before taking-off again on their second sorties of the night. The first of the bombers crossed the English Coast at 04.20 hrs and in Bath the Red Alert was issued at 04.35 hrs. On this occasion the bombing, whilst heavy was rarely concentrated, although both the Kingsmead and Oldfield Park areas again received a fair amount of attention. Other

isolated bombing also took place at Southdown and North Bath, while railway traffic was also affected, the main line between Bristol and London being closed by a damaged bridge at Oldfield Park, before the All Clear sounded at 06.02 hrs. A total of four German aircraft failed to return, resulting in the death of 14 crewmen, with a further two being taken prisoner.

The following night a further 83 bombers were dispatched to Bath in a repeat operation, the participating crews reporting dropping 107 tonnes of H.E.'s and 7956 I.B.'s on the City. The raid, which took place on a fine night with some cloud, lasted from 01.25 hrs until the All Clear at 02.45 hrs, and started as usual with flares and I.B.'s. The old residential part of the Bath was chiefly affected with many houses being destroyed. Within a short time numerous small fires, plus two large areas of conflagration were developing, one around the Kingsmead and Green Park area and the other near Bath Spa Railway Station. In addition the area south of the river from Holloway and Beechen Cliff to Bear Flat received a large number of H.E.'s. For the Germans this was yet another successful attack, as just one aircraft failed to return, although its 4 man crew were all killed, as were two men in other aircraft.

The damage caused in Bath over the two nights was very serious, with over 80 per cent of the City being affected in some way or another, while tragically the raids resulted in the death of 400 people, with a further 872 being injured. By this period little daylight reconnaissance was possible over the Bristol area, nevertheless on April 29th a Bf 109F-5 of 3(F)/123 succeeded in taking post-raid photographs of Bath, as well as photographing Avonmouth and the Nailsea Munition Store, its long range drop tank falling at Pill around midday.

Following the Exeter and Bath attacks York, Norwich, and Cowes were targeted by an operational force of between 40 to 70 aircraft lead by Epgr.u.Lehr Kdo 100 which, in mid-May, was re-designated Ergr.u.Lehr Kdo 17, and still undertaking experimental daylight attacks in addition to its nocturnal duties. Typical of these was the attempt against Avonmouth Docks by seven He 111's, using both X and Y Verfahren, in poor weather on the afternoon of May 23rd. Although the operation was not a great success, one aircraft being lost and the nearest bombs falling at Severn Tunnel Junction, some six miles from the objective, it was the first occasion when the British first definitely detected supersonic modulation on the X signals allowing countermeasures to be immediately put into action.

No other local targets were actually engaged until Weston super Mare was attacked on the nights of June 27th and 28th resulting in the death of 102 persons, with a further 400 injured. Not strictly speaking part of the Baedeker series, it was chosen as a reprisal for the British Thousand Bomber raid on Bremen on the night of June 26th, because German intelligence understood that Churchill was to stay in the town on his return from a visit to the United States.

53 aircraft of I, II and III/KG 2, II/KG 40 and Kü Fl Gr 106 claimed to have attack Weston on the night of June 27th, with a total of 28.6 tonnes of H.E.'s and 18,832 I.B.'s, while 2 Ju 88's of 1(F)/123 kept a look-out for British fighters. The raid began in brilliant weather with a full moon and the first bombs were dropped just before the siren warning at 01.22 hrs. A total of 62 H.E. incidents involving casualties were reported from many locations, but the main concentration was in the residential and shopping centre of the town. The attack, which was of short duration, ended at about 02.00 hrs, the majority of the damage having been confined to residential property. From the attack force only one aircraft was lost, this having crashed in France injuring the 4 crewmen.

The following night a similar number of bombers from the same units delivered some 27 tonnes of H.E.'s and 20,096 I.B.'s, the Weston Anti-Aircraft guns engaging them between 01.59 and 02.24 hrs. During this raid it was the main shopping centre which was chiefly affected with many shops and commercial premises being destroyed as a result of the large fires which took hold in the Regent Street, High Street, South Parade, Waterloo Street and Boulevard area. Railway services in and out of Weston were also suspended, and at the station the waiting room and goods shed were destroyed by fire, as were 12 passenger coaches. Once again German losses were small, and from the 3 aircraft which crashed in France only 3 men were killed and one injured.

In July the Luftwaffe's activities were directed mainly against ports and targets of the British armaments industry, the month starting with an unsuccessful attempt on the harbour installations at Bristol on the night of July 1st in which I, II and III/KG 2, and II/KG 40 were known to have taken part.

Over the target it was a moon light night, but there was thick haze and 4/10ths cloud at 1200 metres. 46 German aircrews subsequently claimed to have successfully attacked with 20 tonnes of H.E.'s, but due to the poor visibility no bombs whatsoever fell on the docks, although widespread bombing occurred on the South and South West coasts and in South Wales. Infact, the nearest any bombs came to Bristol that night were those reported falling at Brean Down at 02.10 hrs. One raider subsequently landed back in France with one crewman killed and one injured, the result of a night fighter attack.

During the summer of 1942 the strength of the units involved in operations over Britain had eroded steadily as the ever strengthening British defences took their toll, a total of 40 aircraft having been lost. There was, however, still pressure on the Luftwaffe to increase its effort as the RAF attacks on Germany had become progressively heavier, culminating in the Thousand Bomber raids on Cologne, Essen and Bremen. One of the few possibilities open to the Germans at this time was to employ their new and experimental Ju 86R high altitude bombers over Britain, and so the trials unit the Höhenkampfkommando der Versuchsstelle für Höhenflüge, later re-designated 14/KG 6, moved to Beauvais in France to commence operations.

The Ju 86R was not particularly fast, nor did it carry any armament, but for its survival relied upon the fact that it could attack from altitudes of over 12,000 metres, out of reach of British fighters then in service. Its offensive load, however, was limited to a single 250 kg bomb.

Operations by the Höhenkampfkommando der Versuchsstelle für Höhenflüg started with an attack on Camberly on the morning of August 24th, followed by sorties to Southampton and Stanstead, while on the 28th Bristol was targeted. The lone aircraft, commanded by Lt. Erich Sommer and piloted by Fw.Horst Götz, appeared over the City at about 09.20 hrs, its bomb impacting on a Ford Ten car in Bristol's Broad Weir.

As a result of the subsequent explosion one of three nearby buses was seriously damaged by blast, while petrol from the car's fuel tank was sprayed in a more or less atomized state over the other two which immediately burst into flames. The death toll was horrific with 45 being killed, many burnt to death in the blazing buses, with a further 45 injured. In terms of loss of life this was the single most serious incident to occur in Bristol during the Second World War.

Bristol was once again the target on September 12th but on this occasion the lone Ju 86R, again flown by Götz and Sommer, was intercepted en-route by a specially modified Spitfire flown by Pilot Officer Prince Emanuel Galitzine, from the RAF's newly formed 'SS' Flight at Northolt.

For the first time a Ju 86R was engaged in combat, and the crew, who hastily jettisoned their bomb near Salisbury, were lucky to return to France with only one cannon hole through the port wing. So ended the highest air battle ever fought over Britain, and soon after the high altitude bombing experiment ceased.

By the beginning of 1943, due to the strength of the British defences, it became almost impossible for the Luftwaffe to fly daylight reconnaissance missions over much of Southern England and a switch was therefore made to night sorties. When engaged in this work the aircraft carried photographic flash bombs and the base plates of two such spent devices were recovered for the first time locally at 23.00 hrs at Long Ashton on the night of January 23rd when a single aircraft operated over the Exeter, South Wales and Bristol area. Although the area was not targeted during 1943, Cardiff was attacked and in preparation for this on the afternoon of May 13th two Bf 109F-5's of 3(F)/123 undertook a pre-raid mission to South Wales, their drop tanks falling at Yatton at 13.00 hrs, on what was one of the last daylight reconnaissance operations carried out locally. The Cardiff raid in fact took place on the night of May 17th and during the course of this a few stray bombs fell at Aust and Uffz. Joachim Tröger of 3/KG 2 was rescued from the sea off Clevedon, his Do 217 having crashed into Woodspring Bay following a mid-air collision. This operation was, not surprisingly, followed by post-raid photographic sorties, and between 01.44 and 01.49 hrs on the morning of May 31st eight photo flash bombs fell south of Bristol, one of which, having failed to ignite, was recovered unburnt at Winford.

By the end of the year the terrible pounding that the RAF was inflicting on Germany's cities had reached intolerable levels and on December 12th Göring ordered a new series of retaliatory attacks to be carried out against Britain under the code name of Steinbock or Ibex. As a result the Luftwaffe long range bomber force in the West was reinforced, and by mid-January 1944 there was available about 500 aircraft.

The Germans, however, realised that standards of training amongst the bomber crews left much to be desired, and therefore made considerable efforts to emulate the examples of RAF Bomber Command by the use of the expert pathfinder crews from the specially formed I/KG 66, in addition to the Illuminator Ju 188's of KG 2. These units operated an elaborate target marking system which involved using clusters of parachute flares as route, as well as target sky markers, in addition to dropping incendiary ground markers. The attacks were themselves to be of short duration, heavy and devastating.

Operations began with a raid on London on the night of January 21st, the Capital continuing to be the target throughout February. These missions, however, produced most unsatisfactory results with the Ju 88's and Ju 188's of I/KG 66 failing to provide adequate target marking. In addition unlike the Night Blitz of 1940/41 and, to a lesser degree, the Baedeker Raids of 1942, the night defences now had the upper hand. Large numbers of radar controlled AA guns, 'Z' rocket batteries and searchlights, together with a well equipped night fighter force directed by a most efficient Ground Controlled Interception radar system, took a heavy toll of the attackers, with 129 aircraft being lost during January and February alone.

Nor were these the German's only problems, for on January 23rd Allied troops had landed at Anzio in Italy necessitating the transfer of about 100 aircraft for operations in the Mediterranean area, a further cut in the already inadequate force in the West. As if this was not enough the new four engined bomber, the He 177, was also proving to be a design disaster, suffering some 50 per cent breakdowns in operational use, many of them involving engine fires!

March saw a further four attacks on London, as well as an unsuccessful raid on Hull on the 19th, followed towards the end of the month by the first directed against Bristol since 1942. By this time only 297 bombers were available for operations over Britain, these being the Do 217's of I and III/KG 2, Stab and 6/KG 100 and part of I/KG 66; the Ju 88's of II and III/KG 6, Stab, II and III/KG 30, Stab, I and II KG/54 and Stab/KG 77; the Ju 188's of II/KG 2, Stab and I/KG 6 and part of I/KG 66; the Me 410's of Stab and I/KG 54; as well as the He 177's of I/KG 100.

On the night of March 27th the target was the harbour installations at Bristol, while a co-ordinated attack was also undertaken against night fighter airfields in the Bristol area by the Me 410's of I/KG 51. To aid navigation the pathfinders of I/KG 66 employed Y-Verfahren which was in use between 22.18 and 01.38 hrs from Cherbourg, Calais and St. Valery, while the Knickebein transmitters at Bergen op Zoom, Caen, Cherbourg West, and Morlaix were also in operation.

The main attack force, probably made up of I, II and III/KG 2, I, II, and III/KG 6, II and III/KG 30, I and II/KG 54, I/KG 66 and I/KG 100, were to converge on Guernsey before crossing Lyme Bay at about 23.44 hrs and flying over South West England to the first turning point, known as the Initial Point, at the mouth of the Usk near Newport. This was to be marked by four red flares dropped at four minute intervals starting at 23.58 hrs. These were to be laid at an altitude of 3000 metres by four Ju 188 Illuminators of II/KG 2.

From here the final approach to the target required a four minute leg along the north bank of the River Severn to the second turning point at Beachley, near Chepstow, followed by a short north to south run-in to Bristol. Here the target was to be marked by I/KG 66 with a cluster of white flares and one of yellow. Additionally, in an attempt to jam the British radar system Düppel anti-radar foil was also dropped, first off shore, but later spreading to cover almost the whole operational area. This was the first operational use of this material in a raid against Bristol.

Over the target area there was a 16 kph south-east wind and visibility was 3.2 kilometres with no cloud cover, although there was thick mist at 1500 metres. The bombing time was to be concentrated between 00.00 hrs and 00.12 hrs in an attempt to saturate the defences, and units were allocated specific bombing heights, which varied between 3350 and 4425 metres. After bomb release all aircraft were to continue to the third turning point, 13 kilometres SSW of Bath before turning to cross the Dorset coast near Bridport, their fourth point, while the fifth, and final point, was over the sea at 50° 23' N 02° 43' W.

116 of the 139 crews dispatched claimed to have attacked the the target with 100 tonnes of bombs including H.E.'s and a considerable number of Phosphorus Oil incendiaries between 23.38 and 00.13 hrs, and this was the first time that Phosphorous bombs were employed locally. As the Luftwaffe had been unable to carry out any daytime photographic missions over the Bristol area since the summer of 1942, 1(F)/121 was

instructed to fly strike assessment sorties at night, and their activities probably accounted for the numerous photo-flashes reported during the attack.

In actual fact no bombs whatsoever fell on Bristol, and those aircraft that managed to get anywhere near the City were first of all led astray by inaccurate marking of the Initial Point, and then by target marking flares dropped well to the west of the port. For the Luftwaffe it had been yet another bad night with a further 13 valuable bombers lost. Of these 10 failed to return resulting in the deaths of 21 crewmen, while a further 18, including 5 injured, were taken prisoner. In addition 3 more aircraft crashed in France where 4 men were killed and 3 injured, while yet another aircraft returned safely, but with a dead crewman aboard.

Incidents were in fact reported over the whole of Southern England, from Hastings to North Somerset, with the highest concentration in the rural areas around Highbridge and Weston super Mare. Many Phosphorous bombs fell on the Bournville Estate at Weston, but the 3 H.E.'s and 6 Phosphorous incendiaries which fell at Strode, near Winford, in Somerset were the closest that any bombs came to Bristol that night.

By the end of March it had become obvious to the Luftwaffe High Command that the target marking over Hull and Bristol had been particularly poor, and so 1(F)/121 was also ordered to photograph the flares laid by the pathfinders in an attempt to improve the accuracy of subsequent attacks.

The first two weeks of April were quiet, then on the 18th, there was a final manned bomber raid on the Capital. From here on the Germans were more concerned with the build up of shipping and supplies in the various ports from which an invasion of the Continent seemed likely, and henceforth the Luftwaffe was to concentrate almost exclusively on these objectives. Accordingly the harbour installations at Bristol were again the target on the night of April 23rd, while in parallel an attack against night fighter airfields in the Bristol area was also to be carried out by the Me 410's of I/KG 51.

The raiders, probably drawn from I, II and III/KG 2, I, II and III/KG 6, II and III/KG 30, I and III/KG 54, I/KG 66, I/KG 100, together with the Ju 88's of the operational training unit IV/KG 101, were to converge on Guernsey before making for the Initial Point at the mouth of the River Usk, and the second turning point near Chepstow. From here the final approach to Bristol was to be from the north, the target being marked by a square of red and white flares at the start of the attack. Over the target area there was a 16 kph south-west wind and 5/10th's cloud at 900 metres, but ground mist reduced visibility to 800 metres

To aid navigation during the raid the pathfinders of I/KG 66 employed Y-Verfahren which was operational from 23.45 to 02.45 hrs from St.Valery. In addition the Knickebein transmitters at Cherbourg West, Caen, and Morlaix were also in use, and Düppel was dropped in an attempt to jam the British Radar system. It first fell at about 01.25 hrs over the coast near Portland, but eventually built up overland forming extensive areas of about 20 miles radius.

A total of 117 aircraft were dispatched, of which 93 reported over the City, claiming to have dropped 59.3 tonnes of H.E.'s and 79.4 tonnes of I.B.'s on target. Once again, however, not one bomb actually fell on Bristol, the majority being scattered throughout, Wiltshire, Dorset, Hampshire, and East Somerset, the nearest to Bristol having landed at Batheaston at 02.05 hrs. German losses for this attack were again very high. A total of 10 aircraft failed to return resulting in the deaths of 39 crewmen, with 3 more being taken prisoner, 2 of them injured. In addition a further 4 aircraft crashed in France killing 5 and injuring another 6 men.

Like April, May started quietly and it was not until the night of the 14th that a force of 91 bombers took off for the third time in 1944 to attempt an attack on the harbour installations at Bristol. The raiders, probably drawn from I, II and III/KG 2, I and II/KG 6, II and III/KG 30, I and III/KG 54, I/KG 66 and I/KG 100, first flew to Guernsey where the bomber streams converged, and from there direct to Bristol. The Sonderaufklärungsstaffel Ob.d.L. had at, the end of April, joined 1(F)/121 in photographing target markers, and it was their aircraft which provided the night photographic capability for the attack force.

To aid navigation the pathfinders of I/KG 66 employed Y-Verfahren which was operational from Cherbourg and St.Valery, while the Knickebein transmitters at Caen, Cherbourg West and Morlaix were also active. The target was to be marked by two green cascade flares dropped by I/KG 66, and the bombing run was to be

south to north at 4000 to 6000 metres following a 30 degree glide. Over Bristol there was a 8 kph NNE wind, and a half moon in a cloudless sky giving 16 kilometres visibility.

This raid was particularly significant for on that night the Luftwaffe initiated airborne jamming on a frequency band covering part of the British ground and airborne radar system. A few Ju 188's of I/KG 2 carried the apparatus under the code name Kettenhund or Watchdog, which was applied to both the equipment and the aircraft in which it was fitted. During the operation extensive use was also made of Düppel which was dropped from 01.20 hrs onwards, eventually covering a lane about 20 miles wide from Portland to Bristol. It persisted throughout the raid, the Bristol area not being free of it until 03.01 hrs.

A total of 68 aircraft subsequently claimed to have attacked the City, with a further 15 Me 410's of I/KG 51 operating over local fighter airfields. Bristol was reported to have been raided between 01.50 hrs and 02.25 hrs with 163 tonnes of H.E.'s being dropped on target, and a further 4.65 tonnes on airfields in the Bristol area. The attack force again lost 14 aircraft, 11 of which failed to return resulting in the deaths of 40 crewmen, while 6 others were taken prisoner, including 3 injured. In addition 3 more aircraft crashed in France where a further 2 men died.

However, inspite of the German claims only five bombs had actually fallen within the Bristol city boundary. These came down at around 02.00 hrs in Headley Park, and at Kings Weston where a Searchlight Site was destroyed, and its attendant killed, the last life to be lost locally as a result of enemy action during World War Two.

For the inhabitants of Bristol and surrounding districts the trial by combat was drawing to an end, the All Clear at 03.07 hrs on the morning of May 15th 1944 marking the departure of the last German bomber to threaten the area. During the rest of the month the attacks continued against the ports where the forces were concentrating for the forthcoming invasion of France, accordingly Portsmouth, Weymouth, Torquay and Falmouth were targeted. These were infact the final raids of the Steinbock operation, and manned attacks on the West Country did not continue into June, the few remaining aircraft being required to counter the Allied landings.

By this time, however, the long awaited Fiesler Fi 103 pilotless aircraft, better known as the V1, was almost ready for action and Flak Regiment 155(W) opened their bombardment of London on June 13th. It had also been planned to attack Bristol from the Côtentin Peinsula where specially constructed launching ramps were aligned on the City. As early as March it had been stated that the eight sites then existing would be able to discharge 96 to 120 missiles at Bristol during a six hour period. The scheme thankfully came to nothing as effective bombing of the sites and their supply routes, followed by the Allied landing in Normandy on June 6th, ensured that the Germans were not able to mount an attack before the V1 launching ramps, and the bunkers from which it had also been intended to bombard Bristol with A4 (V2) rockets, were overrun.

A threat still existed from the He 111's of III/KG 3 based in Holland, each of which carried a V1 suspended below the fuselage. These weapons were air launched over the North Sea, their targets being initially Southampton, Portsmouth and London, although early on the morning of August 31st 20 were fired at Gloucester. Of these, 17 were detected by the defences between 04.30 and 05.00 hrs, and of the 8 which did eventually make landfall, 6 fell in Suffolk and 2 in Essex. These proved to be the Luftwaffe's parting shots at our region, and any lingering threat was soon removed as III/KG 3 had completed its enforced move to Germany by September 16th 1944.

During the period June 1940 to May 1944 the Luftwaffe are known to have lost 105 aircraft, with others suffering various degrees of damage, during operations against targets in the Bristol area. This resulted in the death of 257 German airmen, with a further 65 being injured. On the British side, as far as can be ascertained, in what is now the County of Avon some 2046 people lost their lives and 5961 were injured as a result of enemy air attacks on the area. Of these Bristol suffered 1243 killed and 2903 injured, Bath 417 killed and 952 injured, Weston super Mare 138 killed and 478 injured, Filton 135 killed and 335 injured, Yate 57 killed and 175 injured, North Somerset 36 killed and 57 injured and South Gloucestershire 19 killed and 61 injured. In addition to the tragic loss of life material damage to the area had also been serious, and following the end of the War in 1945 Bristol City Council announced that over 3000 houses had been completely destroyed and a further 90,000 properties damaged. In Bath a total of 19,147 premises had suffered damage, of which 1185 were houses, some 218 being of architectural and historic interest. 329 houses and shops were totally destroyed, and a further 732 had to be demolished. At Weston super Mare 282 premises

were totally destroyed, while 7757 houses, 6 industrial establishments, 581 offices and shops, 85 churches and public buildings, and 18 other premises in the town had been damaged.

Even today few people can fail to be moved by the sight of the personal monuments to the victims of the Second World War, especially the neat rows of German and British military graves at Greenbank Cemetery in Bristol, at Haycombe in Bath, and at Weston super Mare, where men of both nationalities lie side by side. In this account, based as it is upon German records, it is fitting that the names of individual airmen lost on operations against the area should be recorded, not only in the spirit of reconciliation, but also in commemoration of their suffering and as a tribute to their sacrifice.

Glossary and abbreviations

Aufkl.Gr.Ob.d.L. : Aufklärungsgruppe Oberbefehlshaber der Luftwaffe. The Reconnaissance Wing of the Commander in Chief of the German Airforce.

Adler Tag: Eagle Day. The opening of the German air offensive to destroy the RAF on August 13th 1940.

All Clear: This was the British Civil Defence 'Raiders Passed' message, receipt of which would cause the sirens to sound a continuous signal for two minutes, indicating enemy aircraft had passed out of the area.

Baedeker: The name given to the reprisal raids against Britain in the summer of 1942. From Karl Baedeker's tourist guide book.

Beleuchtergruppe: A unit charged with lighting fires in a target area for the guidance of other less well equipped units.

Bf: Bayerische Flugzeugwerk GmbH. Manufacturers of Messerschmitt aircraft (Later renamed Messerschmitt AG) ie Bf 109, Bf 110 and Me 410.

Bruder: Brother. The German code name for Bristol.

Dead Reckoning : The basis of navigation in the Luftwaffe. With a knowledge of his aircraft's climb/cruise performance and given a forecast wind velocity and details of the track(s) to target, the navigator was able to calculate the headings to fly and time to reach his objective.

Düppel: Anti-radar metal foil. Named after the Düppel Estate near Berlin where it was first tested.

Do: Dornier-Werke GmbH. Manufacturers of Dornier aircraft ie Do 17, Do 217.

Epr.Gr.210 : Erprobungs Gruppe 210. Test and Development Wing. Originally intended to introduce the Me 210 into service. Later used as a fighter-bomber unit flying Bf 110's.

Erprobungs und LehrKommando: Test and Training Unit.

(F) : Fern, as in Fern Aufklärungsgruppe. Long Range Reconnaissance Wing. Abbreviated 1(F)/121 etc.

Fliegerdivision: Similar but of less importance than a Fliegerkorps, most of which were expanded into the latter as the war progressed.

Fliegerkorps: An operational command controlling an unspecified number of units. Subsidiary to a Luftflotte.

F/Lt.: Flight Lieutenant.

F/O.: Flying Officer.

F/Sgt.: Flight Sergeant.:

Geschwader: An operational unit similar to an RAF Group. Normally comprising three operational Gruppen and a Staff Flight, with a total establishment of about 100 aircraft. It also possessed a fourth training Gruppe, and later in the war a fifth Gruppe was added to some Geschwadern. Prefixed Kampf (Bomber) or Zerstörer (Long-range fighter) ie KG 55, ZG 26 etc.

Gp.Capt.: Group Captain.

Gruppe: An operational unit similar to an RAF Wing. Normally comprised three Staffeln and a Staff flight with a total establishment of 30 aircraft. Abbreviated I/KG 55 etc.

Gruppenkommandeur: Officer commanding a Gruppe.

H.E. : High Explosive bomb. Dropped in sizes from 50 to 1800 kg.

He: Ernst Heinkel Flugzeugwerke GmbH. Manufacturers of Heinkel aircraft ie He 111 and He 177.

Höhenkampskommando der Versuchsstelle für Höhenflüge : The High Altitude Bombing Unit of the Experimental Establishment for High Altitude Flight.

I.B. : Incendiary bomb. The standard 1 kg magnesium incendiary.

Ju: Junkers Flugzeug-und Motorenwerken AG. Manufacturers of Junkers aircraft ie Ju 86R, Ju 88 and Ju 188.

Kampfgeschwader: Bomber Group. Abbreviated KG 1 etc.

Kampfgruppe : Bomber Wing. Normally a specialised independent unit. Abbreviated KGr 100 (pathfinders) KGr 606 and KGr 806 (ex-naval units).

Kettenhund: Watchdog. Airborne radar jamming equipment.

Knickebein : A precision VHF radio beam navigation and bombing system.

Kü Fl Gr : Küstenfliegergruppe. Coastal bomber-reconnaissance unit. Abbreviated Kü Fl Gr 106 etc.

Land Mine : Parachute deployed 1000 kg sea mines suitably re-fuzed for use against land targets. Later parachuteless mines fitted with a tail unit were employed.

Lehrgeschwader: Instructional/Operational Development Group. Became normal operational bombing units on the outbreak of war. Abbreviated LG 1 etc.

