

F/O DOUGLAS MACLENNAN, RCAF, AIR BOMBER

Douglas MacLennan was a RCAF Air Bomber who flew 45 sorties with 106 and 617 Squadrons. His crew was interned in Sweden after the second attack on the battleship Tirpitz. He dropped numerous Tallboy and one Grand Slam bomb on difficult targets.

Douglas Hayden MacLennan was born in O'Leary, PEI on 2 August, 1922 to Albert D. MacLennan and Stella C.(née Hayden) MacLennan. He had one sister Margaret Katherine who married Rev Donald Ross McLennan.

Doug MacLennan (R112245/J87492) enlisted in the RCAF in September 1941 in Charlottetown, PEI. On 20 November, 1942, he completed his training as an Air Bomber (Armament) at No. 7 Bombing and Gunnery School in Paulson, MB. He then went to the No. 5 Air Observation School in Winnipeg, MB for the Air Bomber Navigation course from September until 3 May, 1943. In June 1943, he started training as part of a night bomber crew on Wellingtons at No. 29 Operational Training Unit at RAF North Luffenham, UK. He was the air bomber on a crew with pilot F/Sgt Daniel William (Bill) Carey, RAAF, (A416650); Sgt Leslie W. Franks, flight engineer; F/Sgt R.L. Kerr, navigator; Sgt Arthur Ernest Young, wireless operator; Sgt L.A. Fowle, mid-upper gunner and F/Sgt T.W. Price, RCAF, (R190247), rear gunner.



Sgt MacLennan's Graduation

Doug and crew then went to No. 1660 Conversion Unit at Swinderby, Lincolnshire, UK, from September to November 1943. He flew with pilot F/S Carey initially on Manchester bombers then moved to Lancasters. From 10 January to 2 February 1944, the crew were at the No. 5 Lancaster Finishing School at Syerston Notts with Carey promoted to Pilot Officer.

On 3 February, 1944, F/Sgt MacLennan arrived at 106 Squadron at Metheringham, Lincolnshire as part of P/O Carey's crew. They flew Lancaster ND339 during their tour there. In April 1944, P/O Carey's crew including W/O MacLennan and Lancaster ND339 were transferred to 617 Squadron at Woodhall Spa arriving 9 April, 1944. (Note 617 Squadron has Carey's initials as T.A when they are D.W on his RAAF documents and on the 106 Squadron ORBs. They were eventually changed on 617 Squadron Operations Record Book (ORB) entry for 18 August 1944.) On an Air Test flight on 3 May, 1944, Doug listed Carey as F/O in his log book.

Below is a list of sorties Doug flew as the Bomb Aimer:

106 Squadron

20/21 February, 1944 – Stuttgart (7.35)
24/25 February, 1944 – Schweinfurt (7.50)
25/26 February, 1944 – Augsburg (8.05)
1/2 March, 1944 – Stuttgart (8.15)
15/16 March, 1944 – Stuttgart (7.50)
18/19 March, 1944 – Frankfurt (5.30)
22/23 March, 1944 – Frankfurt (5.40)
24/25 March, 1944 – Berlin (7.40)
26/27 March, 1944 – Essen (5.30)
30/31 March, 1944 – Nuremburg (7.00)
5/6 April, 1944 – Toulouse (7.25) – landed at Carley

617 Squadron

10/11 April, 1944 – St Cyr (5.00) Front Gunner
18/19 April, 1944 – Juvisy (5.15)
20/21 April, 1944 – La Chappelle (4.30)
22/23 April, 1944 – Brunswick (5.35)
24/25 April, 1944 – Milan (5.15) – Spoof
5/6 June, 1944 – Special Operation for D-Day (4.35) – Operation Taxable
8/9 June, 1944 – Samur Tunnel (6.00)
14 June, 1944 – Le Harve 'E' Boat Pens (3.45) Daylight
15 June, 1944 – Boulougne (2.50) Daylight
19 June, 1944 – Watten (3.05) Daylight
25 June, 1944 – Siracourt (3.00) Daylight
20 July, 1944 – Wizernes (3.05) Daylight. Recalled
25 July, 1944 – Watton (3.00) Daylight
31 July, 1944 – Rilly-la-Montagne (4.35) Daylight
1 August, 1944 – Siracourt (3.20) Daylight. Recalled
6 August, 1944 – Lorient (4.20) Daylight
11 August, 1944 – La Pallice (5.55) Daylight
16 August, 1944 – La Pallice (6.35) Daylight. Recalled
18 August, 1944 – La Pallice (6.05) Daylight
24 August, 1944 – Ijmuiden (3.20) Daylight
11/12 September, 1944 – Yagodnik, Russia (10.45) Positioning flight for raid on
Tirpitz. Damaged by flak over Finland
15 September, 1944 – Tirpitz (7.20) Daylight flight from Yagodnik, Russia
19 September, 1944 – Depart Yagodnik, Russia (9.10) Return home after attack
on 15 September. Diverted to RAF Drem
29 October, 1944 – Tirpitz (9.55) Daylight. Tallboy

14 February, 1945 – Bielefeld Viaduct (4.50) Daylight. Tallboy. Aborted
 22 February, 1945 - Bielefeld Viaduct (4.35) Daylight. Tallboy
 24 February, 1945 – Dortmund Ems Canal (4.35) Daylight. Tallboy. Aborted
 13 March, 1945 – Bielefeld Viaduct (4.35) Daylight. Tallboy. Aborted. Diverted to
 Carnaby
 14 March, 1945 – Bielefeld Viaduct (5.20) Daylight Tallboy. Aborted
 19 March, 1945 – Arnsberg Viaduct (5.52) Daylight Tallboy.
 Diverted to Carnaby
 21 March, 1945 – Bremen (Dreys) Railway Bridge (4.55) Daylight Tallboy.
 22 March, 1945 – Nienberg Railway Bridge (5.05) Daylight Tallboy.
 23 March, 1945 – Bremen Railway Bridge (5.00) Daylight Tallboy.
 27 March, 1945 – Farge (Bremen) U Pens (4.44) Daylight Grand Slam.

106 Squadron

Between 4 and 19 February, Doug and crew did some H2S navigation training flights and prepared for a number of sorties which were scrubbed later in the day. An entry from Doug's Diary for 5 February 1944 at the side is interesting about the intense training they were doing and the cold weather.

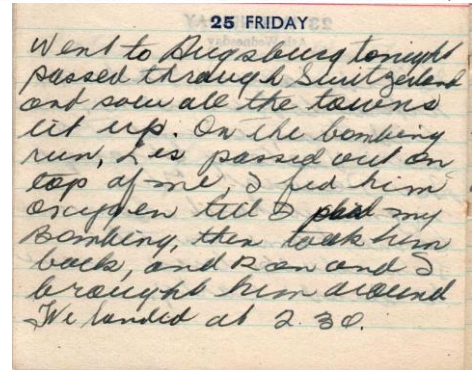
5 SATURDAY
 6 O's Inspection, cold as hell, nearly froze my ears, flew in the morning, Bremen again, could only get two bombs away flew again at night a few and a half hour do, they are going to fly the pants off us in this place. I hope the moon period is soon over.

On 20/21 February 1944, Doug and the rest of P/O Carey's crew took off on their first mission with 12 other 106 Squadron Lancasters in four waves. They were part of a raid on Stuttgart by 598 aircraft. Due to a diversion in the North Sea by 156 bombers, only nine of the 598 aircraft were lost to fighters. The entry from Doug's Diary for the sortie is at the side. The Operations Record Book (ORB) entry for their sortie follows.

20 SUNDAY
 Quinquagesima
 did our first 'op' as a crew, on Stuttgart, the, H2S, Fishpond and our bombs packed up, we were attached by a ME 109 over the target, but got out O.K. landed at Winttherpe due to weather. Jim Hannon missing in this raid

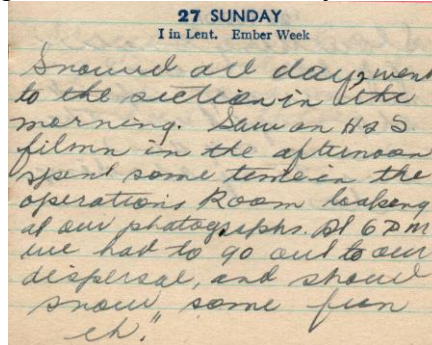
Lancaster ND339	P/O D.W.Carey Sgt L.W.Franks F/Sgt R.L.Kerr F/Sgt D.H.MacLennan Sgt A.E.Youngs Sgt L.A.Fowle F/Sgt T.W.Price	Captain Flt Engineer Navigator Air Bomber W/Operator M/Upr Gunner Rear Gunner	00.10	07.45	2/10ths thin cloud, tops about 8000 feet, good visibility. Arrived at target early, orbited and came into bomb at 22700 feet at 04.08 hours. Photograph taken with bombing plotted Ludwigsburg, 7 miles North of aiming Pt. Crews first operational sortie. BOMB LOAD 1 x 4000lb; 1050 x 4lb; 48 x 30lb.
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On the night of 25/26 February, 594 aircraft in two waves attacked various targets in the city of Augsburg. Over 2,000 tons of bombs were dropped causing much destruction. The weather was clear and the flak was light. 21 of the 594 aircraft were lost, of which at least four were due to collisions. After Doug's crew dropped their bombs, the flight engineer passed out. Doug described the incident in his Diary which is at the side.



