

## **BOMBER COMMAND & NOTES OF SOME OF MY EXPERIENCES DURING 1941 - 1945**

**Churchill's Minute of 8 July 1940 about Bomber Command to Beaverbrook  
(Minister for Aircraft Production)** - made after the fall of France and the retreat of the British Forces from Dunkirk ,when Britain stood alone against the might of Germany under the control of Hitler.

" But when I look round to see how we can win the war I see that there is only one sure path. We have no Continental army which can defeat the German military power. The blockade is broken and Hitler has Asia and probably Africa to draw from. Should he be repulsed here or not try invasion he will recoil eastward, and we have nothing to stop him. But there is one thing that will bring him back and bring him down, and that is an absolutely devastating, exterminating attack by very heavy bombers from this country upon the Nazi homeland. We must be able to overwhelm them by this means, without which I do not see a way through."

A sustained air bombardment of Germany was therefore a major instrument of military policy, all the more appealing to the Nation as a whole because of the Blitz - As Churchill himself said, the almost universal cry was "Give it to them back!"  
( Extract from Most Secret War - R.V. Jones)

With regard to the Blitz, I personally experienced before I joined Aircrew in August 1941, seventy-eight consecutive nights when the German Bombers flew up the Thames and bombed London ( East London had extensive damage and suffered many thousands of civilian casualties).

One of the last of these raids, and also the worst, occurred on 29 December 1940 when 300 tons of bombs (mostly incendiary bombs) were dropped on the City and surrounding area. The whole area was a mass of flames. (There is a famous photograph of St. Paul's in sharp relief against a skyline of fire). I walked through the devastated area the next morning on my way to Unilever House (my place of work before I joined the RAFVR).

On 29 December 1943 exactly three years later to the night, I 'gave it to them back!' I flew as navigator, in a Halifax Bomber as one of a force of over 700 Bombers to Berlin. It was the fifth heaviest raid ever made against Berlin and over 2300 tons of incendiaries and bombs were dropped in about twenty minutes!

### **When Britain stood alone**

After Dunkirk in 1940 there was no hope of bringing the war to Germany on land until the success of the Second Front in 1944 and the Invasion of Germany in 1945. For the first three and a half years only one force, Bomber Command was able to do so from the Air, and keep the torch of freedom burning for Britain and occupied Europe.

For the rest of the war Bomber Command was joined by the American Airforce who supported the air war with a substantial heavy bomber force operating in daytime from East Anglia.

#### 1943 - The growth point for Bomber Command

By 1943 Bomber Command, now under the direction Air Chief Marshall Arthur Harris, had grown into a powerful heavy bomber force. A famous biblical quotation used by Arthur Harris about Germany's earlier bombing of British cities, summed up the future for Germany's industrial heartland - "they have sown the wind, and they shall reap the whirlwind".

Bomber Command was able to sustain some 700 to 1000 aircraft, which could deliver in excess of 2000 tons of bombs on a target in one bombing raid. It flew at night throughout the year at relatively high altitudes; and in all weathers. It also used the long winter nights to penetrate deep into Germany to reach their industrial cities. Flying at over 10000ft required crew to wear oxygen masks and at 20000ft., temperatures could be minus 40 degrees centigrade! The sole heating for the crews would be from movable flexible pipes from the engines, or for the air gunners, electrically heated suits. Only fog, snow and ice around their base airfields and perhaps a full moon, would hold the squadrons back from operational flying.

Bomber Command flew in a concentrated stream and bombed targets in a matter of 20 minutes or so. Techniques were developed to smother the ground-to-air radar defences by all aircraft dropping metalised strips ('window') en route and over the target. The mass of strips obliterated the German radar responses from the bombers, so that the ground defences were unable to direct nightfighters or ack-ack to their quarry. Ground control of the nightfighters was also broken by jamming their intercom frequencies. Bomber wireless operators would tune to the nightfighters' frequencies and transmit engine noise to drown out communication. Specially equipped squadrons flying in or near the bomber stream would carry out operations known as ABC (Airborne Cigar), which interfered with radar responses from nightfighters, causing confusion in ground control operations. These squadrons would also tune to the ground control frequencies and with the aid of German speaking specialists gave false directions to the German pilots. When the German defences resorted to broadcasting coded music over national broadcasting channels, to indicate to the nightfighters where the targets were, these were jammed by over-playing the broadcasts, very loudly, with previously recorded Hitler speeches!

The development of the Pathfinder Force and the introduction of more sophisticated radar aids, especially H2S, enabled Bomber Command to keep closely to prescribed routes and to locate targets more accurately. This was achieved by the Pathfinders dropping coloured sky or ground markers near turning points and directly on the target, the whole operation being directed by Master Bomber crews flying at the forefront of the main force. In addition, other radar techniques for guiding bombers and indicating the release point for bombs, known as Oboe and G - H, were very accurate methods for pinpointing targets, especially in areas like the Ruhr Valley. All these techniques helped to produce highly concentrated bombing results.

These successes however were not without heavy losses to Bomber Command \* as the German ground control revised their procedures and the German nightfighter force expanded. The nightfighter force (especially squadrons equipped with twin

engined aircraft) became more freelance and extremely skilled due to the re-equipment of their aircraft with cannon firepower and radar air interception and homing techniques.

Bomber Command took a major part in destroying much of Germany's industrial base. It also caused the German ground defence forces to divert, in 1943-45, a huge number of men (almost 900,000) and all types of artillery (56,500) from the Western and Eastern Fronts to defend the skies over German cities, especially Berlin and cities in the Ruhr Valley. Additionally 1,200,000 civilians were employed in civil defence and in repair work.

Bomber Command delayed the use of the V weapons in 1944 by many months, and saved thousands of lives and possible destruction of much of London, especially the eastern areas of Greater London.

It was responsible, along with the American Airforce, for destroying in 1944-45 much of the armament, transport, radar and communications infrastructure in occupied Europe and Germany. Additionally the German oil refining industry was destroyed. These successes eventually grounded the German Airforce, paralysed the German Army, and advanced their surrender.

#### \*Bomber Command suffered very heavy losses

From 1939 - 1945 Bomber Command suffered some 60% casualties; a number greater than any other British and Commonwealth Force during the Second World War (only exceeded by the German U - Boat Force who suffered some 70% casualties).

Out of a force of 125000 Aircrrew :

- 56000 were killed (equivalent to almost one fifth of all the deaths sustained by the British and Commonwealth forces for World War 2, and equal to all the Officer deaths on the Western Front - Vimy Ridge, the Somme, Passchendaele, Ypres etc during World War 1).
- 9000 were injured or wounded.
- 11000 were POWs or were missing.

In the peak times of 1943 and 1944 less than 10 crews in a 100 crews would survive their first tour of 30 operations. The Halifax and Lancaster Bomber would have an average life of 40 operational hours - about 5 or 6 missions.

The worst month of the war for aircraft losses was January 1944 when 633 aircraft were lost out of 6278 sorties - just over 10%.

This was also the month I was shot down over Berlin on my tenth operation, when my Squadron (102) lost 7 out of 15 aircraft - a loss of 47% (a loss of aircraft in percentage terms greater than that suffered by 617 Squadron on the Dam Busters Raid). The following night my Squadron lost a further 4 aircraft out of 16 on a mission to Magdeburg, Germany. Shortly after these disastrous losses, the Squadron was withdrawn from operations over Germany until they were re-equipped with the improved aircraft, the Halifax MK 3.

