The Victory of Unrestricted Submarine Warfare

The smoke had not even begun to clear over Pearl Harbor when Admiral Hart and Admiral Stark issued their orders to destroy all Japanese shipping. These orders turned out to be more easily transmitted than executed, however. For the first year of the war, the U.S. submarine force was continually hampered by malfunctioning torpedoes, timid commanders, and improper doctrine.

OVERCOMING INTERWAR PROBLEMS

The most vexing and complicated problem facing the U.S. submarine force turned out to be the submariners' own torpedoes. Just before the war began, the Navy's Bureau of Ordnance revealed its top-secret warhead for the Mark XIV steam-driven torpedo: the Mark VI magnetic exploder. By all accounts, the designed weapon was remarkable. The warhead sensed the magnetic field around an enemy ship and was designed to detonate at the point of maximum magnetism directly underneath the target. The resulting detonation of over six hundred pounds of explosive would snap the target's keel like a toothpick.¹

But unbeknownst to the submariners, as both a cost-saving measure and a misguided effort to maintain secrecy, the Bureau of Ordnance never live-tested the Mark VI warhead. Instead, the Bureau of Ordnance presented the warhead to the U.S. submarine force and claimed the torpedoes would need only one shot to work against a target. As it was, submariners could fire six shots directly at a target, and the torpedoes still would not work. Instead, torpedoes, weighed down by the magnetic exploder, would run too deep, explode prematurely because of the intense magnetic field of the target, or fail to explode if they reached a target. The magnetic exploder was at fault for the first two shortcomings, while faulty contact exploder pins were responsible for the last problem. Consequently, American submariners would pursue daring attacks, only to

see their torpedo wakes bubble under a target or prematurely detonate, giving away their position.²

Worse than the failure of the U.S. torpedoes was the reaction of the Bureau of Ordnance, which steadfastly insisted that the problem was not the Mark VI exploder but the aim of American submariners. Eventually, submarine force leaders were compelled to carry out their own tests using fishing nets, underwater cliffs, and cherry pickers. At the forefront was the naval officer who became the commander of the Pacific Fleet's Submarine Force from February 1943 until the end of the war, Vice Admiral Charles A. Lockwood. Throughout the war, Lockwood and his staff doggedly pursued the torpedo problem, discovering the depth excursion defect, pulling the magnetic exploder out of service, and eventually determining that the contact exploder was improperly constructed as well. But although Lockwood and his staff eventually fixed the torpedoes, it was a painfully prolonged process. Not until October 1943, over twenty-one months after the start of hostilities, could American submariners put to sea and know that their torpedoes would actually work.³ Even so, a few torpedo problems continued to plague the American submarine force for the rest of the war, including a problem with circular runs that may have been responsible for as many as eight U.S. submarines sunk with all hands.4

The torpedo problem was the most serious issue facing the submarine force, but it was hardly the only one. As previously noted, timid commanders and unrealistic tactics forged in the interwar period constrained the submarine force just as much as the terrible torpedoes. When the test of war came, neither the tactics nor the commanders shaped up. Some U.S. submarine commanders simply could not handle the stress of combat. Others were relieved out of hand for lack of aggressiveness. American submariners were forced to reinvent their tactics and learn how to fight *while in combat*—an unenviable task for any combatant. A new breed of younger and more aggressive American sub commanders eventually proved equal to the task.⁵

Without a doubt, the one submarine commander who most instilled aggressiveness and tenacity into the U.S. submarine force was Dudley W. "Mush" Morton. Nicknamed "Mush" after a fellow Kentuckian in the *Moon Mullins* comic strip, Morton had been a football star at the U.S. Naval Academy, graduating in the class of 1930. After being relieved from command of the troubled USS *Dolphin* in 1942, Morton had been on his way out of the submarine force

when fate and Captain John H. "Babe" Brown intervened. Brown picked Morton to replace USS *Wahoo*'s first commanding officer, who had not shown the aggressiveness necessary for submarine warfare. At the time, Brown could only explain his decision by pointing to Morton's gridiron performance and his satisfaction with "the way Morton shakes hands."

