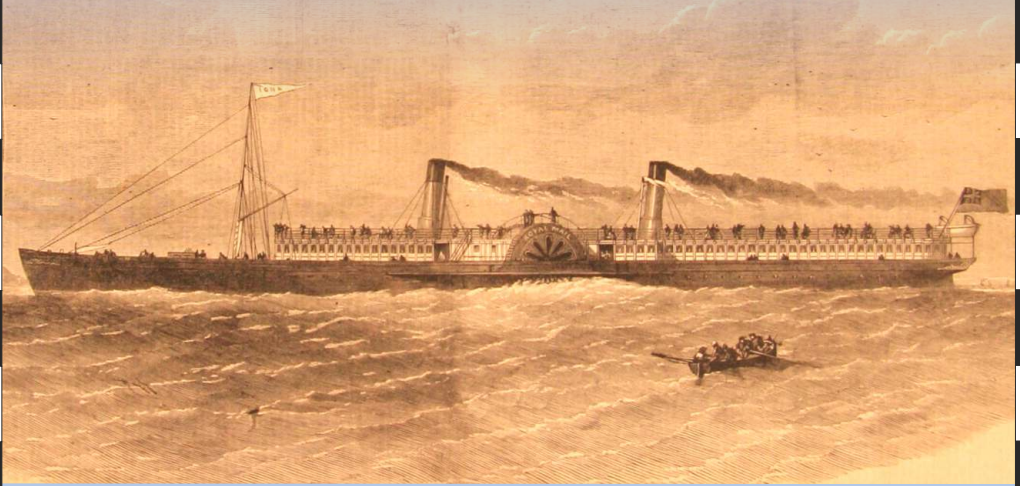


# IONA II DIVE TRAIL

## Introductory Booklet



*Iona II* was a paddle steamer, built in 1863 as a Clyde fast ferry and sold in 1864 for use as a Confederate blockade runner in the American Civil War. En route to the southern American ports, *Iona II* sank off Lundy Island on 2 February 1864. The vessel was rediscovered in 1976 and declared a protected wreck in 1989.



ENGLISH HERITAGE



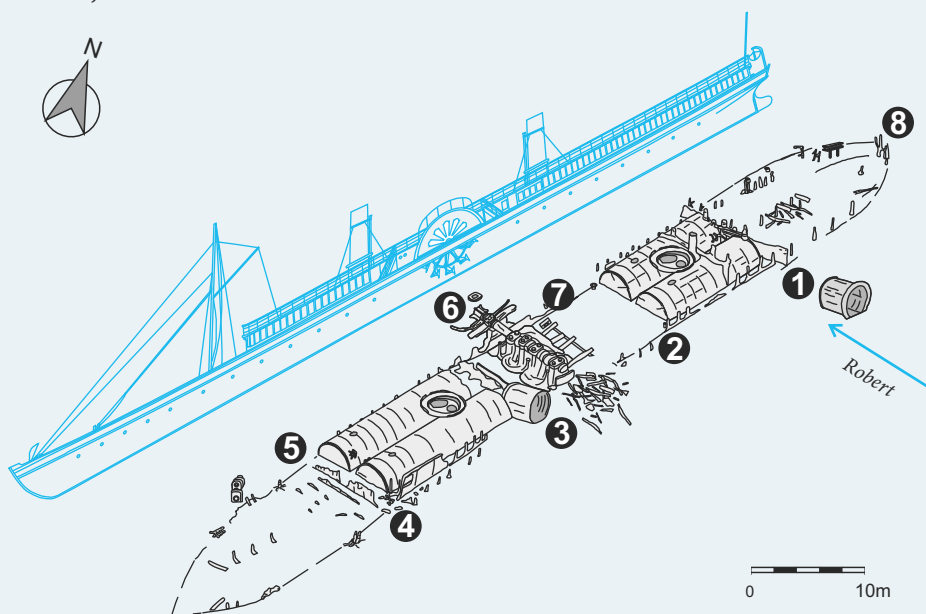
[www.landmarktrust.org.uk/lundyisland/iona-ii-dive-trail](http://www.landmarktrust.org.uk/lundyisland/iona-ii-dive-trail)

# NAVIGATING THE WRECK

This Information Booklet corresponds with the **Introductory Underwater Guide**. The numbers on the plan below are also on the Introductory Underwater Guide and correspond to areas of interest around the wreck, which are explored further in this booklet.

