

appendix of technical data and profile comparisons for the main classes of Schnellboote to serve as a quick reference guide to the evolution of the vessels' design and a representation of standard appearances at various points in their operational history. There is also the occasional spelling mistake and at least one out of sequence photograph, which could be corrected with an editorial sweep. Such additions would only improve Paterson's detailed chronology, and their absence is in no way a detraction.

Schnellboote is a solid English-language examination of an often overlooked component of Germany's Second World War fleet. Paterson does an excellent job of covering the wide range of theatres that saw the deployment of S-Boats to their waters, highlighting successes, failures, accidents, and upper level interferences equally to present a complete picture of their service from the men on the boats to their command authorities. As such, it provides insight into aspects of almost everywhere the Kriegsmarine was deployed, making this a useful resource for those studying S-boats in particular, the German war effort at sea generally, or those seeking a source to contrast the German fast attack torpedo boat experience against their American PT Boat and British MTB/MGB adversaries.

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William Rawlings. *Lighthouses of the Georgia Coast*. Macon, GA: Mercer University Press, www.mupress.org, 2021. 190 pp., illustrations, index. US \$29.00, cloth; ISBN 978-0-88146-775-8.

Lighthouses mean various things to different people. To mariners, they are landmarks and guides to safety. To tourists, they are objects of beauty and the stuff of tales of romance. To the keepers who manned them of yore, they were a job and a way of life, and often a demanding and lonely one at that. *Lighthouses of the Georgia Coast* attempts to consider all their meanings.

Beacons of Hope, the first part which constitutes about half of the book, is a primer on lighthouse history. Part Two is descriptions of five lighthouses of the Georgia Coast. Part One begins with the mystique of lighthouses. The Great Storm of 1839-40 created havoc on land and led to the loss of 192 seafaring vessels and "about 300 lives" at sea. Though tragic, the loss was neither unusual nor unexpected, but merely an extreme example of life and property lost on the seas. Lighthouses were constructed in proportion to seaborne trade, originally by private interests seeking protection for their vessels. Over time, they became symbols of hope and beacons of guidance to individuals and in literary works. In our own age, advances in science, technology and navigation

have relegated lighthouses to beautiful anachronisms beloved by tourists and photographers.

The book then dives into a history of lighthouses across the globe from 6000 B.C. Edifices of the ancients, such as the Pharos of Alexandria, one of the Seven Wonders of the Ancient World, entice us to marvel at the accomplishments of civilizations almost beyond our imagination. Completed in 280 B.C., it guided mariners into the Port of Alexandria, Egypt, until disabled by earthquakes over the centuries. Author Rawlings then guides readers through technological details dealing with construction, illumination, and lenses used to focus beams. Diagrams of the Bishop Rock lighthouse, located on the westernmost landfall of Britain's Isles of Scilly, provide a crosscut view in pictures and words.

A genius of lighthouse technology was Augustin Fresnel, a French physicist and engineer. He was recruited to advise the French Commission des Phares on improving lighthouse visibility. By 1821, Fresnel's research led to a mockup design of his lens that was ready to be demonstrated. I am sure I am not the only Northern Mariner reader who has seen Fresnel's name in museums and peered into lantern rooms and wondered, "How can that small light beam out across miles of water?" Now I have a better idea. By taking advantage of the reflection and refraction produced by a convex lens and prisms of glass, light is intensified and focused in a single direction. The practical invention of this type of lens represented a revolution in optics. Calibrated into six orders, the Fresnel lenses became the standard and are still seen in lighthouses in Georgia and world-wide. The narrative continues with history of American lighthouses, with a whole chapter devoted the role of lighthouses in the American Civil War, when they suffered as their lights served as guides and threats to the belligerents.

The ruggedness of a lighthouse keeper's life is hinted at during lighthouse tours, but described in greater detail on these pages. Trimming of wicks, winding of the mechanism that turned the rotating beam, lighting the light each night, carrying buckets of fuel up the stairs tourists ascend and descend so gingerly, to say nothing of rescuing mariners in peril and maintenance of records are only some of the jobs of the keeper. Add to that life at remote locations on the edge of the sea or lakes for a modest keep, and one wonders how critics claimed that lighthouse keeper was a plum political patronage job.

Part two earns the book its title with chapters on the five Georgia lighthouses—Tybee, Cockspur, Sapelo, St. Simons and Little Cumberland. Each chapter narrates the history of the lighthouse and concludes with information for visitors. This section will be of particular interest to tourists. St. Simon's, Tybee and Cockspur welcome visitors from land, Sapelo can only be reached by ferry and Little Cumberland remains in a rustic state with difficult access.

Many pictures, drawings and diagrams supplement the text. The brief glossary of lighthouse-related terms is an immense help both in understanding the book and as an independent resource. The bibliography is a guide to further reading and the index helps you find that elusive fact you remember but cannot locate again.

As a recent visitor to St. Simons Lighthouse, I enjoyed reading its story. The history of the development of lighthouses and particularly the struggles between Confederate and Union forces to control, disable and put back into service I find fascinating. Lighthouses of the Georgia Coast is a treasure for Northern Mariner readers planning to visit the area or those interested in the history and charm of lighthouses in Georgia, America or the world.

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Anthony Rogers. *Battle of Malta: June 1940-November 1942*. Oxford, UK: Osprey Publishing, www.ospreypublishing.com, 2022. 80 pp., illustrations, index. US \$24.00, paper; ISBN 978-1-47284-890-1. (E-book available.)

The island nation of Malta occupies an important strategic location in the Mediterranean Sea. Situated between the island of Sicily and the North African coast, the possessor of Malta has the ability to choke off trade and naval missions. During the Second World War, Malta's location made it a prime target for enemy bombing, and perhaps an invasion by German and Italian forces. In Osprey Campaign 381: *Battle of Malta. June 1940-November 1942*, Anthony Rogers relates the nearly two-and-a-half-year struggle, primarily waged in the air, to prevent the Axis forces from taking over Malta.

Malta consists of two major islands, Malta and Gozo, plus a few smaller islands, some then uninhabited. In 1814, Malta became part of the British Empire and was a prime base for the British Royal Navy (RN), the British Army, and later the British Royal Air Force (RAF). For many years, Malta was a plum assignment for members of the British military. All that changed on 10 June 1940, when Mussolini's Fascist Italy joined Hitler's Nazi Germany in declaring war against Great Britain and France. The very next day, units of Italy's Regia Aeronautica (Italy's Royal Air Force) bombed Malta. That launched a combined aerial and sea campaign that would last over two years, at times bringing Malta to the brink of starvation. During that period, Malta earned the dubious distinction of being the most heavily bombed place on Earth.

Even prior to the outbreak of the Second World War, on 1 September 1939, the British government knew that Malta could, and most likely would, be a