Starting in January 1943, Morton's ferocity transformed U.S. submarine warfare. He audaciously took *Wahoo* into a Japanese-controlled harbor in Wewak, New Guinea, using only an enlarged almanac map as his chart. Although he was in shallow water, Morton attacked a Japanese destroyer, sinking her at point blank-range with a bow shot. Later in the patrol, he daringly attacked and destroyed an entire convoy, earning *Wahoo* a broomstick for a "clean sweep." Out of torpedoes, and finding another convoy, Morton once more attempted to strike using only his small deck gun. His plan derailed when the convoy's destroyer discovered him and shelled *Wahoo*, which barely escaped. This sort of tenacity and determination inspired the entire submarine force. After the war, Edward L. Beach praised Morton: "more than any other man . . . [he] showed the way to the brethren of the Silent Service."

When Morton was killed in October 1943, after ten months in combat, he had sunk a confirmed total of 19 ships, making him the second-top U.S. submarine ace of the war. He earned four Navy Crosses. His training heavily influenced his executive officer and the future leading U.S. submarine ace of the war, Dick O'Kane, as well as other highly aggressive and successful submarine commanders and officers.¹⁰

Men like Morton energized the submarine force, but new and reliable equipment was necessary as well. In addition to the improved Mark XIV torpedoes, new types of torpedoes were developed, including the wakeless Mark XVIII electric torpedo and the acoustic Mark XXVII torpedo. In the last years of the war, new types of equipment began to enter the submarine force, giving the Americans even more of an edge over the Japanese. This technological superiority included the new SJ radar and its plan position indicator, the improved Target Bearing Transmitter, and a bathythermograph to find thermal layers, allowing U.S. submarines to evade Japanese sonar. 12

DECISIVE VICTORY

As a result of the myriad equipment and leadership problems plaguing the U.S. submarine force, American submariners did not get much of a chance to

shine during the first year of the war. At the end of 1942, U.S. submarines had only sunk 180 ships in return for 7 American submarines. It was a start, but given that the number of Japanese ships sunk by all U.S. submarines equaled the number of Allied ships sunk by German U-boats in only two months of 1942, it was disappointing.¹³

But even this small start was enough, because the Japanese displayed an attitude regarding their merchant marine that can be only described as staggeringly nonchalant, inept, and incompetent. At the beginning of the war, Japan only had about 6 million tons of merchant shipping, and of that, only 525,000 tons of tankers. And even though Japan went to war over raw materials in Southeast Asia, the Japanese military command saw no inherent contradiction in requisitioning almost two-thirds of Japan's merchant marine solely for military transportation and supplies. Thus, just as the war began, Japanese military leaders had already drastically cut the vital importation of raw materials with which to supply the Japanese war machine and economy. Moreover, Japan's leaders spared little thought to building up Japan's merchant marine. And the ships that were afloat were used so inefficiently that they might as well have been on the bottom: empty merchant ships passed empty merchant ships, heading toward ports the other had just left. If that was not enough, the Japanese Navy ignored the issue of commerce protection, disregarding the lessons of the First World War and interwar Japanese submarine exercises. Consequently, despite the numerous troubles plaguing the U.S. submarine force, the amount of Japanese tonnage sunk in 1942 exceeded the amount constructed.14

In 1943 the momentum began to shift even more to the U.S. submarine force thanks to aggressive commanders such as Mush Morton and the correction of the numerous torpedo problems. At the end of 1943, 335 ships had been sunk in exchange for 15 submarines. The Japanese, however, had focused on one important slice of their tonnage that U.S. submarines had not made enough of a dent in—oil tonnage. Admittedly, the Japanese started off the war with pitifully few tankers, but Japan's shipbuilding industry quickly ramped up to supply more. Despite rising success by U.S. submarines, the Japanese were able to replace their tanker losses in both 1942 and 1943. One reason why Japan's tanker fleet seemed to remain relatively unscathed was the U.S. torpedo problem: tankers were hard targets to sink, and even being holed by an unexploded torpedo was no great emergency. Indeed, Japanese merchant

mariners claimed that "a tanker would not sink if torpedoed." ¹⁶ If the Japanese believed their momentary success with tankers was decisive, however, they were completely mistaken: Japan still lost twice as much shipping as it constructed in 1943.¹⁷

