

RAF Scampton Historical Museum

Museum staff at RAF Scampton are very experienced in carrying out school visits tailored to the specific needs of schools. They are also extremely knowledgeable about their subject.

We offer the following as tasters for a visit to RAF Scampton Historical Museum.

Key Stage 2

History:
Chronological understanding
Historical interpretation
Historical enquiry
British History

Key Stage 3

History:
Chronological understanding
Change and continuity
Cause and consequences
Interpretation

Key Stage 2

English:
Writing
Composition
Planning and drafting
Reading
Understanding texts
Reading for information
Non-fiction and non-literary texts

Key Stage 3

English:
Competence
Creativity
Cultural understanding
Critical understanding

Overview of the activities

In this section we offer background information on the Dambuster Raids in preparation for a visit. We suggest young people carry out further research into the subject.

Aims of the session

To research the Dambuster Raids

Preparation

PowerPoint: Guy Gibson

Youtube videos

There is a BBC documentary about the Dambusters which can be viewed on Youtube

<http://www.youtube.com/watch?v=wgP2z2O4NDo> - Dambusters documentary

<http://www.youtube.com/watch?v=-OWuhhrqwz4&feature=related> -

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Exploring our aviation heritage

Activity: The Dambuster Raids

Introduction

Introduce the theme of the Dambuster raids. This section contains some basic background information and sources of further information.

Activity

Ask young people to find out about the following in order to discuss the mission fully:

- The mission
- The people involved: Barnes Wallis, Guy Gibson, the crews of the Lancasters that took part
- The training
- What happened on the mission?
- What were the implications of the raid in terms of improving morale in Britain and in damaging Germany's industry?
- Was the mission a success?

Background

Many British scientists worked to develop ingenious tools for the armed forces. Sir Frank Whittle's jet engine would have made a huge difference to the RAF's airpower had it been funded for development.

Barnes Wallis invented the Wellington bomber and as war became inevitable he started to think about how to shorten the War. He thought the best way to do this would be to cripple German industry by either destroying sources of power or transport networks. The oilfields used by the Germans were too far for British bombers to reach them and mines were too deep underground for bombs to cause much damage. The only other option was dams.

Three dams were key to Germany's industry, all between the Rhine and the Ruhr: the Eder, the Mohne and the Sorpe. They were deep dams, storing the huge amounts of water needed to supply hydro-electric power for heavy industry. The Eder also supplied water to the Mittelland Canal which was Germany's busiest waterway. Destroying the dams would cause huge disruption to German industry.

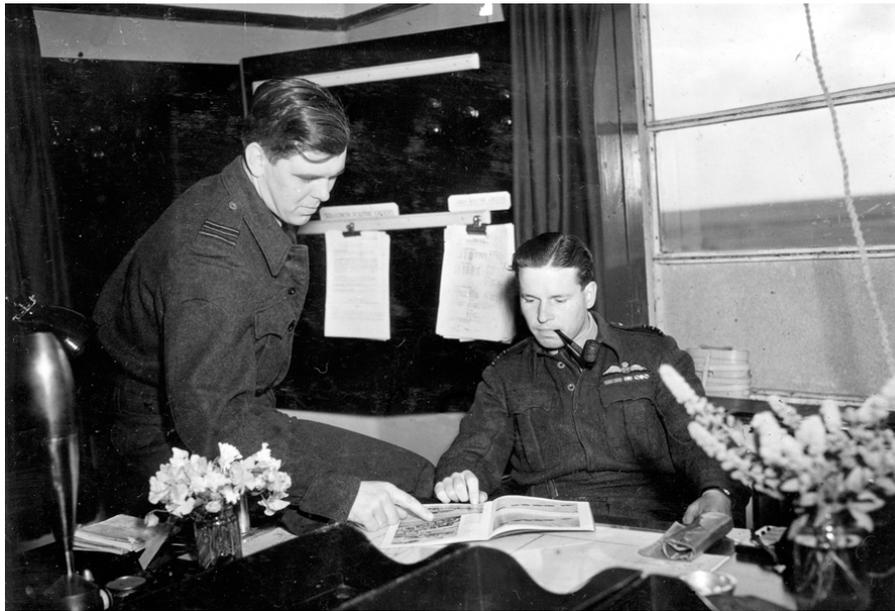
Barnes Wallis knew that the walls of the dams were too thick to be destroyed by bombs dropped from above, but an underwater bomb that exploded next to the dam wall would have enough power to breach the dam.

So instead of dropping bombs from above, Barnes Wallis suggested bouncing bombs across the water. The bomb would hit the dam wall and sink, where it would explode, causing shock waves in the water that would cause the walls to break.

Wallis made scale versions of his bouncing bomb before going to see Head of Bomber Command, Arthur Harris. He asked for one bomber so he could try out his idea. He realised that the bomb would only work if it was dropped from a height of 60 feet and at a precise speed at the exact distance from the dam wall.