The *Iona II* wreck site is on the east coast of Lundy Island. The seabed around the *Iona II* wreck is generally flat, with a slight slope east of the amidships area. The seabed is coarse, firm, level mud and fine silt with some areas of fine sand within the wreck and some gravel patches around the boilers.

The wreck lies at 22 to 28 metres depending upon the state of the tide. Visibility can vary from 1 to 15 metres. The best time to dive is at slack water, which is two hours either side of low water.



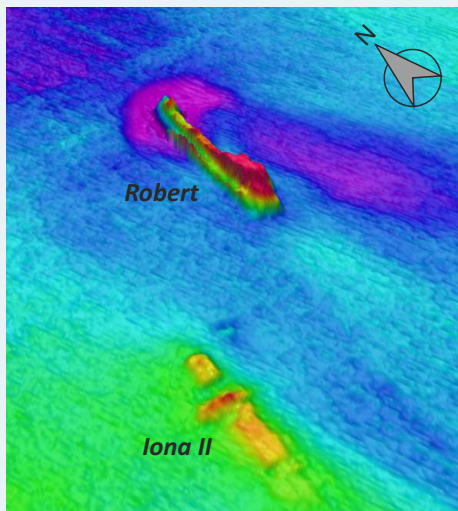
Access to the *Iona II* Dive Trail is via the *Robert* wreck buoy. From the *Robert's* rudder, head 35m on a bearing of 245 degrees or WSW to reach the *Iona II*.

# TWO WRECKS

Since the wreck was rediscovered in 1976 divers have been using the *Robert* as an entry and reference point.

The *Robert* was a 50m long single screw coaster which capsized and sank in 1975 when the cargo of anthracite coal moved.

Over the years, the two wrecks have been reported to be 30m, 60m or even 300m apart. In 2004 Wessex Archaeology confirmed that the *Iona II* bears 245 degrees or WSW 30m from the *Robert's* rudder.



MCA data ©Crown copyright

In 2000, debris was reported in the area between the two wrecks; however, nothing was found during the 2008 metal detector search.

Despite their close proximity, the marine life on the *Iona II* and the *Robert* are very different. The *Robert* is more intact, sits higher off the seabed and is further into the tidal stream. This is may be why plumose anemones are more prevalent on the *Robert* and oaten pipes hydroids are more common on the *Iona II*.

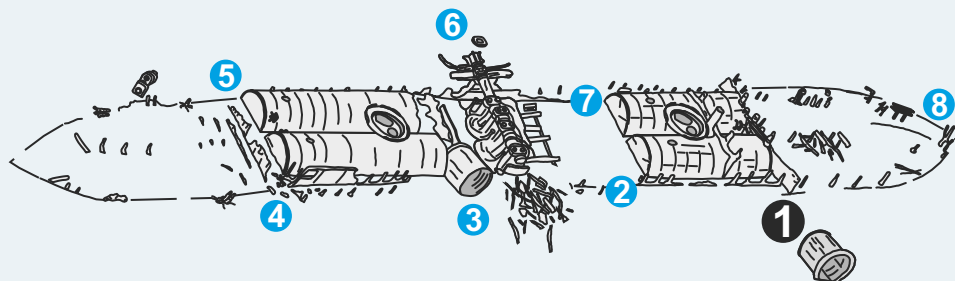


MV *Robert* marine life (R. Holden)



*Iona II* marine life (M. Deaton)

# 1 AFT FUNNEL



The most noticeable features of the wreck are the two sets of boilers that used to provide steam pressure to the engine. There is a smaller set in the aft of the vessel and a larger pair forward.

