Radar

Radar, or **Radio Direction Finding (RDF)**, played a critical role in the Battle of Britain. Without the early detection of incoming aircraft, RAF fighter squadrons would not have been able to scramble into the skies and take the enemy by surprise.

When war broke out in 1939, radar was a new technology; in Britain scientists had been working on it for less than a decade.

At this time **Radar**:

-Could only detect over sea and not over land, so were positioned along the coastline.

- Could not identify whether aircraft were friendly or hostile. This identification was done in the Filter Room at *RAF Bentley Priory* or by the Observer Corps.

Radar Stations

In the late 1930s, a chain of radar stations had been built around the east and south coast of Britain. A signal pulse was sent from radar stations. When it encountered a target it echoed the pulse back on the radar screen which had a distance marking on it. This showed the number of miles away the target was.

Chain Home & Chain Home (Low)

There were two types of stations; Chain Home radar stations could detect aircraft from over 100 miles away and Chain Home (Low) had a shorter range of just 35 miles but could detect aircraft flying as low as 2,000 feet.

Chain Home stations consisted of four 360ft high metal transmitter towers and four 240ft high wooden receiver towers. Chain Home Low varied between 20ft and 185ft depending on geographical surroundings.

Radar Tower Challenge:

Chain Home transmitter towers were 360ft tall,

that's 40ft taller than Big Ben!

Have a go at building your own Radar Tower out of upcycled materials (you could even make a model of Big Ben to show scale)

We'd love to see it! Post a photo to our social media:

- Facebook/Instagram @bentleypriorymuseum
- Twitter @bentley_priory