Luftflotte : Air Fleet. An operational command controlling a number of subsidiary Fliegerkorps.

Luftwaffe: The German Airforce

Me: see Bf.

Ob.d.L. : Oberbefehlshaber der Luftwaffe. The Commander in Chief of the German Airforce.

Oil Bomb : A large incendiary weapon containing an oil mixture and a high explosive bursting charge.

Phosphorous Bomb : A large incendiary weapon containing a liquid filling of Phosphorous, oil and rubber solution.

Pirateneinsätze: Pirate Attack. An attack carried out by a single aircraft in daylight but only with the aid of poor weather conditions to provide safety from British fighters.

PK 2: Propaganda-Kompanie 2. War Reporters Company No.2.

P/O.: Pilot Officer.

Red Alert : Red was the British Civil Defence action warning 'Raiders Approach', receipt of which would authorise the sounding of the audible sirens on a two minute fluctuating or warbling note of varying pitch giving 12 minutes advance warning of the enemy's arrival.

Ritterkreuz : The Knight's Cross of the Iron Cross. A military award.

Sgt.: Sergeant.

S/Ldr.: Squadron Leader.

Sonderaufklärungsstaffel Ob.d.L.: The Special Reconnaissance Squadron of the Commander in Chief of the German Airforce.

SS Flight : RAF's Special Service Flight. Formed to counter high altitude raiders.

Stab Schwarm : Group HQ Staff Flight. Normally three aircraft. Abbreviated Stab/KG 55 etc.

Staffel: The smallest Luftwaffe operational unit similar to an RAF Squadron normally comprising 9 aircraft. 1,2 and 3 Staffeln were in I Gruppe; 4,5 and 6 in II Gruppe; 7,8, and 9 in III Gruppe; 10,11 and 12 in IV Gruppe; 13,14 and 15 in V Gruppe. Abbreviated 7/KG 100 etc.

Staffelkapitan: Officer commanding a Staffel.

Steinbock: Ibex. The code name given to the German reprisal raids against Britain in early 1944.

Störangriffe: Nuisance or harassing attack.

Unternehmen Seelöwe : Operation Sealion, the planned German invasion of Britain during the summer of 1940.

(W) : Wachtel, after Oberst Max Wachtel commander of Flak Regiment 155.

X-Verfahren: X-System . A VHF multi-beam precision bombing system.

Y-Verfahren: Y-System . A VHF single beam/range-measuring precision bombing system.

W/Cdr.: Wing Commander.

Zerstörergeschwader : (lit. Destroyer Wing). Long-range fighter Wing. Abbreviated ZG 26 etc.

Luftwaffe weapons

At first the majority of German High Explosive bombs (Sprengbombe) were of small calibre, with those of 50 kg predominant. Also widely used was the 250 kg H.E., but gradually bombs of increasing size and weight came into service. The principle types used against the U.K. mainland were types designated SC, SD and PC. Their type designation was used as a prefix, followed by a number indicating their weight in kilogrammes, eg. SC 50 being the 50 kg version of the Sprengbombe Cylindrich. Names were also applied at the heavier end of the scale. In addition to their type and weight designation, high explosive bombs

sometimes carried a suffix to indicate the type of zünder or fuse fitted i.e. mV = mit Verzögerung (with short delay action) and LZZ = LangZeitZünder (long time delay). Thus, for example, the designation SC 250 LZZ indicated a bomb fitted with a long delay fuse.

SC = SPRENGBOMBE CYLINDRICH (thin cased general purpose). These had for blast effect, a high charge ratio 55 per cent explosive, and were used primarily for general demolition. Approximately 8 out of 10 of German high explosive bombs dropped on the U.K. were of the SC type. Those dropped locally were the 50 kg, 250 kg, 500 kg, 1000 kg "Hermann", and 1800 kg "Satan" versions.

SD = SPRENGBOMBE DICKWANDIG (thick cased semi-armour piercing). These were medium cased steel weapons and, being either anti-personnel or semi-armour piercing, had a load factor of 35 per cent explosive; because of their penetration qualities they were used primarily against ships and fortifications. Those dropped locally were the 50, 250, 500 and 1700 kg versions.

PC = PANZERBOMBE CYLINDRICH (Armour piercing). These had a loading factor of 20 per cent explosive, and were used primarily against shipping and fortifications. The 1400 kg "Fritz" version was dropped locally.

LC = LICHT CYLINDRISCHE (LC 50 parachute flare). These devices which were approximately the same size as a conventional SC 50 bomb, hence its designation "50", were used for target illumination and marking at night.

At times the Luftwaffe also purposely dropped its standard sea mines, fitted with a suitable detonator, on British cities where they became universally known as Land Mines. With their high charge ratio of 60 to 70 per cent explosive and slow parachute retarded descent they created considerable blast damage in built-up areas. The 1000 kg Luft Mine B was normally employed, and as such was designated Bomben B when used against land targets. During 1941 a new weapon, the BM 1000 "Monika", made its appearance. This consisted of the sea mine LMB, but fitted with a bomb tail unit, being designed to be dropped like a conventional bomb without a parachute.

Although the available H.E.'s possessed great destructive power, perhaps the most potent of German bombs remained the tiny B1 EI, a 1 kg incendiary which, dropped in profusion in 1940/41, caused millions of pounds worth of fire damage and virtually burnt out whole districts of British cities.

BRANDBOMB, 1 KILOGRAMME, ELEKTRON or B1 EI, was the designation of the standard 1 kg incendiary bomb. They consisted of a cylinder of Magnesium Alloy (Elektron), with an incendiary filling of Thermit. These weapons, which burnt with a heat sufficient to melt steel, were ignited by a small percussion charge in the nose which fired on impact.

In an attempt to make these weapons even more effective, and to defeat the fire-fighters efforts, the Germans introduced explosive charges into the nose or tail of some incendiary bombs. The charge was initiated either by the heat of combustion, or by a more complicated device that incorporated a delay of about 7 minutes. The various versions of this bomb included the letter Z in their designation, indicating explosive charge. Thus the standard B1 EI incendiary bomb fitted with an explosive charge detonated by heat was designated B1 EL ZA, and that detonated by a delay B1 EI ZB, while in 1944, a further development was introduced, the 2.2 kg steel nosed B2 E.

The Luftwaffe used various types of containers to carry and drop small incendiary bombs and in the early part of the war these were usually expendable, aimable types, designated AB (Abwurf Behälter) or BSK (BombenSchaltKasten), holding some 36 B1 EI's. During early 1942 the AB 500 container, which held 140 B1 EI's was brought into use; more effective than the older BSK 36, the new container held not only more incendiaries but concentrated its entire contents over a small area. The final development was introduced for the Steinbock operation in 1944 during which the bombers were to carry the AB 1000, capable of holding up to 620 B1 EI's or 360 B2 E's.

The original large incendiary device, the so called Oil Bomb which was known to the Germans as the FLAM or FLAMMENBOMBE, contained an oil mixture and a high explosive bursting charge. These weapons, based on the 250 kg and 500 kg high explosive bomb case, and thus designated Flam 250 and Flam 500,

were fitted with an impact fuse which often failed to detonate. This resulted in the case splitting open to discharge its contents without igniting, and as a result of their reliability they were withdrawn from widespread use in January 1941.

Two other types of large incendiary bomb were introduced later in the War and were first deployed against local targets during the Baby Blitz of 1944. The most widely used of these were the two variants of the PHOSPHORBRANDBOMBE or Phosphorus Incendiary Bomb which were the same shape and size as 50 and 250 kg high explosive types, and therefore designated Brand C 50 and Brand C 250. Both contained a liquid filling consisting of Phosphorus, Oil and Rubber Solution, the Phosphorus being carried in glass bottles that were designed to break on impact and mix with the main filling. The bomb then split open scattering the contents, which ignited spontaneously, over an area of some metres.

The second type was the SPRENGBRANDBOMBE or Explosive Incendiary Bomb which was designated Spreng-Brand C 50, being the same shape and size as a 50 kg H.E. These complex weapons used a Black Powder charge to expel and ignite the 6 large magnesium-elektron Fire Pots and 67 smaller magnesium incendiary elements which they dispersed over a radius of about 100 yards. The nose of the bomb also contained 20 lbs of TNT which exploded after a time delay.

Known Luftwaffe targets in the Bristol area

Intelligence gathering was undertaken by the Operations Staff of the Luftwaffe's 5 Abteilung. The material they collected to compile their Target Files included not only photographs but maps, which in the case of Britain were suitably re-marked extracts from pre-war Ordnance Survey publications! Each target was also allocated both a group and an individual number prefixed by GB indicating Grossbritannien.

AIRFIELDS

GB 10 26 Bristol-Whitchurch.

GB 10 81 Filton.

GB 10 240 Weston super Mare.

GB 10 284 Yate.

GB 10 371 Swainswick (Charmy Down).

GB 10 393 Wrington (Lulsgate).

GB 10 866 Colerne.

ARMY TRAINING CENTRES

GB 14 10 Bristol, Horfield Barracks.

GB 14 31 Avonmouth Barracks.

Teil 1 Shirehampton Camp.

Teil 2 Easton in Gordano, Camp at Sheephouse Farm.

GB 14 67 Bath, Foxhill Camp.

GB 14 115 Bath, North Camp.

RADIO DIRECTION FINDING (D/F) STATIONS

GB 17 9 Bristol-Whitchurch Aerodrome.

RAF SUPPLY AND EQUIPMENT CENTRES

GB 20 47 Weston super Mare Aircraft Park.

FUEL DEPOTS

GB 21 18 Avonmouth, Haw Wood, Fuel Tanks.

GB 21 51 Avonmouth, Oil Tanks north of the Royal Edward Dock.

AMMUNITION CENTRES (DUMPS)

GB 22 4 Nailsea, at Lime Breach Wood near Nailsea.

GB 22 51 Bathford (Monkton Farley) - MVRA.

BARRAGE BALLOON STATIONS WITH SPECIALIST MILITARY CAMPS

GB 25 16 Pucklechurch, Barrage Balloon Store.

RAILWAY BRIDGES, TUNNELS AND JUNCTIONS

GB 41 35 Bristol, Railway Bridge over the River Avon at Victoria Street, St.Philip's Marsh.

GB 41 36 Bristol, Railway Bridge over the Floating Harbour, north of Temple Meads Station.

PORT INSTALLATIONS

GB 45 51 Bristol, Cumberland Basin & Lock Gates.

GB 45 52 Bristol, Bathurst Basin & Lock Gates.

GB 45 53 Bristol, Floating Harbour/Feeder Canal. Locks at Feeder Road/Market Road.

GB 45 54 Avonmouth, Avonmouth Dock.

GB 45 55 Avonmouth, Royal Edward Dock.

GB 45 56 Portishead Docks & Lock Gates.

RADIO STATIONS

GB 49 33 Clevedon, Broadcasting Transmitter.

GB 49 34 Portishead, Marine Radio Station.

POWER STATIONS

GB 50 51 Bristol Corporation Electricity Dept. Generating Station at Temple Back.

GB 50 52 Bristol Corporation Electricity Dept. Generating Station at Feeder Road.

GB 50 53 Bristol Corporation Electricity Dept. Generating Station at Portishead.

TRANSFORMER WORKS

GB 51 101 Outdoor Electrical Transformer Station in Locking Road, Weston super Mare.

GASWORKS AND GAS SUPPLY INSTALLATIONS

GB 52 51 Bristol Gas Co. Works at Canon's Marsh.

GB 52 52 Bristol Gas Co. Gasholders at Day's Road, Barton Hill and at Gas Lane, St. Philip's.

GB 52 53 Probably the Gasholder at Marksbury Road, Bristol. Destroyed 24/11/40.

GB 52 54 Bristol Gas Co. Stapleton Road Gas Works.

WATERWORKS PUMPING STATIONS AND RESERVOIRS

GB 53 50 Bristol, Barrow Tanks.

GB 53 51 Bristol, Victoria Reservoir, Oakfield Road,

SILOS, WAREHOUSES, STORES, MILLS AND GRANARIES

GB 56 51 Bristol, Cumberland Basin Tobacco Bonds.

GB 56 52 Bristol, Baltic Wharf; Timber Yard and Saw Mill.

GB 56 53 Bristol, Princes Wharf Granary.

GB 56 54 Bristol, Redcliff Back; Mill and Granary.

GB 56 55 Bristol, Temple Meads Cattle Market.

GB 56 56 Avonmouth Dock, Flour Mill and Granary.

GB 56 52 Not allocated in 1943, but was originally a Grain Mill at Avonmouth.

GB 56 58 Portishead, Flour Mills Silos.

GB 56 64 Avonmouth, CWS Mill and Silos at the Royal Edward Dock.

GB 56 66 Avonmouth, Coldstore at the Royal Edward Dock.

GB 56 69 Portishead, Flour Mill, Silos & Store.

IRON AND STEEL WORKS

GB 70 31 Bristol, Netham Steel Works.

NON-FERROUS METAL WORKS

GB 71 1 Avonmouth, Imperial Smelting Corp. Ltd. at St. Andrew's Road.

AERO-ENGINE FACTORIES.

GB 73 30 Kingswood, Bristol (Aero Engines).

GB 73 52 Filton, Bristol Aeroplane Co. Ltd. Aero Engine Department.

AIRCRAFT FACTORIES

GB 74 51 Yate, Parnall Aircraft Ltd.

GB 74 52 Filton, The Bristol Aeroplane Co. Ltd.

GB 74 68 Uphill, The Bristol Aeroplane Co. Ltd.

MACHINE AND MACHINE TOOL FACTORIES

GB 82 43 Keynsham, Fry's Chocolate Works. Originally designated a wire cable factory.

SHIPYARDS

GB 83 51 Bristol, The Albion Shipyard and Dry Dock at Cumberland Road.

GB 83 52 Avonmouth, Graving Dock at the Royal Edward Dock.

NAVIGABLE WATERWAYS - MINING TARGETS

GB 95 24 a Severn Estuary off Cardiff/Barry.

GB 95 24 b Severn Estuary off Avonmouth.

LESSER TOWNS - WITHOUT SPECIFIC AIMING POINTS

GB 99 35 Bath.

Luftwaffe bombing operations over the Bristol area

NOTE: *AF = Airfield; BAC = Bristol Aeroplane Company; SL = Searchlight; AA = Anti Aircraft Gun Site; t/o = took off; cr. = crashed; c. = circa; Figure in brackets following aircraft type indicates number attacking.*

JUNE 1940

19/20: III/KG 27, Merville, He 111 (2), BAC Filton & Avonmouth Docks with SC 250, SC 50, B1 EI, monitored 00.40 - 04.06 hrs.

24/25: I/KG 27, Merville, He 111 (2), BAC Filton with 60 SC 50, 720 B1 EI, landed 02.30 hrs.

25/26: KG 27, He 111's, Avonmouth & Portishead Docks, monitored 21.25 - 04.43 hrs.

26/27: KG 27, He 111 (3), Avonmouth & Portishead Docks with SC 250, SC 50, Flam 250. Alternative (3) SL & Railway Station nr. Bristol, monitored 02.00 - 04.06 hrs.

27/28: I & III/KG 51, Villacoublay, Ju 88's t/o 23.00 - 00.30 hrs, Avonmouth & Portishead Docks with SD 250. Alternative (4) Filton AF & SL nr. Bristol with 10 SC 250, 10 Flam 250, 48 SC 50.

29/30: I/KG 27, Merville, He 111's, Bristol Docks, 00.50 - 02.05 hrs with 8 SC 250, 52 SC 50.

30/01: I/KG 27, Merville, 5 He 111, t/o 22.30 - 23.10 hrs, BAC Filton & Bristol Docks, aborted. III/KG 55, Villacoublay, 1 He 111, crossed French Coast 22.20 hrs, BAC Filton, attacked.

JULY 1940

02/03: I/KG 55, Chartres, 8 He 111 t/o 21.30 - 22.20 hrs, Bristol, Avonmouth, & Portishead Docks. Alternative (6) Bristol with 18 SD 250, 72 SD 50.

03/04: II/KG 51, Orly, 3 Ju 88 t/o 14.45 - 15.15 hrs, Armed Reconnaissance in Bristol Area, Portishead Docks attacked.

04/05: III/KG 54, Le Bourget, 1 He 111, t/o 10.00 hrs on weather reporting & attack on BAC Filton. Aircraft lost cr. Gillingham, Dorset.

07/08: II/KG 55, Chartres, 3 He 111 t/o 12.15 hrs, BAC Filton aborted.

08/09: III/KG 54, Le Bourget, 3 He 111, night attack on Grain Silo & Electricity Works nr. Bristol with 8 SC 250.

10/11: II/LG 1, Orléans, 1 Ju 88 t/o 12.00 hrs, Bristol (Feint for main attack on Swansea). Aborted.

11/12: I/KG 51, Orly, 9 Ju 88 t/o 22.00 - 01.20 hrs, Oil Tanks at Avonmouth & Portishead. Portishead bombed (1), also alternative SL & AA nr. Bristol (4). 2 Ju 88's lost in France & at sea.

14/15: I/KG 55, Villacoublay, He 111's t/o 21.15 - 2.40 hrs, Oil Tanks at Avonmouth. Tanks attacked, also alternative SL nr. Bristol with SD 50, Flam 250.

22/23: Stab & I/KG 51, Melun, Ju 88's t/o 22.12 - 22.54 hrs, BAC Filton. Alternative SL nr. Bristol with SC 250.

26/27: II/KG 55, Chartres, He 111's t/o 21.00 - 23.30 hrs, BAC Filton. Alternative SL nr. Bristol with SC 250, SD 50, Flam 250.

28/29: III/KG 55, Villacoublay, He 111's, Rolls Royce Crewe. Alternative SL nr. Bristol 23.30 hrs with 4 SC 250, 24 SC 50.

29/30: III/KG 55, Villacoublay, He 111's, BAC Filton, 23.10 - 01.30 hrs with 14 SC 50, also alternative Oil Tanks at Avonmouth attacked.

30/31: I/KG 55, Villacoublay, He 111's, BAC Filton & Oil Tanks at Avonmouth, 23.00 - 00.15 hrs with SC 250, SD 50, Flam 250.

AUGUST 1940

01/02: II/KG 55, Chartres, 4 He 111 t/o 21.30 hrs. Bristol (2) with 14 packs of leaflets, also BAC Filton & Parnall Yate (2). Alternative (2) factory and SL nr. Bristol 23.30 & 24.00 hrs with 10 SC 250, 12 SD 50, 1 Flam 250.

02/03: II/KG 51, Orly, Ju 88's, 22.00 - 23.40 hrs, BAC Filton. Alternative SL nr. Bristol with SC 250, SC 50.

03/04: I/KG 55, Dreux, 2 He 111, BAC Filton, 22.16 hrs with 2 SC 250, 24 SD 50. III/KG 55, Villacoublay, 1 He 111, night mission to the Bristol Area, lost cr. into the sea.

08/09: I/KG 55, Dreux, 3 He 111 t/o 20.30 - 20.40 hrs, BAC Filton, 12 SC 50, 2 Flam 250. II/KG 27, Bourges & Dinard, He 111's. Alternative SL nr. Bristol 02.15 - 02.30 hrs with 30 SD 50.

09/10: II/KG 27, Bourges & Dinard, 12 He 111, Filton AF, 24.00 hrs with 20 SD 50 also leaflets dropped nr. Bristol.

10/11: II/KG 27, Bourges & Dinard, He 111's, S.Wales Ports. Alternative Bristol Dock attacked 23.40 - 23.50 hrs, also leaflets dropped over Bristol.

11/12: II/KG 27, Bourges & Dinard, 7 He 111, BAC Filton & Avonmouth Docks. Alternatives Bristol Docks at 23.35 hrs with 60 SD 50 and SL nr. Bristol at 23.00 hrs with 14 SD 50. 1 (from Dinard) lost cr. Sturminster Marshall, Dorset. III/KG 55, Villacoublay, He 111's, t/o 20.15 - 21.00 hrs, BAC Filton. Alternative Oil Tanks Avonmouth with 6 SC 250, 48 SC 50. 1 lost cr. France.

12/13: II/KG 27, Bourges & Dinard, He 111's t/o 24.00 - 00.18 hrs, RAF Sealand, Cheshire. Alternative industrial installation nr. Bristol attacked.

13/14: II/KG 27, Bourges & Dinard, 2 He 111, BAC Filton & AF, 00.15 hrs with 12 SD 50, also SL nr. Bristol 24.00 - 02.05 hrs with 18 SD 50.

14/15: I/LG 1, Orléans, Ju 88's t/o 14.42 - 15.12 hrs, Armed Reconnaissance over W.Country. Railway station & quays at Weston s Mare, & Whitchurch Airport with SC 250, SD 50, Flam 250. III/KG 27, Rennes, He 111's, t/o 15.51 - 18.30 hrs, Armed Recon. over W.Country. BAC Filton with 6 SC 250, 12 SC 50, 12 SD 50, 3 Flam 250, also factory N of Bristol. 3 lost cr. Charteouse & Puriton, Som. & in Bristol Channel.

15/16: III/KG 27, Rennes, He 111's t/o 08.01 - 08.28 hrs, BAC Filton & AF aborted. II/KG 27, Bourges & Dinard, He 111's, BAC Filton & Avonmouth Docks. BAC Filton 00.50 hrs with 40 SD 50 also alternative SL nr. Bristol SD 50.

16/17: II/KG 27, Bourges & Dinard, He 111's, Filton AF & Avonmouth Docks 23.25 - 03.30 hrs with SC 250 LZZ, SC 50, SD 50 also alternative SL nr. Bristol.

17/18: II/KG 27, Bourges & Dinard, He 111's, BAC Filton & Avonmouth Docks, 23.10 - 02.05 hrs with 3 SC 250 LZZ, 46 SD 50.

18/19: II/KG 27, Bourges & Dinard, He 111's and III/KG 27, Rennes, He 111's, night Armed Reconnaissance to Airfields & Harbours. Avonmouth and SL nr. Bristol attacked.

22/23: KGr 100, Vannes, 23 He 111, BAC Filton (16) 23.10 - 02.50 hrs with 333 SC 50, 576 B1 EI. Alternative Railway Station nr. Bristol with 12 SC 50 and AA nr. Bristol 02.45 hrs with 10 SC 50. (X-Verfahren guided).

23/24: I/KG 27, Tours, 11 He 111, Avonmouth Docks, 23.10 - 00.05 hrs with 1 SC 250 LZZ, 2 SC 250, 120 SD 50, 864 B1 EI. Alternative AA nr. Bristol 23.15 - 23.40 with 56 SD 50. II/KG 27, Bourges & Dinard, 8 He 111, Bristol Docks (7) 00.20 - 02.40 hrs with 3 SC 250 LZZ, 1 SC 250, 66 SD 50, 9 Flam 250. III/KG 27, Rennes, 12 He 111, Bristol Docks, 22.45 - 00.55 hrs with 7 SC 250, 56 SC 50, 56 SD 50

24/25: I/KG 27, Tours, 9 He 111, Bristol Docks & Factories, 23.10 - 22.55 hrs with 2 SC 250, 85 SC 50, 1908 B1 EI. Alternative 23.55 hrs factory NE of Bristol with 12 SC 50, 1 Flam 250, also AA NW of Bristol. II/KG 27, Bourges & Dinard, 14 He 111, Bristol Docks & Factories, 23.00 - 00.15 hrs with with 13 SC 250, 104 SC 50, 13 Flam 250, 1152 B1 EI. III/KG 27, Rennes, 13 He 111 t/o 22.37 - 23.34 hrs, Bristol Docks & Factories, with 9 SC 250, 9 SC 250 LZZ, 54 SC 50, 54 SD 50, 3456 B1 EI. I/LG 1, Orléans, 5 Ju 88 t/o 01.10 - 01.40 hrs, Bristol Docks (2). Alternative (1) Weston s Mare AF. III/LG 1, Châteaudun, 3 Ju 88, Bristol Docks (2) 03.45 hrs with 3 SC 250, 10 SD 50, 3 Flam 250.

25/26: III/KG 27, Rennes, He 111's, Birmingham, Alternative (1) Avonmouth Docks 23.00 hrs.

26/27: III/KG 55, Villacoublay, He 111's, Filton AF and alternative railway installations nr. Bristol 22.10 - 23.15 hrs.

27/28: KGr 606, Brest, 11 Do 17, Bristol Area. Avonmouth 23.00 - 03.30 hrs with 20 SC 250, 105 B1 EI. Military targets at Bristol 50 SC 50, 225 B1 EI. III/KG 27, Rennes, He 111's, Bristol Area, 23.45 hrs with 1 SC 250, 4 SC 50.

28/29: KGr 606, Brest, 23 Do 17, night attack on Bristol (22) 190 SC 50, 900 B1 EI. KG 27, He 111; LG 1 Ju 88; KGr 806 Ju 88, Liverpool. Alternative night attack on Bristol.

29/30: III/LG 1, Châteaudun, Ju 88's, I/KG 27, He 111's, Tours; I/KG 55, He 111's, Dreux, Liverpool. Alternative night attack on Bristol (6) with 14 SC 250, 4 SC 50, 4 Flam 250, 216 B1 EI. III/LG 1 (2); I/KG 27 (2) plus 1 lost cr. Fordingbridge, Hants; and I/KG 55 (1).

30/31: II/KG 27, Bourges & Dinard, He 111's; III/KG 27, Rennes, He 111's; I/LG 1, Ju 88's, Orléans; III/LG 1, Châteaudun, Ju 88's; II/KG 51, Orly, Ju 88's, Liverpool. Alternative night attack on Bristol (10).

31/01: I/KG 27, Tours, He 111's; KGr 806, Nantes, Ju 88's, Liverpool. Some made night attack on Bristol as alternative.

