## Plane Crash in Herken

70 years ago, a British Lancaster bomber with seven crewmembers crashed here

On the moonlit night of 16/17 May, 1943, the Lancaster III "Type 454" ED927/G, with seven crewmen aboard, crashed near Herken at 22:50 after colliding with high voltage power lines. The bomber was one of 19 aircraft sent to attack German dams in the North Rhine and Westphalia during Operation Chastise.



Figure 1: An Avro Lancaster Mark I<sup>1</sup>

The operation was flown in three waves of attacks. The aircraft that crashed in Herken came from the Second Wave and was piloted by 31-year-old Australian Robert Norman George Barlow. Additional crewmembers were Australian Charles Rowland Williams (age 34), Britons Samuel Leslie Whillis (31), Philip Sydney Burgess (20), Alan Gillespie (20), Jack Robert George Liddell (18), and Canadian Harvey Sterling Glinz (21).<sup>2</sup>

The route led from RAF Station Scampton over the North Sea and the Netherlands to the northern edge of the Ruhr and the Mohne, Eder, Sorpe, Diemel, Ennepe, and Lister dams. The target of the crashed Lancaster in Herken was the Sorpe dam.

The aircraft flown by Barlow took off at 21:28 hours, the first of the entire operation.<sup>3</sup> The urban area of Rees, in particular the pronounced loops of the Rhine, was for all the aircraft the point of orientation for the final run into the dams.

Haldern Then and Now

<sup>&</sup>lt;sup>1</sup> Internet: Alliot Verdon Roe: <a href="http://www.verdon-roe.co.uk/#/pictures--videos-avro-aircraft/wwii/avrolancaster/">http://www.verdon-roe.co.uk/#/pictures--videos-avro-aircraft/wwii/avrolancaster/</a> avrolancastermk1, accessed 18/11/2012

<sup>&</sup>lt;sup>2</sup> Internet: Aircrew Remembrance: <a href="http://www.aircrewremembrancesociety.com/raf1943/5/barlowrobert.html">http://www.aircrewremembrancesociety.com/raf1943/5/barlowrobert.html</a>, accessed 18/11/2012

Tobin Jones: 617 Squadron: The Operational Record Book 1943-1945, p28

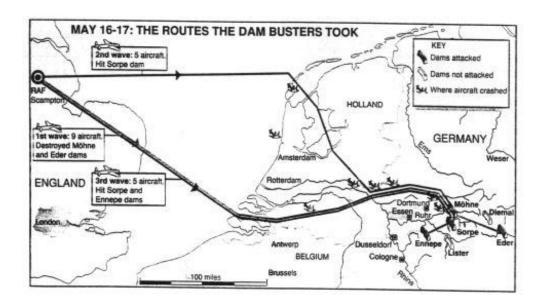


Figure 2: The flight paths taken by the three attack waves<sup>4</sup>

The bombers were modified for the attacks on the dams and carried a special bomb. The so-called "bouncing bomb," codenamed Upkeep, was designed to skip across the water like a stone and then detonate below the water line of the dam. The bombs could only be carried by specially equipped Lancasters in a cradle mounted under the aircraft with a motor and belt to spin the bomb backwards before release.

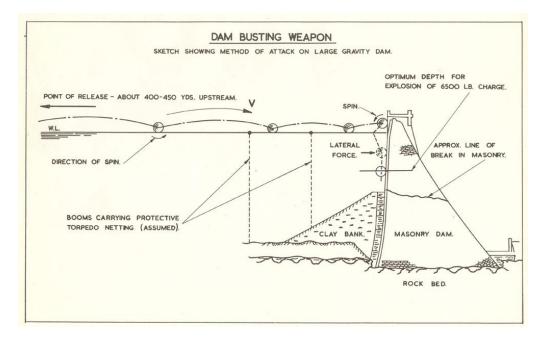


Figure 3: The principle of the bouncing bomb<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> Internet: Lancaster Archive: <a href="http://www.lancaster-archive.com/bc">http://www.lancaster-archive.com/bc</a> damsraid2.htm, accessed 18/11/2012

