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Second World War

THE TRIUMPH OF THE DAMBUSTERS



James Holland, presenter of a new BBC documentary on the iconic 1943 raid, says that the attacks were more than just a PR victory >

ABOVE: Water spews through the crippled Möhne Dam following the Dambusters raid of May 1943

BELOW: Guy Gibson (centre), leader of Operation Chastise, in front of a Lancaster bomber in c1943. Alongside him are squadron leaders John Searby (left) and Peter Ward-Hunt



ALAMY/TOPFOTO



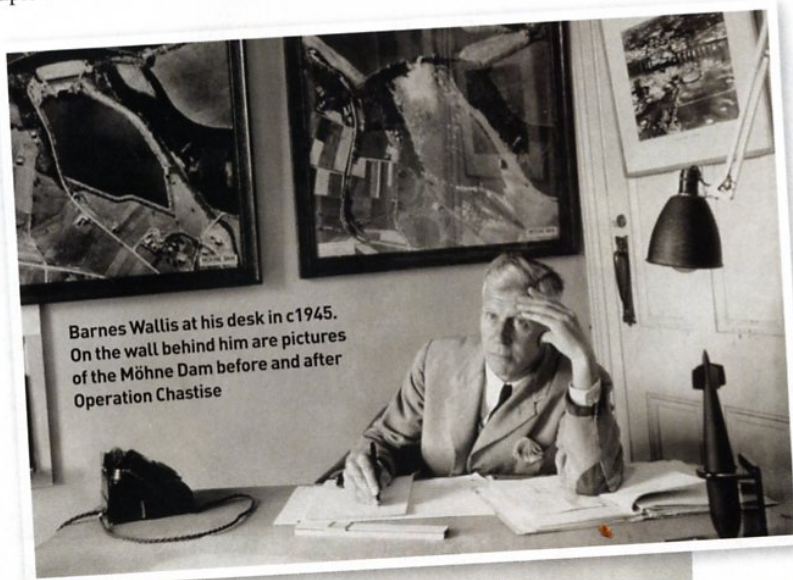
A Lancaster carries out live testing of an Upkeep bouncing bomb off the coast at Reculver, Kent, cMay 1943

AT ELEVEN minutes to one, on the moonlit morning of Monday 17 May 1943, Flight Lieutenant David Shannon was circling over a headland just a couple of miles to the east of the Möhne Dam, one of the best-known – and largest – structures in the entire German Reich. Shannon and his crew in Lancaster *L-Leather* were anxiously watching one of the first wave of attackers, Flight Lieutenant David Maltby in *J-Johnny*, speed towards the dam wall at a little over 220 miles per hour and at just 60 feet above the water. Sixty feet – it was nothing, the height of ten men.

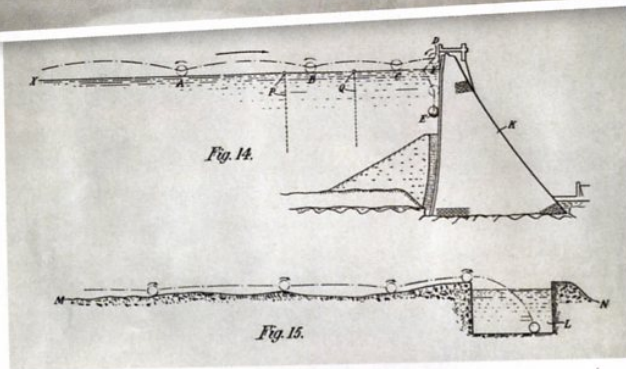
From the dam and both sides, arcs of tracer were pumping towards the Lancaster and those of Wing Commander Gibson and Flight Lieutenant Martin, flying either side to try and draw away the enemy flak.

Then the Upkeep, the specially designed depth charge, was dropped, spinning, from underneath Maltby's plane, and skipping over the water towards the dam wall. Shannon, an Australian about to celebrate his 21st birthday, watched the huge explosion moments later, a plume of water rising a thousand feet into the air. But despite this, the dam appeared to hold fast. Five Lancasters had now made attack runs and two – those of Maltby and, before him, Squadron Leader Young – appeared to have struck perfectly. Yet still the dam had not broken.

Over his headset, Shannon heard Gibson tell him to prepare to attack. Perhaps this sixth bomb would do the trick. Or perhaps the inventor, Barnes Wallis, had been wrong. Perhaps it could not break the dam after all...