On February 27, 28 and 29, MacLennan and others from 106 Squadron spent hours over the three days clearing snow from the runway and dispersal areas. All personnel, not even aircrew, were exempt from this work.

On February 27, Doug made the attached interesting note in his diary about this snow clearing.



On 15/16 March, Doug and crew took part in a raid on Stuttgart with 817 other aircraft. 37 aircraft were lost. He noted in his diary that he observed a collision and "it was a horrible sight". The ORB entry for the flight is below.

Lancaster ND339	P/O D.W.Carey (Aus) Sgt L.W.Franks F/Sgt R.L.Kerr F/Sgt D.H.MacLennan Sgt A.E.Young Sgt L.A.Fowle F/Sgt T.W.Price	Captain Flt Engineer Navigator Air Bomber W/Operator M/Upr Gunner Rear Gunner	19.20	03.10	8-9/10ths cloud, tops about 12000 feet. Target located by target indicators and Wanganui flares. Bombed on centre of fairly large concentration of red target indicators from 19000 feet at 2322 hours. Wanganui flares appeared scattered. BOMB LOAD 1 x 4000lb; 900 x 4lb; 52 x 30lb.
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During a raid on Frankfurt on 18/19 March by 846 aircraft, 22 aircraft were lost. Doug noted in his diary that they were coned by 20 search lights as they were reaching the target but got out ok. The ORB entry for their sortie is below.

Lancaster ND339	P/O D.W.Carey (Aus) Sgt L.W.Franks F/Sgt R.L.Kerr W/O D.H.MacLennan Sgt A.E.Young Sgt L.A.Fowle F/Sgt T.W.Price	Captain Flt Engineer Navigator Air Bomber W/Operator M/Upr Gunner Rear Gunner	19.00	00.40	Thin layer cloud, tops about 8000 feet. Visibility good. Target located by red TIs and sky markers. Aimed at centre of about eight red target indicators from 22000 feet at 2156 hours. Attack seemed successful, all target area was ablaze. BOMB LOAD 1 x 4000lb; 12000 x 4lb; 92 x 30lb.
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Days between sorties were sometimes difficult with numerous sorties cancelled due to weather or other reasons. Taking care of your clothing was not simple as noted in Doug's diary entry of 27 March, 1944

27 MONDAY

Went to Lencahn with Bill, took some laundry in will be done in a month, my uniform will be done in ten days. Went to see Sabara at the S away.

On 30/31 March, there was a raid on Nuremburg by 795 aircraft of which 96 were lost, mostly to German fighters. This was the highest Bomber Command loss to date. 106 Squadron sent 17 Lancasters on this raid. Two returned early, one abandoned the mission due to heavy fighter attacks and three others were missing. The target was illuminated by moonlight which made the bombers easy targets for the numerous fighters in the area. Doug's diary entry is at right and the ORB entry for Doug's sortie is below. The ORB for the sortie is below with W/O D.H. MacLennan, misspelled as W/O D.H. McLennan. This also occurred on ORBs for several later sorties. Doug had these sorties in his log book.

30 THURSDAY

Nuremberg - a very bright moonlight night
Saw plenty of combats but escaped unscathed ourselves. Big fires in the target area
96 of our A/c missing

Lancaster. ND339.	P/O Carey L.W. Sgt. Franks L.W. W/Sgt. Kearsley W/O McLennan D.H. Sgt. Young E. Sgt. Fawle L.A. W/Sgt. Price G.F.	Captain. Flt. Engr. Navigator. Bomber. W/Operator. W/U Gunner. W/Gunner.	2225	0535	Thin layer of cloud, tops about 10000 feet. Red Hts seen at target. Bombed on a concentration of these from 20500 feet at 0121 hours. Fires appeared fairly concentrated in target area. BOMB LOAD 1 x 1000lb, 750 x 41lb, 88 x 20lb.
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On 5/6 April, 1944, P/O Carey's crew flew their last sortie with 106 Squadron. They were one of 144 Lancasters and one Mosquito which attacked an aircraft factory at Toulouse, France. The ORB entry for their sortie is below.

Lancaster. ND339.	P/O Carey D.W. (AUG) Sgt. Franks L.W. W/Sgt. Kearsley W/O McLennan D.H. (CAN) Sgt. Young E. Sgt. Fawle L.A. W/Sgt. Price G.F.	Captain. Flt. Engr. Navigator. Bomber. W/Operator. W/U Gunner. W/Gunner.	2010	0415	Clear, visibility excellent. Target located visually and by H2S. Red spot fires seen. Aimed bombs at large building, the red spot fire being obscured by smoke. Results of own attack not observed but photograph plotted 600 yards from the aiming point. Attack seemed very effective. BOMB LOAD 9 x 1000lb.
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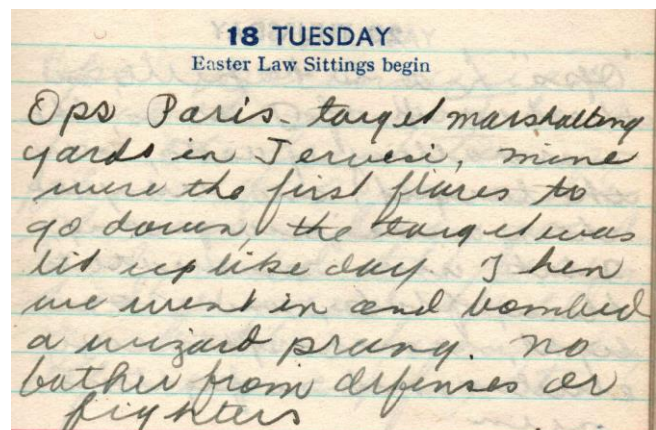
617 Squadron

Doug and the rest of the Carey crew were transferred to 617 Squadron at Woodhall Spa on 5 April, 1944 and arrived in Lancaster ND339 on Easter Sunday, 9 April.

On his first sortie with 617 Squadron on 10/11 April, Doug's log book and diary noted he flew as the front gunner (ORB lists him as a passenger) for F/L Cooper in Lancaster DV394 to bomb a German Signals Equipment Depot at St. Cyr, France. P/O Carey also listed as a passenger with F/L Clayton in Lancaster ME560. This raid by 17 Lancasters was led by W/C Cheshire in his Mosquito. This was training for Doug on the squadron's bombing techniques. The ORB for the sortie is below with W/O D.H. MacLennan, mistakenly identified as W/O R. McLennan.

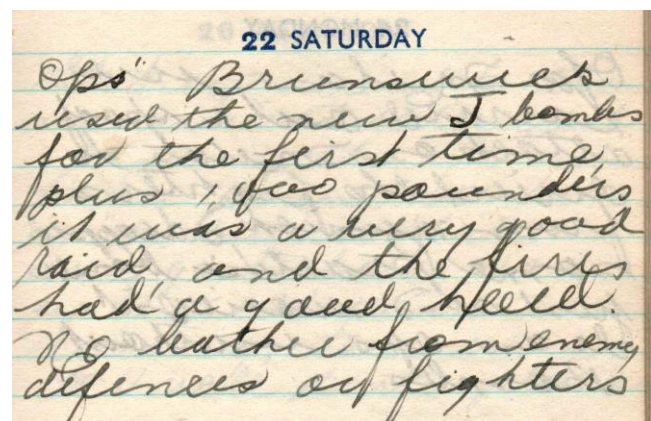
Lancaster I DV. 394.	F/L. J.L. COOPER. P/O. S.R. CLARKE. F/L. P.E. DREW. P/O. G.J. HADEN.	AS SHOWN ABOVE.	2344	0444	Bombing, St. Cyr. 3 flares 2 Green TL-4 x 500lb. Inc. 1 x 8000lb. Mtx. 0219. 9600'. Own bombs fell on S.E. corner of existing fires. Aiming point obtained.
NC.	F/O. B.J. HOSIE. F/O. A.E. KELLY.				
CAN.	F/O. P.J. TUCKER. W/O. R. McLENNAN	PASSENGER.			

