

Tom Smith

Flight Engineer

582 Pathfinder Squadron 1944-45



When Tom Smith became 18 years old on the 10th August 1943, he decided to volunteer for the RAF. He had been in the Air Training Corps for much of his teenage years. He did not want to be “called up” (conscripted) for the army or navy and so volunteered to ensure his choice of service. At the time he was an apprentice at the Vulcan Works in Newton-Le-Willows. The Vulcan produced steam locomotives. He attended night school at Wigan and District Mining and Technical College.

Tom had told his mother that he had been “called up” to the RAF.

It isn't clear exactly when his time in the RAF started. The first record of his RAF career is in his Flying Log book.

At the front of this log book is a record of his Training on Lancaster I and III. This training was carried out at 4S of TT (4 School of Technical Training) at RAF St.Athan.

2 *yes short Sunderland*

RESULTS OF AB INITIO COURSES AND REMARKS

FLIGHT ENGINEER COURSE
NO 4 S. of T.T. R.A.F. St. Athan

Type of Aircraft **LANCASTER I. & III.**

Examination Result 63.0 %

Passed ☐
~~Failed~~ ☒

Langford
 Chief Instructor

Date 20 SEP 1944

<https://raffaeaa.com/history-2/raf-st-athan-wartime-training/#:~:text=The%20eligibility%20for%20internal%20recruitment,not%20take%20long%20to%20fill.>

He did once say that he had hoped to get Short Sunderland flying boats – thinking this was the safest option in the RAF. But he got Lancasters instead!

I do know that his induction into the RAF took place at RAF Locking near Weston-super-Mare

https://en.wikipedia.org/wiki/RAF_Locking#:~:text=RAF%20Locking%20was%20opened%20as,provided%20for%20marine%20craft%20personnel.

One clue as to when he joined the RAF comes from the fact that he married Ellen Burns on the 17th January 1947. He did this as soon as he returned from India and was discharged from the RAF. It was a slightly odd thing in that if you volunteered for a service you had to stay in for 3 years whereas if you were conscripted you didn't. This would indicate that he finished in the RAF at the end of December 1946. Which means he would have joined in December 1943.

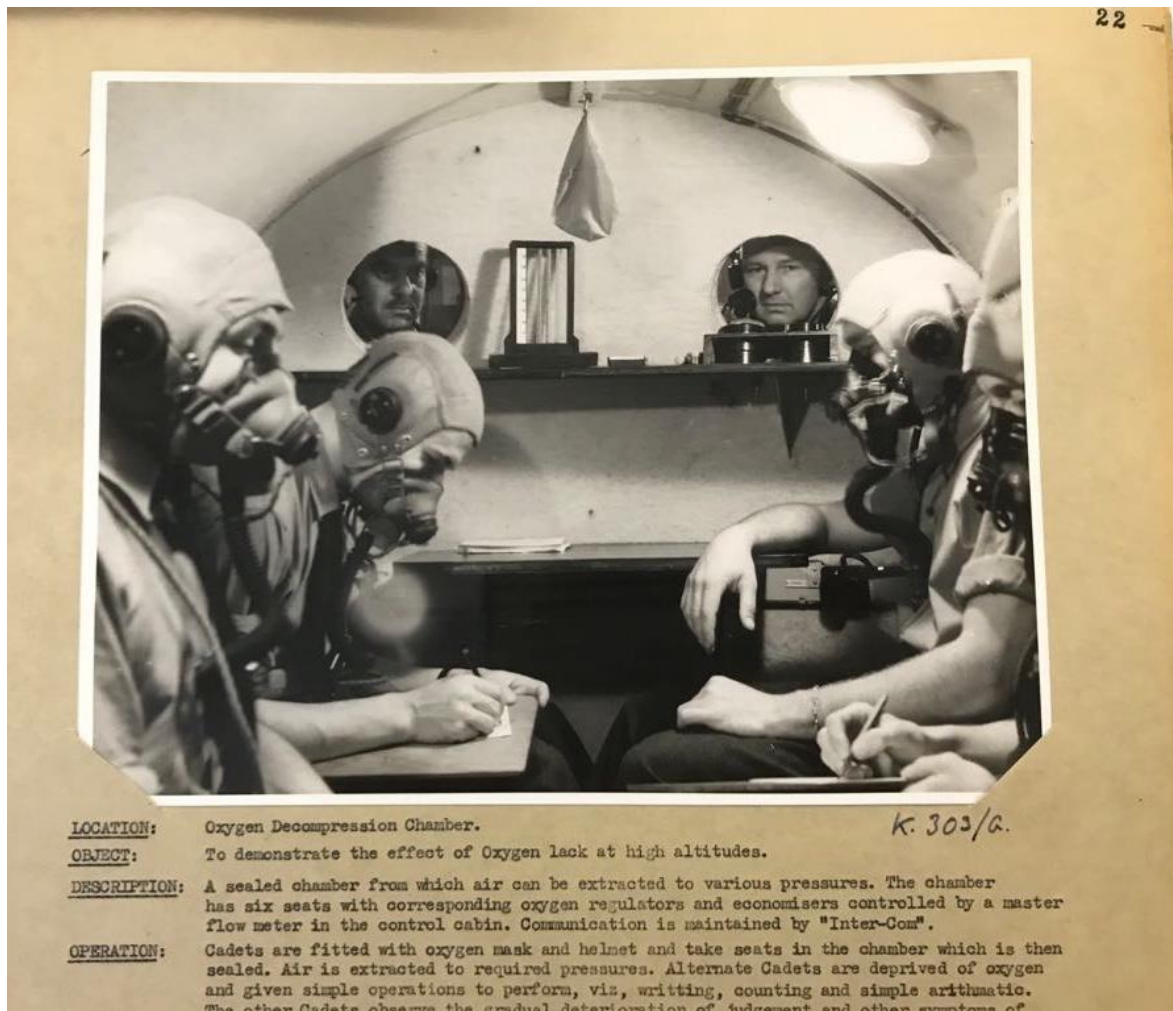
At the time of Tom's death in October 2004, I was engaged in taking over the Adour engine test facility at RAF St. Athan. I suddenly had a recollection of him mentioning RAF St. Athan and so I found his log book and checked – there was the training record. Shortly after we started operating the Adour test facility I discovered that 4S of TT was still active on the site and in fact the original buildings were only some 200m from our site.