SEPTEMBER 1940

01/02: Target - Bristol; 31 dispatched, 21 attacked Bristol, 5 Avonmouth, 4 Portishead, 1 local alternative. I/KG 55, Dreux, 9 He 111, 20.15 - 21.05 hrs with 12 SC 250, 6 SC 250 LZZ, 36 SC 50, 9 Flam 250 (Portishead 2, Avonmouth 2). III/KG 55, Villacoublay, 10 He 111, 21.15 hrs - 22.00 hrs with 10 SC 250 LZZ, 8 SC 50, 10 Flam 250 (Portishead 1, Avonmouth 2). I/KG 51, Melun, 4 Ju 88, 23.15 - 23.45 hrs with 10 SC 250, 10 Flam 250 (Portishead 1, Avonmouth 1, SL S. of Bristol 1). II/KG 51, Orly, 6 Ju 88, 22.15 - 23.15 hrs with 3 SC 500, 10 SC 250, 3 Falm 250. III/KG 51, Etamps, 2 Ju 88, 03.15 - 03.30 hrs with 3 SC 500, 10 SC 50, 4 Flam 250.

02/03: II/KG 27, Bourges & Dinard, 3 He 111 t/o 20.30 - 21.00 hrs, BAC Filton with 48 SC 50. II/KG 55, Chartres, He 111's, Liverpool. Alternative night attack on Bristol.

03/04: Target - Avonmouth. St/KG 55, Villacoublay, 1 He 111, Bristol 01.22 hrs with 1 SC 250, 12 SC 50. I/KG 55, Dreux, 10 He 111, Avonmouth & Bristol (9) 21.45 - 22.50 hrs with 15 SC 250, 6 SC 250 LZZ, 22 SC 50, 21 Flam 250. III/KG 55, Villacoublay, 10 He 111, Bristol 23.17 - 01.08 hrs with 10 SC 250 LZZ, 80 SC 50, 10 Flam 250.

04/05: Target - Bristol. 47 aircraft attacked at night. I/KG 27, Tours, 1 He 111, 1 SC 250, 4 SC 50, 2 Flam 250. II/LG 1, Orléans, 1 Ju 88, 3 SC 50, 1 Flam 250. I/KG 51, Melun, 6 Ju 88, (5) 15 SC 250, 3 SC 250 LZZ, 2 Flam 250. Alternative Avonmouth (1) 3 SC 250, 1 Flam 250. II/KG 51, Orly, 5 Ju 88, 10 SC 250, 5 Flam 250. III/KG 51, Etamps, 11 Ju 88, 28 SC 250, 7 SC 250 LZZ, 9 Flam 250. I/KG 55, Dreux, 11 He 111, 2 SC 250, 2 SC 250 LZZ, 188 SC 50, 4 Flam 250. II/KG 55, Chartres, 13 He 111, 13 SC 250, 6 SC 250 LZZ, 256 SC 50, 13 Falm 250. I/LG 1, Orléans, 1 Ju 88, Liverpool. Alternative AA nr. Bristol with 2 SC 250, 10 SC 50, 1 Flam 250.

05/06: II/KG 27, Bourges & Dinard, He 111's, Liverpool. Alternative night attack on Bristol. III/KG 27, Rennes, He 111's, Liverpool, Alternative night attack on Bristol.

07/08: 3(F)/123, Buc, 1 Ju 88, Armed Recon. Bristol Area t/o 06.27 hrs. Over area 10.10 hrs, again at 10.30 hrs when it circled. 5 H.E.'s (including 1 UXB) dropped on Bristol City Centre.

07/08: III/KG 27, Rennes, He 111's, London. Alternative night attack on Bristol with 1 SC 250, 16 SC 50.

09/10: I/KG 27, Tours, He 111's, Liverpool. Alternative night attack on Bristol.

10/11: II/KG 27, Bourges & Dinard, 3 He 111, Bristol, 22.20 - 01.08 hrs with 60 SC 50.

12/13: III/KG 27, Rennes, He 111's, Liverpool, Alternative night attack on Bristol with 10 SC 50, 144 B1 EI.

15/16: II/KG 27, Bourges & Dinard, He 111's, London. Alternative Avonmouth (4) 23.30 - 00.30 hrs with 60 SC 50, 4 Flam 250, 576 B1 EI.

16/17: I/KG 55, Dreux, 1 He 111 t/o 10.30 hrs, BAC Filton. Aborted. I/KG 27, Tours, He 111's, London, Alternatives 21.00 - 23.10 hrs, Bristol Docks (2) with 3 SC 250, 1 SC 250 LZZ, 14 SC 50: Bath (1) with 2 SC 250, 14 SC 50.

17/18: KGr 606, Brest, Do 17's, Liverpool. Alternative night attack on Bristol (1) with 10 SC 50, 72 B1 EI. III/KG 27, Rennes, He 111's London. Alternative Bristol (1) 21.10 - 00.06 hrs with 1 SC 250, 14 SC 50, 1 Flam 250.

24/25: II/KG 27, Bourges & Dinard, He 111's, Liverpool. Alternative Bristol (2) 00.05 - 02.15 hrs with 6 SC 250, 4 SC 50, 1 Flam 250, 576 B1 EI.

25/26: Target - BAC Filton; 68 dispatched; 58 attacked; 6 aborted; 4 lost. St/KG 55, Villacoublay, 5 He 111 (2) 11.45 - 11.50 hrs with 8 SC 250. I/KG 55, Dreux, 21 He 111 (18), 11.45 hrs with 68 SC 250, 17 SC 250 LZZ. 1 lost cr. Studland, Dorset. II/KG 55, Chartres, 24 He 111 (20), 11.40 hrs with 150 SC 250, 24 Flam 250. 2 lost cr. Failand & Woolverton, Somerset. III/KG 55, Villacoublay, 18 He 111 (17), 11.45 hrs with 74 SC 250, 24 Flam 250. 1 lost cr. Poole, Dorset. I,II,III/ZG 26, Cherbourg, Le Havre, Thiberville, 52 Bf 110, Fighter Escort. 3 lost cr. Boyton, Wilts; in English Channel; France.

25/26: KGr 606, Brest, Do 17's, Liverpool. Alternative night attack on Bristol (1) with 10 SC 50, 60 B1 EI.

27/28: Epr Gr 210, Cherbourg, 10 Bf 110, Parnall Aircraft Yate, aborted. 20 SC 250 jettisoned on edge of Bristol. 4 lost cr. Tarrent Gunville, Iwerne Minster, and Kimmeridge, in Dorset also 1 in English Channel. I,II,III/ZG 26, Cherbourg, Le Havre, Thiberville, 42 Bf 110, Fighter Escort. 6 lost cr. Bristol; Radstock, Som; Piddletrenthide, Arne, Kimmeridge, Dorset; also 1 in the English Channel.

27/28: KGr 606, Brest, Do 17's, Liverpool. Alternative night attack on Bristol (1) with 10 SC 50, 60 B1 EI.

29/30: III/KG 27, Rennes, He 111's, Liverpool. Alternative Bristol Channel Area (1) 22.30 hrs with 4 SC 250.

OCTOBER 1940

01/02: KGr 100, Vannes, He 111's, Manchester. Alternative Bristol (1) 00.48 hrs with 4 SC 250, 2 Flam 250.

06/07: II/KG 55, Chartres, 1 He 111 t/o 16.19 hrs, Parnall Yate. Aborted.

10/11: III/KG 55, Villacoublay, 1 He 111 t/o 03.45 hrs, BAC Filton. Aborted. 2 crew identified:- Oblt. Speck von Sternberg (F); Ofw. Martin Reiser (B).

12/13: II/KG 55, Chartres, 3 He 111, Parnall Yate. Alternative Bristol & Avonmouth 20.40 - 21.45 hrs with 2 SC 1000, 11 SC 250, 2 Flam 250, 289 B1 EI.

13/14: III/KG 27, Rennes, He 111's, Liverpool. Alternative Bristol (1) 23.15 hrs with 4 SC 250, 144 B1 EI.

14/15: 4(F)/14, 1 Do 17, t/o 03.45 hrs (14/10) on armed reconnaissance and weather reporting mission jettisoned 4 SC 50 in the Bristol Area.

14/15: KGr 606, Brest, 2 Do 17, Bristol (1) 21.00 hrs with 10 SC 50, 60 B1 EI. Alternative Avonmouth (1) 21.15 hrs with 10 SC 50, 60 B1 EI.

15/16: III/KG 55, Villacoublay, 1 He 111, BAC Filton. Alternative Avonmouth 06.10 hrs with 4 SC 250, 3 Flam 250. 3 crew identified:- Oblt. Speck von Sternberg (F); Ofw. Martin Reiser (B); Uffz. Josef Schröder (Bm).

15/16: KGr 606, Brest, 8 Do 17, Bristol, 19.40 - 21.45 hrs with 80 SC 50, 480 B1 EI. III/KG 55, Villacoublay, 1 He 111, BAC Filton. 4 SC 250, 2 Flam 250 dropped SW of Filton at 22.49 hrs.

16/17: KGr 606, Brest, Do 17's, Liverpool. Alternative Bristol (1) 21.06 hrs with 10 SC 50, 60 B1 EI

18/19: II/KG 27, Bourges & Dinard, He 111's Birkenhead, Alternative Bristol (1) 20.15 hrs with 3 SC 250, 1 SC 250 LZZ.

19/20: III/KG 55, Villacoublay, 1 He 111, daytime attack on BAC Filton. Aborted. 2 crew identified :- Oblt. Speck von Sternberg (F); Ofw. Martin Reiser (B).

19/20: KGr 606, Brest, Do 17's, Liverpool. Alternative Bristol (2) 20.05 - 20.30 hrs with 20 SC 50, 120 B1 EI. I/KG 27, Tours, He 111's, Liverpool. Alternative (2) 19.30 - 22.25 hrs with 6 SC 250, 2 SC 250 LZZ, 36 B1 EI.

20/21: KGr 606, Brest, Do 17's, Birmingham. Alternative night attack on Bristol (1) with 10 SC 50, 60 B1 EI.

21/22: KGr 606, Brest, Do 17's, Liverpool. Alternative Bristol (1) 22.45 hrs with 10 SC 50, 60 B1 EI. III/KG 27, Rennes, He 111's, Liverpool. Alternative Bristol (1) 23.15 hrs with 4 SC 250.

22/23: KGr 606, Brest, Do 17's, Liverpool. Alternative Bristol (1) 20.35 hrs with 10 SC 50, 60 B1 EI.

24/25: III/KG 55, Villacoublay, 1 He 111, BAC Filton. Alternative railway junction E. of Filton 13.27 hrs with 4 SC 250, 4 SC 50. Crew:- Oblt. Speck von Sternberg (F); Oblt Martin Reiser (B); Uffz. Josef Schröder (Bm); Ofw. Konrad Rabenstein (Bf); PK Sfr. Kirchhoff (War Correspondent); Fw Rühle (Bs).

25/26: I/LG 1, Orléans, Ju 88's, Birmingham. Alternative Bristol (1) 20.10 hrs with 2 SC 500. III/KG 27, Rennes, He 111's, Liverpool. Alternative Bristol (1) 22.35 hrs with 4 SC 250, 144 B1 EI.

26/27: II/KG 27, Bourges & Dinard, He 111's, Liverpool. Alternative Bristol (2) 22.10 - 22.35 hrs with 7 SC 250, 1 SC 250 LZZ

27/28: KGr 606, Brest, Do 17's. Alternative (1) Bristol 21.00 hrs with 1 SC 250, 60 B1 EI. II/LG 1, Orléans, Ju 88's. Alternative (1) Bristol 21.10 hrs with 2 SC 500

28/29: KG 27, 1 He 111, Bristol (Feint for main attack on Birmingham) 21.45 hrs with 4 SC 250, 144 B1 EI.

29/30: KGr 606, Brest, 1 Do 17, Bristol (Feint for main attack against Birmingham/Coventry), 21.55 hrs with 10 SC 50, 60 B1 EI.

30/31: I/LG 1, Orléans, 1 Ju 88, Bristol (Feint for main attacks on Sheffield/Nottingham), 20.04 hrs with 2 SC 500, 1 Flam 250.

31/01: III/KG 55, Villacoublay, 1 He 111 t/o 10.46 hrs, BAC Filton. Aborted. crew:- Oblt. Speck von Sternberg (F); Ofw. Martin Reiser (B). Uffz. Josef Schröder (Bm); Ofw. Konrad Rabenstein (Bf); Fw Rühle (Bs).

NOVEMBER 1940

01/02: II/KG 55, Chartres, 1 He 111, daytime attack on Industrial & Railway targets on S. edge of Bristol with 1 SC 1000, 4 SC 250. III/KG 27, Rennes, 1 He 111, Bristol (Feint for main attack on Birmingham) 20.00 hrs with 3 SC 250, 1 SC 250 LZZ.

06/07: III/KG 27, Rennes, 3 He 111, night attack on Bristol, with 6 SC 250, 30 SC 50, 432 B1 EI.

20/21: Feint for main night attack on Birmingham. III/KG 27, Rennes, 1 He 111, Bristol with 20 SC 50. KGr 606, Brest, 1 Do 17, Bristol, 22.10 hrs with 10 SC 50, 60 B1 EI.

21/22: II,III/LG 1, Orléans & Châteaudun, 8 Ju 88, Bristol, 19.50 - 20.04 hrs with 5 SC 500, 13 SC 250, 20 SC 50.

23/24: KGr 606, Brest, 1 Do 17, Bristol (Feint for main attack on Southampton), 19.40 hrs with 10 SC 50, 60 B1 EI.

24/25: Target - Bristol: Concentration point both sides of the City Docks. 148 aircraft dispatched, 135 over Bristol, 2 lost. I/KG 1, Montdidier, 15 He 111 (12), 20.49 - 22.00 hrs with 19 SC 250, 140 SD 50, 1152 B1 EI. III/KG 26, Poix-Nord, 4 He 111, 18.47 - 19.51 hrs with 3 SC 500, 12 SC 250, 3 Flam 250. (Y-Verfahren guided). LG 1, Orléans & Châteaudun, 22 Ju 88 (21) 19.33 - 20.20 hrs with 3 SC 1000, 17 SC 500, 36, SC 250, 40 SD 250. I/KG 27, Tours, 15 He 111's, 20.20 - 21.00 with 15 SC 250, 252 SC 50. III/KG 27, Rennes, 15 He 111 (14), 21.00 - 22.00 with 12 SC 250, 200 SC 50. KGr 100, Vannes, 11 He 111, 18.58 - 19.37 hrs with 112 SC 50mV, 4690 B1 EI ZA. KGr 606, Brest, 5 Do 17, 21.35 - 22.00 with 50 SC 50, 240 B1 EI. I lost returning cr. Penlee Point, Cornwall. I/KG 51, Melun, 14 Ju 88 (11), 21.10 - 22.35 with 15 SC 500, 18 SC 250. II/KG 51, Orly, 10 Ju 88, 21.39 - 22.20 hrs with 15 SC 500, 10 Flam 250, 50 SC 50. III/KG 51, Bretigny, 7 Ju 88, 22.10 - 23.00 hrs with 3 SC 1000, 3 SC 500, 2 Flam 500, 3 SC 250, 2 Flam 250, 10 SC 50. St/KG 55, Villacoublay, 2 He 111, 19.15 - 19.25 hrs with 32 SD 50, 456 B1 EI. I/KG 55, Dreux, 16 He 111 (12), 20.20 - 21.08 hrs with 7 SC 1000, 1 SC 500, 96 SD 50, 1152 B1 EI. II/KG 55, Chartres, 14 He 111, 18.30 - 19.15 hrs with 5 SC 1800, 9 PC 1400, 5 SC 1000, 28 SC 50, 28 SD 50. 1 lost returning cr. in sea off Isle of Wight. III/KG 55, Villacoublay, 11 He 111 (10), 19.30 - 20.14 hrs with 180 SD 50, 3888 B1 EI.

25/26: KGr 100, Vannes, 9 He 111's, Avonmouth, 1845 - 19.11 hrs with 72 SC 50, 6 480 B1 EI (X-Verfahren guided).

26/27: KGr 100, Vannes, 7 He 111, Avonmouth (4) 18.32 - 18.48 with 24 SC 50, 2640 B1 EI, 528 B1 EI ZA (X-Verfahren guided). III/KG 26, Poix-Nord, He 111's, night attack on Bristol. Aborted.

28/29: Target - Liverpool, Bristol attacked at night as alternative. KG 26, 2 He 111 21.30 hrs with 2 SC 500, 4 SC 250, 288 B1 EI. KG 76, 1 Ju 88, 2 SC 500. III/KG 27, Rennes, 1 He 111, 23.00 hrs with 1152 B1 EI. KGr 100, Vannes, 2 He 111, 20.00 - 20.30 hrs, 2016 B1 EI. II/LG 1, Orléans, 3 Ju 88, 20.45 - 01.25 hrs with 1 SC 1000, 3 SC 500, 2 SC 250.

DECEMBER 1940

02/03: Target - Bristol: Docks & Harbour Area. 132 aircraft dispatched, 121 attacked Bristol, 1 an alternative in the Bristol area. 1 lost. I/KG 1, Montdidier, 13 He 111, 17.20 - 20.35 hrs and III/KG 1, Achiet, 7 Ju 88, 18.28 - 19.22 hrs with 14 SC 500, 53 SC 250, 14 SC 250 LZZ, 5328 B1 EI. II/KG 77, Rheims, 15 Ju 88 (11), 19.43 - 20.51 hrs with 7 SC 1000, 8 SC 500, 5 SC 250LZZ. II/LG 1, Orléans, 11 Ju 88, 19.00 - 19.35 hrs with 1 SC 1000, 18 SC 500, 19 SC 250 LZZ. III/LG 1, Châteaudun, 9 Ju 88 (8), 18.48 - 19.40 hrs with 4 SC 1000, 8 SC 500. I/KG 27, Tours, 14 He 111, 20.40 - 21.45 hrs with 1 SC 500, 13 SC 250, 220 SC 50, 2888 B1 EI. III/KG 27, Rennes, 9 He 111 (8), 20.20 - 20.52 hrs with 8 SC 250, 120 SC 50, 1152 B1 EI. KGr 100, Vannes, 10 He 111, 18.37 - 19.06 hrs with 48 SC 50, 7855 B1 EI, 785 B1 EI ZA. (X-Verfahren guided). KGr 606, Brest, 8 Do 17 (5), 21.55 - 22.15 hrs with 50 SC 50, 300 B1 EI. 1 Do 17 attacked vicinity of Bristol at 21.00 hrs with 1 SC 250, 60 B1 EI. 1 lost cr. taking off in France. I/KG 54, Evreux, 4 Ju 88, 21.50 - 22.30 hrs with 8 SC 250, 20 SC 50, 20 SD 50. II/KG 54, St.André, 4 Ju 88, 20.50 - 21.43 hrs with 2 SC 1000, 3 SC 500, 3 Flam 500. KGr 806, Nantes, 5 Ju 88 (4), 21.23 - 22.04 hrs with 1 SC 1000, 4 SC 500, 3 Flam 500. I/KG 55, Dreux, 10 He 111, 20.28 - 21.08 hrs with 9 SC 1000, 1 SC 500, 120 SC 50, 1152 B1 EI. II/KG 55, Chartres, 13 He 111 (12), 18.30 - 19.55 hrs with 3 SC 1800, 1 SD 1700, 1 PC 1400, 3 SC 1000, 10 SC 50, 10 SD 50, 2700 B1 EI.

04/05: III/KG 55, Villacoublay, 1 He 111 t/o 14.25 hrs. Nuisance attack on Bristol. Alternative railway works nr. Bristol at 16.25 hrs with 4 SC 250, 12, SC 50.

06/07: Target - Bristol: Docks & Harbour Area. 80 aircraft dispatched, 67 attacked, 3 lost. I & III/KG 77, Juvincourt, 15 Ju 88 (11), 19.20 - 21.10 hrs with 10 SC 1000, 2 SC 500, 7 SC 250 LZZ. 1 lost cr. France. I/LG 1, Orléans, 3 Ju 88, 20.00 - 20.10 hrs with 2 SC 1000, 3 SC 500, 2 SC 250. II/LG 1, Orléans, 6 Ju 88 (5), 20.00 - 20.18 hrs with 8 SC 500, 4 SC 250. II/KG 27, Bourges, 10 He 111 (7), 19.50 - 20.25 hrs with 7 SC 250, 82 SC 50, 576 B1 El. 1 lost cr. France. I/KG 51, Melun, 9 Ju 88 (8), 21.45 - 22.45 hrs with 2 SC 1000, 12 SC 500, 7 SC 250, 2 Flam 250. 1 lost cr. France. II/KG 51, Orly, 7 Ju 88, 20.50 - 21.35 hrs with 14 SC 500. I/KG 55, Dreux, 11 He 111 (8), 20.30 - 21.35 hrs with 5 SC 1000, 84 SC 50, 896 B1 El. II/KG 55, Chartres, 11 He 111 (9), 19.20 - 20.10 hrs with 2 SC 1800, 1 SD 1700, 4 PC 1400, 4 SC 500, 12 SC 50, 12 SD 50, 1920 B1 El. III/KG 55, Villacoublay, 11 He 111 (9), 19.50 - 20.20 hrs with 31 SC 250, 36 SD 50, 2304 B1 El.

11/12: Feint for main attack on Birmingham. KGr 606, Brest, 1 Do 17, Bristol 20.25 hrs with 10 SC 50, 60 B1 El. III/KG 27, Rennes, 1 He 111, Bristol, 22.55 hrs with 4 SC 250. I/LG 1, Orléans, 1 Ju 88, Avonmouth, 22.30 hrs with 1 SC 1000, 1 SC 250.

12/13: III/KG 27, Rennes, 1 He 111, Bristol (Feint for main night attack on Sheffield). Aborted.

15/16: I/KG 27, Tours, 3 He 111, Bristol (Feint for main attack on Sheffield) 20.20 - 20.25 hrs with 7 SC 250, 432 B1 El.

20/21: III/KG 77, Juvincourt, 1 Ju 88, Bristol (Feint for main attack on Liverpool). 18.50 hrs with 1 SC 1000 and 1 SC 250. 1 aircraft (unit unrecorded) attacked Bristol as an alternative at 22.10 hrs with 30 SC 50, 72 B1 El.

21/22: III/KG 27, Rennes, 1 He 111, Liverpool. Alternative target south of Bristol at 20.20 hrs with 4 SC 250.

22/23: I/KG 27, Tours, 2 He 111, Bristol (Feint for main attack on Manchester) 20.20 hrs with 4 SC 250, 8 SC 50, 476 B1 El. III/KG 27, Rennes, 1 He 111, Manchester. Alternative Bristol at 20.35 hrs with 2 SC 250, 1 SC 250 LZZ. KGr 100, Vannes, 1 He 111, Manchester. Alternative Bristol at 18.29 hrs with 1008 B1 El.

23/24: KGr 606, Brest, 1 Do 17, Bristol (Feint for main attack on Manchester) 22.00 hrs with 10 SC 50, 60 B1 EL.

JANUARY 1941

03/04: Target - Bristol with Concentration Point the Town Centre on both sides of the River Avon. 202 aircraft of Luftflotte 2 & 3 dispatched, 178 attacked, 1 lost.

Luftflotte 3 dispatched 125 aircraft, 111 attacked. I & III/KG 1, Montdidier, 11 He 111 (10) and 4 Ju 88 (3), 18.35 - 20.10 hrs with 1 SC 1000, 5 SC 500, 3 SC 250 LZZ, 11,520 B1 El. I & III/KG 77, Rheims & Juvincourt, 21 Ju 88 (19), 18.55 - 20.35 hrs with 7 SC 1000, 13 SC 500, 1 SC 500 LZZ, 4500 B1 El. I/KG 26, Beauvais, 10 He 111 (9), 19.20 - 20.00 hrs with 7 SC 1000, 2 SC 500, 6 SC 250 LZZ, 3742 B1 El. III/KG 26, Poix-Nord, 4 He 111, 19.35 hrs - 20.06 hrs with 4 SC 1000, 576 B1 El. I/LG 1, Orléans, 6 Ju 88 (4), 23.25 - 00.10 hrs with 4 SC 1000, 3 SC 500, 2 SC 250 LZZ. I/KG 27, Tours, 15 He 111 (14), 21.50 - 23.08 hrs with 1 SC 500, 8 SC 250, 6 SC 250 LZZ, 48 SC 50, 9720 B1 El, 1080 B1 El ZA. II/KG 27, Bourges, 9 He 111, 21.55 - 23.30 hrs with 4 SC 250, 5 SC 250 LZZ, 6480 B1 El. KGr 100, Vannes, 9 He 111's, 19.20 - 19.40 hrs with 9332 B1 El, 1036 B1 El ZA. (X-Verfahren guided). I/KG 54, Evreux, 8 Ju 88 (7), 20.40 - 22.35 hrs with 16 SC 250, 30 SC 50, 25 SD 50, 180 B1 El. II/KG 54, St. André, 6 Ju 88, 21.04 - 21.45 hrs with 8 SC 500, 4 Flam 500. St/KG 55, Villacoublay, 1 He 111. Aborted. I/KG 55, Dreux, 4 He 111 (3), 20.14 - 20.21 hrs with 12 SC 250. II/KG 55, Chartres, 11 He 111 (9), 19.05 - 19.43 hrs with 4 SC 1800, 5 PC 1400, 3096 B1 El. III/KG 55, Villacoublay, 5 He 111, 19.45 - 20.10 hrs with 24 SC 250, 16 SD 50, 864 B1 El.

Luftflotte 2 dispatched 77 aircraft, 67 attacked from ? - 00.38 hrs then 01.12 - 05.51 hrs with 10 SC 1800, 30 SC 1000, 10 SC 500, 3 SC 250 LZZ, 7 SC 250, 274 SC/SD 50, 1440 B1 El. 1 lost. (Units not confirmed) :- II/KG 2, Merville, Do 17's; Stab & III/KG 2, Cambrai, Do 17's; I/KG 3, Le Coult, Do 17's; II/KG 3, Antwerp, Do 17's; III/KG 3 St. Trond, Do 17's. 1 lost cr. Belgium; I/KG 53, Vitry, He 111's; I/KG 4, Soesterberg, He 111's; II/KG 4, Soesterberg, He 111's; II/KG 30, Amsterdam, Ju 88's.