On 18/19 April, Doug flew with P/O Carey and the rest of his regular crew on Lancaster ND339 for a sortie on the marshalling yards at Juvisy, France. This raid consisted of 202 Lancasters and seven Mosquitos where 617 Squadron acted as markers and backers up for the Group. Doug's diary entry is at right and the ORB entry for Doug's sortie is below.



18.4.44.	Lancaster III ND. 339.	F/O. T.A. CAREY AUS. SGT. FRANKS L.W. P/S. KEENE R.E. W/O. McLENNAN D.H. SGT. YOUNG A.E. SGT. FOWLE L.A. P/S. PRICE T.W.F.	CAPTAIN. P/ENG. NAV. A/B. W/OP. M.U. E.C.	2046	0203	Bombing, Juvisy. 6 x 1000lb. 4 x 500lb. 6 x 7" flares. 2313. 9600'. At least one direct on spotfire was observed. Aiming point obtained.	2
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On 22/23 April, Doug and crew were part of 265 other aircraft attacking Brunswick. Doug's crew used 10 clusters of the new J-bombs for the first time along with one 2,000 lb bomb on Brunswick. The J-bomb was a new incendiary 30 lb bomb which produced a 2-foot wide by 15-foot-long a very hot white flame which burned for about two minutes. Doug's diary entry is at right and the ORB entry for Doug's sortie follows.



Lancaster III ED. 817.	P/O. T.A. CAREY. AUS. SGT. FRANKS L. P/S. KERR A.	AS SHOWN ABOVE.	2325	0459	Bombing, Brunswick. 1 x 2000lb. HC. 10 'J' Clusters. 0155. 18,400'. Bombs seen to fall about 200 yds. East of markers. A further cluster seen East, which finally merged with first concentration.
CAN.	W/O. McLENNAN D.H. SGT. YOUNG A.E.				
CAN.	SGT. POWLE L.A. P/S. PRICE T.W.P.				

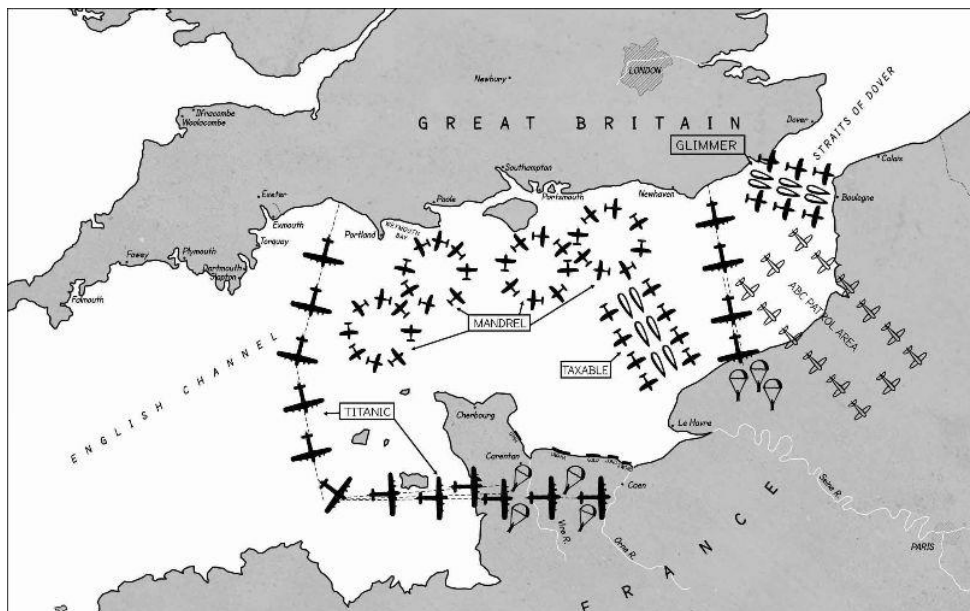
On 24/25 April, Carey's crew was one of six Lancasters (five were equipped with H2S) which did a diversion attack on Milan dropping target indicators and flares. This diversion was to distract enemy defences from a raid by 260 bombers on Munich. This sortie was the last operational entry in Doug's diary. The ORB entry for their sortie is below.

24 MONDAY
Ops Milan were carried out a spoof attack on Milan to divert the fighters from Munich & dropped some practice bombs just so I wouldn't do an ops without bombs.

Lancaster III ED. 817.	P/O. T.A. CAREY. AUS. SGT. FRANKS L. P/S. KERR A.	AS SHOWN ABOVE.	2053	0542	Spoff, Milan. 6 Green II. 2 clusters 7" flares. 0056 17400' X Square in town centre in bombsight when II were dropped.
CAN.	W/O. McLENNAN D.H. SGT. YOUNG A.E.				
CAN.	SGT. POWLE L.A. P/S. PRICE T.W.P.				

5 June 1944 Operation Taxable

To prepare for the Allied landing in Normandy on 6 June, the allies developed an extensive deception plan called **Operation Bodyguard** to direct the attention of the German military away from Normandy. The plan involved components of the Allied aerial, ground and naval forces in numerous operations to direct the attention of Germany away from Normandy to sites in northern France. This included dropping dummy parachutist, jamming radar and creating the illusion of a large fleet approaching the northern coast of France



Components of Operation Bodyguard

On June 5/6, 1944, 16 Lancasters of 617 Squadron were assigned to Operation Taxable, a component of Operation Bodyguard. Doug had saved an article about Operation Taxable titled "*Hoax Helped To Win Beaches*" from an undated edition of a Chronicle-Herald newspaper. A partial excerpt follows.

At 11 pm, eight Lancasters roared away into the darkness. Each was loaded with bundles of "window" _ strips of tinfoil which, when tossed overboard, produced an echo on an enemy radar screen that was completely indistinguishable from the echo of a real aircraft. The Lancasters, in two lines eight miles apart, droned out over the Channel, heading for Cap D'Antifer. There was no room for error. Each aircraft had to be four miles behind the one in front. Then came the vital moment as the Lancasters began a series of gentle circles, closing up to



Lancaster dropping 'Window'

precisely 0.95 miles from each other. On flashed the green light . . . and the bundles of "window" were thrown out at four-second intervals to produce a steady echo on the German radar. At three o'clock in the morning of June 6, a second wave of eight Lancasters took over _ one hour after the real invasion force was on its way to Normandy. Below the Lancasters were 18 motor launches of the Royal Navy, each towing a barrage balloon with radar reflectors – and loudspeakers broadcasting the sound effects of large ships dropping anchor. While 617 Squadron flew backwards and forwards over the Channel for eight long hours, six Stirlings of No. 218 Squadron were carrying out a similar operation further north, near Boulogne."

The 617 Squadron Profile by Chris Ward and the book "*The Dambusters*" by Ted Barris provided additional information. The operation was to give the impression on German radar of a fleet of ships advancing at eight knots towards the French coast at Cap d'Antifer. Eight Lancasters had to fly line-abreast two miles apart (the news article had 8 miles apart) at 180 miles an hour dispensing Window for two and a half minutes. The Window strips were up to six feet long with a hundred in each bundle. Twelve bundles of Window had to be dropped each minute from an altitude of 3,000 feet. The size of the foils strips of Window changed as the aircraft approached the coast to give the proper radar reflection of an advancing fleet. After heading for the French coast, all aircraft turned to port to complete a spiral elliptical circuit lasting seven minutes. A new circuit advanced the forward travel of the formation by one minute. The squadron had practiced this operation for a month. The timing was so critical if one plane was 50 feet

out of position, the deception might have failed. The operation was precisely carried out without arousing any suspicions of the German radar operators. Even the German gunners fired on the imaginary armada and E-boats were sent from Calais and Boulogne to intercept the ghost ships.

For Operation Taxable, the ORB for 5 June notes 617 Squadron had 16 Lancasters (19 Lancasters listed in the Detail of Work) flying a "Special Operation". Details of the operation including flight times were excluded from the Detail of Work. Each Lancaster had 11 to 14 crew members instead of the usual seven. F/O Carey, co-pilot, F/S Kerr, co-navigator, Doug and F/S Price were the extra members of F/L Clayton's crew in Lancaster MH 560. The ORB for the crew is below.

