

# Our Listening Ears of World War 1

Welcome to Fulwell Acoustic Mirror, a rare survival of our coastal defences in the North East.

## Secrecy and mystery

Also known as 'listening ears' or 'coastal watchers', acoustic mirrors are still a bit of a mystery. As they were wartime defences, secrecy surrounds how they were built and exactly how they worked.

## Why did the airships attack?

Zeppelin airships aimed mostly to destroy industrial and military sites. Their devastating air attacks caused panic and fear amongst local people, giving Germany power over Britain.

## Zeppelin raid on Sunderland


Sunderland docks were an obvious target. On 1 April 1916 a Zeppelin attack caused major damage to Monkwearmouth Station, houses and the docks, killing 22 people and injuring 100 others. This attack was played down in the local press to try and stop local people panicking, reporting the damage as three small fires.

## What was the threat to Sunderland?

We know that this mirror was built very quickly as an early warning system during WWI, mainly due to the danger of more German Zeppelin airship attacks. It is likely it was built in 1917, following air raids on our coast in 1915 and 1916. Only 10 others were ever built in Britain during WWI.

## Did it stop the airship attacks?

By the time Fulwell's mirror was built most German and British airships were used only for reconnaissance at sea. Threats from the air were replaced by early warplanes such as the German Fokker DVII.

An illustration of the Fulwell Acoustic Mirror, a large, curved, stone structure on a grassy hill. A man in a WWI-era uniform and cap is sitting in a trench in front of the mirror, wearing headphones and looking up at the sky. A German Zeppelin airship is flying in the sky above. The sky is a mix of blue, white, and red, suggesting a sunset or sunrise. The sea is visible in the background.

Acoustic mirrors picked up sound waves from approaching German airships and other aircraft giving a 15 minute early warning of attacks. Anti-aircraft weapons could then be alerted and fired.

This mirror was specially placed on high land, looking out to sea and far enough away to avoid sound interference from the waves.

A 'listening ear' operator probably sat in an underground trench in front of the mirror. Here at Fulwell archaeological investigation didn't find a trench, so the 'listener' possibly sat in a hut nearby.

How would you feel to be a radio listener if you got a signal that there was an enemy aircraft on the way to bomb this area?

Fulwell Acoustic Mirror was sensitively repaired in 2014, and the land around it landscaped.