



Bomber Command

Key Stage 3

History:

Chronological understanding

Historical enquiry

Key Stage 3

English:

Reading

Speaking and listening

Writing

Overview of the activities

This section contains six stories from different members of a Lancaster crew. The stories are authentic accounts from BBMF Visitor Centre. They can be used to explore sources of information and they can also be used as inspiration for creative writing or artwork.

Stories from Bomber Command

Researching Bomber Command

Aims of the activities

Recognise the difference between present and past

Find answers to simple questions about the past from sources of information

Gain an understanding of what it was like for young men in Bomber Command.

Preparation

Accounts from Bomber Command Lancaster crews

Background information on Bomber Command

PowerPoint: Bomber Command which can be used to show the aircraft, air crew, equipment and uniforms.

Venue

All with possible exception of RAF Digby



Activity 1: Stories from Bomber Command crew members

Introduction

Explain that young people will read one or more account of a bombing raid from the point of view of a crew member of a Lancaster bomber. The accounts are told from the perspective of each different crew member but on different missions.

Select from the stories below.

NOTE: There are a number of accounts of bombing missions told by Lancaster crew members. Please read them carefully before giving them to young people to make absolutely certain they are appropriate to your group. The content of each story relates to bombing missions over Germany and the consequences of aerial combat. Some young people may find the stories upsetting.

Starter activity

Divide the class into groups of six. Give each a copy of the account you want to discuss. Ask them to read the story individually. Ask them to underline any words they don't understand. When they have read the account ask them to make notes so that in a few minutes time they can tell the story briefly to other people in the class in their own words.

- Who is the story about?
- What happened?
- What stands out about the story for people in the group?
- How does the group feel about that person and what happened?
- How might they feel in his position?
- What might they have done?

Activity

Ask young people to work in pairs to create a pen portrait of the person they have just read about. What sort of person was he, how old, what did he look like.

Plenary

Ask young people to give a brief summary of the story and explain their views on what the member of aircrew did.



“As usual combats with fighters could be seen going on all around by the lights of tracers from each aircraft.”

A flight engineer's story - 'Just another night out'

Sergeant John Sargeant DFM from Frithville near Boston, attended Boston Grammar School – aged 19 in 1943 when he served with No 106 Squadron based at RAF Syerston, Notts.

The story from which these words are taken was found by John Sargeant's widow after his death in 1970, written in pencil in an old notebook he had kept in his desk. He called his story "Just another night out".

'We arrived over Berlin one hour after avoiding a few searchlights and near misses from flak bursts that seemed pretty close on the starboard side. When we turned on, I saw quite plainly two or three aircraft, each coned by about twenty or thirty searchlights on our starboard side, having hell knocked out of them by flak. It was the same on the port side where half a dozen searchlights were doing their best to pick us up in their beams. As usual combats with fighters could be seen going on all around by the lights of tracers from each aircraft.

Now it was our turn for the run up to the target. As we got to our positions the skipper's voice came over the intercom: "Everything okay? Turning on". Then the bomb aimer's voice, "Bomb doors open, Skip".

Suddenly the whole aircraft shuddered and Mac, the rear gunner, called out, "They've got me, Skip. I can't get out, the doors are jammed." The aircraft shook, lurched, rolled and dived steeply as the skipper took evasive action to get away from the oncoming fighter. The bomb aimer had already dropped the whole bomb load without a moment's notice and then the wireless operator's voice was heard, "Okay, Mac, going down."

We were still doing violent evasive action when the fighter attacked again, this time from below, raking the aircraft from stem to stern. I was on the floor, having been thrown there from my standing position beside the Skipper by the sudden evasive manoeuvre and having seen the fighter attacking the first time from the rear starboard quarter with his tracer rounds entering the rear of the fuselage. I stayed on the floor, unable to do anything to help, waiting for 'my packet' if it was coming, while watching my panel of engine and fuel gauges for any trouble that may suddenly break forth. Fortunately, at that moment they were okay.