DATE	AIRCRAFT TYPE & NUMBER	CREW	DUTY	TIME		DETAILS OF SORTIE OR FLIGHT
				UP	DOWN	
5.6.44.	Lancaster I MH 560. AHS.	F/L. B.W. CLAYTON. F/O. B.W. CAREY F/O. A. HILL. F/O. F.W. BUTTLE. F/S. KERR R.L. F/O. J.S. WATSON. F/O. G.A. CHALMERS. SGT. SHARP A.W. F/S. HUME W. CAN. W/O. MacLENNAN D.H. CAN. F/S. PRICE T.W.P.	PILOT. CO-PILOT. F/E. NAV. CO-NAV. A/B. W/O. L.U. R.G. EXTRA PERSONNEL.			SPECIAL OPERATION, NO DETAILS ISSUED.

Tallboys

Tallboys were developed by Barnes Wallis to destroy difficult targets like viaducts and U-boat pens. A Tallboy was 21 feet long and weighed 11,800 lbs but was classed as 12,000 lb bomb. It was filled with 5,200 lbs of Torpex explosive and dropped from Lancasters whose bomb bay doors had been enlarged to accommodate the large bomb. The Tallboy was designed to be dropped from an optimum height of 18,000 feet and take 37 seconds to reach the ground reaching a terminal speed of 750 mph and penetrating approximately 25 feet into the ground before exploding. Fins on the Tallboy prevented oscillation when dropped by making it spin as it descended which improved the accuracy.



Tallboys being moved in armament area



Tallboy with F/L C.N. Lancey, RAF, pilot; F/L G.R. Price, RCAF, pilot; F/O D.H. MacLennan, RCAF, bomb aimer; F/L F.L. English, RCAF, rear gunner; F/L C.N. Hill, RCAF, pilot and P/O S.K. Jennison RCAF, mid upper gunner. Photo is from F/L MacLennan's collection.

Crews reported the Lancasters jerked up when the Tallboy was released. 854 Tallboys were dropped before the end of hostilities against difficult targets that included shipping, submarine and E-Boat pens, viaducts, canals and V-Weapon sites. Stephen Flower in his book "*Barnes Wallis' Bombs*" has detailed descriptions of the sorties using the Tallboys. There is an excellent Youtube video of the Tallboy and Grand Slam bombs on the website

<https://www.youtube.com/watch?v=-F7PbHskFYI>



Dropping a Tallboy

On June 8/9, 1944, the first Tallboys were dropped on the Saumur tunnel to prevent a German Panzer unit from moving by train through the tunnel to reinforce German forces against the allied invasion in Normandy. 19 Lancasters dropped Tallboys on the tunnel while six Lancasters each had a bomb load of eight 1000 lb bombs to attack the railway bridge at Saumur. The 25 Lancasters were led by 617 Squadron CO W/C Leonard Cheshire, VC, OM, DSO and Two Bars, DFC, in his Mosquito with markers dropped by four Lancasters of 83 Squadron and three Mosquitos. One Tallboy hit the top of the tunnel as an ammunition train was passing underneath the impact point resulting in a massive explosion. The Germans were unable to clear the blockage until just before the Allies took control of the area. Doug recorded this sortie in his log book as the Air Bomber on Carey's Lancaster EE146 which dropped their eight 1,000 lb bombs on the bridge. The ORB for the sortie is below with W/O D.H. MacLennan, mistakenly identified as W/O J. McLennan who is also listed as an Air Bomber with F/O Ross in Lancaster ME562 for this sortie.

Lancaster III. EE.146.	P/O T.A. CAREY. AUB. AS SHOWN ABOVE SGT A.W. CHEWINGTON.	2315	0515	Bombing Railway Bridge, Saumur. 8 x 1000 GP. 6 x 7" Clusters. 0235-4000'. Bombing was seen to be well concentrated around the Spot Fires by the tunnel. Results of our bombing could not be seen.
	P/S KEIR. A. W/O MCLENNAN. J.			
	SGT YOUNG. A.E. SGT POWELL. L.H.			
C.N.	P/S PRICE. T.W.P.			

On 14 June, 221 Lancasters and 13 Mosquitos with a Spitfire escort attacked German torpedo boats and light vessels at the harbour in Le Harve, France. 21 Lancasters from 617 Squadron all with Tallboys took part in this sortie. On this sortie, several Lancasters had one or two extra crew. W/O MacLennan experienced his first Tallboy drop as the Front Gunner for P/O Gingles. The ORB for the sortie is below.

Lancaster III HM.489	P/O J. GINGLES SGT GALLAGHER J. F/O C.G. BEALE F/S HAZELL L. W/O RILEY J. F/L G.S. SCOTT-KIDDIE	AS SHOWN ABOVE	2013	0001	Bombing E-Boats moored in Le Havre. 1 x Tallboy. 2232. 17300'. One huge explosion seen. Later smoke obscured target.
AUS GNF	F/O E.T. HALL W/O MCELLENNAN D.H. F/S MASON W.	PASSENGER PASSENGER			

On 15 June, 297 aircraft attacked German naval vessels at the harbour in Bolougne, France. 21 Lancasters from 617 Squadron all with Tallboys were on this sortie with an escort of Spitfires from 11 Group. W/O MacLennan was again the Front Gunner for P/O Gingles and dropped another Tallboy on this sortie. Numerous Lancasters were damaged by flak. Some of the E-boat pens at Bolougne with their 11-foot-thick concrete roofs were severely damaged. Ten Lancasters brought their Tallboys back due to poor visibility over the target. Due to the high cost of the Tallboys, crews were instructed to return them to base rather than drop them in the sea as they did with their other bombs. The ORB for the sortie is below.

Lancaster III HM.489	P/O J. GINGLES SGT GALLAGHER J. F/O C.G. BEALE F/S HAZELL L. W/O RILEY J. F/L SCOTT-KIDDIE G.S.	AS SHOWN ABOVE	2115	0005	Bombing E. Boats. Boulogne. 1 x Tallboy. 2233. 16000'. No ground detail could be seen when over the target owing to cloud which was directly over the target area. Many bomb bursts were well concentrated round the Red T.I.s and about 10 mins after leaving the target (2234) there was a terrific explosion.
AUS GNF	F/O E.T. HALL W/O MCELLENNAN D.H. F/S MASON W.				

On 25 June, 323 bombers from 1,4,6 and 8 Groups attacked three V-1 sites along with an escort of Spitfires. 617 Squadron had 17 Lancasters each with a Tallboy and two Mosquitos and one Mustang (for W/C Cheshire which was his first time flying it) which attacked the V-1 flying bomb site under construction at Siracourt. Doug was back in Carey's crew in Lancaster EE146 and dropped one of 16 Tallboys on or near the target. One Tallboy hit the 16-foot-thick concrete roof making an oval crater about 34 feet by 29 feet. This Tallboy only penetrated about eight feet into the roof and then blowing up the last eight feet. The western wall was blown in by another Tallboy. The damage to the interior was minor and the German operations soon continued. F/O Lee's Tallboy hung up over the target and was jettisoned at sea. The ORB for the operation is below.

Lancaster III HM.146.	P/O T.A. CAREY. AUS. SGT FRANKS. L. P/O R. KERR. W/O MCELLENNAN. J. SGT YOUNG. W.S. SGT POWELL. L.A. SGT. F/S COURSON. M.W.	AS SHOWN ABOVE	0735	1037	Bombing Constructional Works, Siracourt. 1 x Tallboy. 0910 16,200'. As we did a dummy run up to the target we saw three bomb bursts, two of which were direct hits. After the explosion a big column of smoke shot up.
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On 25 July, 16 Lancasters with Tallboys and one Mustang and one Mosquito as marker aircraft were escorted by Spitfires to attack the V-2 Liquid Oxygen plant at Watten. In addition, 75 bombers attacked two V-1 sites in the Dieppe area. Seven squadrons of Spitfires provided cover for these raids. The Tallboys had a 30-minute delay after they hit the target before exploding to maximize the damage. Doug and the rest of Carey's crew dropped their Tallboy from 18,500 feet but did not see the result as the target was covered in smoke. Although damaged, most of the building remained standing. The ORB for the crew is below.

Lancaster III Lt. 488.	F/O T.A. CAREY AUS. F/S FRANKS L. F/O R. E. KEAR. GEN. W/O ROBERTSON D.H. F/S YOUNG A.E. F/S POWLE L.A. F/S SHARP A.E.	AS SHOWN ABOVE.	0727	1023	Bombing Constructional Works, WATTEN. 1 x Tallboy. 0917. 185000 One bomb seen to fall in woods. A/P covered in smoke.
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Interestingly, in August, the Watten plant was also dive bombed by three radio equipped old B-17s filled with the explosive Torpex but caused little damage.