See – <https://www.raf.mod.uk/our-organisation/stations/mod-st-athan/>

In my searches I also came across this website which is truly lovely – I recommend you take a look if you want to be immersed in what the training must have been like.

<https://raffaeaa.com/history-2/4-softt-st-athan/>

I have extracted two of the pictures because they have stories directly related to them.



He did tell me about this. He remembered being in a chamber, he was asked to count down from 100, and they reduced his oxygen supply, and he passed out. Then they restored his supply and he resumed exactly where he had left off. The Lancaster was not pressurised and above 10,000ft you start to need additional air supply. The Lancaster cruised at over 20,000ft. So having an oxygen supply and knowing when someone else's wasn't working properly was crucial.

It is also worth mentioning that at this altitude the air temperature would be around -40°C. There was no specific heating in the aircraft and so the crew were extremely cold. They were wearing as much as they could to keep warm – but it was still a challenge.

Below you can see a picture of a flight engineer in action, sat in his jump seat, dealing with the dials and switches on his control panel, wearing his warm clothing, oxygen mask and comms.





K. 120/G.

LOCATION: Gymnasium.
OBJECT: To train Cadets in the technique of safe landing from parachute descent.
DESCRIPTION: Cadets practising parachute rolls jumping from bench.
OPERATION: One foot is raised when taking off from bench. Both feet and legs are brought quickly together before landing.

We were once at Tom and Ellen's house in Sidmouth on a lovely summer's day. We were in the garden, eating at a table on the patio which was raised about 3ft above the lawn with a relatively sharp drop. Suddenly, Toms' chair leg went over the edge of the patio and he reeled backwards and down onto the grass below. We all gasped, concerned for his wellbeing. But he rolled over, and jumped up and announced "They teach you how to fall in the RAF!". Well, this picture is proof of how they used to teach you to fall – although only from a gym bench! I'm not sure if there was any more parachute training than this but I hope so.

All aircrew were issued with a parachute. But they did not wear them whilst flying as they were too cumbersome. Instead, they had to clip it onto a harness if needed.

As soon as his training at St.Athan was completed he very quickly found himself getting flying experience as the next page of his log book shows.

He went to RAF Lindholme in Yorkshire to what was then called the HCU – Heavy Conversion Unit. It is believed that here is where he would have taken up with his crew.

An RAF Lancaster had 7 crew members.

Pilot

Flight Engineer

Navigator

Bomb aimer

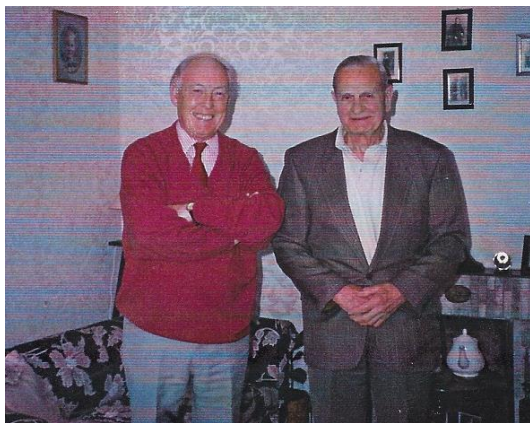
Wireless operator

Mid-upper gunner

Rear gunner

On the first page of his log book dedicated to flying, the name P/O (Pilot Officer) Haines appears for the first time. Eric Haines was Toms' pilot for the rest of the war. Eric was a carpet salesman from Keynsham which is a small town between Bath and Bristol. Unlike the rest of the crew, Eric was an elderly gentleman at the age of 35. There is little doubt that this additional experience was a bonus to this crew.

Tom and Eric had a reunion in Bath in the 1990's some 50 years after the war had ended. Although they had written each other a Christmas card every year.



1656 H.C.U "C" LINDHOLME				Time carried forward :-		Flying Times	
Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Day	Night
OCT. 12		HALIFAX LW 244	F/O BERRY	FLT/ENG.	FAMILIARISATION	00.35	
OCT. 19		HALIFAX LW 244	F/O STEEL	FLT/ENG.	LOCAL DUAL	00.10	
OCT. 22		HALIFAX LW 244	F/O GOODALL	FLT/ENG.	LOCAL DUAL	01.25	
OCT. 26		HALIFAX JD 268	F/LT. HOLMES	FLT/ENG.	LOCAL DUAL	01.35	
OCT. 27		HALIFAX JD 268	F/O GOODALL	FLT/ENG.	LOCAL DUAL	02.00	
" 27		HALIFAX JD 268	F/LT. PICKLES	FLT/ENG.	CHECK DUAL A/C. U/S	00.15	
OCT. 29.		HALIFAX JD 268	F/O GOODALL	FLT. ENG.	2 ENG & TANK CHANGING. CORKSCREWS. LAND AT CARNABY	01.55	
OCT. 29		HALIFAX JD 268	F/LT. PICKLES	FLT/ENG.	CHECK DUAL	00.15	
OCT. 29		HALIFAX JD 268	P/O HAINES	FLT/ENG.	LOCAL SOLO	01.05	
OCT. 30		HALIFAX W 771	F/O STEEL	FLT/ENG.	CHECK DUAL & CORKSCREW	00.20	
OCT. 30		HALIFAX W 771	P/O HAINES	FLT/ENG.	LOCAL SOLO	00.50	
OCT. 31		HALIFAX LW 244	F/O GOODALL	FLT/ENG.	CHECK DUAL & SCREENED BOMBING	00.15	
OCT. 31		HALIFAX LW 244	P/O HAINES	FLT/ENG.	SOLO CxL	02.20	
Nov 1		HALIFAX W 7508	P/O HAINES	FLT ENG	CROSS COUNTRY	04.40	
Nov 2		HALIFAX BB 269	F/O GOODALL	FLT/ENG	LOCAL DUAL		02.15
" 3		HALIFAX BB 269	F/LT PICKLES	FLT/ENG	LOCAL DUAL		01.40
" 4		HALIFAX BB 269	F/LT HOLMES	FLT/ENG	LOCAL DUAL		01.20
" 4		HALIFAX BB 269	P/O HAINES	FLT/ENG	LOCAL SOLO		02.20
" 4		HALIFAX BB 269	F/LT HOLMES	FLT/ENG	ADHOC OPS TRAINING		00.45
Total Time ...						17.40	06.30

The initial flights indicate dual and then solo. On the dual flights the pilot's name is not Eric's. So it is assumed that these initial flights were with a second pilot training Eric. Then later, Eric went solo.

