



Pushing the Limits: The Remarkable Life and Times of Vice Adm. Allan Rockwell McCann, USN by Carl LaVO.

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Military historian Carl LaVO¹ became interested in the subject of this biography while researching the rescue of survivors of the sunken USS *Squalus* by means of the McCann Rescue Bell. His task was difficult because, unlike more famous admirals, McCann had not won medals for combat successes and left few letters or recorded interviews. He was, however, involved in major events during the two world wars and the subsequent period of downsizing the US military. LaVO's book is more the story of Adm. Allan Rockwell McCann's specific adventures and engineering feats than a traditional biography.

McCann was born in North Adams, Massachusetts (20 Sept. 1896), to an emigrant Canadian couple. North Adams was home to the famous Drury Academy, which drew students from elementary schools for miles around. It featured morning devotionals, strong discipline, and a classical curriculum stressing rhetoric and public speaking. Here McCann developed a booming voice that served him well in his Navy career. As a sixteen-year-old senior at Drury, McCann was nominated to the US Naval Academy. Though he passed the English, geography, and geometry portions of the Academy entrance exam, he failed algebra, arithmetic, and history. Undeterred, he dropped out of Drury to prepare for a second try. He passed the exam with much higher scores and went to Annapolis in June 1913.

During McCann's time there, the Naval Academy grew considerably in size. His class graduated in March 1917, an unprecedented two months early, just weeks before Congress declared war on Germany. McCann reportedly wrote (to his father) that his was "the luckiest class" (22). He did not, however, see action, instead spending the war completing engineering training on the battleship USS *Kansas*.

Such uneventful duty led McCann to switch his career path to submarines, a choice prompted by the impact of German U-boats during the war, especially along the east coast of the United States. In addition, he could advance to a command more quickly, since submarine crews were comparatively small. The prospect of receiving hazardous duty pay also appealed to a young man about to marry his high school sweetheart, Katheryne Gallup, daughter of the North Adams mayor who later became a state senator.

A few months after McCann began his sub training, a hydrogen gas explosion devastated the USS *O-5* in the Brooklyn Navy Yard, killing Capt. George A. Trevor and Ens. William J. Sharkey. LaVO recounts the dramatic rescue mission carried out by Lt. Cmdr. Robert H. English, whose sub was docked next to the *O-5*. McCann and his classmates studied this accident and its cause—a faulty valve in the main exhaust line—as well as corrections made by the Navy to prevent a recurrence.

McCann subsequently served on seven submarines of various classes, moving up to the post of Submarine Division I commander. He left New London for the Coco Solo Naval Reservation at the Atlantic end of the Panama Canal in fall 1922. One year later, a banana freighter accidentally rammed the *O-5* (survivor of the Brooklyn Naval Yard accident), which sank within a minute. Seventeen men es-

1. Author of *The Galloping Ghost: The Extraordinary Life of Submarine Legend Eugene Fluckey* (Annapolis: Naval Inst. Press, 2011) and two other books.

caped; five were missing. Their rescue would require lifting the sub with a giant crane barge. Bringing one of the two such cranes in the Canal Zone to the accident site took sixteen hours and completing a tunnel to put cables under the sub and lift it took another eight. The two men who were saved had bled compressed air from a tank in the torpedo room and exited via the torpedo room hatch.

LaVO notes that McCann “ruminated” on this and other sub disasters in his off-hours as a diesel mechanics instructor and base chief engineer in New London through his command of the USS *S-46*, which he was ordered to take to Pearl Harbor. He envisioned an enclosed rescue chamber that could bring survivors up from a sunken sub. Sometime between 1922 and 1927, he wrote to his division commander concerning his concept (42).

“The following year [1928], the Navy finally responded to the sketch plan McCann had submitted for a submarine rescue chamber” (58). McCann and another sub skipper with similar ideas, Charles B. Momsen, were to collaborate at the Navy’s Bureau of Construction and Repair. However, before they could start, another submarine accident occurred: on 17 December 1927, the *S-4*, while raising its periscope near Provincetown, Massachusetts, was rammed by the Coast Guard cutter *Pauling*; it sank in 110 feet of water. Thirty-four men drowned immediately. Six others were temporarily safe in one compartment, but gale-force winds prevented deep-sea divers from reaching them and they suffocated before they could be rescued. This added urgency to the work of McCann and Momsen.