On 31 July, 97 Lancasters and six Mosquitoes attacked the railway tunnel at Rilly-la-Montagne which was being used as a V-1 storage depot. They were escorted by 102 Spitfires. 617 Squadron had two Mosquitos as markers and 16 Lancasters with Tallboys on this raid. 617 Squadron was to fly at 12,000 feet while the Main Force would fly at 18,000 feet. Concerns of bombs from the Main Force hitting the lower Lancasters were ignored. Despite 617 Squadron trying to stay ahead of the Main Force, problems did occur. F/L Foote, flying a 9 Squadron Lancaster at 15,000 feet, saw a bomb fall 200 yards off his starboard wing. F/L William Reid, VC, in 617 Lancaster ME557, was hit by two bombs from the Main Force bombers above damaging a port engine and the fuselage resulting in the Lancaster spinning down in two pieces. He and his wireless operator, F/O Dave Lucker, managed to bail out but became POWs. Unfortunately, the other five crew members did not survive. Tallboys caused both ends of the tunnel to cave in. The target was identified too late for Doug's crew to bomb and the Tallboy was brought back. Doug was listed at P/O (J87492) on the ORB entry on this raid. The ORB for the crew is below.

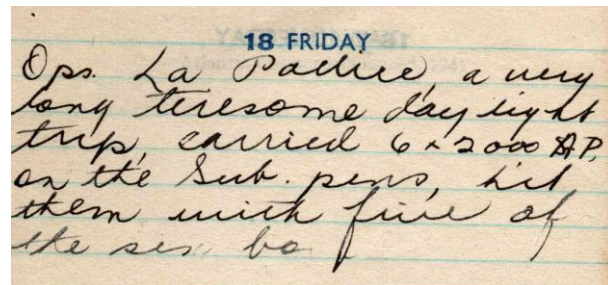
Lancaster I DY. 245	F/O T.A. CAREY AUS. F/S FRANKS L. GEN. F/O J. R. BRIND. GEN. F/O D. H. MCDONNELL F/S YOUNG A.E. F/S POWLE L.A. F/S SHARP A.E.	AS SHOWN ABOVE.	1752	2229	Bombing Rilly la Montagne. 1 x Tallboy. Identified too late. U for good run. Bomb brought back.
			<i>J87492</i>		
			WING COMMANDER, COMMANDER, No. 617 SQUADRON.		

On 1 August one Mosquito and 15 Lancasters were to attack V-1 sites at Siracourt but thick cloud obscured the target and all were recalled. Flight time was 3:20 hours. On 6 August, two Mosquitos and 12 Lancasters took off to drop Tallboys the Koroman U-boat pens at Lorient. In addition, 16 Lancasters from 106 Squadron each loaded with 13 – 1,000 lb General Purpose bombs were to follow the 617 Squadron Lancasters. The two

squadrons were escorted by 17 Spitfires. Carey's Lancaster had an electrical failure so they jettisoned their Tallboy in the sea when they were five miles from the target. Flight time was 3:20 hours

On 11 August, 14 Lancasters each carrying six 2,000 lb bombs attacked the U-boat pens at La Pallice. Doug dropped his six 2,000 lb armour piercing bombs from 17,250 feet. The bombing was generally well concentrated. The CO of 617 Squadron, W/C James Brian "Willie" Tait, RAF, DSO and three Bars, DFC, in his Mosquito provided photos. Another raid by one Mosquito and 11 Lancasters against the sub pens at La Pallice on 16 August was recalled due to thick cloud over the targets.

On August 18 the U-boat pens at La Pallice. were attacked again by 11 Lancasters from 617 Squadron and 14 Lancasters from 9 Squadron. Six Lancasters of 617 Squadron dropped Tallboys and the rest of the Lancasters each carried six 2,000 lb armour piercing bombs. Doug and crew dropped their six 2,000 lb armour piercing bombs on the U-boat pens at La Pallice. Doug's diary entry is at right and the ORB entry for Doug's sortie on 18 August is below.



Lancaster I 16-555	P/O D.W. CAREY AUS P/S FRANKS L. P/O A.H. MCKIE	AS SHOWN ABOVE	1125	1730	Bombing U-boat pens. La PALICE. 6 x 2000 lbs. A.P. 1510. 17,000'. First bomb of stick undershot. Remainder of stick fell over target. Much smoke on target.
Out.	P/O D.H. BERRIGAN P/S YOUNG A.M. P/S POWIE L.W. P/O G.A. WITHERICK				Bombing U-boat pens. La PALICE. 1x Tallboy. 1510. 18,000'

On 24 August, eight Lancasters with Tallboys from 617 Squadron and 14 Lancasters with 1,000 lb bombs from 9 Squadron attacked the E-boat pens at Ijmuiden. They were escorted by 22 Spitfires from 229 Squadron RAF and 312 Squadron (Czech). Two Mosquitos, one from 617 Squadron and the other from 627 Squadron were camera aircraft. Doug's crew dropped their Tallboy from 16,000 feet on the E-boat pens. The ORB for the sortie is below.

Lancaster III 16L-489	P/O D.W. CAREY AUS P/S FRANKS L. P/O A.H. MCKIE	AS SHOWN ABOVE	1022	1355	BOMBING E-BOAT PENS. IJMUIDEN. 1 x Tallboy. 1425 16000' 2 Explosions took place at same time, both were hits on the pens. One on centre and the OTHER ON N.W. side.
Out.	P/O D.H. BERRIGAN P/S YOUNG A.M. P/S POWIE L.W. P/O G.A. WITHERICK				

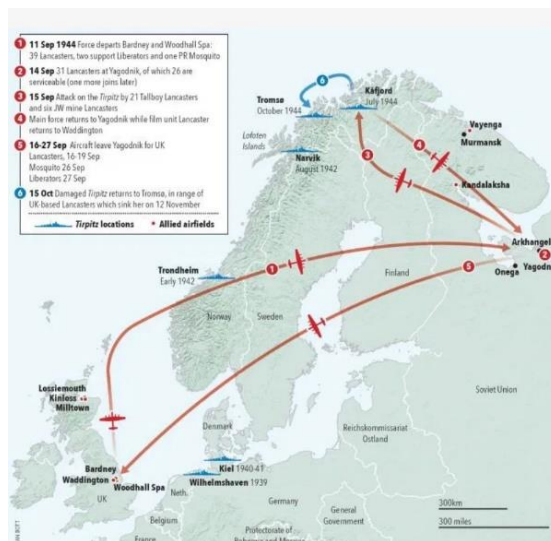
Tirpitz Raid

The Tirpitz at 56,000 tons fully loaded and 828 feet in length was one of the two largest battleships in the German navy in WW2, the Bismark being the other. It had a crew of 2,400 men and officers. (Note there are slight variations in the details of the Tirpitz in

different references.) Its main armament had eight 15-inch guns and its armour varied up to 16 inches. The Tirpitz was stationed in northern Norway to intercept allied convoys of aid to the Soviet Union. The allies had made numerous attempts by air while the Tirpitz was being completed in dry dock at Wilhelmshaven and later by sea to destroy the Tirpitz but failed. Operation Paravane was planned by Bomber Command to destroy the Tirpitz using Tallboy bombs dropped by specially modified Lancasters of 9 and 617 Squadrons. The Tirpitz was located in the Kåfjord (Kaa Fjord in some references) which is at the south end of the much larger Altafjord (Alten Fiord in some references). The book "*Barnes Wallis' Bombs*" by Stephen Flower has several chapters describing in detail the three attacks on the Tirpitz.

Before 11 September, 1944, an advance party of ground crew was sent to the naval airfield at Yagodnik, 10 miles south of Arkhangelsk (Archangel in some references), on the Kola Peninsula in Russia. This location enabled the Lancasters to be deployed for planned attacks on the Tirpitz as the Lancasters did not have the range to reach the Tirpitz from Britain. The airfield surface was grass and sandy soil. Facilities were poor and crowded. Crew accommodation was on a river boat.

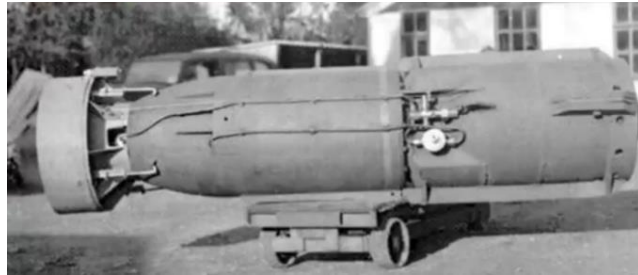
On 11 September, 1944, Doug and 19 other Lancasters took off from Woodhall Spa to Yagodnik. This 10-hour 45-minute flight was to position the squadron for the raid on the Tirpitz in the Kåfjord which is off the Alten Fiord in Norway. In addition, 9 Squadron sent 18 Lancasters on this raid with 5 Group sending one Mosquito. A Lancaster from 463 Squadron was to film the raid. Also, two Liberators took spare parts to Yagodnik. Twenty-six Lancasters from 9 and 617 Squadrons carried Tallboys. F/O Carey's Lancaster NF920 'Easy Elsie' was one of six 617 Squadron aircraft carrying 12 "Johnnie Walker" (J.W.) mines. This was to be the first and only time these mines were used. 9 Squadron also had six Lancasters carrying J.W. mines. The ORB for Doug's crew is below.