On October 12th, the crew had their first introduction to corkscrewing – this was a manoeuvre used to confuse the radar of night fighters. It was essentially diving and banking and then climbing whilst still banking. Pilots would do it routinely during flight even if not under attack. For the rest of the crew it was a motion sickness challenge at best.

On this quite eventful flight they also landed at RAF Carnaby. This was an emergency landing strip with a runway five times wider than a standard runway. I don't think there was a problem with the aircraft though – I think it was just to show them Carnaby.

Then on November 2nd they had their first night flying experience – note the change in the colour of the ink used from blue to red. At first this is dual but eventually they go solo at night for the first time and then straight into practising for OPS.

Training at Lindholme continues on the next page of the log book.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
Time carried forward :-						17.00	08.30
Nov 8		HALIFAX JN 975	P/O HAINES	FLT/ENG	"Y" CROSS COUNTRY	04.20	
Nov 9		HALIFAX JN 975	P/O HAINES	FLT/ENG	BULLSEYE P/O U/S		00.55
" 9		HALIFAX	P/O HAINES	FLT/ENG	X COUNTRY		06.00
" 10		JN 975	P/O HAINES	FLT/ENG	HLB.		01.40
Nov 13		LW 244	F/O BERRY	FLT/ENG	DUAL F/A	00.45	
" 13		LW 244	P/O HAINES	F/E	Solo FA	00.20	
Nov 20		BB 255	P/O HAINES	F/E	X C.T.Y.		05.10
						23.05	22.15
<p>Summary for 1656 HCU. CO. 130. UNIT 1656 CU. A/C HALIFAX DATE 21/11/44 SIGNATURE Smith.</p>						UNIT	
						w/c o/c 1656 HCU.	
TOTAL TIME ...						23.05	22.15

On the 10th of November there is HLB – High level bombing – this may well have been the first time they have been up to full bombing altitude – 26000ft – and done at night.

On the 13th November they have their first fighter affiliation (F/A) exercise – first with an instructor – then solo. We don't know what aircraft were used for these fighter affiliations – Hurricane, Spitfire? Or something a little less precious?

Tom told a story of this training on the Halifaxes which was hard to comprehend. So much so I started to think I had not heard him right. But he told it a couple of times and I will not forget it. On the night of the 20th November they were down to do a relatively straightforward (compared to the earlier training) night time navigation exercise. Eric Haines rejected the first 3 Halifax aircraft which he was offered for the exercise saying that they were not flight worthy. He accepted the fourth.

They lined up on the runway, 3rd in the queue to take off. The first Halifax took off and crashed. The second then took off and also crashed. They then took off successfully and continued towards their exercise. The aircraft behind them took off and it too crashed. The loss of life and of aircraft seems unreal and yet this is what happened that night.

There is a record of it -

Halifax W7875 near Dunsville, Doncaster.

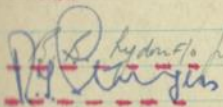
At 21.58hrs on 20th November 1944 the crew of this 1656 Heavy Conversion Unit aircraft took off from Lindholme airfield to undertake a night navigation training flight. Shortly after leaving the ground the aircraft banked steeply, lost height, struck a tree and then crashed into farm buildings at Lings Farm, near Dunsville. On impact the aircraft caught fire and six of the crew were killed. Farm buildings also caught fire causing a number of cattle to be put down. No civilians are believed to have been injured as a result of this incident though I suspect that the rear gunner was pulled clear of the burning aircraft but a civilian rescue effort though cannot locate any information about it. This was the third aircraft of three 1656 HCU Halifaxes to crash over an hour in this small vicinity, all accidents were put down to the incorrect use of the flap or bomb-door levers. The first saw five of the crew killed when Halifax BB254 crashed at Dunscoft, second was to Halifax HR794 where the crew were lucky and escaped with their lives. Halifax W7875 had crashed around half a mile nearer the airfield from where BB254 had crashed.

The above words are from –

<https://www.yorkshire-aircraft.co.uk/aircraft/yorkshire/york44/w7875.html>

One has to hope that all learned from this experience and that such a tragedy was not repeated on this scale.

That night was Tom's crew's last flight from Lindholme. Were they moved forward towards operations early because of the tragedy or was it just time? We will never know. But on the next page of the log book, they are now flying Lancasters!

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Time carried forward :-	
						23.05	22.15
						Flying Times	
						Day	Night
Nov 27		LANCASTER R5549	P/O CATLIN	F/E	FAMILERISATION * C & Ls	02.00	
" 27		LANCASTER R5549	P/O HAINES	F/E	C & Ls	00.30	
" 28		LANCASTER W4995	P/O CATLIN	F/E	C & Ls	00.50	
" 28		LANCASTER LM 369	P/O HAINES	F/E	C & Ls	00.45	
NOV 28		LANCASTER R5549	P/O LYDON	F/E	C & Ls	01.40	
" 28		LANCASTER R5549	P/O HAINES	F/E	C & Ls	01.50	
Nov 30		LANCASTER ED 585	P/O LYDON	F/E	FIGHTER AFFILIATION	00.25	
DEC 1		LANCASTER W4995	P/O HAINES	F/E	LOCAL FLYING	02.10	
						06.40	03.30
SUMMARY FOR 1656 LFS COURSE							
UNIT 1656 LFS							
DATE							
AIRCRAFT - LANCASTER							
SIGNATURE Smith							
							
S/Lt O'D'F.T.							
W/C 05 1656 LFS							
TOTAL TIME						29.45	25.45

For the last few days in November and the 1st December they were sent to Lancaster Finishing School (LFS) – at RAF Syerston in Nottinghamshire – Top Gun!