The Lancaster bombers to be used in the raid had to be modified to take the bouncing bombs.

Harris also understood that precision flying was critical so he sent for Air Vice Marshal Ralph Cochrane, who was Head of 5 Group and told him to find Guy Gibson who was in 5 Group. Guy Gibson was appointed to command a new Squadron formed especially for this one mission. The Squadron was made up of 21 crews and 147 men. On 21st March 1943 the newly-formed 617 Squadron came to RAF Scampton.



Their mission was top secret, even Guy Gibson didn't know the exact detail of what they were going to do. They began training by flying at night at low level on routes that took them over English dams. Gibson was told what the target was on 14th April but he was not allowed to tell his Squadron.

YEAR	DATE	TYPE	No.	PILOT, OR 1st PILOT	END PILOT, PUPIL OR PASSENGER	DUTY (INCLUDING RESULTS AND REMARKS)	Single Engine Aircraft	Multi Engine Aircraft	FAIR ENGINE	INTENSITY LIGHTING									
1943						TOTALS BROUGHT FORWARD													
MAY	7	LANCASTER	1	SELF	USUAL CREW	TO MANSTON - BASE.			1.50										
MAY	8	OXFORD	1	SELF	S/L SMITH	TO MENDON.			1.30										
"	"	VE8A	1	SELF	1/2 CREW	MENDON - MANSTON.	1.00												
"	"	OXFORD	1	S/L SMITH	SELF	MANSTON - BASE.			1.00										
"	11	LANCASTER	1	SELF	USUAL CREW	LOW LEVEL OPKEEP DROPPED AT 60 FT. PROD ROW OF 600YDS BOTTOM'S LOW LEVEL AND V.H.F. TEST.			3.00										
"	14	"	1	SELF	"	"			1.15										
"	14	"	1	"	"	"													
"	14	"	1	S/C WHITWORTH, D.S.O., D.F.C.	"	FULL DRESS REHEARSAL ON OXFORDHAM LAKE AND COLCHESTER RES. COMPLETELY SUCCESSFUL.			5.05										
"	16	LANCASTER	1	SELF	Sgt DUFFORD P/O DEERING P/O TAYLOR P/O HITCHMAN P/O SPARROW P/O TEBBINS	LED ATTACK ON TIGHE AN EGG DAYS. SUCCESSFUL.			6.40										
GRAND TOTAL (Coln. (1) to (10))							50-15	63650	3-10	2.50	4-10	577.00	16.00	-	644.25	-	87.45	10.58	47.830
1944							AWARDED V.C. 23: 2: 43												
GRAND TOTAL (Coln. (1) to (10))							TOTALS CARRIED FORWARD												

Guy Gibson's log book showing entries for the Dambuster Raids.

The modified Lancasters arrived at Scampton on 6th May. There were a lot of problems to overcome. The bomb had to be dropped precisely on target. The aircraft had to fly at exactly 60 feet above the water. At the time there were no navigational aids for the crews to rely on. Searchlights were fitted to the nose and tail of the Lancasters and were angled so that when they crossed exactly the pilots would know they were 60 feet above the water.

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The bomb aimers had wooden triangles that they had to line up with the towers at each end of the dam wall. When the triangle lined up exactly that was the precise time to drop the bomb.

The raid happened on 16th May. Wallis went to Scampton to answer any questions the crews might have. It was only in the briefing meeting that the crews found out what they had to do. As soon as the briefing meeting was over, Scampton was locked down. Nobody was allowed to leave until the raid was over.

Guy Gibson's black Labrador, the Squadron mascot, was run over before the mission started. Guy Gibson asked a colleague to bury the dog outside his office at the precise time of the mission over the Mohne Dam. He also decided to use the dog's name as the codework for the mission.

NOTE: (There are obvious issues around the dog's name. Teachers may like to visit this website <http://www.bbc.co.uk/news/uk-england-lincolnshire-13727908> to see how Stephen Fry decided to tackle the issue when writing a screen-play about the Dambusters. This may help any discussion with young people on this topic).

The mission began at 21.25 and the Squadron flew in three waves. Guy Gibson led the attack. Eight other Lancasters flew with him.

The second wave was made up of five Lancasters and the third wave was made up of five.

Two of the dams were breached but eight of the aircraft and 56 men did not return.

In Germany the damage inflicted was huge. There was total devastation 50 miles downstream of both the Mohne and the Eder dams. The water from the flood swept away houses and factories. Coalmines were flooded and destroyed. Around 6,000 acres of farmland were also destroyed. The official German report listed 1,294 people who were killed. Most of them were Russian prisoners of war who had been in a camp just below the Eder.

Source: Heroes of Bomber Command by Rupert Matthews Countryside Books, First Published 2005.