Lancaster I, NF.920.	F/O D.W. CAREY, AUS. P/S FRANKS, L. P/O W. H. HICKS	AS SHOWN ABOVE	1944	1955 20/9	Bombing "Tirpitz" Alten Fiord (Via Russia). 12 J.W. Mines. This aircraft was badly damaged by fuel prior to reaching advanced base. Returned to home base on 20/9. Mines were taken by ME 264 to target. This aircraft had to jettison before reaching advanced base.
	GAN. P/O D.H. HOLMSTAN. P/S TONG, A.E.				
	P/O G.A. WITHEWICK. P/S SHARP, A.E.				

The "Johnnie Walker" mine was a 500 lb oscillating mine dropped by parachute and activated when it came in contact with water and sank 50 to 60 feet. The mine was powered by a bottle of hydrogen enabling it to move up near the surface. If it didn't hit

anything, it sank again and moved 30 feet to the side and then rose again. This procedure was repeated until it blew up a target. When it ran out of hydrogen, the mine was to explode to protect its design from the enemy. Crews were directed to jettison the mines if they came under attack as the hydrogen in the mines was combustible and explosive.



Johnny Walker Mine

The Lancasters flew at 400 feet over the North Sea to avoid German radar on the Norwegian coast and then flew at 8,000 feet to avoid the mountains. Carey's Lancaster NF920 was badly damaged by flak enroute to the advance base at Yagodnik so it could not participate in the raid on the Tirpitz on 15 September. F/L Iveson had to jettison his 12 mines before reaching Yagodnik so he took the mines from Doug's Lancaster to use in the raid on 15 September. Due to poor weather, some Lancasters landed at airfields in the area other than Yagodnik. Six Lancasters had to be abandoned along with three Tallboys and 48 JW mines.

On 15 September, 1944, W/C Tait led the attack on the Tirpitz by 10 Lancasters of 9 Squadron and 17 Lancasters of 617 Squadron. As the Lancasters approached the Tirpitz at Kåfjord from the south east, the Tirpitz and other ships started a smoke screen and firing at the Lancasters. The Lancasters started to drop their Tallboys at 12:56 hours while aiming at the gun flashes. Some explosions were seen through the smoke screen. 15 Lancasters dropped their Tallboys but were unable to assess any damage due to the smoke screen. After the attack by the Lancasters with Tallboys, four 617 Squadron and two 9 Squadron Lancasters each with 12 J.W. mines dropped them in the fjord. Some of the JW mines fell on shore. There was no reported damage caused by these mines and they were not used again. During the attack, a film crew in a 463 Squadron Lancaster circled overhead between 10,000 and 13,000 feet and shot 400 feet of film. In his log book, Doug recorded he flew as front gunner for F/O Gingles in Lancaster LM489. The front gunner was a position that was no longer being on Lancasters during most raids. Carey also flew as second pilot with another crew. Gingles crew were carrying one Tallboy but did not drop it as the Tirpitz was obscured by a smoke screen. The ORB for the Gingles sortie is below but does not list Doug who was listed originally as part of Carey's crew.

Lancaster III LM 489	F/O J. GINGLES P/S MASON, W. P/S JOHNSON, R. P/S HAZELL, L. W/O KILBY, J. P/L SCOTT-KIDDLE, R.F. P/S HUNNISSETT, E.W.	AS SHOWN ABOVE	1940	0130 17/9.	Bombing "TIRPITZ", Alten Fjord (via Russia). 1 x Tallboy. Did not bomb, owing to target being completely obscured by smoke screen. Bomb returned to Yagodnik.
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After the raid, the bombers returned to Yagodnik with their Tallboys that were not drop to prepare for the return trip home. 14 Tallboys were disabled and left in Russia. Nine crews returned home on September 17. F/L Levy's Lancaster PB416 crashed in the mountains of Norway on the trip home. All the crew, including two of S/L Wyness's crew whose aircraft had crashed and was written off 11 September, were killed. Another five crews returned to Woodhall Spa on the 18th and F/L Oram on the 19th. On 19 September, Lancaster NF920 had been repaired and Doug's crew left Yagodnik to return home but were diverted to RAF Drem in northern Scotland. This flight took 9 hours and 10 minutes. They left the next day for a 1:05 hour flight to Woodhall Spa. F/L Knights was the last crew home on the 21st.

The raid on September 15 caused considerable damage to the Tirpitz but this damage was unknown to Bomber Command until later. One Tallboy tore a hole about 30 feet by 50 feet in the starboard bow causing flooding in that section of the ship. Another Tallboy hit the bow ahead of the anchor cable holders. There was also damage to the deck, the fire control instrument and the main engines. The German navy determined it would take nine months to repair the battle damage to make the ship fully operational. Instead of restoring the ship's ocean capabilities, it was moved further south near Tromsø, Norway to be used as a floating artillery battery to defend the area from a possible allied invasion. This move further south of the Kåfjord put it within range of the Lancasters from RAF bases in Scotland rather than using Russian airfields for their attacks. Operation Obviate was planned for the second assault on Tirpitz. The Lancasters were modified for this raid by removing the mid upper turret and other items to reduce weight and adding long range fuel tanks for the round trip to Tromsø. Also, the more powerful Merlin 24 engines were required. As not all the 617 and 9 Squadron Lancasters had these engines, 120 Merlin 24 engines were taken off Lancasters in other squadrons to put on the Lancasters as they had the modified bomb bay doors for the Tallboy. The ground crews worked three days to install the Merlin 24s on the Lancasters.

On October 28, 20 Lancasters flew from Woodhall Spa to Lossiemouth, Scotland to join 9 Squadron for a second attack on the Tirpitz the next day. W/C Tait and 37 Lancasters left Lossiemouth after 01:00 hours on the 29th flying 2,160 miles to Tromsø. While approaching the Tirpitz from the east, clouds started to cover the Tirpitz and the crews started to drop their Tallboys at 07:49 hours. A total of 33 Tallboys were dropped often using the gun flashes as aiming points. This was a very eventful sortie for Doug and the rest of Carey's crew in Lancaster NF920 'Easy Elsie'.

On their sixth run over the target, they dropped the Tallboy but the starboard outer engine and a fuel tank were hit by flak. With fuel leaking, Carey dived to get away but the aircraft was hit by gunfire over the village of Andenes. Another fuel tank was hit and the port inner engine and the starboard outer engine stopped. The resulting loss of hydraulics caused the wheels, flaps and bomb doors to fall down. Fortunately, there was no fire. As the sea was too rough to attempt a landing with the wheels down Carey decided to divert to Sweden.



Painting by Gerald Coulson of NF920 dropping its Tallboy on the Tirpitz

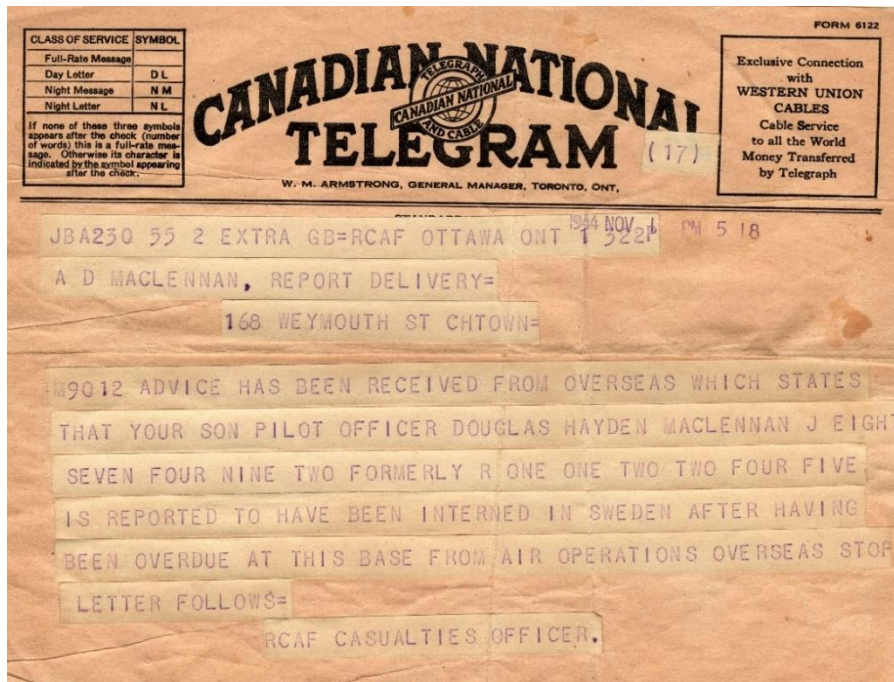
The crew started to throw items overboard to lighten the aircraft so it could clear the mountains. Seeing a field near Porjus, the crew cranked the wheels back up by hand so the Lancaster would not flip over when they landed. The field was a bog so when the bomber hit the soft ground nose first then the rest of the plane fell back. There are several web sites with short videos of the location of Easy Elsie showing many parts still scattered on the bog.