At the start of 1944, Japan's leaders finally began to awaken to the mortal danger they had been in since the beginning of the war. Ironically, Japan's awakening was probably slowed by the miserable performance of American torpedoes, which lulled Japanese naval leaders into a false sense of security regarding the apparent impotence of U.S. submarines. Toward the end of 1943, Japanese naval leaders suddenly "realized that some innovation had come to the American torpedoes ... [and the] sinking rate of our torpedoed ships suddenly began to increase."18 The Japanese finally began systematic convoying in March 1944 and attempted to establish and provision an effective antisubmarine force, but it was too little and too late. Even if the resources had been present to create such an effective antisubmarine force, the rest of the Japanese military would have greedily seized those resources, as they did with the few air components of the Japanese antisubmarine effort. Consequently, 1944 turned out to be the halcyon year of the U.S. submarine force. Finally equipped with reliable torpedoes and equipment, as well as experienced crews, U.S. submarines chewed into the Japanese. American submariners sank 603 ships in 1944 at the cost of 19 U.S. submarines. Significantly, the submarine force annihilated the Japanese tanker fleet, quadrupling the number of tankers sunk. By the beginning of 1945, virtually no oil from the oil fields in Southeast Asia, for which Japan had gone to war, was reaching the home islands.19

As 1945 went on, American submarines found fewer and fewer targets left to sink. In a quest for what remained of Japanese shipping, Admiral Lockwood approved Operation BARNEY, the invasion of the mined Sea of Japan by submarines specially equipped with anti-mine sonar. But even that once protected haven had little shipping to sink. By the end of the war, Japan had only 700,000 tons of "serviceable" merchant tonnage remaining.²⁰

The U.S. submarine force achieved its mission to strangle Japan with devastating efficiency. By the end of the war, U.S. submarines had sunk 1,113 Japanese merchant ships and 201 warships. That amounted to 4,779,902 tons of enemy commerce and 540,192 tons of naval warships. The commerce figures were particularly impressive, since Japan had started the war with only 6,337,000

tons of commercial shipping. In terms of casualties, the Japanese lost virtually their entire prewar merchant marine: out of 122,000 sailors, 27,000 were killed and 89,000 were wounded or "otherwise incapacitated."²¹

But the true effectiveness of the U.S. submarine blockade did not lie at sea. The blockade severely affected the Japanese military throughout the Pacific, as well as the Japanese population on the home islands. In particular, the U.S. unrestricted campaign dramatically reduced the nutritional intake of most Japanese soldiers and civilians. Starvation, and related illnesses such as beriberi, "became the major cause of death among fighting men" in Japan's overseas holdings.²² On the home islands, the Japanese population felt the pangs of hunger from a very early stage of the war. Even before U.S. bombers destroyed Japanese industrial centers, a large percentage of the Japanese work force suffered from malnutrition and related illnesses. By the end of the war, the food situation was so bad that authorities in Osaka recommended that Japanese civilians add items like acorns, rose leaves, silkworm cocoons, grasshoppers, and even sawdust to their diet. The Japanese government issued dishonest radio bulletins advising the Japanese people that fishbone ash had nutritional value. Even after the surrender, as many as six people a day died from starvation in just one homeless center in Tokyo. In October 1945 the Japanese minister of finance told the United Press that as many as 10 million people would starve to death without immediate U.S. food aid. Although this number was "exaggerated," it reflected Japan's desperate situation. The exact toll on the Japanese military and population due to starvation and privation during and immediately after the war may never be fully known, but the number is probably staggering.23

