

SUMBURGH HEAD AT WAR

Follow in their footsteps on our military trail

Walk around the Sumburgh Head Lighthouse site and learn more about its defensive role during wartime. Shetland played a crucially important function in the defence of Britain during both World Wars due to its strategic military location on the northern periphery of Britain and Europe.

To avoid the vulnerable and dangerous naval passage through the Straits of Dover, enemy shipping and submarines used the North Sea as their preferred route to the North Atlantic Ocean. Shetland was therefore an important base for the Royal Navy and Royal Air Force to patrol the surrounding waters, and for the military radar stations, scanning the skies and seas. One such radar station was built within the grounds of Sumburgh Head Lighthouse in 1939.



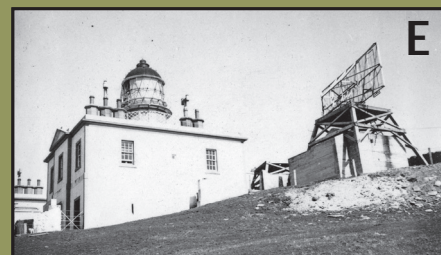
Radar station under construction in 1939. (courtesy collection of Lt Dunworth via Squadron Leader Mike Dean, MBE)



A buried brick-built tank was found next to the foghorn during restoration works. This may have been the storage pit for the Lewis gun ammunition.



This concrete platform and blocked up entrance within the stone wall may be a defensive Lewis gun platform.



Sumburgh's Admiralty Experimental radar station (named AES 1) and receiver hut in the foreground with metal aerial frame.



During wartime, soot and brown clay were added to the limewash coating the lighthouse tower to help it blend into its surroundings.



A military cap badge, button and bullet casings were discovered here during the 2012-14 restoration.



Foundations of the barrack blocks which housed the army guard for the radar station.



A former air raid shelter blast wall was discovered during groundworks when the site was renovated in 2012-14.

Admiralty Experimental Station 1 (AES1)

The Sumburgh Head radar facility started permanent watch on 27th December 1939. Named Admiralty Experimental Station Number 1 (AES1), it was tasked with plotting surfaced U-boats attempting to escape from the North Sea into the North Atlantic, but also capable of detecting aircraft by transmitting and receiving radio waves. The station formed part of a wider network of stations to protect the strategically significant waters to the north of Scotland and in particular the Fair Isle channel. As the science and practice of radar rapidly evolved through the late 1930s, later stations were built at Dunnet Head, South Ronaldsay in Orkney, two stations in Fair Isle, Saxa Vord in Unst and later Ritur Hut on the coast of north-west Iceland.



Sumburgh Head Radar Station as viewed from aboard the *Good Shepherd* at sea



Principal Keeper William Groat with his wife Jessie at Sumburgh Head during World War II

William Groat was Principal Keeper at Sumburgh during the war years, and soon found his home and place of work overtaken by the trappings of conflict. Directives from the Admiralty changed the keepers' routines and added to their workloads. The foghorn was not sounded during wartime and keepers covered the lens with a black hood to reduce the light's power, with just a hole to allow some light to escape. They also painted the lamp room windows that faced away from the sea to help stop the beam shining inland and helping enemy forces.

In a letter of December 1939 to the Northern Lighthouse Board, Groat said *'An army officer informed me that a number of soldiers were to be stationed here and asked if an officer could be accommodated in the lighthouse buildings'*. By February 1940, the keeper was concerned about the radar buildings being so close to the lighthouse and wrote that the station was liable *'to be bombed at any time'* and that *'there was 'no protection for the lightkeepers, women, children or property'*. Time would show that William Groat was right to be



Fair Isle South after its second, fatal attack in January 1942, which killed the Principal Keeper's wife and daughter. The first fatal attack was in September 1941, killing the Assistant Keeper's wife. [courtesy Collection of the Museum of Scottish Lighthouses, Fraserburgh]

concerned; during the next two years, Fair Isle South suffered two fatal attacks by enemy aircraft.

Perhaps the most famous tale associated with AES1 is its role in thwarting a surprise German air raid on the 8th April 1940. This was the eve of the German invasion of Norway and Denmark. On this night around 60 Luftwaffe bombers left Germany, intent on the destruction of the British Home Fleet, at anchor in Scapa Flow.



George Clifford Evans at Sumburgh, Summer 1940

George Clifford Evans was a Sub-Lieutenant in charge of AES1 that night. He detected the planes approximately 100 miles south-east of Sumburgh Head and was able to provide a 25 minute warning of this impending attack to the commanding officer at Lyness, Hoy, on the western flank of Scapa Flow. As the planes continued to be tracked, George stepped out on a clear starlit night, looked towards Orkney and witnessed a *'tremendous firework display'* in absolute silence; this was the Scapa barrage repelling the enemy attack. A few minutes later the noise of anti-aircraft fire was heard in Lerwick, 125 miles from Scapa Flow, and described as the *'loudest continuous sound ever heard in the British Isles'*. George Clifford Evans later wrote that *'when we heard that no serious damage had been done, I told my crew that if the stations never made any other contribution to the war we had already justified the entire enterprise'*.



Radar Hut before and after restoration

BICENTENARY
1821-2021



Sumburgh Head
LIGHTHOUSE