Much of the time is spent doing circuits and landings (C&Ls). There is some night flying but not much. But as December arrives it is time to join their squadron.

The squadron in question was 582 Pathfinder Squadron at RAF Little Staughton at the time in Huntingdonshire. Little Staughton is relatively south compared to most of Bomber Command's Lincolnshire airfields. It is part way between Bedford and Cambridge and the nearest town is St. Neots.



The airfield still exists today although it is mostly an industrial estate. There is a nice memorial on the road outside the airfield which commemorates the aircrews who served there. As well as 582 squadron, there was also the 109 squadron of Mosquitos.





582 squadron was relatively new. It was only formed in April 1944. The Pathfinder name is about the fact that the function of these aircraft was to find and mark the target for the other bombers to follow. This meant they would be going in first. The idea was that they would increase the accuracy of the main bombing wave. They were given the most advanced and often therefore secret target finding equipment.

582

SQUADRON

8 (PFF) GROUP

Code Letters

60

Operated the Lancaster from
April 1944 - Sept 1945

Wartime Base
Little Staughton

Raids flown with Lancasters
165

Lancasters lost
28
plus 8 in accidents

Points of Interest
Formed from elements of 7 and
156 Squadrons, 582 was one
of the most short lived units
in the RAF having existed for a
total period of only 17 months.
Captain E.E. Swales was award-
ed the V.C. for his actions on
23/24 February 1945
over Pforzheim.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
7/12/44		LANCASTER N P/O HAINES		F/E	X COUNTRY	21:55	
11/12/44		LANCASTER N P/O HAINES		F/E	FIGHTER AFFIL	21:10	
28/12/44		LANCASTER X F/O HAINES		F/E	"OPS" BONNE		0600
29/12/44		LANCASTER N F/O HAINES		F/E	"OPS" BUEB		0600
31/12/44		LANCASTER V F/O HAINES		F/E	FIGHTER AFFIL, AIR TO SEA "Y" BOMBING	24:35	
TOTAL FOR DECEMBER 1944							
NIGHT							1200
DAY						10:40	
S/Ldr. O.C. "B" 7LT.							
TOTAL TIME ...						40:25	37:45

On this page of the log book, Tom's crew are given only two flights with the aircraft before the first of their 21 operations (OPS). The first one is to Bonn (notice the spelling). The strategic location of Bonn on the Rhine was that it would protect against the allied crossing into the heartland of Germany.

Note that D-day had already taken place in June of this year and the allies were advancing through Europe.

The next night they were sent out again – this time to Buer. It is understood this was related to the Germans fuel supplies in that there was a synthetic oil manufacturing plant there.

Notice how the flight time for these two raids is now up to 6 hours – not what they had been used to to this point.

Over such a duration, the need for a toilet started to become an issue. Tom quite often mentioned the on-board toilet – the Elsan – and rolled his eyes and shook his head.



I read the following paragraph about the Elsan by a Lancaster crew member.

“Nobody liked the Elsanthe dustbin like apparatus with a clip down lid placed at the centre of the fuselage aft, near the main door. It was one of the Lancaster’s major design faults, and the crews hated them. Apart from the challenges of aim and balance, men who’d used it at high altitude in intense cold had been known to freeze to the seat. And the ground crews hated cleaning them out.

One crew member wrote –

“ While we were flying around in rough air, this devil’s convenience often shared its contents with the floor of the aircraft, the walls and the ceiling. It doesn’t take much imagination to picture what it was like trying to combat fear and airsickness whilst struggling to remove enough gear in cramped quarters and at the same time trying to use the bloody Elsan. If it wasn’t an invention of the devil, it certainly must have been foisted on us by the enemy. When seated in frigid cold amid the cacophony of roaring engines and whistling air, away from what should have been one of life’s peaceful moments, the occupant had the chance fully to ponder the miserable condition of his life instead. This loathsome creation invariably overflowed on long trips, and, in turbulence, was always prone to bathe the nether regions of the user. It was one of the true reminders to me that was is hell.”

Eric Haines asked Tom to come up with a means for him to do a wee without leaving his seat. Tom duly found an inner tube from a bicycle and cut it to create a pipeline from the pilot’s seat to outside the aircraft (near the bomb aimer I think). Was it that Eric disliked the Elsan so much, or didn’t trust the Lancaster’s autopilot (George), or didn’t trust my dad’s flying abilities (Flight Engineers were meant to take over the controls if the pilot was indisposed)? We will never really know.

When they returned from a raid, they would have a debrief with tea and then a full breakfast including bacon and eggs – something which much of the country couldn’t get.

Note also that Pilot Officer Haines is now Flying Officer Haines – recognition of the completion of his training and starting ops I think.

January 1945 was a relatively busy time for Tom and his crew. 4 raids. Notice the flight time – particularly Munich at 9 hours.

There was one story which Tom told me which is hard to pin down exactly in time. Certainly the event does not appear in his log book! They returned from an op one night, landed and taxied to a stop. The ground crew said to them “what are you doing here?” They had landed at the wrong airfield! Not as silly as you might think – the airfields were only miles apart – and in fog a system called FIDO was used which involved burning fuel along the side of the runway – so if you saw that and you thought you were roughly in the right place you would land.