Whatever the exact number of casualties caused by the U.S. submarine campaign, the Japanese had no illusions about the ultimate cause of their defeat. Directly after Japan surrendered, the Japanese cabinet reported to the Diet that "the greatest cause of defeat was the loss of shipping." This was a remarkable admission given the Japanese Navy's extraordinary ineptitude and nonchalance towards antisubmarine warfare. The submarine blockade against Japan was so successful that submarine historian Clay Blair later claimed: "[M]any experts concluded that the invasions of the Palaus, the Philippines, Iwo Jima, and Okinawa, and the dropping of fire bombs and atomic bombs on Japanese cities were unnecessary. They reasoned that despite the fanatical desire of some Japanese to hang on and fight to the last man, the

submarine blockade alone would have ultimately defeated that suicidal impulse." Blair's "experts" were perhaps exaggerating the potential windfalls of the submarine campaign, but few people, on either side of the war, could argue that U.S. submarines were devastatingly effective. Mark Parillo, the foremost academic expert on the Japanese merchant marine in the Second World War, wrote: "The submarine had stopped Japan's industrial heart from beating by severing its arteries, and it did so well before the bomber ruptured the organ itself." ²⁶

The American victory is even more remarkable given the small size of the U.S. submarine force. Including all rear-echelon personnel, the submarine force amounted to only 50,000 officers and men, about 1.6 percent of the entire U.S. Navy personnel. Out of those 50,000, only 16,000 men actually went to sea. Of those 16,000 submariners, 3,500 never returned, amounting to a 22 percent casualty rate, the highest of any combat branch in the U.S. Armed Forces during the Second World War. And yet, despite the high casualty rate and extremely low number of personnel serving in the U.S. submarine force, American submarines sank 55 percent of all Japanese ships in the Second World War.²⁷ In terms of sheer decisiveness and cost-effectiveness, it is hard to argue with the conclusions of Japanese naval historian Masanori Ito, who wrote: "U.S submarines . . . proved to be the most potent weapon . . . in the Pacific War.²⁸

AN UNRESTRICTED WAR

The U.S. submarine victory over Japan was unambiguous. But the victory did not have clearly defined limits of acceptable behavior. If anything, unrestricted submarine warfare sometimes became truly unrestricted.

One oft-repeated maxim of military history is that a military force fights as it trains. The U.S. submarine force had never trained for unrestricted warfare. Without having prepared for the war they ended up fighting, the submarine force had no guidance about the limits of unrestricted warfare. Dick Voge, prewar commander of USS Sealion, wrote of his surprise at receiving the unexpected orders to conduct unrestricted submarine warfare: "This directive hadn't been expected. It was as startling as the Japanese attack . . . The submarines were not caught napping—they were ready for war, or as ready as the peace time ships of a peace loving nation can be. But it was a war of their own conception, an orthodox, an ethical war that they were pre-

pared to fight . . . Neither by training nor indoctrination were the submarines prepared to wage unrestricted warfare." Dick Voge's words were revealing. He did not expect unrestricted submarine warfare, and he emphasized that it was not the "ethical" form of warfare he had trained for. Although the U.S. submarine force would grow to fully embrace this new mission, the submarine force leaders made little effort at casting the unrestricted war as an "ethical" war.

After the attack at Pearl Harbor, U.S. submariners eagerly accepted their orders to conduct unrestricted warfare. Clay Blair recorded: "There were no moral qualms at Pearl Harbor. 'On the contrary,' Weary Wilkins said later, 'I was cheered by the order.' Said Barney Sieglaff, duty officer on the *Tautog*, 'After the carnage at Pearl Harbor—a sneak attack—who could have moral qualms about killing Japanese? Every ship they had, combat or merchant, was engaged in the war effort one way or the other.'"³⁰

Even though the submariners accepted their orders, unrestricted warfare remained technically illegal. Consequently, the very first submarine to depart Pearl Harbor on a war patrol carried written authorization to conduct unrestricted submarine warfare. Although the U.S. submarine force chain of command eventually stopped issuing these letters, the letters emphasized the murky legal and ethical nature of unrestricted warfare.31 Moreover, neither the U.S. Navy's leadership nor its judge advocate general legally sanctioned the unrestricted war in the Pacific. In April 1944 the Navy reissued its 1941 Instructions for the Navy of the United States Governing Maritime and Aerial Warfare, with revisions that had been made during hostilities. Amazingly, despite the fact that American submarines had been conducting unrestricted warfare for almost two and a half years, the 1944 Instructions continued to insist that the U.S. Navy and its submarine force were bound by Article 22 of the London Naval Treaty of 1930. A perplexed submariner would have opened the book to the same pages as the 1941 edition to find that nothing had changed. 32 In short, American submariners were conducting a form of warfare that was plainly in violation of both international law and their own Instructions for the Navy of the United States.