Momsen, who graduated from the Naval Academy two years after McCann, had witnessed the sinking of the *S-51* off Rhode Island in 1925 when the merchant steamer *SS City of Rome* rammed it. As skipper of the nearby *S-1*, he located the downed sub and tried unsuccessfully to contact its crew. Thirty-three men perished. Momsen, haunted by the mental image of an Academy classmate who tried to claw his way out of the sub, became preoccupied with designing and building a prototype breathing device for submariners. He first tested such a device in the Washington Navy Yard in February 1928 and then in the middle of the Potomac at depths similar to those of the sunken *S-4* and *S-51*. LaVO notes that “Navy brass learned of Momsen’s fete [sic; read “feat”] by reading the newspapers like everyone else. Chief of Naval Operations Adm. Charles Hughes was among the first to greet the sub captain.... ‘Young man, what the hell have you been up to?’ demanded an agitated Hughes” (63). When Momsen testified to the members of the presidential Board on Submarine Safety and Salvage, they were unaware of his and McCann’s designs for a submarine rescue bell and were shocked to learn that the Navy had ignored their submissions.

Momsen began official work on a rescue bell in fall 1928 and was joined by McCann in mid-1929. Though they worked together, the approved design reflected more of McCann’s ideas.

It had taken years, but Momsen, McCann, and their tight-knit codevelopers had overcome all challenges to make rescue of trapped submariners not only possible but probable. Momsen and McCann also developed decompression tables for deep-sea divers that would be used henceforth throughout the world. By the fall of 1931 the Momsen lung had become standard equipment on all Navy submarines. It was now mandatory for every officer and enlisted sailor passing through the sub school to use the rebreather bag to make hundred-foot ascents in the escape training tower designed by Momsen.... Meanwhile, five other McCann rescue chambers were in production for deployment to ... New London, Key West, Balboa, San Diego, Pearl Harbor, and Cavite Naval Base in the Philippines. It remained to be seen, however, whether they actually would be put to use in an emergency. (71)

After the rescue bell project, the Navy assigned Lieutenant Commander McCann as a liaison officer to supervise the modification of *O-12*, on terminal lease to Australian adventurer Sir George Hubert Wilkins, who planned to sail it under the Arctic ice cap from the Atlantic to the Pacific. Novel alterations included a pressurized diving chamber in place of torpedo tubes, a collapsible ice bumper, a retractable conning tower, and long metal rails called “sledge runners” on the superstructure to allow

the sub to skid along the bottom of the ice. By mid-1931, the submarine was ready and McCann was detached to monitor its progress from Washington. Renamed *Nautilus*, the vessel departed for trial dives in New London. During what was to have been a ninety-foot dive, it went to the seabed 240 feet down (the sub was designed for a maximum of 200 feet). Many other breakdowns made the sub two months late for its arrival in Norway. While it was the first ship to successfully dive beneath the polar ice cap, it had to be scuttled in Norway that fall.

The decade before the American entry into World War II passed rapidly for McCann. He commanded one of the Navy's experimental V-class boats, the USS *Bonita*, and served on the Board of Inspection and Survey, the cruiser USS *Indianapolis*, and the Bureau of Navigation. In spring 1939, he and Momsen had the chance to test their rescue chamber when the USS *Squalus*, the most expensive sub yet made by the Navy, flooded on a crucial submergence test and sank near Portsmouth Naval Shipyard. Thirty-three of the fifty-nine men aboard were rescued more than a day after the sinking.

At 1333 on 24 May, the chamber bobbed to the surface next to the *Falcon* and two men leaped onto the overhead as McCann called out over the telephone, "All right, inside the chamber, open the hatch!" The cover flipped open. At first no one emerged. Finally, the ghostly, unshaven face of a survivor appeared through the chamber's hatch. "It's Nichols!" shouted a sailor on the *Falcon*. Momsen was beside himself. "In the eyes of the outside world this was a miracle," he later said. "We tried to appear calm and maybe others were but to me this was the most exciting moment of my life. Eleven years of preparation, combating skepticism and constructing imaginary disasters, all telescoped into one moment. Who could remain calm?" (98)

After the salvage of the *Squalus*, McCann joined the Bureau of Navigation as planning officer as the Navy was preparing for imminent war with Germany and Japan. In May 1941, he assumed command of the twelve-ship Submarine Squadron 6 of the Pacific fleet. In his pajamas after morning calisthenics on the submarine tender *Pelias*, he watched the bombing of Pearl Harbor and directed antiaircraft guns. The four subs anchored at Pearl, five outside the harbor, and sub headquarters itself were untouched. Within six hours, submarine officers met to plan a response to the attack. Little did they know that defective torpedoes would cripple their strategy.