As I lay there during the second attack, an explosive shell burst immediately below my position and shrapnel whirled through the floor and out through the roof. A few pieces of shrapnel ripped into the back of my left knee. The lower part of my leg went numb and I thought I had lost it, but I managed to stand up on my right leg. My other leg was intact but I was unable to put my weight on it.

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Sax, the bomb aimer, climbed out of his compartment and fell on the floor in front of me. The intercom was u/s so I hadn't heard him say anything but when I examined him, I discovered he had been seriously hurt in the attack – he was unconscious but he was still warm and had a strong pulse. Later, however, he died. Meanwhile, the wireless operator had got 'Mac', the injured rear gunner out of his turret and into a more comfortable position against the rear spar. His injuries meant that bailing out was not really an option for him so we headed North up to the Baltic Coast and towards Denmark and then out across the North Sea. I checked the fuel situation and found that we didn't have enough to make it back to base. The Skipper decided to carry on and ditch to give Mac the best chance.'

The pilot, Squadron Leader David Howroyd, successfully ditched the aircraft when fuel was almost exhausted. After rapidly exiting the floating aircraft on to the starboard wing, despite his own injuries, John Sargeant and two others went back inside the aircraft for the injured rear gunner. Unfortunately, the rear gunner, Sergeant Les McKenzie died in their dinghy before the crew was rescued by an Air Sea Rescue launch. Whilst John Sargeant was recovering from his leg wounds in hospital the remaining survivors of his crew continued on operations and were reported missing on the night of 8/9 October 1943 on an operation to Hannover – they were all killed.



“Then I had to dodge under another Lancaster coming from our port side, looking up into its yawning bomb-bay with its rows of 500lb bombs and a cookie.”

A pilot's story - One hell of a bombing run

Flying Officer Roy Yule DFC – a Lancaster pilot and captain on No 626 Squadron based at RAF Wickenby, Lincs during 1945.

‘On February 7th 1945 we were briefed for a night raid on Kleve. This operation was to prepare the way for the attack by 15th Scottish Division across the German frontier near Reischwald. We took off at 7pm and at 10pm approached the target at 10,000 feet. There was a layer of thin cloud at 5,000 feet and we clearly heard the Master Bomber, who was circling in a Mosquito at 3,000 feet, ordering the main force to come below cloud. To comply with his orders, I closed the throttles and put the aircraft into a dive, getting under the cloud and levelling off at 4,000 feet. This turned out to be one hell of a dangerous bombing run. Over half the main force did not come below cloud but bombed through it on the fires and flares that could be seen through the thin layer.

The one hundred and forty or so Lancaster pilots that did obey the Master Bomber converged onto the tight bunch of target markers. Stan, the bomb aimer, gave “Bomb-doors open”, and we heard the clear, casual voice of the Master Bomber, “Bomb to starboard of the red Target Indicators”. Then I had to dodge under another Lancaster coming from our port side, looking up into its yawning bomb bay with its rows of 500lb bombs and a cookie. I jabbed the left rudder to slide clear of it. Stan, who could not see the other Lanc, had started his run-up patter giving me “Right,” and shouted agitatedly, “Right, not bloody left!”

The scene ahead was fantastic. Red and yellow tracer shells were criss-crossing from the flak batteries outside the town. They seemed to be coming from eight different positions and looked like 20 mm and 37 mm, which are nasty blighters at the height we were at. Strings of bombs were falling through the cloud from the Lancs above. Flashes from the exploding blockbusters on the ground were blinding. A stricken Lancaster crashed on its run-in blowing up with its full bomb load. Large columns of thick black smoke rose from the town up to 3,000 feet.

Stan gave, “Right, right, steady, bombs away.” then our aircraft was bucking and rearing as the pressure waves hit us. 4,000 feet was reckoned to be the absolute minimum height for dropping a blockbuster. At last we were through the target and turning south over the Rhine and my stomach muscles started to relax.’

We landed back at Wickenby at 42 minutes after midnight. At debriefing, Frank, the mid-upper gunner, said that a string of bombs with a wobbling blockbuster dropped past our starboard tail-plane as our own bombs were leaving.



“Had I not been thrown off my seat, the top of my head would have been sliced off like a breakfast boiled egg.”

