

**1863**

Union submarine *Alligator* tests her new propeller after spending the winter in Washington Navy Yard for a refit. Originally her twenty-man crew used oars to propel the vessel at only 1-2 knots; the new propeller allowed only eight or nine men to move the sub at 4-5 knots. The boat had an airlock in the bow and a hatch on the underside that allowed a diver to exit the vessel with a mine. Once placed, the diver would insert an insulated electric wire into the mine and plug the other end into a battery aboard the sub, triggering an explosion. *Alligator* was the only submarine in the Civil War to have an air-purifying system that allowed for an extended dive time. The two chains deployed from the top surface of the craft held buoyancy banks that helped keep *Alligator* stable while underway; ballast tanks dropped to suspended by chain from the bottom helped keep her steady while the diver was outside. The boat was lost at sea off Cape Hatteras on April 1, 1863.

