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Bomber Flight Berlin

Mike Rossiter

About the Book

We believed in ourselves so much, no one ever panicked, even when the situation looked so desperate. We all believed that our best chance of staying alive was to stick together.

Flying Lancaster bombers was one of the most dangerous missions of the war. Yet night after night Flight Lieutenant Geoffrey King and the crew of C Charlie risked their lives in the skies over Germany. Together they faced incredible dangers, flak damage, close encounters with the fighter planes of the Luftwaffe, and crash landings.

Geoffrey King and the crew of C Charlie are unique in having flown together for fifty missions and living to tell the tale. *Bomber Flight Berlin* is the story of a group of ordinary men, from different walks of life, thrown together by the forces of war, as they flew into what seemed certain death. It is also a testament to a remarkable friendship they formed against all odds.

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BOMBER FLIGHT BERLIN

MIKE ROSSITER

To my parents,
who survived the Blitz on London

Acknowledgements

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PREFACE

GEOFF KING, HIS pilot and skipper George Laing, and the five other members of the bomber crew whose story this is started their front-line service in September 1943. The war had ground on for four long years and over that time Bomber Command had grown in size and effectiveness. A year earlier just 178 four-engined bombers had been in service; now there were 740 of these aircraft. In the month that Geoff King first took off on a raid over Germany, Bomber Command dropped over 128,000 tons of high explosives on German cities. The crew started their operational tour at a critical time. They were just a few weeks away from being thrown into the massive campaign of raids against the German capital, Berlin. Many senior officers in the Royal Air Force believed that these unrelenting air raids on the centre of Nazi power might bring about the end of the war.

The leaders of Bomber Command supported a view that had gained a great deal of currency in the 1930s – that strategic bombing could win a war by creating such devastation that the people and the government of the bombed country would no longer have the will to continue the fight. This was based on a naïve analysis of the way that modern societies were held together and functioned, but it became such an article of faith that it prevented any deep analysis of just how bomber forces were going to achieve their strategic objectives.

The start of the war in 1939 quickly showed that creating a strategic bomber force required a great deal

more thought and effort than had previously been imagined. Whether it was mounting daylight raids against German shipping, or carrying out leaflet-drops over German cities, or indeed the first night raids against Berlin, the casualties in aircraft and aircrew were out of all proportion to the damage inflicted against Germany. It became obvious that vital issues like training for long-range navigation at night or in bad weather, bombing accuracy, protection against fighter attack and the development of radio direction-finding aids had all been seriously neglected by the RAF.

The Blitz – the bombing of London and other cities like Coventry by the German Luftwaffe – created the most awesome destruction of populated areas ever seen in war and revealed to the world how deadly air raids were. It showed also that, despite the initial damage, the numbers of planes and the sheer weight of bombs needed to destroy a city or knock out a country permanently was much greater than that currently deployed by either Germany or Britain.

Rather than abandon the dream of a war-winning weapon, Bomber Command persisted, building more and bigger bombers, assembling an enormous fleet of aircraft. At the same time, technical innovations created a variety of techniques to transmit radio beams to keep the bombers on course and produced airborne radar to assist the bomb aimers in identifying their targets. The commander-in-chief of Bomber Command, Sir Arthur Harris, was determined to eradicate the weaknesses and failures that had bedevilled the bomber force in the first years of the war. Yet the modernization and expansion never entirely reduced the regular casualties that the Germans managed to inflict on every operation, and these meant that the odds were always against a bomber crew surviving a full tour of thirty missions.

The casualties, however, did not deter people like Geoff King, who was just one of the thousands who volunteered to join Bomber Command. Part of the attraction was the adventure of flight. The RAF was modern, at the cutting edge of technology, the aircraft were fast and impressive, and the men who flew in them were bold and glamorous. Bomber Command at the time was viewed by the population at large as the only service that was taking the war to the enemy's heartland; people believed that the bombers were making the Germans pay for the violence they had inflicted on the cities of Britain. Of this there was no doubt. The Blitz on London and Coventry had shocked the world, but the thousand-bomber raid on Cologne and the fire-raising raids on Hamburg that followed in July 1943 were far more severe than anything the Luftwaffe had been able to carry out.