Tail end Charlie - A mid-upper gunner's story

Hit by flak on a daylight raid over Leipzig

Sergeant John Pearl – aged 19 in 1945 when he served with No 207 Squadron based at RAF Spilsby, Lincs.

‘Pathfinder marker flares were going down as we began moving across the target – the railway yards at Leipzig. Some light flak appeared ahead of us but it was spread thinly around the sky and did not look too formidable. However, black puffs of smoke from the bursting shells of predicted heavy flak seemed dangerously close and as we continued our run across the target it was one of these shells that exploded alongside, between the two starboard motors.

It shook the plane, throwing us around the sky, causing me to slip off the little hammock that served as a seat in the mid-upper turret. I fell backwards on to the floor of the aircraft. I lay there for a few seconds as shrapnel ripped through the aircraft, sounding like hail stones on a tin roof. The skipper steadied the aircraft and I climbed back to my turret to find it badly holed with most of the cupola Perspex blown away. A lot of the metal framework which had been supporting the Perspex was twisted and mangled and I sat there like a World War I air gunner with my head out in the fresh air. Had I not been thrown off my seat, the top of my head would have been sliced of like a breakfast boiled egg.

It was freezing in the shattered turret now and it could only be rotated by the winding handle as the hydraulics had been shot away. My guns did not work either, so I was reduced to the role of lookout.

Both starboard engines were damaged, losing oil, and had to be feathered but after a quick discussion amongst the crew as to what we should do, we continued on two engines and bombed the target from 14,000 feet. Leaving the target area, we were hit by flak on the port side. Ninety, limping minutes later, oil pressure began dropping fast on the port inner engine and the pilot told us to prepare for baling out.”

The crew baled out successfully, except for the pilot, Flight Lieutenant Peter ‘Andy’ Anderson, who was killed when the aircraft crashed near the village of Burgbrohl. The rest of the crew were picked up by American GIs and quickly repatriated.’



“I realised that my chief fear of ops had been this fear, the fear of wasting the lives of other men who were relying on me.”

A navigator's story - Off track

Flight Lieutenant Don Charlwood (Royal Australian Air Force) 27 years old in 1942-3 when he served with No 103 Squadron based at RAF Elsham Wolds, Lincs.

In the seven months during the winter of 1942-43 whilst Don's crew was serving with 103 Squadron, it was the only crew to complete a full operational tour of 30 missions. Of the 20 men from his training course who qualified as navigators with him, only five survived the War.

‘We were briefed to bomb Mannheim. We meandered across Europe weaving all the way, found our target and bombed it. On the return journey, about an hour out from the target, an astro fix showed us about 40 miles south of track. I regarded this fix with extreme doubt – astro navigation on operations was a different proposition from during training. Getting another fix was then complicated by the development of high cloud obscuring the stars. Our GEE and our radios were both out of order and, in any event, we were beyond the range of British transmitters. I continued with dead reckoning navigation for almost two hours. For all that time a stronger than forecast wind blew us further south of track. There was still cloud above and below us and no sight of the ground when there was a cry from the rear turret. “Flak, dead astern!” I jumped to my feet. We should by now have crossed the English coast. “Flak coming straight up.” Called the rear gunner. We swung away from it and the pilot called on the intercom, “Navigator, where the hell are we? When we get out of this muck what about a bit of astro?”

I shuffled to the astrodome. The dome was almost over the wireless operator's head, being shielded from his light by a black curtain. The curtain was tightly drawn, as beneath the light Max, the wireless operator was trying to find the fault with his set.

“I need a star shot”, I said.

“How the hell am I going to work in the dark?” he complained.

“We must have a check”, I replied.

“Do you want this set fixed, or don't you?” he continued.

“Give me two minutes.”

Growling something, he switched off his lights. I pulled back the curtain and raised my head into the Perspex bubble. I could hear on the intercom, the pilot and the flight engineer discussing how little fuel we had remaining. I am to blame for our predicament, I thought – for throwing away the lives of our crew. I realised that my chief fear of ops had been this fear, the fear of wasting the lives of other men who were relying on me.

