

**ROYAL AIR FORCE
BOMBER COMMAND**

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**SQUADRON PROFILES
NUMBER 1**



7 SQUADRON

Per Diem Per Noctem

**RESEARCHED, COMPILED AND WRITTEN
BY
CHRIS WARD**

**ROYAL AIR FORCE
BOMBER COMMAND
SQUADRON PROFILES**



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GENERAL NOTES

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GENERAL NOTES

This profile is a reference work on the activities of the squadron during the Second World War. Bomber Command operated exclusively from stations in the UK, and used overseas bases purely for shuttle operations, or as advanced staging posts for specific purposes. For this reason, periods spent on detachment, or permanent postings to overseas Commands, do not fall within the scope of this work.

This profile is not intended to serve as a comprehensive squadron history, but to provide as much information as possible in a non-anecdotal form. The brief history narrative is basically an account of Bomber Command's war, with the individual squadron's involvement interwoven into it. The publications listed in section 5 are not only recommended reading, but represent the best available sources of information for serious students of the subject. The operational record is based almost entirely on the figures provided in *The Bomber Command War Diaries* by Martin Middlebrook and Chris Everitt, and I am indebted to Martin Middlebrook for allowing me to use them.

An aircraft is included in section 3 if; a) it spent time on squadron charge, no matter how briefly, and irrespectively of whether or not it operated. b) the type was used operationally by the squadron. Where a squadron has a Conversion Flight involving a type with which it is intending to re-equip, but then does not, as in the case of 101 and 460 Squadrons, these have been included, on the basis that they sometimes found themselves on operations. Information is restricted in most cases to; where from, where to, unless it completed its service with the squadron, in which case, some detail of its demise appears. Aircraft which failed to return have the date and target recorded. Where no information follows the serial number of a type still in use when the squadron departed Bomber Command, or at war's end, it can be assumed that the aircraft was still on squadron strength. However, where there is a blank space following the serial number of a type which has been withdrawn from service with Bomber Command, it signifies that I don't know its ultimate fate. An absence of information does not imply that the aircraft flew no operations during its time with the squadron.

Those squadrons which served with the AASF in France between the outbreak of war and the fall of France, were not technically part of Bomber Command from January 1940. Nevertheless, their service is deemed to be on behalf of Bomber Command for the purpose of the relevant Profiles, and their experiences are, therefore, detailed, and their aircraft listed. The Blenheim squadrons of the AASF are also treated as if under Bomber Command.

Finally, information has been drawn from a variety of sources, ranging from Records Branch to individuals with squadron connections, and I am grateful for their contributions. There will inevitably be errors and omissions when dealing with a subject as vast as Bomber Command, and I am happy to be corrected and/or updated by readers.

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SECTION 1



BRIEF HISTORY

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7 SQUADRON

MOTTO **PER DIEM PER NOCTEM** By day and by night.

Codes **MG XU**

With its original formation dating from before the outbreak of the Great War, on the 1st of May 1914, 7 Squadron has one of the longest histories in British military aviation, and is the lowest numbered squadron to have served with Bomber Command during the Second World War. Its First World War service began in April 1915 in France, where it operated in a reconnaissance and artillery spotting role until war's end. It was disbanded on the last day of 1919, only to be resurrected in June 1923 as a bomber unit. Frequent changes of equipment took place over the succeeding years, and in April 1939, the squadron exchanged its recently acquired Whitleys for Hampdens, before two months later being designated a training squadron. Thus, when hostilities began in September 1939, 7 Squadron was non-operational, and it would remain so until being absorbed into what became 16 OTU in April 1940, when it lost its identity. It was reformed within weeks, but was just as quickly disbanded, and remained on the shelf until the 1st of August 1940, when it reformed at Leeming, tasked with introducing the new Stirling into squadron service.

The first operational commanding officer was W/C Paul Harris, who had already been tempered in the fires of battle as a flight commander with 214 Squadron, a job he shared with Denys Balsdon, who was later to be the first commander of the reforming 97 Squadron, with which he would lose his life at the end of 1941. On the 12th of the month, N3641 duly arrived on station to enable training to begin, and on the 29th of September, the first incident of note occurred. Flying Officer Bradley DFC was over the Isle of Man in N3640, when friendly flak caused damage to two engines. In the ensuing forced-landing in Lancashire, the aircraft was written off, becoming not only the first Stirling, but the first of the new four-engined generation of bombers to suffer destruction. Fortunately, on this occasion, there were no casualties. The squadron moved to Oakington on the 29th of October, where it would remain throughout the war, and continued to work up on the Stirling, which was beset with technical problems. Slow production and constant modifications restricted the supply of aircraft, to the extent that only six of the type were on squadron charge by the start of 1941.

1941

Operations finally got underway, when three sorties were despatched to Rotterdam on the 10th of February to bomb oil storage tanks near the docks, and five nights later, two more went to Boulogne. The former was in line with the Air Ministry directive issued on the 15th of January, which assessed that the German oil industry would be facing a critical period during the next six months, and that a concerted campaign against it could seriously disrupt the enemy war effort. A list of seventeen targets was drawn up accordingly, the top nine of which represented 80% of production. On the night of the 3/4th of March, the squadron suffered its first operational loss, when, with Brest as the target, N3653 crashed into the sea, killing Squadron Leader Griffith-Jones DFC and his crew. On the 9th, a new Air Ministry directive ordered the C-in-C, Sir Richard Peirse, to concentrate his forces against the U-Boat and its partner in crime, the long range maritime reconnaissance bomber, the Focke-Wulf Kondor.

These were to be hunted down where-ever they could be found, at sea, in their bases, in the shipyards and in the factories, and consequently, the bulk of the operational activity for the month centred around German and occupied ports. In the early hours of the 24th, during an operation to Calais, N3643 caught fire and crashed while Squadron Leader Robertson was attempting to land, and six of the crew were killed outright, the seventh succumbing to his injuries a week later. At the end of March, the German cruisers, Scharnhorst and Gneisenau, put in at Brest, where they would remain as lodgers for the next eleven months. They would prove to be a major distraction to the Command over this period, and many valuable crews would be lost during the dozens of mostly ineffective attacks sent against them. In early April, the squadron detached temporarily to Newmarket, from where three sorties were launched to Berlin on the 9/10th. Two certainly did not reach the target before turning back, and the third Stirling, N6011, failed to return after having been despatched by a nightfighter, killing F/L Pike DFC and five of his crew. On the 13th, W/C Harris was posted out at the end of his tour, and he was replaced by W/C Graham. F/L Cruikshank flew the only Stirling sortie of the 20/21st, in company with sixty other aircraft, and they produced an ineffective raid on Cologne. On return, he crash-landed N6009 in Essex, although happily, without injury to the crew. By the end of April, XV Squadron was declared operational on Stirlings, although it would be barely discernible by the numbers of the type being committed to the battle.

Another Stirling written-off on return without crew casualties was F/L Williams's N6014, and this happened in the early morning of the 1st of May, after running short of fuel on the way back from Berlin. F/L Cruikshank's luck ran out on the 2/3rd, when he crashed near Oakington in N6012 on return from Hamburg, and six of those on board died at the scene, while the seventh succumbed on the following day. Three of the Command's few serviceable Stirlings were detailed for Brest on the 3/4th, and a solitary one joined other types for a return to the port on the following night. Four were included in a force bound for Mannheim on the 5/6th, and a further three took off for Hamburg twenty four hours later. On the 9th, S/L Seale lost an engine on take-off for a training flight, and a second engine failed immediately afterwards, forcing him to crash-land N6019 beyond the airfield, but again doing so without crew casualties. On the following night, Berlin was the objective for twenty three assorted aircraft, although only twelve reached the target to bomb. F/L Williams, who had crash-landed on return from the "Big City" only ten days previously, this time failed to return, and all the occupants of N6010 were killed when it crashed in Germany. Other operations during the month to include one or more Stirlings were Hanover and Berlin on the 15/16th, Cologne on the 16/17th and 23/24th, an armed reconnaissance in search of the Prinz Eugen by daylight on the 27th, and an aborted lone photo-reconnaissance sortie to Münster on the 30th.

Berlin was again responsible for a squadron casualty on the 2/3rd of June, when W4730 fell victim to a nightfighter during another small scale raid, and only the rear gunner in F/O Mitchell's crew survived. The Prinz Eugen's arrival at Brest prompted a response from the Command on the 7/8th, but no hits were scored by the Wellingtons and three supporting Stirlings. A massive seven Stirlings joined eleven Halifaxes to attack a chemical factory at Hüls on the 12/13th, and all returned safely. On the 28th, six Stirlings joined eighteen Blenheims of 2 Group on a daylight Circus operation to Bremen, but lack of cloud cover prevented any from reaching the target. F/L Collins and crew in N6007, were chased by

BF109s and were eventually shot down into the sea twenty miles out from the Yorkshire coast with no survivors. On the 29/30th, a small scale operation comprising twenty eight aircraft, including thirteen Stirlings from 7 and XV Squadrons, attacked Hamburg, in what was a surprisingly effective raid for the period and the size of the force. Four Stirlings, two from each squadron, failed to return, a loss rate of over 30%. S/L Seale and his crew all died when N6001 was shot down by a nightfighter, and they were the third crew to survive a crash-landing only to go missing shortly thereafter. F/O Hartwright and his crew also perished when N3664 likewise fell victim to a nightfighter. From June the squadron began to use Bourn as a satellite station, and would do so for the next twelve months.

On the 8th of July, N6034 joined another 2 Group Circus operation to France, during which 90 Squadron launched its first sorties with the Fortress 1. Flak accounted for the Stirling, and there were just two survivors from P/O Morley's crew, but none from the crew of F/O Fraser DFC, when N6017 was brought down into the sea by flak during a daylight attack on the Chocques power station by just three Stirlings on the 10th. On the day before, a new Air Ministry directive highlighted the morale of the enemy civilian population and its transportation system as the weakest points, and the emphasis was now to be directed onto these areas. Consequently, during the moon period, attacks were to be carried out against the major railway centres ringing and serving the Ruhr, while on dark nights, the Rhein cities of Cologne, Düsseldorf and Duisburg would be easier to identify. On dark nights with less favourable weather conditions, Peirse was to send his forces further afield to northern, eastern and southern Germany. On the 14/15th, two 7 Squadron crews abandoned their aircraft while returning from Hanover, F/O Witt's leaving N6022 to crash in Norfolk, and F/S Madgwick's N6033 to fall into Northampton, the latter alone from the two crews failing to survive. All survived, albeit as POWs, when F/L Sherwood and crew were brought down in Holland in N6035 during another very small scale raid on Berlin on the 25/26th, from which two of seven Stirlings despatched were lost.

When P/O Rolfe and his crew were posted missing in N3663, following a slightly larger assault on Berlin, this time by fifty three aircraft on the 2/3rd of August, they represented 20% of the Stirling force on that occasion, and the vulnerability of the Stirling was becoming evident, and the wisdom of small scale operations questionable. The 14/15th was a bad night for the squadron, although it could have been much worse. Returning from railway targets in Magdeburg, the commanding officer, W/C Graham, overshot his approach and wrote off N6041, P/O Crebbin hit an obstruction at Graveley in N6042, and F/O Witt, who had piloted the lone Stirling among 151 other assorted aircraft to Hanover, crashed on landing at Oakington. Remarkably, despite the loss of three Stirlings, there were no crew casualties. More worrying was the fact that XV Squadron also suffered the loss of three Stirlings, two of them through mechanical failure or design characteristics, and thus out of ten Stirlings despatched for the night's operations, 60% were lost, only one of which was attributable to enemy action. The infamous Butt Report was completed on the 18th, and its contents sent shock waves resounding around the Command. Having studied around four thousand photographs taken during a hundred operations during June and July, civil servant Mr D M Butt concluded that only a fraction of bombs were falling within miles of their intended objectives. This was a bitter blow to the morale of the Command, and it would forever

unjustly blight the tenure as C-in-C of Sir Richard Peirse. On the 25/26th, twelve Stirlings joined a force of twenty five Wellingtons to attack the city centre of Karlsruhe. Scattered bombing ensued, and N6020 was lost with only one survivor from the crew of F/O Blunden. 118 assorted aircraft went to Duisburg on the 28/29th, Stirlings still playing a minor role in the proceedings, and 7 Squadron lost two aircraft, P/O Chilvers' W7438 to the defences, with all on board killed, and N3666, which crashed at Newmarket with battle damage on return, but from which F/L Lay and his crew were able to walk away. F/L Lay would complete his tour with 7 Squadron, and go on to command XV Squadron between June and December 1942.

A nightfighter accounted for N6046 on the 7/8th of September, when 193 aircraft went to Berlin and produced good results, but Sgt Yardley and his crew survived as POWs. 139 aircraft set off for Stettin on the 29/30th, and ninety five of the crews claimed to have bombed accurately. W7441 succumbed to a nightfighter over Denmark, with four survivors from the crew of Sgt Cobbold, and W7433 went into the North Sea on return, W/O Fletcher and crew perishing. October proved to be a loss free month for the squadron, although W7444 was written off on the last night of the month, fortunately without casualties among the crew of P/O Winch. The month did, however, see one of the most distant operations to date by Stirlings, when five crews each from 7 and XV Squadrons were briefed to attack the Skoda works at Pilsen in Czechoslovakia on the 28/29th. The weather was not as forecast, and only leaflets were dropped, the bombs being deposited on German targets on the way home.

On the 7/8th of November, the Command launched a record 392 aircraft to various targets, of which only nineteen were Stirlings. 7 Squadron put up a record thirteen sorties, which after twelve months in service, reflected the poor serviceability rate and slow production which still obtained. 169 of the night's effort were briefed for Berlin, of which eleven were from 7 Squadron, led by F/L O'Brien in N6087, and his was one of four squadron crews, and seventy three in all, which claimed to have reached and bombed the primary target. Included in the 12.4% loss rate were N3677, which fell victim to a nightfighter, and N6091, which was brought down by flak, and there were no survivors from either aircraft, which were captained by F/O van Buskirk and Sgt Morris respectively. To cap what became a bad night all round, Berlin escaped with only the slightest damage. 5 Group had originally also been assigned to the Capital, but following doubts about the weather, which had recently been frustrating the Command's attempts to hit Germany, the 5 Group AOC was allowed to withdraw his contribution, and send it instead to Cologne. A third main operation that night involved Wellingtons of 1 and 3 Groups at Mannheim, but this, like the other two, was a complete failure. A record thirty seven aircraft failed to return from these and the minor operations also mounted, and this was more than twice the previous highest from a single night's operations. Peirse was summoned to see Churchill to make his explanations, and on the 13th, he was instructed to restrict further operations while the future of Bomber Command was considered.

Winter conditions were always hazardous, and when W7445 crashed on take-off for Kiel on the 15/16th, ice was considered to be the cause. One of the crew died at the scene, and the pilot, Sgt Hunter, succumbed to his injuries shortly afterwards. On the 18th, it was telephone wires which caused the demise of N6087, as it returned to base with an engine fire after

bombing the German warships in Brest, and F/L O'Brien and four others of the eight men on board lost their lives. On the same day, W7446 suffered the Stirling malaise, an undercarriage collapse, while training. December opened with flight commander S/L Lay DFC writing off N3701 on return from an air-sea rescue sortie on the 2nd, but there were no crew casualties. The 18th was a bad day for Stirlings operating against German warships at Brest in daylight. Of the eighteen of the type despatched, four were shot down by fighters, including N3680, with no survivors from F/L Parnell's crew, and W7436, from which S/L Jennens and four others became POWs. P/O Heard managed to coax a badly shot-up N6095 back to base, where it was declared a write-off, and again over 25% of the Stirling force had been lost in return for some unconfirmed damage to the Gneisenau.

7 Squadron's first year of operations on the Stirling had been characterized by poor serviceability and high percentage losses, the latter partly the result of the type of operation to which they had been assigned. Also, a goodly number of experienced and decorated crew members had been sacrificed, and through no lack on the part of the squadron, scant damage had been caused to the German war effort in return. It had been a bad year all round for the Command, and there had been few advances on the performance of 1940. The new aircraft types had failed to match expectations, and had all spent lengthy periods away from the operational scene while essential modifications were put in hand. The coming year would bring changes, most notably at the top, but it would be sometime yet before this would be manifested in performance.

1942

January 1942 began with a continuation of the obsession with the port of Brest, or more precisely its guests, the German cruisers Scharnhorst and Gneisenau. They had been a nagging thorn in the flesh of Bomber Command for a long time, and much effort had been expended in operations against them, with many good crews being sacrificed for little return. Such precision targets were always difficult to hit, and a hostile reception from the defences was guaranteed. No less than eight raids were directed at Brest between the 2/3rd and 11/12th of January, with more towards the end of the month. The year's first incidents for 7 Squadron were a frustrating undercarriage collapse involving Sgt Runciman and N3672 during training on the 14th, and a tragic accident on the 17th, when a Hurricane collided with W7467 over Cambridgeshire, killing the pilot, F/S Taylor, and the seven others on the Stirling. Later that day, N6120 was one of two Stirlings outbound for Soesterburg airfield, when it was damaged by flak from an Allied convoy, whose aircraft recognition was infamously poor. A crash-landing ensued, as a result of which the aircraft was deemed beyond repair, although the crew of P/O Hart was able to walk away. Again three Stirlings and one crew had been lost for no return.

In February, much of the activity continued to be directed against French ports, and the situation at Brest at last came to a head, although it was the Germans who were the prime movers. In atrocious weather conditions in the early hours of the 12th, Scharnhorst, Gneisenau and Prinz Eugen slipped anchor, and headed for the Channel under the umbrella of a destroyer escort. An operation had been prepared in advance to counter such an eventuality,

under the codename Operation Fuller. So secret was it, however, that many of those charged with its implementation, were ignorant of its requirements. Once the fleet was located, frantic efforts were made to get Coastal and Bomber Command aircraft away, but it was already afternoon before the first sorties were launched. The conditions made it almost impossible to keep track of the quarry, and despite a number of attacks being made, no hits were scored, and the fleet passed through the Straits of Dover, and into open sea. Both Scharnhorst and Gneisenau struck mines recently laid by 5 Group aircraft, and although their progress was slowed, they made good their escape, and were in home ports by the following morning. Operation Fuller, which had seen the largest daylight commitment of Bomber Command aircraft to date, amounting to 242 sorties, claimed fifteen more gallant crews, as well as others from Coastal Command, but despite the huge embarrassment to the government and the nation, at least this itch had been scratched for the last time, and with a new commander-in-chief waiting in the wings, the crews could be employed on more suitable targets. On the 14th, a new Air Ministry directive specified the morale of the enemy's civilian population, particularly its workers, as the primary objective, and this cleared the way for the blatant area bombing of Germany's urban areas, without the pretence of aiming for industrial and military targets.