04/05: Target - Avonmouth, 165 aircraft of Luftflotte 2 & 3 dispatched, 103 attacked. None lost.

Luftflotte 3 dispatched 87 aircraft, 75 attacked. I & III/KG 77, Rheims & Juvincourt, 25 Ju 88, 22.25 - 00.09 hrs with 13 SC 1000, 16 SC 500, 4896 B1 El. I/KG 26, Beauvais, 10 He 111, 22.28 - 00.20 hrs with 8 SC 1000, 2 SC 500, 6 SC 250, 3168 B1 El. I/KG 27, Tours, 14 He 111 (11), 21.40 - 22.25 hrs with 2 SC 500, 16 SC 250, 80 SC 50. (1) Portishead as alternative 22.05 hrs with 2 SC 250, 8 SC 50, 578 B1 El. II/KG 27, Bourges, 11 He 11 (10), 21.43 hrs - 22.43 hrs with 10 SC 250, 10 SC 250 LZZ, 40 SC 50, 5040 B1 El. KGr 100, Vannes, 10 He 111 (6), 18.57 - 19.05 hrs with 6284 B1 El, 628 B1 El ZA. (X-Verfahren guided). I/KG 51, Melun, 4 He 111, 18.35 - 19.00 hrs with 4 SC 500, 8 SC 250. II/KG 51, Orly, 3 Ju 88 (2), 19.10 - 19.15 hrs with 1 SC 1000, 2 SC 500. (1) Bristol as alternative with 1 SC 1000. III/KG 51, Bretigny, 1 Ju 88, 19.25 hrs with 1 SC 1000. I/KG 54, Evreux, 4 Ju 88 (3), 20.10 - 20.25 hrs with 8 SC 250, 7 SC 50, 10 SD 50. II/KG 54, St. André, 5 Ju 88 (2), 20.10 - 21.08 hrs with 3 SC 500, 3 Flam 500. (2) Bristol as alternative at 21.00 hrs with 4 SC 500.

Luftflotte 2 dispatched 78 aircraft to Avonmouth, 28 attacked and 21 Bristol as an alternative. Avonmouth bombed up to 06.15 hrs with 3 SC 1800, 7 SC 1000, 1 SC 250, 288 SC/SD 50, 725 B1 El. Bristol 23.45 - 04.27 hrs with 1 SC 1800, 12 SC 1000, 6 SC 500, 5 SC 250, 88 SC 50, 72 B1 El. (Units not confirmed):- I/KG 2, Cambrai, Do 17's; II/KG 2, Merville, Do 17's; I/KG 3, Le Culot, Do 17's; III/KG 3, St. Trond, Do 17's; I/KG 53, Vitry, He 111's; I/KG 4, Soesterberg, He 111's; II/KG 4, Soesterberg, He 111's; I/KG 30, Eindhoven, Ju 88's; II/KG 30, Gilze-Rijen, Ju 88's.

09/10: I/KG 27, Tours, 1 He 111, Manchester, Alternative Bristol 22.20 hrs with 2 SC 250, 360 B1 El. KGr 100, Vannes, 1 He 111, Manchester, Alternative Bristol 21.02 hrs with 957 B1 El ZA. II/KG 54, St. André, 1 Ju 88, Manchester, Alternative Bristol, 23.00 hrs with 3 SC 250 LZZ, 1 SC 50. I/KG 27, Tours, 2 He 111, Manchester, Alternative Avonmouth 22.55 - 23.12 hrs with 2 SC 250, 16 SC 50, 1152 B1 El.

11/12: I/KG 51, Melun, 1 Ju 88, Parnall Yate. Alternative Bristol 19.50 hrs with 1 SC 1000, 1 SC 250.

16/17: Target - Avonmouth, attack centred on the town and northern half of the dock area. 178 aircraft dispatched, 126 attacked, 15 to Bristol as alternative. 2 lost. III/KG 26, Poix-Nord, 7 He 111 (6), 19.40 - 22.30 hrs with 6 SC 1000, 96 SC 50 (Y-Verfahren guided). I/LG 1, Orléans, 12 Ju 88 (9), 04.05 - 05.08 hrs with 9 SC 1000, 8 SC 500. 1 lost cr. in the Sea. I/KG 27, Tours, 17 He 111 (13), 02.12 - 03.25 hrs with 4 SC 500, 25 SC 250, 76 SC 50, 5616 B1 El. (1) Alternative Bristol 01.55 hrs with 1 SC 250, 4 SC 50, 288 B1 El. II/KG 27, Bourges, 19 He 111, 02.03 - 03.55 hrs with 19 SC 250, 152 SC 50, 10,944 B1 El. III/KG 27, Rennes, 11 He 111, 02.20 - 03.47 hrs with 10 SC 250, 84 SC 50, 6192 B1 El. KGr 100, Vannes, 20 He 111, 19.30 - 20.20 hrs with 26,736 B1 El. 1 lost cr. in Sea. (X-Verfahren guided). I/KG 51, Melun, 6 He 111 (1), 22.50 hrs with 3 SC 500, 1 SC 250. (4) Alternative Bristol 23.14 hrs with 1 SD 1400, 8 SC 500, 3 SC 250. II/KG 51, Orly, 5 Ju 88 (4), 23.55 - 00.14 hrs with 4 SC 1000. III/KG 51, Bretigny, 6 Ju 88 (3), 23.41 - 00.14 hrs with 2 SC 1000, 1 SC 500, 1 SC 250. I/KG 54, Evreux, 14 Ju 88 (2), 00.20 - 01.20 hrs with 2 SC 500, 4 SC 250, 5 SD 50. (12) Alternative AA nr. Avonmouth 00.20 - 01.20 hrs with 4 SC 1000, 15 SC 500, 2 SC 250, 5 SD 50. II/KG 54, St. André, 9 Ju 88 (7), 01.20 - 02.25 hrs with 15 SC 500. (1) Alternative Bristol 02.05 hrs with 2 SC 500. KGr 806, Caen, 7 Ju 88 (2) 01.25 - 02.43 hrs with 2 SC 1000. (3) Alternative Bristol 01.55 hrs with 1 SC 250, 4 SC 50, 288 B1 El. St/KG 55, Villacoublay 6 He 111 (4), 22.30 - 23.40 hrs with 24 SC 250, 2016 B1 El. I/KG 55, Dreux, 8 He 111 (3), 22.45 - 23.30 hrs with 3 SC 1000, 6 SC 250, 864 B1 El. (5) Alternative Bristol 20.00 - 23.30 hrs with 1 SC 1800, 4 SC 1000, 7 SC 250, 1728 B1 El. I & II/KG 55, Dreux & Chartres, 18 He 111 (17), 19.48 - 20.15 hrs with 4 SC 1800, 12 PC 1400, 3 SC 1000, 15 SC 250, 21 SC 50, 4320 B1 El. III/KG 55, Villacoublay, 13 He 111 (6), 21.55 - 23.00 hrs with 30 SC 250, 2592 B1 El. I/KG 51, Melun, 1 Ju 88, Parnall Yate. Aborted.

17/18: Target - Swansea. Bristol attacked as alternative. KGr 606, Brest, 1 Do 17, 22.45 hrs with 10 SC 50. I/KG 54, Evreux, 1 Ju 88, 00.15 hrs with 1 SC 1000. II/KG 54, St. André, 1 Ju 88, 01.02 hrs with 3 SC 500, also 1 Ju 88 attacked SL SE of Bristol 01.15 hrs with 2 SC 500. KGr 806, Caen, 2 Ju 88, 00.05 hrs with 1 SC 1000, 2 SC 500.

FEBRUARY 1941

20/21: KG 77, 1 Ju 88, Swansea, Alternative Bristol 21.45 hrs with 1 SC 500, 3 SC 250.

22/23: II/KG 27, Bourges, 3 He 111 (1G+BM, 1G+GP, 1G+GM), afternoon attack on BAC Filton & Parnall Yate. (2) Aborted. 1G+GM, briefed to attack Yate cr. Portbury 14.12 hrs.

27/28: II/KG 27, Bourges, 2 He 111 (1G+CC & 1G+GP) BAC Filton & Parnall Yate, 1 aborted. G1+CC attacked Parnall Yate 14.36 hrs with 7 SC 250 mV. Crew - Oblt. Hermann Lohmann (B); Ofw. Beckmann (F); Sfw. Köster (Bf); Sfw. Trageser (Bm); Gefr. Hey (Bs).

MARCH 1941

01/02: II/KG 27, Bourges, He 111's, Cardiff. Alternative Bristol (1) 20.10 hrs with 3 SC 250, 8 SC 50.

06/07: I/KG 27, Tours, 1 He 111, BAC Filton 18.25 hrs with 7 SC 250. Crew - Oblt. Hollinde; Ofw. Libuda; Uffz. Weber; Gefr. Schillig; Gefr. Schwarz.

07/08: II/KG 27, Bourges, 1 He 111 (1G+CC), Parnall Yate 14.05 hrs with 7 SC 250 mV. Crew - Oblt. Hermann Lohmann (B); Obfw. Beckmann (F); Sfw. Köster (Bf); Sfw. Trageser (Bm); Gefr. Hey (Bs).

11/12: KGr 100, Vannes, He 111's, Birmingham. Alternative Bristol (1) 21.53 hrs with 24 SC 50.

16/17: Target - Bristol & Avonmouth. 76 aircraft dispatched to Bristol, 108 to Avonmouth. 107 reported over Bristol, 57 over Avonmouth. 6 lost. Luftflotte 2 was also to take part but poor weather prevented it.

On Avonmouth 5 SC 1000, 12 SC 500, 110 SC 250, 17 SC 250 LZZ, 243 SC 50, 22,824 B1 EI. Target Avonmouth:- I/KG 27, Tours, 15 He 111 (14), 23.00 - 00.20 hrs. II/KG 27, Bourges, 16 He 111, 22.55 - 00.26 hrs. Alternative Bristol (2) 00.20 - 00.28 hrs. III/KG 27, Rennes, 8 He 111 (1) 23.45 hrs. Alternative Bristol (7) 22.30 - 00.23 hrs. KGr 100, Vannes, 8 He 111 (5), 22.45 - 23.42 hrs. Alternative Bristol (3) 23.15 - 23.55 hrs. (X-Verfahren guided) I/KG 51, Melun, 12 Ju 88 (3), 23.24 - 23.30 hrs. Alternative Bristol (5) 23.45 - 00.06 hrs. 2 lost cr. Chilmark, Wilts & France. II/KG 51, Orly, 3 Ju 88, 00.45 - 01.18 hrs. III/KG 51, Bretigny, 2 Ju 88, 00.18 - 00.37 hrs. I/KG 54, Evreux, 2 Ju 88, 00.40 - 00.43 hrs. St/KG 55, Villacoublay, 2 He 111 (1) 00.45 hrs. Alternative (1) Whitchurch 22.20 hrs with 16 SD 50 & Bristol 22.25 hrs with 16 SD 50. I/KG 55, Dreux, 10 He 111, 24.00 - 00.35 hrs. II/KG 55, Chartres, 12 He 111 (0). Alternative Bristol (12) 23.50 - 00.01 hrs. III/KG 55, Villacoublay, 14 He 111 (13), 00.40 - 01.22 hrs. Alternative Bristol (1) 00.50 hrs with 5 SC 250 and 288 B1 EI.

On Bristol 4 SC 1000, 43 SC 500, 261 SC 250, 7 SC 250 LZZ, 267 SC 50, 80 SD 50, 11,016 B1 EI. Target Bristol:- I/KG 1, Amiens, 6 He 111, 21.00 - 21.30 hrs. II/KG 1, Rosières, 7 Ju 88, 20.35 - 20.50 hrs. 1 lost cr. France. III/KG 26, Le Bourget, 15 He 111 (14), 21.06 - 22.37 hrs. (Y-Verfahren guided) II/KG 76, Châteaudun, 30 Ju 88 (29), 02.00 - 03.25 hrs. 3 lost cr. France. I/KG 77, Juvincourt, 5 Ju 88, 21.58 - 23.25 hrs. II/KG 77, Beauvais, 4 Ju 88, 22.40 - 23.05 hrs.

18/19: III/KG 27, Rennes, He 111's, Hull. Alternative Bristol (1) 04.40 hrs with 3 SC 250, 12 SD 50.

19/20: St/KG 55, Villacoublay, He 111's, RAF Airfields. Alternative Whitchurch airfield (1) 23.00 hrs with 38 SD 50.

29/30: Target - Bristol/Avonmouth. 21 aircraft to Bristol, 19 attacked. 17 to Avonmouth, 16 attacked, 1 to Bristol as alternative.

Target Bristol:- III/KG 1, Achiet, 13 Ju 88 (11), 21.10 - 21.45 hrs with 6 SC 500, 31 SC 250, 5 SC 250 LZZ, 15 SC 50, 540 B1 EI. II/KG 76, Châteaudun, 8 Ju 88, 21.15 - 21.40 hrs with 32 SC 250, 80 SD 50.

Target Avonmouth:- III/KG 26, Le Bourget, 5 He 111, 21.38 -

22.08 hrs with 5 SC 500, 8 SC 50, 2160 B1 EI. (Y-Verfahren guided). KGr 100, Vannes, 12 He 111 (11), 21.05 - 21.53 hrs with 95 SC 50 mV, 8396 B1 EI, 840 B1 EI ZA. Alternative Bristol (1) 21.53 hrs with 1047 B1 EI, 105 B1 EI ZA. (X-Verfahren guided).

APRIL 1941

03/04: Target - Avonmouth. 94 aircraft dispatched, 49 attacked, 27 attacked Bristol as an alternative. 1 lost. III/KG 26, Le Bourget, 6 He 111, 21.40 - 22.34 hrs with 6 SC 500, 3168 B1 EI. II/KG 1, Rosières, 16 Ju 88 (11), 23.30 - 00.10 hrs with 8 SC 500, 8 SC 250 LZZ, 27, SC 250. III/KG 1, Achiet, 10 Ju 88 (5), 23.10 - 00.45 hrs, 2 SC 500, 1 SC 250 LZZ, 15 SC 250, 2 SC 250 LZZ, 10 SC 50. 1 lost cr. in sea off Isle of Wight. II/KG 76, Châteaudun, 10 Ju 88, 21.35 - 22.30 hrs with 39 SC 250. KGr 100, Vannes, 14 He 111 (13), 21.22 - 22.05 hrs with 14 SC 250, 216 SC 50, 4200 B1 EI, 418 B1 EI ZA. Alternative Bristol (1) 22.05 hrs with 1037 B1 EI, 115 B1 EI ZA. (X-Verfahren guided). II/KG 27, Bourges, 12 He 111 (11), 21.30 - 23.00 hrs with 33 SC 250, 11 SC 250 LZZ, 40 SC 50. I/KG 54, Evreux, 8 Ju 88 (5), 21.16 - 23.25 hrs with 4 SC 500, 12 SC 250. II/KG 54, Evreux, 11 Ju 88, 23.08 - 23.35 hrs with 16 SC 500, 8 SC 250. KGr 806, Caen, 6 Ju 88, 22.02 - 22.45 hrs with 5 SC 1000.

04/05: Target - Avonmouth. 105 aircraft dispatched, 83 attacked. 2 attacked SE Bristol as an alternative. 1 lost. I/KG 77, Juvincourt, 15 Ju 88 (14), 22.48 - 23.55 hrs with 1 SC 500, 42 SC 250, 12 SC 250 LZZ, 3672 B1 EI. Alternative Bristol (1) 23.55 hrs with 3 SC 250, 1 SC 250 LZZ, 108 B1 EI. II/KG 77, Beauvais, 12 Ju 88 (9), 23.00 - 00.30 hrs with 16 SC 500, 19 SC 250, 2016 B1 EI. Alternative Bristol (1) 23.00 hrs with 1 SC 500, 2 SC 250, 360 B1 EI. III/KG 77, Juvincourt, 6 Ju 88 (5) 00.40 - 01.30 hrs with 15 SC 250, 5 SC 25 LZZ, 576 B1 EI. III/KG 26, Le Bourget 12 He 111 (11) 21.57 - 23.11 hrs with 11 SC 500, 4176 B1 EI. 1 lost cr. Hewish, Som. (Y-Verfahren guided). II/KG 27, Bourges, 12 He 111, 21.15 - 22.04 hrs with 36 SC 250, 12 SC 250 LZZ, 54 SC 50. KGr 100, Vannes, 10 He 111, 21.17 - 21.44 hrs with 64 SC 50 mV with B1 EI, 8378 B1 EI, 838 B1 EI ZA (X-Verfahren guided). I/KG 54, Evreux, 9 Ju 88 (7), 21.56 - 23.05 hrs with 8 SC 500, 17 SC 250. II/KG 54, Evreux, 16 Ju 88 (12), 22.54 - 00.23 hrs with 13 SC 500, 30 SC 250. KGr 806, Caen, 3 Ju 88, 22.06 - 22.20 hrs with 12 SC 250.

07/08: Target - Bristol. 22 aircraft dispatched, 13 attacked Bristol, 9 attacked Avonmouth as alternative. KGr 100, Vannes, 1 He 111, 21.25 hrs with 4 SC 250 mV, 24 B1 EI. (X-Verfahren guided). I/KG 54, Evreux, 2 Ju 88, 21.25 - 22.00 Hrs with 8 SC 250. II/KG 54, Evreux, 1 Ju 88 (0). Alternative Avonmouth 21.50 hrs with 2 SC 250. KGr 806, Caen, 2 Ju 88, 21.13 - 21.25 hrs with 8 SC 250. I/KG 55, Dreux, 8 He 111 (0). Alternative Avonmouth (8) 22.27 - 00.15 hrs with 7 SC 500, 17 SC 250, 1512 B1 EI. II/KG 55, Chartres, 2 He 111, 22.20 - 22.30 hrs with 2 SC 500, 4 SD 250, 576 B1 EI. III/KG 55, Villacoublay, 6 He 111, 00.40 - 01.17 hrs with 12 SC 250, 44 SC 50, 3462 B1 EI.

Target - Glasgow, Greenock, Liverpool. 11 aircraft attacked Bristol as an alternative. KGr 100, Vannes, 1 He 111, 00.50 hrs with 759 B1 EI, 79 B1 EI ZA. II/KG 1, Rosières, 2 He 111, 23.05 - 24.00 hrs with 18 SC 250, 6 SC 250 LZZ. III/KG 1, Achiet, 1 Ju 88, 02.20 hrs; I/KG 27, Tours, 1 He 111, 00.42 hrs; and III/KG 27, Orléans, 2 He 111 22.28 - 23.55 hrs, with a total of 5 SC 250, 6 SC 250 LZZ, 198 B1 EI.

09/10: I/KG 55, Dreux, He 111's Birmingham. Alternative (1) Bristol 00.57 hrs. KGr 100, Vannes, He 111's, Birmingham. Alternative (1) Avonmouth, 22.56 hrs with 32 SC 50.

11/12: Target - Harbour installations at Bristol, Avonmouth and Portishead. 153 aircraft over the Bristol area, 98 claimed to have attacked Bristol, 38 Avonmouth, and 17 Portishead. Aircraft from Luftflotte 2 & 3. 5 lost.

Luftflotte 3 dispatched 164 aircraft, 130 reported over the area, 96 over Bristol, 25 over Avonmouth, 17 over Portishead. Target Avonmouth & Portishead:- I/KG 27, Tours, 9 He 111 (3), Portishead 01.15 - 02.20 hrs with 1 SC 500, 4 SC 250, 1 SC 250 LZZ, 16 SC 50, 612 B1 EI. Alternative (2) Avonmouth 02.31 - 02.35 hrs with 2 SC 500, 3 SC 250, 1 SC 250 LZZ, 16 SC 50. Alternative (3) Portishead 02.08 - 02.20 hrs with 3 SC 500, 10 SC 250, 3 SC 50. II/KG 27, Bourges, 15 He 111 (9), Avonmouth 01.45 - 02.30 hrs. (1) Alternative SW Bristol. Alternative (2) SE Bristol. All with 40 SC 250, 4 SC 250 LZZ, 66 SC 50, 1152 B1 EI. Alternative (3) SE Bristol 01.50 - 02.10 hrs with 12 SC 250, 13 SC 50. III/KG 27, Orléans, 15 He 111 (6), Avonmouth 01.30 - 02.15 hrs with 16 SC 250, 4 SC 250 LZZ, 48 SC 50. (7) Portishead 01.25 - 02.25 hrs with 13 SC 250, 2 SC 250 LZZ, 48 SC 50, 2204 B1 EI. 1 lost cr. Lydlinch, Dorset. KGr 100, Vannes, 14 He 111 (8), Avonmouth 22.15 - 23.09 hrs with 32 SC 50 mV, 7469 B1 EI, 735 B1 EI ZA (X-Verfahren guided). Portishead (4) 22.10 - 00.31 hrs with 32 SC 50 mV, 3100 B1 EI, 312 B1 EI ZA.

Target - Bristol:- II/KG 1, Rosières, 10 Ju 88 (9), 01.45 - 02.30 hrs with 9 SC 500, 9 SC 250, 9 SC 250 LZZ, 9 SD 50. III/KG 1, 6 Ju 88 (5), 01.20 - 01.40 hrs with 5 SC 500, 9 SC 250, 4, SC 250 LZZ. 1 lost cr. France.

III/KG 26, Le Bourget, 8 He 111 (5), 22.14 - 22.50 hrs with 1 SC 1800, 4 SC 1000, 3240 B1 EI (Y-Verfahren guided). 1 lost cr. in the sea. I/KG 54, Evreux, 17 Ju 88 (14) 00.30 - 01.41 hrs with 16 SC 500, 37 SC 250. II/KG 54, Evreux, 14 He 111 (10), 00.20 - 01.30 hrs with 8 SC 500, 32 SC 250, 4 SC 50, 144 B1 EI. 1 lost cr. in the sea. KGr 806, Caen, 8 Ju 88 (7), 00.06 - 01.10 hrs with 5 SC 500, 21 SC 250. St/KG 55, Villacoublay, 1 He 111, 01.10 hrs with 2 SC 250, 8 SC 50, 576 B1 EI. I/KG 55, Dreux, 17 He 111 (14), 01.42 - 03.00 hrs with 17 SC 1000, 7 SC 500, 24 SC 250, 3168 B1 EI. II/KG 55, Chartres, 9 He 111, 01.45 - 02.25 hrs with 8 SC 1000, 1 SC 500, 12 SC 250, 12 SC 50, 2952 B1 EI. III/KG 55, Villacoublay, 17 He 111 (16), 01.21 - 01.45 hrs with 32 SC 250, 126 SC 50, 9072 B1 EI. 1 lost cr. in the sea off Cherbourg.

Luftflotte 2 dispatched 17 aircraft to Bristol, 15 attacked Bristol, with probably 2 over Avonmouth. (Units not confirmed):- I & II/KG 53, Vitry & Lille, 15 He 111, 22.15 - 23.27 hrs with 21 SC 1000, 4 SC 500, 25 SC 250, 4 SC 250 LZZ, 37 SC 50, 1152 B1 EI.

15/16: Target - Belfast. 9 aircraft claimed to have attacked the Bristol area as an alternative. KG 77, 1 Ju 88, Bristol, 23.40 hrs with 4 SC 250. KGr 100, Vannes, 3 He 111, Avonmouth, 00.45 - 01.18 hrs with 4 SC 250, 1702 B1 EI, 170 B1 EI ZA. KGr 806, Caen, 1 Ju 88, Bristol, 00.10 hrs with 4 SC 250. 2 Ju 88 SW Bristol and Portishead, 01.45 - 02.33 hrs with 8 SC 250. III/KG 55, Villacoublay, 2 He 111, Bristol, 22.50 - 23.00 hrs with 2 SC 250, 2 SC 250 LZZ, 16 SC 50, 1152 B1 EI.

MAY 1941

05/06: I/KG 27, Tours, 1 He 111, Glasgow. Alternative Bristol 00.20 hrs with 1 SC 500, 2 SC 250, 288 B1 EI. St/KG 55, Villacoublay, 1 He 111, Exeter AF. Alternative Bristol 03.25 hrs with 12 SC 50, 144 B1 EI.

06/07: Unit unrecorded, 1 aircraft, Glasgow. Alternative Bristol 00.13 hrs with 1 SC 1000, 2 SC 250, 288 B1 EI.

07/08: Target - Liverpool. Bristol attacked as alternative by 16 aircraft. II/KG 27, Bourges, 4 He 111, 01.15 - 01.50 hrs with 13 SC 250, 3 SC 250 LZZ, 864 B1 EI. III/KG 27, Orléans, 2 He 111, 01.12 - 01.40 hrs with 12 SC 250. KGr 100, Vannes, 5 He 111, 01.30 - 01.57 hrs with 11 SC 250, 1 SC 250 LZZ, 20 SC 50, 2304 B1 EI. I/KG 55, Dreux, 1 He 111, 01.35 hrs with 1 SC 1000, 4 SC 250. II/KG 55, Chartres, 2 He 111, 02.10 - 02.35 hrs with 2 SC 500, 4 SC 250, 576 B1 EI. III/KG 55, Villacoublay, 2 He 111, 01.30 - 01.40 hrs with 4 SC 250, 3 SD 250, 8 SC 50, 8 SD 50, 576 B1 EI.

08/09: KGr 100, Vannes, 1 He 111, Derby. Alternative Bristol 01.07 hrs with 864 B1 EI.

11/12: Unit unrecorded, 7 aircraft, Filton AF. Alternative Avonmouth (1) 03.30 hrs with 4 SC 250 & Bristol (1) 04.05 hrs with 4 SC 250.

30/31: Target - West Coast Towns including Bristol. 15 aircraft dispatched to Bristol which was attacked 00.35 - 03.14 hrs. Unit unrecorded, with 6 SC 500, 4 SC 250. I/KG 28, Nantes, 12 Bomben B, also 4 He 111's 00.50 - 01.20 hrs Bristol Channel area with 4 BM 1000.

