

### Experiments At Sea: Early Subs On Both Sides Had Trouble Staying Afloat

Robert H. Fowler

Follow this and additional works at: <https://digitalcommons.lsu.edu/cwbr>

---

#### Recommended Citation

Fowler, Robert H. (1999) "Experiments At Sea: Early Subs On Both Sides Had Trouble Staying Afloat," *Civil War Book Review*: Vol. 1 : Iss. 1 .

Available at: <https://digitalcommons.lsu.edu/cwbr/vol1/iss1/10>

## Review

### EXPERIMENTS AT SEA

#### Early subs on both sides had trouble staying afloat

Fowler, Robert H.

Summer 1999

**Ragan, Mark K.** *Union and Confederate Submarine Warfare in the Civil War.* Savas, ISBN 1882810325

The average student of the Civil War should know that the *H.L. Hunley*, a Confederate submarine, sank the *U.S.S. Housatonic* in Charleston Harbor in February 1864, only to perish with its crew. He or she might know that submersible torpedo boats operated briefly and without success in the defense of New Orleans and Mobile. But it would be the rare Civil War buff who realizes the full extent of the experimental submarines that were planned and built by both sides.

Mark K. Ragan shows us the rest of the iceberg in this volume which is a standout both for its scholarship and clear, concise writing. As he says, "The *Hunley*, for all the justifiable attention she has received, was but one of perhaps two dozen underwater boats constructed during the conflict by both sides."

Although the U.S. Navy and Patent Office received many proposals for Union submarines, mostly hare-brained, only one, the *U.S.S. Alligator*, was built and got anywhere near the enemy. This manually propelled, 100-foot-long craft was intended to help counter the iron clad *C.S.S. Virginia* (Merrimac) but was found unsuitable. It sank ingloriously while being towed to Charleston a year later.

Submarines made more sense for the Confederates than for the Federals. In theory, they could remain safely under the protection of coastal forts and sneak out at night to attach "torpedoes" (really nautical mines) to the hulls of blockading ships. Another proposed early tactic was for the sub to tow a torpedo attached to a board, dive under the target vessel, and allow the torpedo to strike the other side. This worked only in practice runs.

The more reliable device was a spar projecting from the bow of the sub and tipped with a torpedo. After impaling the device in the target's hull, the sub was supposed to back away to a safe distance and then set off the charge by electricity. Presumably that is what the *Hunley* did in the only successful sub attack of the war.

Some proposals for subs were far ahead of their time, most notably air-purification systems, electro-magnetic motors, periscopes, and even snorkels. In the end, however, only manually operated propellers proved even marginally practical.

Ragan's job of research was as daunting as it is impressive. Many of the Confederate records were destroyed by fire in the fall of Richmond. He had to scour through company records, newspaper accounts, and personal correspondence to produce this brilliant, definitive work on a little-known aspect of the endlessly fascinating Civil War.

*Robert H. Fowler, founder of Civil War Times Illustrated, is author of Jim Mundy, a novel of the Civil War, and other historical fiction.*