It was on the 22nd that ACM Sir Arthur T Harris took up the reins at Bomber Command, and he would pursue the new directive with a will. Harris arrived at the helm with firm ideas already in place about how to inflict maximum damage on urban targets. He recognized the need to overwhelm the defences by pushing the maximum number of aircraft across the aiming point in the shortest possible time, and knew also that a built-up area is destroyed by fire and not blast. It would not be long before the bomb loads began to reflect this thinking. Despite the fact that the Stirling had now been operational for a year, Harris could count only twenty nine of them available for operations. All of these were airborne on the 3/4th of March, for an operation which was a sign of things to come. The Renault factory at Billancourt was bombed by 233 aircraft in three waves led by experienced crews, and with extensive use of flares to provide illumination. It was the largest force to date assigned to a single target, and it produced excellent results for the loss of only one aircraft, and all the Stirlings came through intact. Essen was to feature prominently in Harris's plans, and five operations were launched against this most important centre of industry during the month, but each would be a major disappointment, brought about largely by the blanket of industrial haze which constantly hung over the Ruhr. By this stage of the Stirling's operational career, 7 Squadron had managed to push up serviceability to around 60%, good for the Stirling, and marginally better than the Manchester, but well below the Wellington, which was still the mainstay of the Command.

Since the unfortunate accident with the Hurricane, death had taken a holiday as far as 7 Squadron was concerned, but this almost came to an end when N6074 returned from St Nazaire in the early hours of the 26th, well west of course, and in danger of missing England altogether. Out of fuel, four crew members baled out, and S/L Legh-Smith ditched the Stirling off North Cardigan bay without casualties. That night, N3709 was shot down by a nightfighter on the way back from Essen, and there were no survivors from the crew, which was captained by F/O Heard, but which also included a W/C Chapman. On the 28/29th, Harris launched an

attack which was a forerunner of things to come for German cities. Lübeck, chosen for its close proximity to the coast, the combustibility of its buildings, and the paucity of its defences, was subjected to a three wave assault by 234 aircraft, led by experienced and Gee equipped crews as "Pathfinders". 191 crews claimed to have deposited their predominately incendiary bomb loads onto the target, causing enormous damage, and registering the first major success for area bombing. Three of the twenty six Stirlings committed to the raid were missing, all of them from 7 Squadron, and there were no survivors from among the crews of P/O Hayes in R9305 and P/O Green in W7466, both of which crashed in Germany, and none either from the crew of F/L Edwards in W7501, which was sent crashing into the North Sea off the Frisians by a nightfighter. March was also the month in which the Stirling was first assigned to mining duties, and 7 Squadron would carry out its share in the future.

On the 10th of April, W/C Sellick was appointed as the new commanding officer, and apart from N3679 landing wheels-up at Newmarket in the hands of P/O Winch on return from Essen on 12/13th, his first two weeks in command coincided with a lull in missing and written-off aircraft. The 5/6th had seen the largest Stirling force despatched to date, when twenty nine went to Cologne without loss, a record beaten on the 23/24th, when thirty one joined a force of 161 assorted aircraft in the first of a series of four raids on the Baltic port of Rostock, in what was an attempt to repeat the success gained at Lübeck at the end of March. Stirlings were present on all four raids, which by the end of the last one on the 26/27th, had destroyed over seventeen hundred buildings and 60% of the main town area. No Stirlings were lost to the defences during this series, but the Grim Reaper struck again on the 27/28th, when F/L Denny and his crew became the first squadron losses from a mining sortie, when failing to return from the Heligoland area in N3727. The squadron sent twelve of the type to Stuttgart on the 5/6th of May, as part of a force of 121 aircraft, and 7 Squadron lost the eight man crew of Sgt Lewis to a crash in France in N3710, this in return for a disappointing result. The squadron continued to despatch isolated mining sorties during the month, while the main business of city-busting went on around it. The 19/20th was another bad night for the squadron, when a poor performance by the attacking force was compounded by the loss of three more crews. All survived from Sgt Hague's crew, when N3716 was brought down over Belgium, and all but the pilot, Sgt Tomkins, escaped from N6073, which crashed in the target area. Finally, F/L Pilling's W7520 collided with a nightfighter, again over Belgium, and both crews died.

Activity diminished towards the end of the month, as Harris prepared for his master stroke, the Thousand Plan. Operation Millennium was to provide a major success to help silence the critics who had been lobbying for the dissolution of the Command since the release of the damning Butt report in the previous August. Evidence of the almost total ineffectiveness of bomber operations had led to calls from the vultures on high, principally those in the Admiralty, to divert bomber aircraft to combat the U-Boat menace in the Atlantic, and to redress reversals in the Middle East. When Harris took over the Command, he had asked for four thousand bombers with which to win the war, and while there was never a chance of getting them, he needed to ensure that those earmarked for him were not spirited away to other theatres of operation. The unleashing of a thousand aircraft in one night against a major German city, would, if successful, provide Harris with the ammunition to fight his corner,

while sending shock waves reverberating around the Reich. To reach the magic figure of one thousand aircraft, Harris would have to use his entire frontline strength, and call on other Commands, most notably Coastal and Flying Training, for help. This was forthcoming until late in the day, when the Admiralty intervened, and forced a change of heart and a withdrawal of the Coastal Command effort. Undaunted, Harris, or more probably his deputy, AM Sir Robert Saundby, dragged in all the reserve and training units, and by scraping together every airframe capable of controlled flight, or something approaching it, and calling in the screened crews from their instructional duties, they not only achieved the symbolic figure of one thousand, but come the hour, comfortably surpassed it. The only question at this stage was the weather, and as the days ticked by towards the end of May, the weather was in no mood to cooperate, giving rise to concerns that the giant force might draw attention to itself. Finally, at "morning prayers" on the 30th, Harris's chief meteorological adviser, Magnus Spence, gave a qualified and somewhat grudging nod in the direction of the Rheinland as the most likely spot for a break in the cloud, and thus sealed the fate of Cologne as the host of the first one thousand bomber raid in history. 1047 aircraft took off that night and headed towards the Rheinland capital, some of the older and more ill-used ones from the training units a little reluctantly, and unable to drag themselves to a respectable height, a proportion of these would be among those which failed to return. 7 Squadron despatched nineteen Stirlings, four of which returned early, while the remainder pressed on to carry out their assigned tasks and return safely. Among the early returns, one was forced to jettison its load over the Wash, and Sgt Templeman did likewise over Belgium following a brush with a nightfighter. Although Cologne would suffer worse experiences later in the war, the operation was a resounding success, and left over three thousand buildings in ruins. Harris had his victory, but the cost in missing aircraft was a new record of forty one, although in percentage terms, it was a sustainable figure.

June began with F/L Winch and crew parachuting into captivity off the Dutch coast during the second thousand bomber operation, which was to Essen on the 1/2nd. Also in the crew of N3750 was G/C Massey, late of the RFC, and who was later to be repatriated. In contrast to the success gained at Cologne, the Essen raid was a dismal failure, which sprayed bombs all over the Ruhr. Essen was attacked again on the following night in a follow-up operation, which like the first was a failure, and 7 Squadron lost the eight man crew of P/O Sanderson, who were all killed when W7500 was despatched by a nightfighter also into the sea off Holland. Another nightfighter accounted for F/O Tayler and crew in W7471 during a successful operation to Emden on the 6/7th, but all survived as POWs. Essen was the target which few found on the 16/17th, when Sgt Templeman, ever in the action, was on this occasion unable to throw off the attentions of a nightfighter over France, and R9324 succumbed. Templeman and four of his crew parachuted to safety, and he evaded capture. Missing from Emden on the 20/21st were P/O Calvert and his crew, all of whom perished, when W7472 was shot into the sea. The third and final 1,000 bomber raid took place on the 25/26th, with Bremen as the target. While falling short of the effectiveness of the Cologne raid, it far surpassed the debacle of Essen, and produced some useful destruction. It did, however, cost 7 Squadron N3754, from which Sgt Green and two of his crew survived. The month ended with two further crews being posted missing under similar circumstances. W7539 was shot down into the Bay of Biscay during an operation to St Nazaire on the

28/29th, Sgt Richards and two of his crew surviving, and N3706 likewise found the sea off Borkum on the following night when bound for Bremen, and this time F/S Bailey and two of his crew escaped with their lives.

S/L Cook didn't even reach the end of the runway, let alone Bremen, on the night of the 2/3rd of July, a burst tyre causing W7563 to swing off the runway and crash, fortunately without injury to the occupants. A series of four operations to Duisburg began in the middle of the month, which 7 Squadron negotiated without loss, although the operations themselves were generally disappointing. On the 26/27th, the Command paid its annual late July visit to Hamburg with a force of 403 aircraft, and these produced an effective pattern of concentrated bombing, which created at least eight hundred fires. The defences had their say, however, and brought down R9328 to crash in the River Elbe, F/L Harris and three of his crew surviving. Two nights later, seventy one Stirlings took part in a follow-up, which became a largely 3 Group effort, and not only was it a failure, it became a victory for the defenders, who claimed nine Stirlings, two of them from 7 Squadron. W/O Black died with all but one of his crew after W7533 was shot down near Wilhelmshaven, and F/L Whiteman and three others were killed when W7565 was damaged by flak, and finished off by a nightfighter.

August would see the end of the squadron's main force activities with 3 Group, but there was still a job to be done in the meantime. Duisburg provided the target on the 6/7th, and it was another poor performance, which cost the lives of Sgt Pullen and crew, who were brought down in R9154 on the German side of the border with Holland. Only one man survived from the crew of F/S Clark, who were posted missing from a mining sortie off Denmark in W7579 on the 13/14th. On the 15/16th, during another mining sortie, Sgt Orrell force-landed N3705 in Holland, where it was captured intact. Its damaged nose section was patched up with straw bales, and while its crew was being marched off into captivity, the Stirling was flown to the German aircraft research centre at Rechlin for evaluation. On the 15th of August, 7 Squadron became a founder member of the Pathfinders, which, for the purpose of administration, came technically under the control 3 Group. Harris had been opposed to the creation of a force which might be considered elitist, and with the exception of 4 Group's AVM Carr, the other Group commanders were unanimously of the same mind. His choice of G/C Don Bennett to lead the Path Finders was, however, a brave and inspired move, and Bennett's brilliant mind and strong if humourless personality would prevent his intimidation by the fully fledged Group commanders. Bennett's squadrons lodged somewhat uneasily on 3 Group's stations, and it would be a sensitive relationship until the status of the force, and of Bennett himself was upgraded by being designated 8 Group on the 8th of January 1943. Typically of Harris, once firmly overruled, he gave the Pathfinder Force his unstinting support, and determined to make it operational within days of its formation. The first PFF led operation was planned for the 17/18th, but in the event, its contribution was withdrawn, and a small but effective raid ensued on Osnabrück, which was the final occasion on which 7 Squadron operated in a non-PFF role, although mining sorties would continue. The squadron was excluded from the first Pathfinder led operation to Flensburg on the 18/19th, and was probably glad not to be associated with what was a very inauspicious start, which resulted in no bombs falling within miles of the target area. The squadron had to wait until the second Pathfinder operation to open its account, and this was at Frankfurt on the 24/25th. Although some bombs fell in the

city, much of the effort was wasted in open country, and 7 Squadron lost two crews, including the one captained by one of its flight commanders, W/C Shewell. BF336 crashed in France, and the wing commander was one of four men killed, while the three survivors became POWs. There were two survivors also from the other missing Stirling, W7616, which was shot down over France by a combination of flak and a nightfighter, but the pilot, F/S Sumsky, was one of those killed. Sgt Land's BF335 was severely damaged during an engagement with a fighter, which his gunners were able to claim as destroyed, and the Stirling was successfully brought to a crash-landing at Abingdon with no casualties.

Wing Commander "Hamish" Mahaddie, later to become Bennett's chief of recruitment at 8 Group, a job which would earn him the title of Horse Thief, arrived to begin his second tour of operations earlier in the month, and assumed temporary command of the squadron as required. During his time on the squadron as a flight commander, Mahaddie had under him F/S Ron Middleton, who had been recruited to PFF from 149 Squadron. It became apparent that Middleton's navigator was not up to the task, and Mahaddie offered Middleton the chance to replace him, or return instead to 149 Squadron. Middleton chose the latter course, rather than be disloyal to his crew, and was subsequently awarded a posthumous VC, following an operation to Turin on the 28/29th of November. Kassel was the target for the 27/28th, and it was attended by a slightly better marking performance. Two of the squadron's crews had to fight off strenuous fighter attacks, but the operation was completed without loss. On the following night, the crews went to Nuremberg, and the marking was better still, 7 Squadron acting at this stage of its Pathfinder career, as part of the flare force. BF316 arrived home low on fuel, and crashed while trying to land at Boscombe Down, but there were no injuries to report among the crew of P/O Boylson.

September began with an embarrassing failure, when Saarlouis was marked in error for Saarbrücken on the 1/2nd. 7 Squadron came through unscathed, which is more than can be said for the unfortunate residents of the unintended target. On the following night, a force of two hundred aircraft set out for Karlsruhe, and with this operation, the Command embarked on an unprecedented series of effective and destructive raids. Bremen suffered extensive damage on the 4/5th, and while the attack on Duisburg on the 6/7th achieved only modest success, it was still this city's most punishing raid of the war to date. F/L Bennitt and crew were posted missing from this trip in W7629, and it was later learned that all had been killed in the crash on Germany's western frontier. An attack on Frankfurt on the 8/9th was the only failure during this period, and then it was back to winning ways at Düsseldorf on the 10/11th, where the catalogue of damage included over nine hundred houses destroyed along with numerous industrial premises. F/O Trench and two of his crew were decorated after bringing a severely damaged W7564 home from this operation to a crash-landing in Essex, after the Stirling was hit by flak over Holland, but two other members of the crew were killed. Less fortunate was the eight man crew of F/L Barr, when they were shot down by a nightfighter in W7630 with only two survivors, one of whom evaded capture. Even the difficult and elusive city of Essen suffered, during this successful period, what was probably its most damaging assault to date on the 16/17th, but it cost the squadron P/O Dallenger and crew, who all died when flak brought down W7569 into the IJsselmeer. If any moment in Bomber Command's war could be seen as the turning point on the long and arduous road to forging a war winning

weapon, then these first two and a half weeks of September 1942 was it. Failures would still outnumber successes for some time to come, but the signs were there, and it can be no coincidence that these encouraging operations had come at a time when the fledgling Pathfinder Force was getting to grips with the requirements of its job.

On the 1st of October, W/C Sellick's period in command of the squadron came to an end, and he was replaced by W/C Donaldson on the following day. Italy became the focus of attention during the period from October to December, frequent operations being launched across the Alps to the major industrial centres in support of Operation Torch, the Allied landings in North Africa, which would ultimately lead to Montgomery's victory over Rommel at El Alamein. Mining operations continued, despite the squadron's Pathfinder role, and it was such an operation which brought about the first loss for over a month, when sadly, friendly anti-aircraft fire accounted for F/O Brady and his crew in BF390, while they were returning over the east coast on the 21/22nd of October. Operation Torch took eleven of the squadron's Stirlings to Genoa on the 23/24th, only six completing their tasks, and ten went to Milan on the 24/25th. November began quietly, and the squadron's first loss of the month came on the 6/7th, when flak brought about the demise of P/O Tottman and his crew, while they were mining off Vlieland in W7620. Genoa was again the objective on the 7/8th, 13/14th and 15/16th, and Turin's turn came on the 20/21st and 28/29th. Germany was not totally neglected during the period, however, and Hamburg was selected for attention on the 9/10th, when 213 aircraft produced a scattered and ineffective raid, and it was one of those not infrequent occasions when the death toll among the attackers exceeded that on the ground. Fifteen aircraft failed to return, including three of 7 Squadron's Stirlings. P/O Harris and crew were lost without trace in R9169, there were no survivors from F/L Nicholl's crew in BF387, which disappeared into the North Sea, and none either from F/L Heywood's N3764, which crashed into Hamburg. A small scale raid by thirty six aircraft to the Fiat works at Turin failed to achieve its objectives on the 29/30th, and F/L Smith's R9150 was shot down over France by a nightfighter, with only two survivors.

Mannheim was cloud covered when attacked on the 6/7th of December, and an unsatisfactory operation resulted. R9259 was shot down over Belgium, and the rear gunner of F/L Arnott's crew was the only survivor, he ultimately evading capture. On the 11/12th, the squadron returned to Turin, and BF379 was hit by flak over the target. F/L Christie was one of many pilots to sacrifice his life ensuring the safety of his colleagues, who were able to parachute to earth to be taken into captivity. Munich was the target for a 1 and 5 Group effort on the 21/22nd, with a Pathfinder marker element in support, but again the bombs fell into open country, and nearly 9% of the force was missing, 25% of those being represented by 7 Squadron Stirlings. W7632 and BF358 both crashed in France and produced no survivors between them from the crews of F/O Davies and P/O Rumboll respectively, but four men escaped from F/O Duro's R9262 after it was shot down by a nightfighter also over France, three of them ultimately evading capture.

These were the final casualties in what had been a testing year for 7 Squadron. Many experienced and decorated men had been lost, and the operational inadequacies of the Stirling had been highlighted. Its design characteristics and servicing problems had hampered the

squadron's attempts to increase its sortie rate, during a period when it was trying to find its feet in a new and exacting role. From the formation of the Pathfinder Force to the end of 1942, sixteen of the squadron's Stirlings had failed to return, a loss rate of 5.4%. The Command was, at the same time, developing a strategy which the new year, the year of major campaigns, would see put into effect, on occasions with spectacular results, and on other occasions with devastating losses. The key to success lay in the hands of the Pathfinders, from which much had been expected, and by whom, so far, less than hoped for had been delivered, and they had but a short time at the start of 1943 to get it right. They did at least have a new weapon in their armoury, however, and this was Oboe, the blind bombing device which had been undergoing development trials in the hands of 109 Squadron since August, and once this became available for main force operations, it would signal disaster for the towns and cities of the Ruhr.

1943

The first two weeks of the New Year were dominated by seven small scale raids on Essen and one on Duisburg as part of the Oboe trials programme, and these involved the Mosquitos of 109 Squadron marking for 1 and 5 Group Lancasters. On the 8th, the Pathfinder Force achieved Group status, and from now on would operate as 8 Group. It was mid January before the Pathfinders operated again, when raiding Lorient on consecutive nights on the 14th and 15th. This was in response to a new Air Ministry directive issued on the 14th, which called for the area bombing of those French ports which contained U-Boat bases and support facilities. On the 16/17th, the Stirlings were withdrawn from an operation to Berlin by two hundred aircraft, which although only moderately effective, was the first occasion on which proper target indicators were employed, and the only damage of significance was the complete destruction of the 10,000 seater Deutschlandhalle, the largest covered arena in Europe. On the credit side, only one aircraft failed to return, but when the operation was repeated on the following night, again without the presence of 7 Squadron, the failure was compounded by the loss this time, of twenty two aircraft. On the 27/28th, Düsseldorf was the recipient of the first Oboe ground marking exercise, but again the Stirlings stayed at home. In November 1942, 7 and 35 Squadrons had begun to receive H2S, and they pioneered its operational use on the 30/31st with a raid on Hamburg, which included seven Stirlings from 7 Squadron, six Halifaxes from 35 Squadron, and a main force of 1 and 5 Group Lancasters. It was not a particularly successful debut for the device, and bombing was scattered, although over a hundred fires were started.