I would put this event in January 1945 – because apparently it was unusually cold in that month. I would guess that they landed at Thurleigh or Twinwood Farm – see the map above. These two sites became the foundation of the National Aerospace Centre after the war – which eventually turned into the Royal Aircraft Establishment (RAE) Bedford.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
2/1/45		LANCASTER T	F/O HAINES	F/E	OPS. NURENBERG		08.20
5/1/45		LANCASTER S	F/O HAINES	F/E	OPS. ROYAN		06.40
7/1/45		LANCASTER 3	F/O HAINES	F/E	FIGHTER AFFILIATION	00.45	
7/1/45		LANCASTER O	F/O HAINES	F/E	OPS. MUNICH		09.00
14/1/45		LANCASTER Y	F/O HAINES	F/E	OPS. MERSEBURG		08.20
17/1/45		LANCASTER X	F/O HAINES	F/E	BOMBING		01.15
21/1/45		LANCASTER W	F/O HAINES	F/E	BOMBING		01.10
TOTAL FOR JANUARY 1945							
NIGHT							33.35
DAY						01.55	
TOTAL TIME						42.20	71.20

The Nuremburg attack is very intriguing. Reading the history, it appears this was the first time it was attacked. But given its background it is hard to understand why it had never been targeted before. I recommend reading some of the history of Nuremburg to get the full picture.

There is then an entry for somewhere called Royan on the 5th January 1945.

Royan is a port on the south west coast of France. Here is any extract from the Wikipedia history section for Royan.

During [World War II](#), two German forts defended the Gironde estuary: *Gironde Mündung Nord* (to the north, at Royan) and *Gironde Mündung Süd* (to the south, at La [Pointe de Grave](#)). These constituted one of the last pockets of [Third Reich](#) resistance along the Atlantic

coast of France, well after the [liberation](#) of the rest of the country. A force of some 350 heavy bombers of the [Royal Air Force](#) (RAF) bombed Royan in two raids conducted in the early hours of 5 January 1945, destroying the town. Four Lancaster heavy bombers were shot down; no aircrew survived. Two other bombers also crashed after colliding. The raid was ordered by [Supreme Headquarters Allied Expeditionary Force](#) (SHAEF),^[10] which had been told that the only people left in Royan were Germans and collaborators. Responsibility for this raid is generally attributed to [General de Larminat](#) of the [Free French Forces](#).^[11]

<https://en.wikipedia.org/wiki/Royan>

Munich was a constant target throughout the war. So it is difficult to pin down why it was attacked on this particular occasion.

Merseberg was a target because it had an oil refinery.

The entries which just say the word “bombing” are not believed to be OPS. At around about 1 hour – they are too short. It is thought that they were training exercises.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
10/2/45		LANCASTER ME 313 A	F/O HAINES	F/E	Mock OPS	02.50	
12/2/45		LANCASTER PB 297 D	F/O HAINES	F/E + B/A	BOMBING	01.45	
13/2/45		LANCASTER NP 646 V	F/O HAINES	F/R + B/A	Mock OPS + BOMBING	03.40	
		LANCASTER PB 167 U	F/O HAINES	F/E + B/A	Mock OPS + BOMBING	02.50	
						12.05	
<p>165 COURSE FEBRUARY 1945</p> <p>SUMMARY FOR: UNIT: RAF WARBOYS AIRCRAFT: LANCASTER</p> <p>DATE: 15/3/44 TYPES: SIGNATURE: [Signature]</p> <p>OC "B" FLIGHT</p> <p>[Signature] w/Gen CFI</p> <p>Wear a/c.</p> <p>OFFICER COMMANDING</p> <p>P.P.S. NAT. TRAINING UNIT.</p>							
TOTAL TIME						54.25	11.20

During February the crew went to RAF Warboys and flew 4 times over a few days. This was the “home” of the pathfinder squadrons and so it is assumed that this break was some form of training – 165 course as it says - but we don’t know what that means. My guess would be some form of new navigation system.

But on the next page they are back at Little Staughton. They only do one OPS – to Essen.

					Time carried forward —	54.25	71.20
Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
19/2/45		LANCASTER PB 583 M	F/O HAINES	F/E	"Y" CROSS COUNTRY	03.20	
20/2/45		LANCASTER PB 475 E	F/O HAINES	F/E	"Y" CROSS COUNTRY	01.10	
22/2/45		LANCASTER BB 377 S	F/O HAINES	F/E & B/A	"Y" CROSS COUNTRY & BOMBING	04.20	
23/2/45		LANCASTER PB 149 J	F/O HAINES	F/E	OPS ESSEN	04.45	
25/2/45		LANCASTER ND 849 P	F/O HAINES	F/E	"Y" CROSS COUNTRY	02.25	
26/2/45		LANCASTER PD 475 E	F/O HAINES	F/E	"Y" CROSS COUNTRY	02.15	
					TOTAL FOR FEBRUARY 1945		
					FOR 582 SGO.		
					DAY	17.55	
					OR B FLIGHT — W. G. B. HAINES S/LDR		
					TOTAL TIME	72.20	71.20

Essen is in the Ruhr Valley. And the aircrews sarcastically called it "happy valley". The Ruhr was the heartland of industrial Germany and a large number of targets were therefore chosen in this location and Essen was a common one.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Time carried forward — 72.20 71.20	
						Flying Times	
						Day	Night
11/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. ESSEN	04.30	
12/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. DORTMUND	04.35	
13/3/45		LANCASTER	F/O HAINES	FLT/ENG	F/A. BOMBING "Y" X COUNTRY	02.35	
13/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. HERNE		04.40
14/3/45		LANCASTER	F/O HAINES	FLT/ENG	BOMBING	01.35	
15/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. CASTROP-RAUXEL	04.35	
18/3/45		LANCASTER	F/O HAINES	FLT/ENG	BOMBING	02.30	
19/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. HANAU		05.50
21/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. BREMEN	04.15	
22/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. DULMEN	04.15	
24/3/45		LANCASTER	F/O HAINES	FLT/ENG	OPS. STERKRADE	04.15	
26/3/45		LANCASTER	F/O HAINES	FLT/ENG	Y X COUNTRY	03.15	
TOTAL FOR MARCH 1945							
FOR 582 SQUADRON							
DAY						36.30	
NIGHT							10.30
W. J. HAINES							
S/LDR. "OC" "B" FLIGHT							
TOTAL TIME						108.50	81.50

So much so that they are back a few days later. But notice on these two ops that they are daylight raids. As the war is coming to close, and the German defences are starting to falter, Bomber Command starts to move to daylight raids and March is their busiest month with 8 OPS.