The only injury was to Carey who dislocated his knee when it hit the compass. Surprisingly, the crash sent F/S Les Franks, the flight engineer through the wind screen but he was not injured. P/O Alex McKie, the navigator, recalls trying to destroy the aircraft by using the flare in the aircraft but it didn't work. He then punctured a fuel tank and threw a match into it but only the front section was burnt. They walked to the village where a lady invited them in for tea and biscuits. She phoned a policeman who came and called the army who put them in jail except Carey who was taken to the hospital in Jokkmokk where his knee was set by a surgeon. Two days later they were sent by train to an internment camp south of Stockholm for several days and then moved to Stockholm except for Carey who stayed at the hospital until November 6. During their internment, the crew were interrogated by officers of the Swedish Air Force. The crew were well treated by the Swedes. On November 7, 1944, the crew were flown from Stockholm to Leuchars, Scotland on a British Overseas Airways C47. Lancaster NF 920, 'Easy Elsie' remained in the bog until 1985 when some parts were removed. Photo at right is Glör Wandug Iversen at the wreck of 'Easy Elsie' in a swamp near Porjus in northern Sweden from article in Vi Menn that he sent to Doug along with a translation.



Two entries from the ORB for this sortie are below.

Lancaster I. NF. 920	F/O B.W. CAREY AUS F/S FRANKS M. F/O A.M. MORRIS CAN. F/O D.H. MCLENNAN F/S YOUNG A.E. F/O G.A. WITHERIDGE	AS SHOWN ABOVE.	0114	Bombing, TIRPITZ. 1 x Tallboy. This aircraft is believed to have attacked and was last seen heading for Sweden. Missing.
29	19 aircraft took off from advanced base to attack German Battleship "Tirpitz". F/O Carey and crew landed in Sweden and were interned. One direct hit on ship.			



Telegram sent to Doug's father after Doug was interned in Sweden

On 12 November, 1944, W/C Tait led 18 Lancasters of 617 Squadron and 13 Lancasters of 9 Squadron on the final attack on the Tirpitz departing Lossiemouth at 03:00 hrs. Each aircraft had one Tallboy. 463 Squadron provided one Lancaster for the film crew. At 08:41 hours, the Lancasters started to release their Tallboys at the Tirpitz from about 13,000 feet scoring numerous hits on the ship which finally lay on its side. Doug's crew did not take part in this raid. The ORB for W/C Tait is below. F/O W.A. 'Danny' Daniel, RCAF, from Rivers, Manitoba was Tait's bomb aimer for these sorties.

	TYPE & NUMBER	CREW	UP	DOWN	REMARKS	
12.11.44.	Lancaster I ES. 146.	W/C TAIT J.B. F/S GALLAGHER A.E. CAN. F/O H. ELLIS F/O W.A. DANIEL F/O A.J. WARD W/O VAUGHAN H.D.	PILOT F/ENG. NAV. A/B. W/OP. R.G.	0312	1545	Bombing, TIRPITZ. 1 x Tallboy. 0841. 13000'. We did not see our bomb burst, but the initial bombing was concentrated on the vessel. When we arrived there was steam coming from the funnel.

The February 1945 ORB notes Doug's pilot, F/O Daniel William Carey, RAAF, was awarded the DFC. On February 14, 1945, their first sortie after their internment was in Lancaster NG494 against the Bielefeld viaduct with 18 other Lancasters led by its new CO W/C Johnny Fauquier, RCAF, DSO and two Bars, DFC. All aircraft aborted the sortie due to weather and returned to Woodhall Spa with their Tallboys after a daylight flight of about five hours.

On February 22, 18 Lancasters of 617 Squadron and 16 Lancasters of 9 Squadron attacked the two parallel railway viaducts at Bielefeld with Tallboys. Doug aimed and dropped his first Tallboy from 13,470 feet. Only one of the two tracks was damaged and it was quickly repaired. The ORB for the sortie is below.

Lancaster 1 W.494	F/O. J.W. CARRI. F/S. VALLIBHETI. F/S. FISHER. F/O.D.H. McLEHMAN. F/S. SHURE. F/Lt. G.A. WITHERICK	AS SHOWN ABOVE	13.46	16.17	RAILWAY VIADUCT, BIELEFELD. 1 x Tallboy. 16.04/16.53. 13,470'. Own bomb undershot by some 30/40 yds. Possible direct hit at northern end and several near misses.	167
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On February 24, 18 Lancasters of 617 Squadron and some Lancasters of 9 Squadron with Tallboys aborted their daylight raid on the Dortmund Ems Canal due to 10/10 clouds when they were 30 miles from the target. One Lancaster of 9 Squadron jettisoned their Tallboy as one of their engines was malfunctioning. Similarly, on March 13, a daylight sortie on the Bielefeld Viaduct by 20 Lancasters of 617 Squadron with Tallboys was aborted due to 10/10 clouds. The aircraft were diverted to Carnaby. On both sorties, the flying time was about 4.5 hours. 18 Lancasters of 9 Squadron, each with a Tallboy, were to attack the railway viaduct at Arnsberg. Due to poor visibility, only two aircraft released their Tallboys. Two others dropped their Tallboys due to problems with their Lancasters. The other 9 Squadron Lancasters returned with their Tallboys.

22,000 lb "Grand Slam"

The 22,000 lb "Grand Slam" was designed by Dr. Barnes Wallis and contained 11,000 lbs. of Torpex explosive and was 25.5 feet long. This was the largest bomb dropped by Bomber Command and was used against heavily reinforced targets such as U-Boat Pens and viaducts. Due to the weight of this bomb, specially modified Lancasters with stronger airframes and engines were ordered for 617 Squadron. Numerous items such as the front and the mid upper turrets, H2S radar, rear gunner's armour plate. fuel tanks, flare chutes and even tools such as the crew ladder were eliminated to reduce the weight of these Lancasters. Only 40 Grand Slams were dropped during the war by these specially modified Lancasters. 617 Squadron CO W/C Johnny Fauquier described the take-off of his test flight on March 5, 1945 with the Grand Slam.

"At one point, I didn't think we would make it because we usually got airborne with a full load at around 110 miles an hour and I was at 145. The wing tips of the airplane started to bend up and I was wondering whether the wings would come off or what would happen, but finally she did take off."

'So I flew it around for about twenty minutes and brought it back and landed and then called up Bomber Command and said it was quite safe"



G/C Johnny Fauquier with Grand Slam



Lancaster dropping Grand Slam

On 14 March, 1945, Doug and 13 other Lancasters carrying Tallboys and two other Lancasters carrying Grand Slams were to bomb the Bielefeld viaduct. Some of the Lancasters were B1 Specials which had been modified to carry the Grand Slam. The Lancaster with a second Grand Slam flown by G/C Fauquier was unable to take off due to engine problems. The first Grand Slam was dropped by S/L C.C. Calder in Lancaster B1 Special PB112. Twelve Lancasters dropped their Tallboys. Over 100 yards of the two parallel railway viaducts collapsed. On the bombing run, Doug's bomb sight couldn't function, so they returned to base with their Tallboy. The squadron ORB entry for S/L Calder is below. Note the ORB calls the Grand Slam a "Special Store".