Somehow we reached Waddington, our six hours of fuel stretched to seven hours forty-five minutes.’



“When a bomber corkscrews the worst place to be is in the back”

A rear gunner's story - Tail end Charlie

Sergeant Bob Pearson aged 19 in 1944 when he served on a Lancaster Squadron based at RAF Waltham, Lincs.

‘We would be flying at 250 mph and the wind tore through the clear view panel in the turret – the piece of Perspex that had been removed from the turret canopy to improve vision. My face was exposed to the slipstream – the temperature of which plummeted the higher we went – but it was better to freeze than not to see the enemy. Some rear gunners greased their cheeks with lanolin to ward off the effects; we were often exposed to temperatures of minus thirty or minus forty degrees. My breath froze into an icicle in front of me. I waited until it was three or four inches long before breaking it off with my hands; they, at least, were warm thanks to the four pairs of gloves I had on - a white silky pair underneath, then mittens and a pair of ordinary black gloves and finally gauntlets. My trigger fingers were twice their normal thickness!

We had electrically heated flying suits if we wanted to use them. It plugged into the aircraft like an electric blanket but it was a mixed blessing and I never used mine. It had no thermostat and would never remain at a steady temperature. The danger was that it would get too hot and send you to sleep.

When we coasted in over mainland Europe and were over enemy territory the skipper would say, “Keep your eyes peeled, Bob”. We were trained to spot different [aircraft] silhouettes, the shape and size of their wings. In the classroom they flashed slides in front of us for two seconds and we were supposed to know instantly if it was friend or foe. But it was very different 18,000 feet up in the pitch black. You see something. You know instantly it isn't a Spitfire or a Hurricane. Your heart jumps. This is for real. But you can't just blaze away. You have to think clearly. If you fire, the tracer will give your position away to the enemy for sure and, anyway, you might hit another Lancaster in the stream. Also our .303 machine guns were like pea shooters compared with the night fighter's cannons. So you wait and it gets closer, until you can make out a head and shoulders in the cockpit. Is he going to keep coming? Is he going to start firing? Sometimes he peels away out of sight and that's the worst moment of all. All you can do is sit tight, wait and pray he's really gone away, that he hasn't dived below you and is coming back underneath with his guns blazing away at you. The horror was waiting and not knowing, wondering if you were about to die.

If an attack came, I would yell, “Corkscrew” on the intercom to the skipper and he would throw the Lanc into a steep dive. When a bomber corkscrews the worst place to be is in the back. As the wings go down the tail comes hurling up. Facing backwards, you go up too, and then you plunge back down as the skipper pulls back on the stick and the plane climbs steeply in the opposite direction. The G-force clamps on your head like a ton of concrete. Your chin is pressed hard into your chest and at the same time you are still trying to fire at the enemy fighter on your tail!



“It seemed as if every flak battery was concentrating on us and I thought it would be only a matter of seconds before they scored a direct hit.”

A wireless operator's story - On the receiving end

Sergeant Edwin Wheeler DFC – 22 years old in 1943 when serving with No 97 Squadron based at RAF Bourne, Cambs (his second operational tour)

‘On 27th August 1943 we were back to Nuremburg with another 7,000 lb of ‘goodies’. These were dropped on workshops and marshalling yards, bombing with the aid of the H2S ground-mapping radar. On our return we were coned by searchlights and suddenly the heavy flak stopped, which indicated fighter activity could be expected. Jackie in the mid-upper turret spotted a fighter attacking from the starboard quarter and gave the skipper instructions to ‘corkscrew’ and he and Geoff, in the rear turret, both gave a burst of fire, which made N-Nan shudder and the smell of cordite in the cabin was pungent. I was sitting at my radio listening to the Group broadcast and as I looked up I saw that there was a clean hole through the crystal monitor about 18 inches above to the right of my head. A cannon shell had pierced it and gone straight out through the front of the aircraft. I was rigid not daring to move an inch. The contact was brief and the fighter sheered off, much to our relief.

