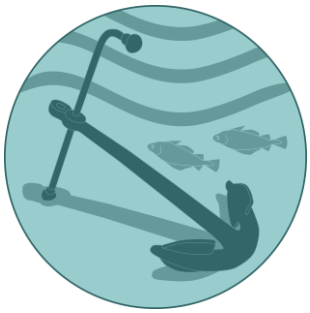
6 Alpha Associates Limited
Quatro House, Frimley Road
Camberley, Surrey
GU16 7ER

Tel: +44(0) 203 371 3900
Web: www.6alpha.com

alpha ASSOCIATES
special risks consultancy

Unexploded Ordnance Guide for the Marine Antiquities Scheme (MAS)



UVDB empowered by Achilles Registered
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1 Introduction

1.1 Background

The Marine Antiquities Scheme (MAS) aims to encourage and promote the recording of archaeological and historical objects discovered by users of the marine environment in England and Wales.

The archaeological position is that items of historical and/or cultural significance should remain in place and undisturbed, so that they may be appreciated by other recreational users and by future generations. Nevertheless, recoveries of items are often made, accidently or intentionally, and it is important these finds are described and recorded in order to assist in their protection as well as to improve the knowledge associated with our marine cultural heritage.

1.2 The Unexploded Ordnance Hazard

War fighting and military activity has left a legacy of munitions contamination in the marine environment, such that it is now relatively common to encounter items of unexploded ordnance (UXO). Beyond the opening of sea lanes and the clearance of naval mine fields, further general UXO clearance efforts have not been made post World Wars and as a result a wide variety of types of UXO might be readily encountered on the seafloor.

Conventional and chemical munitions dumping has also occurred after World Wars I and II, with little regard for the environmental impact, nor for the future safety implications associated with unexploded ordnance. There was also little enforcement of the positional accuracy of munitions deposition associated with such official offshore ordnance dumps with widespread inaccurate and short-dumping of UXO having occurred at that time. Additionally, military training and especially live firing has also contributed to the general background level of UXO contamination of the seafloor.

High explosive constituents of military ordnance rarely becomes inert or loses its effectiveness with age and trigger mechanisms may become more sensitive, so that a significant impact or mishandling of an item of UXO may cause an inadvertent detonation. Such an incident occurred in 2005, when three Dutch fishermen lost their lives in the southern part of the North Sea when a World War II bomb exploded on board the fishing vessel after it was inadvertently hauled aboard (OSPAR Commission, 2010).

2 Actions to Take on Finding a UXO

2.1 Recognise, Retreat and Report

Unexploded ordnance can cause very serious injuries and fatalities and it is potentially dangerous, despite its outward appearance or apparent condition, the explosive content may still be present. If you think you might have encountered an item of unexploded ordnance, follow the 3Rs, as a simple guide to help keep yourself and others safe (DENIX):

- **Recognise** when you have found an item of UXO and accept that it is potentially dangerous;
- **Retreat** from the UXO, do not touch, move or disturb and safely leave the area;
- **Report** the UXO location and give a description to the coastguard.

Any incident causing the recovery of UXO must be reported by the vessel Master/or person in charge to HM Coastguard who will coordinate military Explosives Ordnance Disposal (EOD) support if there is a threat to life.

If an item of UXO is later discovered for example when the vessel is alongside, the discovery is to be reported to the Police who will then arrange for Explosives Ordnance Disposal (EPD) support, ensuring public safety if there is a threat to life.

2.2 The Do and Don’ts Associated with Unexploded Ordnance

Other do and don’ts when encountering UXO include:

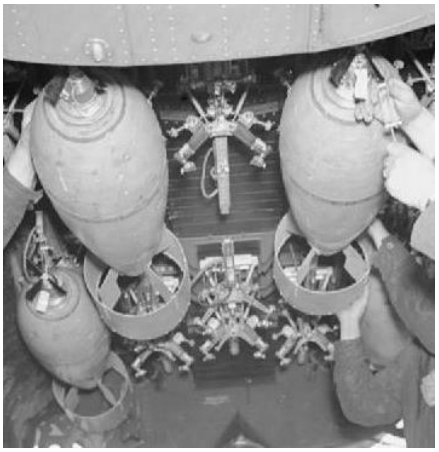
- DO cease work if an item of UXO is inadvertently recovered to the deck;
- DO communicate the danger to other crew/team members and to local marine traffic in the area if UXO has been inadvertently recovered;
- DO notify the HM Coastguard of the presence of UXO, who will advise of the appropriate action to take;
- DO make a note of the approximate dimensions, colour, condition as well as any distinguishing features or protrusions. And take a photograph, if possible;
- DO record the coordinates of where the item of UXO was/is located on the seabed, so that the authorities can implement appropriate safety measures and so that the UXO can subsequently be either rendered safe, relocated and/or detonated;
- DO follow the orders and instructions of HM Coastguard.

- DO NOT ignore your suspicions, for example if you only think that you might have found an item of UXO – assume it is UXO and it is dangerous;
- DO NOT attempt to dump any inadvertently recovered munitions back overboard, do not ignore the incident and do not continue operations;
- DO NOT touch or attempt to remove the item of unexploded ordnance from the seabed. Despite the UXO's outward appearance or condition, it may explode and/or contain toxic chemicals harmful to safety, health and the environment;
- DO NOT tamper, disassemble or attempt to disarm the item of unexploded ordnance because it could be accidently initiated;
- DO NOT attempt to clean or remove any biogenic growth from UXO.

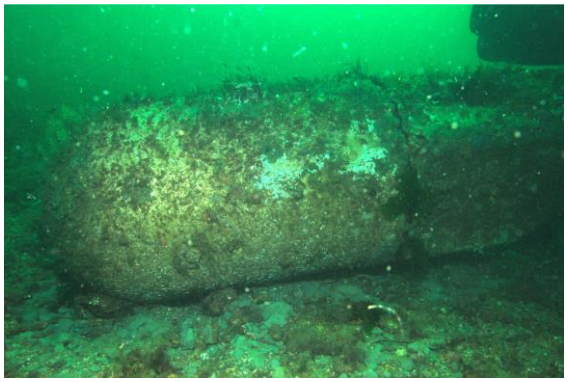
As a final note, it is unlawful to knowingly or otherwise, remove items of explosive ordnance, including firearms as they are considered dangerous. They may cause harm to the individual concerned and/or be subsequently employed to harm others (either accidentally or deliberately).

3 Example Images

3.1 HE Bombs



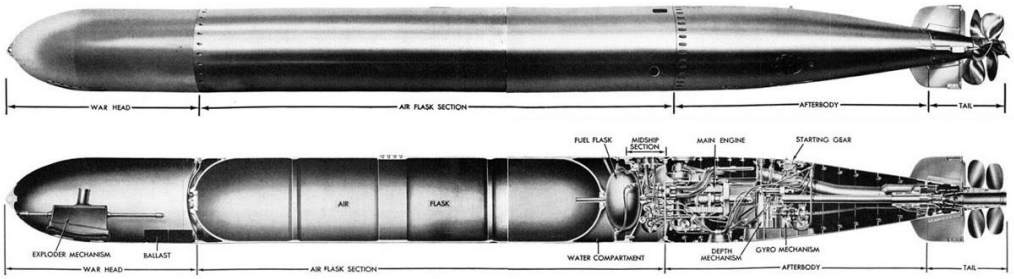
3.2 Sea Mines



3.3 Rockets

3.4 Depth Charges

3.5 Torpedoes



3.6 Guided Missiles