to a junior officer to allow the other man to escape in his place (83). The unprepared nature of the Argentinian forces in the face of a large-scale, armed British response is quite evident, as are the deficiencies of the Type 42 destroyers' radar systems against low aircraft and missiles and the attempts to overcome this with the "42/22 Combo" pairing of the two different ship types and their respective defensive systems (47). The fact that Britain was able to field a carrier and maintain a Close Air Patrol of Sidewinder-armed Harrier Jump Jets was clearly a key deterrent to some of Argentina's aerial attack efforts.

Hampshire's "Aftermath" section does an excellent job of highlighting the war's rippling effects, from the fall of the Argentine junta to the invigoration of the Royal Navy, the Falkland Islanders, and the British people as a whole. Most importantly, he notes that the campaign "demonstrated the importance of sea power in unexpected crises where … land and air bases were unavailable" while at the same time highlighting the dangers of inadequately protected vessels on the modern battlefield and the need for flexibility and adaptability when unforeseen threats challenge military planning (92).

The inclusion of direct citation such as endnotes would help with referencing, but the lack of these is a common feature of the Osprey format. Given the post-Falklands War politicization of the sinking of the cruiser *General Belgrano* as a "war crime" in Argentina, it might be prudent to add a note that the Argentinian Navy considers the loss of their own vessel as having been a legitimate act of war. Finally, in the Battlefield Today section, it might be worth mentioning the final disposition of surviving ships and aircraft. For instance, Falklands veteran HMS *Bristol* has recently been put up for disposal in England despite calls for her conversion into a museum, and all four Vulcan bombers mentioned in the early attack phases were preserved in England after decommissioning. These are minor suggestions, however, and are meant only for possible future revisions. In fact, *The Falklands Naval Campaign* is a solid introductory text into both the Royal Navy's and Argentina's actions leading up to and during the conflict. Hampshire's knowledge of the Cold War British navy and excellent research offers a detailed yet succinct accounting of the nearly-three-month conflict as seen by sailors and airmen both in and around the Falkland Islands Total Exclusion Zone. With equal coverage of both Argentinian and British forces presented down to individuals in engagements, Hampshire offers a well-rounded and impartial view into an extremely contentious piece of modern naval history.

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Chris Henry. *Depth Charge: Royal Naval Mines, Depth Charges & Underwater Weapons, 1914–1945*. Barnsley, S. Yorks: Pen & Sword, www.pen-and-sword.org, 20121. 197 pp., illustrations, notes, appendices, bibliography, index. US $29.95, paper; ISBN 978-1-52679-643-1.

The first workable submarine, *Turtle*, appeared during the American Revolutionary War but failed to sink a ship. The first submersible to successfully attack and destroy an enemy vessel – USS *Housatonic* off Charleston, South Carolina – was CSS *H.L. Hunley* during the American Civil War. Ironically, *Hunley* was likely sunk from the concussive explosion of the implanted mine, an unintended suicide-by-depth-charge. During the dawn of the twentieth century, submarines were largely considered defensive deterrents useful in attack-

ing ships not far from shore, especially around harbours. In the loosely chivalrous rules of naval warfare, these vessels were considered ungentlemanly. By a noble warrior's agreement, they were required to surface and aid in the rescue of surviving seamen from the stricken ship attacked. This policy did not last long. During the First World War, Germany successfully turned U-boats with their torpedoes and deck guns into potent offensive weapons. The sinking of the battleship HMS *Audacious* spurred the development of countermeasures to staunch their lethality.

Chris Henry's book is concerned with the development of a considerable array of underwater devices largely developed in Great Britain at HMS *Vernon*. This nineteenth-century Royal Navy shore establishment (affectionately known as a "stone frigate") located in Portsmouth, also served as the royal torpedo school. A second base, established during the Second World War, was known as *Vernon* M. Depth charges devised at this facility could destroy the submerged enemy or psychologically impact submarine crews forcing the vessel to surface and face destruction by conventional gunfire.