Each pair of boilers shared a smokestack funnel which was bolted in place. This allowed the exhaust fumes to escape.

In 1864 a section of funnel was salvaged and other sections have since become scattered around the site.

The aft funnel section, pictured below, is covered in hydroid and bryozoan marine turf. Jewel anemones and Devonshire cup coral have also been found on hard surfaces, such as this funnel base.



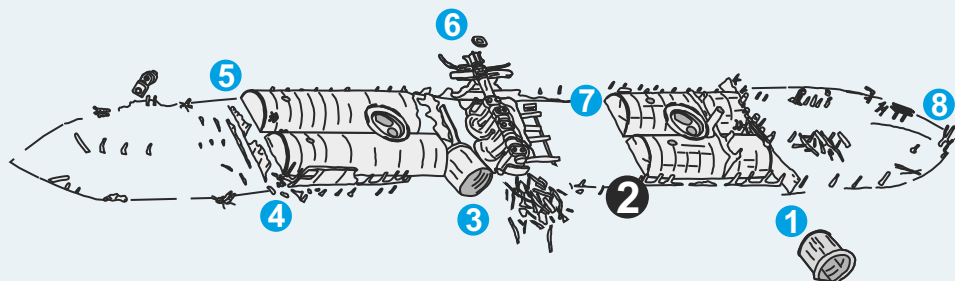
Aft funnel (Wessex Archaeology)



*Iona III* aft funnel (McLean Museum and Art Gallery, Inverclyde Council)



## 2 AFT BOILERS

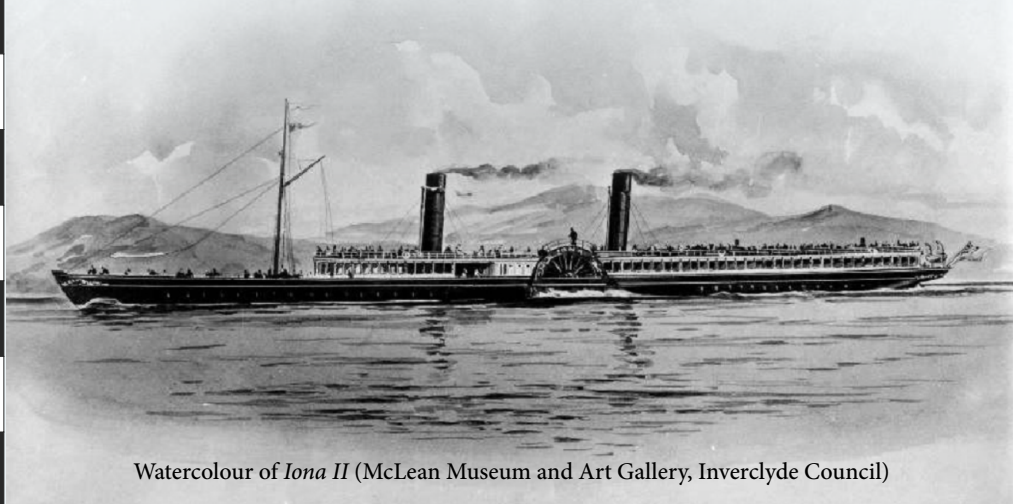


During the 1990s these aft boilers started to disintegrate. Since then, the infilling of sediment has prevented their collapse.

Depending on the sediment levels, it may be possible to see the fireboxes of the stern boilers. Coal was burnt in the fireboxes to produce steam in the boiler. The steam was transferred to the engine, while the excess fumes left via the smokestack funnel.