Just as the Navy never "legalized" unrestricted submarine warfare, the submarine force leadership set no limits on unrestricted warfare. The unclear limits on unrestricted submarine warfare were illustrated by an incident in late 1943 concerning one of the top U.S. submarine aces of the war, Lieutenant

Commander Slade D. Cutter. In command of USS Seahorse, Cutter followed the letter of his operational orders to sink all Japanese shipping by destroying a number of Japanese sampans that crossed his path. The experience left him disgusted. After sinking three sampans in three days, with no survivors, Cutter swore off sinking the defenseless fishing boats, recalling later: "It was just too much, and I said, 'Goddamn it, I'm not going to do this any more.'"³³

With the patrol over, Cutter reported to Admiral Lockwood, the commander, Submarine Force, U.S. Pacific Fleet. Cutter asked Lockwood for clarification on what to do about the sampans. Lockwood, usually known for his decisiveness, oddly chose to equivocate, and told Cutter, "Slade, let your conscience be your guide."³⁴

The *Pinocchio*-style answer left Cutter to make up his own mind, and he sided with his feeling that sinking the sampans was murder. As he recalled later, with satisfaction, "we never bothered any more. I never fired a gun again."³⁵

Cutter epitomized the view many submariners held toward unrestricted warfare, which seemed to regard the only legitimate targets as ships one could sink with torpedoes. Cutter explained his rationale after the war, pointing out that sinking enemy freighters and tankers hurt the Japanese war effort far more than sinking sampans: "Well, when we sank a ship with torpedoes, we were sinking a target, and that hurt the enemy. And I don't think that sinking those fishing boats hurt the enemy. It was just hurting some people, the few fish that they were going to take in to feed some people that were already starving to death or that were hard up. But it wasn't hurting their war effort. I didn't think it would contribute anything to the war effort. If you sink a ship, you do, particularly in the traffic lanes going to Saipan and Southeast Asia down to New Guinea and the Philippines—that hurt."36 Significantly, Cutter's operational reasoning directly tied into the strategic needs that had prompted U.S. unrestricted warfare in the first place. The U.S. unrestricted war, after all, was meant to cut off Japanese trade, not to slaughter fishermen. But Cutter was forced to come up with this rationale for himself. His chain of command provided little or no guidance.

Other submarine commanders developed their own rationales regarding sampans. Some chose to avoid the fishing craft, whether because of moral qualms or simply because they had bigger fish to fry. Other commanders, however, frequently targeted sampans. In some cases, submarine commanders justified their attacks by evaluating the fishermen as actively aiding the Japanese war effort with their catches. Other submarine commanders felt that any and every Japanese ship sunk ended the war that much sooner. Regardless of the rationale, however, U.S. submarine attacks on sampans left few, if any, survivors.³⁷

Based on Slade Cutter's experience with Admiral Lockwood, the differing treatment of Japanese sampans, and the completely unhelpful guidance in the *Instructions for the Navy of the United States*, the exact limits of unrestricted warfare remained ambiguous for submariners throughout the war. Such a state of affairs left individual submarine commanders as the arbiters of the limits of unrestricted warfare. Unsurprisingly, at least one submarine commander chose to take unrestricted submarine warfare to its logical extreme.

THE LOGICAL EXTREME OF UNRESTRICTED SUBMARINE WARFARE

On January 26, 1943, during a dogged and intense action, USS *Wahoo*, under the command of Lieutenant Commander Dudley W. "Mush" Morton, surfaced amid the shipwrecked survivors of the transport *Buyo Maru*. Pausing to recharge batteries, Morton idled in the vicinity of what he estimated to be almost 10,000 Japanese troops who had just abandoned their sinking ship. He ordered his crew to shoot at the survivors and their lifeboats.³⁸

Morton's actions have since been discussed, often in passing, in both histories and fiction dealing with submarine warfare during the Second World War. In one sense, Morton's actions were a solitary blemish upon the history of the submarine force and an ugly stain on the reputation of one of the greatest American submariners of the war. At the same time, the incident was emblematic of the ambiguities associated with unrestricted submarine warfare, because Morton rationalized his actions as being entirely consistent with his mission.