Geoff King was a young man from a poor farm labourer's family in Essex, but the volunteers came from every country in the Commonwealth. In 57 Squadron, where Geoff and his crew first saw combat, almost a third of the airmen were from Canada. Geoff's crew had a Canadian, George Laing, as its skipper; a Scot, Robbie Burns, as its flight engineer; a Londoner, Vincent Day, as its wireless operator; a Welshman, Sidney Thomas, as rear gunner; and an Australian, Frank Green, in the mid-upper gun turret. Roy Davis, the navigator, from Manchester, had been to grammar school, while Geoff had left school at fourteen.

All of the crew, whatever their background and education, had come out of the lengthy training period with well-developed engineering and mathematical skills. These were necessary to operate and fly the advanced and complicated weapon that was a Lancaster bomber to a target many hundreds of miles away – yet these talents, which might have remained hidden for ever without the onset of war, were not enough. Germany invested as much in its air defences as Britain invested in its bomber force,

and flying over occupied Europe to a target in Germany meant spending hours in constant danger of death or injury. Without the courage, and the considerable mental and physical strength, of the aircrews, the bomber offensive against Germany would have been impossible. Berlin was the best-defended target of all and the long bombing run over the spread-out city required exceptional fortitude and commitment. Geoff and his crew flew over this target ten times and were hit on several occasions, once having to return to their base with two engines out of action. The flight home, at a height within easy range of anti-aircraft fire, in bad weather, with the added fear of having to ditch in the North Sea, was a test of endurance. That night was the worst Christmas Eve that any of them could remember, but a week later, the aircraft repaired, they were once more flying through the shellbursts and searchlights over Berlin.

The raids on the German capital did not end the war. The defences were formidable and in the period from September 1943 to March 1944, German night fighters or anti-aircraft fire shot down around 1,500 heavy bombers, with the loss of almost 10,000 young aircrew. Geoff and his crew not only survived this endless storm of shells and bullets, but throughout their tour their performance as a bomber crew improved. They were getting to the target and coming closer to the aiming point. On their twenty-ninth mission they were selected to carry out a pinpoint raid on a German port in the Baltic, where they narrowly avoided being shot down by enemy fighters.

When, against all odds, their first tour was finished, the crew rejected the offer of a six-month rest from operations to spend time in training units. Whilst most aircrew grasped at the chance of a break from the relentless stress of mission after mission, Geoff, George and the rest of the crew had become so sure of their own abilities, so confident and trusting in each other that they preferred to

stay together and continue to risk their lives over Germany rather than be split up.

Their next set of operations, as target-markers in 97 Squadron, involved a completely different set of dangers. Flying in daylight against precision targets in France while the Allied armies stormed the beaches of Normandy was the culmination of the skills that they had honed in the previous six months flying over Berlin and other German cities. The D-Day landings marked the end of the dream that the bombers would defeat Germany single-handed, but Geoff and his crew continued to play a key role in the war, preventing the build-up of German reinforcements and then targeting the sites that were launching V1 ‘buzz’ bombs against London.

Out of the 125,000 aircrew who served in Bomber Command in the war, 55,500 died and another 8,403 were seriously wounded. Only 24 per cent of the aircrew in Bomber Command survived death, injury or capture. In the face of these statistics, what Geoff and his crew did in their two tours of operations was truly remarkable. They were ordinary young men who faced the threat of death over Germany on more than fifty long, stressful operations, and they showed skill and courage of a very high order. These missions took place over just twelve months, but they never forgot their frightening, heart-stopping experiences over Berlin and other targets, nor the comrades they shared it with. That bond has remained with them to the grave.

The tale of Geoff, George and the others has been pieced together from a written memoir, remembered anecdotes and a few sparse contemporary records, and it deserves to be told. Sadly, in a few more years none of the men who carried out these or similar missions will be alive to tell their own stories.