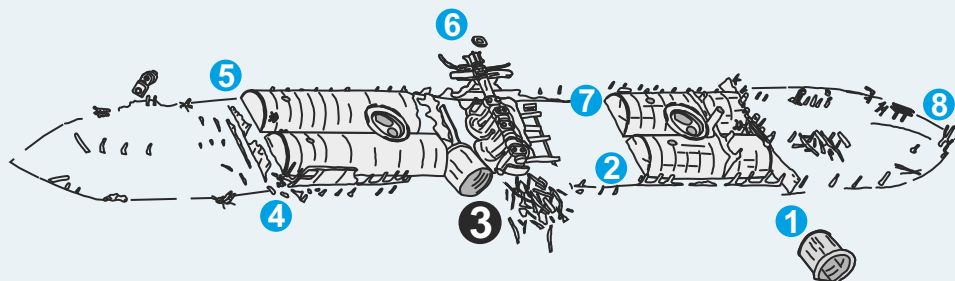


Fireboxes just above the sediment (M. Deaton)



Watercolour of *Iona II* (McLean Museum and Art Gallery, Inverclyde Council)

### 3 FORWARD



As can be seen in the ship builder's model of the *Iona II* (below), the forward and aft sections of smoke stack funnels are only parts of the much taller originals. These are probably the sections that were bolted to the deck as the flanges for attaching them still remain. The rest of the funnels have either disintegrated over time, or became detached during the sinking and now lie elsewhere.



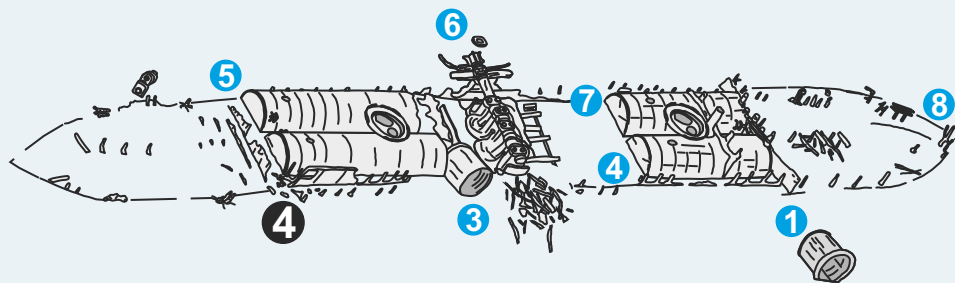
Model of *Iona II* (McLean Museum and Art Gallery, Inverclyde Council)

This section of funnel now provides an excellent substrate on which hydroid and bryozoan turf can grow along with Devonshire cup coral and jewel anemones.



Forward funnel (M. Deaton)

# 4 HULL PLATING

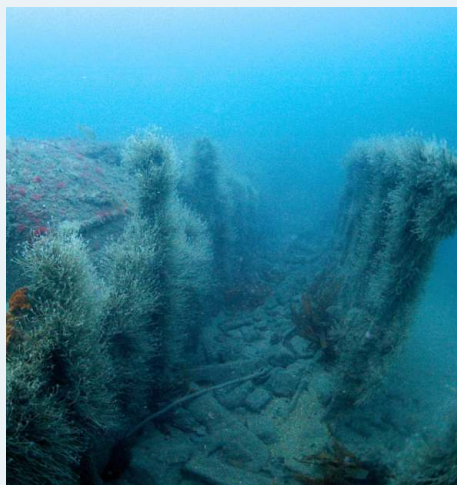


To the turn of the bilge, the hull is intact and buried in the seabed. The only visible section of hull is a 2m high by 4m long piece near the forward port boiler. Sandalled anemones and oaten pipe hydroids are often found on this section of hull plating.

Built as a river steamer, the *Iona II* required alterations before crossing the Atlantic Ocean. Strengthening plates were installed along the length of the deck, additional hull frames were fitted and the vessel sides were increased in height. These alterations did not satisfy many of the crew who refused to set sail in what they considered an unseaworthy vessel. While they were jailed for mutiny, they were proved right a few days later when their fellow crew were rescued from the sinking vessel.