The first month of the new year had been negotiated by the squadron without loss, but that encouraging record came to an end on the 2/3rd of February, when H2S was being used operationally for only the second time. 7 Squadron Stirling R9264, in the hands of S/L Smith and his crew, was shot down over Holland during an operation to Cologne, thus presenting the Germans with an example of the device very early on in its development. This was a typically experienced Pathfinder crew, and four of the five crew members who lost their lives in this incident were decorated men. A return to Hamburg on the 3/4th produced less encouraging results than those of four nights earlier, but some compensation was gained at Turin on the following night, where widespread damage was created by a force of just over

150 aircraft. Lorient was also bombed on that night, and again on the 7/8th, making it seven raids against the port under the current directive, and then came an attack on Wilhelmshaven on the 11/12th. Complete cloud cover concealed the target, so that bombing was by the skymarking method based on H2s. At least one bomb load found its way onto a naval ammunition store, and the resultant explosion laid waste to 120 acres, and caused severe damage in the town and the docks area. After yet another raid on Lorient, the penultimate one in the series, a cloud covered Cologne was bombed on skymarkers, this time with only very modest success. After the final assault on Lorient on the 16/17th, the town was left a deserted ruin, and attention would soon turn to St Nazaire. Three more attempts were made on Wilhelmshaven, on the 18/19th, 19/20th and 24/25th, but each produced a poor return for the effort expended. Nuremberg escaped serious damage on the 25/26th, when the marking and bombing fell short of the intended aiming point and into the northern suburbs, and the creep-back spread into outlying communities well to the north. Only a quarter of the bombs dropped on Cologne on the 26/27th actually found the city, and this was generally indicative of the Command's fortunes at German targets during the month. It had fared much better over France, and the first of the series against St Nazaire on the last night of the month produced widespread destruction. On the credit side, 7 Squadron came through its allotted quota of operations without loss.

March began with a muscle-flexing exercise in preparation for the impending Ruhr campaign. Berlin was raided on the 1/2nd, and despite scattered bombing, it was the most effective raid on the Capital to date. Hamburg followed on the 3/4th, but the marking went awry, and much of the bombing fell onto the small town of Wedel, while the fire service at the intended target had to deal with a hundred fires. The Ruhr campaign was the first for which the Command was genuinely well equipped and prepared, and it opened with an attack on Essen, Germany's arsenal, and the home of the giant Krupps works on the 5/6th. 7 Squadron detailed two Stirlings, one of which returned early with engine trouble, while W7529 pressed on and completed its allotted task in the hands of W/O Zee and crew. An unusually high number of early returns and the bombing of alternative targets substantially reduced the size of the force reaching the target area, but guided to the aiming point by Mosquito borne Oboe, the 362 aircraft which did get there, were able to produce an outstandingly successful raid, which destroyed over three thousand houses, and scored some hits on the Krupps works. A week elapsed before the next Ruhr operation, and during this period Harris switched his force to southern Germany. Nuremberg was targeted with some success on the 8/9th, and this operation cost the squadron R9270, which was shot down over France with no survivors from the crew of F/L Trench. Shortly afterwards, tragedy struck the crew of BK610, which was on the way home and short of fuel. Sgt Toupin ordered the crew to abandon the aircraft, presumably believing them to be over France, but Sgt Spanton in the mid-upper turret failed to hear the order, and found himself alone in the aircraft, whereupon he also parachuted. He landed safely in Kent, while his colleagues all drowned. Sadly it would be a temporary reprieve for this airman. On the following night, P/O Tomlinson died ensuring the safety of his crew, when R9149 was despatched by a nightfighter when bound for what became a moderately rewarding raid on Munich, and three of the six survivors managed to evade capture. On the 11/12th, the squadron lost the highly decorated crew of S/L Thwaites, which contained collectively three DFCs, a DFC & Bar and two DFMs, when W7617 came down in

France without survivors during a disappointing operation to Stuttgart. On the next night, the crew of F/S Street was lost without trace in BK592, during the second Ruhr operation, which was again directed at Essen. This was another highly successful raid, the concentration of which surpassed that of a week earlier, and the Krupps works found itself in the centre of the bombing area. St Nazaire received its second attack on the 22/23rd, and this, like the first, was reported to be accurate. Duisburg followed on the 26/27th, but equipment failure among the Mosquito Oboe element led to scattered bombing and only superficial damage. On the 27/28th, P/O Lord and crew were killed when flak accounted for BF317 during a disappointing operation to Berlin, but F/O Baker and his crew emerged unhurt when R9255 crashed on landing on return from the same destination. A return to the Capital on the 29/30th resulted in most of the bombing missing the target, and falling into open country.

The run of successes against Essen continued on the 3/4th of April, but generally this would be the least rewarding month of the Ruhr offensive, largely because of the number of operations conducted beyond the range of Oboe. The largest non-1,000 force to date, comprising 577 aircraft, was sent to Kiel on the 4/5th, but it failed to achieve more than light damage, and it was a similar story at Duisburg on the 8/9th, from which F/O Stewart and crew were lost without trace in R9199. Frankfurt brought about the demise of S/L Chesterman's BK760 on the 10/11th, from which two survived and evaded, but P/O Terry and crew perished in R9275, and again the results were disappointing. P/O Taylor and his crew were more fortunate when R9278 was shot down by a nightfighter on the way home from Stuttgart on the 14/15th. All survived, and the two gunners evaded capture, but their squadron colleagues, P/O Mank and S/L McCarthy and their crews, in BK709 and BK769 respectively, were all killed when they were brought down over Germany. An attempt by the Lancaster and Halifax brigade to hit the Skoda armaments works at distant Pilsen failed dismally on the 16/17th, while a predominately Wellington and Stirling force enjoyed a reasonably successful time at Mannheim. The combined loss of fifty four aircraft, however, was the largest to date, although a number of crews were rescued after their aircraft ditched in the sea on the way home. F/L Parish was flying R9261 across Denmark on the way back from Stettin on the 20/21st, when a nightfighter brought them down. Sgt Smith alone of this eight man crew survived, and after making his way into Sweden, became the first from Bomber Command to evade from Denmark. Over five hundred aircraft managed to destroy three hundred buildings at Duisburg on the 26/27th, and this was the most successful attack on this important city to date. On the last night of the month, the main force raided Essen with modest results, while 7 and 35 Squadrons despatched twelve aircraft between them on an H2s trials flight to attack Bocholt. R9263 failed to return, having been shot down by a nightfighter, and six of the crew of Sgt Hallding were killed, while the survivor became a POW.

By this stage of the war, all Stirling squadrons had added a C Flight, and this aided 7 Squadron in making available greater numbers of aircraft for operations. May would see the first Lancasters arrive at Oakington, but it would be some months yet before the Stirlings were relinquished for good. This month would also bring some spectacular successes after the disappointments of April, and it began for the squadron with the appointment of a new commanding officer, when W/C Burnell took up his post on the 3rd, following the posting out of W/C Donaldson at the conclusion of his tour. BK773 was shot down into the IJsselmeer by

a nightfighter while raiding Dortmund on the 4/5th, and there were no survivors from the crew of P/O Holden. This was the largest non-1,000 bomber operation to date, but thirty one of the 596 aircraft were lost from an attack which caused considerable damage, even though half of the bomb loads fell more than three miles from the aiming point. On the 11th, the squadron began the process of converting onto Lancasters when EE200 was taken on charge, and this registered the squadron as the 21st operational unit to receive the type, but Stirlings would continue to operate alongside Lancasters for the time being.

The fourth raid on Duisburg since the start of the Ruhr campaign was mounted on the 12/13th, and after three previous failures against Germany's largest inland port during the current campaign, it finally succumbed to a devastating attack, which destroyed almost sixteen hundred buildings, and sank or damaged sixty thousands of tons of shipping. Decoy markers at Bochum on the following night lured away a proportion of the bombs, but damage was, never-the-less, substantial, and a nine day break lay ahead for the crews, during which 617 Squadron went into bomber folklore with its epic attack on the dams. In a repeat of the successful operation to Dortmund at the start of the month, this unfortunate city was selected to host a new record non-1,000 raid on the 23/24th, Bomber Command despatching its largest force during the entire campaign, comprising 826 aircraft, of which 7 Squadron's contribution was twenty Stirlings, its own best effort to date. On this occasion the Pathfinder marking was accurate, and was rewarded by concentrated bombing by the main force, which produced an outstandingly successful raid, devastating large areas of Dortmund for the loss, this time, of thirty eight aircraft, none of which was from 7 Squadron. The increasing scale of the losses at Ruhr targets was a major concern, but it was a problem for which, in the short term, there could be no remedy, and even when a counter-measure was introduced two months hence, its effectiveness would be temporary, and may even have contributed in the long run to a more efficient enemy defensive system.

On the 25/26th, 77 Squadron Halifax JB837 was attacked by a nightfighter en-route to Düsseldorf, and the ensuing violent explosion brought down two Stirlings, one from XV Squadron, and the other from 7 Squadron. EF361 was being flown by P/O Berthiaume, one of many Canadians in 7 Squadron, and sadly there were no survivors from the three aircraft involved. Essen was raided yet again on the 27/28th, and by recent standards at this target, the destruction of a mere 480 buildings was something of a disappointment, particularly in view of the failure to return of a further twenty three aircraft. The month ended for the squadron with participation in what was undoubtedly one of the most successful, awesome and destructive operations of the entire campaign. A force of 719 aircraft took off on the 29/30th, to attack Barmen, one of the twin towns which are known jointly as Wuppertal. The Pathfinders led the way with pin point marking, which was exploited by the main force crews following behind, and 80% of the town's built-up area became engulfed in flame. Almost four thousand houses were destroyed along with numerous industrial buildings, and around three and a half thousand inhabitants lost their lives. The defenders fought back and claimed thirty three bombers, including eight Stirlings, but the squadron negotiated this one without casualties.

There were no major operations for the first ten nights of June, and this allowed the squadrons to draw breath and concentrate on training. On the 11/12th, while a Pathfinders element accompanied the main force to Düsseldorf, an all 8 Group force of seventy two aircraft visited Münster in a mass H2S trial. Despite complete cloud cover, the potential of H2S was demonstrated in a very successful operation, from which F/O Deville and his crew failed to return in R9286, and no bodies were ever recovered. A hectic round of four major operations in the space of five nights began on Mid-summer's night at Krefeld, and it resulted in heavy losses to the Command. Forty four aircraft went missing, in return for almost total destruction of the city centre, and it was 7 Squadron's worst experience to date, with four crews failing to return. F/L Ince was the only fatality in his crew when R9266 was brought down by Flak, and there were two survivors from the crew of F/L Watt in R9272, which was despatched by a nightfighter over Holland. Also the victims of nightfighters were EF366, with F/O Meiklejohn and his crew, from which five men became POWs, and EF387 of S/L Hughes with eight men on board, from which the pilot and six others escaped with their lives, all in all, a remarkable number of survivors from these four aircraft. Mülheim was similarly afflicted on the following night, suffering the destruction of over eleven hundred houses, but again at the high cost of thirty five aircraft, and the loss rate among the Stirling contingent was close to 12%.

After a night's rest, 630 aircraft took off for Elberfeld, Barmen's twin and the eastern end of Wuppertal. It was another demonstration of the terrifying destructive capacity of the Command when all facets of the operational plan came together in perfect harmony. The pinpoint accuracy of the Oboe ground marking provided a reference for the Pathfinder heavy crews, and their concentrated target indicators were peppered by the main force crews. Even the creep-back worked in the Command's favour on this night, and when the smoke had cleared, over 90% of the town could be seen to be in ruins, and eighteen hundred of its people lay dead. This victory was achieved at a cost to the Command of thirty four bombers, and it was on this night that 7 Squadron lost its first Lancaster, and a highly experienced flight Commander. ED595 was shot down by a nightfighter over Holland, and W/C Barrell DSO DFC & Bar was killed when his parachute failed him. Of the four survivors from his crew, three became POWs and one evaded capture. Also lost that night was the eight man crew of S/L Savage in Stirling EF392, which was shot down into the sea off the Dutch coast, and had on board Sgt Spanton, who, it will be remembered, was the lone survivor of his former crew. There were no survivors from this crew, or that of F/O Davis in R9281, which also went down into the North Sea. The run of outstanding successes came to an end on the following night, the 25/26th, at the oil town of Gelsenkirchen, when in an echo of the past, bombs were sprayed all over the Ruhr, and few if any found the intended target. It was a disappointment which was compounded by the loss of another thirty aircraft and crews, although 7 Squadron was not represented among them. The first of three raids on Cologne spanning the turn of the month was mounted on the 28/29th, and it was the worst experience of the war for this Rheinland city. Over six thousand four hundred buildings were destroyed on this one night alone, and more than four thousand people were killed. When six hundred aircraft returned on the 3/4th of July, they laid waste to a further two thousand two hundred houses, and an all Lancaster force followed up on the 8/9th to complete the devastation. By the conclusion of the series, 5,500 people had been killed, 350,000 others were bombed out of their homes, and

the catalogue of destruction amounted to around eleven thousand buildings, in return for which, the defences claimed a combined total of sixty two bombers.

The Ruhr campaign was now effectively over, although Gelsenkirchen was raided again on the 9/10th to little effect, and Essen and Remscheid would receive further attention at the end of the month. It had been a hard-fought offensive, but Harris could look back over the past five months with genuine satisfaction at the performance of his squadrons, and point to vast areas of Germany's industrial heartland which now lay in ruins. Losses had been enormous, but the factories had more than kept pace with the rate of attrition, and a gradual expansion had been possible. Fresh crews were being fed into the squadrons by the Empire Training Schools, and confidence was high in the Command's ability to continue to carry the fight to the enemy. The last week in July always brought Hamburg into the bomb sights, and for 1943, Harris planned not a single operation, but a short, sharp series, with the intention of erasing Germany's second city from the map. Hamburg was the ideal target for such a campaign, satisfying as it did all of Harris's main criteria. As the centre of U-Boat production and home to other industries, it had enormous industrial significance, and its political status was undeniable. Of equal importance for the requirements of the operation was its proximity to a coastline which would assist navigation, and it was also close enough to the bomber stations to be reached during the scant hours of darkness afforded by mid summer. Finally, beyond the range of Oboe which had proved so decisive at the Ruhr, it boasted the distinctive feature of the wide River Elbe, to provide good H2s returns for the Pathfinder navigators high above. Operation Gomorrah commenced on the night of the 24/25th, and the 7 Squadron Lancaster EE119 was the first Pathfinder aircraft aloft, in a campaign which would be assisted by the first use of "Window", the tinfoil-backed strips of paper designed to swamp the enemy nightfighter, searchlight and gun-laying radar with false returns. The benefits of Window were soon made apparent by the lack of combats during the outward flight. Those aircraft which were lost at this stage of the operation were generally off course, and outside of the protection of the bomber and Window screens. Despite slightly misplaced marking and an extensive "creep back", a swathe of destruction was cut from the city centre, along the line of approach across the north-western districts, and out into open country, where a substantial number of bomb loads were wasted. Never-the-less, severe damage resulted, and it was an encouraging start to the campaign, made more so by the success of Window, which had almost totally incapacitated the city's searchlight and flak defences. Only twelve aircraft failed to return, and all eight Lancasters and nine Stirlings from 7 Squadron came through unscathed.

On the following night, Harris switched his force to Essen with great effect, taking advantage of the body-blow dealt to the enemy defensive system by Window. Over 2,800 houses were destroyed, while the Krupps complex suffered perhaps its heaviest damage to date, and once more the squadron operated without loss. On the 27/28th, over 780 aircraft set out for Hamburg for round two, and what followed was both unprecedented and unforeseen, and was the product of a conspiracy of circumstances. A period of excessively hot and dry weather had left the city a tinderbox, and the spark to ignite it came when the Pathfinders were again slightly wide of the planned aiming point, but marked with unaccustomed concentration the densely populated working class residential districts of Hamm, Hammerbrook and Borgfeld,

an area two miles to the east of the city centre. Over seven hundred aircraft of the main force followed up with equally unusual accuracy and almost no creep-back, and unloaded their bombs into this relatively compact area of the city. The individual fires joined together to form one giant conflagration, which sucked in oxygen from the surrounding areas at hurricane speed to feed its voracious appetite. It was a meteorological phenomenon of such intensity and violence, that trees were uprooted and flung into the seat of the inferno along with debris and people, and the temperatures at its heart reached 1,000 degrees centigrade. It was the first recorded example of a firestorm, and over forty thousand people died on this one night alone, on top of the fifteen hundred who had been killed two nights earlier. P/O Wood and his crew, in EF369, crashed on final approach on return, but no serious injuries were reported among those on board. The third Hamburg Raid took place on the 29/30th, and although many bombs fell into the already devastated firestorm area, extensive damage was created in other residential districts. This operation cost the squadron EF364, which was lost without trace with the crew of P/O Forbes, and they were the last to be posted missing in a 7 Squadron Stirling. The loss of twenty seven other aircraft suggested that the enemy defensive system was beginning to recover from the setback of Window, and what would emerge from the ashes in the not too distant future was a leaner, more efficient and much more deadly nightfighter force. Remscheid was pounded to destruction by a relatively small force of less than three hundred aircraft on the 30/31st, and this brought down the final curtain on the Ruhr campaign.

The final Hamburg operation took place on the 2/3rd of August, and was ruined by violent electrical storms which the crews encountered during the outward flight, and many opted to jettison their loads or bomb alternative targets. R9260 was written off on landing when the undercarriage collapsed, and this was the 120th and final 7 Squadron Stirling to be lost or otherwise destroyed. Throughout the four raid series, 7 Squadron had despatched seventy eight Stirling and Lancaster sorties for the loss of just one crew. (The Battle of Hamburg. Martin Middlebrook). The final operation in which a 7 Squadron and Pathfinder Stirling participated was to Nuremberg on the 10/11th of August, an occasion on which Lancaster JA931 was successfully abandoned over Kent on return by the crew of F/O Belsey, when running short of fuel. Italy was now teetering on the brink of capitulation, and in an attempt to nudge it over, a series of operations against its major cities was launched during the second week of the month. Milan was the target for operations on the 12/13th, when JA682 was abandoned over France with mechanical difficulties, and S/L Butterfield and three of his crew evaded capture, while three others became POWs and one was killed. A repeat raid on this city on the 14/15th resulted in the loss of JA850 over France, with no survivors from the crew of F/L Matkin, and the Command's final raid of the war on Italy fell on Turin on the 16/17th. This had been a predominately Stirling operation, with Halifaxes and Lancasters for company, and many were diverted around the country on their return, and would not be available for the coming night's activity, a raid of supreme importance.