Introduction

Days to Remember

TURNING RIGHT FROM the long, sweeping turn-off at junction 7 on the M11 motorway takes you on to a wide, little-used dual carriageway. It runs south of Stansted airport, from where, in 1944, United States B-26 bombers took off to attack German positions on the beaches of Normandy. Now twin-engined Airbus and Boeing jets, glinting in the sun, fly overhead on their way to cities in Europe and beyond. Further, and the road offers exits for quaintly named towns and villages that have lain for centuries in the gentle Essex countryside.

On the outskirts of one small market town, with narrow streets and old cottages with ornate rendered walls, lives Geoff King, now in his late eighties, less healthy and less mobile than he would like to be. Still with an active mind, he sits in his conservatory observing the rich variety of wild birds that flock to his country garden. Occasionally he studies the books, maps and photographs of a former life that surround his desk. A flight lieutenant in the Royal Air Force, awarded the Distinguished Flying Cross, Geoff King is never far from the memories of a short period, almost seventy years ago, when death sat on his shoulder. In just twelve months, Geoff formed a vital, rock-solid bond with six other airmen. It became the most fundamental aspect of

their existence, and was to remain with them in some form for the rest of their lives.

On the evening of 23 September 1943, at East Kirkby air base in Lincolnshire, Geoff sat in the second ‘dickie seat’ in the cockpit of a Lancaster bomber, call sign E Edward. The aircraft’s four Rolls-Royce Merlin engines – the same engines that had powered the Spitfire and Hurricane fighters in the Battle of Britain in 1940 – their twelve cylinders firing noisily but not yet delivering their massive 1,400 horsepower, sent vibrations along the wings and through the whole airframe. The cockpit was crowded with levers and dials, and the smell of metal, hot oil and high-octane petrol filled the fuselage, mingling with the exhausts from the procession of Lancasters in front of them.

It was four years into the Second World War. British and US forces had defeated the Axis armies of Germany and Italy in North Africa and had invaded southern Italy. There was heavy fighting with the German army as the Allies tried to advance up the Italian peninsula; the German army was also engaged in a dreadful, blood-soaked conflict with the Red Army in Russia. The United States Army Air Force (USAAF) had established bases in England, Stansted among them, and their big B-17 and B-26 bombers had started to launch daylight raids on targets in Germany, but had suffered heavy casualties. The Royal Air Force had assembled in Bomber Command a force of 650 front-line heavy bombers that were conducting a continuous campaign of night raids on German cities and towns.

Lancaster E Edward, part of the complement of 57 Squadron, was just another aircraft on the latest raid on a German town, but for the crew it was highly significant. None of them had ever flown on an active mission before. In the pilot’s seat to the left of Geoff was Flight Lieutenant George Laing, the ‘Skipper’, a tall, slim Canadian with piercing blue eyes and a wicked smile. He had a blunt, no-

nonsense approach to flying and to serving in the RAF that had already aroused the ire of some members of the squadron's hierarchy. George was keeping the big bomber on its course around the perimeter track of the airfield. It needed a deft hand on the throttles to prevent the large main wheels, which he could not see from the pilot's seat, from running off the concrete and becoming stuck in the muddy grass at its edge. The RAF training manual called on the captain of a bomber 'to make firm decisions in any emergency, and show calm determination throughout the operation, keeping in constant touch with all members of his crew. By leadership and courage he must earn the admiration of his crew, and by his flying skill, their confidence and respect.'

Directly behind the Skipper, shielded by a curtain, was Flight Lieutenant Roy Davis, 'Curly', from Manchester. Short, with dark curly hair, quiet and precise, Curly was the navigator, in Bomber Command's eyes the most important member of the crew. According to the manual he must 'prepare a flight plan and give accurate and frequent instructions regarding speed, height and course to the pilot throughout the mission, and must insist that they are obeyed in spite of external distractions. At all times he should know his position and be able to calculate the time of arrival at prescribed turning points, and rendezvous.'