The worst single operation of the war was in March 1944, when 94 aircraft were lost on the Nurnberg raid with 14 more aircraft crashing on return to UK. On this raid more aircrrew in Bomber Command were killed, than were killed in Fighter Command for the whole of the Battle of Britain.

### Battle of Berlin

There were 16 raids during the Battle of Berlin from the end of 1943 to early 1944. In this time some 500 aircraft were lost on the Berlin raids. Over 3500 aircrew were lost, of which some 80% were killed! More than 2000 of them lie buried in the British War Graves Cemetery in West Berlin - two of my crew are buried there, two others who have no known graves are remembered on the RAF War Memorial at Runnymede.

### Bomber Command was heavily criticised for the destruction of Dresden and Chemnitz in February 1945

Dresden and Chemnitz were regarded as non-military targets. Dresden in particular was a cultural and arts centre since medieval times. They were also great fire risks because of their wooden architecture.

As the Russian Forces on the Eastern Front entered East Germany in 1945, Stalin requested to Allied Command that Leipzig, Chemnitz and Dresden be bombed as these cities were strategic railheads for moving German troops to the Eastern Front.

At that time I was a POW at Stalag IVB (Muhlberg on Elbe) and I was being moved to Oflag VIIB (Eichstat, Bavaria) with four other POW's. The route took us through Chemnitz station and we spent the best part of a day waiting with our German guards on the station for a connection to go south to Bavaria. During this time we witnessed several German Panzer troop trains en route for the Eastern Front pass through the station. The date was 2 February 1945 just 10 days before Chemnitz and Dresden were bombed. I understand since, that the information about the date of these troop movements was not known at the time; otherwise the Allied Command might have taken action earlier.

Nevertheless Stalin was right, they were strategic railheads, and we (POW's) were in the unique position of being the only Allied witnesses to see it. (I have a reference to this event in my wartime log entered whilst I was still a POW in Oflag VIIB).

The bombing was shared by Bomber Command and the American Airforce. The towns were burnt out and the casualties were very high indeed.

Personally I refute the charge, having seen the Panzer troop trains passing through Chemnitz, that these were open cities, wilfully destroyed. The Allied Airforces carried out what they were ordered to do - to aid the Russian Forces in what was total war in those days.

These charges of wanton destruction were, after the war, levelled at Air Chief Marshall Arthur Harris (who was denied a Peerage), and Bomber Command by the post war Labour Government. The accusations have been made ever since by all and sundry. They choose to forget that some 60,000 British civilians were killed as a result of German Airforce bombing and use of V weapons, on London and other Cities.

As a result campaign medals were not awarded to Bomber Command.

Arthur Harris said "Every butcher, baker, and candlestick maker, within two hundred miles of the Front got a campaign medal, but not Bomber Command".

When one reflects on the contribution that Bomber Command (a front line force without doubt) made to the success of World War 2; and the casualties and the

stress the aircrew (mostly in their early 20's) suffered in achieving it, it is a travesty of justice to level the accusation of wanton destruction. Fortunately, with more thorough research, especially involving veterans of Bomber Command, the books of recent years have put the records straight.

### **Summary of my aircrew training days**

I joined the RAFVR in August 1941, wore a white flash in my forage cap to indicate aircrew; and after a long wait at St John's Wood, London, I was posted to Initial Training Wing Torquay, Devon.

Here I learnt the rudiments of subjects such as meteorology, air navigation, aircraft recognition, wireless telegraphy etc, alongside some square bashing and clay pigeon shooting.

I was promoted from AC2 to LAC and posted to Marshalls Airfield, Cambridge for a flying test. I flew with an instructor in a Tiger Moth for about eight hours and passed the initial experience requirement necessary to join the Arnold Training Scheme in the USA.

After some Christmas leave and a short stay at Heaton Park, Manchester, I joined the troopship 'Montcalm' at Gourock, on the Clyde, bound for Halifax, Canada.

We were accompanied by another troopship the 'Vollendam' and we were supposed to have had a destroyer as escort for the crossing. Unfortunately the destroyer had to return to base. (It was a World War 1 American destroyer, one of fifty given to Britain in exchange for the use of Bermuda I believe, and it could not cope with the bad weather we were experiencing).

Luckily our two weeks crossing in January 1942 was uneventful although half a dozen ships were sunk in the same area of the Atlantic as ourselves. At this time in the war as many as 60 ships a week were sunk by German U boats in the North Atlantic.

From Halifax we were the first RAF aircrew trainees to travel to the USA in uniform. America had become our Ally just a few weeks before, (after the infamy of the Japanese who had bombed Pearl Harbour, on 7 December 1941, without formal declaration of war, sinking much of the Pacific fleet).

After suffering the privations in Britain - bombing, blackout, blockade, rationing of virtually everything, and the military setbacks such as experienced in Norway, France and the Middle East, America was no doubt the land of milk and honey.

We travelled to 'Turner Field' in Albany, Georgia for a month's acclimatisation, during which time I celebrated my 19th birthday. It was a base for the American Army Air corps cadets.

Here we were given Army Air corps clothing and were to be treated like the cadets to all their style of intake training such as :-

- drilling and physical training (callisthenics at 6 o'clock in the morning)
- being given literature on expected behaviour and etiquette!
- marching behind a brass band, playing Army Air corps music, to all meals and to Retreat (lowering of the American Flag in the evening).

Having endured basic rations in Britain for a considerable time, every meal at 'Turner Field' was a feast, and as cadets, we were waited on hand and foot by coloured waiters (at this time in the South, coloured people were not considered equal to whites; they were required to sit in the back of buses and in separate parts of the cinema etc and were treated generally as second class citizens). Back in Britain you had to queue up for your meals, get all your meal on one plate, take your own cutlery (in your gas mask case) and wash it up afterwards in a tank of tepid greasy water.

After a month I was posted to Lakeland, Florida (in March 1942) to a Civilian Flying School for Primary Flying Training.

Here I had a very pleasant time indeed. I went solo in a 'Stearman' biplane after the Instructor had 'buzzed off' a herd of cows from the auxillary landing field by diving at them! I had 40 hours solo, much of which was aerobatics - stalls, spins, loops etc. The flying was over lakes and orange groves in the Florida sunshine. As English Cadets we had much hospitality with local American families and their daughters!

After completion of the Course, we had a few days leave, and a colleague and I hitched a lift to West Palm Beach. We booked into an hotel, but within a short while we were invited to stay with an American lady (Mrs Hubbard), who turned out to be the daughter of Rockefeller (a multi-millionaire and philanthropist). She had an English lady staying with her (who had a son in the RAF) and between them they looked after us for the next two days, like two long lost sons. Her home could have been in Hollywood; it had a beautiful swimming pool within a magnificent Italian styled garden, with an arcaded drinks bar at one end.

My greatest memory of this occasion, was to meet - and be photographed with - one of the few surviving Fleet Air Arm pilots, who in the previous year had torpedoed the pocket battleship 'Bismark', damaged its rudder, and enabled the British Fleet to sink it in the English Channel. He was touring America as a hero and had been invited to Mrs Hubbard's home. (The sinking of the Bismark was a great British victory, it having sunk the battleship 'Hood', with the loss of nearly 1500 lives.)

After this short break (at the end of April 1942) we were posted to an Army Aircorps Flying School in Georgia for Intermediate Training. Here I started a course of flying on a basic trainer with an Army Instructor. After a number of flying lessons I was unable to convince my Instructor I was safe to go solo on this plane and that was the end of my pilot training. (The US Army Aircorps had a policy of failing a high proportion of cadets and I was one of them; had I been trained in an RAF Flying School in the States the story might have been different). I was disheartened at the time but took the view that I could have killed myself, as one of my friends did shortly afterwards!