Since the start of hostilities, intelligence had been filtering through concerning German research into rocketry, and it gradually became clear that it was centred upon Peenemünde, an island on the Baltic coast. Harris's chief scientific adviser, Professor Lindemann, later Lord Cherwell, steadfastly refused to accept the feasibility of such weapons, and even when faced

with evidence of a V-2 captured on film by a PRU Mosquito in June, he was able to put forward an alternative explanation for its purpose. It required the combined urgings of Duncan Sandys and the brilliant scientist Dr R V Jones to get Churchill to act, and plans were at last put in hand to attack this vital target at the first available opportunity. This arose on the night of the 17/18th of August, when 596 aircraft answered the call for a maximum effort, the numbers somewhat depleted by the errant elements from the Stirling Squadrons. The 7 squadron contingent of seventeen Lancasters was led by W/C Rampling, shortly to become the next commanding officer, in JA713. The other aircraft and pilots for this momentous operation were; S/L Lofthouse in JA678, S/L Anekstein in JA936, F/Ls Foster, Zee, Baker, Harcourt and French in JA717, JA685, EE119, JA907 and JA854 respectively, F/Os McIntyre, Philipson-Stowe, Campling and Wells in JA706, JA933, JA964 and JA935, P/Os Harding and Wilby in JA710 and JA853, and F/Ss Petrie, Negus and Sutherst in EE200, JA932 and JA917.

The operation, under the overall control of 83 Squadron's G/C Searby as Master of Ceremonies, called for three aiming points to be attacked, the housing estate, the factory and the experimental site, each assigned to a specific wave of bombers, with the Pathfinders charged with the exacting task of shifting the point of aim accordingly. The initial marking of the housing estate went astray, and the target indicators fell more than a mile to the south, onto the forced workers camp at Trassenheide. Trapped inside the wooden barracks, the inmates had little chance when the 3 and 4 Group bombs began to fall around them, and grievous casualties were inflicted on these "friendly" foreign nationals. Once rectified, the operation proceeded according to plan, and was sufficiently successful to delay development of the V-2 by a number of weeks, and ultimately to cause the testing programme to be withdrawn to Poland, out of range of Harris's bombers. A spoof raid on Berlin by eight Mosquitos of 139 Squadron was successful in keeping the nightfighters away from the main force until the latter stages, but once on the scene, they began to take a heavy toll of bombers, both in the skies over Peenemünde, and on the route home towards Denmark, and a total of forty aircraft failed to return. It was the 5 and 6 Group crews which had to contend with the bulk of the nightfighter activity, and they suffered the heaviest casualties, while 7 Squadron suffered no losses at all.

The next major campaign was to prove particularly testing for the Command in general, and for 7 Squadron in particular. Harris had long believed that Berlin, as the seat and symbol of Nazi power, held the key to ultimate victory, and had stated, that with the support of the UK based American 8th Air Force, he could "wreck Berlin from end to end", and bring a speedy conclusion to the war without the need for the kind of protracted and bloody land campaigns which had characterized the Great War. The Americans, however, were committed to a land invasion, and would not participate, but Harris, adamant as ever, would not be denied, and determined to go to Berlin alone. The Battle of Berlin began on the 23/24th of August, and it would continue, with an autumn break, until the end of March 1944. This first operation, by over seven hundred aircraft, was made noteworthy by the number of high-ranking officers who took part, including three station commanders. G/C Willetts, Oakington's station commander, hitched a lift with B Flight commander S/L Lofthouse in JA678, which was shot down by a nightfighter on approach to the Capital, and all became POWs, the pilot requiring hospital treatment. Extensive damage resulted in Berlin, but the scattered bombing deposited

many loads in open country, something which would be a feature of all future raids on this target, and a new record loss of fifty six aircraft was incurred. One week later, it was the turn of the twin towns of Mönchengladbach and Rheydt to receive a devastating attack by 660 aircraft. Of the twenty five aircraft which were posted missing, three came from 7 Squadron, JA710, from which the crew of F/O Wells all survived when shot down by a nightfighter, JA936, with two survivors from the crew of S/L Anekstein, and JA937, with only one survivor from the crew of F/S Sutherst. The second Berlin raid, on the last night of the month, was bad for the Command both in performance and losses. Poor marking by the Pathfinders, and indifferent bombing by the main force, allowed the city to escape with superficial damage, while the attacking force lost forty seven aircraft and crews, none, however, from 7 Squadron.

The final operation to Berlin in the current series took place on the 3/4th of September, and the heavy contingent was drawn entirely from Lancaster squadrons. Some useful industrial damage resulted, but again the raid did not achieve its objective, and 7 Squadron suffered at the hands of the defences. The crew of F/O Crockford all died when JA713 was shot down off Denmark by a nightfighter, and only one man survived from the crew of F/L French in JA854. Finally, W/O Hatchard and his crew were all killed in JA929, and thus only one man came through with his life from among the twenty one men involved. From that point until the resumption of the campaign in November, there would be a steady attrition of aircraft and crews. Mannheim reeled under the first of its two heavy raids during the month on the 5/6th, and its twin Ludwigshafen on the other bank of the Rhein, also suffered severe damage. Cloud thwarted an attempt on Munich on the following night, and then came two trips to France for 3, 4 and 6 Groups with Pathfinder support. The 15/16th was devoted to the Dunlop Rubber factory at Montlucon, and every building in the factory was hit. Such accuracy could not be repeated at the Modane railway yards on the 16/17th, and the operation failed. On the 20th, W/C Rampling assumed command of the squadron in place of W/C Burnell, who had completed his tour, and would finish the war in command of 100 Group's 223 Squadron. The new commanding officer presided over a series of raids on Hanover over the next month, which cost the squadron P/O Stenhouse and crew after JB184 crashed in Germany with just one survivor on the 22/23rd. This was the first raid, and P/O Routen and his crew were lost in JA849 during the second one on the 27/28th, this Lancaster falling to a nightfighter over Germany, also with only one survivor. In between, on the 23/24th, the second of Mannheim's trials took place, and almost a thousand buildings were destroyed, and then Oboe ensured a concentrated attack on Bochum on the 29/30th to bring the month to a close.

The first eight nights of October were particularly hectic for the Lancaster squadrons, which were called on to operate on six occasions. It began at Hagen on the 1/2nd, where the industry took a severe beating, and this had some impact on U-Boat production. 1 and 5 Groups went to Munich on the 2/3rd with a Pathfinder marker force for company, but an extensive creep-back developed and damage was moderate. Kassel's western suburbs received the greater proportion of bombs on the 3/4th, but an eastern district was also devastated, while Frankfurt was hit hard for the first time on the 4/5th, and the eastern half of this city and the docks were left engulfed in flames. Over three hundred aircraft of 1, 3, 5, 6 and 8 Groups went to Stuttgart on the 7/8th, the night on which 101 Squadron's ABC Lancasters were out in numbers for the first time. A moderately successful operation ensued for the loss of just four

Lancasters, which suggested a promising debut for the above mentioned RCM contingent. On the 8/9th, Hanover was raided for the third time, and in contrast to the first two occasions, this attack was delivered with stunning accuracy, and almost four thousand buildings were reduced to rubble. It did, however, claim two 7 Squadron crews, those of W/O Hartstein and F/O Macpherson in JA706 and JB181 respectively, the former crashing on German soil, killing the pilot and three others, and the latter coming down in Holland with total loss of life. The last of what had been a generally disappointing and expensive series against this target came on the 18/19th, and this was another failure which accounted for the crews of P/O Boness in JA907 and W/O Marshall in JB347, both of which crashed in Germany with eight survivors between them. The losses to the Command over the four raids amounted to 110 aircraft and crews, and no further operations would be launched to this city until January 1945.

The German defences were continuing to recover magnificently from the reverses caused by the introduction of Window, and new tactics, particularly in the area of nightfighter control, were beginning to pay dividends. It was nightfighters which accounted for the crews of F/O Leitch and F/S Watson in JA907 and JB175 during an operation to Leipzig on the 20/21st, in return for scant damage to the target. Two nights later, the main force and an 8 Group marker contingent returned to Kassel, and unleashed a firestorm, which, although less intense than that inflicted on Hamburg in July, never-the-less destroyed over four thousand apartment blocks and damaged over six and a half thousand more, and produced a death toll in excess of six thousand people. While this was in progress, thirty six aircraft of 8 Group carried out a diversionary raid on Frankfurt, which in the event did not prevent the heavy loss of forty three aircraft at Kassel, and cost 7 Squadron P/O Payne's JA717, from which five men became POWs. There were no other major operations during the month, and the main force would only have one to negotiate before the resumption of the Berlin offensive in mid November.

Düsseldorf opened the November account on the 3/4th, and heavy damage was caused to residential and industrial property in central and southern districts. A diversionary raid by 8 Group Lancasters and Mosquitos on Cologne was also accurate, and this was one of the few occasions when the famous cathedral was hit by bombs. A contingent of 8 Group Lancasters accompanied 5 Group to Modane on the 10/11th, where the railway installations were seriously damaged, and on the following night the Group operated with 4 and 6 Groups at Cannes, although this time the marshalling yards were not hit. The long and rocky road to Berlin was rejoined by an all Lancaster heavy force on the 18/19th, for which the squadron provided three aircraft, while a further seventeen supported a simultaneous operation by predominately Halifaxes and Stirlings at Mannheim and Ludwigshaven. Neither raid could be termed a major success, and the Mannheim force suffered the larger casualties, including JA970 of 7 Squadron, from which there were no survivors among the crew of F/L Harding. This began a period of heavy 7 Squadron casualties on Berlin operations, something which would be maintained throughout the campaign. On the 22/23rd, S/L Nesbitt and crew were lost in JB155, along with W/O Dorrell and his crew in EE119, but on the credit side, the 764 aircraft despatched produced probably the most effective attack of the war on the "Big City", with extensive damage to both industrial and residential areas amounting to around three thousand buildings destroyed. An estimated two thousand people lost their lives on the

ground, and a further 175,000 were rendered homeless. This operation proved to be the swansong over Germany for the Stirling, which from now on would be relegated to other useful if secondary duties. On the following, night a predominately Lancaster force enjoyed proportionate success for the loss of twenty of the type, three of which were from 7 Squadron. JA932 and JB840 failed to return to Oakington, and it was later learned that the crews of F/S Tindall and F/S Page had been killed, the former to a crash on Texel as the result of flak, and the latter lost without trace. JA971 was hit by flak over the target, but made it back to base, where F/O Williams baled out five of his crew, and he and the other crew member followed suit shortly afterwards. On the 26/27th, an all Lancaster heavy force, with Mosquito support, again hurt Berlin, while a predominately Halifax diversion was directed against Stuttgart. 7 Squadron lost flight commander W/C Hilton in JB538 from the main raid, he and five of his crew becoming POWs, and JB303 was despatched by a nightfighter, with just two survivors from the crew of F/O Beaumont.

December's account opened with Berlin on the 2/3rd, where some useful industrial damage rescued the operation from being a major disappointment, although the high figure of forty aircraft failed to return. This was followed twenty four hours later by a successful operation against Leipzig, during which 7 Squadron lost JA685, with Sgt Phillips and two of his crew surviving as POWs. A lull in activity allowed the Command to draw breath before the next assault on the capital, which came on the 16/17th. A reasonably effective, though scattered attack ensued, which cost the Command twenty five of the all Lancaster heavy contingent, four of which belonged to 7 Squadron, and this represented its most severe Lancaster loss to date. JA853 was shot down by a nightfighter over Holland with no survivors from the crew of W/O Watson, and JB543 fell in similar circumstances over Germany, with just two survivors from the crew of P/O Tyler. Also crashing in Germany was JB552, in which the crew of F/L Petrie all died, and finally, JB656 of F/O Rush came down in Holland, and the sole survivor ultimately evaded capture. Happily, 7 Squadron avoided the tragic consequences of fog-bound airfields on return, which cost the Command a further twenty nine Lancasters, either abandoned by their crews or crashing while searching for a place to land. Frankfurt followed on the 20/21st, and despite the fact that decoy sites and dummy target indicators attracted many bomb loads, the effort was not entirely wasted. On return, F/O Field and his crew abandoned JB652 over Suffolk, but sadly the rear gunner, W/O Smith, struck the tailplane and did not survive. Two more operations to the Capital followed before the year was out, on the 23/24th, by a mostly Lancaster force, and a maximum effort on the 29/30th, the first of an unprecedented three Berlin raids in five nights spanning the turn of the year. These last two December operations were disappointing, and the strain of such frequent long range trips was beginning to tell on the hard-pressed crews.

1944

Harris did not allow Berliners long to enjoy the new year before launching the next series of operations, and before New Year's Day was over, four hundred Lancasters were winging their way towards the Capital, arriving overhead as the clock approached 03.00 hours. EE129 and JB682 failed to return on this night, along with twenty six other Lancasters, F/L Kingsbury and crew all surviving from the former to fall into enemy hands, while S/L Jaggard and crew

perished when the latter was brought down by a nightfighter while outbound. On the following night, JB677 was one of twenty seven Lancasters lost, and there was only one survivor from the crew of F/L Pearson, and neither raid was effective. This was but a foretaste of things to come in January, a month which would ultimately cost the squadron eleven crews. Tough as it was for the crews, however, the besieged inhabitants of Berlin were also feeling the strain, but like their counterparts in London during the blitz of 1940, they were a hardy people, who bore their trials with fortitude and humour, and no amount of bombing would break their spirit. Banners appeared in the streets proclaiming, "you may break our walls, but not our hearts", and the most popular song of the day, played endlessly over the radio, was Nach jedem Dezember kommt immer ein Mai, After every December comes always a May, a sentiment which held promise of a change in fortunes with the onset of spring.

JB651 failed to return from Stettin with the crew of W/O McGinlay on the 5/6th, and this Lancaster was lost without trace, one of fourteen missing from the 348 of the type which had set out, although in return for the losses, some useful damage was created in the central districts of the city. A particularly severe winter, combined with the "moon period", was helping to keep the heavies on the ground for the first half of the month, and it was the 14/15th when they next went to war. The crews were probably relieved when briefings took place, to find that Brunswick and not Berlin was the target for the night. Not formerly raided by the Command in numbers, it lay in the same region of Germany as Hanover, and the expensive and largely ineffective attacks on that particular city during the autumn were too recent to have been forgotten. Brunswick proved to be equally elusive, and the authorities reported a light raid, when in fact almost five hundred aircraft had taken part. Thirty eight of them failed to return home, and among these were eleven Path Finders. JA905 was carrying the eight man crew of F/L Newton, and the highly experienced F/L Thomas was the captain of JA935, and neither crew was blessed with a survivor. JB398, a veteran of nine Berlin operations and with the crew of F/O Croxford on board, crashed in Germany after just two men had escaped by parachute, and this brought the squadron's losses for the first two weeks of the year to seven.

Another five nights elapsed before the command was able to operate in strength again, and it was to Berlin on the 20/21, the night on which the Luftwaffe launched its first "Tame Boar" nightfighter sorties. The city was completely covered by cloud, and this led to the previously relatively untouched eastern districts of Berlin experiencing a damaging raid at a cost to the attackers of thirty five aircraft. ND368 succumbed to a nightfighter, and another very experienced crew was lost to the squadron, the pilot, S/L Baird-Smith, and one other surviving as POWs. Two unusual features on this night were the high rate of early returns, almost 10%, and the remarkable number of aircrew survivors from among those shot down, which was very nearly 50%. The force was out in strength again on the following night with Magdeburg in its sights, while a diversion by a force of twenty two Lancasters and twelve Mosquitos was directed at Berlin. The main raid was a complete failure, and cost the Command a new record loss of fifty seven aircraft, most of them to nightfighters which had infiltrated the stream early on, and remained with it all the way to the target. JB408 was the sole 7 Squadron casualty, and F/L Robertson died with his crew in the crash in Germany.

Although unusual to mount back-to-back long range operations, an unprecedented three Berlin raids in four nights brought the month to an end. The first was mounted by an all Lancaster heavy force on the 27/28th, and the scattered moderate damage was a poor return for the loss of thirty three aircraft. On the following night, the Halifaxes joined in to create a force of over six hundred aircraft, and they were able to inflict extensive damage in predominately western and southern districts, sufficient to render 180,000 people homeless, but scattered bombs into dozens of outlying communities. The operation cost the Command a massive forty six aircraft in return for its success, and it was the Halifax squadrons which sustained the heavier actual and percentage casualties. 7 Squadron lost flight commander W/C Young in JB717 which crashed in Germany, he and two others surviving, and W/O Clifford and crew in JA718, a Lancaster on its tenth trip to Berlin. The pilot and one other were the sole survivors, and they fell into enemy hands, but their colleagues died in the crash in Germany. It was predominately Lancasters which concluded the series on the 30/31st, and further heavy damage was inflicted on the Capital, with the now familiar sprinkling of bombs onto outlying communities. This three raid phase of the campaign was the last concerted effort to destroy Berlin, and only two more major operations would be directed against it during the winter period. It had again suffered severe damage to housing and industry, and the death toll almost certainly exceeded two thousand people, but the Command had paid for this success with a combined total of 112 aircraft and crews, and Berlin was still a city functioning as the seat of Government, and not in danger of imminent collapse.