<sup>&</sup>lt;sup>5</sup> RAF Museum Online Exhibition: <a href="http://www.rafmuseum.org.uk/images/online">http://www.rafmuseum.org.uk/images/online</a> exhibitions/dam-diagram.jpg, accessed 18/11/2012

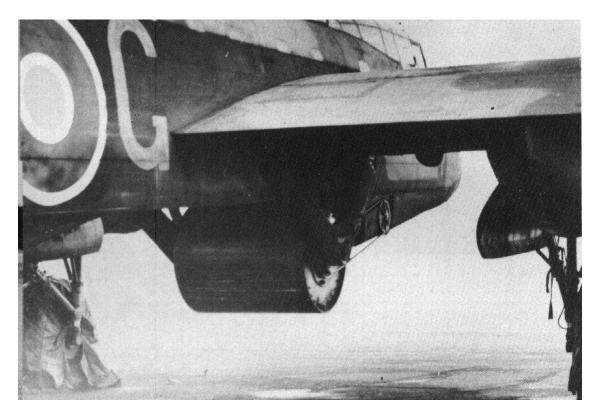


Figure 4: Upkeep underneath a Lancaster III<sup>6</sup>

The English engineer Barnes Wallis took just under a year to develop the bouncing bomb. To this end, many test runs with prototypes were made. The final design of the bombs was, beginning in November 1942, extensively tested, and from February 1943 approved for production for the attacks on the dams.<sup>7</sup>

To evade German radar and elude detection by nightfighters, the Lancasters, carrying the 4-ton Upkeep bombs, had to fly the entire route at 20-40 meters altitude, at night, in moonlight. The Lancaster crews had been specially selected and before the mission had spent seven weeks in training, practicing the operation to the smallest detail. On this nearly suicidal mission 133 men took off -53 men died in the eight aircraft lost (three men were captured and made POWs). Only eleven Lancasters would return to Scampton.<sup>8</sup>

According to English accounts, the machine flown by Norman Barlow, after having been possibly shot up by flak, encountered and collided with power lines at 22:50 hours in Herken.<sup>9</sup>

In the crash, the Upkeep bomb came free and the self-destruct fuse failed to activate. The following photo, taken from the archives of the Imperial War Museum, stimulated me to further research into the bouncing bomb and Lancaster AJ-E.

<sup>&</sup>lt;sup>6</sup> Photo: Internet: Lancaster Archive: http://www.lancaster-archive.com/dam\_lanc1.jpg accessed 11/18/2012

<sup>&</sup>lt;sup>7</sup> Wikipedia (En): Tag: Bouncing Bomb

<sup>&</sup>lt;sup>8</sup> Information from the documentary *Dambusters*, directed by Gary Johnstone, Pinewood Studios, Buckinghamshire 2003. http://youtu.be/1FX2XZjJv2o

Tobin Jones: 617 Squadron: The Operational Record Book 1943-1945, p28



Figure 5: The Upkeep "Bouncing Bomb" from the Haldern Lancaster. Photo probably taken in the Kalkumer Forest bomb storage area used by the bomb disposal squad<sup>10</sup>

According to Franz Hildenhagen (Jr.) of Rees, his father Franz Hildenhagen (Sr.) (1891-1969) was at that time an air raid warden in Haldern. He was one of the first on the crash site, and found a completely destroyed aircraft and its dead crew. The next morning the Upkeep was recovered by Bomb Disposal Squad 1/VI of Dusseldorf and was taken to Kalkum.



Figure 6: Captain Heinz Schweizer (center) explains the Haldern bouncing bomb to high-ranking German officials<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> Photo: Imperial War Museum: http://www.iwm.org.uk/collections/item/object/205211258, accessed 18/11/2012

<sup>&</sup>lt;sup>11</sup> Photo: YouTube, BBC Documentary *Dambusters Declassified*: https://www.youtube.com/watch?v=35qsu9HsYos

Disposal Squad Leader Captain Heinz Schweizer, with engineer Siegfried Werner, defused, inspected, and studied the bouncing bomb in the bomb storage area in the North Kalkumer Forest near Dusseldorf.12

