### SMS Karlsruhe Wreck - Scapa Flow

<table>
<thead>
<tr>
<th>Nationality:</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launched:</td>
<td>31 January 1916</td>
</tr>
<tr>
<td>Commissioned:</td>
<td>15 November 1916</td>
</tr>
<tr>
<td>Builder:</td>
<td>Kaiserliche Werft, Kiel (Imperial Dockyard Kiel)</td>
</tr>
<tr>
<td>Construction number:</td>
<td>41</td>
</tr>
<tr>
<td>Type:</td>
<td>Light Cruiser</td>
</tr>
<tr>
<td>Subtype/class:</td>
<td>Königsberg class</td>
</tr>
<tr>
<td>Displacement (standard):</td>
<td>5440 tonnes</td>
</tr>
<tr>
<td>Displacement (full load):</td>
<td>7125 tonnes</td>
</tr>
<tr>
<td>Length overall:</td>
<td>112m*</td>
</tr>
<tr>
<td>Beam:</td>
<td>12m</td>
</tr>
<tr>
<td>Draught:</td>
<td>6.32 - 5.96m</td>
</tr>
<tr>
<td>Complement:</td>
<td>475 men</td>
</tr>
<tr>
<td>Material:</td>
<td>Steel</td>
</tr>
<tr>
<td>Cause of loss:</td>
<td>Scuttled</td>
</tr>
<tr>
<td>Date lost:</td>
<td>21 June 1919; 1550 hrs</td>
</tr>
<tr>
<td>Casualties (in scuttling):</td>
<td>0</td>
</tr>
<tr>
<td>Propulsion:</td>
<td>Ten coal-fired and two oil-fired doubled ended marine type boilers, two sets marine type turbines (high pressure turbines worked by geared transmission), two propellers</td>
</tr>
<tr>
<td>Fuel:</td>
<td>1340 tonnes coal, 500 tonnes oil</td>
</tr>
<tr>
<td>Range:</td>
<td>4850 nautical miles at 12 knots</td>
</tr>
<tr>
<td>Power:</td>
<td>55700 shp** maximum</td>
</tr>
<tr>
<td>Speed:</td>
<td>27.7 knots maximum</td>
</tr>
<tr>
<td>Armour:</td>
<td>ranges from 20mm – 60mm (position dependent), control tower 100mm (on the sides)</td>
</tr>
<tr>
<td>Armament:</td>
<td>8 x 15cm guns, 2 x 8.8cm guns, 2 x 50cm deck mounted torpedo tubes, 2 x 50cm lateral submerged torpedo tubes, 200 deck-mounted mines</td>
</tr>
</tbody>
</table>

*measurements taken from the ships plans  
**shaft horse power

NB Horse power is generally given in maximum and design. The former indicates the maximum output of the individual ship under trial conditions and the latter the design output (generally common to all ships of the class).

### History of the Vessel

SMS Karlsruhe was a light cruiser of the Königsberg class built as part of the 1914-15 programme. The official design dates to 1913 but she was laid down in May 1915 to be a direct replacement for the obsolete Gazelle class light cruiser Niobe of 1899. She was named Karlsruhe after her namesake sank following an internal explosion in the Caribbean on 4 November 1914. She was launched on 31 January 1916 and commissioned into the fleet on 15 November 1916.

Karlsruhe and the three other ships of her class (Emden, Königsberg and Nürnberg) were an incremental improvement on their predecessors. Coal was carried in longitudinal side-bunkers and oil in tanks within the double bottom. In comparison to the arrangements on the later Cöln class of light cruisers, the control tower of the Karlsruhe is positioned forward of the bridge. It is noteworthy that she is the only light cruiser in Scapa to have submerged torpedo tubes.

She served in the 2nd Scouting Group with her sister ships Königsberg and Nürnberg and usually patrolled the Heligoland Bight protecting minesweepers against British light forces.
Between September and October 1917 the Karlsruhe was involved in Operation Albion. During the operation the Karlsruhe was one of five cruisers of the 2nd Scouting Group commanded by Kontreadmiral von Reuter, who would later give the order to scuttle the German fleet in Scapa Flow. She led the transport of German troops, including a bicycle brigade, into the Bay of Tagga on the 11 October whereupon they disembarked to continue their assault (Thiele, 2010). During the remainder of Operation Albion the Karlsruhe acted as a scout and protector for IV Battle Squadron comprising the Kaiser class battleships as they destroyed the Russian shore batteries.

She undertook a sortie to protect the light cruisers Bremse and Arcona in April 1918 when they laid offensive mines off of the Norwegian coast in advance of an operation to intercept allied convoys. This operation was called off when the battlecruiser Moltke lost a propeller (Smith, 1984: 54). She guarded the cost of Flanders in October 1918 as the Germans evacuated the U-Boat and destroyer bases at Zeebrugge and Bruges (Smith 1984: 54). The ship was the only one of the class the Germans managed to scuttle in Scapa Flow as Nürnberg and Emden were both beached by British (RCAHMS, 6/1/2003). The wreck was sold in 1962 and partially broken up under water in 1963-1965.

**People Associated with the Ship**

The commander of SMS Karlsruhe was Fregattenkapitän Tietgens. He was assigned on 15 November 1916 and was to remain with her until the voyage to internment (Smith, 1989: 50). His wife, a professional artist, taught him to paint. A painting of the SMS Karlsruhe by a Johann Heinrich Tietgens was up for sale in 2011 at auction house Hermann Historica. Tietgens retired with the rank of corvette captain in the early 1930s.

![Light cruiser S.M.S. Karlsruhe in turbulent sea up for auction at the auction house Hermann Historica in Munich, Germany. It is a watercolour on cardboard, signed on the lower left "Tietgens Prerow 1935", with title on the lower right.](http://www.artfact.com/auction-lot/johann-heinrich-tietgens-1-c-d4799b3566)

Lieutenant Egon Ruville was the commander during internment.
Artefacts from the Wreck

Material reported under Receiver of Wreck amnesty (2001):
A1854 1 valve: from seabed
A1871 1 part turbine blade, 1 lamp, 2 switches or sockets: from seabed
A2455 1 gun breach [breech]: from seabed
A3031 1 lamp, 1 boiler feed: from seabed
A3398 1 ‘flagpole’, 1 ‘gun wheel winder’: from seabed
A4322 1 brass steam valve and whistle: from seabed.
NMRS, MS/829/35.

In 2003 divers reported what they believed to be postcards in an accessible area of the bow. Historic Scotland organised a rescue excavation and the postcards were recovered by SULA Diving of Stromness then conserved and are now held in the Kirkwall Library Archive (ScapaMAP).

Photos of the SMS Karlsruhe

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Scapa postcard stack, as brought from wreck  
Scapa side view of stack of postcards
2 stacks of cards, cemented together by corroded metal container

Postcard of children reading letters

Postcard of man in uniform