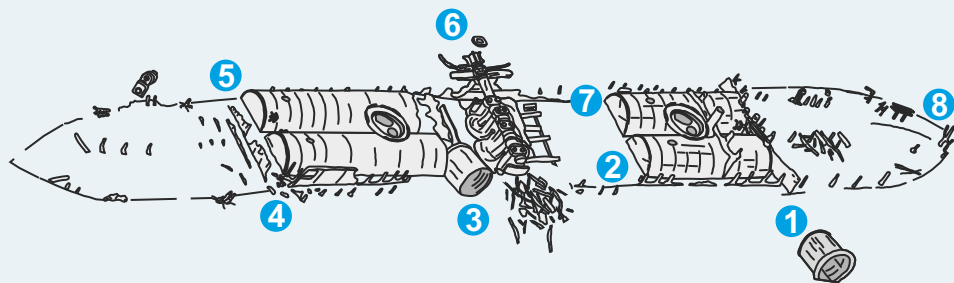


Hull section with sandalled anemones (S. Prentice)



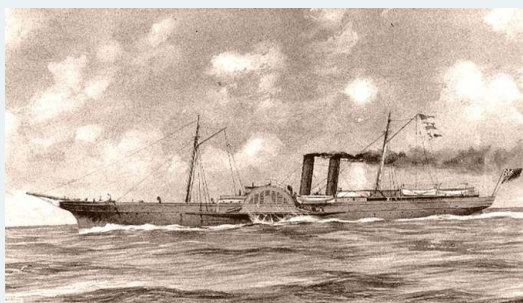
Hull and port forward boiler (J. Wright)

# BOW SECTION



Steam engines during the 1860s were relatively inefficient and most steamships required the assistance of sails to make it across the Atlantic. The *Iona II* was fitted with a schooner rig for the journey to the blockade and, while there are no masts left on site, the forward mast step may lie beneath the sediment.

The sediment levels in this area can change from year to year. When this area was uncovered, the outside



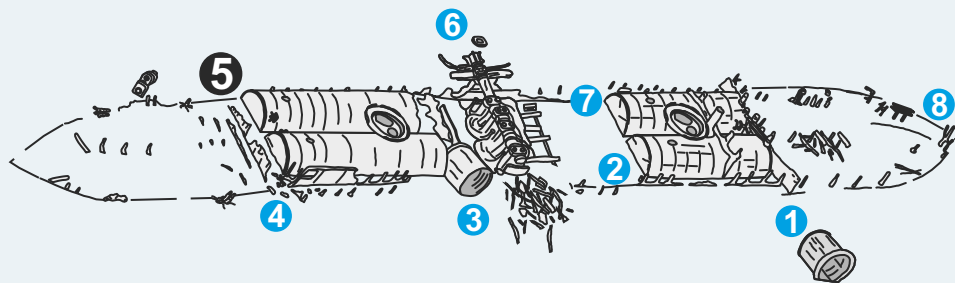
*Advance* blockade runner (R.G. Skerrett, U.S. Naval Historical Center PD\_US)

hull frames and stanchions were visible and often, thick clumps of plumose anemones could also be found clinging to the frames.

Forward frames (Wessex Archaeology)



# 5 FORWARD BOILER



The forward set of boilers are closer to the centre of the ship and are larger to maintain the balance of the vessel. The boilers were constructed of shaped iron plates that were riveted together.