The findings and the detailed sketches made by Werner were published in the instruction sheets for defusing enemy munitions. The sketch was dated 26 May 1943. Thus, within 10 days, the mystery of the bouncing bomb had been solved. According to the English magazine "After the Battle," the German plans and sketches are the only ones of Barnes Wallis' Upkeep to survive - and exist only thanks to the Haldern bouncing bomb. 13

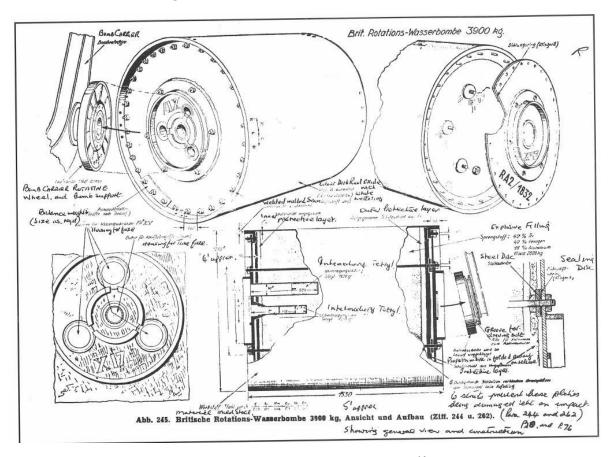


Figure 7: Siegfried Werner's sketches with handwritten English notations<sup>14</sup>

The Luftwaffe performed further investigations at the Ballistics Institute of the Technology Academy at Berlin-Gatow. Here small-scale experiments were performed and recorded on film to further the understanding of the bomb. The results were reported by Professor Dr. Schardin and Dr. H. Maecker on September 23 1943 in "Report 18/43: Model Experiments with Rotating Water Bombs," which was released with the cine film. In summary, it was found that the most effective protection against attacks with rotating bombs was the prevention of low-level attacks and adding fill on the waterside of the dams to keep the bombs a safe distance away.15

<sup>&</sup>lt;sup>12</sup> Wolfgang Thamm: Hauptmann (W) and Ritterkruezträger Heinz Schweizer – Feuerwerker und Sprengkommandoführer, Biblio Verlag, Bissendorf, 2004

<sup>&</sup>lt;sup>13</sup> Winston G. Ramsey: After the Battle magazine, Issue 97, "Dambusters' Bomb Recovery", p28, Plaistow Press Ltd.,

<sup>&</sup>lt;sup>14</sup> Winston G. Ramsey: After the Battle magazine, Issue 97, "Dambusters' Bomb Recovery", p30, Plaistow Press Ltd., London 1997

<sup>&</sup>lt;sup>15</sup> BArch - MA Freiburg RL39/57

The now 86-year-old Kurt Jansen (currently residing in Wesel) responded to the report of the crash. He was a 16-year-old serving in the Fire Service of the Hitler Youth. From his parents' house (today Halderner Strasse 11), he rode his bicycle to the crash site. He arrived about 30 minutes after the crash and found no one in control of the crash site and people lingering around the unexploded bomb in the assumption that it was a fuel tank from the aircraft. Also present were the fire chiefs, Theodor Seesing, in civilian life a carpenter, and Josef Koster, in civilian life a shoemaker. A Luftwaffe officer who had arrived on the scene warned those gathered around the Upkeep, "Are you crazy? This is a bomb!" Kurt Jansen and his young comrades of the Fire Service of the Hitler Youth thereupon took control of the scene and moved everyone back to a safe distance. 16



Figure 8: Overview map of the crash site near Herken<sup>17</sup>

Charles Foster from Ireland has extensively studied the story of Operation Chastise and has been reporting the fates of all of the participating aircrew in his blog Dambustersblog.com. Foster's uncle, David Maltby, was one of the participating pilots and returned unscathed from the operation. Only four months later, Maltby and his crew were killed when their Lancaster crashed following an aborted attack on the Dortmund-Ems Canal.