My sixty-fourth operation, on 23rd/24th September, was against Mannheim. On this raid we were coned by searchlights for a whole six minutes; it seemed as if every flak battery was concentrating on us and I thought it would be only a matter of seconds before they scored a direct hit. After a battering during this interminable period, during which I had virtually given up hope of escaping, Johnny, our pilot, finally gave them the slip by violent evasive action and we were away and on the return flight. If I ever prayed it was never more earnest than on that night.’



Activity 2: Bomber Command

Introduction

This section contains very brief background information on Bomber Command and a diary of key raids. If teachers want to find out more there are a number of books which may be of interest in the resources section.

Discuss the role of Bomber Command during the War.

Brief

Tell the young people that they have been commissioned to write an article for a local magazine about Bomber Command. Ask young people to find out what they can about Bomber Command during the Second World War. They can start their research in the classroom and continue it when they visit the venues.

Ask them to think of questions that will help them to find the information they are looking for.

Use the Journalists Writing Frame to help them form their article.

- What was the role of Bomber Command?
- Who was in charge of Bomber Command?
- How many people were in Bomber Command?
- How was their reputation different during and after the War and why.
- Only very recently has a permanent memorial been created to Bomber Command.

For more information visit <http://www.raf.mod.uk/news/archive/bomber-command-memorial-05052011>

What are the young people's views on this?

Plenary

Ask young people to present their report for a local newspaper on what they have found out about Bomber Command. Make sure they check their facts.

Extension

Aviation Heritage Lincolnshire would like young people to create a time line for Bomber Command in the context of the major events in the Second World War. They would like this time line to be displayed at the different venues.

Discussion activity

Discuss the role of Bomber Command during the War. The background information here provides a starter but much more can be found at the venues and online.

<http://www.rafbombercommand.com/memorialfund/>



Background information

Approximately 125,000 aircrew flew with Bomber Command during World War II (their average age was 22). 73,700 of them became casualties (killed, wounded or shot down and taken prisoner of war), of those 55,500 were killed.

For over 60 years consecutive governments have not recognised the bravery of these young men, by not presenting them with a special medal of their own. During the War these young men were seen as heroes and a lot of their raids were used in propaganda to improve the morale of the country.

Bomber Command was formed in 1936 and in the first year of the Second World War its role was defensive. From autumn 1940 it assumed an attacking role, targeting German industry.

At the beginning of the War, aircrews flew without any navigational or radar aids. Sorties at night were preferable to sorties during the day because crews had to spend a lot of time looking for their targets. Only one in ten bombs landed within five miles of the aiming point. Even so, there were few losses because German defences against night attacks were still basic. It wasn't until July 1942 that radar aids were developed to help the bombers navigate more accurately. Night-time raids were more successful and the bombs were much larger so more effective.

Bomber Command was made up of five operational groups.

Before January 1942 Sir Richard Pierse led Bomber Command. Air Marshal A.T. Harris who had commanded 5 Group succeeded him and held the position of the Deputy Chief of Air Staff at the Air Ministry. He was Commander in Charge until the end of the War. He believed the best way to cripple Germany was to bomb its industry.

Gaining air superiority

The Pathfinder Force (PFF) was formed the year Harris took command, it was a force designed to take advantage of the new radar devices. At first, PFF comprised five Squadrons, one from each of Bomber Command's operations groups, but, by April of 1945, 19 Squadrons were involved. All PFF crews were specially selected from volunteers who had carried out a minimum of 30 operational sorties. By the end of February 1943 the four-engined heavy bombers made up two thirds of the force, so increasing bomb carrying capacity by almost 70%. Bomber Command was at maximum strength on 1st October 1944 when the numbers in all ranks amounted to 266,742.

Commonwealth and Allied Squadrons had been involved in the air battle since 1940/41 and then in January 1943 the few Royal Canadian Air Force (RCAF) Squadrons that existed were united as 6 Bomber Group mainly based in Yorkshire. This Group eventually expanded into 14 heavy bomber Squadrons flying Lancasters and Halifaxes, its cost being met by the Canadian Government.