February began with a total stand down by the main force for the first two weeks, before Berlin was again the objective on the 15/16th. This was a record breaking night for the Command, the 891 aircraft despatched representing the largest non-1,000 force yet and it was the first time that five hundred Lancasters and three hundred Halifaxes had operated together. Those reaching the target area delivered an unprecedented 2,600 tons of bombs, much of which fell to good effect into the city, partly into areas already hit on previous occasions, but extensive damage also resulted in regions of the city which had remained relatively unscathed during earlier attacks. Forty three aircraft failed to return, and 7 Squadron suffered a particularly bruising operation, losing four experienced crews. Flying with S/L Hegman DSO in JB414 was W/C Tatnall OBE, and the eight man crew, only one of which survived the crash in Germany, contained a further DFC and three DFMs. The crew of S/L Campling, in ND445, contained in all one DSO, five DFCs and two DFMs, and all on board were killed. The crew of F/L Barnes in JB224, another veteran of ten Berlin trips, also contained decorated men, and none of these survived. The pilot of ND365, F/L Williams, had a miraculous escape along with one of his crew, when their Lancaster exploded over the Baltic after being attacked by a nightfighter. Both were blown clear to fall into enemy hands, and F/S Staniforth was eventually repatriated after sustaining serious injuries. Four nights later, another maximum effort raid was directed against Leipzig, and problems began as the bomber stream crossed the Dutch coast outbound. A running battle with nightfighters ensued all the way to the target, where a number of aircraft arrived too early through wrongly forecast winds, and about twenty of these were shot down by the local flak batteries as they orbited, waiting for the Pathfinder markers to go down. When all the aircraft which were going to return home from this inconclusive raid had done so, there was an unbelievable shortfall of seventy eight, by far the Command's heaviest reversal to date. Little went right during the

operation, and 7 Squadron suffered the loss of two more crews. S/L Davies and one other were killed when JB468 was shot down by a nightfighter over Germany, while the remainder of his crew parachuted into captivity, and S/L Curtis and one of his crew were the only survivors of the destruction by a nightfighter of ND470, they also having been catapulted into space when the Lancaster broke up. Three more major operations, to Stuttgart on the 20/21st, Schweinfurt on the 24/25th and Augsburg on the 25/26th, were negotiated by the squadron without loss. The two last mentioned operations employed a new tactic in an attempt to reduce the prohibitive losses of recent weeks. The forces were split into two, with a two hour gap between phases, and although thirty three aircraft failed to return from Schweinfurt, the second wave lost 50% fewer aircraft than the first. The operation itself was a failure, but this was redressed at Augsburg, the beautiful and historic old centre of which was ripped out in an inferno, following a copybook example of accurate and concentrated bombing.

March opened with a reasonably successful attack on Stuttgart on the 1/2nd, which was remarkable for the low loss of only four aircraft, but after a two week break from major operations, this was redressed at the same target on the 15/16th, when, despite the commitment of 863 aircraft, much of the bombing fell in open country, and the defences claimed thirty seven aircraft. Among them was ND557 of 7 Squadron, which was carrying the eight man crew of P/O Carter, and there were no survivors from the crash in Germany. Two heavy and devastating attacks fell on Frankfurt on the 18/19th and 22/23rd, the first of which alone destroyed five and a half thousand houses and a hundred industrial buildings. Following the second raid, half of the city was left without electricity, gas and water for a protracted period, and this major success was gained for the loss of a combined total of fifty five bombers. From the latter raid, 7 Squadron lost JA964, from which P/O Hinde and two of his crew escaped with their lives, and ND523, which was being captained that night by the squadron commander, the now G/C Rampling. Shot down in the target area by a nightfighter, he was killed with four of the eight men on board, and his death was a bitter blow to the squadron at a time when it was suffering heavy losses.

His replacement, W/C Lockhart, was an ideal choice, however, and he was posted in from his command of 692 Squadron, a Pathfinder Mosquito unit at Graveley, having previously served with 627 Squadron, and before that 161 Squadron, with which he had carried out daring lone sorties to France to pick up and deliver agents on behalf of SOE and SIS. Sadly, W/C Lockhart's own time on the squadron would be all too brief, and like many of the inspirational squadron commanders before him, his unquenchable thirst for action and desire to lead his squadron from the front would ultimately bring about his untimely end. The final assault on Berlin took place on the 24/25th, and in fact, it would be the last time that the Command would send heavy bombers to the Capital for the remainder of the war. The raid was only moderately successful after strong winds from the north broke the cohesion of the bomber stream, and this led to scattered bombing, with over a hundred outlying communities reporting bombs. Many aircraft were driven by the jetstream winds over heavily defended areas of the Reich on the way home, and as a result, the flak batteries enjoyed perhaps their most successful night of the war, claiming over two thirds of the seventy two bombers which were shot down. Two 7 Squadron crews were among them, those of F/O Mee in ND581, which was despatched by a nightfighter on approach to the target with no survivors, and P/O

Kyle in ND457, from which just two men escaped with their lives. During the Berlin offensive, which ran from the 23rd of August 1943 to the 25th of March 1944, nineteen main force operations were launched against the "Big City", 7 Squadron participating in every one. By the end of the campaign, 7 Squadron had dispatched 353 Lancasters to Berlin, the fourth highest in Bomber Command, for the loss of twenty six aircraft, the highest in Bomber Command. Its crew casualties amounted to 146 killed, again the highest in the Command, and its percentage loss rate was the highest in 8 Group. (The Berlin Raids, Martin Middlebrook).

The period which became known as the Battle of Berlin, or more accurately the winter campaign, still had a week to run, and two more major operations for the crews to negotiate. The first of these was launched against Essen, which became the victim of another devastating attack on the 26/27th, for the loss of just nine aircraft, thus continuing the outstanding run of good results at this target since the introduction of Oboe to main force operations twelve months earlier. The final deep penetration operation of the winter period was to be a standard maximum effort against Nuremberg on the night of the 30/31st. It departed from normal routine in just one respect, and this was to prove critical. In place of the usual Pathfinder prepared plan incorporating feints, a 5 Group inspired route was selected, which took the bomber stream in a long, straight leg across Germany to a point about fifty miles north of the target, from where the final run-in would commence. Despite heated protests from AVM Bennett, the Pathfinder AOC, and doubts about the weather, the operation went ahead as planned, and the 795 aircraft took off around 22.00 hours and set course towards disaster. The disputed route, and a combination of meteorological conditions in the form of unusually bright moonlight, crystal clear visibility, none of the forecast cloud at cruising altitude, but a backdrop of white cloud below the bombers to silhouette them like flies on a tablecloth, and the presence of condensation trails to advertise their position, presented a naked bomber stream on a plate to the waiting nightfighters. The jetstream winds which had so adversely affected the Berlin raid a week earlier were also present, only this time from the south, and aircraft were constantly blown north of their intended track. Many of those crews which either failed to notice, or refused to believe the evidence, turned towards Nuremberg from a false position, and bombed Schweinfurt in error. The nightfighters arrived on the scene over Charleroi in Belgium, and from there to the target, the route was signposted by the burning wrecks of RAF bombers on the ground. About eighty aircraft fell during the outward flight, and those which reached the target produced little damage of value. Ninety five empty dispersals on bomber stations next morning was testimony enough to the catastrophe which had befallen the Command. 7 Squadron's ND443 went down under the guns of a nightfighter over central Germany, and S/L Wilson and his crew perished, a similar fate overtaking F/L Evans and his crew in JB722. F/L McGillivray crash-landed ND350 at Feltwell on return, and he and his crew were able to walk away for what would be a temporary reprieve.

On the 1st of April, 7 Squadron donated its C Flight to become B Flight of the newly forming addition to 8 Group, 582 Squadron, at Little Staughton. The main focus of operations from now on would be the French transport system, and what lay before the crews was in marked contrast to that which had been endured over the winter. In place of the long slog to Germany on dark, often dirty nights, short range hops to France and the occupied countries would

become the order of the day. Despite the flawed thinking in high places that such operations were worthy of counting as just one third of a sortie towards the completion of a tour, they would prove to be equally demanding in their way, and require of the crews a greater commitment to accuracy to avoid inflicting casualties on the civilian population. Fortunately, this despised policy was quickly rescinded, and thoughts of mutiny which pervaded the crew rooms subsided. The Transportation Plan had, in fact, been put into operation in early March, when the older Halifaxes, which had been withdrawn from operations over Germany, attacked railway yards at Trappes and Le Mans. Despite the horrendous losses incurred during the winter campaign, the Command was in fine fettle to face its new challenge, and Harris was in the enviable position of being able to achieve what his predecessor had tried to do but failed, namely, to attack multiple targets simultaneously with large enough forces to make an impact. He could now assign targets to individual Groups, to Groups in tandem or to the Command as a whole, as directed by operational requirements, secure in the knowledge that any force would have the capacity to do the job. As far as the Pathfinders were concerned, they were going to be extremely busy providing a marking element for almost every operation, except, that is, for 5 Group, which was developing its own low level visual technique using Mosquitos, a fact which would strain relations between AVM Bennett and his 5 Group counterpart, AVM Cochrane. Both were brilliant men, with the finest tactical minds, their differences springing from diametrically opposed views on the subject of marking. This rivalry, as it seems to have become, was about to become more intense, with the transfer from 8 Group to 5 Group of two of the latter's former heavy squadrons, 83 and 97, along with 627 Squadron as the low level Mosquito marker unit.

The pre-invasion programme of operations got into full swing on the 9/10th, when railway targets were attacked at Lille and Villeneuve-St-Georges. Both operations were concluded successfully, but the satisfaction derived from this was marred by heavy casualties among civilians at both locations. On the following night, five railway yards were attacked, with an 8 Group presence at four of them, although mostly in the form of Oboe Mosquitos. Aachen was subjected to an area attack on the 11/12th, and over fifteen hundred people were killed, while particular damage was inflicted on the town's communications network and power supplies. From the 14th, Bomber Command became officially subject to the dictates of SHAEF in preparation for the forthcoming invasion, and would remain thus shackled until the Allied ground forces were sweeping towards the German frontier. Four more railway yards were attacked on the 18/19th, and the Pathfinders were present at all but the one assigned to 5 Group. While Harris was at the helm, however, city-busting would never be shelved entirely in favour of other considerations, and on the 20/21st, Cologne was raided by Lancasters and Mosquitos of 1, 3, 6 and 8 Groups, which inflicted extensive damage on residential, industrial and public buildings, while also hitting numerous railway installations. On the same night, the Group assisted 4 Group's attack on railway yards at Ottignies, and accompanied 6 Group to a similar target at Lens. On the 22/23rd, 7 Squadron sent elements to two targets, one of which was Düsseldorf, the city suffering heavy damage under the bombs of nearly six hundred aircraft. ND353 was shot down by a nightfighter in the target area, and three of the crew were killed, but F/L MacGillivray and three others escaped with their lives to fall into enemy hands. The other operation involving 7 Squadron on that night was to Laon, where a force of under two hundred aircraft of 3, 4, 6 and 8 Groups severely incapacitated the railway yards, 7

Squadron losing ND592 in the process. This Lancaster fell to a nightfighter over France, and none survived from the crew of P/O Aslett. Two nights later, JB719 was lost when Karlsruhe was the objective, much of the bombing falling outside of the town, and there was no good news concerning the fate of P/O Napier and his crew. An outstandingly successful attack on Friedrichshafen on the 27/28th was marred for the squadron by the loss of its recently appointed commanding officer, W/C Lockhart, who died with his entire crew when JB676 was brought down by a nightfighter over Germany. He had been a warrior, much in the mould of Embry and Gibson, and inspired those around him by not just sending, but leading them into battle.

Lockhart's replacement came from within the squadron, and was another inspired choice. W/C Barron, a New Zealander, was a man who typified the Pathfinder spirit in the same way as his predecessor. Having served a tour with XV Squadron, he was posted to 7 Squadron, where he completed his second tour. He returned for a third tour, and was made flight commander on the 27th of December 1943 at the age of twenty two, at which point he had a total of sixty two operations to his credit. On the 1/2nd of May, six separate targets were selected for attention, and elements of 7 Squadron accompanied a 3 Group attack on the main stores and repair centre for part of the French railway system at Chambly. In return for an effective operation, 7 Squadron lost ND901 and the crew of P/O Spiers, the pilot alone surviving, ultimately to evade capture. As if operational losses were not enough, a further crew was killed in a training accident on the 5th, when ND906 crashed in Northamptonshire in the hands of F/O Bennington. 8 Group Lancasters and Mosquitos joined 4 Group on the 6/7th to attack the railway yards at Mantes-la-Jolie, where success was gained at the expense of further heavy casualties among the civilian population. Seven coastal batteries in the Pas-de-Calais were the targets on the 9/10th, to maintain the deception over the invasion force's true landing area, and then it was back to railways on the 10/11th, when five targets were bombed in France and Belgium.

This remained the pattern over the ensuing nights, as on the 19/20th, when one of the operations was an all 8 Group effort against the radar station at Mont Couple. This cost the squadron ND736, which was hit by flak and exploded, throwing clear the pilot, S/L Oliver, but his seven crewmen perished in the crash in the Pas-de-Calais area. Another target that night was the railway yards at Le Mans, where much damage was caused to sheds, permanent way and an ammunition train. The Master Bomber for this predominately 3 Group attack was W/C Barron, who was on his 79th operation, and tragically, he and his deputy, S/L Dennis, also of 7 Squadron, were both hit by flak over the target in ND845 and JB653 respectively, although there is a suggestion that they may have been the victims of a collision. Whatever the cause of their demise, both were killed in the ensuing crashes, along with the thirteen others on board the two Lancasters. Again the vacancy for a commanding officer was filled by promotion from within, when W/C Cox was appointed. W/C Cox was an original member of the squadron from 1940, and had risen through the ranks from P/O. On the 21/22nd, Duisburg received its first major attack since the Ruhr campaign a year earlier. 510 Lancasters produced good results for the loss of twenty nine of their number, including ND588 of 7 Squadron with the crew of P/O Hookway, who were lost without trace. A similar anniversary for Dortmund was commemorated on the following night, and over eight hundred houses

were destroyed. Railway yards on the eastern and western outskirts of Aachen were the objectives for a larger than necessary force of 442 heavies on the 24/25th, suggesting perhaps, that colateral damage was to be encouraged. The targets were successfully bombed, as were communities on the periphery and in the town itself. 7 Squadron lost JB313, a Lancaster which had survived ten operations to Berlin, and F/L Crew died with all the others on board when it crashed in Germany. A return to this target on the 27/28th dealt with the railway lines not cut three nights earlier, and all through traffic was halted.

Feverish activity preceeded the D-Day landings, with attention paid to radio listening stations, radar jamming stations, railways and coastal batteries during the first four nights of the month. On D-Day Eve, the Command launched over a thousand aircraft to drop around five thousand tons of bombs onto ten coastal batteries, and although the crews were not then aware of the significance of this night, they had been told at briefing that bombs were not to be jettisoned over the sea. Some of these returning crews were rewarded for their efforts with the sight of the giant armada ploughing its way across the Channel far below. A similar number of aircraft were airborne on D-Day Night to attack communications targets, and it was the same fare for the next two nights, before airfields were targeted south of the beachhead on the 9/10th, to prevent their use by the enemy to bring up reinforcements and supplies. The pace of operations would continue throughout the month, with 7 Squadron in support, and NE129 was lost from an attack on a railway target at Dreux on the 10/11th, P/O Bonnett and crew all dying in the crash in the target area. A new oil campaign began at Gelsenkirchen on the 12/13th, when the Nordstern plant was attacked by elements of 1, 3 and 8 Groups with stunning success, and the first daylight operations since the departure of 2 Group a year earlier, were mounted against Le Havre on the evening of the 14th. Pathfinders led both phases of the attack, which was intended to destroy the enemy's fast, light naval craft which were a threat to Allied shipping supplying the beachhead. The highly successful operation was repeated at Boulogne on the following day with equally encouraging results.

The squadron's JB455 failed to return from a railway target at Lens on the 15/16th, and six of the crew were killed, while the pilot, P/O Thomson, survived the crash in Belgium, and managed to evade capture. Also that night, ND744 was one of the squadron's representatives at Valenciennes, another railway target, and this Lancaster was brought down to crash in the Pas-de-Calais area, killing P/O Grant and three of his crew. The month's second new campaign, this one against flying bomb launching and storage sites in the Pas-de-Calais, opened on the 16/17th at the hands of 1, 4, 5 and 6 Groups, for which 8 Group's Oboe Mosquitos provided the marking. The oil campaign was further prosecuted on the same night at Sterkrade-Holten, but cloud cover concealed the Pathfinder markers, and the bombing was scattered. Two further operations against oil refineries were mounted on the 21/22nd at Wesseling and Scholven-Buer. Both were predominately 5 Group affairs, and each was hampered by complete cloud cover, which prevented use of the 5 Group marking method at the former. This operation alone cost four 5 Group squadrons six aircraft each and another one five in an overall loss of thirty seven Lancasters, but only eight were missing from the latter, where standard Pathfinder marking was employed. The squadron's ND590 and ND766 both failed to return from attacking a flying bomb site at Coubronne on the 23/24th, the former crashing in Belgium, killing F/L Irwin and crew, and there were likewise no survivors

from the crew of F/L Wakefield in the latter. A similar target at Siracourt was attacked in daylight on the 29th, and this brought about the loss of the Master Bomber, F/L Clark, in ND897, he and five others failing to survive, while two men fell into enemy hands.

Flying bomb sites and railway targets continued to dominated proceedings in July, with occasional operations in support of the land battle raging below. It was on behalf of British and Canadian forces that over four hundred aircraft drawn from 1, 4, 6 and 8 Groups attacked an area of fortified villages around Caen by daylight on the 7th. Some of the bombing spilled over into the city's northern districts, which were destroyed, and the operation failed to achieve its aims. The simultaneous campaigns against oil, railways, flying bombs, and the need to support the land offensive, placed great demands on the Pathfinder squadrons, which were never found wanting. Oil refineries at Wesseling and Scholven-Buer received a further visit on the 18/19th, followed by Homberg on the 20/21st, and Wanne Eickel on the 25/26th. July was a good month for the squadron, which registered only the loss of PB212, which crashed in Suffolk on the 28/29th. This Lancaster was returning from a raid on Hamburg, while another force was completing the last of a series of three operations against Stuttgart which had begun on the 24/25th. Flak caused the aircraft to catch fire internally, and given the opportunity to abandon ship, one man did so, and failed to survive. The others fought the fire, and P/O Perry pulled off a successful crash-landing, from which all on board walked away. It was a successful mini campaign against Stuttgart, and it left the city's central districts devastated, but nightfighters got amongst the bombers on this night, and thirty nine of them failed to return. Isolated operations in support of the land battle continued, but gradually the Command turned its attention once more towards the industrial capacity of Germany, placing the main emphasis now on its oil production.

The first half of August was dominated by the campaign against flying bomb sites, but this would cease at the end of the month as the Pas-de-Calais fell into Allied hands. On the 7/8th, over a thousand heavy bombers were launched against enemy troop concentrations in the Normandy battle area, although only two thirds of the force bombed, and ten Lancasters were lost. Among them was 7 Squadron's ND460, which crashed on French soil, killing the eight man crew of F/O Kidd. Operations were conducted daily and nightly, and it was by daylight that eight hundred aircraft were despatched to bomb seven enemy troop concentrations ahead of Canadian forces approaching the Falaise area on the 14th. This was the occasion on which thirteen Canadian soldiers were killed by RAF bombs, and a further fifty were wounded. In preparation for his new night offensive against Germany, Harris launched a thousand aircraft by daylight on the 15th, to attack nine nightfighter airfields in Holland and Belgium. The 16/17th brought raids on Stettin and Kiel, the former with great success, the latter with less so, and over eight thousand houses and apartment blocks were destroyed in Bremen by a relatively modest force on the 18/19th. Also on this night, the oil refinery at Sterkrade received a visit from 4 Group, with elements of 7 Squadron in support. A successful operation ensued for the loss of one Halifax and the squadron's Lancaster PB148, this carrying another eight man crew, that of F/L McCarthy, and again there were no survivors. The Opel works at Rüsselsheim was one of three targets for the 25/26th, but the attack fell short of expectations, and production was not seriously compromised. ND852 was one of fifteen failures to return from the all Lancaster force, but at least on this occasion only one man died, and F/L Strong

and the rest of his crew became POWs. NE123 represented 50% of the losses from the Brest operation of the same night, when coastal batteries were targeted, and nothing more was heard of this Lancaster and its crew, which was captained by S/L Chopping. Kiel suffered a heavy and damaging assault on the 26/27th, and 7 Squadron registered its final casualty of the month, when F/L Smaill's PB180 failed to return, the Lancaster having crashed into the Baltic with the loss of all on board. The final attacks of the campaign against flying bomb sites in the Pas-de-Calais took place by daylight on the 28th, and the area was captured by Allied forces a few days later.