31/01: Target - Liverpool. 6 aircraft attacked the Bristol area as an alternative. Units unrecorded (4), 00.10 - 01.20 hrs with 2 SC 500, 8 SC 250, 30 SD 50. I/KG 28, Nantes, 1 He 111, 1 BM 1000 also 1 He 111, Airfield nr. Bristol 02.10 hrs with 1 Bombe B.

JUNE 1941

01/02: Target - Manchester. 6 aircraft attacked the Bristol area as an alternative. III/KG 26, 1 He 111 Le Bourget, Avonmouth 01.57 hrs with 1 SC 500, 1 Flam 250, 288 B1 EI. I/KG 28, Nantes, 1 He 111, Bristol 03.20 hrs with 1 SC 500, 576 B1 EI. II/KG 53, Lille, 1 He 111, Bristol 01.20 hrs with 1 SC 500, 4 SC 250. KGr 806, Caen, 3 Ju 88, Bristol 02.20 - 02.35 hrs with 4 SC 250, 4 SD 250, 20 SC 50.

04/05: Target - Filton & Colerne airfields, Gloster Aircraft Co. Hucclecote & Rotol Airscrews Cheltenham. 4 aircraft attacked Bristol as alternative. III/KG 27, Orléans, He 111's. (1) Filton. Alternative Bristol 02.25 hrs

with 32 SD 50. (2) Colerne. Alternative Bristol 01.45 - 02.10 hrs with 64 SD 50. (1) Gloster Aircraft. Alternative Bristol 00.44 hrs with 1 SC 500, 4 SC 250.

11/12: I/KG 28, Nantes, 1 He 111, Birmingham. Alternative Bristol 04.01 hrs with 2 Bomben B.

14/15: Target - BAC Filton. 10 aircraft dispatched, 8 attacked, 1 lost. KGr 100, Vannes, 8 He 111 (6), 00.58 - 1.41 hrs with 32 SC 250, 60 SD 50, 64 SC 50 (X-Verfahren guided). 1 lost cr. Sturminster Newton, Dorset.

16/17: KGr 100, Vannes, 1 He 111, Gloster Aircraft Hucclecote. Alternative Bristol 01.35 hrs with 16 SD 50.

JULY 1941

04/05: Kü FI Gr 606, Lannion, 1 Ju 88, Birmingham. Alternative Bristol 02.03 hrs with 2 SC 500, 2 SD 250. III/KG 26, Le Bourget, 1 He 111, BAC Filton & AF (X-Verfahren guided). Lost cr. Frome, Som.

APRIL 1942

03/04: Eprobungs und Lehr Kommando 100, Chartres, 1 He 111, afternoon attack on BAC Filton (X-Verfahren guided).

25/26: Target - Bath. 163 sorties dispatched in 2 waves (most aircraft flying double sorties). 1st wave attacked c. 23.30 - 01.00 hrs, 2nd wave from c.04.45 - 05.45 hrs. 151 attacked with 206 tonnes of HE and 3564 B1 El. 4 aircraft lost. (Units confirmed):- II/KG 2, Evreux, Do 217; III/KG 2, Caen, Do 217; IV/KG 2, Evreux, Do 17. 1 lost cr. in the Sea; IV/KG 3 Brussels-Evere, Ju 88. 1 lost cr. Builth Wells, Brecon; IV/KG 30, Ju 88, Brétigny; II/KG 40, Rennes, Do 217. 1 lost cr. Handley Cross, Dorset; IV/KG 55, Orléans-Bricy, He 111; Eprg.u.Lehr Kdo 100, Chartres, (Y-Verfahren guided); Kü FI Gr 106, Dinard, Ju 88; Kü FI Gr 506, Lannion, Ju 88. 1 lost cr.in the Sea.

26/27: Target - Bath. 83 aircraft dispatched, attacking from 01.25 hrs with 107 tonnes HE and 7956 B1 El. 1 aircraft lost. (Units confirmed):- II/KG 2, Evreux, Do 217; III/KG 2, Caen, Do 217; IV/KG 2, Do 17, Evreux. 1 lost cr. into the Sea; IV/KG 4 Bourges, He 111; IV/KG 30, Brétigny, Ju 88; II/KG 40, Do 217, Rennes; IV/KG 55, Orléans-Bricy, He 111; Eprg.u.Lehr Kdo 100, Chartres, He 111 (Y-Verfahren guided); Kü FI Gr 106, Dinard, Ju 88.

MAY 1942

23/24: Erprobungs und Lehr Kommando 17, Chartres, 7 He 111, afternoon attack on Avonmouth Docks (2 with Y-Verfahren, 5 with X-Verfahren). 1 lost cr. Shaftesbury, Dorset.

JUNE 1942

27/28: Target - Weston s Mare. 53 aircraft attacked from 01.22 hrs with 28.6 tonnes HE and 18,832 B1 EL. 1 aircraft lost. (Units confirmed):- I/KG 2, Evreux, Do 217. 1 lost cr. France; II/KG 2, Beauvais, Do 217; III/KG 2, Do 217, St.André; II/KG 40, Creil, Do 217; Kü FI Gr 106, Dinard, Ju 88.

28/29: Target - Weston s Mare. 53 aircraft attacked from 02.20 hrs with 27 tonnes HE and 20,096 B1 El. 2 aircraft lost. (Units confirmed):- I/KG 2, Evreux, Do 217; II/KG 2, Beauvais, Do 217. 1 lost cr. France; III/KG 2, St.André, Do 217. 1 lost cr. France; II/KG 40, Do 217, Creil; Kü FI Gr 106, Dinard, Ju 88.

JULY 1942

01/02: Target - Bristol Docks (City Docks to Avonmouth & Portishead code name Unterschlupf). 46 aircraft dispatched, most attacked alternatives. On Bristol 20 tonnes HE. (Units confirmed):- I/KG 2, Do 217, Evreux; II/KG 2, Evreux, Do 217; III/KG 2, St.André, Do 217; II/KG 40, Creil, Do 217.

AUGUST 1942

28/29: Target - Bristol. Höhenkampfkommando der Versuchsstelle für Höhenflüeg, Beauvais, 1 Ju 86R monitored 08.10 - 09.37 hrs. Bristol 09.21 hrs 1 250 kg HE. Crew - Fw. Horst Götz (F); Lt. Erich Sommer (B).

SEPTEMBER 1942

12/13: Target - Bristol. Höhenkampfkommando der Versuchsstelle für Höhenflüeg, Beauvais, 1 Ju 86R t/o 08.25 hrs. Aborted. Crew - Fw. Horst Götz (F); Lt. Erich Sommer (B).

MARCH 1944

27/28: Target - Bristol Docks. 139 aircraft dispatched, 116 reported over Bristol (inc. 11 pathfinders). 13 lost. Bristol attacked 23.58 - 00.13 hrs with 100 tonnes of bombs including practically every kind of incendiary, from B1 EI through all variations inc. B1 EI ZA, B1 EI ZB, B2 EI etc, to large Phosphorus Oil bombs. (Units confirmed):- I/KG 2, Nantes, Do 217; II/KG 2, Vannes, Ju 188 (illuminators). 1 lost cr. Wells Som.; III/KG 2, Nantes, Do 217. 2 lost (1) cr. in the sea. (2) cr. France; I/KG 6, Ju 188; II/KG 6 Ju 88; II/KG 6, Bretigny, Ju 88. 3 lost, (2) cr. in the sea, (1) cr. Beer, Devon; St/KG 30, Ju 88, Brétigny; II/KG 30, Orly, Ju 88. 1 lost cr. Berkeley, Glos.; III/KG 30, Orly, Ju 88. 1 lost cr. France; I/KG 51, Me 410, (to attack fighter airfields); St/KG 54, Laon, Ju 88. 1 lost cr. Wedmore, Som.; I/KG 54, Juvincourt, Ju 88. 3 lost, (1) cr. France, (1) cr. Taunton, Som, (1) cr. Ilminster, Som; II/KG 54, Laon, Ju 88; I/KG 66, Laon, Ju 88 & Ju 188, (Y-Verfahren guided). 1 lost cr. in the sea; KG 100, He 177.

APRIL 1944

23/24: Target - Bristol Docks. 117 aircraft dispatched, 93 reported over Bristol attacking from 02.00 hrs with 59.3 tonnes HE and 79.4 tonnes incendiaries. 13 aircraft lost. (Units confirmed):- I/KG 2, Melun, Ju 188's. 2 lost (1) cr. in the sea, (1) cr. Arne, Dorset; II/KG 2, Ju 188, Vannes; III/KG 2, Melun, Do 217. 2 lost, (1) cr. in France, (1) cr. in the sea; St/KG 6, Ju 88; I/KG 6, Ju 188's; II/KG 6, Bretigny, Ju 88. 1 lost cr. in the sea; III/KG 6, Ju 88; St/KG 30, Orly, Ju 88; II/KG 30, Orly, Ju 88. 2 lost, (1) cr. in the sea, (1) cr. Hill Deverill, Wilts; III/KG 30, Orly, Ju 88; I/KG 51, Me 410, (attacking night fighter airfields); I/KG 54, Juvincourt. 2 lost, (1) cr. in France, (1) cr. in the sea; III/KG 54, Laon, Ju 88. 3 lost all cr. in the sea; I/KG 66, Montdidier, Ju 88 & Ju 188 (Y-Verfahren); I/KG 100, Châteaudun, He 177; IV/KG 101, Juvincourt, Ju 88. 1 lost cr. in the sea.

MAY 1944

14/15: Target - Bristol Docks. 91 aircraft dispatched, 68 reported over Bristol 01.50 - 02.25 hrs with 163 tonnes HE, with 4.65 tonnes on airfields in the Bristol area. 15 aircraft lost. (Units confirmed):- I/KG 2, Vannes, Ju 188. 2 lost, (1) cr. Larkhill, Wilts, (1) cr. in the sea; II/KG 2, Vannes, Ju 188. 1 lost cr. France; III/KG 2, Lorient, Do 217. 4 lost, (3) cr. in the sea, (1) cr. Yeovilton, Som.; I/KG 6, Bretigny, Ju 188. 5 lost, (2) cr. in the sea, (1) cr. Selbourne, Hants; (1) cr. Henstridge, Som., (1) cr. St. Helier, Jersey; II/KG 6, Ju 88; II/KG 30, Orly. 2 lost, cr. in the sea. III/KG 30, Ju 88; I/KG 51, Me 410, (attacks on airfields in the Bristol area); I/KG 54, Evreux, Ju 88. 1 lost cr. in the sea. III/KG 54, St. André, Ju 88; I/KG 66, Montdidier, Ju 88 & Ju 188 (Y-Verfahren guided); KG 100, He 177;

Reconnaissance over the Bristol area

NOTE: t/o = took off; c = circa; a/c = aircraft; ? following aircraft type indicates details from AA Command observations.

(Only flights confirmed in German records are listed)

29/08/39 A clandestine German reconnaissance aircraft, almost certainly from the Gruppe Rowehl (Aufklärungsgruppe Ob.d.L.), flew sortie 580 taking photographs 580 S 25 over Yate, 62 at 13.14 hrs, together with 64, 65, and 67, all over the Cardiff area, 73 over Barry, and 88 and 92 over Weymouth and Portland as it crossed the English coast on the return flight.

29/06/40 1/Aufkl.Gr.Ob.d.L., He 111, Sortie 1017, 09.30 - 09.45 hrs over Bristol area. Observations over Bristol, Avonmouth & Portishead. Photos Avonmouth 1017 SG 21 & 22.

30/06/40 1/Aufkl.Gr.Ob.d.L., Do 17?, Sortie 1018, 07.33 hrs circled Bristol. Observations over Bristol & Avonmouth also Filton & Whitchurch airfields. Photos Bristol 1018 L 73 & 1018 R 089. Also Barrow Tanks 1018 R 115.

07/07/40 4(F)/121, Villacoublay, Do 17, 09.48 hrs over Bristol, photographed Whitchurch airfield.

08/07/40 4(F)/121, Villacoublay, Do 17, 09.20 hrs over Bristol area. Observations over Avonmouth, Bristol & Filton. Filton & Whitchurch photographed. Intercepted & claimed damaged by 92 Squadron.

16/07/40 1(F)/123, 1 Ju 88 t/o 10.00 hrs on reconnaissance over St.George's Channel & airfields in Bristol, Cardiff & Birmingham areas

20/07/40 3(F)/121, 1 Ju 88 t/o 08.17 hrs on reconnaissance to eastern part of Bristol Channel and to airfields in Bristol, Bridgwater & Swansea area.

21/07/40 3(F)/123, Ju 88, t/o 07.00 hrs airfield reconnaissance. 09.02 - 09.05 hrs over Filton & Avonmouth.

21/07/40 4(F)/14, 1 Do 17, t/o 13.40 hrs on mission to the English Channel and airfields in Bournemouth, Bristol, Oxford & Portsmouth area. Shot down 15.00 hrs nr. Blandford, Dorset.

23.07.40 3(F)/123, 1 Ju 88, t/o 10.30 hrs on mission to airfields and harbours in Bristol Channel area.

24/07/40 3(F)/121, 1 Ju 88, t/o 09.25 hrs on a mission to airfields along Bristol Channel & shipping movements. No results due to poor weather.

27/07/40 3(F)/121, Ju 88, t/o 08.23 hrs. 13.36 hrs aborted just S.of Bristol. Observations over Avonmouth & Whitchurch airfield.

03/08/40 4(F)/14, 1 Bf 110, t/o 13.50 hrs on a mission over airfields in the Bristol, Gloucester & Newbury area.

04/08/40 3(F)/121, 1 Ju 88, t/o 05.05 hrs on a reconnaissance from the English Channel to Bristol.

08/08/40 3(F)/121, 1 Ju 88, t/o 05.46 hrs on a mission over the Bristol Channel and South Coast.

08/08/40 4(F)/14, Bf 110, t/o 10.50 hrs mission over Bristol, Oxford, Weymouth & Portsmouth area. 16.42 hrs circled Bristol.

09/08/40 3(F)/123, 1 Ju 88, weather reporting over northern part of the Bristol Channel 05.00 - 07.00 hrs, and reconnaissance over Filton & Yeovil. Damaged by fighter attack 06.55 hrs.

09/08/40 4(F)/121, 1 aircraft t/o 06.45 hrs on a mission to airfields in the Bristol, Gloucester & Reading area.

09/08/40 4(F)/14, Bf 110, t/o 13.45 hrs for Bristol. Reached Chew Magna.

12/08/40 3(F)/123, Ju 88, t/o 07.10 hrs S.Coast & Bristol Channel. Circled Filton 12.07 - 12.15 hrs.

15/08/40 3(F)/31, Do 17, t/o 07.25 hrs to Bristol Channel. Observation of shipping 20km W.of Bristol. Over Avonmouth 09.06 hrs. Claimed damaged by AA guns.

17/08/40 1(F)/123, 1 Ju 88, t/o 09.28 hrs on a mission to airfields between Bristol and London. Heavy cloud over all objectives.

18/08/40 3(F)/123, 1 Ju 88, t/o 07.43 hrs to RAF installations in the Filton, Salisbury & Evesham areas.

18/08/40 3(F)/121, 1 Ju 88 t/o 11.10 hrs on photo mission to airfields including Filton.

19/08/40 3(F)/121, Ju 88, t/o 11.22 hrs to airfields including Filton, Penhros & Middle Wallop, also weather reporting in Bristol Channel. Over Bristol area 13.20 hrs.

20/08/40 3(F)/123, 2 Ju 88's, t/o 07.06 & 07.12 hrs. Missions to Bristol, Gloucester, Derby and Liverpool areas. 1 aircraft reported N. of Bristol 12.13 hrs.

21/08/40 3(F)/121, Ju 88, t/o 08.21 hrs. Observations at 11.40 hrs over Weston super Mare.

22/08/40 3(F)/121, 1 Ju 88. Circling Filton 15.34 hrs then shot down by 152 Sq. cr. Okehampton 16.00 hrs.
23/08/40 3(F)/121, Ju 88, t/o 08.40 hrs post raid mission to Filton, Pembrey & St. Athan. Circling Filton twice making observations at 11.00 - 11.10 hrs and again between 11.42 - 12.00 hrs. Poor conditions over target.

24/08/40 A Ju 88 returned with photograph 394 Z 20 of GB 20 47, Weston super Mare Aircraft Park and GB 51 101, Weston's Outdoor Electrical Transformer Station in Locking Road.

28/08/40 3(F)/121, 1 a/c, t/o 08.07 hrs. Filton airfield not identified but observations made over Avonmouth.

30/08/40 3(F)/123, 1 Ju 88, t/o 09.06 hrs. Observations made over Bath, Portishead & Avonmouth. Over Bristol area 14.01 - 14.16 hrs. Probably took photo G85 Z 14 of Bath.

02/09/40 2(F)/123, 1 Do 17? & Bf 110? made observations over Bristol also Whitchurch, Filton & Weston super Mare airfields. Weston & Whitchurch photographed. Both a/c made very wide circles of Filton 13.25 hrs. Probably took photos of Kingswood, Northern Bath and Charmy Down airfield (812b/40 & 085).

02/09/40 1(F)/123, 1 Ju 88?, t/o 14.00 hrs made observations over Bristol also Filton, Whitchurch & Weston super Mare airfields. Passed to N. of Bristol 15.56 hrs. Photographed Weston super Mare.

03/09/40 3(F)/123, 1 Ju 88, t/o 06.08 hrs. Over Bristol area 09.57 - 10.02 hrs. Observations made at Filton, Bristol and Avonmouth. Bristol photo 654 Z 50.

03/09/40 ?(F)/123, 1 Ju 88, t/o 08.07 hrs took photos over Filton.

04/09/40 3(F)/123, 1 Ju 88, t/o 08.45 hrs to obtain post raid photos of Bristol, Avonmouth, Hucclecote, Cardiff and Swansea. Aborted because of repeated fighter attacks.

04/09/40 4(F)/14, 1 Bf 110 t/o 09.20 hrs on post raid photography mission to Avonmouth.

04/09/40 3(F)/123, 1 Ju 88 t/o 11.43 hrs on post raid photography mission to Bristol, Avonmouth and Cardiff. Over Bristol 16.12 hrs observations over Avonmouth and Bristol, also Filton, Whitchurch and Weston super Mare airfields. Filton, Whitchurch and Weston photographed.

05/09/40 2(F)/123, 1 Ju 88, t/o 08.45 hrs on a mission to Bristol, Barry, Cardiff & Liverpool areas. Observations made at Portishead, Avonmouth, Whitchurch airfield & Bristol which was partly covered by clouds.

05/09/40 4(F)/14, 1 Bf 110, t/o 10.40 hrs took photos over Filton.

05/09/40 3(F)/121, 1 Ju 88, t/o 11.14 hrs on post raid reconnaissance over Bristol and its local airfields. Aborted because of 10/10 cloud cover.

06/09/40 3(F)/121, 1 Ju 88 t/o 08.44 hrs. This aircraft entered Bristol area 09.40 hrs and circled. Fires seen in Bristol and Weston super Mare.

06/09/40 2(F)/123, 1 Ju 88, t/o 10.25 hrs. Made two passes over Bristol 12.18 hrs. Observations made over Bristol, Avonmouth, Almondsbury, and at Whitchurch airfield. Landed 14.50 hrs.

07/09/40 3(F)/123, 1 Ju 88, Armed Recon. Bristol Area t/o 06.27 hrs. Over area 10.10 hrs, again at 10.30 hrs when it circled. 5 H.E.'s (including 1 UXB) dropped on Bristol City Centre. Observations over Bristol and Filton. Photo during attack 745 Z 45.

07/09/40 3(F)/121, 1 Ju 88, t/o 09.26 hrs. Observations made over Filton 11.25 hrs, Bristol 11.26 hrs, Almondsbury 11.40 hrs, Filton 11.41 hrs, and an airfield N.of Bath 11.44 hrs.

21/09/40 3(F)/121, 1 Ju 88, t/o 08.05 hrs. Approached Bristol 10.40 hrs and engaged by fighters which claimed it damaged. Airfields at Weston super Mare, Whitchurch, Filton (11.00 hrs), Bath, and Colerne photographed.

23/09/40 2(F)/123, 1 Ju 88, 17.15 hrs over Bristol. Observations made over Filton and Whitchurch airfields. Filton photographed - 1075 S.

25/09/40 4(F)/14, 1 Bf 110, t/o 11.56 hrs on post raid mission to Filton. Observations over Filton at 13.13 hrs.

27/09/40 3(F)/123, 1 Ju 88. Over Bristol area 09.30 hrs. Observations made over Filton, Weston super Mare and Avonmouth. Landed Chartres c.14.55 hrs. Photos Avonmouth and Filton 908b 011 & 016.

14/10/40 4(F)/14, 1 Do 17, t/o 03.45 hrs on armed reconnaissance and weather reporting mission jettisoned 4 SC 50 in the Bristol Area.

26/11/40 Ju 88 of Luftflotte 3 over Bristol area 13.50 hrs at 2/4000 feet. Photo Bristol - 1144 Z 45.

26/11/40 Ob.d.L.?, He 111, Over Bristol area 15.07 - 15.16 hrs. Photos Bristol 1044a & Portishead 1044b. (Lfl 5).

30/11/40 1 a/c of Luftflotte 3 over Bristol area 12.37 - 13.08 hrs. Photos Colerne & Keynsham - 1062b/334 & 609.

04/12/40 3(F)/123, 2 Ju 88, 1 Bf 110 post raid missin to Avonmouth. Aborted due to excessive cloud.

04/12/40 3(F)/31, 1 Ju 88, t/o 09.46 hrs on mission to Bristol. Aborted due to excessive cloud.

05/12/40 2(F)/123, 1 Ju 88, mission to Bristol. Over Bath & Bristol 11.44 - 11.54 hrs. Photography not undertaken due to icing.

06/12/40 1 a/c of Luftflotte 3 over Bristol 15.25 hrs. on mission 1078b. Photo Bristol 1216 Z 52.

08/12/40 2(F)/123, 1 Bf 110, mission to Bristol. Circled Bristol 16.12 hrs, Avonmouth observed from 40/50km.

11/12/40 2(F)/123, 1 Ju 88, mission to Bristol. Over Bristol 13.33 hrs photo of City Centre.

12/12/40 3 reconnaissance aircraft over Bristol 13.05 - 13.46 hrs. Observations over Avonmouth & Bristol. Photo of Bristol City Centre.

04/01/41 2(F)/123, mission to Bristol & Avonmouth. Over Bristol 13.01 hrs and 14.25 hrs No valid photos because of low cloud base.

08/01/41 1(F)/123, 1 Ju 88, t/o 11.10 hrs mission to Bristol & Avonmouth. Flew past Bristol area 14.38 - 15.03 hrs. Aborted due to cloud cover.

10/01/41 2(F)/123, 1 Ju 88, t/o 10.40 hrs on a mission to Bristol. Aborted due to cloud cover.

10/01/41 3(F)/123, 1 Ju 88, t/o 13.16 hrs on post raid photo mission to Bristol, Avonmouth, & Weston super Mare. Over Bristol 16.15 - 16.50 hrs.

17/01/41 3(F)/121, 1 Ju 88, on a mission to Avonmouth & Bristol. Aborted because of cloud cover.

19/01/41 3(F)/121, 1 Ju 88, t/o 10.17 hrs on a mission to Avonmouth. Aborted due to poor weather.

20/01/41 3(F)/121, 1 Ju 88, mission to Avonmouth. Aborted due to poor weather.

27/01/41 3(F)/121, 1 Ju 88, t/o 09.32 hrs on photo mission to Avonmouth & Bristol. Aborted due to poor weather.

28/01/41 2(F)/123, 1 sortie to Avonmouth. Aborted due to fighter attack before target was reached.

31/01/41 3(F)/121, 1 Ju 88, t/o 12.45 hrs on a mission to Avonmouth. Photos not possible due to poor weather.

11/02/41 2(F)/123, on a mission to Avonmouth & Swansea.

13/02/41 2(F)/123, on a mission to Avonmouth & Swansea.

18/03/41 3(F)/121, 1 Ju 88, t/o 14.26 hrs on a mission to Bristol. Aborted due to thick cloud.

26/08/41 1(F)/123, 1 Ju 88 on a mission to Bristol & Birmingham. Shot down by 615 Sq. and crashed Belgooly, Co. Cork, Eire.

02/10/41 Photographs F185/41/274 to 276 taken by Luftflotte 3 over Weston super Mare (airfield GB 10 240 identified).

27/04/42 1(F)/123, 1 Ju 88, mission to Bath, also anti-shipping reconnaissance in the Bristol Channel.

29/04/42 3(F)/123, Lannion, 1 Bf 109F-5 circled Bristol and Bath area from 11.31 hrs. Drop tanks fell at Pill c.12.00 hrs. Photos Nailsea 2450 Z 22, Avonmouth 2429 Z 14, and Bath.

23/01/43 1 a/c of Luftflotte 3 on night photo mission over Exeter, Newport & Bristol. Over Bristol 23.00 hrs. 2 base plates of photo flash bombs fell at Long Ashton.

13/03/43 3(F)/123, 2 Bf 109F-5's, on a mission over Bristol Channel area. 2 drop tanks fell at Yatton at 13.00 hrs.

31/07/43 1 a/c of Luftflotte 3, over Bristol 01.44 - 01.49 hrs. 8 photo flash bombs fell S.of Bristol. 1 UXB recovered at Winford.

14/05/44 Sonderaufklärungsstaffel/Ob.d.L., Orly, on night photo sortie to record the accuracy of target marking at Bristol (14/15th).

