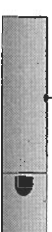




## Belcher Bits

33 Spruce Street, Sittsville, ON, Canada K2S 1P3  
Phone: (613) 836-6575, e-mail: belcher@mordenet.com

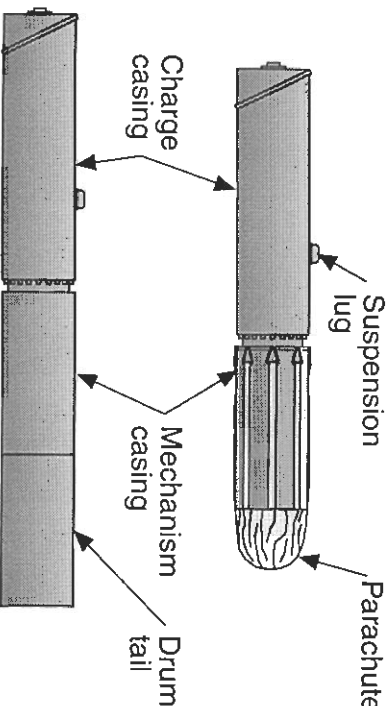


# Belcher Bits No. 11: RAF 1,500 lb Mine, 250 lb Depth Charges 1/48

**Background:** During WWI, the mine was primarily considered a defensive weapon. However, the advent of aerial minelaying in WWII allowed the mine to take on an offensive role through its ability to restrict enemy shipping in their home waters. The use of depth charges by surface ships against submarines was well established, but the development of air-dropped weapons coupled with the use of long range aircraft to provide extended convoy coverage may well have been one of the determining factors in winning the War of the Atlantic.

**1,500 lb A Mine Mk I-IV:** At the beginning of WWII, the RAF developed the 1,500 lb A mine (A for aerial delivery, as opposed to M for moored). It was produced in several marks with minor differences in triggering mechanisms and this kit represents a common variant, the 1,500 lb A Mk I-IV. The forward section contained the explosive charge (750 lb of Amatol), while the after section contained the various triggering mechanisms, which were primarily magnetic but later modified to include acoustic triggers. The casing was strengthened to allow the mine to be air dropped; for low altitude delivery a simple drum tail was attached to stabilize the weapon during the drop. Higher altitude delivery required the use of a parachute to slow the mine's descent.

These mines were carried by a variety of aircraft. Initially, Coastal Command Beauforts were the intended delivery aircraft, but mines were also carried by FAA Swordfish and Albacores. Later, Bomber Command assumed responsibility for minelaying and these weapons were carried by Wellingtons, Stirlings, Lancasters and even Mosquitos. More than 55,000 mines were laid in



Mine 1,500 lb A Mk I-IV

## Depth Charge 250 lb Mk XI

European waters in WWII and 152 enemy vessels were sunk with a further 310 damaged, including the capital ships Prinz Eugen, Scharnhorst and Gneissau. This was not without cost, since minelaying activities usually occurred within range of coastal air defence installations and more than 500 RAF aircraft were shot down while minelaying.

**250 lb Depth Charge Mk XI:** At the start of WWII, the standard RAF airborne anti-submarine weapon was the 250 lb AS Bomb. Its primary disadvantage was the requirement to hit the target directly. Difficult as this was with the submarine on the surface, it was nearly impossible once the sub started to submerge. Depth charges were much more effective, and the first airborne depth charges were simple modifications of shipboard weapons with a protective nosecone and aerodynamic tail. These were heavy (450 lb) which limited the number carried, and they tended to break up on impact with the water. The 250 lb DC was a simple 11" diameter cylindrical can filled with 170 lb of explosive; it used a tail pistol and had a breakaway drum tail. The case was strengthened to allow air dropping and the nose had a simple indented dished head which slowed the rate of sinking. The Mk XI variant substituted Torpex for Amatol. The kit provides four of these, a typical load for a Coastal Command Canso operating in the North Atlantic. The majority of these depth charges were carried by Coastal Command aircraft such as Catalinas / Cansos, Sunderlands and Liberators During WWII, Coastal Command and other units its control sank 209 submarines. Many of the submarine attacks were carried out at low level to ensure accuracy of placement and the anti-aircraft armament fitted on U boats was formidable. Coastal Command lost 1,777 aircraft during anti-shipping operations, the majority of these being on anti-submarine duties.

**Assembly and Painting:** The parts are supplied on thin standoffs, allowing the modeller to use a razor saw to cut them off the bases and join them together using cyanoacrylate or epoxy adhesives. Like all resin parts, they should be washed with soapy water to remove any oils prior to painting. For the depth charges, the two slots in the drum tail can be opened up using a hobby knife. The wall thickness of the tail is a little over-scale to allow moulding; if desired, one can use a small grinder inside to thin the walls if desired. It is easiest to do this while the tail is still attached to the base.

Mines and depth charges would have been painted overall Dark Green; if used, the parachute pack was off-white and the risers would likely have been khaki

## References

1. Bombs Gone by J. MacBean and A. Hogben, 1990 (excellent reference on RAF bombs)