

## Foreword

*Enemy Waters* tells the fascinating story of the Allied aircraft, ships and submarines that participated in mining and mine clearing during World War II. Once again Commanders David Bruhn and Rob Hoole have provided exquisite detail about the tremendous efforts and sacrifices of our sailors and airmen, primarily in the European theater of operations.

Offensive mining is conducted at great risk to the minelaying platform when performed in enemy waters. Aircraft, surface ships and submarines have been lost while implanting minefields. Defensive mining is conducted in home waters, but not without other risks: grounding, pre-mature detonation as mines are being released over the side, and inadvertent collisions with “friendly” mines. This book provides historical examples of these risks.

Commanders Bruhn and Hoole put readers in the thick of mining and minesweeping operations in the North Atlantic, English Channel, North Sea, and Mediterranean. Many of the events and associated action are little known to the public, even to devotees of naval history. For example, HMS *Rorqual*, a British submarine minelayer, implanted over 450 mines in 10 sorties in the Mediterranean between June 1940 and May 1941, damaging or sinking approximately 15 ships.

While many World War II history books gloss over the contribution of Free French forces, *Enemy Waters* doesn't. The French submarine *Rubis* was in the UK when France surrendered to Germany in June 1940. The crew of *Rubis* joined the Free French forces and continued the fight, operating out of the UK. *Rubis* conducted minelaying operations off the coast of Norway and southwest France, implanting 684 mines in 23 sorties, responsible for the sinking of 23 ships. Besides conducting mining operations, *Rubis* also conducted torpedo attacks. As a submariner who appreciates the hazards of wartime submarine operations, I was particularly happy to see that *Rubis* survived the entire war and was decommissioned in 1949.

I personally appreciate the numerous charts and pictures that bring the book to life. Commanders Bruhn and Hoole have included over one hundred forty photographs and illustrations to help the reader appreciate the ships, aircraft, submarines, mines, minesweeping gear and geographic environments.

None of us has a crystal ball. Over 300,000 Allied mines were deployed in the Atlantic and Mediterranean campaigns. Approximately 250 minesweepers supported the Allied landings at Normandy on June 6, 1944 and additional minesweepers were in theater standing by to open other continental ports. At the same time, several hundred minesweepers were engaged in the Pacific theater. Today's allied mine inventory is probably in the single digit thousands. The number of allied minesweepers is about 150. The emphasis over the last 15-20 years has been on getting sailors out of the minefield, i.e., using remote controlled and unmanned systems to clear mines rather than historical minesweeping. While modern systems are improving mine detection and neutralization capability, the overall capacity of our current assets is significantly less than at almost any time since World War II. I hope we don't have to relearn the outstanding history documented by Commanders Bruhn and Hoole in their well-researched trilogy of books, *Home Waters*, *Nightraiders*, and *Enemy Waters*.

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