Luftwaffe aircraft, identification markings, ranks & aircrew categories

LUFTWAFFE AIRCRAFT

At the start of operations against Britain the Luftwaffe was using three principle types of bomber, the Dornier Do 17, the Heinkel He 111 and the Junkers Ju 88, all twin-engined aircraft. So, with no four-engined bombers in its inventory, the Luftwaffe was incapable of lifting an enormous weight of bombs in one night. By the end of 1940 the obsolescent Do 17 was largely phased out and, from then on, the Ju 88 and He 111 carried on the battle almost exclusively until mid-1941. The Messerschmitt Bf 110 long-range fighter used as a light bomber also saw limited service during this period but its operations were usually confined to daylight precision attacks. All four types were also employed on reconnaissance duties.

The Do 217 introduced into service on the western front during the spring of 1941 was a development of the Do 17, just as the Ju 86R which first operated against Britain in August 1942 was an experimental development of the pre-war Ju 86. This was followed in May 1943 by the Messerschmitt Me 410 fighter-bomber, which replaced the Bf 110, and in August by the Ju 188, developed from the Ju 88.

The Luftwaffe's failure to develop a strategic bomber was a fundamental error on the part of the High Command, and one for which it was to pay dearly. The He 177, its belated attempt construct such an aircraft was a complete disaster, and although it commenced operations against Britain in early 1944 it was plagued with technical problems which were never successfully overcome.

AIRCRAFT IDENTIFICATION MARKINGS

Bomber, Heavy Fighter (Zerstörer) and Reconnaissance units identified their aircraft by a four character coding system painted on the fuselage sides. The first two characters, to the left of the fuselage cross, were an arbitrary identification code peculiar to each Geschwader or independent Gruppe. The third character was the individual aircraft identification letter, and the fourth and final letter in the code identified the Staffel according to a rigid sequence. For example an He 111 coded G1+AH :- The G1 to the left of the fuselage cross was the code for KG 55, while the H on the extreme right indicated that the aircraft belonged to the 1st Staffel (of the 1st Gruppe). The A was the identification letter of the individual aircraft within the Staffel. In addition all aircraft carried throughout their lives their own individual Werk Nummer (Wnr.) or airframe serial number which had been allocated by the manufacturer.

PRINCIPAL LUFTWAFFE RANKS

OFFICERS

Generalfeldmarschall (Gen. Feldm.) = Marshal of the RAF

Generaloberst (Gen. Oberst.) = Air Chief Marshal

General der Flieger (Gen. d. Fl.) = Air Marshal

Generalleutnant (Gen. Lt.) = Air Vice Marshal

Generalmajor (Gen. Maj.) = Air Commodore

Oberst (Oberst) = Group Captain

Oberstleutnant (Oberstlt.) = Wing Commander

Major (Maj.) = Squadron Leader

Hauptmann (Hptm.) = Flight Lieutenant

Oberleutnant (Oblt.) = Flying Officer

Leutnant (Ltn.) = Pilot Officer

Leutnant zur See *(Ltn.z.S.) = Sub Lieutenant

* A Naval rank held by some members of mixed Airforce/Navy crewed units e.g. KGr 606, KGr 806.

NON-COMMISSIONED OFFICERS

Stabsfeldwebel (Sfw.) = Warrant Officer

Oberfeldwebel (Ofw.) = Flight Sergeant

Fahnenjunker-Fw. (Fhj-Fw.) = Cadet Sergeant Major

Feldwebel (Fw.) = Sergeant

Unteroffizier (Uffz.) = Corporal

OTHER RANKS

Obergefreiter (Ogefr.) = Leading Aircraftsman

Gefreiter (Gefr.) = Aircraftman First Class

Flieger (Flg.) = Aircraftman Second Class

CIVILIANS ENGAGED IN MILITARY OPERATIONS

Sonderführer (Sdf.) = Kriegsberichter

War correspondents who usually flew as gunners.

LUFTWAFFE AIRCREW CATEGORIES

Flugzeugführer (F) = Pilot

Beobachter (B) = Observer (Navigator/BombAimer)

Bordfunker (Bf) = Wireless (W/T) Operator

Bordmechaniker (Bm) = Flight Mechanic

Bordschütze (Bs) = Gunner

Bombenschütze (Bsz) = Bomb Aimer (not fully trained)

Kampfbeobachter (Kb) = Combat Observer (not fully trained)

German losses

LUFTWAFFE LOSSES

Aircraft and aircrew lost whilst flying sorties to targets in the Bristol area.

04.07.40: Target BAC Filton: III/KG 54.

He 111P, Wnr.2480, B3+DM (previously used by 4/KG 54)

Ltn. Hans-Heinrich Delfs (F) killed

Uffz. Gerhard Bischoff (B) killed

Uffz. Hermann Krack (Bs) killed

Uffz. Heinz Karwelat (Bf) POW injured

Intercepted on return flight over Weston-s-Mare and severely damaged by Spitfires of Yellow Section , 92 Sq. (Pembrey) - P/O. H.D.Edwards, P/O. C.H.Saunders and Sgt. R.H.Fokes. Crashed at 15.25 hrs at Longmoor Farm, Gillingham, Dorset. Saunders and Fokes landed alongside the wreck and assisted in rescue work.

11/12.07.40: Target Avonmouth & Portishead: I/KG 51.

Ju 88A of 3/KG 51

Ofw. Josef Rattel (F) killed

1 NCO injured

2 others uninjured

This aircraft was unable to precisely identify the target because of intense flak. It suffered engine failure on the return flight and crashed and burnt out at Varnevil while on approach to landing.

11/12.07.40: Target Avonmouth & Portishead: I/KG 51.

Ju 88A of I/KG 51

4 NCO's missing

Failed to return and probably crashed into the sea.

21.07.40: Recon. over airfields in Bournemouth, Bristol, Oxford and Portsmouth area: 4(F)/14.

Do 17M, Wnr.780, 5F+OM of 4(F)/14.

Oblt. Georg Thiel (B) POW injured

Fw. Fritz Bohnen (F) POW injured

Uffz. Alfred Werner (Bf) POW injured

Intercepted by the Hurricanes of A Flight, 238 Sq. (Middle Wallop); S/Ldr. Harold Fenton, F/Lt. Donald Turner, F/O. C.T.Davies, P/O. J.S.Wigglesworth and Sgt. L.G.Batt. The Dornier was shot down and crash-landed at Nutford Farm, 1 mile north of Blandford, Dorset at 15.00 hrs. During the combat Hurricane P3767, flown by P/O. C.T.Davies, was damaged by return fire.

03/04.08.40: Target Bristol area: III/KG 55.

He 111P G1+IR of 7/KG 55

Ofw. Gerhard Geissler (F) killed

Uffz. Karl Ohmann (B) missing

Uffz. Walter Weber (Bf) missing

Uffz. Werner Thieme (Bm) missing

Uffz. Friedrich Westphal (Bs) missing

Shot down by Flak over the English Coast.

09.08.40: Reconnaissance over Filton and Yeovil: 3(F)/123.

Ju 88 of 3(F)/123.

1 NCO killed

Intercepted and damaged at 06.55 hrs by a Hurricane of 213 Sq. (Exeter) flown by P/O. W.M.Sizer. Aircraft returned to base with 25% damage.

11/12.08.40: Target Bristol Docks: II/KG 27.

He 111H-3, 1G+AC of Stab.II/KG 27

Maj. Friedrich-Karl Schlichting () POW

Ofw. Gunther Löhning () POW

Ofw. Willi Bendrich () POW injured

Ofw. Herbert Frey () POW

Maj. Hans-Jurgen Brehmer () POW injured

Shot down returning from a mission to Bristol Docks (possibly intercepted at 00.19 hrs by a Hurricane of 87 Squadron). Crew all baled out. Aircraft crashed 02.00 hrs at Sturminster Marshall, near Wimborne, Dorset. Schlichting was the Gruppenkommandeur and Brehmer was Adj.Chef Genst.d.Lw.

11/12.08.40: Target BAC Filton: III/KG 55.

He 111P, 1G+HT of 9/KG 55

Uffz. Herbert Schmidt (F) killed

Uffz. Siegfried Held (B) missing

Uffz. Bubel (Bf) injured

Fw. Paulussen (Bm) injured

Both engines damaged in a fighter attack during the outward flight to Bristol. Crashed and burnt at Rambervilliers, France, during return flight.

14.08.40: Target Armed Recon. over West Country: III/KG 27.

He 111P, 1G+NT of 9/KG 27

Oblt. Ernst Ohlenschlager (F) POW

Uffz. Kurt Sulzbach (B) POW

Uffz. Adolf Blumenthal (Bf) POW

Fw. Nikolaus Jug (Bm) POW

Gefr. Kurt Kupsch (Bs) POW

Shot down by Spitfires of Blue Section, 92 Sq. (Pembrey). Force landed 18.00 hrs at Charterhouse, near Cheddar, Somerset, having jettisoned its bombs at Edington Burtle. Kupsch was promoted to Uffz. via the Red Cross 1/7/42.

14.08.40: Target Armed Recon. over West Country: III/KG 27.

He 111P, 1G+OT of 9/KG 27

Ltn. Otto Uhland (F) POW

Uffz. Josef Krenn (Bm) POW

Obgefr. Hans Ramsetter (B) POW

Gefr. Gerhard Rother (Bs) POW

Uffz. Edo Flick (Bf) POW injured

Shot down by Spitfires of Blue Section, 92 Sq. (Pembrey). Crashed 18.05 hrs at Cann's Farm, near Puriton, Somerset, having jettisoned bombs in the Burnham-on-Sea area.

14.08.40: Target Armed Recon. over West Country: III/KG 27.

He 111P of 9/KG 27

Hptm. Josef Riedel (F) missing

Uffz. Adelhard Witt (B) missing

Fw. Ernst Haumann (Bm) missing

Gefr. Emil Wolf (Bs) missing

Uffz. Hans Dolata (Bf) killed

Shot down by Spitfires of Blue Section, 92 Sq. (Pembrey). Crashed into the sea between Barry and Steep Holm Island at 18.00 hrs. Dolata's body was washed up at Portishead on September 12th 1940 and is buried at Weston-s-Mare Cemetery.

22.08.40: Reconnaissance over Filton: 3(F)/123.

Ju 88A-1, 7A+AL, of 3(F)/121

Ogefr. W.Kuhweide () killed

Ltn. R.Pfundtner () POW injured

Oblt. Baudler () POW injured

Flg. A.Leber () POW injured

Crashed at 16.00 hrs at Upcott Farm, Beaford, nr. Okehampton, Devon. Shot down by Spitfires of Green Section, 152 Sq. (Warmwell) following an attack by P/O. W.Beaumont.

29/30.08.40: Target Bristol as alt. for Liverpool: I/KG 27.

He 111H, Wnr.3438, 1G+EL of 3/KG 27

Oblt. H-J. Hünnerbein () POW

Uffz. J. Schlosser () POW

Uffz. D. Siebers () POW

Obgefr. P. Walpert () POW died later

Caught in searchlights over Bristol and shot down by a Spitfire of A Flight, 92 Sq. (Bibury) flown by F/L. A.R. Wright. The abandoned aircraft crashed onto a house at Downton, Hale, near Fordingbridge, Hants. at 23.45 hrs.

25.09.40: Target BAC Filton: I/KG 55.

He 111P, Wnr.6305, G1+BH of 1/KG 55

Fw. Fritz Jürges (F) POW injured

Hptm. Karl Köthke (B) POW

Gefr. Rudolf Weisbach (Bf) POW

Fl. Otto Müller (Bs) POW injured

Uffz. Josef Altrichter (Bm) POW died same day

Attacked by P/O. J.S. Wigglesworth in a Hurricane of 238 Sq. (Middle Wallop) and P/O. J. Curchin in a Spitfire of 609 Sq. (Middle Wallop). Force-landed at Westfield Farm, Studland, near Swanage, Dorset at 12.10 hrs.

25.09.40: Target BAC Filton: II/KG 55.

He 111P, Wnr. 2126, G1+DN of 5/KG 55

Oblt. Gottfried Weigel (F) POW

Ofw. Alfred Narres (B) POW

Uffz. Karl Gerdsmeyer (Bm) POW

Gefr. Karl Geib (Bs) POW

Fw. Georg Engel (Bf) POW injured

Shot down by A.A. fire from Portbury gunsite (237 Battery, 76th HAA Rgt.). Aircraft abandoned by crew and crashed at Racecourse Farm, Failand, near Bristol at 11.50 hrs.

25.09.40: Target BAC Filton: II/KG 55.

He 111P, Wnr.1525, G1+EP of 6/KG 55

Hptm. Helmut Brandt (F) POW injured

Ofw. Günter Wittkamp (B) killed

Ofw. Rudolf Kirchoff (Bf) killed

Uffz. Hans-Fritz Mertz (Bm) killed

Gefr. Rudolf Beck (Bs) killed

Starboard engine hit and aircraft severely damaged in attacks by F/O. I.N. Bayles and Sgt. K.C. Holland in Spitfires of 152 Sq. (Warmwell), as well as P/O. J.R. Urwin-Mann and Sgt. R. Little in Hurricanes of 238 Sq. (Middle Wallop). Crashed at Church Farm, Woolverton, near Frome, Somerset at 12.02 hrs. Hptm. Brandt was Staffelkapitän.

25.09.40: Target Filton: II/KG 55.

He 111P, Wnr.1579, G1+AP of 6/KG 55

Oblt. Helmut Kindor (B) injured

Uffz. Erich Turek (Bs) injured

Damaged by fighters in combat over England. Crash-landed at Caen, France 50% damaged.

25.09.40: Target BAC Filton: III/KG 55.

He 111P, Wnr.2803, G1+LR of 7/KG 55

Oblt. Hans Brocker (F) killed

Oblt. Heinz Harry Scholz (B) killed

Uffz. Kurt Schraps (Bm) POW

Uffz. Josef Hanft (Bs) killed

Uffz. Günter Weidner (Bm) killed

Attacked by P/O. N.le C. Agazarian in a Spitfire of 609 Sq. (Middle Wallop) and P/O. J.R. Urwin-Mann in a Hurricane of 238 Sq. (Middle Wallop). Also engaged by P/O. R.F.G. Miller in a Spitfire of 609 Sq. Crashed on "Chatsworth", Westminster Road, Branksome Park, Poole, Dorset at 12.08 hrs. Oblt. Brocker was Staffelkapitän.

25.09.40: Target BAC Filton: III/ZG 26.

Bf 110C-4, Wnr.3591, 3U+GS of 8/ZG 26

Gefr. Heinz Schumacher (Bf) killed

Fw. Walter Scherer (F) POW injured

Port engine set on fire in attacks by P/O. W.D. Williams in a Spitfire of 152 Sq. (Warmwell) and P/O. H.C. Mayers in a Spitfire of 609 Sq. (Middle Wallop). Crash-landed at Well Bottom, near Boyton, Wilts at 12.15 hrs.

25.09.40: Target BAC Filton: III/ZG 26.

Bf 110C, Wnr.3263, of III/ ZG 26

Crew rescued unhurt by Seenotdienst.

Ditched in the English Channel following combat with RAF fighters over Weymouth.

25.09.40: Target BAC Filton: III/ZG 26.

Bf 110C-4, Wnr.2194, of III/ZG 26

Crew unhurt

Damaged by fighters over English Channel. Crash-landed at Theville airfield, France. Aircraft 60% damaged.

27.09.40: Target Parnall Yate: Epr Gr 210.

Bf 110D-3, Wnr.3378, S9+DH of St/Epr Gr 210

Hptm. Martin Lutz (F) killed

Uffz. Anton Schön (Bf) killed

Attacked and badly damaged by a number of pilots. Believed finally shot down by F/L. A.H. Rook in a Hurricane of 504 Sq. (Filton). Crashed at Busseys Stool Farm, Tarrant Gunville, Dorset at 12.00 hrs. Hptm. Lutz was Gruppenkommandeur.

27.09.40: Target Parnall Yate: Epr Gr 210.

Bf 110D-0, Wnr.4270, S9+DU of 2/Epr Gr 210

Fw. Friedrich Ebner (F) POW injured

Gefr. Werner Zwick (Bf) POW injured

Port engine disabled in attacks by F/L. A.H. Rook in a Hurricane of 504 Sq. (Filton); and starboard engine damaged in attacks by P/O. M.H. Constable-Maxwell in a Hurricane of 56 Sq. (Boscombe Down). Force-landed at The Beeches, Preston Hill, Iwerne Minster, Dorset at 12.00 hrs.

27.09.40: Target Parnall Yate: Epr Gr 210.

Bf 110D-3, Wnr.3888, S9+JH of 1/Epr Gr 210

Ltn. Gerhard Schmidt (F) killed

Fw. Gerhard Richter (Bf) killed

Engaged by Hurricanes of 504 Sq. (Filton), finally shot down by P/O. B.E.G. White. Dived vertically into the ground and burned out at Bradle Row, Kimmeridge, Dorset c.12.00 hrs.

27.09.40: Target Parnall Yate: Epr Gr 210.

Bf 110D-0, Wnr.2248, S9+GK of 2/Epr Gr 210

Oblt. Wilhelm Rössiger (F) missing

Ofw. Hans Marx (Bf) missing

Crashed into the sea off the Dorset coast following combat with RAF fighters c.12.00 hrs. Oblt. Rössiger was Staffelkapitan.

27.09.40: Target Parnall Yate: I/ZG 26.

Bf 110C-4, Wnr.2162, U8+FK of 2/ZG 26

Ofw. Hans Tiepelt (F) killed

Uffz. Herbert Brosig (Bf) killed

Both engines set alight in an attack by F/O. M.E.A. Royce in a Hurricane of 504 Sq. (Filton). Exploded at the Stapleton Institution, Fishponds, Bristol at 11.45 hrs. Tiepelt and Brosig are buried in Greenbank Cemetery, Bristol.

27.09.40: Target Parnall Yate: I/ZG 26.

Bf 110C-4, Wnr.3352, U8+GL of 3/ZG 26

Ltn. Joachim Koepsell (F) POW

Uffz. Johann Schmidt (Bf) killed

Engaged head-on and petrol tank set on fire. Probably that attacked by Sgt. H.D.B. Jones in a Hurricane of 504 Sq. (Filton) but possibly that claimed by F/O. T.H.T. Forshaw in a Spitfire of 609 Sq. (Middle Wallop). Abandoned aircraft crashed at Haydon Farm, Radstock, Somerset at 11.45 hrs.

27.09.40: Target Parnall Yate: II/ZG 26.

Bf 110C-7, Wnr.3629, 3U+IM of 4/ZG 26

Oblt. Artur Niebuhr (F) killed

Obgfr. Klaus Theisen (Bf) killed

Both engines disabled in attacks by P/O. M.E. Staples in a Spitfire of 609 Sq. (Middle Wallop); further attacked by P/O. A.R. Watson in a Spitfire of 152 Sq. (Warmwell). Exploded over Salters Wood, Middle Bere Farm, near Arne, Dorset at 11.45 hrs. Oblt. Niebuhr was Staffelkapitan.

27.09.40: Target Parnall Yate: III/ZG 26.

Bf 110C-4, Wnr.3297, 3U+FT of 9/ZG 26

Gefr. Georg Jackstedt (F) POW injured

Gefr. Emil Lidtke (Bf) killed

Collided with Spitfire X4107 of 609 Sq. (Middle Wallop) which crashed at Chesilbourne near Piddlehinton, Dorset killing P/O. R.F.G. Miller. The Bf 110 came down at Bellamy's Farm, Piddletrenthide, Dorset at 11.45 hrs.

27.09.40: Target Parnall Yate: III/ZG 26.

Bf 110C-4, Wnr.2168, 3U+BD of St.III/ZG 26

Oblt. Hans Barschel (F) missing

Uffz. Klose (Bf) missing

Shot down into the sea off the Dorset coast during fighter combat at 11.50 hrs.

27.09.40: Target Parnall Yate: III/ZG 26.

Bf 110C-4, Wnr.3290, 3U+DS of 8/ZG 26

Uffz. Fritz Schupp (F) POW injured

Gefr. Karl Nechwatal (Bf) POW injured

One engine disabled and set alight in attacks by P/O. A.R. Watson in a Spitfire of 152 Sq. (Warmwell). Force-landed 1 mile SW of Kimmeridge, Dorset at 11.45 hrs.

24/25.11.40: Target Bristol: KGr 606.

Do 17Z, Wnr.2796, 7T+HT of 1/KGr 606

Obgfr. Albert Hoferichter (F) POW

Ltn.z. See Martin Saueracker (B) POW

Uffz. Heinrich Weiss (Bf) POW

Uffz. Kurt Eislet (Bm) POW injured

After dropping 10 SC 50 on Bristol aircraft flew into balloon barrage site 64/11 at Plymouth Harbour having becoming lost due to British Meacon countermeasures (St. Malo beacon was being Meaconed by Templecombe). Crashed on Penlee Point, Cornwall at 22.40 hrs.

24/25.11.40: Target Bristol: II/KG 55.

He 111H-4, Wnr.3092, G1+KN of 5/KG 55

Ofw. Werner Müller (F) missing

Ltn. Gerhard Heiland (B) missing

Sfw. Heinrich Heidt (Bm) killed

Sdf.(PK2) Emil Weihmüller (Bs) missing

Fw. Heinrich Gaick (Bf) missing

Shot down by Portsmouth AA guns while on return flight from Bristol. Crashed into the sea off St.Catherine's Point, Isle of Wight at 19.40 hrs.

02/03.12.40: Target Bristol: KGr 606.

Do 17Z, Wnr.3618, 7T+KL of 3/KGr 606

Ltn. Helmut Anders (F) missing

Ltn.z.See Karl Ganske (B) killed

Ogefr. Willi Dembeck (Bf) killed

Uffz. Paul Tüsselmann (Bm) killed

Crashed near Brest soon after take-off. Probably came down in the sea.

06/07.12.40: Target Bristol: III/KG 77.

Ju 88A-5, Wnr.5149, of III/KG 77

Oblt. Otto Tüdemann (F) injured

Fw. Johann Merz (B) injured

Fw. Gerhard Wähler (Bf) injured

Uffz. Gerhard Röhmisch (Bs) injured

Crew baled out near Bieberach am Rhein, aircraft crashed at Dijon, France on the return flight from Bristol.

06/07.12.40: Target Bristol: II/KG 27.

He 111P-2, Wnr.1415, 1G+BP of 6/KG 27

Ltn. Manfred Enderlein (F) killed

Fw. Gunther Erwin (B) missing

Fw. Paul Tappe (Bf) killed

Uffz. Werner Pattke (Bm) killed

Failed to return. Later found crashed near Champagnale. Crew deaths confirmed 2.2.41.

06/07.12.40: Target Bristol: I/KG 51.

Ju 88A-1, Wnr.5048, of I/KG 51

Ofw. Arnim Baussert (F) killed

Ofw. Hugo Helms (B) killed

Fw. August Konrad (Bf) injured

Gefr. John Henry (Bs) injured

Crashed near Melun, France following an engine failure on the return flight from Bristol. Konrad and Henry baled out.

12/13.12.40: Target Bristol: III/KG 27.

He 111 of III/KG 27

Uffz. Martin Peper (Bm) killed

Uffz. Rudolf Kraner (Bs) injured

At 00.30 hrs F/Lt. H.Speke flying a Beaufighter of 604 Sq. (Middle Wallop) was vectored onto a bomber flying at about 5200 metres over Ringwood in Hampshire. The enemy aircraft was identified as a Heinkel but, as Speke closed in, he discovered that the dimmer on his gunsight had failed. Despite being dazzled, he opened fire and saw strikes made on the bomber before it dived away.

03/04.01.41: Target Bristol: III/KG 3.

Do 17Z-2, Wnr.3328, of 8/KG 3

Crash-landed at St.Trond-Brusthem at 04.53 hrs with 55% damage. No crew casualties.

16/17.01.41: Target Avonmouth: I/LG 1.

Ju 88A-5, Wnr.6123, L1+LK of 2/LG 1

Ltn. Max Zodrow (F) killed

Uffz. Engelbert Lipps (B) killed

Fw. Paul Gölzow (Bf) killed

Uffz. Bruno Finke (Bs) killed

Last contact was when it made a W/T transmission at 05.21 hrs to advise that it was on its return flight. Presumed crashed into the sea. This could be the aircraft claimed destroyed by the Cardiff AA guns.

16/17.01.41: Target Avonmouth: KGr 100.

He 111H-2, Wnr.5441, 6N+CL of 3/KGr 100

Fw. Erwin Schul (F) missing

Uffz. Heinz Bolle (B) missing

Fw. Engelbert Buck (Bf) missing

Gefr. Karl-Heinz Kayser (Bs) missing

Last reported at 20.46 hrs on the return flight that it was estimating radio beacon Max near Caen in ten minutes. Presumed crashed into the sea.

22.02.41: Target Parnall Yate: II/KG 27.

He 111H-3, Wnr. 3247, 1G+GM of 4/KG 27

Ltn. Berndt Rusche (F) POW

Fw. Georg Jankowaik (Bf) missing

Gefr. Erich Steinback (Bs) missing

Uffz. Heinrich de Wall (Bm) killed

Fw. Albert Ranke (B) killed

Probably crippled by AA fire from A Troop, 236 Battery, 76 HAA Rgt. from the Markham Farm, Easton in Gordano, gun site it then struck the cable of barrage balloon 27/29 which tore off its port wing, before crashing on the water's edge at Portbury Wharf, Portbury, Somerset, at 14.12 hrs. Ranke and de Wall are buried in Greenbank Cemetery, Bristol.

16/17.03.41: Target Avonmouth: I/KG 51.

Ju 88A-5, Wnr.7134, of I/KG 51

Uffz. Karl Lindemeyer (F) killed

Gefr. Fritz Ettig (Bf) killed

Uffz. Willi Maurer (B) killed

Gefr. Josef Stadler (Bs) killed

Crashed near Villaroche due to faulty servicing.

16/17.03.41: Target Avonmouth: I/KG 51.

Ju 88A-5, Wnr.8124, 9K+AK of 2/KG 51

Ltn. Egon Arz (F) POW

Obfw. Oskar Reimer (B) POW

Fw. August Konrad (Bf) POW

Fw. Otto Hoferrichter (Bm) POW

Suffered double engine failure. Last radio call "Emergency landing in England". Crashed at RAF Chilmark, Dinton, Wilts at 23.40 hrs.