Barnes Wallis at his desk in c1945. On the wall behind him are pictures of the Möhne Dam before and after Operation Chastise



A drawing from 1943 illustrating the trajectories of bouncing bombs aimed at a dam

Shannon began his run, swooping low over the headland towards the water and switching on the two beam lights that would give him the exact height needed of 60 feet. The Australian saw both Martin and Gibson moving into position on either side of him to draw the flak. "And then," recalled Shannon, "there was an excited yell over the R/T. 'It's gone! It's gone!'" The whole wall had collapsed and the water had started spewing out down the valley. "Gibson called to me: 'Steer off the run and stand by. I think it's gone.' Then he

came back and said: 'Yes! It has gone!'" The great Möhne Dam, so crucial for controlling the life-blood of water to the industrial heartland in the Ruhr valley, had been destroyed.

Later that night, the attackers also wrecked the Eder Dam, 50 miles to the south-east, and badly damaged the Sorpe, which like the Möhne, was key to controlling the water supply needed for the steel works, especially, in the Ruhr.

To say this was a bold and daring operation – and a massive gamble of lives and resources – is a massive understatement. RAF Bomber Command had been slowly but surely improving its navigational equipment during the previous 12 months, but had long before accepted that pin-point bombing

accuracy was unachievable. Instead, Air Marshal Harris, commander-in-chief of Bomber Command, had determined that the key to success was flying large numbers of heavy bombers with equally large numbers of bombs over targets from as safe a height as possible – and at night.

War-changers

Barnes Wallis, however, had other ideas. Assistant chief designer at Vickers-Armstrong Aviation, he had long been convinced that the way to win the war was to paralyse Germany's war machine. In between his aircraft work, he had been developing ideas for potentially war-changing weapons, including the bouncing bomb. Having convinced enough people that the weapon could work against the dams, Operation Chastise, as it was called, was swiftly put into action. At the time, it was regarded as a great success.

In recent times, however, it has become widely accepted that the raid, while providing Britain with a much-

needed morale boost, was a good PR exercise that otherwise achieved little. After all, eight of the nineteen crews never made it home, an unacceptable loss rate of more than 40 per cent. In any case, all three dams were rebuilt by that autumn, just five months later.

However, the study of German records in no way supports this view. The damage caused was enormous. Not only were two major dams completely destroyed, so too were seven railway bridges, 18 road bridges, four water turbine power stations and three steam turbine power stations. Meanwhile,

"It's gone! It's gone!" The whole wall had collapsed and the water had started spewing out down the valley

in the Ruhr valley alone, 11 factories were razed and a further 114 damaged, many severely. Vast tracts of land had also been devastated by the tidal waves that had thundered up to 80 miles from the dams.

For the Germans this was a 'katastrophe' – and the smashing of the dams is today still labelled as such. It was true that in 1943, Germany still had enough reserves of water to ensure steel production was not unduly affected, but were the dams to remain broken the following year, then war production would be seriously compromised. It was therefore absolutely essential that they be rebuilt by the autumn, in time to catch the winter rainfall. And even then, the Germans had to pray that winter was not drier than usual.

It is much to the credit of the armaments minister, Albert Speer, that this was achieved, but it came at a huge cost – not just financially, but also in terms of manpower, materials, and sheer logistical effort. On Speer's request, a staggering 70,000 men from the Organization Todt were transferred to the area, a large number of Dutch and French labourers being moved from the Atlantic Wall. New temporary timber-framed railway and road bridges were hastily erected, while entire railway lines

Guy Gibson in flying kit, May 1943. Gibson was awarded the Victoria Cross but died when his plane crashed in the Netherlands the following year



Unlikely heroes **An inexperienced crew who beat the odds**

Barnes Wallis, with considerable help from scientists and engineers from the Ministry of Aircraft Production, had discovered the previous year that the explosive effect of the bouncing bomb would be much greater if detonated at depth against a dam wall. Yet it was not until 26 February 1943 that Operation Chastise was eventually given the green light.

However, at the time, Barnes Wallis was in danger of being hoisted by his own petard. The time to strike was when water levels were highest, in mid-May, and with the light of a full moon.

That gave the project just ten weeks, otherwise it would have to be postponed for another year. Yet Wallis had not even finished the designs for his weapon

at that point in time. Nor did he know how feasible it would be for Avro to specially adapt a number of Lancasters to carry and deliver the weapon to the targets.