As previously noted, Mush Morton was perhaps the most important submarine commander in the U.S. Navy. His executive officer, and the future leading U.S. submarine ace of the war, Dick O'Kane, eulogized Morton as "the captain who shook off the shackles and set the pace" for the entire submarine force. ³⁹ Unfortunately, there was a dark side to Mush Morton's greatness. As Edward L. Beach put it: "Morton felt that the destruction of the Japanese merchant marine was his own private job." ⁴⁰ Morton did not merely want to sink enemy shipping, however. He also wanted to kill his Japanese adversar-

ies. Throughout *Wahoo*, he posted placards that read "SHOOT THE SUNZA BITCHES." When Morton sailed into Pearl Harbor after his first successful war patrol, not only did he have a broom lashed to his scope to signify a "clean sweep," but he also had a pennant that read "SHOOT THE SUNZA BITCHES" dangling aft of his periscopes. ⁴¹ The submarine force was generally aggressive about sinking merchant ships, but Morton's focus on actually shooting Japanese was unusual, since most submarine commanders avoided surface gunfire when possible. ⁴²

On January 26, 1943, Morton's hatred meshed with his mission of unrestricted submarine warfare. Dick O'Kane later recalled that Morton's justification was directly tied to *Wahoo*'s mission to interdict enemy personnel and supplies: "Dick . . . the army bombards strategic areas, and the air corps uses area-bombing so the ground forces can advance. Both bring civilian casualties. Now without other casualties, I will prevent these soldiers from getting ashore, for every one who does can mean an American life." Under the logic of unrestricted warfare, inanimate goods and soldiers on board ship were lawful targets because upon reaching shore they would directly aid the enemy war effort. Just as *Wahoo* prevented Japanese supplies and personnel from reaching their destination by sinking transports and merchant ships, Morton chose to ensure that the troops in the water would not be of any further assistance to the Japanese war machine.

Morton's rationale had a chilling logic to it. Even sixty years later, naval personnel used the rationale of unrestricted submarine warfare to justify Morton's actions. One Navy commentator wrote:

This controversy seems to hinge on one major point: the "defenseless survivor" status of the troops . . . [but] the individual soldier was just as defenseless and powerless to prevent the *Wahoo*'s attack while in his bunk on board ship as he was in the boats . . .

... These men still constituted a threat, one that could not be mitigated, and therefore needed to be eliminated. Anything less would have been a dereliction of duty. That left Morton with one choice, the same choice that he had when he first sighted the ship: kill them.⁴⁴

Another Navy writer pointed out that "if indeed the survivors were headed ashore to regain the fight, it can be argued that they were still combatants engaged in the larger context of battle."⁴⁵ Morton apparently believed so. His actions were the logical extreme of unrestricted submarine warfare.

However, Morton did *not* attack defenseless Japanese troops. He actually shot at friendly prisoners of war. The *Buyo Maru* survivors were not part of "Hirohito's crack Imperial Marine outfit" but rather British Indian prisoners of war from the 2nd Battalion, 16th Punjab Regiment, captured in the fall of Singapore. There *were* some Japanese troops in the water, but they were mostly garrison troops from the 26th Field Ordnance Depot. ⁴⁶ That Morton shot at friendly prisoners of war generally remained unknown for over fifty years, until James F. DeRose learned of the story of the *Buyo Maru* from the Japanese Diet Library for his history of Morton and the submarine force, *Unrestricted Warfare* (2000). ⁴⁷

Fortunately, the Americans' aim and numerical perception was as poor as their identification skills. Morton and his crew claimed there were 10,000 soldiers in the water and Morton wrote: "We destroyed all the boats and most of the troops." Such claims led Edwin Hoyt to pen that "hundreds, perhaps thousands of" the survivors were killed. The actual number was much lower. A total of 1,126 men had been embarked on the *Buyo Maru* and some were undoubtedly killed when the transport sank. But between the torpedo attack, Morton's gunfire, fighting between the two sets of soldiers in the water, and drownings, only 195 Indian troops and 87 Japanese soldiers died. So