Six more 7 Squadron Lancasters were to be lost to operations over Germany during the remainder of the year, beginning with PB466 on the 6th of September, when Emden was successfully attacked in daylight by a force from 6 and 8 Groups. This was the only aircraft to fail to return from the 180 Lancasters and Halifaxes detailed, and it fell victim to a direct hit from a flak shell, which killed F/L Wilson, the Deputy Master Bomber, and two of his crew, the other five escaping by parachute. The day before, the first of six daylight raids in as many days had been carried out against Le Havre, in an attempt to dislodge German strong points, and following the operation of the 11th, the garrison surrendered to British forces. Boulogne and Calais were now the only French ports still occupied by the enemy, and these would be targeted later in the month. The last major raid of the war on Frankfurt, on the 12/13th, left its western districts reeling from a devastating blow, but the operation cost seventeen Lancasters, and the squadron posted missing the crew of F/L Banks, who failed to return in NE126, and they were all killed. More than three thousand tons of bombs were dropped on German positions around Boulogne by daylight on the 17th, and this port was also soon liberated. German strong points around Calais occupied the Command for much of the remainder of the month beginning on the 20th, and continuing from the 24th to the 28th, after which the garrison surrendered to Canadian forces.

The squadron continued with its hectic round of operations without further loss, and sent an element to the Scholven-Buer synthetic oil refinery by daylight on the 6th of October. In return for an accurate attack, the raiders lost four Halifaxes and two Lancasters, both of the latter, PA964 and PB241, belonging to 7 Squadron. There were no survivors from the eight man crew of P/O McRae in the former, but F/O Beaune and four of his crew were more fortunate, and escaped with their lives to fall into enemy hands. A second Ruhr offensive opened at Dortmund that night, and further extensive damage was inflicted by the five hundred strong force, for the loss of just five of their number, which unusually, on this occasion, included a Mosquito. On the 9th, W/C Walbourn was posted in from 582 Squadron, where he had been a flight commander, and he was installed as successor to W/C Cox, who was promoted to Group Captain and appointed station commander at Downham Market. An attempt to knock out the Wanne-Eickel synthetic oil plant by daylight on the 12th was thwarted by heavy smoke from an early strike, and little damage resulted, although a nearby chemical factory was destroyed. On the debit side, PB474 failed to return to Oakington, and the crew of S/L Bennett was posted missing. It would later emerge that he and four of his crew had survived their experience, albeit to spend the remainder of the war as guests of the Reich.

Duisburg, already one of the most bombed cities in Germany, was selected as the objective for the first raid under Operation Hurricane, a demonstration to the enemy of the overwhelming superiority of the Allied bomber forces ranged against it. Two operations were launched against the unfortunate city on the 14th, the first by daylight shortly after breakfast time, and the second that night, each employing over one thousand aircraft, which between them dropped a total of nine thousand tons of bombs. A combined total of twenty one aircraft were missing as a result of these two operations, and the squadron was represented among them by PB357, which failed to return from the night attack, and F/O Crawford and his crew perished in its wreckage. Happily, despite remaining at the forefront of operations for the remainder of the year, 7 Squadron would suffer no further casualties in 1944. The impressive number of aircraft available for these raids against Duisburg did not include a 5 Group contribution, it going instead to Brunswick, where, after four previous failures, the town finally succumbed to an accurate and concentrated assault, which left much of it in flames. Essen was next in line for Operation Hurricane, and was visited by over a thousand aircraft on the night of the 23/24th, and by over seven hundred more in daylight on the 25th. Cologne's turn came on the 28th, 30/31st and on the last night of the month, after which there was little left to hit. Worthwhile targets were becoming increasingly difficult to find, so thoroughly had Germany been reduced to rubble by persistent bombing. As a result, smaller and seemingly insignificant towns found themselves in the firing line, particularly if they were unfortunate enough to lie on the route of the retreating German forces.

November was a time to consolidate the campaign against the enemy's oil industry, and much of the Command's effort during the month was devoted to this. The Hurricane force went to Düsseldorf on the 2/3rd, and destroyed or seriously damaged five thousand houses, and Bochum was similarly pounded two nights later. It was the turn of Gelsenkirchen on the 6th, and this was the last of the Hurricane style attacks. The three small towns of Düren, Jülich and Heinsberg were heavily bombed in support of American ground forces on the 16th, with the Pathfinders in attendance at the first two mentioned. Area attacks were delivered on Freiburg and Neuss on the 27/28th, the former by over three hundred aircraft from 1 and 8 Groups, and more than two thousand houses were destroyed. The same two Groups attacked Dortmund on the 29th, and ended the month at Duisburg in company with 4 and 6 Groups on the night of the 30th. The pattern remained the same during December, and thus ended a year which had begun disastrously for 7 Squadron, and indeed the entire Pathfinder Force. During those dark days of the Berlin offensive, the Pathfinder squadrons faced a real danger of being bled dry of experienced crews, and sideways postings, principally between 7, 97 and 156 Squadrons, enabled them each to retain a sprinkling of men with leadership qualities. The end of the year was indeed for 7 Squadron, in stark contrast to those earlier days, with no losses for six weeks, and the prospect of victory in the near future.

1945

With victory in sight, 1945 brought an increasing tempo of operations. The sheer number of aircraft available to Harris, combined with those of the American 8th Air Force, overwhelmed the defences, and losses would fall to a fraction of those formerly endured. The Luftwaffe was still able on occasions to exact a heavy toll, however, and 7 Squadron was to lose further

crews before the end came. The year began for the squadron with a new commanding officer at the helm, W/C Cracknell replacing his predecessor on New Year's Day, and he would see the squadron through to the end. The New Year began with a flourish on the Continent, as the Luftwaffe launched its ill-conceived and ultimately ill-fated Operation Bodenplatte at first light on the 1st. The plan to catch the Allied Air Forces on the ground at the recently liberated airfields in France, Holland and Belgium was only modestly realized, but at the huge cost of around 250 day fighter aircraft. The majority of the pilots involved were killed, wounded or captured, and it was a setback from which the Tagjagd would never recover. The Command was aloft on New Year's Night, with 5 Group targeting the Mittelland Canal at Gravenhorst, 3 Group going for railway yards at Vohwinkel, while 4 Group attacked a benzol plant at Dortmund with 8 Group Lancasters and Mosquitos in support. Just as in the previous year when the 8 Group squadrons had spread themselves around the various operations conducted simultaneously, so it would be in these last few months of the bombing war.

On the 2/3rd, an element from the Group partnered Lancasters of 1, 3 and 6 Groups at Nuremberg, which was finally nailed after so many failures and heavy losses in the past, and this time at a cost of just six aircraft. Two thousand historic houses and over four and a half thousand apartment blocks were destroyed, along with hundreds of industrial buildings, and over eighteen hundred people were killed. The other main operation that night took place at Ludwigshafen and nearby Oppau, where the Group marked two I G Farben factories for a force drawn from 4 and 6 Groups, and this too met with great success. A controversial attack was mounted against the small French town of Royan in the early hours of the 5th, in response to a request from Free French forces which were laying siege to it. Many of the inhabitants, having declined an opportunity offered by the garrison commander to evacuate the town, were killed or injured in the onslaught. In the event, the French push did not materialize, and the German garrison stayed put until mid April. Hanover was another city which had proved difficult to destroy, particularly during an expensive four raid series in the Autumn of 1943, and a further attempt was made on the 5/6th by elements of 1, 4 and 6 Groups, with Pathfinder Lancasters in attendance. It was during this operation that 7 Squadron registered its first loss of the year, when PB526 was shot down over Germany by a nightfighter, and F/O Friedrich and his crew were killed. This was one of thirty one aircraft missing from what was a successful assault, which destroyed almost five hundred apartment blocks. On the credit side, however, this was the squadron's only casualty of the month, despite a busy schedule of operations.

Hanau was raided on the 6/7th with particular attention paid to that part containing the railway network, but many bombs found the centre of the town, and again much damage was inflicted. Munich followed on the 7/8th to complete a hectic first week of January, and the six hundred Lancasters of 1, 3, 5, 6 and 8 Groups left severe damage in their wake. The railway yards at Saarbrücken were attacked three times in twenty four hours during the 13th and 14th, twice by 3 Group using its G-H system, and in between by 4 and 6 Groups with Pathfinder markers. The German oil industry would be the main focus from now on, and the synthetic oil plant at Leuna in the east of the country suffered severe damage on the 14/15th at the hands of 1, 5, 6 and 8 Groups. Magdeburg was pounded on the 16/17th, and a Pathfinder element was also present that night at Zeitz, where the Braunkohle-Benzin oil plant was the objective. A

late afternoon take-off for Duisburg on the 22/23rd allowed the 1, 3 and 8 Group crews to be home before midnight, and they were able to report a successful attack on a benzol plant, and damage to the nearby Thyssen steelworks. The month ended with the last major raid of the war on Stuttgart on the 28/29th, a two phase affair which targeted railway installations to the north of the city, and an aero-engine factory in one of its northern suburbs.

The first night of February took elements of 8 Group to two destinations, Ludwigshafen in company with 1 and 6 Groups, and Mainz with 4 and 6 Groups. The former raid succeeded in inflicting extensive damage on residential property, railway installations and a bridge, but the latter was thwarted by cloud, and the use of skymarking led to inaccurate bombing. The one and only raid of the war on Wiesbaden created widespread destruction on the 2/3rd, but a further 8 Group presence at Wanne-Eickel on the same night could not prevent the operation from failing. This was not the only disappointing result during the early part of the month, and all three operations involving the Pathfinders on the 4/5th, those to Bonn, Osterfeld and Gelsenkirchen brought little reward. The frontier towns of Goch and Cleves were attacked on the 7/8th in support of the British XXX Corps, the former by 4 and 6 Groups, and the latter by 1 Group, both with Pathfinders in attendance, and each target suffered severe damage. Occasionally, standard Pathfinder marking and the 5 Group low level visual technique were used at the same target, and this happened at Pölitz on the 8/9th, when 5 Group constituted the first wave of bombing against the synthetic oil refinery, and the Pathfinders marked for the 1 Group second wave, both attacks concluded with great accuracy. Wanne-Eickel was also bombed on this night, with an 8 Group contingent in support of Halifaxes of 4 and 6 Groups, but this operation failed to inflict more than minor damage on the oil plant.

The Churchill inspired series of attacks on Germany's eastern cities under Operation Thunderclap was unleashed in all its fury against Dresden on the 13/14th. Conducted in two phases, this too was led by 5 Group employing its low level visual marking technique, and eight hundred tons of bombs were dropped in a partially successful opening assault. The fires which were started acted as a beacon to the second wave of over five hundred Lancasters of 1, 3 and 6 Groups following three hours behind, the number including a Pathfinder element to provide the marking. In clear conditions, a further eighteen hundred tons of bombs cascaded into the beautiful and historic city, setting off the same chain of events which had devastated districts of Hamburg in July 1943. The resultant firestorm was an absolute catastrophe for the city and its people, and the civil defence services were powerless to act. The population was swelled enormously by refugees pouring in from the eastern front, and estimates of the death toll ranged from 50,000 to 135,000, although the lower figure has now been accepted as the more accurate one. The Americans also raided the city in the morning, and escort fighters apparently strafed the streets and open spaces where survivors were gathering, and this has largely been responsible for much of the German anger which has unjustly been directed at Harris ever since. A similar two phase raid on Chemnitz twenty four hours later failed to cause severe damage in the face of complete cloud cover, but its time would come in March.

The town of Wesel, standing close to the area being fought over on the ground, was attacked on four consecutive days from the 16th, three times by 3 Group, and on the 17th by 4 and 6 Groups with Pathfinder aircraft in support. The penultimate large RAF raid of the war on

Dortmund was delivered by five hundred Lancasters of 1, 3, 6 and 8 Groups during the final hour of the 20th, while another 8 Group contingent marked the Rhenania Ossag oil refinery at Düsseldorf for a force of 4 Group Halifaxes, and all production at the plant was halted. Worms received its one and only large raid of the war on the 21/22nd at the hands of a predominately Halifax force, with Pathfinder Lancasters and Mosquitos in attendance. Great accuracy was once more achieved, and 39% of the town's built-up area was destroyed for the loss of ten Halifaxes and a single Lancaster. The latter was 7 Squadron's PA978, which crashed in southern Germany, killing six of the eight men on board, but the pilot, F/L Liddell, and one other survived to fall into enemy hands. Also on this night, Duisburg received its final raid of the war, a standard area attack delivered by 1 and 6 Groups after the target had been marked by Pathfinders. An 8 Group element joined 4 and 6 Groups at Essen on the 23rd, and despite the use of skymarking, great accuracy was achieved, and the Krupps works suffered more severe damage. The first and last attack of the war on Pforzheim was conducted by over three hundred Lancasters of 1, 6 and 8 Groups on the 23/24th. In a twenty two minute orgy of destruction, 83% of the town was reduced to ruins, and more than seventeen thousand people died in the inferno. The Master Bomber for the occasion was Captain Ed Swales of 582 Squadron, who remained with his crippled Lancaster while his crew baled out, and died in the ensuing crash. For his gallantry, he was awarded a posthumous Victoria Cross, and as events were to prove, this was the last to be awarded to a member of Bomber Command. The Group was involved in two more major operations before the end of the month, marking for 4 and 6 Groups at Kamen on the 24th, where an oil refinery was the target, and an area attack on Mainz on the 27th, which destroyed over five and a half thousand buildings.

March opened with the final raid of the war on Mannheim, delivered by 1, 6 and 8 Groups on the 1st through complete cloud cover, and this prevented an assessment of results. Cologne was also raided for the final time on the 2nd in a two phase assault begun by seven hundred aircraft led by 8 Group. Further massive damage was inflicted on this once magnificent and proud city, and four days later it fell to American forces. The Pathfinders led a return to Chemnitz on the 5/6th, and this time there was no escape for the city, which suffered severe fire damage in its central and southern districts at the hands of over seven hundred aircraft. The virgin target of Dessau was devastated on the 7/8th, and Hamburg and Kassel were the main objectives on the 8/9th, the latter receiving its last visit of the war. A new record was set on the 11th, when a force of 1,079 aircraft took off for Essen, on the final raid of the war on this city, but the record lasted only until the following day, when 1,108 aircraft set off for Dortmund, and this would stand until the end of the war as the largest Bomber Command force ever. The already destroyed Barmen half of Wuppertal was the target for the 13th, and the following two days and nights saw Pathfinders marking oil related targets for elements of the main force. The last trip to Nuremberg came on the 16/17th, when Pathfinder Mosquitos and Lancasters marked the target for 1 Group. The defenders fought back and brought down twenty four 1 Group Lancasters, in what was a final act of defiance by the enemy nightfighter force. 7 Squadron's excellent run of loss free operations came to an end at Recklinghausen on the 20th, where an attempt was made to destroy the railway yards. It was not successful, and F/O Bacon's PB667 was sent crashing onto Dutch soil in the Scheldt Estuary area on the way home, and there were no survivors. The remainder of the month was devoted to the

continuing assault on Germany's oil industry and communications network, and 7 Squadron came through these operations without casualty.

April proved to be the final month of the bombing war, and 7 Squadron's final loss occurred early on, during an attack on the Rhenania oil refinery at Harburg on the 4/5th. NG229 crashed in Germany with the crew of F/L Wadham, and theirs were the last of the many names to be entered in the squadron's Roll of Honour. The pattern of operations remained the same during the final weeks of hostilities, and the very last offensive operations for the squadron, and indeed, for the main force heavy squadrons came on the 25th, with a morning attack on the SS barracks at Hitler's Eagles Nest retreat at Berchtesgaden, a fitting finale, and later in the day, gun emplacements on the Frisian island of Wangerooge, which barred the approaches to the north German ports. That night, 5 Group attacked an oil refinery at Tonsberg in Norway, and then it was all over. Within a few days, many of the squadrons would be participating in the humanitarian Operations Manna and Exodus, the delivery of food to those starving Dutch people still under German occupation, and the repatriation of Allied POWs from the Continent.

7 Squadron completed its wartime service with a fine record of achievement, although higher than average losses. Its final tally shows it to have suffered the third highest percentage loss rate in the whole of Bomber Command. It introduced the Stirling to operational service, and struggled through with an aircraft which was hampered by poor design characteristics, and in its early days, technical problems. It was a founder member of the Pathfinder Force, and inevitably shared in its initial teething problems, but throughout, the quality of leadership enjoyed by the squadron, maintained its morale and its position at the forefront of Bomber Command's offensives.

STATIONS

LEEMING	01.08.40. to 29.10.40.
OAKINGTON	29.10.40. to 24.07.45.

COMMANDING OFFICERS

WING COMMANDER P I HARRIS DFC	01.08.40. to 13.04.41.
WING COMMANDER H R GRAHAM DSO DFC	13.04.41. to 09.04.42.
WING COMMANDER B D SELICK DFC	10.04.42. to 01.10.42.
WING COMMANDER O R DONALDSON DSO DFC	02.10.42. to 02.05.43.
WING COMMANDER H H BURNELL	03.05.43. to 19.09.43.
GROUP CAPTAIN K J RAMPLING DSO DFC	20.09.43. to 22.03.44.
WING COMMANDER W G LOCKHART DSO DFC	24.03.44. to 28.04.44.
WING COMMANDER J F BARRON DSO DFC DFM	28.04.44. to 20.05.44.
WING COMMANDER R W COX DFC AFC	21.05.44. to 08.10.44.
WING COMMANDER D M WALBOURN DSO	09.10.44. to 31.12.44.
WING COMMANDER D A CRACKNELL DSO DFC	01.01.45. to 04.06.45.

AIRCRAFT

STIRLING I	08.40. to 07.43.
STIRLING III	03.43. to 07.43.
LANCASTER I/III	05.43. to 08.49.