Behind Curly, again on the left-hand side of the fuselage, sat the wireless operator, Warrant Officer First Class Vincent Day. 'Vin', a Londoner, was the shortest member of the crew and after a few drinks the life and soul of the party. The wireless operator had to keep watch on all the radio frequencies in use and monitor the transmissions from Base, Bomber Command, and on some missions from the Pathfinder aircraft leading the attack. All information had to be passed on quickly to the pilot, navigator and other members of the crew affected by it. The manual also said, ominously, that the wireless operator 'plays an

invaluable part in safety when ditching becomes inevitable'. This was true. The transmission of a signal containing the accurate position of a downed crew was sometimes the key factor in their being saved from a freezing death in the North Sea.

Further aft, past the thick main spar that crossed the fuselage at thigh height, was the mid-upper gunner's position, a clear Plexiglas turret fitted with two .303-inch calibre machine guns that rose out of the top of the fuselage. The turret was occupied by Warrant Officer First Class Frank Green, 'Flash', an Australian and so, like the Skipper, a long way from home. He was a long-distance runner, lean, quiet and patient. He was responsible for 'maintaining a continuous vigilant lookout for enemy aircraft throughout the operation, and in the airfield circuit and en route to and from his target must warn the pilot of any collision which is imminent.'

There was another gunner in the Lancaster, sitting cramped in a turret in the tail of the plane, with four machine guns pointing to the rear. The loneliest position of all, it was crewed by Pilot Officer Sidney 'Tommy' Thomas from Wales. 'Tommy' was the oldest member of the crew and was married – a rarity amongst front-line aircrew, many of whom were barely out of their teens. His was an uncomfortable position in many ways. It was very cold, hardly affected by the Lancaster's heating system, so every rear gunner was given an electrically heated flying suit. The position was also the most vulnerable to air attack, and bore the main weight and responsibility of defending the rest of the crew against enemy night fighters. His duty was 'to keep continuous watch throughout the mission, and when in the target area keep a strict lookout for hostile fighters, and not allow his attention to be distracted by the conflagration beneath him.'

Geoff King, or 'Kingy' as the Skipper called him, was the air bomber, popularly known as the bomb aimer, whose

position after take-off was lying in the nose of the aircraft looking down and forward. Gentle and fresh-faced, Geoff was quiet and precise. His job was to operate the bombsight and give instructions to the pilot over the target area to ensure that the bomb load was dropped accurately on the planned aiming point, ignoring whatever explosions and anti-aircraft fire they might seem to be flying towards. The bomb aimer was also required to operate the forward gun turret, which was situated above the clear blister that housed the bombsight and on which were mounted two machine guns.

Finally, sitting to Geoff's right was the flight engineer, Warrant Officer Robert Burns. 'Jock', as he was inevitably called, was a stolid engineer from Kirkcudbright in Scotland with a distinctive burr to his voice and a warm but dry sense of humour. He had to have an understanding of all the mechanical details of the airframe and the engines, and was responsible for logging and monitoring fuel consumption, operating fuel transfers in flight, observing oil temperatures and pressures, supercharger settings and engine-power output. He had to have the knowledge and skill to carry out repairs in flight where possible. 'Essentially the pilot's assistant, he has to be able to fly the plane when necessary, and, over the target, by keeping a careful lookout on the starboard side of the cockpit, give immeasurable assistance to the Pilot and greatly relieve his mental strain.'

So the Lancaster, with seven souls on board, moved round the perimeter track, getting closer and closer to the end of the runway and its own take-off. The Skipper alternately advanced the throttles for the engines on one wing and then the other to manoeuvre the aircraft round the airfield, Jock anxiously checking engine temperature and oil pressure. The gunners checked their safety catches and the hydraulic power to their turrets. Everyone checked their intercoms, the radios, the navigation aids,

ammunition, oxygen bottles, signal lamps, fuel load, oil and coolant. All this had already been checked that morning by the aircraft's ground crew, the engine mechanics, airframe riggers and armourers. It had been signed for by the Skipper, checked and tested again in the morning's air test, then checked yet again. Curly looked at his charts and rehearsed once more the heading and the flight times. Geoff went over in his head the target indicators and the geography of the approach to the target German city that he had been given at the briefing.