16/17.03.41: Target Bristol: II/KG 1.

Ju 88A-1, Wnr.6255, of II/KG 1

Fw. Heinrich Hoben (F) killed

Uffz. Hans Kugelsetter (Bf) killed

Uffz. Helmut Wetzel (B) killed

Fw. Heinrich Brunstein (Bs) killed

Crashed between Beaumont and Cherbourg due to fuel shortage.

16/17.03.41: Target Bristol: II/KG 76.

Ju 88A-5, Wnr.241, of II/KG 76

Fw. Heinz Richter (F) killed

Ofw. Dietrich Mertens (B) killed

Fw. Rudolf Bloch (Bf) killed

Fw. Hans Gorke (Bs) killed

Crashed near Le Havre soon after take-off.

16/17.03.41: Target Bristol: II/KG 76.

Ju 88A-5, Wnr.2213, of II/KG 76

Ogefr. Karl Ronzinski (Bf) injured

Gefr. Hans Müller (Bs) injured

2 other crewmen unhurt.

Ran out of fuel returning from Bristol, crew baled out over France. Aircraft crashed near Chartres.

16/17.03.41: Target Bristol: II/KG 76.

Ju 88A-5, Wnr.542, of II/KG 76

Uffz. Wilhelm Batels (F) injured

Gefr. Hermann Model (B) injured

Ogefr. Heinrich Hanss (Bf) injured

Gefr. Wilhelm Baszik (Bs) injured.

90% damaged in crash landing near Châteaudun.

03/04.04.41: Target Avonmouth: III/KG 1.

Ju 88A-5, Wnr.4224, V4+AR of 7/KG 1

Ltn. Ernst Menge (F) missing

Uffz. Wilhelm Hahn (Bf) missing

Uffz. Robert König (B) missing

Uffz. Wilhelm Schreiber (Bs) missing

Believed that shot down by F/Lt. J.Cunningham and Sgt. C.F.Rawnsley in a Beaufighter of 604 Sq. (Middle Wallop) following an AI attack. Aircraft disintegrated and pieces hit the Beaufighter. Crashed into the sea south of the Needles, Isle of Wight at 00.50hrs.

04/05.04.41: Target Avonmouth: III/KG 26.

He 111H-5, Wnr.3595, 1H+ED of Stab.III/KG 26

Ofw. Erich Blüher (Bf) killed.

Gefr. Mathias van Kaldenkerken (Bs) killed.

Ofw. Herbert Rose (F) POW

Fw. Georg Fietzek (B) POW

Uffz. Ernst Groschle (Bm) POW

Target Avonmouth, bomb load 1 SC 500 and 16 AB. Shot down during run-in to target by F/O. Edward Crew and Sgt. Norman Guthrie following an AI attack by Beaufighter R2252 of 604 Sq. (Middle Wallop). Crashed at Reading's Farm, St Lawrence Wick Road, Hewish, near Weston-s-Mare, Somerset at 22.25 hrs. Blüher and van Kaldenkerken are buried at Weston-s-Mare.

11/12.04.41: Target Bristol area: III/KG 27.

He 111P-2, Wnr.2002, 1G+HT of 9/KG 27

Uffz. Leo Röth (F) killed

Ofw. Wilhelm Franke (B) killed

Uffz. Walter Rüggeberg (Bm) killed

Uffz. Fritz Unterrieser (Bf) killed

Shot down en route to the target by Sq.Ldr. J.Cunningham and Sgt. C.F.Rawnsley in a Beaufighter of 604 Sq. (Middle Wallop). Also claimed by Sgt. F.O. Jankowiak and Sgt. J.Lipinski in a Defiant of 307 Sq. (Colerne). Crashed at Prowers Farm, Lydlinch, Dorset at 01.35 hrs.

11/12.04.41: Target Bristol area: III/KG 1.

Ju 88A-5, Wnr.6304, of III/KG 1

Ofw. Friedrich Greiner (F) killed

Uffz. Karl Grauber (Bf) killed

Oblt. Richard Sayk (B) killed

Fw. Franz Grys (Bs) killed

Crashed on return and burnt out on Abbeville airfield.

11/12.04.41: Target Bristol area: III/KG 26.

He 111H-5, Wnr.3629, 1H+GD of Stab.III/KG 26

Obfw. Hans Büttner (F) unhurt

Obfw. Heinz Tiemann (B) injured

Uffz. Anton Ehm (Bf) injured

Fw. Arthur Balken (Bm) killed

Failed to return. Crew baled out over occupied territory. Aircraft probably crashed into the sea.

11/12.04.41: Target Bristol area: II/KG 54.

Ju 88A-5, B3+GN of 5/KG 54

Uffz. Karl Funke (F) missing

Fw. Josef Höhnhorst (Bf) missing

Gefr. Heinz Bretschneider (Bs) missing

Gefr. Horst Heller (B) missing

Failed to return, probably crashed into the sea.

11/12.04.41: Target Bristol area: III/KG 55.

He 111P-2, G1+GS of 8/KG 55

Gefr. Bruno Rode (F) missing

Uffz. Erich Rähse (B) missing

Uffz. Walter Ulbricht (Bf) missing

Gefr. Karl Berger (Bm) missing

Ditched in the Channel north of Cherbourg as a result of engine failure following combat with a nightfighter on return flight.

14/15.06.41: Target BAC Filton: KGr 100.

He 111H, Wnr.3248, 6N+DK of 2/KGr 100

Ofw. Adalbert Knier (F) killed

Uffz. Werner Kuhnert (B) killed

Uffz. Werner Schmalfluss (Bf) killed

Fw. Heinrich Laubesheimer (Bm) killed

Uffz. Gunter Muller (Bs) killed

This aircraft which took off at 23.19 hrs was shot down by F/O. K.I. Geddes and Sgt. A.C. Cannon in a Beaufighter of 604 Sq. (Middle Wallop). Crashed at Plumber, near Sturminster Newton, Dorset, at 00.55 hrs.

04/05.07.41: Target Filton Airfield: III/KG 27.

He 111H-5, Wnr. 4087, 1H+FR of 7/KG 26

Ltn. Siegfried Baden (F) POW

Fw. Ernst Witt (B) POW

Gefr. Ludwig Kügel (Bf) POW

Ogefr. Eduard Köppel (Bm) killed

Shot down by F/Lt. Patten and F/Sgt. Moody in a Beaufighter of 604 Sq. (Middle Wallop). Crashed 01.25 hrs at Vallis Farm, Great Elm, Murdercombe Bottom, near Frome, Somerset.

08/09.07.41: Target Filton Airfield: KGr 100.

He 111H-3, Wnr.5725, of KGr 100

Oblt. Ferdinand Cartes (Bm) killed

Uffz. Alosius Menzel (Bs) POW died later

Damaged 60% following night-fighter attack over the Bristol Channel.

26.08.41: Reconnaissance over Bristol & Birmingham: 1(F)/123.

Ju 88D-2, Wnr.0369, 4U+HH, of 1(F)/123

Ltn. Rudolf Lauer (B) interned

Ltn. Ludwig Stockbauer (F) interned

Gefr. Herbert Schulze (Bf) interned

Gefr. Gerhard Drechsel (Bs) interned

Crashed at 18.34 hrs at Belgooly, Old Head of Kinsale, Co. Cork, Eire. Shot down by F/O. R.G.O.J.Mouchette and Sgt. Hamilton in Hurricanes of 615 Sq. (Valley).

25/26.04.42: Target Bath: IV/KG 2.

Do 17Z-1, Wnr.2507, U5+GW of 12/KG 2

Uffz. Siegfried Kukla (F) missing

Gefr. Karl Küsters (B) missing

Uffz. Karl Graf (Bf) killed

Uffz. Hans Jansen (Bm) killed

This aircraft appears to have become lost probably due to "Meacom" activity. It sent an "SOS" at 22.26 hrs and at 23.45 hrs was intercepted and attacked 40 miles south of Worthing by S/L J.G. Topham DFC and F/L Strange on Beaufighter II X7690 of 219 Sq. (Tangmere). At 00.16 hrs it received a D/F/ fix from Paris-Villacoublay giving a position 40 miles NE of Cherbourg. It then homed on Caen from the NW and at 00.34 hrs signalled "Landing - Pancake Landing", but appears to have crashed into the sea as it was called between 00.35 and 00.59 hrs without reply. The bodies of Graf and Jansen were subsequently recovered from the sea.

25/26.04.42: Target Bath: IV/KG 3.

Ju 88A-6, Wnr. 3459, 5K+DW of 12/KG 3

Oblt. Günther Brixius (F) killed

Ofw. Walter Kreinenbrock (B) POW

Gefr. Paul Kochon (Bf) POW

Fw. Adolf Leidig (Bm) killed

This aircraft took off at 21.36 hrs from Brussels-Evere briefed to intrude over night fighter airfields in the Wiltshire area to disrupt night flying. The crew subsequently became lost over England due to "Meacon" activity and at 22.35 hrs was claimed damaged by Cardiff HAA gun site J16B on Flat Holm Island in the Mouth of the River Severn (351/112 HAA Rgt). It was initially picked up by the Gun Laying Radar at a range of 42,000 yards and engaged with 6 rounds of 4.7" at a height of 8000 feet. The target, which was tracked through 180 degrees, then lost height disappearing at an altitude of 6000 feet and a distance of 1900 yards before crossing the coast near Chepstow. The Junkers then flew up the Wye Valley before being shot down by F/O Wyrill and Sgt Willins in Beaufighter X7933 of 255 Sq (High Ercall), crashing at 23.50 hrs at Lanhaylo Farm, Gwaunceste Hill, Builth Wells, Brecon. The crew, originally buried in Glascwm churchyard were later moved to the German Military Cemetery at Cannock Chase.

25/26.04.42: Target Bath: Kü FI Gr 506.

Ju 88A-4, Wnr.1540, S4+MH of 1/Kü FI Gr 506.

Uffz. Michael Bartl (F) missing

Ltn. Joachim Ritzmann (B) missing

Uffz. Fritz Schmidt (Bf) missing

Fw. Max Burdenski (Bs) missing Shot down by F/L Neyder and Sgt Wozney in Beaufighter II T3358 of 307 Sq (Exeter). Crashed into the sea 15 miles south of Beer Head about 22.20 hrs. Four parachutes seen

before the aircraft went down in flames and its destruction was confirmed by the Royal Observer Corps and Convoy "Stencil".

25/26.04.42: Target Bath: II/KG 40.

Do 217E-3, Wnr.5090.

Crashed and destroyed at Courseulles sur Mer, near Caen, due to engine failure after crew had successfully baled out. Probably the aircraft claimed destroyed by Portland 4 (Southwell) HAA gun site (418/140 HAA Rgt) at 23.38 hrs and called without reply at 00.22 hrs.

25/26.04.42: Target Bath: III/KG 2.

Do 217E-4, Wnr.1165.

Signalled "Engine Damaged" at 23.31 hrs and later homed on Caen-Carpiquet airfield from the NW before crash-landing there, 50% damaged.

25/26.04.42: Target Bath: II/KG 40.

Do 217E-4, Wnr.5361.

Crash-landed (30% damaged) at Rennes airfield due to engine troubles and was probably the aircraft ordered to jettison its bombs on the emergency dumping ground at 04.44 hrs.

25/26.04.42: Target Bath: II/KG 40.

Do 217E-4, Wnr.1120, F8+EM of 4/KG 40

Fw. Herbert Gregs (F) killed

Obgfr. Helmut Tomschi (Kb) killed

Uffz. Karl Kainzinger (Bf) killed

Uffz. Adolf Lenz (Bs) killed

Pilot dazzled by searchlight at Site MPB 9 on Pentridge Hill, Handley, Dorset (4/2 SL Rgt). Crashed 05.05 hrs at Bottlebush Down, Handley Cross. Tomschi, Kainzinger and Lenz subsequently buried in Cranborne Cemetery. This aircraft appears to have already been in difficulty having first been called by Rennes, without reply, from 04.42 hrs, and they continued until 07.58 hrs, while Nantes also tried unsuccessfully between 06.57 and 07.10 hrs.

26/27.04.42: Target Bath: IV/KG 2.

Do 217Z-3, Wnr.4236, U5+BW of 12/KG 2

Ltn. Helmut Schobbert (F) missing

Gefr. Kurt Motz (B) missing

Uffz. Heinrich Stadler (Bf) missing

Gefr. Johann Plschek (Bm) missing

Damaged at about 01.40 hrs by Hurricane IIC Z3778 of 87 Sq (Charmy Down) flown by P/O Grantham whilst at between 1500 and 2000 feet over Lansdown, near Bath. Called on the Tactical Frequency between 02.59 and 04.14 hrs but without reply and appears to have crashed into the English Channel during the return flight.

26/27.04.42: Target Bath: IV/KG 4.

He 111H-5, Wnr.3590.

Damaged whilst northbound near the northern edge of the Portland Gun Defended Area by Beaufighter I X7571 of 604 Sq. (Middle Wallop) flown by F/L Crew and P/O Duckett at 01.05 hrs. The aircraft was followed back by GCI until it faded losing height. It was probably the aircraft which reported "Flying on One Engine" and is known to have subsequently forced landed at Avord airfield 30% damaged.

26/27.04.42: Target Bath: IV/KG 30.

Ju 88A-5.

Probably damaged near Bridport by Beaufighter II T3358 of 307 Sq (Exeter) flown by F/L Neyder and Sgt Wozny. At 00.47 hrs, outward bound to Bath, this aircraft signalled "Engine Damaged" and at 01.07 hrs "Port engine out of action - intermittently jettisoning bombs". Returned safely.

26/27.04.42: Target Bath: IV/KG 55.

He 111H-5, Wnr.5319.

Ofw. Willi Schulz (Bm) killed

At 02.15 hrs whilst returning from Bath at 4500 feet the aircraft was intercepted near Bristol by Defiant I N3370 of 125 Sq. (Colerne) flown by P/O White and P/O Gavegen. This was probably the aircraft which was initially controlled by Caen and signalled it intended landing there due to a damaged engine, but later homed on Rennes from the NW wher it finally put down.

26/27.04.42: Target Bath: Kü FI Gr 106.

Ju 88D-1, Wnr.1293.

Uffz. Leo Peier (Bs) killed

Intercepted at about 01.14 hrs flying at 11,000 feet and 10 miles south of Exmouth by Beaufighter II T3382 of 307 Sq. (Exeter) flown by F/O Pietrzyk and F/O Krawiecki. This was probably the aircraft which was plotted in the Casquets area, west of Alderney, at 01.30 hrs. It then made an emergency landing at Dinard-St.Briac airfield 60% damaged.

23.05.42: Target Avonmouth: Erprobungs und LehrKommando 17.

He 111H-6, Wnr.4627, 6N+FR of Ergr.u.Lehr Kdo 17.

Hptm. Siegfried Langer (F) killed

Oberfw. Gerhard Schmidt (Bf) killed

Fw. Dietrich Hoffmann (Bm) killed

Fw. Paul Gaidies (Bf) killed

Gefr. Willi Worrying (Bs) killed

Forced down by W/Cdr. J.Cunningham DSO, DFC and Bar and F/Lt. C.F.Rawnsley, DFC, DFM and Bar, in a Beaufighter of 604 Sq. (Middle Wallop). Crashed at Elcombe Farm, Alvediston, near Shaftesbury, Dorset, at 17.05 hrs. Hptm. Langer was the Staffelkapitan.

27/28.06.42: Target Weston super Mare: I/KG 2.

Do 217E-4, Wnr.4207 of I/KG 2.

Technical fault. Crash-landed west of Evreux airfield 45% damaged.

27/28.06.42: Target Weston super Mare: I/KG 2.

Do 217E-4, Wnr. 5473, U5+CL of 3/KG 2

Fw. Wilhelm Schludecker (F) injured

Oblt. Hans Reiss (B) injured

Uffz. Alfons Bemelmans (Bf) injured

Fw. Heinrich Buhr (Bs) injured

Engine failure on take-off, crash-landed Evreux-Fauville, 60% damaged. Oblt. Reiss was the Staffelkapitan.

28/29.06.42: Target Weston super Mare: II/KG 2.

Do 217E-2, Wnr.5365, U5+BP of 6/KG 2

Uffz. Rudolf Blankenburg (F) uninjured

Uffz. Horst Schwandt (B) uninjured

Uffz. Heinrich Depping (Bf) uninjured

Uffz. Max Feiget (Bm) uninjured

Intercepted near Taunton by Mosquito DD638 of 264 Sq (Colerne) flown by F/O. Hodgkinson and Sgt.Roe. Crash-landed near Creil at 03.05 hrs.

28/29.06.42: Target Weston super Mare: III/KG 2.

Do 217E-4, Wnr.5379, of 7/KG 2

Uffz. Michael Peters (F) killed

Fw. Josef Prinzensing (B) killed

Uffz. Peter Schwab (Bf) injured

Gefr. Konrad Bierl (Bm) killed

Intercepted by Hurricane II BE581 of 1 Sq (Tangmere) flown by F/Lt. Kuttelwascher. Crashed at Trevieres near Caen. 100% destroyed.

28/29.06.42: Target Weston super Mare: III/KG 2.

Do 217E-4, Wnr.5490.

Suffered engine failure and force-landed at Montdidier. 60% damaged.

01/02.07.42: Target Bristol: II/KG 2.

Do 217E-4, Wnr.4268 of 4/KG 2

Uffz. Josef Hesch (B) killed

Ofw. Alwin Kuhlmann (Bm) injured

This aircraft was intercepted near Coutances by a Hurricane of 1 Sq (Tangmere). 2 crewmen baled out one being killed and one injured. The aircraft was then safely landed at St.André with 10% damage.

27/28.03.44: Target Bristol: II/KG 2.

Ju 188E-1, Wnr.260219, U5+EN of 5/KG 2

Ltn.Werner Siebert(F)POW injured

Uffz. Klaus Holst (Kb) POW

Uffz. Matthias Josephs (Bf) POW

Fw. Hermann Sagel (Bm) POW

Gefr. Marcel Rozycki (Bs) POW

This aircraft loaded with 2 AB 1000, 4 BC 50 and 6 LC 50 took-off at 22.32 hrs and was shot down en-route for Bristol by F/O. Russell and F/Lt. Weir in a Beaufighter VI, MM 850, of 68 Sq. (Fairwood Common). Crashed 00.10 hrs at Walnut Farm, Coxley, Wells, Somerset.

27/28.03.44: Target Bristol: III/KG 2.

Do 217K-1, Wnr.4497, U5+GR of 7/KG 2

Fw. Emil Krings (F) missing

Uffz. Hermann Erich (B) missing

Ogefr. Reinhold Braczyk (Bf) missing

Uffz. Willi Grossmann (Bd) missing

Failed to return and was probably lost at sea.

27/28.03.44: Target Bristol: III/KG 2.

Do 217 of III/KG 2

Caught fire after landing at Nantes, crew uninjured.

27/28.03.44: Target Bristol: II/KG 6.

Ju 88 of 6/KG 6

Fhj.Fw. Günther Tobor (F) missing

Ogefr. Karl-Heinz Menzel (B) missing

Uffz. Theodor Burkard (Bf) missing

Fw. Gerhard Thon (Bd) missing

Failed to return and was probably lost at sea.

27/28.03.44: Target Bristol: III/KG 6.

Ju 88 of 7/KG 6

Ltn. Herbert Blass (F) killed

Ogefr. Helmut Spaltmann (B) missing

Fw. Richard Roth (Bf) missing

Uffz. Gerhard Schiller (Bs) missing

Failed to return and was probably lost at sea.

27/28.03.44: Target Bristol: III/KG 6.

Ju 88A-4, Wnr.144551, 3E+FT of 9/KG 6

Uffz. Günter Blaffert (F) POW injured

Ogefr. Gerhard Hartung (B) killed

Ogefr. Josef Helm (Bf) missing

Gefr. Adam Kurz (Bs) missing

This aircraft took-off at 21.30 hrs loaded with 1 AB 1000 and 1 500kg H.E. to bomb a factory on the banks of the River Severn on the western outskirts of Bristol. It was shot down by W/Cdr. K.M.Hampshire DSO and F/O. T.Condon in a Mosquito XVII of 456 Sq. RAAF (Ford). Crashed 23.45 hrs at Beer, Devon.

27/28.03.44: Target Bristol: III/KG 6.

Ju 88 of 9/KG 6

Uffz. Alfred Hahn (Bs) killed

This aircraft was claimed damaged by AA fire over Yeovil at 00.01 hrs. Hahn was killed when he baled out near Chelborough, Dorset without the aid of a parachute which was found at Halstock. The remaining crew returned safely to base.

27/28.03.44: Target Bristol: II/KG 30.

Ju 88A-4, Whr.550241, 4D+EP of 6/KG 30

Uffz. Walter Tutschek (F) POW

Ogefr. Otto Bauch (B) POW

Uffz. Hans Wirth (Bf) POW

Ogefr. Karl Wiedner (Bs) POW injured

This aircraft loaded with 1 AB 500 and 1 500kg H.E. and 10 50kg H.E.'s was shot down by F/Lt. H.D.McNabb and P/O. J.L.N.Hall in a Beaufighter VI, KW 981, of 406 Sq. RCAF (Exeter). Crashed at 23.50 hrs at Willis Farm, Clapton, near Berkeley. Gloucestershire. Maps recovered from the wreckage showed the turning point at the mouth of the Usk ringed in red together with the time 23.58 hrs.

27/28.03.44: Target Bristol: III/KG 30.

Ju 88A-4, Wnr.301518, 4D+AR of 7/KG 30

Uffz. Helmut Heimpel (F) killed

Uffz. Ernst Schmidt (B) killed

Uffz. Matthias Berg (Bf) killed

Uffz. Werner Neubert (Bs) killed

Shot down by an Intruder . Crashed at Nussy, near Cherbourg.

27/28.03.44: Target Bristol: St/KG 54.

Ju 88A-4, Wnr.141211, B3+UA of Stab/KG 54

Ltn. Wolfgang Fritz (F) POW

Ogefr. Gunter Bärmann (B) POW

Gefr. Heinrich Schwenzer (Bs) POW

Uffz. Heinrich Schink (Bf) killed

This aircraft loaded with 2 AB 1000's was accredited to the Weston-super-Mare AA guns but said by crew to have suffered a fire in the faulty left engine after attacking the target. The smoke filled aircraft was abandoned and crashed at 23.55 hrs at Delean Peat Works, Blakeway, Westhay, near Wedmore, Somerset. Schink is buried at Weston-s-Mare.

27/28.03.44: Target Bristol: I/KG 54.

Ju 88A-4, Wnr. 142276, B3+KL of 2/KG 54

Ofw. Werner Goertz (F) killed

Fw. Ferdinand Fuchs (B) killed

Uffz. Walter Lindner (Bf) injured

Uffz. Franz Sitzwohl (Bs) killed

Crashed in the Aisne Canal, near Juvincourt, on return from Bristol. Lindner baled out.

27/28.03.44: Target Bristol: I/KG 54.

Ju 88A-4, Wnr.550401, B3+FK of 2/KG 54

Ltn. Friedrich Kerkhof (F) killed

Uffz. Gunter Pfaunder (B) POW injured

Uffz. Rudolf Teismann (Bf) POW injured

Ogefr. Werner Decho (Bs) POW

This aircraft loaded with 2 AB 1000's took-off at 21.30 hrs and was shot down en-route for Bristol by S/Ldr. H.V.Ellis and F/Lt. J.M.Craig in Mosquito XVII, HK260, of 219 Sq.(Colerne). Crashed at 23.57 hrs at Hestercombe Manor House, Upper Cheddon, near Taunton.

27/28.03.44: Target Bristol: I/KG 54.

Ju 88A-4, Wnr.144551, B3+BL of 3/KG 54

Ofw. Hans Brautigam (F) POW

Ogefr. Kurt Chalon (B) POW

Ogefr. Alfred Maleztki (Bm) POW

Uffz. Robert Belz (Bf) killed

This aircraft loaded with 3 AB 500's was shot down by W/Cdr. K.M.Hampshire DSO and F/O. T.Condon on Mosquito XVII of 456 Sq. RAAF (Ford). Crashed at 23.50 hrs at Walrond's Park Farm, Isle Brewers, near Ilminster, Somerset. Belz's body was found at Isle Brewers 13/4/44

27/28.03.44: Target Bristol: I/KG 66.

Ju 88S-1, Wnr.301509, Z6+FN of 5/KG 66

Fw. Wilhelm Schmidt (F) missing

Uffz. Heinz Kunczak (B) missing

Uffz. Franz Kraus (Bf) missing

Failed to return and was probably lost at sea.

23/24.04.44: Target Bristol: I/KG 2.

Ju 188, Wnr.180413, U5+LH of 1/KG 2

Ofw. Georg Rösler (F) missing

Uffz. Friedrich Kreihsel (B) missing

Uffz. Rudolf Fietz (Bf) missing

Fw. Günter Hosters (Bs) missing

Ogefr. Emil Weissbrich (Bsz) missing

Failed to return and was probably lost at sea.

23/24.04.44: Target Bristol: I/KG 2.

Ju 188E-2, Wnr. 180414, U5+GH of 1/KG 2

Ltn. Wolfgang Christoff (F) killed

Fw. Horst Huffaky (Bs) killed

Ogefr. Theophil Joretzki (Bs) killed

Uffz. Heinrich Schnuer (B) killed

Ogefr. Wolfgang Biegerl (Bf) killed

Shot down by 3.7 inch AA guns from 17,000 feet and crashed at 02.15 hrs at Salterns Wood, Arne, near Wareham, Dorset.

23/24.04.44: Target Bristol: III/KG 2.

Do 217M-1, Wnr.6324, U5+HS of 8/KG 2

Uffz. Klaus-Dieter Bohm (Bf) injured

Engine fire south-west of Caen, crew baled out.

23/24.04.44: Target Bristol: III/KG 2.

