



# GLASGOW & CLYDEBANK

Understanding Unexploded Ordnance (UXO) Risk in Glasgow & Clydebank: Bombing History and Remaining Threats

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## WWII Bombing of Glasgow & Clydebank

### During World War II, Glasgow's River Clyde was a vital industrial hub, renowned for its shipyards and marine engineering firms.

By the early 20th century, approximately 20% of the world's ships were constructed along the Clyde, supported by nearby resources such as the Ravenscraig Steel Works and extensive coal mining operations, which peaked at around 560 mines.

This industrial prominence made Glasgow a significant target for German bombing campaigns. The city experienced its first air raid on 19<sup>th</sup> July 1940 and endured multiple attacks until 23<sup>rd</sup> March 1943. A particularly severe assault occurred on the night of 13<sup>th</sup> March 1941, when 236 Luftwaffe aircraft targeted Glasgow and Clydebank, dropping 272 tons of high-explosive bombs and 1,650 incendiary canisters. This raid resulted in extensive damage to industrial sites, including Singer's timber yards, Yoker Distillery, and the oil depot in Old Kilpatrick.

Clydebank bore the brunt of this attack, with official records citing at least 528 fatalities. The widespread use of incendiary bombs led to fires that severely damaged or destroyed many industrial facilities in the region.

Despite the devastation, Glasgow's industrial sector demonstrated remarkable resilience, continuing to produce essential wartime materials and contributing significantly to the Allied war effort.

#### Key Facts:

- Clydebank's housing was completely decimated, with roughly a third of all houses destroyed and only SEVEN escaping damage.
- Clydebank received a bombing density of around 171 bomb strikes per 1000 acres. However, due to wartime restrictions, the destruction of Clydebank went almost completely unreported.
- At the Admiralty oil storage depot at Dalnottar, 11 large tanks were destroyed and others severely damaged. Millions of gallons of fuel were lost and the resulting fires burned for two weeks. When the site was finally cleared, 96 bomb craters were counted.

#### Military activity in Glasgow and Clydebank during wartime:

Several Home Guard battalions were stationed across Glasgow and Clydebank, responsible for defending key industrial sites and infrastructure.

Numerous anti-aircraft batteries were stationed in the area, frequently active in the defence of Glasgow and Clydebank from the incoming bombers. See Luftwaffe target photographs below.







#### Sample of Finds:

- 11/02: Wartime bomb detonated at Meadowside Granary.
- 06/07: Unexploded bomb alert at primary school in Dumbarton.
- 06/12: Bomb squad called after find at Dalmarnock power station.
- 09/18: Unexploded mortar found on Bishopbriggs canal path.
- 11/20: Magnet fishers find four items of UXO at Dalmarnock Bridge, Glasgow (a shell, grenades, unexploded bomb).
- 12/20: WWII mine found in Firth of Clyde.
- 07/21: Possible unexploded bomb found in the River Kelvin, Glasgow.
- 09/22: ScotRail closes Glasgow line after unexploded bomb found near tracks.
- 04/23: Unexploded bomb found at a residential site in Glasgow.

#### Legacy:

One of the legacies of this conflict is buried unexploded air-dropped bombs or anti-aircraft projectiles resulting from the failure of a proportion of the weapons to function as designed. It is commonly accepted that the failure rate of these munitions was approximately 10% and, depending on their shape, weight, velocity and ground conditions, many penetrated the ground and came to rest at depth. Intensive efforts were made during and after the war to locate and render safe all UXO but, unsurprisingly, not all were found and dealt with. This is evidenced by the regular, on-going discoveries of UXO during construction-related intrusive ground works.

#### Managing UXO risks with Igne

UXO presents a serious hazard to construction projects, causing delays, safety risks, and financial loss. Igne provides expert UXO risk assessment, detection, and clearance, ensuring projects proceed safely and efficiently. Protect Your Site Today igne.com hello@igne.com 0371 789 1000