

of hostile mining of our harbours and passages, such as the St. Lawrence estuary, but available to those providing the funding for at least a minimal countermeasure. Here Captain O'Flaherty provides a close scrutiny of what is required in statecraft to meet the all-too-real threat alone. While he covers the possibility of mining opponents' waters (after all, he leads an RN minewarfare school), the application of preparations to deal with the potential mining of ours, quite possibly by the most minor of groups—not even major powers—is where this volume is at its most valuable. An unusual, an essential, read for quite a range of leaders, apart from anyone with an interest in the subject.

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Lawrence Paterson. *Eagles Over the Sea 1943-45: A History of Luftwaffe Maritime Operations*. Barnsley, S. Yorks: Seaforth Publishing, www.seaforthpublishing.com, 2020. Distributed by Naval Institute Press. xvii+382 pp., illustrations, maps, glossary, notes, bibliography, index. UK £30.00, US \$44.95, cloth; ISBN 978-1-5267-7765-2. (E-book available).

This is the second volume of author Lawrence Paterson's examination into the history of Luftwaffe maritime units and operations during the Second World War. Primarily focused on the period of 1943 to 1945 with initial discussions of relevant 1942 events woven into combat theatre histories, Paterson narrowed the overall focus of the work to be predominantly on the bomber units repurposed for specialized maritime roles. Additional aircraft units and pilots are discussed when relevant, but the scope was specialized to prevent the need to create further volumes in what was ini-

tially intended to be a single book. As with his previous works on the Kriegsmarine, the author makes excellent use of primary sources from both the axis and allies to present a solid chronology of operations within several theaters of engagement. Contemporary quotes and images are spread throughout the work, and the main text is bookended by a lead-in glossary of terms and unit organizational structures and an appendix guide to relevant aircraft introduced from 1942 to 1945, followed by endnotes, bibliography, and an index.

While this book is the second volume of the author's first foray into the airborne operations side of the naval war, his pattern of analysis bears a distinct similarity to his earlier work, *Hitler's Forgotten Flotillas: Kriegsmarine Security Forces*, in which Paterson focuses each chapter on a specific theater of operation, covering the early dispositions of each theater in the first half of the work, followed by their late war situations in the latter half. For *Eagles Over the Sea*, he divides the treatment into three; France and the Atlantic, North Africa and the Mediterranean, and the Arctic and Eastern Front. While the book title implies a focus solely on 1943 forward, the first half actually covers large portions of 1942 for the various theatres as well, providing context and background for the primary period of focus.

The first three chapters of the work set the stages for the various theatres of operation, covering assigned squadrons, equipment, situations and operations. In addition to Paterson's stated focus on converted bombing units, there is a definite early emphasis on U-boat escort duty around the Bay of Biscay, with the Mediterranean operations more varied in nature to include sea rescue, supply transport, and reconnaissance. The northern units offer an interesting view

into effective Luftwaffe-Kriegsmarine interactions, especially with the joint reconnaissance and attack operations of U-boats and diesel-powered Bv-138 flying boats. Worked into these narratives are analyses of the construction, training, and implementation of new airframes and technology as the war progressed, to include radar systems, RATO units, and guided munitions.

The seven remaining chapters trace the maritime operations of 1943 onwards, with the ebbing of Germany's fortunes becoming more and more evident and its increased impact on the various units. Italy's defection from the axis gains its own chapter, with detailed accounting of the anti-shipping operations undertaken by German forces against their former allies prior to the various amphibious invasion operations launched on the Italian mainland. Throughout the work Paterson offers a good accounting of such individual flight operations, many of which are often blow-by-blow in nature, including the He-177 on convoy KMF 26, resulting in the loss of HMT *Rohna* to a rocket powered Hs-293 in "the second worst disaster at sea for the United States" (251-253). The efforts of unit leaders and crews to continue their operations amidst ever dwindling supplies and increased allied military superiority is clearly seen in the listing of aircraft lost, the accounts of officers and men affected by the attrition of their units, and the constant consolidation of units due to losses and collapsing territorial control. The lack of sufficient numbers of aircraft then leads to airframes being run ragged without the time or proper facilities for maintenance, resulting in further strain and hampering of efforts to maintain a presence for U-boat escort or anti-shipping raids. Paterson also recounts evacuation efforts in various theatres which were to become more prev-

alent during the final months of the war. The final chapter covers the bastion of maritime units operating in Norway from 1944 onwards, beginning with convoy patrols and ending with the participation of KG26, the first dedicated torpedo bomber unit of the Luftwaffe, in the service's final evacuation operation right up to the official surrender of Germany on 8 May 1945. The appendix that follows offers information on five different airframes, each consisting of a short summary, general characteristics, performance, and armament.