I took the train back to Canada (in June 1942) to the RCAF Camp at Trenton, Ontario, and after some interviews and an exam I remustered to U/T Navigator. This transfer did at least give me a chance to see some more of Canada, and I was able to visit Lake Ontario, Toronto and Niagara Falls before I moved on.

A party of us were moved westward for a day or so by train, through impressive Canadian countryside with pine forests and rivers solid with floating logs. The train was pulled by an enormous steam engine, snorting its way through this majestic

scenery with hardly a sign of civilisation anywhere. We stopped eventually at Brandon, Manitoba, where we stayed awaiting a posting to an Air Navigation School. Whilst at Brandon I managed to spend a weekend at Clear Lake about 60 miles north. It was a beautiful lake surrounded by pine forests (with log cabins, a restaurant, a central hall), where swimming, fishing, and rowing facilities were available. In the evening dances were held in the hall and a Royal Canadian Mounted Policeman was in attendance - it was just like a picture post card! At the dance I met a girl who lived in Winnipeg, who I was able to see again on a number of occasions, as I was posted to the Winnipeg Air Navigation School about a week later (August 1942).

Winnipeg Air Navigation School services were run by civilians, with the teaching of all the subjects by the RCAF.

Winnipeg was situated in the vast grain growing area of Manitoba which was as flat as a pancake - when flying at a few thousand feet you had an unrestricted view to the horizon. The towns, marked by grain elevators and water towers (with the town's name painted on the side), were spaced along the railway line, with other towns scattered in the countryside. All were visible on any cross country route, thus it was impossible to get lost during navigational exercises, even at night, as there was no blackout in Canada!

It was a pleasant, comfortable three months training, spending about half our time in the class room and half on air exercises. We flew in ancient Anson aircraft with civilian pilots, and apart from our air exercises we had to wind up the wheels on take off and down on landing!

The main things I can remember were: the crash of a light aircraft only a few yards away, and the raging fire that ensued that made it impossible to rescue the pilot; the freezing nights practising astro sextant shots. And the more pleasant activity of eating Christmas-like turkey dinners every Sunday, and going to dances in Winnipeg, with my friend whom I had met at Clear Lake, Brandon, at weekends. I was awarded my Navigator's Wing on 20 November 1942 and was promoted to Sergeant (I was just a few marks short of getting a Commission).

A few days later we were all on the long train journey back to Moncton, Halifax, breaking our journey for a memorable stopover in Montreal. We returned to England on the luxury liner the Queen Elizabeth, which had been converted into a troopship. We had two meals a day, there were 17 bunks to a state cabin, and we travelled without escort taking only four days to cross the North Atlantic. We were home on leave for Christmas - just one year had elapsed since I was on embarkation leave for my training in North America.

The beginning of 1943 brought about a glut of trained aircrew from the North American and Commonwealth Training Schools.

As a result many hundreds of us were held in holding centres in Harrogate and Bournemouth to await postings. To fill in the time I was posted with others to an RAF Regiment Training Course at Whitley Bay on the coast near Newcastle in the freezing weather of February 1943.

It was not until late April 1943 that we took up flying again, when a party of us were posted to the RAF Air Navigation School at Jurby, at the northern end of the Isle of Man.

For the next three weeks, still flying in Ansons, I brushed up my navigation (not having flown for five months) with day and night cross country exercises around the Irish Sea, the east coast of Northern Ireland and the west coast of Britain. The weather was quite cool and we even experienced snow in the first two weeks of May. On free days we would take the small 'toast rack' railway from Jurby to Douglas (capital of the Isle of Man) for a day out - it was very quiet in wartime. The only feature I can remember was that all the hotels along the sea front were wired off, as they housed many of the aliens that had been interned for the duration of the war.

On the completion of the course we had some leave and I was posted to the RAF Operational Training Unit at Kinloss, Scotland, on the Moray Firth. I was now set for 'crewing up' in Bomber Command and getting nearer to operational flying.

I arrived at Kinloss in the first week in June. The weather was marvellous and stayed like it for the six weeks we were there. For part of the time a party of us were housed in a large mansion-like property (just for sleeping purposes) and each of us was given a bike to get to and from the airfield. The countryside was beautiful and with the consistent fine weather and the birds singing in the trees and hedgerows, cycling was an added pleasure. It was so peaceful the war seemed very far away indeed. RAF Kinloss was equipped with Whitley Bombers (withdrawn from operational flying in 1942) and were known as 'flying coffins' as they were very sluggish responding to the flying controls - a major defect we were to discover when flying in formation over Elgin (to celebrate a special occasion).

After a few days we were crewed up and our crew consisted of :-

F/O S.R.Vivian	Pilot	'Viv'
F/Sgt R.C.Wilson	Navigator	'Reg'
F/O L.A.Underwood	Bombaimer	'Laurie'
Sgt W.Ross	W/OP AG	'Bill'
Sgt J. Bushell	Rear AG	'John'

During the ensuing six weeks we had day and night flying fairly frequently, carrying out exercises such as cross country and formation flying, airfiring, fighter affiliation and bombing practice.

We had some ground work also. I can remember being introduced to the Distant Reading Compass, located near the tail of the aircraft away from magnetic influences. It was a giro-controlled compass, very stable (which could be adjusted by the navigator for the earth's magnetic variation to give true north readings), with electric repeaters for the pilot, navigator and bomb aimer.

I can also remember flying at night, trying to practise astro-navigation, with the sky being barely dark. In the north of Scotland in mid-summer at a height of 10000 ft the sun's glow was present on the horizon most of the night. In this light the Grampian mountains and the Highlands below looked very gaunt and awesome indeed.

At the end of our training our crew had become great friends. We spent time together at Findhorn Bay (on the Moray Firth) on some afternoons, and in the pub in Forres town on some Saturdays. And once in the Mess all one weekend, when we were confined to the Station by the C.O. because we landed in error at RAF Lossiemouth (an adjacent airfield on the Moray Firth) instead of Kinloss! But we drank a lot of beer that weekend!

We left Kinloss for some leave towards the end of July, never to see 'Viv' our pilot again. Little did we know that 'Viv' would be killed in three weeks (just a few days

after getting married on leave). This was before we even reached RAF Rufforth in Yorkshire, our Conversion Unit for Halifax Heavy Bombers.

We arrived at RAF Rufforth in the middle of August to find that 'Viv' had been reported missing on 10 August 1941 flying as second pilot on a raid to Nurnburg. (I have learned since that the aircraft crashed near Ramsen/ Bollanden, Germany. Six were killed including 'Viv' and two became POWs).

All pilots, as captains of their aircraft, had to have two operational flights - 'second dickey trips' - before they could fly their own crews on operations. 'Viv' was on the second of his flights.

We were now a headless crew, awaiting the appointment of another pilot.

From now on it would be apparent that our lives in Bomber Command were becoming a lottery. There was no way we could tell, even at a Conversion Unit before Operations, whether from day to day we would live or die.

During our short stay at Rufforth, about 60 aircrew were killed due to mechanical failure or accidents. Among other accidents, I can remember that two aircraft collided in mid-air, another crashed when a propellor flew off into the fuselage, and a further aircraft crashed at night on a practice bombing raid exercise.