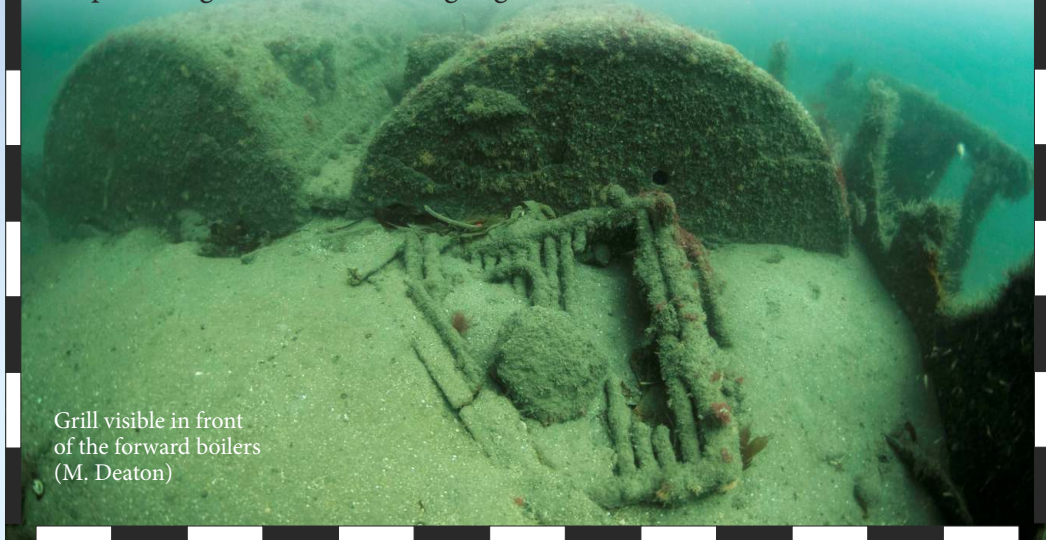
When *Iona II* set off for the blockade, there was c. 300 tons of coal on board. Some of this still remains on the seabed and may be visible forward of the boilers depending on the changing

sediment levels. Other features in this area such as the grill below can be covered and uncovered by the changing sediment levels.

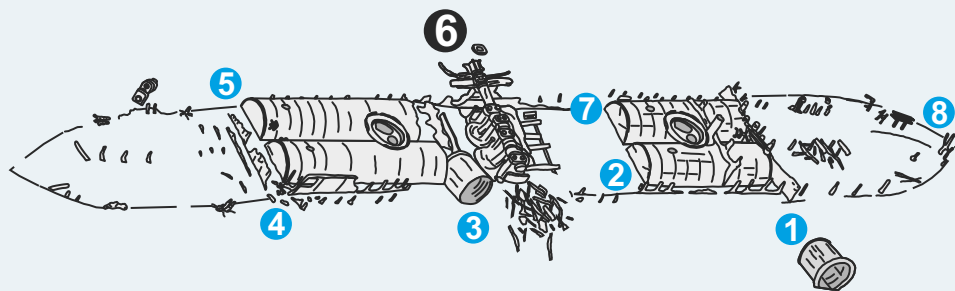


Grill buried in front of the forward boilers  
(M. Shean)

Grill visible in front  
of the forward boilers  
(M. Deaton)



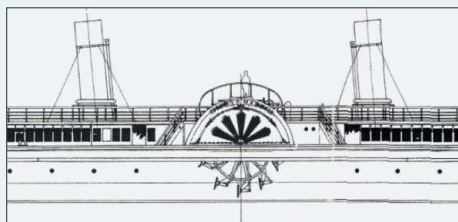
# 6 PADDLE WHEELS



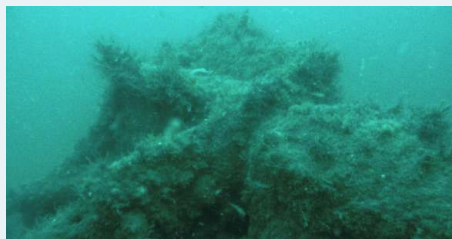
The *Iona II*'s paddle wheels were 20ft in diameter and fitted with patent 'feathering floats'. These were a variable pitch paddle allowing the angle of the blades to be adjusted.

When the wreck was rediscovered, both the paddle wheels were still fairly intact. By 1990 only the portside paddle wheel remained intact, but it collapsed during that winter and had completely fallen apart a few years later.

Further out from the wreck is one radial spoke and a small section of the circumference of the port paddle wheel.