The only suggested future improvement would be a slight expansion to the appendix. Paterson does cover a variety of aircraft types throughout the work and there are wartime photographs interspersed throughout, but there are no recognition style aircraft profiles in the work to offer a clean, standardized, comparable view of the different designs. If such images were added to the appendix entries for the aircraft types, it would help add a visual element to the technical data and allow for a rapid comparison of size, scale, and structure. The pre-1942 aircraft designs discussed could also be included this way. Such an inclusion would be minor in the grand scheme of the work, but might prove a useful supplement for future editions.

Eagles Over the Sea is an excellent addition to the often neglected historiography of Luftwaffe maritime operations in the mid- to late-war period. Paterson's compilation of official reports, first-hand accounts, and insightful analysis weave together the various threads that made up each theatre of operation's combat chronology. Human actions and errors, developing technologies, changing tactics, and the struggle to continue operations amidst the ever encroaching allied forces are all covered in a flowing, detailed style that provides

both technical details and humanizing elements at the same time. For those interested in German inter-service operations or the Luftwaffe's maritime aircraft, equipment, and their operations, this work is a welcome addition to current scholarship.

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Robin L. Rielly. *American Amphibious Gunboats in World War II: A History of LCI and LCS(L) Ships in the Pacific*. Jefferson, NC: McFarland & Company Inc. www.mcfarlandbooks.com, 2013. vii+398 pp., illustrations, notes, index, appendices. US \$45.00, paper; ISBN 978-0-7864-7422-6.

Robin L. Rielly gives a definitive history of an often-forgotten class of naval vessels in his 2013 book, *American Amphibious Gunboats in World War II*. The exhaustively researched book is an authoritative account of the vessels from their inception to "the last gunboat" which was turned into a museum in 2010. Rielly's work is both well researched and eminently readable. Read in parts or from start to finish, it will broaden the understanding of amateur and professional historians alike.

Rielly's story of what terms "LCI gunboats" begins in 1943—already years into the war. He notes that even though the boats debuted in the North Africa landings they did not really come into their own until they were used in the Pacific theatre where he focuses his work. After the early battles in the Solomon Islands, and the bloody assault on Tarawa the Navy realized that amphibious assaults needed to be supported by far more firepower during the landing itself. Early LCI gunboats were conversions of other landing craft modified by the addition of guns—usually 20 mm and 40 mm—with extra machine

guns and many were converted in forward areas. But later versions carried 4.5" and then 5" rockets and mortars as more and more firepower was requested and new designs were put into production or converted from other boats. In the designations "LC" meant "Landing Craft" and the last letter usually designated the type of weapon carried (R) for rockets, (M) for mortars, and (G) for the heavy gunboats produced by the end of the war that carried a mix of rockets and guns.

Over the course of the war, the gunboats progressively increased their armament. Late war versions carried one 3" gun, two twin 40 mm guns, four 20 mm guns, rocket launchers that could salvo fire 120 rockets and as many as six .50-calibre machine guns—all on a ship that carried no more than 70 officers and men. This made the gunboats easily the most heavily armed ships of the war, man for man and ton for ton. One seaman put it "we were so cramped on deck side you could not go more than six feet from a gun... even the flag man had a machine gun attached to his flag bag."

One of the most interesting sections of *American Amphibious Gunboats* is the section on crew life. The gunboats were some of the smallest vessels able to make open water transits. Despite their small size—the largest were only 159 feet long and only 23 feet wide—they transited across the Pacific all the way to Okinawa and beyond. Rielly does not mince words here, telling the reader simply "Flat bottom boats are not comfortable in a seaway." An understatement if there ever was one. Life aboard was cramped and uncomfortable.

Rielly chronicles the mundane part of crew life. Life was "Spartan" and uncomfortable. Crews loved ice cream and breakfast always caused problems because gunboats never had more than one toaster and the coffee was always