

This Issue: linear routes, lockdown, munitions depots, and datasheets

Case Study: Large-scale linear routes

Zetica is the go-to for UXO desk studies and risk assessments. This includes large-scale linear routes, such as transport links for road or railways.

Typically, we obtain detailed historical aerial photography for the entire length of any site route. This is standard for every Zetica desk study, and allows us to identify areas of potential UXO hazard, which can be corroborated with de-



A plan showing zoned areas of UXO hazard.

tailed archival research. We also prepare UXO hazard plans and World War Two (WWII) bomb impact maps, presenting a large amount of infor-



An extract of a WWII bomb map in London.

mation concisely, and in a digital format (such as AutoCAD and GIS) to suit our clients' needs.

Our aim with any site is to zone the UXO hazard level, based on in-depth research. This often saves our clients considerable time and money by limiting the requirement for follow-on risk mitigation work.

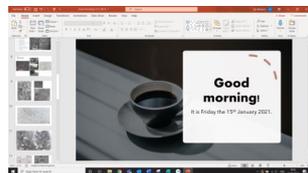
To find out more, contact uxo@zetica.com with any queries.

Research during the COVID-19 Lockdown

When the UK entered lockdown in response to the Covid-19 outbreak last year, the Zetica UXO department was faced with the challenge of adapting to a new routine during the pandemic.

Our decades of experience have allowed us to amass a vast and varied record of Britain's military history, which has allowed us to continue to produce detailed desk studies and risk assessments to the same high standard as usual.

With the UXO team working from home, daily catch-ups and collaborations have moved online, with our database accessible through remote access.



Morning catch-ups, now virtual!

Difficulties have come in the form of the closures of national and regional libraries and archives — new relevant records

have not always been accessible, and we aim to issue revisions to reports once it is safe to access the additional material.

Despite the ongoing challenges, the UXO team's hard work made 2020 one of our strongest years yet, with over 1,700No. free Pre-Desk Study Assessments (PDSAs) and over 300No. detailed risk assessments issued, demonstrating our reputation for reliable advice backed by thorough research.

Recent UXO finds

- 10/02/2021: A suspected WWII 5" naval projectile was dug up by a dog on Hurst Spit, Milford-on-Haven. An Explosive Ordnance Disposal (EOD) team was called in (by the dog's owner) and the device was safely destroyed in situ.



- 01/02/2021: Two controlled explosions were carried out after anti-tank mines were discovered at Slapton Sands in Devon. Slapton Sands was the Site of the WWII military exercise 'Exercise Tiger', which caused the friendly-fire deaths of 700 American troops.



- 19/01/2021: An EOD team was called in and road closures were put in place in Shevington, near Wigan, when a hand grenade was found by an eight-year old magnet fisher. The grenade was found close to a former factory engaged in munitions manufacture during WWII.



Zetica House
Southfield Road
Eynsham
Oxfordshire
OX29 4JB

T: (0)1993 886682

E: uxo@zetica.com

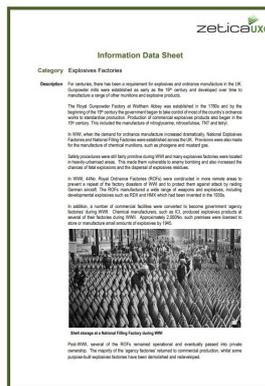
W: www.zeticauxo.com

@ZeticaUXO

Free online resources: datasheets

Perhaps you've received a PSDA and your site was located adjacent to an explosives factory; maybe you've downloaded a free Risk Map and want to find out more about the aerial bombardment of Britain's towns and cities during WWII.

Whatever information you're trying to find, our UXO datasheets provide detailed



An example datasheet, accessible at <https://zeticauxo.com/downloads-and-resources/>.

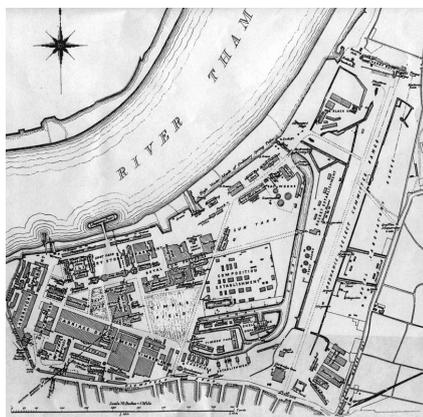
overviews of different UXO hazards which may affect your site.

This helps you understand the wide range of military activity that can give rise to UXO hazards, whilst giving an insight into the sources of information Zetica consults when researching the history of any site.

Check out our free datasheets by visiting the link at inset.

This issue's spotlight: Munitions Depots and Stores

The history of munitions depots is as old as munitions themselves. Smaller armouries and gunpowder mills were the precursors to the Royal Arsenal at Woolwich, established during the 17th century. This was a large-scale munitions storage and testing facility, starting its life as a gun carriage repair works in 1696 and remaining under military control for the next 300 years.



The Royal Arsenal in 1877. It would go on to cover an area of over 520 hectares by WWI.

In addition to large-scale establishments like the Royal Arsenal, ordnance was also stored in small quantities for operational purposes where it was likely to be needed, such as at military airfields, camps, and barracks. With the outbreak of WWII, the demand for storage and movement of large quantities of munitions increased dramatically. Numerous munitions depots were established across

the country, usually away from residential areas, but with good access to transport facilities for easy dispersal across the country.

Munitions depots varied in size, function, and design. Ordnance could be stored in subterranean chambers, reinforced bunkers, or prefabricated huts. While some smaller depots were designed to store a specific type of ordnance, others serviced a wide range of different munitions.

Some munitions depots had designated facilities for the repair, disposal, and destruction of munitions deemed faulty, outdated, or surplus to requirement. Careful analysis of facility plans and aerial photography is required to identify such areas, which may provide a source of UXO hazard as well as



Underground bomb storage at RAF Fauld.

soil contamination.

Unsurprisingly, munitions storage facilities were prone to explosions due to either enemy attack or accidents. Such explosions could scatter munitions beyond the footprint of the de-

pot, extending the UXO hazard to the surrounding area. A famous example is the incident at the underground bomb stores at Fauld, Staffordshire, in 1944, which caused the largest man-made non-nuclear explosion in human



Roadside bomb storage, rural Oxfordshire.

history.

During WWII, munitions were also stored alongside rural roads in parks, woodlands, and fields. Such munitions storage was sometimes poorly documented and inadequately guarded. Official military records show incidents of ordnance being stolen by the local populace, or military personnel undertaking unauthorised experimentation and testing of ordnance.

Zetica combines in-depth research into the operational history of munitions depots with extensive experience of having worked on similar facilities across the country. This ensures that when we identify a potential hazard, we know exactly what it is likely to be and can put in place a detailed risk mitigation plan for its removal.