At the time, Morton's actions were greeted by silence from the submarine force leadership. Perhaps it was because Morton's patrol had been otherwise so spectacularly successful that the submarine force did not wish to impugn the reputation of its only shining star. After all, for a service that had seen a heartbreaking year of torpedo failures and skipper timidity, Mush Morton's success was a breath of desperately needed fresh air. More likely, however, it was the fact that Morton's patrol took place while the Pacific Fleet Submarine Force was undergoing a temporary leadership gap. The previous ComSubPac, Rear Admiral Robert English, had been killed in an airplane accident shortly after *Wahoo* went on patrol, and his successor, Rear Admiral Charles A. Lockwood, did not assume command until after *Wahoo* had returned to Pearl Harbor to a hero's welcome. During that time, Captain "Babe" Brown temporarily filled in as ComSubPac, but he hardly could have been expected

to challenge the actions of the very man whom he had handpicked to command *Wahoo*.⁵¹

Decades later, however, Clay Blair condemned Morton's actions as "cold-blooded murder and repugnant." That Morton was never censured, Blair asserted, represented "tacit approval from the submarine high command." Of course, Blair noted that the submarine force leadership never issued any policy statements regarding shipwrecked troops or other survivors, which meant "whether other skippers should follow Morton's example was left up to the individual. Few did."

Morton's "massacre" should rightly be labeled as a direct consequence of the decision to conduct unrestricted submarine warfare. Although Mush Morton might well have shot at the survivors of *Buyo Maru* even if he had sunk the troop ship in compliance with cruiser rules of warfare, it seems more likely that he felt the submarine force's mission of unrestricted warfare authorized his actions. Moreover, as far as Morton's *Instructions for the Navy of the United States* were concerned, he was already guilty of gross violations of international law. As one later commentator wrote: "Don't forget that unrestricted warfare itself ran contrary to international law . . . While Morton's actions were illegal (outside international law), they were nowhere near as straightforward or as serious as the crimes committed at My Lai or Son Thang." Having metaphorically thrown the rules of naval warfare "overboard," as Dick Voge later phrased it, the U.S. Navy should not have been surprised when one of its commanders chose to take his mission to its logical extreme.

The Navy's refusal to change its *Instructions for the Navy of the United States*, as well as Admiral Lockwood's unhelpful clarification of the limits of unrestricted submarine warfare, created the conditions for an extreme form of unrestricted submarine warfare. Admittedly, Morton's actions occurred before the Navy reissued the *Instructions* and Admiral Lockwood assumed command of Pacific Fleet's submarine force. But by refusing to explicitly address the legality and limits of unrestricted submarine warfare, the U.S. Navy and its submarine force inculcated an unhealthy command climate of moral ambiguity that permitted incidents like the *Buyo Maru* massacre.

After the war, Rear Admiral Richard Voge devoted five pages to defending the decision to conduct unrestricted warfare, in the official operational history of the U.S. submarine force in the Second World War. His arguments underscored the ambiguous legality and morality of unrestricted warfare. Even though the decision had been necessary to defeat Japan, it was still outlawed by international law. More than that, noncombatants had been killed, ashore and afloat.

The U.S. decision to conduct unrestricted warfare did not just mean Japanese noncombatant casualties in the Second World War, however. If anything, the success of U.S. unrestricted submarine warfare opened the door for future unrestricted warfare in other maritime conflicts.

THE END OF ABSOLUTE FREEDOM OF THE SEAS

Due in no small measure to U.S. unrestricted submarine warfare, the Second World War resulted in an Allied victory. But the decision held unintended consequences, such as Mush Morton's "massacre." More important, U.S. unrestricted warfare in the Second World War ended the noncombatant nature of merchant ship sailors and the Wilsonian paradigm of absolute freedom of the seas. Referring to the decision after the Second World War, historian Samuel Flagg Bemis melodramatically wrote: "The Freedom of the Seas sank beneath the Ocean." 56

One can understand Bemis's distress. After all, every paradigm of freedom of the seas stipulated that any merchant ship, even if a belligerent, was still a noncombatant vessel and therefore could not be sunk without warning.⁵⁷ Treaties such as the Washington Submarine Treaty of 1922, the London Naval Treaty of 1930, and the London Submarine Protocol of 1936 all supported this universal view of the noncombatant nature of merchant ships by requiring submarines to conduct cruiser warfare.⁵⁸ As a result, despite the events of the First World War, merchant sailors were still considered to be noncombatants as the Second World War began.