The Skipper focused on the aircraft ahead and on that part of the perimeter track that he could see from his position 20 feet above the concrete. He spoke on the intercom to each crew member in turn, then went through the take-off checklist with Jock: compass, air-speed indicator, heaters on, trim tabs on the elevator set, the rest neutral, master-engine fuel cocks on, selector cocks to no. 2 tank, booster pumps set, radiator flaps open, flaps set to 15 degrees. Now it was time to wait for a green light to flash on, then he could release the brakes and push all four throttles forward, port levers slightly in advance to counter the Lancaster's tendency to swing to port because of the rotation of its propellers. The noise of the engines rose to a roar and increased in pitch. The vibrations become more severe, and the Lancaster, carrying nearly 2,000 gallons of petrol, 4,000lb of high explosive and hundreds of small incendiary bombs, rolled along the runway and strained to reach its take-off speed of 105 m.p.h.

The heart rate of every member of the crew increased. As the tail wheel rose from the concrete now speeding beneath Tommy's turret, they all knew that they were at the point of no return. A slight mistake by the Skipper, an engine failure now, would end in their utter destruction, a livid, white-hot fireball and a thick column of black smoke marking the deaths of seven attractive, intelligent and highly trained young men.

On this particular late-summer evening, however, there were many emotions circulating through the hearts and minds of Geoff King, the Skipper and the crew. They had come together from many parts of Britain and her empire, and had known and flown with each other for several weeks. The awful tumult of war had enabled each of them to escape the limits of his background, education and geography, and to realize ambitions that earlier in his life would simply have been laughed aside. They had volunteered, and had been encouraged, in Bomber Command's constant search for new men, fresh blood. They had been well trained by men who knew what they were going to face over the skies of Germany, and the training had been intensive, drilling into them day after day the routines, the checklists, the calculations that would ensure that they could carry out their jobs and stay alive. They had got to know each other, learned to recognize each other's voices over the intercom, acquired a sense of how each man worked. But they had never flown over enemy territory and faced the guns of the German soldiers and airmen who wanted to kill them. This, they knew, was the one big test that would reveal whether their training had been good enough, whether deep inside themselves they were good enough to carry out the mission without letting themselves and their fellow crew members down. As the Lancaster's four big propellers hauled it into the sky and the Skipper raised the landing gear and retracted the flaps, and Curly read out the first heading of the night, the seven young men aboard E Edward were about to realize their lifetime's ambition: to be on active service in Bomber Command. They were also about to find out the truth about themselves.

1
The Tools of the Trade

GEOFF KING WAS born in January 1922, in a small hamlet in the parish of Berden, north-west Essex. Rural life in England had changed little since Constable painted his idyllic pastoral landscapes in this area a hundred years earlier. The cottage in which Geoff lived was built with beam-and-plaster walls, a thatched roof and brick floors laid over the earth. It had a small living room, a parlour and a tiny kitchen in a lean-to at the back. Upstairs there were two small bedrooms under the eaves. Water was drawn from a well and light was provided by oil lamps. It was dark and bleak.

The cottage was part of a small row attached to Peyton Hall Farm. It was an isolated life, and Geoff's sole companion was his younger sister Nan, but the farm was a marvellous place to explore and grow up. Opposite their cottage was a thatched, five-bay cart lodge with a large wagon bay at one end, and the massive wooden timbers of the building were a perfect climbing frame. Leading from the cart lodge was a gravel road which passed by the side of the horse pond, where the farm horses would stop to drink at the end of the working day. Here Geoff and Nan would spend hours with jam jars on the hunt for red-breasted sticklebacks and minnows, or early spring tadpoles. Another pond, sourced from a deep well in the fields, kept watercress beds topped up throughout the year,

and both pond and well were out of bounds for the small children because they were deep and dangerous.

The meadows surrounding the family's cottage were a glorious sight in spring and summer, filled with wild flowers, yellow cowslips and primroses mingling with pale blue harebells. The hedgerows with their giant elm trees also contained a profusion of wild flowers, and a nearby wood was carpeted with bluebells and daffodils. The fields and woodland teemed with wildlife – foxes, rabbits, field mice – and a love of nature remains with Geoff to this day.