Bomb Damage at Bielefeld Viaduct

14.3.45	Lancaster 1 PB112 S-12	S/L. C.C. CALDER. PILOT F/O. H.E. WAKEFIELD. F/ENG. F/Lt. J.H. BENISON. NAV. F/Lt. C.B. CHAPER. A/B. W/OE. - M.U. F/O. G. DALE. R.G.	13.46	19.0E	Bielefeld. 1 x Special Store. 1628.25 hrs. 11,965 ft. Our Bomb was a 30 yd. under-shoot. We saw one direct hit and one 70 yd. overshoot.
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On 19 March, 19 Lancasters were sent to attack the double tracked 388-foot-long Arnsberg Bridge with six Grand Slams and 13 Tallboys. They were escorted by Mustangs from 11 Group RAF. This was Carey's crew first sortie in Lancaster PD132, a B1 Special model built to carry the Grand Slam. They dropped their Tallboy from 12,690 feet which fell in the middle of the concentration. Two arches and one pier of the Arnsberg bridge were destroyed. F/O Martin dropped his Grand Slam from 12,700 feet

which fell 30 yards northwest of the target and described the effect on his Lancaster B1 Special as follows:

“I heard the release unit ‘fire’ with its usual sharp retort, and the slam of those great arms hitting the fuselage as they came free. That Grand Slam, spinning impeccably, went down. And we went UP. Lord, how we ascended. Most of us made it six hundred feet upwards, the Lancaster’s wings flexing and reflexing like an overstrung bow – and we were the arrow.”



Damaged Arnsberg bridge

Doug’s crew was diverted to Carnaby after the raid. The sortie ORB is below.

Lancaster I. PP 155	P/O D.W. CAREY. (AUS) AS SWEET ABOVE P/S GALLAGHER, A. P/S FISH. C.V. R. P/O. D.H. MCLEERAN (CAN) P/S SHARPE, A.W. P/L. G.A. WITHERICK	09.10	14.02	Arnsberg. 1 x Tallboy. 1054.36 12.690ft. Bombing was excellent, and our bomb fell in the centre of the concentration. The bridge was definitely breached at the end of the attack.	E
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On March 21, 617 Squadron dispatched six Lancasters with Grand Slams and 14 with Tallboys to attack the Arbergen (Dreys in the ORB) 600-foot double tracked railway bridge with three spans of steel girders over the Weser River near Nienburg, Germany. They were escorted by 20 Mustangs from 306 and 309 Squadrons (both Polish). Instead of the normal seven-man crew, the B1 Lancasters were without their wireless operator/air gunner and the mid-upper gunner as the mid upper gun turret was removed and other modifications had been made. Doug’s Tallboy was dropped from 13,000 feet and overshot the bridge by 10 to 15 yards. Doug observed two of the Grand Slams over shoot by 50 to 60 yards. A section of the double track viaduct and some piers were destroyed. F/L Gumbley, RNZAF, in Lancaster DF117 was hit by flak near the target, caught fire and crashed with its tallboy exploding after impact. All five crew perished. The ORB for the sortie follows.



617 Sqn Lancasters over Arbergen railway bridge

Lancaster.1. PB 997	F/O D.W. CAREY. (AUS) F/S GALLAGHER. A. F/S FISH. C.V.R. F/O. D.H. MCCLENNAN (CAN) - F/S. SHAWNE. A.V.	AS SHOWN ABOVE	07.50	12.53	Dreys. 1 x Tallboy. 1005.42. 13,600 ft. Our bomb overshot about 10 to 15 yards. The two large bombs overshot 50 to 60 yards. Bombing seen concentrated but direct hits seen.
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On March 22, 617 Squadron detailed six Lancasters with Grand Slams and 14 with Tallboys to attack the Nienburg Railway Bridge. They were escorted by again by fighters from 11 Group. Some Lancasters in the gaggle had been directed not to bomb on the first or second runs in case the early bombing was successful. Doug's Tallboy was released from 9,000 feet and fell 10 yards from the end of the bridge. The Tallboys each fell within a minute. The bombing was well concentrated and the bridge was completely destroyed. As the early bombing was successful, one Grand Slam and two Tallboys were returned to base. The ORB for the sortie is below.

Lancaster.1. ED 131.	F/O D.W. CAREY. F/S GALLAGHER. A. F/S FISH. C.B.R. F/O. D.H. MCCLENNAN. (CAN) - F/L A.D.W. CARROLL.	AS SHOWN ABOVE	11.45	17.03	Nienburg. 1 x Tallboy. 1404.24. 9,000ft. Our bomb undershot 10 yards from east end of bridge. We saw the bridge collapse after a hit by a special stores.
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On March 23, the squadron had six Lancasters with Grand Slams and 14 with Tallboys detailed to attack another railway bridge over the Weser River near Bremen, Germany. It was a double tracked bridge about 720 feet long. They were escorted by several RAF squadrons of Mustangs. Two Lancasters had engine problems on takeoff and another had problems with its oxygen system. One Tallboy was jettisoned in the designated area and the other two were returned to stores. Doug dropped his Tallboy from 16,800 feet on the bridge between the centre and the north bank. F/L Hill, RCAF, did not drop his Tallboy as smoke obscured the target. The bridge was not heavily damaged and was soon repaired by the Germans who later destroyed it to slow the Allied advance. On this raid, the Lancasters were damaged by heavy flak and the Luftwaffe's new ME262 jet fighters. All Lancasters returned to Woodhall Spa. Doug's rank was listed as F/O on the ORB for this sortie which is below.

TIME	TYPE & NUMBER		PILOT	VF	AVR	
23-3-45	Lancaster.1. ED 131	F/O D.W. CAREY. A F/S GALLAGHER. A. F/S FISH. C.B.R. (CAN) F/O. D.H. MCCLENNAN. - - F/L C.A. WITHERLACK	PILOT. F/ENG NAV. A/B W/OFF M/U R/G	07.12	12.10	Bremen. 1 x Tallboy. 1004.41. 16,800 ft. Our bomb fell on the bridge between the centre and north bank. The whole bombing was very concentrated.

F/O MacLennan's last sortie of the war was on 27 March, 1945 in Lancaster B1 Special PB997 with F/O Carey, pilot, F/Sgt Gallagher, flight engineer, F/Sgt Fish, navigator and F/L Witherick, rear gunner. Their Lancaster had one Grand Slam bomb. The 617 Squadron Lancasters carried 15 Grand Slams and six Tallboys to target the U-boat

pens at Farge near Bremen. The Grand Slams all had a one-hour delay for detonation. They were escorted by 90 Mustangs of 11 Group. F/L Lancey with his Grand Slam and F/L Goodman with his Tallboy aborted their flights over the base. F/L Beaumont did not drop his Tallboy as another Lancaster was below him when he was over the aiming point. Two of the Grand Slams penetrated the 23-foot-thick roof which collapsed preventing the U-boats from using the pens. The ORB entry for the crew is below.



Damage by one Grand Slam on U-boat Pen

Lancaster I. RB. 997	F/O D.W. CAREY, A- F/S GALLAGHER, A. F/S FISH, C.V.R. F/O. D.H. MCLENNAN, (COB)	AS SHOWN ABOVE	10.23	15.09	Farge. 1 x Special Store. 1301.51 14,600 ft. Saw two bombs seemingly explode just near A/P. Our bomb believed to be one of these.
	F/L G.A. WITHERICK				



617 Squadron Members with Grand Slam – F/O Doug MacLennan had this photo framed. This photo was also in the magazine 'Canada's Weekly' dated April 20, 1945 with this caption: "Twenty Canadian aircrew of an RAF squadron which delivered the huge 22,000 lb bomb, the largest in the world, on targets which require to be destroyed completely."



617 Squadron members outside their Officer's Mess. Left to Right: F/L C.N. Hill (Toronto), pilot, P/O S.K. Jennison, (Windsor, ON), air gunner, F/O W.A. Daniel, DFC, (Rivers, MB), air bomber, F/O D.H. MacLennan, (Charlottetown, PEI), air bomber, and F/L F.L. English (Pictou, NS), air gunner

Photo from 'Canada's Weekly' dated April 20, 1945

For his service, Doug was awarded the following medals: the 1939-1945 Star Medal, the Aircrew Europe Star and Clasp, the Defence Medal 1939-1945, the Canadian Volunteer Service Medal with the Bomber Command Bar, the War Medal 1939-1945 and the Canadian Forces Decoration. Doug had an unofficial "Bomber Command Medal" which was available for purchase.

After the war, Doug stayed in the RCAF as an Air Traffic Controller at various RCAF stations including the 1 Canadian Air Division RCAF Station 1(F) Wing near Marville, France. He occasionally flew as a navigator from March 1958 to September 1969 on various aircraft such as the C47 Dakota, Albatross and Argus. After retiring in 1969, he worked as an Air Traffic Controller for Transport Canada retiring from the Fredericton airport in 1981

Doug married Doris Johannesson in Winnipeg in 1947. They had a daughter Heather MacLennan-Cormier (husband Robert) and a son Ian (wife Seta). They also had several grandchildren: Arlaine, Caroleene and Gregory MacLennan and Lauren Cormier. Doris passed away in 1999 and Doug in 2000. They were both interred in the Fredericton Rural Cemetery, Fredericton, New Brunswick.

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