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At the time scientists were continually working on new ways of helping Bomber Command crews. They came up with a number of defensive measures including:

- 'Window' - metallised strips dropped from the aircraft whilst flying over enemy territory that gave the same kind of signals to enemy radar as did aircraft, thus flooding control screens with both real and false readings.
- 'Monica' – radar set facing rearwards that gave out warning of enemy fighters coming up behind the bomber.
- 'Mandrel' – jammed the enemy's early warning system.
- 'Boozer' - a receiver that lit a warning lamp when the bomber was 'illuminated' by the enemy radar transmitters. When this happened, the pilot changed course until the warning lamp went out.
- 'Tinsel' – jammed the enemy's ground to air telephone frequencies.

A new special group – No 100 was formed in November 1943 exclusively to make use of these counter offensive tactics, confusing and destroying the enemy's night-time defences. This group eventually grew into 13 Squadrons. By 1944 when the allies gained air superiority, Bomber Command began regular daytime operations over Germany and France.



Key RAF bombing raids against Germany

1. Raid on the Ruhr

1940 May 15/16

This was the first strategic attack against Germany.

It was a night precision raid on oil plants and marshalling yards. The amount of damage is unknown but probably very little.

2. Raid on Mannheim

1940 December 16/17

Night area raid on the city centre. Scattered damage was inflicted as many bombs fell outside the target area. This was the first RAF area raid on main industrial cities and its aim was to disrupt German war production and to break civilian morale.

3. Raid on Mannheim

1942 March 28/29

Night area raid on the town centre. 1,500 houses were destroyed and some factories were seriously damaged, but production was back to normal almost a week later. This was the first large-scale incendiary bombing raid.

4. Raid on the Ruhr

1942 April 17

Daylight precision raid on MAN diesel engine factory. Some damage inflicted but production was hardly affected.

5. Raid on Cologne

1942 May 30/31

Night area raid on the city centre involving 1,046 aircraft. 40,000 people were made homeless, but the city made a rapid recovery. (First of 1,000 bomber raids).

6. Raid on Essen

1943 March 5/6

Night area raid on Krupp works. Heavy damage to Krupps, 160 acres of Essen was devastated. 'Oboe' radar used for the first time to overcome problems caused by industrial haze in the Ruhr area.

7. Dams Raid

1943 May 16/17

Night precision raid on Mohne, Eder and Sorpe dams. The Mohne and Eder dams were breached causing severe flooding. It was a landmark raid because of the development of precision bombing techniques.

8. Raid on Hamburg

1943 July 24/25

Night area raid on city centre. Over 2,200 tons of bombs dropped causing wide spread damage to residential areas.



9. Raid on Berlin

1943 November 18/19

Night area raid on city centre. 1,500 tons of bombs dropped. First of 16 mass raids on Berlin involving over 9,000 aircraft.

10. Raid on Nuremberg

1944 March 30/31

Night area raid on city centre. 2,500 tons of bombs dropped. Bombs too scattered to cause serious damage. Heaviest defeat suffered by Bomber Command.

11. Canal Raid

1944 September 23/24

Night precision raid on Dortmund-Ems Canal, the inland waterway linking the Ruhr with other industrial areas. The canal was breached and a six-mile section drained.

12. Raid on Dresden

1945 February 13/14

Night area raid on city centre. Immense damage to the old town and suburbs. 1,600 acres devastated. Incendiary bombs caused the worst fire storm of the War. This was the most destructive and controversial raid of the War.

Bomber Command dropped one million tons of bombs, 625,000 of which were over Germany. The Luftwaffe dropped approximately 72,000 tons of bombs on Britain.

5 Group Bomber Command carried out the most bombing raids: 70,357. It also suffered the greatest losses with 11,990 men killed and 1,888 aircraft lost in action.

Credit

This information is taken from 'Just Jane' East Kirkby, In Bomber Command Country with kind permission from Artworks.



Journalists Writing Frame

A good news report will include
A Headline The headline sums up the report in a way that catches the readers' attention.
Headline
Introduction The Introduction grabs the attention by talking about the five Ws. Who, What, When, Where and Why
The middle section goes into more detail with witness statements or comments from experts
Summary The summary brings the article to an end.