AIRCREW KILLED

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SECTION 2



OPERATIONAL RECORD

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OPERATIONAL RECORD

OPERATIONS	SORTIES	AIRCRAFT LOSSES	% LOSSES
546	5060	165	3.3

CATEGORY OF OPERATIONS

BOMBING	MINING
528	18

STIRLING

OPERATIONS	SORTIES	AIRCRAFT LOSSES	% LOSSES
267	1744	78	4.5

CATEGORY OF OPERATIONS

BOMBING	MINING
249	18

27 further Stirling destroyed in crashes.

LANCASTER

OPERATIONS	SORTIES	AIRCRAFT LOSSES	% LOSSES
279	3316	87	2.6

3 GROUP STIRLING

OPERATIONS	SORTIES	AIRCRAFT LOSSES	% LOSSES
178	918	41	4.5

CATEGORY OF OPERATIONS

BOMBING	MINING
167	11

8 GROUP STIRLING

OPERATIONS	SORTIES	AIRCRAFT LOSSES	% LOSSES
89	826	37	4.5

CATEGORY OF OPERATIONS

BOMBING	MINING
82	7

8 GROUP LANCASTER

OPERATIONS	SORTIES	AIRCRAFT LOSSES	% LOSSES
279	3316	87	2.6

(All bombing)

TABLE OF STATISTICS

(Heavy squadrons)

17th highest number of overall operations in Bomber Command.
26th highest number of sorties in Bomber Command.
15th highest number of aircraft operational losses in Bomber Command.
10th highest number of bombing operations in Bomber Command.
28th highest number of mining operations in Bomber Command.

Out of 13 Stirling squadrons

4th highest number of Stirling overall operations in Bomber Command.
6th highest number of Stirling sorties in Bomber Command.
4th highest number of Stirling operational losses in Bomber Command.

Out of 59 Lancaster squadrons

19th highest number of Lancaster overall operations in Bomber Command.
24th highest number of Lancaster sorties in Bomber Command.
20th highest number of Lancaster operational losses in Bomber Command.

Out of 28 squadrons in 3 Group.

12th highest number of overall operations in 3 Group.
16th highest number of sorties in 3 Group.
13th highest number of aircraft operational losses in 3 Group.

Out of 12 Stirling squadrons in 3 Group.

7th highest number of Stirling overall operations in 3 Group.
7th highest number of Stirling sorties in 3 Group.
7th highest number of Stirling operational losses in 3 Group.

Out of 8 heavy squadrons in 8 Group.

Highest number of overall operations in 8 Group.
2nd highest number of sorties in 8 Group.
Highest number of aircraft operational losses in 8 Group.

Out of 19 squadrons overall in 8 Group.

4th highest number of overall operations in 8 Group.
5th highest number of sorties in 8 Group.
Highest number of aircraft operational losses in 8 Group.
The only Stirling squadron in 8 Group.

Out of 8 Lancaster squadrons in 8 Group.

2nd highest number of Lancaster overall operations in 8 Group.
2nd highest number of Lancaster sorties in 8 Group.
2nd highest number of Lancaster operational losses in 8 Group.

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SECTION 3



AIRCRAFT LISTING

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7 SQUADRON

STIRLING.	From August 1940 to August 1943.
N3636 MG-A	Damaged at Oakington and became ground instruction machine.
N3637 MG-K/G	From Ringway. To AFEE.
N3638	From AMDP. To 15Sqn.
N3640	Crashed on landing at Hodder Bridge Lancashire having been damaged by friendly AA fire while training 29.9.40.
N3641 MG-D	To 26CF.
N3642 MG-E	To 15Sqn.
N3643 MG-G	From A&AEE. Crashed in Suffolk following fire sustained during operation to Calais 24.3.41.
N3644 MG-H	To 15Sqn.
N3652 MG-M	To 1651CU.
N3653	FTR Brest 3/4.3.41. First Stirling lost on operations.
N3655	To 1651CU.
N3663	FTR Berlin 2/3.8.41.
N3664 MG-Z	FTR Hamburg 29/30.6.41.
N3666 MG-Z	Crashed on landing at Newmarket on return from Duisburg 29.8.41.
N3668 MG-B	To 15Sqn.
N3669 MG-H/E/D	To 26CF.
N3670	From 15Sqn. To 101CF.
N3672 MG-M/U	To 26CF and back. U/C collapsed during landing at Oakington while training 14.1.42.
N3677 MG-J	FTR Berlin 7/8.11.41.
N3679 MG-D	Crash-landed at Newmarket on return from Essen 13.4.42.
N3680 MG-Y	From 149Sqn. FTR Brest 18.12.41.
N3700 MG-A	To 26CF and back. To 218Sqn.
N3701	Crashed on landing at Oakington on return from air-sea rescue search 2.12.41.
N3705 MG-R/F	FTR from mining Borkum area 15/16.8.42. Crash-landed, recovered by Germans and test flown.
N3706 MG-S	From 218Sqn. FTR Bremen 29/30.6.42.
N3708 MG-E	From 218Sqn. To 1657CU 12.8.42.
N3709 MG-S/K	From 218Sqn. FTR Essen 26/27.3.42.
N3710 MG-M	From 218Sqn. FTR Stuttgart 5/6.5.42.
N3716 MG-A	FTR Mannheim 19/20.5.42.
N3720	To 218Sqn.
N3727 MG-G	FTR from mining sortie to the Heligoland area 27/28.4.42.
N3750	FTR Essen 1/2.6.42.
N3754 MG-O	FTR Bremen 25/26.6.42.
N3757	To 15Sqn.
N3760 MG-D	To 1657CU

N3764 MG-J To 15Sqn and back. FTR Hamburg 9/10.11.42.
N3765 To 1657CU.
N6001 From A&AEE. FTR Hamburg 29/30.6.41.
N6003 MG-V To 26CF.
N6004 To 15Sqn.
N6005 To 26CF.
N6006 MG-G To 101CF.
N6007 From 15Sqn. FTR Bremen 28.6.41.
N6009 Crash-landed in Essex on return from Cologne 20/21.4.41.
N6010 FTR Berlin 10/11.5.41.
N6011 FTR Berlin 9/10.4.41.
N6012 Crashed in Cambridgeshire on return from Hamburg 3.5.41.
N6013 FTR Borkum 1.7.41.
N6014 Crash-landed in Suffolk on return from Berlin 1.5.41.
N6017 FTR Chocques Power Station 10.7.41.
N6019 Crashed on take-off from Oakington while training 9.5.41.
N6020 MG-B FTR Karlsruhe 25/26.8.41.
N6022 MG-D Abandoned over Norfolk on return from Hanover 15.7.41.
N6023 From DGRD. To 26CF.
N6032 MG-T To 26CF.
N6033 Crashed in Northampton on return from Hanover 15.7.41.
N6034 FTR Mazingarbe 8.7.41.
N6035 MG-A FTR Berlin 25/26.7.41.
N6036 MG-Q To 214CF.
N6037 To 26CF.
N6039 MG-L To 101CF.
N6041 Crashed at Oakington on return from Magdeburg 15.8.41.
N6042 Damaged in landing accident at Graveley on return from Magdeburg 15.8.41.

N6046 FTR Berlin 7/8.9.41.
N6048 To 7CF.
N6049 To 26CF.
N6073 MG-Y FTR Mannheim 19/20.5.42.
N6074 MG-G Ditched off North Wales on return from St Nazaire 26.3.42.
N6075 To 101CF.
N6085 MG-H Shot down near Bourn on return from Brest 3.10.41
N6087 MG-M/A Crash-landed in Cambridgeshire on return from Brest 18.11.41.
N6089 MG-L To 26CF.
N6090 To A&AEE and back. To 15CF.
N6091 MG-K FTR Berlin 7/8.11.41.
N6094 From 149Sqn. To 15Sqn via 26CF
N6095 MG-K From 149Sqn. Damaged beyond repair during an operation to Brest 18.12.41.

N6104 From 149Sqn via 26CF. To 1651CU.

N6120 Crashed while attempting to land at Oakington following early return from Soesterburg 17.1.42.
N6121 To 101CF.
N6128 To 26CF.
N6129 To 218Sqn.
R9143 To 149Sqn.
R9147 To 1651CU.
R9149 MG-S FTR Munich 9/10.3.43.
R9150 MG-A/O FTR Turin 29/30.11.42.
R9154 MG-F FTR Duisburg 6/7.8.42.
R9156 MG-H/S To 1665CU.
R9158 Crashed on landing at Manston on return from Nuremburg 29.8.42.
R9169 MG-Y FTR Hamburg 9/10.11.42.
R9192 To 15Sqn.
R9193 To 15Sqn.
R9199 MG-F/T FTR Duisburg 8/9.4.43.
R9249 From TFU. To 1657CU.
R9251 To 1657CU.
R9252 From TFU. To NTU.
R9255 MG-Q From TFU. Crashed on landing at Oakington on return from Berlin 28.3.43.
R9257 MG-C/E From TFU. To 1657CU.
R9258 MG-K To 214Sqn.
R9259 MG-J FTR Mannheim 6/7.12.42.
R9260 MG-O From TFU. Damaged on landing at Oakington after aborting operation to Hamburg (Operation Gomorrah) 3.8.43.
R9261 MG-M FTR Stettin 20/21.4.43.
R9262 FTR Munich 21/22.12.42.
R9263 MG-D From TFU. FTR Bocholt 30.4/1.5.43.
R9264 FTR Cologne 2/3.2.43.
R9266 MG-J From TFU. FTR Krefeld 21/22.6.43.
R9267 MG-S Crash-landed in Cambridgeshire while training 14.6.43.
R9270 MG-S/Q From TFU. FTR Nuremburg 8/9.3.43.
R9272 MG-W From TFU. FTR Krefeld 21/22.6.43.
R9273 From TFU. To 1657CU.
R9275 MG-Y From TFU. FTR Frankfurt 10/11.4.43.
R9277 MG-P/T To NTU.
R9278 MG-E From TFU. FTR Stuttgart 14/15.4.43.
R9280 MG-E To BDU.
R9281 MG-V FTR Wuppertal-Elberfeld 24/25.6.43.
R9283 MG-Q To 214Sqn.
R9284 To 214Sqn.
R9286 MG-C FTR Munster 11/12.6.43.
R9288 To 214Sqn.
R9289 To 214Sqn.

R9295 To 149Sqn.
R9296 To 149Sqn.
R9297 MG-P From 218Sqn. To 1657CU via 7CF.
R9298 From 218Sqn. To 1651CU.
R9300 MG-L To 1657CU via 7CF.
R9301 MG-Q To 1657CU via 7CF.
R9305 MG-R FTR Lübeck 28/29.3.42.
R9306 To 90Sqn via 7CF.
R9324 FTR Essen 16/17.6.42.
R9328 MG-A From 214Sqn. FTR Hamburg 26/27.7.42.
R9331 MG-Y Overshot while landing at Waterbeach during training 14.7.42.
W7430 FTR Berlin 2/3.6.41.
W7433 MG-U FTR Stettin 29/30.9.41.
W7434 MG-E Crashed on landing at Oakington on return from Hanover 15.8.41.
W7435 To 15Sqn.
W7436 MG-D FTR Brest 18.12.41.
W7438 FTR Duisburg 28/29.8.41.
W7440 To 101CF.
W7441 MG-J/Y From 15Sqn. FTR Stettin 29/30.9.41.
W7442 MG-M To 1651CU.
W7443 To 15Sqn.
W7444 MG-L/G Crashed on landing at Oakington following early return from operation to Bremen 31.10.41.

W7445 MG-V Crashed on take-off from Oakington bound for Kiel 15.11.41.
W7446 MG-S Crashed on landing at Oakington while training 18.11.41.
W7447 MG-V To 15Sqn.
W7448 MG-Z From 149Sqn. To 26CF.
W7449 MG-J From 149Sqn. To 214Sqn.
W7451 MG-D From 149Sqn. To 218CF via 7CF.
W7454 MG-S To 26CF.
W7466 MG-B From 218Sqn. FTR Lübeck 28/29.3.42.
W7467 From 218Sqn. Crashed in Cambridgeshire after colliding with a Hurricane during training 17.1.42.

W7468 MG-W From 218Sqn. To 1651CU.
W7470 MG-U To 1657CU via 7CF.
W7471 MG-J FTR Emden 6/7.6.42.
W7472 MG-C FTR Emden 20/21.6.42.
W7500 MG-B FTR Essen 1/2.6.42.
W7501 MG-Z FTR Lübeck 28/29.3.42.
W7504 To 15Sqn.
W7505 To 15Sqn.
W7517 MG-Z To 1657CU.
W7520 MG-S FTR Mannheim 19/20.5.42.
W7522 MG-G/K To 1651CU.
W7529 MG-R To 1665CU.

W7533 MG-G FTR Hamburg 28/29.7.42.
W7539 From 214Sqn. FTR St.Nazaire 28/29.6.42.
W7563 Crashed on take-off from Oakington en-route to Bremen 2.7.42.
W7564 Crash-landed in Essex on return from Düsseldorf 10/11.9.42.
W7565 FTR Hamburg 28/29.7.42.
W7569 FTR Essen 16/17.9.42.
W7574 From 149Sqn. To 1657CU.
W7579 MG-Y FTR from mining sortie 13/14.8.42.
W7581 To 1657CU.
W7616 MG-G FTR Frankfurt 24/25.8.42.
W7617 MG-A/K FTR Stuttgart 11/12.3.43.
W7620 MG-D/L FTR from mining sortie 6/7.11.42.
W7629 MG-Z FTR Duisburg 6/7.9.42.
W7630 MG-M FTR Düsseldorf 10/11.9.42.
W7632 MG-N FTR Munich 21/22.12.42.
BF316 MG-M Crash-landed at Boscombe Down on return from Nuremburg 29.8.42.
BF317 MG-D/X FTR Berlin 27/28.3.43.
BF321 MG-S To 75Sqn.
BF335 MG-E Damaged beyond repair during an operation to Frankfurt 24/25.8.42.
BF336 MG-Z FTR Frankfurt 24/25.8.42.
BF339 MG-C/F/L To 1665CU.
BF340 MG-A From 15Sqn. To 1657CU.
BF342 MG-E To 1657CU.
BF345 MG-H To 1657CU.
BF354 To 1657CU.
BF358 MG-C FTR Munich 21/22.12.42.
BF378 MG-W To 15Sqn.
BF379 MG-D FTR Turin 11/12.12.42.
BF387 MG-U FTR Hamburg 9/10.11.42.
BF390 MG-A Shot down by friendly AA at Gt Yarmouth on return from a mining sortie 21.10.42.

BF501 MG-N To 218Sqn.
BF526 To 90Sqn.
BF532 To 90Sqn.
BK592 MG-M/F From 214Sqn. FTR Essen 12/13.3.43.
BK602 To 75Sqn.
BK610 Abandoned off Kent coast on return from Nuremburg 9.4.43.
BK621 MG-N To 214Sqn.
BK709 MG-F FTR Stuttgart 14/15.4.43.
BK723 MG-E To 90Sqn.
BK724 MG-I To 214Sqn.
BK760 MG-X FTR Frankfurt 10/11.4.43.
BK761 To 218Sqn.
BK769 MG-G FTR Stuttgart 14/15.4.43.
BK773 MG-T FTR Dortmund 4/5.5.43.

BK779 To 90Sqn.
EE945 To 620Sqn.
EF361 MG-B FTR Düsseldorf 25/26.5.43.
EF363 MG-G² To 214Sqn.
EF364 MG-X FTR Hamburg (Operation Gomorrah) 29/30.7.43.
EF366 MG-L FTR Krefeld 21/22.6.43.
EF368 MG-A To 214Sqn.
EF369 MG-Z Crashed at Oakington on return from Hamburg 28.7.43.
EF384 To 1665CU.
EF386 To 1657CU.
EF387 MG-D FTR Krefeld 21/22.6.43.
EF388 MG-M To 214Sqn.
EF390 MG-T To 214Sqn.
EF392 MG-N² FTR Wuppertal-Elberfeld 24/25.6.43.
EF393 MG-W To 214Sqn.
EF401 To NTU.
EF402 MG-Y To 214Sqn.
EF406 MG-U To 214Sqn.

LANCASTER. From May 1943.

ED595 MG-Q From 156Sqn. FTR Wuppertal 24/25.6.43.
ED971 To NTU Nov 1943.
EE119 MG-G/J/N From 83Sqn. FTR Berlin 22/23.11.43.
EE129 MG-Y/V From 83Sqn. FTR Berlin 1/2.1.44.
EE173 To 156Sqn.
EE175 To 83Sqn.
EE176 To 97Sqn.
EE177 To 156Sqn.
EE178 To 156Sqn.
EE179 To 97Sqn.
EE200 MG-A From 156Sqn. To 166Sqn.
JA677 MG-S From 83Sqn. To NTU.
JA678 MG-S From 83Sqn. FTR Berlin 23/24.8.43.
JA682 MG-D From 83Sqn. FTR Milan 12/13.8.43.
JA685 MG-Z From 156Sqn. FTR Leipzig 3/4.12.43.
JA693 MG-W/T/A From 83Sqn. To 1667CU.
JA706 MG-C FTR Hanover 8/9.10.43.
JA710 MG-N FTR Monchen-Gladbach 30/31.8.43.
JA712 To 83Sqn.
JA713 MG-V FTR Berlin 3/4.9.43.
JA714 To 156Sqn.
JA717 MG-B/C FTR Frankfurt 22/23.10.43.
JA718 MG-T From 156Sqn. FTR Berlin 28/29.1.44. (Lost on its 10th Berlin operation).