In June 1943, Adm. Arthur S. Carpender, commander of Allied Forces in the Southwest Pacific Area, sent McCann, now a Captain in Fremantle, Australia, to investigate a dispute between two admirals concerning torpedoes. Soon after, Adm. Charles Lockwood, Commander, Submarines, Pacific Fleet, ordered all his sub captains to deactivate magnetic torpedo triggers and use contact detonators instead. When this failed to solve the problem, Momsen suggested a testing method that would reveal a defect in the conventional triggers that could be corrected in the field as well as during their manufacture. All told, twenty months passed before the problem of the torpedoes was finally corrected.

In mid-1943, McCann took command of Sub Squadron 7 in the Atlantic, based at Ordnance Island, Bermuda. He was charged with teaching destroyer crews how to find and destroy U-boats, which the Germans were producing at a rate of one per day and deploying in "wolf packs" to stymie British maritime traffic. Later, he returned to Washington for a year in the Fleet Maintenance Division. In mid-1944, he commanded the battleship USS *Iowa* in support of amphibious landings at Peleliu and at the Battle of Leyte Gulf. Newly promoted to rear admiral, he returned to Washington to become the second commander of the Tenth Fleet.

This fleet was the outcome of a meeting a year earlier convened by Fleet Admiral Ernest J. King Jr., where high-level allied naval leaders discussed how to win the Battle of the Atlantic. The Tenth—the fleet with no ships—was actually an electronics center that analyzed decrypts on sub actions and directed warships against U-boats throughout the Atlantic. By the time McCann assumed command, U-boat sightings in the western Atlantic had decreased, but Allied intelligence feared that the seven

submarines in the *Seewolf* wolfpack might be planning to carry out missile attacks on the American east coast. Rumors of this had already prompted newspaper stories that sowed needless fear in the populace. After several skirmishes and the destruction of some U-boats, German admiral Karl Doenitz, on 7 May 1945, ordered all U-boats to return to base or surrender to the Allies.

In August 1945, McCann was selected to accompany President Harry S. Truman to the Potsdam Conference. Afterward, Truman, McCann, Secretary of State James F. Byrnes, and Fleet Admiral William D. Leahy met privately with King George VI. On the return voyage, McCann relayed to Truman the message that the US had dropped an atomic bomb on Hiroshima.

After the war, McCann commanded the Pacific Fleet Submarine Force at Pearl Harbor. In summer 1946, he led a sub squadron to the Bering Sea to study the effects of ice and cold waters on submarines. Word of McCann's progress and his previous role in the Arctic with the *Nautilus* reached Waldo Lyon, director of the Navy Electronics Laboratory's Submarine branch as US-Soviet relations were rapidly cooling. Lyon assigned McCann to assemble a submarine task force specially equipped for the Arctic. In July 1947, the two met at Adak near the western end of the Aleutian Islands and moved through the Bering Sea across the Arctic Circle to the Chukchi Sea. There they boarded the specially equipped USS *Boarfish* for a four-mile run below the thirty-foot-thick ice sheet.

After a short stint on the Navy's General Board, McCann became the fourth Navy Inspector General, just in time to handle the scandal known as the Revolt of the Admirals. During the postwar downsizing of the military, this conflict between the Air Force and the Navy featured rumors, leaked letters, newspaper columns, courts of inquiry, and congressional hearings. At one point, McCann and his staff searched Adm. Arleigh Burke's office for nine hours with Marines at the doors and sandwiches brought in. In the end, the Armed Services Committee concluded that the dispute amounted to differing views on how to wage war. McCann retired soon afterward as a Vice Admiral. His career had been characterized more by scientific, engineering, and diplomatic successes than by strictly military ones.

Carl LaVO has written a lively and colorful account of many of the events in McCann's life. But his narrative is blemished by inconsistent dates, quotations without source citations, and a paucity of notes. In short, *Pushing the Limits* will appeal more to an audience of naval history buffs and adventure lovers than to history professors.