After a few days F/L PGA Harvey was appointed as our pilot, Sgt A McCarroll as our mid/upper gunner (formerly the drummer in Maurice Winnick's dance band - well known on BBC radio pre-war) and Sgt J McArdle as our flight engineer. This completed the crew for our 4 engined bomber, i.e. the Halifax.

F/L Harvey was an experienced pilot having two operational tours in the Middle East in 1941 on Wellington Bombers. It was a mystery to us why he was taking on another tour. Flying on operations deep inside Germany in 1943 was another dimension for him, (with cities heavily defended by ack-ack and night fighters armed with cannon and equipped with radar homing devices), to what he had experienced in the Middle East in 1941. Especially as many of his sorties (whilst being in a war zone) had not been bombing missions.

As F/L Harvey was an experienced pilot, the minimum time was taken to crew up, get familiar with the Halifax, and take on the new disciplines of a flight engineer and a mid/upper gunner. For my part I had to learn how to use 'Gee', a radar device for measuring pulses from two transmitting stations displayed on a cathode ray tube, which were then plotted on a special gridded map, to give pinpoint accuracy of your ground position.

There were air exercises for bombing, airfiring and fighter affiliation. The latter was an exercise to remember (the date was 2 September 1943). For this exercise we flew at 10000ft and a fighter would 'attack' from behind. The two gunners would then cooperate with the pilot so that he could take evasive action. F/L Harvey in taking evasive action managed to turn the aircraft on its back, and it was several thousand feet later before the aircraft was righted again. I had spun round in the nose of the 'plane, broken rivets were rattling around inside the fuselage, and the chemical Elsan toilet at the back of the aircraft had emptied its contents all over the rear of the plane. We were all shaken up by the experience, especially as F/L Harvey had 390 operational flying hours to his credit and we did not expect him to lose control.

However some good came out of it, in that John the rear gunner decided that from then on he would store his parachute in his gun turret, rather than in the fuselage as required by regulations - this action would later save his life!

I also decided I would be prepared and have a routine to cover baling out and I learnt the following procedure :-

'Helmet off' You could break your neck with the helmet still attached to the oxygen supply and intercom!

'Parachute on' You could jump out without it!

'Handle on the left hand side' I was left handed (aircrew have been killed with an un-opened parachute with the handle - D ring - on the 'wrong' side!).

In addition (as navigator) I decided that over the target I had a minute or so to spare, so I could fold back my seat, lift up the navigation table clear of the escape hatch and be ready to bale out immediately if necessary. I believe these plans gave me and Laurie (bomb aimer) additional vital seconds, and with the action John took, the three of us saved our lives nearly five months later.

In a week or so we were posted to 102 Squadron to commence our operational service.

102 Squadron 4 Group Bomber Command - Pocklington Yorkshire

Pocklington airfield was situated 12 miles south-east of York, with 800ft hills 3.5 miles NE of the airfield. (Whilst I was there two Halifaxes with heavy bomb loads crashed into these hills after takeoff - that particular runway was not used after that.) It was a wartime airfield with only temporary accommodation, thus all our billets were in Nissen Huts. They had semi-circular corrugated iron roofs and walls, with concrete ends and were dispersed in fields nearby. They were dreary inhospitable places in winter, each heated only by a small central coal burning stove.

Where possible, when not on duty, we sought refuge and relaxation in the 'comfort' of the Sergeants' Mess or in the pubs (i.e. Betty's Bar) or dance halls (i.e. DeGrey Rooms) in the city of York.

Pocklington had three affiliated airfields - Elvington, Full Sutton and Melbourne. All the airfields were commanded by Air Commodore 'Gus' Walker, at that time the youngest Air Commodore at age 31 in the RAF. He had lost his right arm when a Lancaster exploded on the ground at the airfield he commanded, Syerston, in 1942.

We arrived at Pocklington in mid-September 1943. F/L Harvey was promoted to Acting Squadron Leader in charge of 'A' Flight and we became his crew, which meant we would not fly as frequently on operations as other crews. (This was considered to be a mixed blessing as a tour - 30 operations - would take longer.) Over the next two weeks we completed a number of cross country exercises, mostly for me to practise my navigation with new equipment. At Rufforth I had 'Gee' radar which enabled me to plot accurate ground positions essential for calculating wind velocities - the basis of all air navigation. Unfortunately the Germans were able to jam this equipment, so that as an aircraft approached the coastline of Continental Europe, the radar pulses were obliterated. Thus the navigator had a race against time to get as much data as possible before we reached the 'Enemy Coast'.

At Pocklington we had a very new piece of radar equipment called 'H2S' (height to surface). Located in the aircraft it sent out pulses to the ground around the aircraft for 15/20 miles. Reflections were received back as bright specks on a cathode ray tube. The density of the reflections depended on whether the aircraft was flying over sea, land, hills, rivers, cities, lakes etc thus a rough topographical map of the ground (the quality of the picture varied) was displayed on the cathode ray screen.

Best map results were between land and sea, but provided the navigator was reasonably aware of his ground position, he could recognise coastlines, large rivers and lakes, and sizable towns, to and from the target. Thus he could plot accurately the bearing and distance from these land marks, and be able to recalculate wind/velocities, maintain required tracks, ground speeds and times to the target. For some more experienced navigators, they would have the ability to blind bomb, without the need to use the markers dropped by Pathfinders (who incidentally also used H2S equipment).

H2S could not be jammed, but nightfighters could 'home on' to the H2S frequency if it was continuously switched on (a hazard not known to aircrews for some time after the system was in operation!). Some aircraft were shot down this way.

Another new piece of equipment called the 'airplot indicator' was available to the navigator. This linked the gyro compass and airspeed indicator to provide a continuous read out of the air position in latitude and longitude. It was a useful guide to have available, but no navigator would rely on it entirely and give up his own airplot drawn on his own navigational chart.

We also had a hand held 'I.C.A.N. computer', a manually operated vectoring device on which we could plot a course and calculate the airspeed (to make good our desired track and ground speed), before we added this information to our main chart. Two other navigational aids we had used in training were radio bearings taken by the wireless operator and our own astro sight shots. The astro shots were converted to position lines by use of air almanacs. Both these methods were not practical when operating over 'enemy territory'. Even more so when considering that operational aircraft were faster, and the need at any moment to take evasive action (because of flak or nightfighters) would make these methods inoperable.

There were times when navigational aids were not available to us and map-reading over cloud or at night, especially at high altitude, was not possible. Then fall back on 'dead reckoning' methods was necessary. This required accurate plotting of the air position and the use of wind velocities supplied by the Meteorology Officer, or use of those already calculated by the navigator en route. In both these cases they would need to be modified to cater for forecast weather and wind velocity changes and any alterations in altitude during the flight.

Preparing for a bombing mission on an operational squadron was quite a lengthy procedure, occupying a good part of the day prior to the night's operation. About mid-morning 'Ops On' would be announced if there was to be a raid that night. Soon the ground crew were busy checking each aircraft's radar, guns, engines etc and filling the wing tanks with over 2000 gallons of fuel. Armourers would load the guns with ammunition and bring up and mount a mix of high explosive and incendiary bombs in the bomb bays for that night's target. (The bombs were stored in a remote part of the airfield for safety, behind blast walls. They would be fused for the target and towed on long low trolleys, by tractor, to the aircraft dispersal points.) Although the target was not disclosed at this stage because of the strict security rules, ground

crews would have a good idea from the amount of fuel loaded and the type of bomb load, as to where the target would be.