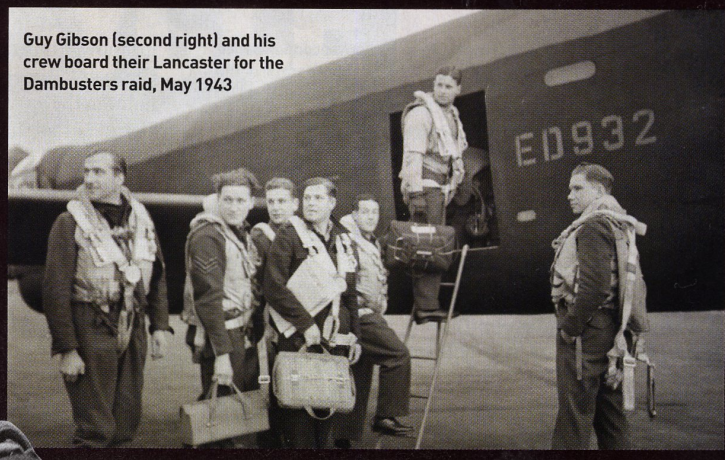
And nor had the squadron yet been formed to carry out the operation. 617 Squadron was created on 24 March with Guy Gibson as its commander. In his book, *Enemy Coast Ahead*, Gibson implied that he had personally chosen every pilot and that the squadron was very much the 'Top Gun' of Bomber Command, the best of the best.

This was not really the case. Gibson personally knew just three of the 22 pilots, although he certainly requested the American, Joe McCarthy, and would have been aware of Micky Martin's reputation for low flying.

As a guideline, crews were to have finished or nearly completed one tour of 30 operations. Some were obvious choices because they fitted that bill, but that still left a shortfall.

At this point, it was left to individual station commanders to find the rest. Les Munro volunteered because he saw a notice asking for crews to do so. He had 22 operations to his name, but others had even fewer. Geoff Rice had no more than a handful, while Vernon Byers had just four, and Cyril Anderson and Ken Brown only seven each.

During training, most crews added around 50 hours' flying time, but this hardly made them the crème de la crème. It makes their achievement even more astonishing.



Guy Gibson (second right) and his crew board their Lancaster for the Dambusters raid, May 1943

were constructed alongside huge walls of scaffolding to bring stone and materials to the dam walls. On top of that, at both the Eder and Möhne, the Germans built entire new barracks blocks for the thousands of labourers.

Even the Sorpe Dam, damaged but not destroyed, had to be emptied because one of the points of impact was 12.5 metres below the parapet and had created a crater more than eight metres wide and with damage right through the width of the dam.

The effort and vast expense of repairing the dams in such a short time was astronomical. Worse still for the Wehrmacht, it now felt compelled to



Albert Speer visits the Möhne Dam. He ordered 70,000 men to be moved to the Ruhr following Chastise, many from the Atlantic Wall

build elaborate anti-aircraft defences, not just on these three but on every single dam of any substance in Germany. And these defences had to be supplied and manned. The photographs taken of the reconstruction efforts – carried out simultaneously – demonstrate what an enormous undertaking this was.

It is also true that those destroyed and damaged factories were up and running again in comparatively short time. However, many of the components

A reconnaissance photograph of the damaged Eder Dam, taken by an RAF aircraft on the day after Operation Chastise

For the Germans, this was a 'katastrophe' – and the smashing of the dams is today still labelled as such

required were not readily available and had to be taken from elsewhere; the Ruhr's gain came at the expense of factories elsewhere in the Reich.

In other words, the speed with which the dams were rebuilt doesn't serve to undermine the effect of the raid. On the contrary, it underlines

just how important the dams were to Germany – especially at such a critical point in the war. In February the Germans had surrendered at Stalingrad; a further 250,000 men had capitulated in north Africa a few days before the raid; while at the height of the reconstruction, the Wehrmacht was facing the invasion of Sicily and the catastrophic counter-attack at Kursk. If there was ever a moment when the Germans needed to avoid diverting resources from the front, it was then.

Furthermore, the Dams raid, carried out by just a handful of aircraft, played on the Nazi high command's worst fears – that the Allies could achieve similar kind of destruction at will with a small force. Moreover, the dams, giant feats of engineering, were known and admired throughout Germany. The psychological blow the raids dealt the Germans was far greater than the psychological boost they gave the British and Americans.

The Möhne Dam was reinaugurated on 3 October the same year. A month later, Field Marshal Rommel was given

command of Army Group B in the west, with the specific task of protecting the Channel coast. He was appalled to discover that the much-vaunted Atlantic Wall was more a concept than reality. Perhaps, however, he should not have been surprised when so many of the wall's workers had been transferred to repair the dams. It was a diversion of resources that would cost Germany dear in June the following year. **H**

James Holland's most recent work of history, *The Battle of Britain*, was published in paperback by Corgi earlier this year. His book *The Dambusters* will be published by Bantam Press in spring 2012

JOURNEYS

Books

► **Enemy Coast Ahead** by Guy Gibson (Goodall Publications, 1998)

TV

Look out for the BBC Timewatch series on the Second World War due to be aired on BBC Two this autumn. Sign up to our TV newsletter for exact details:

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On the podcast

James Holland discusses the triumph of the dambusters on our weekly podcast

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