

Foreword

There is a famous quote from George Santayana: “Those who cannot learn from history are doomed to repeat it.” Military historians have traditionally focused on the land battles of World War I. Commanders David Bruhn and Rob Hoole have written a commendably well-researched and presented history of mining and mine clearing by the British (with help from Americans and Canadians) and German navies in the German attempt to isolate Britain and defeat her by strangling her commerce from the sea. As I read the many detailed chapters I had an uneasy feeling: Is this prescient as well as historical? More about this later.

I have a deep admiration for the sailors who crew minesweepers. In 2002, shortly after taking command of the U.S. Navy’s Mine Warfare Command, I had the pleasure of riding USS *Avenger* (MCM-1), a minesweeper conducting training operations in the Gulf of Mexico. The ship was constructed of wood (with fiberglass sheathing covering the hull to reduce maintenance) to minimize the metallic signature of the ship, and the interior outfitting of the ship was primarily wood, including such simple furniture as the chairs at the wardroom table. For someone who doesn’t understand the full mine clearing process, minesweepers actually navigate through minefields hoping that their own acoustic and magnetic signatures don’t set off the mines they’re trying to clear and that the mines are detonated by the magnetic influence or acoustic sweep gear towed behind the minesweeper. There’s a lot of confidence in the ability of modern minesweepers to safely sweep mines, but in the World War I anecdotes in this book, technology frequently failed the operators.

As noted in Dwight Messimer’s foreword and elsewhere in this book, over 200,000 mines were laid during World War I. At the start of the war the British Admiralty had little appreciation for the use of sea mines, either offensively or defensively. As German mines took their toll on British and allied shipping the Admiralty developed a belated respect for mines, mine laying and mine clearing. Have our current naval leaders learned the lessons of history and paid adequate attention to mine warfare?

Fast forward one hundred years from the end of World War I. It's now 2018 and the western world is concerned about threats from North Korea, Iran, China and a resurgent Russia. At the start of the Korean War, Rear Admiral Allan Smith, in charge of the advance force at Wonsan, cabled the Navy's Washington headquarters that "we have lost control of the seas to a nation without a Navy, using pre-World War I weapons, laid by vessels that were utilized at the time of the birth of Christ."¹ His words and the experience at Wonsan would invigorate the Navy's mine warfare community for several years.

As explained in this book, minesweeping is technically difficult. I remember being briefed in 2002 on the mine warfare community's vision of using advanced technology to "get men out of the minefield." Sixteen years later we're still not there and we're still using minesweeping and minehunting ships with a lot of the same technology used in World War II, which isn't much different from the technology used in World War I!

As I read the fascinating story of repeated British and German mining and mine clearing efforts in the North Sea, I could only think about the modern Persian Gulf. Several tankers and a U.S. Navy frigate struck mines during the "tanker war" (Iraq-Iran War) in the 1980s. When allied forces liberated the port of Umm Qasr in southern Iraq, during Operation Iraqi Freedom, several covertly converted minelayers were found with mine rails full of mines. Iran has repeatedly threatened to mine the Strait of Hormuz. Do the allies have the capability and capacity to expeditiously clear modern minefields?

Commanders Bruhn and Hoole discuss the challenges both Britain and Germany had fielding effective mines during World War I. Offensive and defensive mining has been relatively ignored in modern Western military thought, almost from a chivalric perspective that "gentlemen don't lay mines." In fact, the U.S. Navy hasn't developed a new mine since the 1980s. Are we ignoring a critical component of naval warfare?

¹ Edward Marolda, *Mine Warfare*. Naval History and Heritage Command, <https://www.history.navy.mil/research/library/online-reading-room/title-list-alphabetically/m/mine-warfare.html>

I thank the authors for their thorough research and for highlighting an under-appreciated aspect of naval warfare. I hope this book also serves as a call to action. The mine strike damage to USS *Samuel B. Roberts* during the “tanker war” in 1988, and USS *Tripoli* and USS *Princeton* in 1991 during Operation Desert Storm all highlight the vulnerability of modern warships to inexpensive asymmetric weapons.

Paul J. Ryan
Rear Admiral, USN, retired.