Geoff's father and grandfather had both fought for Britain – his father, in the Essex regiment, had taken part in the Battle of the Somme in 1916, and his grandfather, a former quartermaster sergeant, had fought in the Boer War at the relief of Mafeking in 1900 and then seen action a couple of years later in Afghanistan on the North-West Frontier. Both men were now employed as horse-keepers at Peyton Hall Farm. Life was dominated by labour. Every day at four in the morning the two men would wake, go out to the stable to groom the horses and harness them up for the working day, which would begin an hour later. They would then work until the light faded. Lunch was taken in the fields – the top of a home-baked cottage loaf and a piece of hard, strong cheese, a big slice of home-made fruit cake, all wrapped in greaseproof paper in a straw shoulder bag. A First World War army canteen was filled with unsweetened black tea.

There was little in the way of mechanization; all the work on the farm was carried out by manual labour with the assistance of the great Shire horses. Two of these magnificent animals would be harnessed up to a single-furrow wooden-beam plough and, Geoff's father walking behind, the thick earth would turn over clean and fresh as the horses pulled, their breath turning to frosty clouds in the cold morning air. It took ages, but the field would look magnificent with its dead straight furrows. Next came the

horse-drawn harrows to break up the sods, then the seed drills.

Opening up the field for harvesting also demanded extremely hard work. To prevent the horse-drawn binder from damaging the crop, a 5-foot swathe was cut around the edge of the field by Geoff's father and grandfather using hand-held scythes. They would take it in turns to scythe down the wheat and tie it into loose sheaves; it would take days. As Geoff grew older this labour was eased as the farm acquired a small binder that could be pulled around the edge of the fields. This took just a few hours, greatly reducing the risk of the weather turning in the middle of the harvest and ruining the crop.

When the fields were cut the sheaves would be stood in stooks. These would be left in the fields for a few days for the grain and straw to dry, before being loaded on to horse-drawn carts and taken to the yard where the stacks were being built. Geoff would sometimes be allowed to lead the horses if there were not too many gates to negotiate. The animals sent hot gusts of breath over his head. Calm, biddable beasts, they towered above the little boy and could have hurled him into the air if they had wanted. In the stackyard the sheaves were built up into stacks, side by side, with enough space for the threshing machines to be placed between them. Then Geoff's father and grandfather would thatch them to keep the rain off the grain before it was threshed. Threshing was done by a machine hitched up to a steam traction engine – a fascinating monster to a young boy. It hissed and puffed on its great iron wheels, smoke pouring from its funnel, its brass gleaming, the smell of hot oil and coaldust mingling with the animal smells of the farmyard. Geoff was intrigued by this exotic machine and the sliding pistons, flywheels and pulleys that drove the thresher.

At the age of five it was time for school, which meant a walk every day to the little church school in Berden, 2½

miles away. Geoff's mother took him halfway there and he walked the rest of the way in the company of other children, across fields and along muddy paths, one day losing his wellington boots in the thick mud of a farmyard gateway. The walk to school passed another hamlet, Little London, home to another set of grandparents, and there Geoff, and later his sister Nan too, stopped for a slice of bread with sweet condensed milk poured over it, or sprinkled with very moist brown sugar.

The winter of 1927 was a severe one. It started snowing in December and continued for days and days. The small rural community quickly became isolated as the snow deepened in the fields and thick drifts blocked the lanes and pathways. Ice formed on the inside of the bedroom windows and people huddled round their coal-burning ranges for warmth, wrapped in their thickest jumpers and overcoats. When food started to run out Geoff's father and the other men from the farm started to cut their way through the deep snowdrifts and, after several days, managed to clear a way to the grocer's shop in Manuden, the nearest village. Geoff rode the horse and cart as it forced its way through the deep, sparkling snow that had blanketed the normal contours of the countryside. The drifts stood high above the banks at the sides of the lane and, despite their efforts to clear it, in places the snow still reached the wheel hubs of the cart, nearly touching the chest of the great horse. At the store the cart was loaded with fresh bread and other food, then the men and their young companion struggled back to their beleaguered families.