Henry focuses his character-driven chronicle on the inventive genius of Herbert J. Taylor and, to a lesser extent, Alban L. Gwynne. The author describes the physics, chemistry, and mechanical engineering that went into building a multitude of functional weapon systems. The first devices used TNT as the explosive. Later, more sophisticated pyrotechnics were developed that required an initiator, intermediator, amplifier, accelerator, and intensifier to detonate. Depth charges consisted of four parts: an explosive charge, the so-called "pistol," a casing, and a safety primer. The key to most subsequent schemes was creating reliable hydrostatic "pistol" designs. These had to be sensitive to specific ocean-depth pressures in order to detonate at or near an enemy submarine. The depth charge deliverers also had to devise propulsion mechanisms to fire the depth charges in deadly effective patterns, but explode well away from the firing vessel. They invented rail systems, miniature howitzers, so-called "Y-guns" and "hedgehog" forward-throwing anti-submarine devices among a host of variations. Ordinance-delivering vessels were obviously vulnerable to underwater concussions. As submarines became more sophisticated, it became a game of move/countermove, a perpetual escalation of undersea battle stratagems. The most effective innovation was the invention of the ASDIC oscillator (Anti-Submarine Detection Investigation Committee) using soundwave echoes and hydrophones to detect the whereabouts and course of their stealthy prey.

Other measures were also employed to defend against submarine attacks, including passive submarine nets and trawlers towing gargantuan, thick wire nets on the order of magnitude of 16 miles long. A variety of mines were used for various tactics and were either drifted or were moored to the sea bed. There were also aircraft-laid mines and depth charges that were detonated by contact with projections, antennae, wave motion, as well as acoustical or magnetic disturbances. A section of the book briefly describes mine detection, using mostly wooden vessels to sweep for mines. Unsweepable magnetic devices, variations on limpet mines, were placed directly on hulls below the waterline by frogmen or miniature subs. The book is replete with model updates but lacks information concerning their advances or needs.

Henry discusses the contributions of British allies as well as their enemies in this destructive cat and mouse wargame, but the emphasis is on the Royal Navy's contribution to the research

and development of these devices. The remarkably successful British team of inventors were mostly independent contractors, some of whom profited financially from their inventions during the nation's war effort through two wars. In addition, there is a chapter titled "Prima Donnas, Crackpots and Misfits," where the author discusses the contribution of "a whole host of unusual characters who would not have fitted into a purely military background". . . but "were engaging able people" (146).

This highly focused work suffers from several flaws. The author often introduces or uses technical jargon before giving its definition, which usually occurs later in the segment, sometimes in subsequent chapters or not at all. There are also photos or lists of model upgrades with little or no information about them. Among the abundant illustrations, those dealing with technical items are of marginal quality, others are difficult to read and follow, while some do not appear near the text that refers to them. Still, there is much to be learned about this important topic dealing with the history of defense issues related to submarine warfare. As stated in the first page of the book's introduction: "It is not meant to be an exhaustive account of every weapon, but rather an explanation of some of the weapons, linked to the stories of some of the men who invented them." With that in mind, *Depth Charge* is a good literary gateway for delving deeper into this often-arcane maritime history topic.

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David Hobbs. *Taranto: And Naval Air Warfare in the Mediterranean, 1940-1945*. Barnsley, S. Yorks: Seaforth Publishing, www.seaforthpublishing.com, 2020. xiv+440 pp., illustrations, maps, notes, appendices, bibliography, index. UK £35.00, US $52.95, cloth. ISBN 978-1-5267-9383-6. (E-book available)

David Hobbs is a man on a mission. After a career in the Royal Navy and a decade serving as the curator of the Fleet Air Arm (FAA) Museum at RNAS Yeovilton, he has dedicated himself to chronicling the history of British naval air operations in a series of works. Starting with a book on the British Pacific Fleet (*The British Pacific Fleet*, 2011), he went on to write one about the postwar history of the FAA (*The British Carrier Strike Fleet After 1945*, 2015) before going back to the origins of British naval aviation in the First World War (*The Royal Navy's Air Service in the Great War*, 2017), after which he recounted the events of the interwar era and the early months of the Second World War through the experiences of an FAA pilot (*The Dawn of Carrier Strike, and the World of Lieutenant W P Lucy*, 2019).

Hobbs' latest volume represents a continuation of this effort, focusing on FAA's role in the Mediterranean theatre during the conflict. Readers of his previous books will find much that is familiar in it, as he provides another detailed operational history supplemented with a considerable selection of photographs, most of which are from the author's personal collection. Just as familiar is his admiration for the men who served in the FAA, as well as his lament for the opportunities lost because of prewar decisions that handicapped the senior service's aeronautical capabilities.

This comes across in his description of the origins of Operation Judgment, the airstrike against the Italian battleships anchored in Taranto harbour. Hobbs tracks its genesis to the efforts to perfect airplane-deployed torpedoes in the First World War, one that, but for the Armistice, would have culminated in an airborne attack on the German High