Above: 60-J and 60-Z heading out on a bombing mission. Note the open radiators on the nearest aircraft, an unusual sight on Lancasters at height.

The above picture shows two Lancasters from 582 squadron headed out in daylight conditions. We don't know when the picture was taken but Tom flew on both these aircraft – more Z than J. So there is the very slight possibility that he is in this picture!

Dortmund was attacked many times during the war, but the 12th March 1945 was apparently the most notable attack inflicting maximum damage to the city and paving the way for the allies to take-over the city within a month.

Herne is a small town on the Rhine. The river was used at this location for transporting iron ore and coal and this was probably why it was targeted.

Similarly, Castrop-Rauxel was a coal-mining centre on the Rhine-Ruhr valley and had suffered 35 raids during the war. It had a synthetic oil producing plant.

Looking at the history of Hanau, this attack seems to be timed with the advance of the US Army through this part of Germany.

Dulmen – also oil producing plant as was Sterkrade

WARBOYS "D" FLIGHT "AGLT."					Time carried forward	108.50	81.50
Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
31/3/45		LANCASTER PB 925X	F/O HAINES	FLT/ENG	EX. 1x2	00.15	
1/4/45		LANCASTER PB 925	F/O HAINES	FLT/ENG	EX. 1x2	02.30	
11/4/45		LANCASTER PB 925	F/O HAINES	FLT/ENG	EX. 1x2	01.15	
12/4/45		LANCASTER PB 925	F/O HAINES	FLT/ENG	D.N.C.O.	00.30	
13/4/45		LANCASTER PB 925	F/O HAINES	FLT/ENG	EX. 3x4	01.10	
14/4/45		LANCASTER PB 925	F/O HAINES	FLT/ENG	D.N.C.O.	00.40	
14/4/45		LANCASTER PB 808	F/O HAINES	FLT/ENG	EX. 5	01.05	
SUMMARY FOR "AGLT" COURSE						07.25	
RAF. WARBOYS AIRCRAFT LANCASTER							
DATE 4/4/45							
SIGNATURE J. Smith.							
H. Bad "OC" D FLIGHT							
YAG							
TOTAL TIME						116.15	81.50

And then suddenly as they enter April (effectively the last month of the war) they are sent to Warboys again. The training is designated AGLT. This refers to Automatic Gun Laying Turret. There is quite a write up about it here-

<https://bombercommand.wordpress.com/the-village-inn-460-squadron/>

(It was code named the village inn).

This was a radar system to alert the rear gunner to night fighters so that they could defend themselves better.

DNCO refers to Duty Not Carried Out. There is no explanation, but one guess would be that they were trying to engage with a fighter and the system wouldn't work properly.

And then back to their final ops of the war.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Time carried forward --- 116:15 81:30	
						Flying Times	
						Day	Night
6/4/45		LANCASTER R	F/O HAINES	FLT/ENG	CROSS COUNTRY	02:10	
10/4/45		LANCASTER Z	F/O HAINES	FLT/ENG	OPS. LEIPZIG.	06:25	
11/4/45		LANCASTER P	F/O HAINES	FLT/ENG	OPS. NUREMBURG	05:30	
12/4/45		LANCASTER	F/O HAINES	FLT/ENG.	CROSS COUNTRY, BOMBING, F/A.	02:10	
13/4/45		LANCASTER Z	F/O HAINES	FLT/ENG.	OPS. KIEL (VISUAL CENTRES)		05:35
14/4/45		LANCASTER R	F/O HAINES	FLT/ENG.	OPS. POTSDAM (VISUAL CENTRES)		08:00
16/4/45		LANCASTER M	F/O HAINES	FLT/ENG	BOMBING. F/A.	01:25	
18/4/45		LANCASTER S	F/O HAINES	FLT/ENG	OPS. HELIGOLAND	04:25	
19/4/45		LANCASTER M	F/O HAINES	FLT/ENG.	BOMBING	01:10	
19/4/45		LANCASTER O	F/O HAINES	FLT/ENG.	FERRYING (BASE - DOWNHAM MARKET)	00:25	
19/4/45		LANCASTER S	F/O HAINES	FLT/ENG	FERRYING (DOWNHAM MARKET - BASE)	00:25	
TOTAL FOR APRIL 1945							
FOR 582 Sd.						DAY	24:20
						NIGHT.	13:35
Average --- 37:00 " 8" FLT.							
TOTAL TIME						140:40	95:25

Kiel was a naval base and the attacks in April were aimed mainly at destroying U-boats. These raids apparently took out most of the remaining U-boats stationed here.

The last op is to Heligoland. This is an island equidistant from the Danish and German coasts. It was used as a naval base throughout the war. On the 18th April 1945 the island was attacked by 969 aircraft and the island had to be evacuated the next day as the destruction was so complete.

The need to Ferry to Downham Market is unknown. They flew one aircraft out and then another one back. One assumes this was for some form of repair.

					Time carried forward	140:40	95:25
Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
1/5/45		LANCASTER M	F/O HAINES	FLT/ENG.	BOMBING	01:25	
3/5/45		LANCASTER Q	F/O HAINES	FLT/ENG.	ROTTERDAM. VBU. Food SUPPLIES	02:35	
7/5/45		LANCASTER R	F/O HAINES	FLT/ENG.	YPENBURG VBU. Food SUPPLIES	02:40	
8/5/45		LANCASTER R	F/O HAINES	FLT/ENG.	JUVINCOURT. Exodus P.O.Ws.		
					BASE - JUVINCOURT	02:40	
					JUVINCOURT - WESTCOTT	01:25	
					WESTCOTT - BASE	00:29	
					CROSS COUNTRY	00:45	
16/5/45		LANCASTER Q	F/O HAINES	FLT/ENG.	CIRCUITS * LANDINGS	00:45	
19/5/45		LANCASTER M	F/O HAINES	FLT/ENG.	TOUR.	05:15	
20/5/45		LANCASTER Z	F/O HAINES	FLT/ENG.	WALCHERN-GOSCH-WESEL		
					HAMBORN-DUISBURG-ESSEN		
					CASTROP RAUXEL-DORTMUND-LAMM		
					HANNOVER-OSNABRUCK-CLEVE		
					JUVINCOURT. Exodus P.O.Ws.		
24/5/45		LANCASTER Z	F/O HAINES	FLT/ENG.	BASE - JUVINCOURT	01:38	
					JUVINCOURT - DUNSFOLD	01:20	
					DUNSFOLD - BASE	00:29	
					CROSS - COUNTRY * BOMBING	01:55	
28/5/45		LANCASTER S	F/O HAINES	FLT/ENG.			
					TOTAL TIME	163:45	95:25