JA846 To 97Sqn.
JA849 MG-F FTR Hanover 27/28.9.43.
JA850 From 156Sqn. FTR Milan 14/15.8.43.
JA853 MG-L/R FTR Berlin 16/17.12.43.
JA854 MG-X FTR Berlin 3/4.9.43.
JA905 MG-K/V FTR Brunswick 14/15.1.44.
JA907 MG-U FTR Leipzig 20/21.10.43.
JA911 MG-Q/N/U Completed 9 operations to Berlin. To 1653CU.
MG-A
JA917 MG-P FTR Hanover 18/19.10.43.
JA929 MG-A FTR Berlin 3/4.9.43.
JA931 Abandoned over Kent on return from Nuremburg 10/11.8.43.
JA932 MG-M FTR Berlin 23/24.11.43.
JA933 MG-R/B To 582Sqn 3.44.
JA935 MG-O FTR Brunswick 14/15.1.44.
JA936 MG-J FTR Monchen-Gladbach 30/31.8.43.
JA937 FTR Monchen-Gladbach 30/31.8.43.
JA962 MG-W/Q/U To 582Sqn.
JA964 MG-D/P FTR Frankfurt 22/23.3.44.
JA968 MG-H To 576Sqn. Flew 11 Berlin operations in all.
JA970 MG-N From 97Sqn. FTR Mannheim 18/19.11.43.
JA971 XU-J Abandoned over Oakington on return from Berlin 23/24.11.43.
MG-J²
JA978 MG-S Crashed at Waterbeach while training 12.9.43.
JA980 To 405Sqn.
JB115 MG-G FTR Berlin 22/23.11.43.
JB155 MG-S/L/L² Completed 9 Berlin operations. To 582Sqn.
JB175 MG-A FTR Leipzig 20/21.10.43.
JB181 FTR Hanover 8/9.10.43.
JB184 FTR Hanover 22/23.9.43.
JB185 MG-X/Y To 1651CU. Completed 11 Berlin operations.
JB224 MG-B/W From 97Sqn. FTR Berlin 15/16.2.44. (Lost on its 10th Berlin operation).
JB225 Force-landed at Swanton Morley following early return from Bochum 29.9.43.
JB303 MG-F FTR Berlin 26/27.11.43.
JB308 MG-B Crashed while landing at Oakington during training 24.1.44.
JB313 MG-P/D/F/M FTR Aachen 24/25.5.44. Completed 10 Berlin operations.
MG-H
JB317 To 156Sqn.
JB345 MG-V/X From 83Sqn. To 582Sqn.
JB347 FTR Hanover 18/19.10.43.
JB398 MG-C FTR Brunswick 14/15.1.44. Flew 9 Berlin operations.
JB408 MG-U/A FTR Magdeburg 21/22.1.44.
JB414 MG-V/Y From 83Sqn. FTR Berlin 15/16.2.44.

JB417 MG-F/V To 582Sqn.
JB455 MG-P/N From 83Sqn. FTR Lens 15/16.6.44.
JB468 MG-A/G/U FTR Leipzig 19/20.2.44. Completed 9 Berlin operations.
JB475 MG-M To 514Sqn.
JB480 MG-N FTR Berlin 23/24.11.43.
JB488 To 83Sqn.
JB538 MG-G From 83Sqn. FTR Berlin 26/27.11.43.
JB543 MG-J From 405Sqn. FTR Berlin 16/17.12.43.
JB552 MG-K FTR Berlin 16/17.12.43.
JB643 MG-M/L To 12Sqn.
JB651 MG-K FTR Stettin 5/6.1.44.
JB652 MG-A Abandoned over Suffolk on return from Frankfurt 21.12.43.
JB653 MG-R From 97Sqn. FTR Le Mans 19/20.5.44.
JB656 MG-D FTR Berlin 16/17.12.43.
JB661 MG-Z/T/L To 300Sqn.
JB671 To 97Sqn.
JB675 From A&AEE. No ops. To 405. Returned to 7Sqn from 635Sqn. No operations.

JB676 MG-K FTR Friedrichshaven 27/28.4.44.
JB677 MG-U FTR Berlin 2/3.1.44.
JB682 MG-A FTR Berlin 1/2.1.44.
JB684 To 405Sqn.
JB699 To 405Sqn.
JB713 From Rolls Royce. No operations. To 405Sqn.
JB717 MG-V From SIU. FTR Berlin 28/29.1.44.
JB718 From 12Sqn. Returned to 12Sqn.
JB719 MG-B From 83Sqn. FTR Karlsruhe 24/25.4.44.
JB722 MG-U/Q From SIU. FTR Nuremburg 30/31.3.44.
JB731 To 97Sqn.
JB735 MG-L Crashed at Oakington on take-off for Berlin 23/24.12.43.
ME315 To 405Sqn.
ME356 MG-P From 35Sqn.
ME360 MG-J
ME370
ME623 MG-N From SIU. To 582Sqn.
ND345 To 156Sqn.
ND347 To 405Sqn.
ND350 MG-Z From SIU. Crashed at Feltwell on return from Nuremburg 30/31.3.44.
ND353 MG-G/N From SIU. FTR Düsseldorf 22/23.4.44.
ND354 To 83Sqn.
ND358 To 156Sqn.
ND365 MG-L FTR Berlin 15/16.2.44.
ND368 MG-U FTR Berlin 20/21.1.44.
ND387 MG-C/O From 83Sqn. To 90Sqn.
ND395 To 83Sqn.

ND418 From 83Sqn. No operations. To 635Sqn.
ND443 MG-L FTR Nuremburg 30/31.3.44.
ND445 MG-D From SIU. FTR Berlin 15/16.2.44.
ND457 MG-F²/O FTR Berlin 24/25.3.44.
ND460 MG-D/F/S FTR Normandy battle area 7/8.8.44.
 MG-W
ND470 MG-S From SIU. FTR Leipzig 19/20.2.44.
ND523 MG-X From 83Sqn. FTR Frankfurt 22/23.3.44.
ND557 MG-F From SIU. FTR Stuttgart 15/16.3.44.
ND581 MG-M From SIU. FTR Berlin 24/25.3.44.
ND588 MG-W/Q FTR Duisburg 21/22.5.44.
ND590 MG-G/B FTR Coubronne 23/24.6.44.
ND592 MG-J FTR Laon 22/23.4.44.
ND673 No operations. To 635Sqn.
ND693 From 35Sqn. To 635Sqn via NTU.
ND736 MG-G From 35Sqn. FTR Mont Couple 19/20.5.44.
ND744 MG-W/F FTR Valenciennes 15/16.6.44.
ND750 To 582Sqn.
ND766 MG-P/S FTR Coubronne 23/24.6.44.
ND845 MG-C FTR Le-Mans 19/20.5.44.
ND849 MG-M To 582Sqn.
ND852 MG-G/D FTR Rüsselsheim 25/26.8.44.
ND860 To 460Sqn. To 156Sqn.
ND897 MG-J/C
ND875 FTR Siracourt 28/29.6.44.
ND899 To 582Sqn.
ND901 MG-B FTR Chambly 1/2.5.44.
ND906 MG-N/A Crashed in Northamptonshire while training 5.5.44.
ND907 To 35Sqn.
ND912 MG-P To 405Sqn.
ND916 To 35Sqn.
NE122 MG-V To 1669CU.
NE123 MG-J FTR Brest 25/26.8.44.
NE126 MG-R From 405Sqn. FTR Frankfurt 12/13.9.44.
NE129 MG-G FTR Dreux 10/11.6.44.
NG229 MG-S FTR Harburg 4/5.4.45.
PA964 MG-K FTR Schoven-Buer 6.10.44.
PA975 MG-G/H From 635Sqn.
PA976 From 35Sqn.
PA978 MG-O FTR Worms 21/22.2.45.
PA982 From 405Sqn.
PA983 To 635Sqn.
PB118 From 635Sqn. To 1654CU.
PB123 To 35Sqn.
PB124 MG-H

PB133 To 97Sqn.
PB148 MG-C From 156Sqn. FTR Sterkrade 18/19.8.44.
PB156 To 97Sqn.
PB179 MG-Q From 582Sqn.
PB180 MG-F FTR Kiel 26/27.8.44.
PB212 MG-S Crash-landed near Bungay on return from Hamburg 28/29.7.44.
PB233 From 405Sqn.
PB238 To 582Sqn.
PB241 MG-X FTR Buer 6.10.44.
PB287 To 635Sqn.
PB305 MG-K From 35Sqn.
PB357 MG-S From 35Sqn. FTR Duisburg 14/15.10.44.
PB367 To 35Sqn.
PB371 To 9Sqn.
PB410 To 97Sqn.
PB420 MG-O From 35Sqn.
PB431 MG-D
PB435 MG-R From 635Sqn.
PB437 MG-W
PB454 MG-J
PB466 MG-Q From 582Sqn. FTR Emden 6.9.44.
PB473 To 97Sqn.
PB474 MG-L From 156Sqn. FTR Wanne-Eickel 12.10.44.
PB481 From 582Sqn. To 619Sqn via 5LFS.
PB489 MG-F To 1660CU.
PB490 MG-B
PB505 To 156Sqn.
PB513 To 405Sqn.
PB517 To 156Sqn.
PB526 MG-N From 635Sqn. FTR Hanover 5/6.1.45.
PB570 To 1669CU.
PB576 To 1667CU.
PB582 MG-T From 156Sqn.
PB584 MG-Q/M From 156Sqn. To 1660CU.
PB587 MG-X/A
PB615 From 35Sqn.
PB622 MG-C To 189Sqn.
PB623 MG-L To 1660CU.
PB626 MG-E
PB627 To 635Sqn.
PB667 MG-Q FTR Recklinghausen 20.3.45.
PB677 MG-N From 35Sqn.
PB679 MG-A From 582Sqn.
PB680 To 635Sqn.
PB910 MG-B From 582Sqn.

RA510

HEAVIEST SINGLE LOSS.

21/22.06.43. Krefeld. 4 Stirlings.

16/17.12.43. Berlin. 4 Lancasters.

15/16.02.44. Berlin. 4 Lancasters

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SECTION 4



KEY TO ABBREVIATIONS

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KEY TO ABBREVIATIONS

A&AEE	Aeroplane and Armaments Experimental Establishment.
AA	Anti-Aircraft fire.
AACU	Anti-Aircraft Cooperation Unit.
AAS	Air Armament School.
AASF	Advance Air Striking Force.
AAU	Aircraft Assembly Unit.
ACM	Air Chief Marshal.
ACSEA	Air Command South-East Asia.
AFDU	Air Fighting Development Unit.
AFEE	Airborne Forces Experimental Unit.
AFTDU	Airborne Forces Tactical Development Unit.
AGS	Air Gunners School.
AMDP	Air Members for Development and Production.
AOC	Air Officer Commanding.
AOS	Air Observers School.
ASRTU	Air-Sea Rescue Training Unit.
ATTDU	Air Transport Tactical Development Unit.
AVM	Air Vice-Marshal.
BAT	Beam Approach Training.
BCBS	Bomber Command Bombing School.
BCDU	Bomber Command Development Unit.
BCFU	Bomber Command Film Unit.
BCIS	Bomber Command Instructors School.
BDU	Bombing Development Unit.
BSTU	Bomber Support Training Unit.
CF	Conversion Flight.
CFS	Central Flying School.
CGS	Central Gunnery School.
C-in-C	Commander in Chief.
CNS	Central Navigation School.
CO	Commanding Officer.
CRD	Controller of Research and Development.
CU	Conversion Unit.
DGRD	Director General for Research and Development.
EAAS	Empire Air Armament School.
EANS	Empire Air Navigation School.
ECDU	Electronic Countermeasures Development Unit.
ECFS	Empire Central Flying School.
ETPS	Empire Test Pilots School.
F/L	Flight Lieutenant.
Flt	Flight.
F/O	Flying Officer.

FPP	Ferry Pilots School.
F/S	Flight Sergeant.
FTR	Failed to Return.
FTU	Ferry Training Unit.
G/C	Group Captain.
Gp	Group.
HCU	Heavy Conversion Unit.
HGCU	Heavy Glider Conversion Unit.
LFS	Lancaster Finishing School.
MAC	Mediterranean Air Command.
MTU	Mosquito Training Unit.
MU	Maintenance Unit.
NTU	Navigation Training Unit.
OADU	Overseas Aircraft Delivery Unit.
OAPU	Overseas Aircraft Preparation Unit.
OTU	Operational Training Unit.
P/O	Pilot Officer.
PTS	Parachute Training School.
RAE	Royal Aircraft Establishment.
SGR	School of General Reconnaissance.
Sgt	Sergeant.
SHAEF	Supreme Headquarters Allied Expeditionary Force.
SIU	Signals Intelligence Unit.
SOC	Struck off Charge.
SOE	Special Operations Executive.
Sqn	Squadron.
TF	Training Flight.
TFU	Telecommunications Flying Unit.
W/C	Wing Commander.
Wg	Wing.
WIDU	Wireless Intelligence Development Unit.
W/O	Warrant Officer.



SECTION 5



SOURCES OF INFORMATION

www.bombaycommandmuseumarchives.ca

www.bombercommandmuseumarchives.ca

SOURCES OF INFORMATION

- Air War over France. Robert Jackson. Ian Allan.
 Als Deutschlands Dämme Brachen. Helmut Euler. Motor Buch Verlag.
 At First Sight. Alan B Webb.
 Avenging in the shadows. Ron James. Abington Books.
 Avro Lancaster. The definitive record. Harry Holmes. Airlife.
 Avro Manchester. Robert Kirby. Midland Counties Publications.
 Battle-Axe Blenheims. Stuart R Scott. Budding Books.
 Battle Under the Moon. Jack Currie. Air Data.
 Beam Bombers. Michael Cumming. Sutton Publishing.
 Beware of the Dog at War. John Ward.
 Black Swan. Sid Finn. Newton.
 Bomber Command. Max Hastings. Pan.
 Bomber Command War Diaries. Martin Middlebrook/Chris Everett. Viking.
 Bomber Group at War. Chaz Bowyer. Book Club Associates.
 Bomber Harris. Dudley Saward. Cassel.
 Bomber Harris. Charles Messenger. Arms and Armour Press.
 Bomber Intelligence. W E Jones. Midland Counties Publications.
 Bomber Squadron at War. Andrew Brookes. Ian Allan.
 Bomber Squadrons at War. Geoff D Copeman. Sutton Publishing.
 Bombers over Berlin. Alan W Cooper. Patrick Stephens Ltd.
 Bombing Colours 1937-1973. Michael J F Bowyer. Patrick Stephens Ltd.
 Confounding the Reich. Martin W Bowman/Tom Cushing. Patrick Stephens Ltd.
 De Havilland Mosquito Crash Log. David J Smith. Midland Counties Publications.
 Despite the Elements. 115 Squadron History. Private.
 Diary of RAF Pocklington. M Usherwood. Compaid Graphics.
 Each Tenacious. A G Edgerley. Square One Publications.
 Feuersturm über Hamburg. Hans Brunswig. Motor Buch Verlag.
 Forever Strong. Norman Franks. Random Century.
 From Hull, Hell and Halifax. Chris Blanchett. Midland Counties Publications.
 Gordon's Tour with Shiney 10. J Gordon Shirt. Compaid Graphics.
 Great Raids. Vols 1 and 2. Air Commodore John Searby DSO DFC. Nutshell Press.
 Halifax at War. Brian J Rapier. Ian Allan.
 Hamish. The story of a Pathfinder. Group Captain T G Mahaddie. Ian Allan.
 Heavenly Days. Group Captain James Pelly-Fry DSO. Crecy Books.
 In Brave Company. W R Chorley. P A Chorley.
 Joe. The autobiography of a Trenchard Brat. Wing Commander J Northrop DSO DFC AFC. Square One Publications.
 Lancaster at War. Vols 1,2,3. Mike Garbett/Brian Goulding. Ian Allan.
 Lancaster. The Story of a Famous Bomber. Bruce Robertson. Harleyford Publications Ltd.
 Lancaster to Berlin. Walter Thompson DFC*. Goodall Publications.
 Low Attack. John de L Wooldridge. Crecy.
 Massacre over the Marne. Oliver Clutton-Brock. Patrick Stephens Ltd.
 Master Airman. Alan Bramson. Airlife.

Melbourne Ten. Brian J Rapier. Air Museum Publications (York) Ltd.
 Mission Completed. Sir Basil Embry. Four Square Books.
 Mosquito. C Martin Sharp & Michael J F Bowyer. Crecy.
 Night Fighter. C F Rawnsley/Robert Wright. Collins.
 Night Flyer. Squadron Leader Lewis Brandon DSO DFC. Goodall Publications.
 Night Intruder. Jeremy Howard-Williams. Purnell Book Services.
 No Moon Tonight. Don Charlwood. Goodall Publications.
 On The Wings Of The Morning. RAF Bottesford 1941-45. Vincent Holyoak.
 On Wings of War. A history of 166 Squadron. Jim Wright.
 Only Owls And Bloody Fools Fly At Night. Group Captain Tom Sawyer DFC. Goodall
 Publications.
 Pathfinder. AVM D C T Bennett. Goodall Publications.
 Pathfinder Force. Gordon Musgrove. MacDonald and Janes.
 Reap the Whirlwind. Dunmore and Carter. Crecy.
 Royal Air Force Aircraft Serial Numbers. All Volumes. Air-Britain.
 Royal Air Force Bomber Command Losses. Vols 1,2,3,4,5,6. W R Chorley. Midland Counties
 Publications.
 Silksheen. Geoff D Copeman. Midland Counties Publications.
 Snaith Days. K S Ford. Compaid Graphics.
 Start im Morgengrauen. Werner Girbig. Motor Buch Verlag.
 Stirling Wings. Jonathon Falconer. Alan Sutton Publications.
 Strike Hard. A bomber airfield at war. John B Hilling. Alan Sutton Publishing.
 Sweeping the Skies. David Gunby. Pentland Press.
 The Avro Lancaster. Francis K Mason. Aston Publications.
 The Berlin Raids. Martin Middlebrook. Viking Press.
 The Dambusters Raid. John Sweetman. Arms and Armour Press.
 The Halifax File. Air-Britain.
 The Hampden File. Harry Moyle. Air-Britain.
 The Handley Page Halifax. K A Merrick. Aston Press.
 The Hornets' Nest. History of 100 Squadron RAF 1917-1994. Arthur White. Square One
 Publications.
 The Lancaster File. J J Halley. Air-Britain.
 The Other Battle. Peter Hinchliffe. Airlife.
 The Pedulum and the Scythe. Ken Marshall. Air Research Publications.
 The Starkey Sacrifice. Michael Cumming. Sutton Publishing Ltd.
 The Stirling Bomber. Michael J F Bowyer. Faber.
 The Stirling File. Bryce Gomersall. Air-Britain.
 The Wellington Bomber. Chaz Bowyer. William Kimber.
 The Whitley File. R N Roberts. Air-Britain.
 The Squadrons of the Royal Air Force. James J Halley. Air-Britain.
 They Led the Way. Michael P Wadsworth. Highgate.
 To See The Dawn Breaking. W R Chorley.
 Valiant Wings. Norman Franks. Crecy.
 Wellington. The Geodetic Giant. Martin Bowman. Airlife.
 White Rose Base. Brian J Rapier. Aero Litho Company (Lincoln) Ltd.

Wings of Night.

2 Group RAF. A Complete History.

101 Squadron. Special Operations.

207 Squadron RAF Langar 1942-43. Barry Goodwin/Raymond Glynne-Owen. Quacks Books.

408 Squadron History.

Alexander Hamilton. Crecy.

Michael J F Bowyer. Crecy.

Richard Alexander.

The Hangar Bookshelf. Canada.

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SECTION 6



STOCK LIST

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105 106 115 139 144 149 150 153 156 189
207 214 218 405 408 419 460 467 550 578
617 619 622 625 626 627 630**

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OTHER PUBLICATIONS

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BOMBER COMMAND AND ITS
SQUADRONS**

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Commissions for original work welcomed
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