

unique area of naval history will get a great deal from the text while general readers will likely struggle. If used in conjunction with books explaining minelaying/sweeping as a process and their tactical advantages, the text would really come to life. Anyone working in this particular area of naval history will find *Minecraft* enormously valuable. Laymen, general readers, or even a student of naval history will find it less so. I enjoyed the book but would not recommend it to armchair historians unless they are able to fill in the blanks.

Robert Dienesch
Belle River, Ontario

Alessio Sgarlato and Nico Sgarlato. *Secret Projects of the Kriegsmarine: Unseen Designs of Nazi Germany's Navy*. Barnsley, S. Yorks: Greenhill Books, www.greenhillbooks.com, 2022. 216 pp., illustrations, tables, bibliography. UK £20.00, hardback; ISBN 978-1-78438-687-0. (E-book available.)

Without any doubt there is a certain fascination in the development of experimental and advanced weapons developed by Nazi-Germany during the Second World War and a market for nearly every book dealing with this subject. Nevertheless, the topic is a highly problematic one as any serious historical analysis of the subject also requires an in-depth analysis of how the development of these weapons was connected to the Nazi regime and to forced labour, the concentration camp system and many other subjects that tend to be avoided when focusing on the advanced weapons technology of Nazi-Germany.

Secret Projects of the Kriegsmarine, originally published in Italian and now available in English, unfortunately tries to isolate the development of advanced naval weapons and designs as a purely technological subject, without putting these developments into context and without providing the full background for how and why these weapons were developed. As such, it caters to an audience that still subscribes to the idea of technology being somewhat independent from the regime that provided the opportunity for such developments and fails to recognize the collaboration between technology and a system that was responsible for millions of deaths during the Second World War and the holocaust.

Divided into five parts (secret underwater weapons, piloted torpedoes and midget submarines, major surface vessels, smaller surface vessels, landing wonder weapons) the book claims to provide a comprehensive overview of advanced naval technology developed by the Kriegsmarine during the war

years. Each chapter describes several projects, some realized, and some only conceptualized, offering technical details for projects that never left the concept phase or only reached prototype level for various reasons.

For those projects that were completed, like the V-80 submarine, the VS-8 hydrofoil, various piloted torpedoes and midget submarines, or submersible tanks and amphibious tractors, the authors have managed to collect numerous black-and-white photographs to illustrate the text, which is otherwise a basic description of the respective technological concepts. For projects that remained conceptual, there are schematic drawings which help readers to understand the ideas behind the projects.

While it might be argued that describing the technology and providing rare photographs of the completed projects is enough for a book that claims to provide “comprehensive overview of advanced German naval building projects” and that “studies the innovative designs and technologies” his reviewer disagrees strongly with such an approach. Technological developments can only be understood based on their societal background, and all history of technology, particularly military technology, that does not analyze the conditions under which such technology became possible remains not only incomplete, but can be read in a way that contributes to highly problematic narratives. For example, the chapter on stealth treatments for submarines describes in detail the development of technologies to reduce the sonar signatures of U-boats under water or the radar signature of their snorkels while operating close to the surface under diesel-propulsion. It does not explain, however, that these developments were mainly driven by the ever-increasing losses of Nazi U-boats during the Battle of the Atlantic.

For a book dealing with a subject like this, the sources for the research behind the book are of utmost importance. Unfortunately, *Secret Projects of the Kriegsmarine* does not include a single footnote and only an extremely brief selected bibliography. Consequently, it is impossible to check the credibility of the information provided and the feeling remains that at least some of the information needs to be doubted. This problem becomes extreme when looking at the sections of the book dealing with projects only conceptualized, such as the catamaran hull midget-submarine project “Manta.” The end of this section reads: “it could also enter the water autonomously thanks to wheels borrowed from aircraft trolleys.” and then continues: “The design never even got as far as testing of its shape for hydrodynamic purposes.” In other words, since the project was abandoned at such an early stage, nobody knows if it really would have been able to enter the water autonomously. Instead of using the word “could,” a more appropriate term would have been “should.” At the risk of criticizing a detail in a book that was originally written in a

different language, there is a difference between the two words. The use of “could” moves the Manta from a theoretical design goal to an historical fact without any evidence provided by the authors.

In their introduction to the book, the authors state: “the series of events that led to the outbreak of the Second World War in Europe could arguably have been stimulated by two fundamental aspects: the consequences of the Treaty of Versailles [...] and, secondly, the natural German inclination for technological sophistication that was generally superior to the average “state of the art” within other industrialized countries.” While it is a well-known and accepted fact that the Treaty of Versailles was one of the many reasons behind the outbreak of the Second World War, and that the strict regulations regarding German disarmament and prohibition of advanced weapons development triggered secret research and development during the interwar period, the reference to a “natural German inclination for technological sophistication” is not only highly problematic and not justified by any kind of research, but reads like wording used by certain groups the author of this review definitely would never consider associating with. There might have been certain, maybe even many, periods throughout history where people and companies in Germany were able to come up with technology that might have been sophisticated and superior to other nations at a certain moment in time, but by talking about a “natural” German superiority, the authors are suggesting something that basically discredits the whole book and recalls an earlier time that most people would hope is over.

Normally, I would close a book review with a recommendation for those who would find the book a good read or an addition to their bookshelves, but a book that deals with Nazi technological developments and completely ignores the atrocities of the regime, the nexus of naval construction and forced labour and the concentration camp system, I can and will not recommend to anybody. The book claims to provide a comprehensive overview of advanced naval designs during the Third Reich, and while this might be true in a mere technical understanding sense, such an overview remains incomplete without the political background behind these designs. Dealing with Nazi technology without dealing with the Nazi system at large is simply something that is not acceptable for any serious historian who knows that the history of technology involves more than nuts and bolts, and more importantly, the meaning of the term “never again.”

Ingo Heidbrink
Norfolk, Virginia