Part of a drawing of *Iona II* (D. Watson)

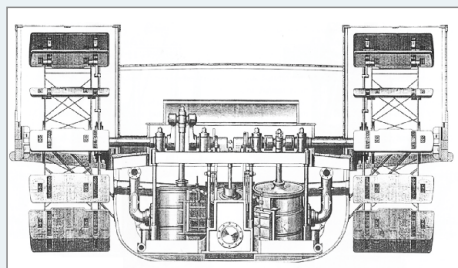
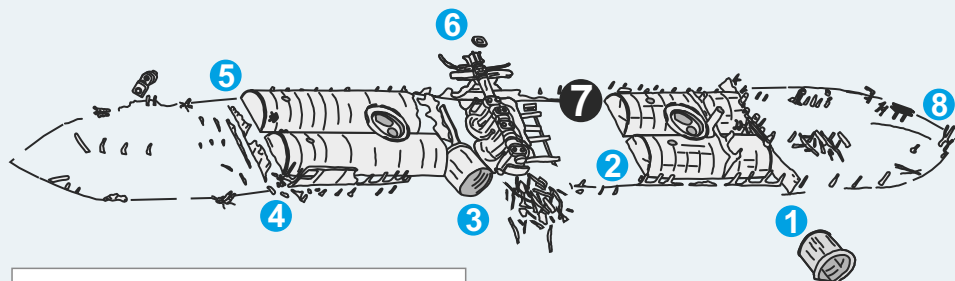


Remains of the starboard paddle wheel (R. Holden)



Remains of the port paddle wheel (M. Deaton)

# 7 ENGINE



Drawing of *Iona II*'s engine (Steam at Sea 1996)

One of the distinguishing features of the *Iona II* was its oscillating engine. This type of engine eliminated the connecting rod by having the piston rod directly attached to the paddle wheel crankshaft. This created a very efficient engine in both space and operation.

When the *Iona II* was rediscovered, the oscillating pistons and the valve gear were still connected to the crankshaft. This unique crankshaft assemblage assisted in the identification of the wreck as it exactly matched the shipyard drawings.

Extremely rare pink sea fans have been sighted in this area as well as the very common oaten pipe hydroids.

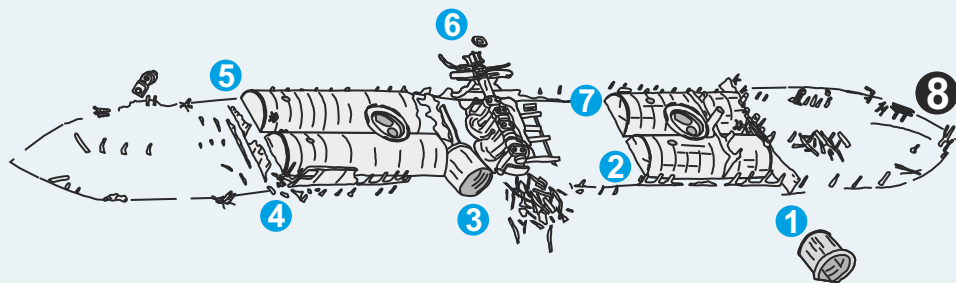


Pink sea fan  
(M. Deaton)

Engine remains  
(Wessex Archaeology)



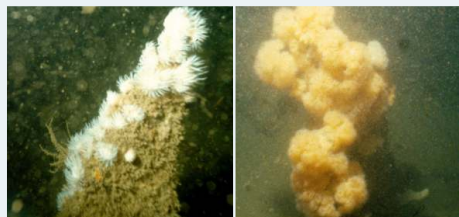
## 8 STERNPOST



The *Iona II*'s magnificent aft saloon cabin with passenger promenade deck was removed in preparation for use as a blockade runner. All that remains in this area now are frames outlining the vessel's stern section. Depending on the changing sediment levels, sometimes these frames protrude from the seabed and sometimes they are buried. The sternpost is a feature used by divers to monitor the deterioration of the wreck.



Sternpost monitoring point (M. Deaton)



Anemones on frames (S. Prentice)

In this aft section, the frames of the wreck are often colonised by plumose anemones (left) and sandalled anemones (far left) where they can feed on the passing nutrient rich current.



For more information about the *Iona II*  
[www.landmarktrust.org.uk/lundyisland/iona-ii-dive-trail](http://www.landmarktrust.org.uk/lundyisland/iona-ii-dive-trail)