About the same time as the ground crew activities, aircrew would be briefed by their respective leaders. There would be a leader for each discipline e.g. pilots, navigators, bomb aimers etc. The navigator would be one of the busiest; the navigation leader would issue them with flight plans and meteorological information (they would be the first to know the target). They would then plot the route on their chart and smaller topographical maps highlighting towns, lakes and rivers near to their track. Initial courses and airspeeds would be calculated from the wind velocities supplied (these would be modified as more information was gained from 'Gee' and 'H2S' during the flight). It was essential that they kept to their prescribed altitudes, tracks and time table, to maintain concentration of the bomber stream and their time slot over the target (no more than three minutes long).

The aircrew would then go to the Mess, have their operational meal of eggs and bacon (civilians were lucky to get one egg a month!), and fill their thermos flasks with coffee. They would also draw their flying rations of chocolate and orange juice to sustain them during the long night. They would also have available caffeine tablets to keep them alert.

The squadron briefing would follow when all aircrew operational that night (about 150 personnel) were assembled in front of a large wall map of Europe, showing the route and the target. If it was the 'Big City' (Berlin) a gasp would go round the hut, as it was considered to be the most dangerous target of them all. The briefing was carried out by the Squadron Commander, the Intelligence officer, the Meteorology officer and any other specialist whose views were pertinent to that night's raid. The briefing would cover overall details of the operation such as :

- size of the bombing force and the objective of any diversionary raids taking place.

- the weather en route and when returning to base; the forecast wind changes; the extent of cloud on route and over the target; icing risks at various altitudes.

- how the pathfinders would be marking the route and target.
- danger spots for flak and nightfighters.

Finally, all personnel, especially navigators, were asked to synchronise their watches (to the second) to GMT

After this the aircrew drew their Parachutes and Mae Wests, left any personal items in a bag to be picked up when they returned (!), and departed by truck to their dispersal points around the airfield.

At the dispersal point they had time to smoke a cigarette outside the aircraft (not frowned upon in those days), and then to check their equipment thoroughly before they took off. The airgunners checked their guns over the North Sea!

(At times they would get to this point of preparation and have to wait for clearance of fog. The 'Met' officer had guaranteed it would clear but mostly it did not, and the operation had to be abandoned!)

At last it was take-off time and they were directed by the Airfield Controller to the runway, where many of the groundcrew would wave them off into the gathering darkness. Then commenced the long ordeal (5-8 hours) of freezing cold and the heavy vibration and incessant roar of four Rolls Royce Merlin engines, in an unpressurised aircraft, until they returned (with luck unscathed) in the early hours the following morning. On return they went to the de-briefing hut where they were given hot coffee and a tot of rum dispensed by the Padre(!) Then followed by a debriefing

by an Intelligence officer, who took notes about their bombing run and any details of flak and nightfighters they had experienced during the night. After an egg and bacon breakfast, they trekked back to their respective Nissen huts, crawled into bed and attempted to get some sleep if that was at all possible, and await the next call.

After ten days of cross country flights at Pocklington as S/L Harvey's crew and practising with 'Gee' and 'H2S' equipment, we were considered ready for our first operation. This was a mine-laying trip (described as 'Gardening and planting vegetables') to the coastal waters on the east side of Denmark. Mine-laying was regarded as a reasonably safe and easy task and ideally suited to be a first mission - this turned out not to be so!

On 2 October 1943 we took off, carrying in the bomb bay two mines and their parachutes. 117 aircraft took part mining various places from Lorient to Heligoland. We climbed on track across the North Sea to a height of 10000ft. About halfway across the North Sea, S/L Harvey asked Laurie to take over the controls whilst he visited the toilet at rear of the aircraft. Laurie as bomb aimer would have had some training to assist the pilot on take off but not to fly the 'plane. In fact Laurie had never sat in the pilot's seat of a Halifax before.

Now Laurie was asked to fly the 'plane on his first operation and, even worse, as we approached the 'enemy coast'! S/L Harvey really must have had an urgent call of nature! If the rest of us had known at the time what a predicament he was putting Laurie in, then I think we would all have needed 'to go', as well! Luckily for everyone S/L Harvey was back in his place before we crossed the Danish coast.

On crossing the coast there was a loud bang which lifted the aircraft alarmingly, afterwards restoring to level flight. At this point both 'Gee' and 'H2S' went out of action, but we continued across Denmark to our dropping zone described as the 'Samso Belt', which we identified visually through broken cloud.

The bomb doors were opened and we made our dropping run at 8000ft. We then attempted to release the mines but they would not drop. Several attempts were made to release them manually but without success. S/L Harvey then decided to return to base with the mines and tried to close the bomb doors. These would not close. It was now evident that the hydraulic system had been damaged as well as the radar equipment, probably caused by a flak ship as we crossed the Danish coast earlier.

We reduced our height to 2000ft to get under the cloud base and some nasty electric storms across the North Sea; also to pick out a landfall as soon as possible, as I had only 'dead reckoning' means by which to navigate!

As we did not need oxygen at this height I decided to visit the Elsan toilet at the rear of the aircraft. Taking a torch I groped my way to the back in the darkness. I was just stepping over the main spar when by torchlight I noticed a gaping hole beneath me; had I completed the step I would have fallen 2000 ft. into the North Sea! I relieved myself through the hole! I returned to the nose section immediately to confirm to S/L Harvey that there was no doubt that we had been hit by flak. I then had a drink of coffee from my thermos flask to restore my shattered nerves.

It was now obvious the damage was more serious than we first thought. Loss of hydraulic power meant that not only were the bomb doors down, but when the flaps and wheels were lowered for landing, the bomb doors, flaps and wheels could not be

raised again. If we were to overshoot the runway on landing, we would have crashed - with two mines still on board!

These thoughts kept us silent, with all eyes skinned for our landfall 'Flamborough Head' on the Yorkshire coast, and the sight of the flashing pundit that would indicate the close proximity of our airfield.

Luckily my dead reckoning navigation brought us back home on course and we landed safely (otherwise these notes would not have been written).

On landing one of the mines fell out onto the runway. At our dispersal point the ground staff were amazed that we had survived as a crew without a scratch.

Both mines, their release mechanism, the bomb doors and the fuselage had been damaged by shrapnel, and the parachutes badly torn. The hydraulics were severed, the 'Gee' and 'H2S' also damaged. Above the flak hole we discovered the fuselage was peppered with shrapnel holes within inches of the mid-upper gunner's turret.

We were told originally that the aircraft would be written off, but I learned since that the aircraft was repaired. It carried out a number of missions, including targets such as Kassel and Berlin, but sadly was shot down by a nightfighter off Denmark in April 1944, again on a minelaying operation. All the crew died when the aircraft crashed into the sea. (This crew had saved their lives three months before, coincidentally on the night we were shot down, having baled out of a Halifax, short of petrol. Such was the fragility of life in Bomber Command at that time).

Reading the Squadron's Operational Record after the war, I found S/L Harvey's statement on our minelaying mission to be totally inaccurate. There was no mention of flak damage and having to bring the mines back, though the Pocklington Station Operations Record did report it accurately. I believe S/L Harvey wanted to have a successful tour of operations and a possible DFC award later on.

Having had a near miss with shrapnel close to his turret, Alec McCarroll the mid-upper gunner, decided to report sick before the next operation. In fact he never flew again, and sadly he was labelled LMF(Lack of Moral Fibre), reduced from Sergeant to AC2 and posted to Elvington (one of our affiliated airfields) to general duties. Such arbitrary action was taken by Commanding Officers as a deterrent to all aircrew.