Every farm had its orchard, and another time-honoured occupation for small children was scrumping – the illicit gathering of fallen fruit, or, if they were daring enough, fruit still hanging on the tree. The farm had a large Victoria plum tree and, close by, a pear tree that produced sweet Williams pears. The plums ripened first, and the two small

children would make their silent, and they hoped secret, attack on the fruit. They walked along a deep ditch between the stackyard and the orchard, then from their hiding place crept under the hedge on the bank and crawled hurriedly to the fruit trees. After stuffing what fruit they could into every pocket and inside their jumpers, they crawled into a large drain-pipe that ran under a track leading into the stackyard, where they ate as much fruit as they could cram into their stomachs. Geoff later discovered that every raid they made was gleefully observed by the farmer and his family.

Nothing remains the same, and the charmed young life in this rural backwater wasn't immune to change. One day when Geoff was seven, a large biplane – he has no idea what type – flew low over the village while giving an aerial display at nearby Bishop's Stortford. It was the first aeroplane that he ever saw. Impressive and magical, it was also a harbinger of things to come. Barely eleven years later, so profound had been the changes in technology and circumstances that there was nobody in Britain who wasn't conscious of and apprehensive about aircraft flying above them. On a more immediate and personal level, the plane also seemed to mark a new phase, for a short while later Geoff found himself moving home. His family had been rescued from the rural squalor of their small cottage and given a modern council house with three bedrooms and electricity, water and gas laid on. This new row of houses had been built in the village of Manuden, which had around six hundred inhabitants. Geoff found the local school more rigorous and demanding than his previous one, and initially it was a shock, but he was keen to learn and soon started to do well.

The most exciting thing that happened, however, was the stuff of childhood dreams. At the age of eight Geoff was asked to work in the village grocery store. His parents had to get permission from the local education authority in

Saffron Walden and after a medical he was issued with a small red booklet that allowed him to work part-time. He was paid 5 shillings – 25 pence in today's money – plus a quarter of a pound of sweets a week!

The grocer's sold everything from pins to motorcycles and supplied all the local hamlets around the village. It also housed the post office and had the only public telephone in the village. Geoff prepared the orders of tea, sugar, dried fruit, biscuits, cheese and anything else that the customers ordered and delivered them on his bike. At the back of the shop was a baker's, making fresh bread and cakes, and at the side was the coalyard, where coal and coke would be shovelled into sacks weighing a hundredweight or half a hundredweight. Deliveries were still made by horse-drawn vehicles, the bread taken out daily in a small two-wheeled van and the coal weekly on the back of a four-wheeled cart.

The bakery in particular was a source of lasting memories for Geoff. The smell of the baked dough and the taste of freshly cut ham in a hot 'huffer' – a type of roll, which they made from pieces of dough from the offcuts of the loaves – he considered to be without equal. His love of tasty food never left him, and his familiarity with baking gave him a useful point of contact with the cooks and caterers he was to meet in his service life.

At the age of fourteen he left school with basic qualifications in Elementary Education and was offered a three-year apprenticeship at Millars in Bishop's Stortford, a company that manufactured heavy plant and machinery for the construction industry. Clocking in each day at seven, with an hour for lunch and a morning and afternoon tea break, he started working in the machine shop, learning to cut screw threads and operate capstan lathes to very fine tolerances, and then moved on to the drawing office. In retrospect, it was a key moment in Geoff's life. It was now that he made the final transition from an old, timeless, rural England to a modern, industrial life and, unbeknown

to him at the time, it provided him with the skills that later would put him in the nose of a Lancaster bomber.