Do 217M-1, Wnr.6256, U5+IT of 9/KG 2

Uffz. Heinrich Rosemann (F) killed

Ogefr. Kurt Deutrich (B) killed

Ogefr. Franz Harnoth (Bf) killed

Uffz. Willi Tettschlag (Bd) killed

Crashed near Savigny, France 00.30 hrs en-route for Bristol.

23/24.04.44: Target Bristol: II/KG 6.

Ju 88 of 5/KG 6

Uffz. Karl Geher (F) missing

Gefr. Franz Hartmann (B) missing

Uffz. Josef Getzinger (Bf) missing

Uffz. Alfred Stenzel (Bd) missing

Failed to return and was probably lost at sea.

23/24.04.44: Target Bristol: II/KG 30.

Ju 88, Wnr.142570, 4D+OM of 4/KG 30

Uffz. Alwin Schlemm (F) missing

Gefr. Gerhard Klinger (B) missing

Gefr. Horst Steinmetz (Bf) missing

Uffz. Franz Rametsheiner (Bs) missing

Failed to return and was probably lost at sea.

23/24.04.44: Target Bristol: II/KG 30.

Ju 88A-14, Wnr.144501, 4D+FM of 4/KG 30

Uffz. Rudolf Detering (F) POW injured

Uffz. Johann Agten (B) POW injured

Uffz. Walter Kempter (Bf) POW

Uffz. Helmut Trauwald (Bs) killed

This aircraft loaded with 1 AB 1000 and 10 50 kg Phosphorous I/B's was shot down en-route for Bristol by S/Ldr. E.G.Barwell DFC and F/Lt. D.Haige in a Mosquito XVII of 125 Sq. (Hurn). Crashed at Manor Farm, Hill Deverill, Wiltshire, at 02.10 hrs. Trauwald is buried at Haycombe Cemetery, Bath.

23/24.03.44: Target Bristol: II/KG 30.

Ju 88 of 4/KG 30

Uffz. Karl Wenzhann (F) injured

Wenzhann was injured bailing out following being shot down by a night fighter. The rest of the crew were uninjured.

23/24.04.44: Target Bristol: I/KG 54.

Ju 88, Wnr.800939, B3+KH of 1/KG 54

Uffz. Günter Fedler (F) missing

Uffz. Walter Marke (B) killed

Uffz. Heinz Reinecke (Bf) missing

Ogefr. Franz Woznick (Bs) missing

Failed to return and crashed into the English Channel.

23/24.04.44: Target Bristol: I/KG 54.

Ju 88, Wnr.1226, B3+GL of 3/KG 54

Ltn. Gerhard Jandke (F) injured

Uffz. Bernhard Frank (B) injured

Uffz. Horst Seeck (Bf) injured

Uffz. Karl Wolle (Bs) killed

Crashed force landing 2 km SW of Tour en Bessin, near Caen, France, on return from Bristol.

23/24.04.44: Target Bristol: III/KG 54.

Ju 88A-4, B3+HR of 7/KG 54

Uffz. Heinz Strobel (F) missing

Uffz. Maximilian Brachtel (B) missing

Uffz. Werner Holl (Bf) missing

Uffz. Josef Götz (Bs) missing

Failed to return presumed crashed into the sea.

23/24.04.44: Target Bristol: III/KG 54.

Ju 88A-4, B3+FS of 8/KG 54

Ltn. Stephan Pauli (F) missing

Uffz. Werner Perlik (B) missing

Uffz. Karl-Heinz Behling (Bf) missing

Uffz. Walter Wickborn (Bs) killed

Failed to return crashed into the sea.

23/24.04.44: Target Bristol: III/KG 54.

Ju 88A-4, B3+DT of 9/KG 54

Ltn. Erhard Uebel (F) missing

Fw. Josef Lichtl (B) missing

Uffz. Erhard Granow (Bf) missing

Fw. Hans Adam (Bs) missing

Failed to return probably crashed into the sea.

23/24.04.44: Target Bristol: IV/KG 101.

Ju 88 of Ergänzungs-Staffel IV/KG 101

Uffz. Hans Bauer (F) killed

Uffz. Josef Krekeller (B) missing

Uffz. Eugen Ritz (Bf) missing

Uffz. Karl Bachus (Bs) missing

Failed to return crashed into the sea.

14/15.05.44: Target Bristol: I/KG 2.

Ju 188A-2, Wnr.160089, U5+HH of 1/KG 2

Fw. Heinz Mühlberger (F) POW injured

Fw. Werner Heinzelmann (Bs) killed

Ogefr. Ewald Steinbeck (Bs) killed

Uffz. Artur Krüger (Bf) killed

Ogefr. Willi Eberle (B) killed

Shot down en-route to Bristol by F/O. A.S.McEvoy and F/O. M.N.Austin in Mosquito XVII HK 246 of 456 Sq. (Ford). Crashed at 02.00 hrs at Greenlands Artillery Range, Larkhill, Wilts.

14/15.05.44: Target Bristol: I/KG 2.

Ju 188A-2 of I/KG 2

Crashed into the sea off Guernsey. Crew baled out and rescued unhurt. Possibly shot down by a Beaufighter of 406 Sq. (Winkleigh).

14/15.05.44: Target Bristol: II/KG 2.

Ju 188E-1 of II/KG 2

Crashed on return to Vannes. Crew unhurt.

14/15.05.44: Target Bristol: III/KG 2.

Do 217M-1, Wnr.6396, U5+DR of 7/KG 2

Uffz. Günter Zimmermann (F) missing

Ogefr. Johann Grabner (B) killed

Uffz. Heinz Steigemann (Bf) missing

Gefr. Johannes Priebes (Bs) missing

Failed to return, probably lost at sea.

14/15.05.44: Target Bristol: III/KG 2.

Do 217K-1, Wnr.4421, U5+BR of 7/KG 2

Uffz. Helmut Dahm (F) missing

Ogefr. Kurt Weprek (B) missing

Ogefr. Friedrich Fischer (Bf) missing

Ogefr. Günther Schiewe (Bd) missing

Failed to return, probably lost at sea. Possible shot down by F/Lt. Surman in a Mosquito of 604 Sq. (Hurn).

14/15.05.44: Target Bristol: III/KG 2.

Do 217K-1, Wnr.4410, U5+MR of 7/KG 2

Ltn. Johannes Domschke (F) killed

Uffz. Emil Chmielewski (B) POW injured

Uffz. Waldemar Jungke (Bf) POW injured

Uffz. Otto Schott (Bs) POW injured

Took-off at 00.40 hrs loaded with 4 500 kg H.E.'s and was shot down en-route for Bristol by F/O. R.G.Jeffs and F/O. E.Spedding in a Mosquito of 488 Sq. (Zeals). Crashed at 02.04 hrs at Camel Cross Cafe, West Camel, near Yeovilton, Somerset.

14/15.05.44: Target Bristol: III/KG 2.

Do 217K-1, Wnr.4454, U5+FR of 7/KG 2

Uffz. Franz Hildebrandt (Bs) POW

Shot down into the sea 30 km south of Torquay probably by S/Ldr. Mansfield in a Beaufighter of 68 Sq. (Fairwood Common).

14/15.05.44: Target Bristol: I/KG 6.

Ju 188A-2, Wnr.180441, 3E+DH of 1/KG 6

Uffz. Gottfried Biedermann (F) missing Uffz. Georg Malek (B) missing

Uffz. Walder Ziener (Bf) missing

Fw. Karl Hartmaier (Bs) missing

Gefr. Franz Hense (Bs) missing

Failed to return, probably lost at sea.

14/15.05.44: Target Bristol: I/KG 6.

Ju 188A-2, Wnr.180440, 3E+MH of 1/KG 6

Oblt. Karl von Manowarda (F) POW injured

Ofw. Ernst Fröhlich (Bf) POW injured

Fw. Heinrich Kaiser (B) killed

Fw. Holf Wolf (Bm) killed

Ofw. Paul Schmalzer (Bs) killed

Shot down by a Mosquito of 264 Sq. (Hartford Bridge) which was lost in the combat. F/Lt. C.M.Ramsay DFC baled out, F/O. Edgar DFC killed. The Ju 188 crashed at 02.25 hrs at Manor Farm, West Woldham, Selbourne, Hampshire.

14/15.05.44: Target Bristol: I/KG 6.

Ju 188A-2, Wnr.180436, 3E+BK of 2/KG 6

Uffz. Ernst Holst (F) missing

Ofw. Walther Hielschem (B) missing

Uffz. Emil Machwart (Bf) missing

Uffz. Kurt Wieners (Bs) missing

Gefr. Siegmund Urban (Bs) missing

Failed to return, probably lost at sea.

14/15.05.44: Target Bristol: I/KG 6. Ju 188A-2, Wnr.160069, 3E+LK of 2/KG 6

Ltn. Gerhard Wentz (F) POW

Uffz. Karl Fritsch (Kb) POW

Uffz. Hilmar Korf (Bf) killed

Uffz. Karl Hoyer (Bs) killed

Gefr. Gerhard Büttner (Bs) killed

Took-off at 00.30 hrs loaded with 2 1000 kg H.E.'s and was shot down en-route for Bristol. Although the destruction of this aircraft was officially credited to F/Lt. J.A.S.Hall and F/O. J.P.Cairns in a Mosquito of 488 Sq. (Zeals) it seem more likely that F/O. R.G.Jeffs and F/O. E.Spedding were the victors, also in a Mosquito

of 488 Sq. The Ju 188 crashed in the grounds of Inwood House, Temple Combe, near Henstridge, Somerset at 02.00 hrs. Korf and Büttner are buried in Haycombe Cemetery in Bath.

14/15.05.44: Target Bristol: I/KG 6.

Ju 188A-2, Wnr.180411, 3E+ML of 3/KG 6

Fw. Hans Pax (F) killed

Uffz. Heinz Schwöbel (Bf) killed

Suffered engine failure over the Channel coast and crashed at St.Hellier, Jersey. Schwöbel baled out but was killed, other crew members baled out over France.

14/15.04.44: Target Bristol: II/KG 30.

Ju 88, Wnr.301324, 4D+AC of Stab.II/KG 30

Fw. Walter Hallen (F) missing

Gefr. Guido Frauscher (B) missing

Uffz. Hans Ueckermann (Bf) missing

Uffz. Peter Ostler (Bs) missing

Failed to return, probably lost at sea.

14/15.05.44: Target Bristol: II/KG 30.

Ju 88, Wnr.550449, 4D+BN of 5/KG 30

Ltn. Walter Bierbrauer (F) missing

Oblt. Rolf Sellmann (B) missing

Uffz. Alois Krebs (Bf) missing

Uffz. Helmut Bierle (Bs) missing

Failed to return, probably lost at sea.

14/15.05.44: Target Bristol: I/KG 54.

Ju 88A-4, Wnr.088560, B3+NH of 1/KG 54

Uffz. Drago Verhove (F) missing

Uffz. Heinrich Schumann (B) missing

Uffz. Robert Schneider (Bf) missing

Ogefr. Georg Fellner (Bs) missing

Failed to return probably lost at sea.

OTHER GERMAN AIRCRAFT BROUGHT DOWN LOCALLY

14/15.03.41: Target Glasgow: II/KG 55.

He 111P-4, Wnr.3096, G1+IP, of 6/KG 55

Oblt. Eckehardt Henschke (F) killed

Fw. Franz Harter (B) killed

Fw. Heinz Krüger (Bf) killed

Fw. Willi Smolinski (Bm) killed

Intercepted in the vicinity of Codrington by F/O. Keith Geddes and Sgt. A.C.Cannon in a Beaufighter of 604 Sq. (Middle Wallop). Shot down and crashed with full bomb load at Brinkmarsh Farm, Whitfield, nr. Falfield, Glos. at 21.40 hrs. Crew all buried at Greenbank Cemetery, Bristol.

07/08.05.41: Target Liverpool: St/KG 27.

He 111P, Wnr. 1647, 1G+NA of Stab/KG 27

Oblt. Johannes Maron (B) POW

Ofw. Heinrich Ronge (F) POW

Fw. Heinz Dietrich (Bf) POW

Uffz. Heinrich Eggert (Bm) POW

Ogfr. Helmut Hilger (Bs) POW

Shot down by F/O. G.Howden in a Beaufighter of 600 Sq. (Colerne). Crashed at Stock Lane, Langford near Weston-s-Mare, at 22.55 hrs en-route for Liverpool.

16/17.06.41: Target Gloster Aircraft Hucclecote: KGr 100.

He 111H-2, Wnr.5462, 6N+CH of 1/KGr 100

Uffz. Franz Koster (B) killed

Oberfw. Heinz Ittner (F) killed

Gefr. Wolfgang Porada (Bf) killed

Gefr. Heinz Keul (Bs) killed

Uffz. Heinz Berwig (Bm) killed

Shot down en-route to Hucclecote by P/O. W.M.Gosland and Sgt. Phillips in Beaufighter R2085 of 604 Sq. (Middle Wallop). Crashed 01.20 hrs at Home Farm, Maiden Bradley, Wilts. Body of Uffz. Berwig not discovered until 11/3/44 and subsequently buried at Haycombe Cemetery, Bath.

23/24.07.41: Target Birkenhead: I/KG 30.

Ju 88A-5, Wnr.3457, 4D+DL of 3/KG 30

Uffz. Wolfgang Hosie (F) POW

Fw. Paul Zimmermann (B) POW

Ogefr. Franz Sander (Bf) POW

Ogefr. Robert Riemann (Bs) POW

Took off from Lanveoc-Poulmic at 23.35 hrs to bomb the docks at Birkenhead. On return it was misled by the Meacon transmitter at Lympsham, Somerset, and low on fuel landed intact at RAF Broadfield Down (Lulsgate Bottom), Wrington, Somerset at 06.20 hrs.

17/18.05.43: Target Cardiff: I/KG 2.

Do 217E-4, Wnr.5497, U5+EK of 2/KG 2

Uffz. Joachim Tröger (F) POW

Uffz. Wilhelm Schmidt (B) killed

Uffz. Werner Grothe (Bf) killed

Uffz. Erich Gratz (Bm) killed

Collided with Do 217 U5+DL at 03.10 hrs. Crashed in the sea off Woodspring Bay, Somerset. Werner Grothe is buried at Weston-s-Mare.

17/18.05.43: Target Cardiff: I/KG 2.

Do 217E-4, Wnr.5305, U5+DL of 3/KG 2

Ltn. Emil Holthaus (F) missing

Uffz. Fritz Richter (B) killed

Uffz. Heinrich Schumacher (Bf) killed

Uffz. Willi Petzke (Bm) killed

Collided with Do 217 U5+EK at 03.10 hrs. Crashed in the sea off Woodspring Bay, Somerset. Richter is buried at Greenbank, Bristol.

VESSELS SUNK AND DAMAGED BY MINELAYING OPERATIONS 1940/41

Operations by I/KG 4

27/7/40: Durdham Sand Dredger, 477 tons, owned by the Bristol Sand & Gravel Co. sunk by a mine at 140.5 ° 1.54 miles from Lavernock Point.

4/8/40: Oswaldian Minesweeping Trawler, 260 tons, RN requisitioned sunk in the Bristol Channel by a mine.

9/8/40: Two mines fell on land at Tickenham 02.17 hrs and Kingston Seymour 02.20 hrs.

Operations by KGr 126

28/10/40: SS Devonian , 98 tons owned by Alfred J.Smith, Appledore to Avonmouth sunk by a mine off Barry Roads at 51 ° 23'N 03 ° 15'W.

28/10/40: SS Wythburn , 420 tons, owned by F.L.Dawson & Co., Bunclara to Bristol sunk by a mine off Barry Roads at 51 ° 22'N 03 ° 15'W.

3/11/40: MV Cairngorm, 393 tons, a merchant ship was damaged by a mine in the Bristol Channel.

5/11/40: SS Haig Rose, 1117 tons, a merchant ship owned by Richard Hughes & Co. sunk by a mine in the Bristol Channel.

10/11/40: Boom Defence Vessel Marcelle, 64 tons, RN Requisitioned sunk by a mine in the Bristol Channel.

11/11/40: SS Skarv, 158 tons, a Sand Carrier owned by W.G.Davies sunk by a mine in the Bristol Channel.

12/11/40: Steam Trawler Lord Haldane, 91 tons, sunk by a mine in the Bristol Channel.

Operations by I/KG 28 and II/KG 30

9/1/41: MV Dorset Coast , 646 tons, a merchant ship was damaged by a mine near Cardiff at 51° 24'N 03° 08'W.

10/1/41: SS Middlesex, 9583 tons, a cargo liner owned by the Federal Steam Navigation Co., Newport for Swansea, then

Australia was sunk by a mine at 190° , 0.8 miles off Flatholm Island.

11/1/41: MV British Fidelity, 8465 tons, was damaged by a mine near Cardiff at 51° 22'N 03° 05'W.

15/1/41: SS Maywood, 1823 tons, a merchant ship, was damaged by a mine off the South Wales Coast at 51° 21'N 03° 16'W.

17/1/41: MV Athelduke, a tanker, was damaged by a mine near Porthcawl at 51° 22'N 03° 20'W.

22/1/41: MV Jamaica Planter, 4098 tons, was damaged by a mine at 196° , 2500 yards from Nell's Point, Barry Island.

28/1/41: SS Tafelberg , 13,640 tons, was damaged by a mine off Barry at 51° 21'N 03° 16'W

6/3/41: SS Eileen Hill, 781 tons, a merchant ship was damaged by a mine off Nell's Point, Barry Island.

13/3/41: MV Ngatira , 525 tons, a merchant ship was damaged by a mine at 51° 21'N 03° 17'W.

4/7/41: SS Lunan, 363 tons, a merchant ship owned by Osborn and Wallis bound for Portishead was sunk by a mine at 51° 27'N 03° 10'W.

Operations by III/KG 30

2/11/41: Hopper Barge Foremost 45, 824 tons, owned by the Great Western Railway sunk by a mine at 51° 21'N 03° 17'W.

3/12/41: SS Maclaren , 2330 tons a merchant ship owned by Stuart Ship Management Co., Liverpool to Barry was sunk by a mine at 51° 21'N 03° 17'W.

7/12/41: MV Severn Transport, 119 tons, a merchant ship owned by the Severn and Canal Carrying Co., Sharpness to Cardiff was sunk by a mine at 51° 27' N 03° 04' W.

11/1/42: SS Borderdane , 122 tons, a merchant ship owned by Sully & Co., Newport to Bridgwater was sunk by a mine SW of Brean Down at about 51° 18' N 03° 03' W. 4 crew lost.

14/1/42: Tug Mercia, 94 tons, owned by C.J.King, Newport to Bristol towing a barge, was sunk by a mine at 51° 31' N 02° 47' W.

AIRCRAFT LOST ON LOCAL MINELAYING OPERATIONS

25/26.07.40: Minelaying in Severn Estuary: I/KG 4.

He 111H-4, 5J+AH of 1/KG 4

Ofw. Hermann Kassler (B) killed

Uffz. Gerhard Hähnel (Bf) killed

Uffz. Wilhelm Sommer (Bm) killed

Uffz. Georg Strickstroock (F) POW injured

Possibly shot down by AA fire. Crashed 00.55 hrs at Longfield Farm, Smeathorpe, near Honiton, Devon. Strickstroock landed at Middle Luxton Farm ½ mile away.

04/05.03.41: Minelaying in the Severn Estuary: I/KG 28.

He 111H-5, Wnr.3561, 1T+BH, of 1/KG 28

Ltn.z.See O.von Hanffstengel () killed

Fw. W.Ernst () killed

Uffz. O.Hinrichs () killed

Gefr. H.Kura () killed

Shot down by S/Ldr. M.F.Anderson in a Beaufighter of 604 Sq. (Middle Wallop). Crashed 21.58 hrs into the sea off Beer Head, Devon.

04/05.03.41: Minelaying in the Severn Estuary: I/KG 28.

He 111H-4, Wnr.3293, 1T+AH, of 1/KG 28

Maj. Dr.R.Auernig () killed

Uffz. A.Dries () killed

Uffz. H.Hartisch () killed

Gefr. H.Felten () killed

Shot down by Barry AA guns. Crashed 21.09 hrs into the sea half a mile off Nell's Point, Barry. Maj.Auernig was Staffelfkämpitan.

28/29.10.41: Minelaying in Severn Estuary: III/KG 30.

Ju 88A-4, Wnr.1436, 4D+MR, of 7/KG 30

Ltn. Helmuth Haakh (F) POW

Ofw. Walter Lehnhoff (B) POW

Gefr. Bernhard Unruh (Bf) POW

Gefr. Hubert Mayer (Bm) killed

Shot down en-route for the target by F/Lt. Selway in a Beaufighter of 604 Sq. (Middle Wallop). Aircraft exploded in the air and crashed at Clayhill Farm, Wembdon, Bridgwater, Somerset, at 21.12 hrs. 2 UX Parachute Mines had fallen at 21.07 hrs at Clayhill Farm.

Principal Sources

Bundesarchiv Militararchiv, Freiburg, Germany

Luftkrieg gegen England 1/8/40 to 31/3/41 (Summary of tactics, Orders of Battle, and High Command orders): RL2/31.

Schlacht um England (anlage zum Gefechtskalender) Einsatz gegen Seeziele 1/8/40 to 30/6/41. (Mining and attacks on shipping): RL2/32D.

Generalstab der Luftwaffe 5 Abteilung. Einsatz alle Fronten (Lageberichte) 1939/41. (Daily summaries of air operations on all fronts): RL2 II/210 to 269 - 15/6/40 to 09/11/41.

Luftflotte 3: Einsatz gegen England 1940/41. (Daily summaries of air operations against England): RL7/88 to 106 - 25/06/40 to 31/12/41.

Reports of the Ob.d.L. 3/44 to 5/44: RM7/300.

Targets in the U.K. Complete list 1941/43: RL7/137.

KG 4 War Diary: RL10/30, 36 to 38, 41 to 47, 487 and 488, 525 and 526.

2(F)/123 War Diary: England 27/9/40 to 18/2/41. RL10/579.

(F)/123, 01/42 to 12/42 also 1&3(F)/123; 3(F)/122; 1&4(F)/123 War Diary: RL10/385.

Luftwaffe Operations Maps 1940 to 1944: Karte 44/900 to 2500.

Deutsche Dienststelle (WASSt), Berlin, Germany

Registers of aircrew losses. Individual units 1940/44.

German Publications

Bolke, Ulf, *Der Luftkrieg In Europa* 2 vols. The operations of KG 2 against Britain 1940-44: Bernard & Graefe Verlag, 1990.

Dierich, Wolfgang, *Die Verbände der Luftwaffe*. The Units of the Luftwaffe: Motorbuch Verlag, Stuttgart, 1976.

Dierich, Wolfgang, Kampfgeschwader 55: Motorbuch Verlag, Stuttgart, 1975.

Gundelach, Karl, Kampfgeschwader 4 : Motorbuch Verlag, Stuttgart, 1978.

Public Record Office, Kew

Air Ministry W/T Intelligence Service Daily Summaries 9/39 to 8/44 ('Y' Service Intercepts): Air 22/476 to 501.

Ministry of Home Security Daily Intelligence Reports 9/39 to 7/44: HO 203/1 to 16.

RAF Fighter Command Daily Intelligence Summaries 9/39 to 12/44: Air 16/234 to 238.

RAF No.80 (Signals) Wing Operations Record Books 6/40 to 8/44: Air 26/580 to 583.

RAF No.80 (Signals) Wing Radio Countermeasures Reports 1940 to 1946: Air 40/2334 to 2339.

Luftwaffe Order of Battle 1/41 to 10/41; 8/42 to 10/43; 1/43 to 11/45: Air 40/1921, 1564, 1992.

46th Anti-Aircraft Brigade War Diary and Daily Intelligence Reports 1939 to 1944: WO 166/2287, 2288, 7403, 11220, 14659.

Imperial War Museum, London

Oberbefehlshaber der Luftwaffe Genst. Gen. Qu./6 Abteilung/40.g. Kdos. IC. (Luftwaffe Quartermaster General's Returns of Aircraft Losses 1940/43): Microfilm.

Bristol Record Office

Bristol ARP Control Diary: 35210 (14).

Somerset Record Office, Taunton

Civil Defence South Western Region Daily Summaries 1/8/40 to 30/5/44: CD/Gen 3/19 and 20.

Air Raid Incidents in Somerset 1940/43: CD/Gen 6/62 to 67.

Gloucestershire Record Office, Gloucester

Periodic Reports of Bomb Damage in Gloucestershire: C/CDa/V/4/5.

British Publications

Air Ministry, The Rise and Fall of the German Air Force 1939/45: Arms and Armour Press Ltd., 1987.

Price, Alfred, Blitz on Britain : Ian Allen Ltd., London, 1976.

Ramsey, Winston G. (Ed.), The Blitz Then and Now : Battle of Britain Prints International Ltd., London.

Volume 1 (9/39 to 9/40) 1987; Volume 2 (9/40 to 5/41) 1988; Volume 3 (5/41 to 5/45) 1990.

Wakefield, Kenneth, The First Pathfinders - The Operational History of KGr 100 1939/41: William Kimber, London, 1981.

Wakefield, Kenneth, Luftwaffe Encore: Attacks on Filton and Yate, September 1940. William Kimber, London 1979. (Reprinted as Target Filton , 1990).

Wakefield, Kenneth, Just Another Raid for a Homesick German Flyer: Article in Blitz - The Night Bristol Blazed : Bristol Evening Post Supplement, 21/11/1990.

Wakefield, Kenneth, Low Level Attack: Raids on Yate 1941. Aviation News, 5-18 February 1988, pp 860/863.

Wakefield, Kenneth, The Luftwaffe's Pirates: Article in Aircraft Illustrated Annual 1986, pp 22/29.

Wakefield, Kenneth, The Air Pirates who Struck from Low Clouds: Article in Bristol Evening Post, 26/3/1984. (See also Belsey, James, Tom Cracks Raid Mystery: Article in Bristol Evening Post 15/10/1984).