At this time losses in aircrew were extremely high, so much so that one crew hardly knew another before one of them went missing (often becoming obvious by a number of empty beds in your Nissen Hut). Every operation to Germany, especially to places such as Berlin, was almost like 'going over the top'. A succession of such raids could bring on exhaustion and a fit of nerves to anyone. The threat of being branded LMF was made to prevent the possibility of some aircrew refusing to fly. In point of fact only about 0.4% of all aircrew in Bomber Command were branded like this during the war. Nevertheless some, who had as many as 20 operations before they came off flying, were cashiered or demoted with ignominy. For these, it was a great injustice, especially as there were many civilians of military age (in reserved occupations) who would never be exposed such risks. And a large proportion of servicemen, in all Services, who fortunately would not have to face the high risk of death on every operational mission.

As the minelaying mission was my first operation and because of the experiences I had on that flight, the Squadron Navigation Officer decided to check through my log

and chart. He found both completely accurate and commended me on the results which he knew were made under testing conditions. Later he informed me that he was recommending me for a Commission. (Actually this was long overdue and should have been made at the time I qualified as a navigator).

Our next operation was on 4 October 1943 to Frankfurt. This was not a success as firstly S/L Harvey decided to weave all the way to Germany (not normally done unless there is some predicted flak or there are nightfighters about, as it doesn't aid good navigation!). Then without explanation he turned back to base, dropping our bombs into the North Sea on the way. (We had flown five hours out of about seven to complete the bombing operation and had been less than a100 miles from the target.)

S/L Harvey reported in the Squadron Operations Record "Overload petrol pump U/S. Returned early". I had a feeling that S/L Harvey wasn't very happy that night after our minelaying experiences just two days before. It was frustrating for us, having got near the target, as this raid turned out to be the first serious blow on Frankfurt so far in the war.

Later the flight engineer went sick and as far as I can recall he did not fly again.

Our third operation was on 8 October 1943 to Hanover, when 504 aircraft took part. This mission went without mishap. No trouble on route, it was clear over the target, we bombed on red target indicators (Pathfinder markers) from 17200 ft, and fires were seen to start. This raid was reported as the most successful attack on Hanover of the war. We began to think we were at last OK as a crew but this proved not so.

Apart from a cross country flight and an air test we did not fly any more operations in October. In fact we did not fly any more missions again with S/L Harvey(!) although 'officially' he remained the 'A' Flight Commander until the end of November 1943. Shortly after our third operation I was interviewed by Air Commodore 'Gus' Walker for my Commission. During that meeting he informed me that S/L Harvey was being withdrawn from operational flying, indicating that he had had enough. It did not really surprise me though, especially as Bomber Command had entered a phase when life was becoming very fragile indeed. What did surprise me however was to learn (only recently) that at the end of November 1943 when he relinquished command of 'A' Flight, S/L Harvey was recommended for a DFC. The award was described as "long overdue" for his tours in the Middle East in 1941 and his operations over Germany (one in June 1942 and two with us in October 1943, which included the 'returned early' operation). He was awarded the DFC on 28 December 1943.

Now we were a headless crew all over again, awaiting the posting of another pilot. In the meantime destined to fly as spares, replacing crew members in other crews who were sick or otherwise unable to fly. This was a very demoralising position to be in. As a crew you develop a team spirit and a trust in each other; without a crew you are just a floating part. You have little or no faith in the crew you are joining for that night, or for that matter neither are they likely to have any faith in you. Your life is in their hands and their lives are in yours!

I complained on one occasion to the Acting 'A' Flight Commander about flying as a spare. His reply was "You will probably just carry on like it, until one day you don't come back". Later I checked his career and luckily he survived his first tour and got a

DFC at the end of May 1944. I have often wondered whether he survived the rest of the war!

Laurie Underwood, John Bushell and I (the wireless operator seemed to have disappeared), then flew as spares for the next five or so operations, which was one of the most potentially unnerving periods I can remember.

More than a month had elapsed since I flew on the Hanover operation, before my next mission on 11 November '43 minelaying off the Frisian Islands (near the Dutch coast). I flew with F/O Eddy and 45 aircraft took part. We dropped our mines from 6000ft and we lost one aircraft from our Squadron, shot down by a flak ship. The aircraft ditched in the North Sea. All the crew were missing presumed killed. This was the same aircraft that I flew in with S/L Harvey when we went to Frankfurt and returned early on 4 October '43!

My fifth operation was on 18 November '43 to Mannheim/Ludwigshafen flying as a spare with P/O Jackson (Australian pilot) when 395 aircraft took part. It was a raid to divert German nightfighters away from the main force of bombers who were bombing Berlin. We bombed from 17000ft on the green target indicators - bombing was well concentrated. The diversion was successful in that the main force only suffered 2% losses, whereas our losses were high at 5.8%. 102 Squadron did not lose any aircraft that night.

I flew again as spare with F/O Jackson on 22 November '43 to the 'Big City' - Berlin - the most heavily defended city in Germany. 764 aircraft took part, dropping 2501 tons of incendiaries and high explosive in about 20 minutes. This was the second out of 16 raids described as the Battle of Berlin. For all raids the target was the centre of Berlin (Hitler's Chancery) and for each raid the City was approached from a different point of the compass. Unless Pathfinders directed otherwise, bombing on each raid would 'creep back' like a wedge from the target point; thus the whole city over the period of 16 raids would be covered by bombing.

This night our bombing run was from the west and we bombed at 18000ft on the centre of the flares (checked by H2S). A glow of fires were seen through 9/10 clouds. This raid was the third heaviest of the war on Berlin and it was also the most successful. Much damage was done to industrial areas and munitions factories, the Ministry of Weapons and Munitions and many political and administrative buildings. The Kaiser Wilhelm Memorial Church was also badly damaged, and post war was part restored and became a Berlin tourist attraction. (I suppose it can be compared with Coventry Cathedral, which back in 1940 was ruined by the German Airforce when they devastated the City. And after the War, a new Cathedral was built alongside the ruins of the old.)

The equivalent of nearly three German Army Divisions were drafted in, to tackle the fires and clear the damage which extended from the centre to the western limits of the City. Luckily we experienced no nightfighter attacks or flak damage, and we narrowly missed an accident on return to Pocklington;

Whilst we were still on the outer circuit waiting to land, another Halifax from our Squadron flying on the same outer circuit as ourselves, had met head-on with a Halifax from 77 Squadron. It had been returning to our affiliate airfield at Full Sutton and was also on its outer circuit preparing to land. The two outer circuits unfortunately overlapped and as a result of the mid-air collision both crews were killed outright -

we had missed that fate by a small margin! John Bushell (rear gunner in our crew also now flying as a spare) had the unenviable task of representing 102 Squadron at the funeral of one of those killed.

I continued my time as spare, flying with F/O Jackson (his navigator must have had a long time off for sickness or, for some other reason, was not flying). This time, 25 November '43, our target was Frankfurt and only 262 aircraft took part. The flight was uneventful, although the gunners had heated discussions about seeing nightfighters, until F/O Jackson, in his casual Australian voice, settled the argument by saying "If they've only got two engines, shoot the bastards down!". We bombed on the red target indicators from 17500ft. Some fires were seen, but it was cloudy over target and the bombing appeared to be scattered. Despite the small force of aircraft, 102 Squadron managed to lose 2 aircraft over Germany, keeping up its record for high losses.