A year later, however, it might all have ended for ever. In August 1937 Geoff was cycling to work with a colleague. At a crossroads in the town, not far from the Millars factory, a car hit both of them. Geoff's workmate was merely bruised, but Geoff was carried along by the car for 100 yards before falling off the wing on to the road. Unconscious, he was taken to Rye House Hospital, where he was found to have a depressed fracture of the skull. Lying in a darkened room, he was kept on the danger list for over a week before he recovered sufficiently to be moved to a general ward. It was an anxious and worrying time for his parents, but eventually he was allowed home. He spent the next month recuperating, but when he returned to work he found that he had not properly recovered. His balance was affected and he had sudden headaches and nosebleeds.

Rightly concerned, Geoff's GP sent him to Harley Street for an examination by the eminent surgeon Lord Horder, a consultant to the Royal Family. His diagnosis was succinct and unhesitating. An operation was needed to open up Geoff's skull and remove the pressure on his brain, and there was not a moment to lose. This, however, was in the days before the National Health Service, so the costs of the operation would naturally fall to the insurance company of the driver who had careered into Geoff and his friend. The company objected to the expense, so once more Geoff took the train to Liverpool Street Station and made his way across town to Wimpole Street to see the insurance company's own doctor, then on for a second opinion to the London Hospital to see a neural consultant. Neither could argue with the original diagnosis, so Geoff went back into hospital to await the operation. Any sort of surgery then was, of course, more dangerous than it is today, and there were no antibiotics, but in Lord Horder's opinion Geoff had

no choice. Entering the hospital, it was impossible for him not to feel anxious about what the future might hold.

The operation, however, had a happy outcome and eventually Geoff returned to work at Millars. He was told that he would have an area of vulnerability in his skull for the rest of his life and that he should never play sports or become involved in any other activity that might result in a blow to the head. Nevertheless, he continued to play tennis and ride his bike, and of course nobody could foresee what was going to happen in a few years' time.

In Millars it was time for Geoff to try his hand at the thread-cutting machine in the workshop. The machines were all driven by pulleys from an overhead drive shaft that ran the length of the factory, and this particular machine was right at the end of the shaft, where the rough forge castings were stored. It was roofed but otherwise open to the elements, even in winter. Sometimes the wind and snow blew in, but Geoff continued to work to extreme tolerances, despite being bundled up in overcoats, mufflers and mittens. This was before computers had transformed machinery; the most precise and accurate equipment was still manufactured by workmen using their own skill and craftsmanship, honed by years of apprenticeship. When Geoff was able to produce flawless work in the screw-cutters, he was allowed to start training on centre and turret lathes, making round- and square-sectioned screw threads and eventually graduating to work on large centre lathes making components for the various jigs used on the assembly line in the factory. All the cutting tools that he used were his responsibility and he kept them sharp and accurate, grinding and forming them so that he could work to tolerances of 1,000th of an inch. He took considerable pride in his developing craftsmanship, and he was growing up. With the prospects of finishing his apprenticeship, and the rising demand for skilled craftsmen in the car and

aircraft factories springing up in Luton and other towns just a few miles from London, the future looked good.

2
The Skipper Gets Inspired

GEORGE LAING WAS born 3,000 miles away from the sleepy hollow of Berden, in another small town – Durban, Manitoba – in the great prairies of Canada. His parents, Scottish immigrants, had led a peripatetic life. His father, Charles, had immigrated to Canada from Scotland in 1912, but at the outbreak of the First World War in 1914 he had enlisted in the armed forces. Charles Laing fought, like Geoff's father, in the Battle of the Somme, and was affected by a German poison-gas attack, but he recovered and continued to fight in the army until the Armistice. He travelled back to Scotland and in Edinburgh met and married his wife, Elizabeth, with whom he returned to Canada in 1919, intending to settle down in the new country.

The Laings lived first in Alberta, where Charles worked for a construction company building a dam on the Bow River, but he suffered continual health problems as a consequence of the gas attack in the war. He had to face the fact that he was no longer fit enough to work in a physically demanding industry like civil engineering, so he decided to move further east. The family legend is that he and Elizabeth reached Winnipeg and took a train along the Swan River Valley to the end of the line. There, in the small town of Durban, they decided to set up a general store. They were in the heart of the flat wheatfields of Canada,