					Time carried forward :- 163 ⁴⁵ 95 ²⁵		
Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
29/5/45		LANCASTER M	F/O HAINES	FLT/ENG	LOCAL FLYING * C.L.S.		2.15
					TOTAL FOR MAY 1945.		
					FOR 682 SQD. DAY	23.05	
					J.D. Conder NIGHT		2.15
					OC'D FLIGHT		

Suddenly there is a much more positive page to the log book.

On the 3rd and 7th of May, the crew take part in Operation Manna. Food supplies in the Netherlands were running extremely low. The allies decided to drop food from the bombers. The Germans had not agreed formally that they would not fire on the aircraft. Also as the food supplies had no parachute, the bombers had to fly much lower (500ft) than they had been used to in order to drop their load and give it some chance of survival.

See - https://en.wikipedia.org/wiki/Operations_Manna_and_Chowhound

Tom's crew flew first to Rotterdam and then to Ypenburg (a town close to the coast which had an airfield which is probably where they could drop the supplies).

May 8th, 1945 was Victory in Europe (VE) Day. The crew took off in Lancaster R for Romeo to fly to Juvincourt in France as part of Operation Exodus - repatriating prisoners of war. Juvincourt was operated by the US Air Force and therefore would have had many temptations – chocolate, cigarettes, nylons ...



Above is a picture of a Lancaster from 582 squadron collecting PoWs from Lubeck in Germany. Tom said that on his trip there were 25 of them sat on the floor of the Lancaster.

They flew the PoWs to Westcott, near Aylesbury. Whilst they were at Westcott, a customs officer approached the aircraft and asked to see on board. Tom went to ask the pilot who said to tell the customs officer that they had "secret equipment" on board which the customs officer was not authorised to see. The customs officer went away thankfully not seeing anything else they may have had on board.

On their return journey to Little Staughton they gave a lift to a senior RAF officer. As they approached Staughton, Flying Officer Haines asked the senior officer for permission to do a fly past. He granted permission and so for the first and only time they buzzed the field. The four throbbing Rolls-Royce Merlin engines at last used in an expression of joy and freedom.

Westcott was also the location that the British assignment of Pennemunde rocket scientists were brought during this period. As a result the Propellants, Explosives and Rocket Motors Establishment (PERME) was created there. And there is still rocket motor activity on the site today.

The general flying training does not stop at this time. This is because there was a belief that they may need to join the war in the far east against Japan as this was still in progress.

On the 23rd of May there is the first reference to a "Tour" ... later you will see them referred to as Cooks Tour (Thomas Cook being a famous travel agent of the day). For some reason, there was a desire to review the damage which the bombing raids had caused and the crews were asked to fly over the sites and take photographs.

The next day they do another Exodus flight again to Juvincourt but this time repatriating to Dunsfold – an airfield which eventually was used by the Hawker Siddeley Aircraft Company for test flying aircraft which included the Harrier. The site later became famous as the site of the BBC's Top Gear programme.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
20/6/45		LANCASTER P	F/O HAINES	FLT/ENG.	H2S. BOMBING Exh.	01.35	
21/6/45		LANCASTER T	F/O HAINES	FLT/ENG.	H2S. BOMBING RUNS.	01.30	
21/6/45		LANCASTER Q	F/O HAINES	FLT/ENG.	LORAN X COUNTRY. DIVERTED TO ENSTONE		02.53
22/6/45		LANCASTER G	F/O HAINES	FLT/ENG.	ENSTONE TO BASE.	00.35	
SUMMARY FOR JUNE 1945							
UNIT 97 SQUADRON							
TOTAL HOURS						03.40	02.55
S/LDR "JF" B FLIGHT							
97 SQD							
TOTAL TIME						167.26	100.35

On the first couple of flights in June they are practicing with "H2S" – this was a new form of radar based targeting system – it is this which Eric Haines would have referred to as "secret" when he told the customs officer at Westcott that he couldn't come on board.

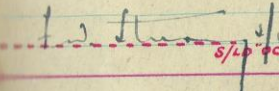
On the 21st June during a cross country flight there is a diversion to Enstone – this is in Oxfordshire. This is presumably a problem with the aircraft. By the next day it is fixed and they return to base.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Time carried forward -	
						167.25 100.35	
						Flying Times Day Night	
2/7/45		LANCASTER C	F/O HAINES	FLT/ENG	COOKS TOUR	04.55	
4/7/45		LANCASTER L	F/O HAINES	FLT/ENG.	COOKS TOUR TURNED BACK	03.30	
5/7/45		LANCASTER Z	F/O HAINES	FLT/ENG.	COOKS TOUR	04.35	
9/7/45		LANCASTER T	F/O HAINES	FLT/ENG.	COOK TOUR	03.50	
23/7/45		LANCASTER G	F/O HAINES	FLT/ENG.	INCENDIARY JETTISONING.	01.50	
24/7/45		LANCASTER E	F/O HAINES	FLT/ENG.	INCENDIARY JETTISONING.	01.50	
25/7/45		LANCASTER N	F/O HAINES	FLT/ENG.	INCENDIARY JETTISONING.	02.05	
30/7/45		LANCASTER O	F/O HAINES	FLT/ENG.	CROSS COUNTRY	05.05	
SUMMARY FOR JULY 1945 UNIT 582 Sqn.						TOTAL HOURS 22.35 05.05	
SIGNED J. Smith.							
- 8.40 OC - B. F. H. H.							
TOTAL TIME 190.00 105.40							

In July you see a number of Cooks Tours – turning back on the 4th July because of poor visibility.