We had hardly got to bed after debriefing from the Frankfurt raid in the early hours of 26 November, when the tannoy blared out for all aircrew to report to their sections to be briefed for another raid that night. We were supplied with caffeine tablets and given 'pink gins' to drink in the hopes that it would keep us 'on our toes' that night. I flew again with F/O Jackson with a small force of 178 aircraft to Stuttgart. This was a diversionary raid to draw off German nightfighters from the main force of bombers whose target was yet again Berlin. We bombed on the red target indicators from 17500ft. Large fires were seen and bombing was scattered but, as planned, a part of the German nightfighter force was drawn off from the main bomber force successfully. We lost one aircraft which crashed near Pocklington and one returned badly damaged by nightfighter (airgunner killed).

We were diverted to Hartford Bridge airfield in the south, so that the main force of Lancasters could use 4 Group airfields, as some of their airfields were fog bound. They were also short of petrol after an exceptionally long flight. Nevertheless 14 Lancasters crashed in England that night. We returned to Pocklington after a weekend in Hartford Bridge, on three engines after one engine failed on take off. This was my last flight with F/O Jackson, who incidentally was previously awarded the DFM. He finished his tour and was awarded the DFC in June 1944 - perhaps I should have stayed with him rather than return to my original crew!

Before Laurie Underwood and John Bushell and I came together again as a crew, I had just one other experience when I was due to fly as a spare. Fortunately the pilot, prior to take off, taxied off the concrete dispersal point into the mud of the outfield and the flight had to be abandoned. Just as well, as I had premonitions about flying that night with this particular crew.

The month of December 1943 proved to be a month of non activity because first there was a full moon, then the weather was poor. I was also waiting for a week's leave to get my officer's uniform (my promotion, although it had been approved had not yet been promulgated) and we were awaiting the names to complete our crew.

Eventually, besides Laurie, John and myself, we learned the additional names to the crew. They were:

Pilot	F/O G. A. Griffiths DFM 'Griff'	On his second tour
-------	---------------------------------	--------------------

Flight Engineer Sgt J. Bremner )  
 Wireless Op. F/S E.A.Church ) all had previous ops.  
 Mid/Upper Gr. F/S C.G.Dupuies (French Canadian) ) as spare crew

It seemed beyond belief that our new Flight Commander did not authorise any cross country 'runs' for us to gain crew experience, or to practise H2S, bombing and gunnery procedures, before we flew on operations together. However it was not to be, and on 29 December '43 we were scheduled on a main force operation to Berlin.

This was the eighth raid on Berlin and the fifth heaviest. 712 aircraft took part, and 2314 tons of incendiaries and high explosives were dropped in 20 minutes. It was an uneventful flight. I remember clearly seeing the outline of the Zuider Zee on the radar screen (H2S always at its best on coastal outlines) as we flew over Northern Holland. Bad weather restricted the German nightfighters to 66, but these were the more experienced crews with air interception and H2S homing radar and upward firing cannon. Fortunately, due to two spoof raids by RAF Mosquitos the nightfighters reached Berlin too late to be effective.

We flew into Berlin from the southeast and dropped our bombs from 17500ft on the target indicators but no results were seen owing to 10/10ths cloud. Aircraft losses that night were down to 2.8%, but 102 Squadron yet again managed to beat the average with two aircraft missing! In one of these aircraft Harold Paar, a Chigwell neighbour of mine, was shot down on his first operation. He became a POW in the same camp - Stalag IVB - indeed the same hut, as myself. (I discovered he was a neighbour when my son met Harold's son in the same class at the same grammar school some 20 years later.)

January 1944 began as another month of inactivity, again as a mixture of bad weather. Also a full moon period prevailed, and there was a reluctance to send Halifax 2's out to Berlin because of their increasing vulnerability. However another maximum effort to Berlin was ordered, so our second operation, as full crew again, was scheduled for Berlin on 20 January '44. In addition a second pilot Sgt K F Stanbridge (flying as a 2nd dickey pilot for operational experience) was also included in the crew.

For this operation I was responsible as one of four navigators operating H2S equipment in 4 Group (4 Group comprised of 15 squadrons totalling 250/300 aircraft), to radio at intervals my calculated wind velocities back to 4 Group. These wind velocities from the four navigators were to be averaged and rebroadcast to the whole of 4 Group for their use in maintaining concentration in the bomber stream. In addition I was to do my own blind bombing that night (not bombing on Pathfinder markers), using H2S to identify the homing point for a timed run into Berlin.

This bombing raid on 20 January '44 was to be the ninth raid and the fourth heaviest on Berlin; 769 aircraft took part and 2400 tons of incendiary and high explosive bombs were dropped in 20 minutes. This raid was considered to have been successful although less concentrated than planned. Due to bad weather again over Germany, the German nightfighters were limited to 98 experienced crews equipped with 'schrage musik' upward firing cannon, and radar interception and H2S homing devices. The nightfighters (all twin engined) were also operating a new procedure called 'tame boar', where they were directed by ground control into the bomber stream at intervals and over the target. From this point they could fly freelance and

use their own equipment to locate bombers, fly beneath them out of sight of the bomber's gunners and fire cannon shells into their petrol laden wings. Additionally on this night, thin cloud covering Berlin with tops about 12000ft was illuminated from below by many searchlights, allowing the nightfighters flying above the bomber stream to locate them, silhouetted against this bright backcloth. Thus, despite the limitation of nightfighters, it was a highly successful night for them, as they claimed 33 victories (nine of them over Berlin) out of the 35 bombers lost.

We took off at 1630hrs GMT on 20 January 1944 in a Halifax nicknamed 'Old Flo' by the ground crew and were soon flying above 10/10ths cloud. Using Gee radar initially and then H2S to 'map read', we flew uninterrupted over a northerly route into Germany, turning southeast about 60 miles from Berlin. Berlin was a large city and there were too many stray reflections on the H2S screen to indentify the target position. I was instructed personally at the navigators' briefing in Pocklington to indentify a turning point, by taking a precise bearing and distance on my H2S screen, of a small town about 10 miles north of Berlin. This was the commencement of a timed bombing run to the target - Hitler's Chancery. We flew in straight and level at 18000ft, maintaining a pre-calculated track and groundspeed, and at the time set by stop watch we dropped our bombs (2000hrs GMT).

This bombing procedure made us a sitting target for the nightfighter expertise available that night, for we had hardly closed our bomb doors when we were hit by a nightfighter. He had trailed behind and below our aircraft, waiting for our bombs to be released, then fired cannon shells upwards into our starboard wing. With more than 1000 gallons of petrol still aboard it was only seconds before the whole wing was aflame.

I heard 'Griff' our pilot call out; "graveners, Engineer!". (These were switches to activate the engine fire extinguishers.) This was of no avail, and the blaze was so fierce 'Griff' realised the aircraft was stricken and immediately called out; "parachute, parachute, bale out! ". I already had my parachute on, and my seat and navigator's table folded back clear of the escape hatch (a discipline I always carried out over a target). I lifted the escape hatch door and dropped it diagonally through the escape hatch, but it caught the slipstream and jammed half in and half out of the aircraft. With the combined efforts of myself, the wireless operator and Laurie, we managed to kick the hatch door clear. I sat on the edge of the escape hatch and dropped through immediately, followed closely by Laurie. The wireless operator had no time to follow us and was killed. I believe after Laurie dropped out, the blazing aircraft went out of control and into a spiral dive.

After baling out at 17000ft, I spun over a few times, then pulled the rip cord. The canopy opened and my harness tightened with a jerk around my crotch, which brought me to my senses in double quick time! Below me and to my left I could see another parachute; it might have been Laurie but I couldn't be sure (I didn't see him again until his wedding after the war!). I was over a layer of light cloud and could see the glow of fires beneath it, and coming up was plenty of heavy flak and tracer shells hosepiping around the sky - I prayed it wouldn't come too near!