The enthusiasm of Charles Foster for the Dambusters caused me to make contact with him. On the 70<sup>th</sup> anniversary of the fateful day the seven airmen died in Herken, I placed a small laminated poster at the crash site to memorialize the victims. Foster posted about this in his blog, and attracted

<sup>&</sup>lt;sup>16</sup> Telephone interview with Kurt Jansen on 6 November 2013

<sup>&</sup>lt;sup>17</sup> Map from TIM-Online - www.tim-online.nrw.de

attention from people interested in a memorial and even the *Telegraph*<sup>18</sup> newspaper, which published an article about the memorial poster in Herken.



An NRZ report from Elizabeth Hemp published in 2007 revealed that beside the crash in Herken, there were crashes in Raesfeld-Marpeck and in Emmerich<sup>19</sup>. The crash in Marpeck also involved high voltage lines; the aircraft crashed and the bouncing bomb detonated immediately, blasting a large crater<sup>20</sup>. On November 29, 2005, a memorial stone was placed there for the seven fallen crewmen of Lancaster ED864/G, "B for Baker."<sup>21</sup>

The crash site in Herken is one of the few, in addition to Emmerich, that has no permanent memorial in place (see Chris Ward and Andrew Wachtel: *Dambuster Crash Sites*, Pen and Sword Books, South Yorkshire, 2007). On May 22, 2013, Charles Foster and his wife Jackie visited the crash site; on May 17, 2013, Tina Fairness and Steve Morris, making a motorcycle charity ride, also visited. Further visits by companies such as European Driving Tours with eight Porsche 911s followed. This demonstrates the enormous popularity the Dambusters enjoy in the English-speaking countries.

Haldern Then and Now

 $<sup>^{18} \</sup> Internet: \textit{The Telegraph}: \underline{\text{http://www.telegraph.co.uk/history/britain-at-war/10038011/New-German-plaque-for-downed-Dambuster-bomber.html}$ 

<sup>&</sup>lt;sup>19</sup> Internet: NRZ: <a href="http://www.derwesten.de/nrz/staedte/emmerich/andenken-an-den-flugzeugabsturzid2047853.html">http://www.derwesten.de/nrz/staedte/emmerich/andenken-an-den-flugzeugabsturzid2047853.html</a> accessed 18/11/2012

<sup>&</sup>lt;sup>20</sup> Internet: Heimatverein Raesfeld: <a href="http://www.heimatverein-raesfeld.de/Pressetxt/presse2002.htm#Absturzstel">http://www.heimatverein-raesfeld.de/Pressetxt/presse2002.htm#Absturzstel</a> accessed on 18/11.2012

<sup>&</sup>lt;sup>21</sup> Internet: Heimatverein Raesfeld: http://www.heimatverein-raesfeld.de/Pressetxt/presse2005.htm#Gedenkstein

## Crew of Lancaster III "Type 646" AJ-E "E for Easy", ED927/G



<sup>&</sup>lt;sup>22</sup> Internet: Private website Dave and Jane: <a href="http://dazzlin-dk.com/images/Airman/Squadrons/Crest617sqn.jpg">http://dazzlin-dk.com/images/Airman/Squadrons/Crest617sqn.jpg</a> Accessed 18/11/2012

Royal Air Force Museum London: <a href="http://www.rafmuseum.org.uk/london/whats-going-on/news/raf-museumto-commemorate-dambusters-anniversary/">http://www.rafmuseum.org.uk/london/whats-going-on/news/raf-museumto-commemorate-dambusters-anniversary/</a> Accessed 18/11/2012

<sup>&</sup>lt;sup>24</sup> Crew photos: Internet: BBC News UK: "Dambusters: All the men who took part": <a href="http://www.bbc.co.uk/news/uk-22544568">http://www.bbc.co.uk/news/uk-22544568</a> Accessed 21/10/2013

The final resting place of the fallen airmen from the Herken crash is the Reichswald Forest Commonwealth War Cemetery near Kleve.



Figure 9: Left to right, Charles and Jackie Foster, Tina Fairness and Steve Morris, and below, the cars from the European Driving Tour at the crash site in Herken.

More information, photos, and newspaper articles from 1943 can be viewed using the following QR code:



Haldern, November 2013

Volker Schürmann