This is followed by incendiary jettisoning. The incendiaries are relatively unstable and it is likely that they wouldn't try to take them to the far east and so it was time to dispose of them. I would assume that this involved dropping them over the sea.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Time carried forward -	
						190.00 105.40	
						Flying Times Day Night	
1/8/45		LANCASTER S	F/O HAINES	FLT/ENG.	CROSS COUNTRY	02.35	
2/8/45		LANCASTER C	F/O HAINES	FLT/ENG.	BULLSEYE	05. 05.10	
4/8/45		LANCASTER N	F/O HAINES	FLT/ENG.	CROSS COUNTRY	02.50	
7/8/45		LANCASTER S	F/O HAINES	FLT/ENG.	CROSS COUNTRY	03.20	
8/8/45		LANCASTER R	F/O HAINES	FLT/ENG.	LIBERTY BRUSSELS BRUSSELS - WYTON WYTON - BASE	01.25 01.20 00.10	
13/8/45		LANCASTER N	F/O HAINES	FLT/ENG.	CROSS COUNTRY	03.45	
15/8/45		LANCASTER J	F/O HAINES	FLT/ENG.	DODGE. BASE - TOULOUSE - NAPLES - BARI	06.55	
17/8/45					BARI - NAPLES - TIGEN HAM TIGEN HAM - BASE	07.40 00.35	
21/8/45		LANCASTER C	F/O HAINES	FLT/ENG.	CROSS COUNTRY	03.25	
TOTAL TIME 220.25 114.15							

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Flying Times	
						Day	Night
23/8/45		LANCASTER N	F/O HAINES		<u>DODGE</u> BASE - TOULOUSE - NAPLES - BARI	06:05	
25/8/45		LANCASTER N	F/O HAINES		BARI - NAPLES - TIBENHAM	06:55	
					TIBENHAM - SKELLINGTHORPE	00:35	
					SKELLINGTHORPE - BASE	00:25	
SUMMARY FOR AUG. 1945.							
UNIT 582 Sqn.							
TOTAL HOURS						DAY	44:25
						NIGHT.	08:35
SIGNED J. Smith.							
							
S/LD "C" B FLIGHT.							
TOTAL TIME ...						234:25	114:15

During August some training continues. The term "Bullseye" refers to a full ops practice – trying to attack a target with search lights, flak, and night fighters.

Operation Liberty and Operation Dodge were both about bringing back people from Belgium and Italy respectively for some leave. Note the Italy trips were over 3 days with a stop in Bari.

Date	Hour	Aircraft Type and No.	Pilot	Duty	REMARKS (including results of bombing, gunnery, exercises, etc.)	Time carried forward — 234.25 / 14.15	
						Flying Times	
						Day	Night
9/9/45		LANCASTER PB976 D	F/S HARDY	FLT/ENG	DODGE.		
					BASE - TIBENHAM	00.30	
					TIBENHAM - NAPLES - BARI	06.48	
12/9/45		LANCASTER PB976 D	F/S HARDY	FLT/ENG.	BARI - NAPLES - TIBENHAM	07.08	
					TIBENHAM - BASE	00.20	
14/9/45		LANCASTER M.	F/O HAINES	FLT/ENG.	FERRYING TO MEPAL	00.09	
SUMMARY FOR 582 SQD FOR SEPT 1945 TOTAL HRS DAY 14.55 SIGNED. J. Smith							
S/LD "OC" B FLIGHT.							
TOTAL TIME 249.20 / 14.15							

Victory in Japan (VJ) Day was on 15th August 1945. All hostilities ceased.

It is interesting how rapidly the RAF moves to disband 582 squadron.

So, after another sortie for Operation Dodge (note a different pilot) the last flight is on 14th September 1945 where the aircraft is flown to Mepal which is actually near Cambridge – the flight takes 9 minutes.

A total of 249 hours of daytime flying and 114 hours of night flying. 363 hours in total – in today's aircraft this would allow you to cross the Atlantic 60 times!

Tom is sent to India shortly afterwards to provide presence for the handover to the Indian Government. He stays there for a year.

During World War 2 125,000 air crew served in Bomber Command. Over 55,000 were killed in action or in accidents. It is horrifying to think that the average air crew had a lower life expectancy than someone serving on the front in World War 1. They had only a 40% chance of survival.

It is impossible for us to comprehend the difficulties and dangers that they faced during their service.

You may think that towards the end of the war, the odds for survival would be increasing – maybe – but the extract below is about someone from 582 squadron flying on the 23rd February 1945 – Tom was also flying that night.



CAPTAIN EDWIN SWALES VC DFC

A SAAF pilot seconded to the RAF with 582 Sqn, Swales was detailed to be Master Bomber for the raid on Pforzheim on the night of 23rd February 1945. Shortly after arriving over the target area, Swales's aircraft was attacked by a night fighter causing considerable damage. Despite this, Swales stayed over the target area and ensured that the Main Force hit the target with great accuracy. Another encounter with a fighter ensued and Swales finally turned for home on two engines with his aircraft losing height. After crossing the Allied lines, the aircraft was becoming increasingly difficult to control and Swales gave the order to bale out. With incredible determination, the brave South African held the plane steady whilst his crew parachuted to safety. Unfortunately he had no time to follow them, the Lancaster plummeted to the ground taking Edwin Swales to his untimely death and a posthumous Victoria Cross.

There are thousands of stories just like this one. If you are interested in reading more, then there is a book called simply Lancaster which recounts many stories for or about servicemen flying the Lancaster.

7377 Lancasters we built. 3,736 were lost during the War (3,249 in action and 487 in ground accidents). Today 17 remain in complete form: two are airworthy, and two others are in taxiable condition with working engines.

One of the airworthy aircraft is in the Battle of Britain Memorial Flight in the UK. The second in Canada. There are examples in museums around the world. And in August 1995, as part of his 70th birthday celebrations, Tom was able to go on board the Lancaster at East Kirkby (Just Jane) which has been restored to the extent that he then stood on the apron and witnessed the aircraft taxiing – all 4 Merlin engines running.



