D-DAY: HOW WAS THE BIGGEST EVER SEABORNE INVASION LAUNCHED?

VIDEO TRANSCIPT - BUILDING A DIY HARBOUR

[Voice of Sophie Raworth, broadcaster]

When the Allied commanders were planning D-Day, they knew that they couldn't rely on capturing harbours by direct assault. It was just too dangerous.

So how would they keep the invasion force supplied once it had landed? One answer was to land supplies and personnel directly onto the Normandy beaches but unpredictable weather might make that impossible for days at a time. So the Allies came up with an insurance plan.

They would build two huge artificial harbours in pre-fabricated sections, tow them across the Channel and fit them together off the Normandy coast.

Code-named Mulberry, each harbour was formed using sunken break-waters made from hollow concrete blocks and old ship hulks. This created calm water where Allied vessels could drop anchor.

Ships unloaded at large steel pier heads which were raised and lowered on four extendable legs depending on the tide. These pier platforms were connected to the beach via long steel roadways that rested on hollow concrete and steel floats.

Building the harbours was a massive undertaking requiring 210,000 tonnes of steel and 1 million tonnes of concrete. Around 55,000 workers were involved building different sections in teams spread across the country, but they had no idea what they were really making.

On 6 June, the two Mulberry harbours were ready. One was constructed off Omaha Beach in the American sector while the other was off Gold Beach in the British sector.

They were both operational within 12 days of D-Day and could move up to 7,000 tonnes of vehicles and supplies per day. Although the US harbour was destroyed in a storm, the British harbour saw heavy use for six months, even though it had been designed to support the force for just three.

Taking their own harbours gave the Allies the confidence to attack the less heavily defended beaches of Normandy and provided an essential supply line for their advance.

As Nazi minister Albert Speer conceded, it had been an idea of simple genius.

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