I floated down for 10/15 minutes; somehow I didn't feel too cold although it would have been minus 34 centigrade when I jumped out! With a 60 mph northerly wind prevailing I soon drifted away from being near to the centre of the City. The deafening noise from the aircraft's engines, present during flight, had gone and now the sound

of bursting flak had died away. Instead there was an uncanny silence and the blackness of the night, as I descended through cloud which covered the area. Nearing the ground I thought I was going to land in marshes and my hand was on the lever to inflate my 'Mae West' (lifejacket), but it turned out to be the tops of trees of a small wood in a southern suburb of Berlin. I crashed through these, falling the last 15 feet and finishing up with a grazed face and a sprained ankle. I think it was remarkable that this was the only injury I sustained throughout this ordeal.

In less than 20 minutes my life had gone through a dramatic change. I had survived death by a hair's breadth. I was elated at being alive, but what of my crew, were they alive or dead? What traumas will my family suffer when they are informed by telegram that I am missing tomorrow morning? A few hours before I was eating my eggs and bacon (only available before operational flights) in the mess at Pocklington, my aircrew colleagues were around me, the friendly town of York was only 12 miles away and home leave to get my officer's kit was imminent.

I was now in hostile Germany, probably in the south-east suburbs of Berlin. What would happen if I were caught by civilians, having just bombed their City? There was nobody here who would care if I lived or died. Germany was now in the depth of winter. I was in enemy territory 600 miles from home, with only some french francs, a handkerchief with a map of France printed on it, and a magnetic trouser button (with a white spot on it which, when cut off my flies and balanced on a pencil point, would point north!). And a tin of Horlicks tablets. Only these to sustain me, whilst I evaded capture and got back to England!

I was still in my F/Sgt's uniform although Commissioned on 1 December 1943 and I was five days off my 21st. birthday.

About eight hours, later having disturbed a dog whilst trying to hide up in a barn, I was captured by the civilian police. From here to the end of the war will have to be another story.

Laurie 'blacked out' I believe during part of his parachute drop, but landed uninjured and was captured by the Military early the next day.

Out of our crew of eight, only four survived. The other two survivors, 'Griff' (pilot) and John Bushell (rear gunner), had most remarkable escapes from death!

After Laurie and I baled out and the aircraft had gone into a spiral dive, 'Griff' was thrown forward towards the controls. He was held in his seat by the 'G' of the spiral dive. He saw the altimeter unwind past 7000ft and wondered when his end would come, before going unconscious. I believe the petrol tanks of the blazing aircraft exploded and 'Griff' was blown out, regaining consciousness just in time to pull his ripcord a few hundred feet from the ground. His parachute was still on the swing when he thumped down amongst the debris of the aircraft on waste ground in Berlin! He was uninjured but in shock. He wrapped himself in his parachute and went to sleep under a bush nearby, where he was discovered the next morning by a party of civilians led by a soldier.

John was thrown over his guns when the aircraft went into the spiral dive and he lost consciousness. He also 'came to' in the air in similar circumstances to 'Griff' and opened his parachute near the ground, but landed close to a searchlight battery and was captured immediately. John had a bad cut over his right eye and bruised face but otherwise was OK.

The four crew who were killed, strangely, were all those fairly new to us. The wireless operator and co-pilot were buried in the British War Cemetery in Berlin. When he was captured 'Griff' our pilot was asked by the German Military "Tell us the name of your wireless operator so that we can bury him with a name". The flight engineer and mid upper gunner were not found nor identified, and having no known graves are remembered only on the War Memorial at Runnymede.

It was very sad that the mid upper gunner, F/S C G Dupuies, had avoided flying to Berlin on his 13th operation by flying on a comparatively 'safe' mission instead; only to be killed on this raid to Berlin, his 14th operation. The lucky rabbit's foot he always carried with him was to no avail. I also regret that I had said to the wireless operator, F/S E.A.Church, before this operation, he shouldn't take milk from the Sergeant's Mess for his own use. I had not known that it was for his young wife living near Pocklington who had just had a baby.

After the war we survivors came to realise that 20 January 1944 was a night to remember. We learned through a German archivist that we had been shot down by an ace nightfighter pilot, Hptm L Fellerer, in a twin engined Messerschmitt Bf 110 G 4 nightfighter. He had 41 victories to his credit, had been awarded the Knights Cross, and had shot down five aircraft including ourselves on the night of 20 January 1944! He became Gruppenkommandeur of the Nightfighter Group 11/NJG5 at Parchim near Berlin. After the war he became a high ranking officer in the Austrian Airforce but was killed in a Cessna flying accident in the 1970's.

The archivist also gave us a map of Berlin showing where our aircraft crashed, which was about seven miles southeast of Hitler's Chancery at Oberspree. This confirms that we were on target that night, as the crash point was on our track less than two minutes flying time from the release of our bombs.

20 January 1944 was also a significant date for 102 Squadron, as the following extract from the Squadron Operation Record summary on that date shows (microfilm held at the Public Records Office Kew):

"Weather foggy clearing later, Vis: mod to good. Wind s'ly 20 - 25 mph.  
16 Aircraft detailed to attack Berlin on what proved to be probably the most disastrous operation embarked by the Squadron which suffered the loss of 5 crews missing (F/O Griffiths DFM, PO Dean, F/S Render, W/O Wilding, & F/S Compton) Moreover two aircraft were lost in this country, F/O Hall short of petrol had to abandon his aircraft near Driffield, the whole crew baling out successfully. F/S Proctor crash landed near Norwich, the Airbomber F/O Turnbull unfortunately dying from his injuries. The rest of the crew suffered minor injuries as a result. Thus no less than 7 of the 16 aircraft which took off were lost including 5 crews - fortunately, an exceptional night of misfortune & unlikely to be repeated. There was also one early return, F/O W.B.Dean, 'W.'"

So this was the end of our time in Bomber Command. After re-forming as a crew again, we had done only two more operations making for me only 10 in all.

2 October	1943	- Minelaying	(Denmark)
4 "		"	- Frankfurt
8 "		"	- Hanover
11 November	"	- Minelaying	(Frisian Islands)

18	"	"	- Ludwigshaven
22	"	"	- Berlin
25	"	"	- Frankfurt
26	"	"	- Stuttgart
29 December		"	- Berlin
20 January 1944			- Berlin

Nevertheless we will go down in the annals of 102 Squadron as being shot down on the night when the Squadron suffered the loss of 7 out of 15 operational aircraft, a 47% loss, which was a loss greater than in any other operation in the Squadron's history in both world wars.

102 Squadron was not a lucky squadron; after the disastrous night of 20 January 1944, another 4 aircraft were lost on the following night's raid to Magdeburg. Shortly after this, as the losses continued, the Squadron was ordered not to operate over Germany. Subsequently the Halifax 2's were withdrawn to be replaced by the Halifax 3's, which were equal to the Lancasters of that time in their operational efficiency.

(Unfortunately for our crew the new aircraft arrived too late for us, otherwise we might have had a better chance of survival and been able to complete at least one tour -30 operations- and perhaps been able to enjoy freedom for the rest of the war).

In World War 2, 102 Squadron suffered the highest losses in 4 Group Bomber Command (15 Squadrons), and the 3rd highest losses in the whole of Bomber Command ( 93 Squadrons).

January 2000