By the end of the Second World War, however, sinking a merchant ship without warning and leaving its sailors to drown hardly seemed controversial. Decades after the Second World War, Clay Blair wrote that merchant marine sailors "were not innocent civilian bystanders . . . seamen manning merchant ships were as much warriors as were the German submariners." Although Blair was discussing Allied merchant sailors, his description could be applied to all merchant marine sailors.

Ironically, the United States, which had once gone to war to defend the

noncombatant status of merchant ship sailors, belligerent or neutral, was the nation that ultimately redefined the status of these sailors. Until the U.S. decision, unrestricted submarine warfare remained illegal and constrained to acts of reprisal. By conducting unrestricted submarine warfare without provocation, the United States implicitly legitimized the entire German unrestricted submarine campaign and irrevocably tore away the noncombatant status of civilian sailors. Henceforth, civilian sailors on merchant ships would be legitimate targets.

RESURGENCE OF THE INTERWAR PARADIGM

Despite the experience of the Second World War, the paradigm of the interwar treaties has not yet died. After the war, the Nuremberg tribunal insisted that the 1936 London Submarine Protocol was still in effect. In fact, without any new treaties to override it, the protocol is still in effect today, as illustrated by the San Remo Manual on International Law Applicable to Armed Conflicts at Sea. Created by a nongovernmental group under the sponsorship of the Institute of Humanitarian Law, the San Remo Manual is the most recent attempt to codify belligerent and neutral rights in time of war. One of its provisions states that submarines are bound to the same rules regarding merchant ships as aircraft and surface ships. In the explanatory notes, the legal and naval experts who drafted the manual specifically note that the London Submarine Protocol of 1936 is still in effect: submarines must carry out cruiser rules of warfare by visiting, searching, and capturing merchant ships. As if the attempts of the San Remo Manual to turn back the clock were not astonishing enough, even more astonishing is the date when the San Remo Manual was released: 1994, almost five decades after the Second World War.⁶¹

To be fair, the *San Remo Manual* does set conditions under which belligerent merchant ships may be attacked as military targets. Among the activities that would result in a loss of noncombatant status are the following:

- (b) acting as an auxiliary to an enemy's armed forces, e.g. carrying troops or replenishing warships . . .
- (d) sailing under convoy of enemy warships or military aircraft;
- (e) refusing an order to stop or actively resisting visit, search or capture;
- (f) being armed to an extent that they could inflict damage to a warship; this excludes light individual weapons for the defence of

personnel, e.g. against pirates, and purely deflective systems such as 'chaff';

or

(g) otherwise making an effective contribution to military action, e.g., carrying military materials.⁶²

In the case of neutral merchant ships, the rules are very similar, except for the clause regarding armament. No matter what, however, a belligerent has to confirm that the neutral ship is actively supporting the military effort of an enemy before treating it as a military target.⁶³

The legal and naval experts who helped draft the manual noted that the provision regarding armed merchant ships was difficult to draft. Some drafters wanted to permit merchant ships to be able to carry defensive weapons, but the naval experts countered that most defensive weapons could be turned to offensive purposes. Eventually, the drafters agreed to ban everything but small arms, which could be used to repel pirates: "[I]n light of modern weapons, it is impossible to determine, if it ever was possible, whether the armament on merchant ships is to be used offensively or defensively. It is unrealistic to expect enemy forces to be able to make that determination. Enemy merchant ships which are armed to the extent that they could damage any warship, including a submarine, may be attacked on sight." At last, over seventy years after the end of the First World War, the recommendations of the U.S. Navy had finally been incorporated into a code of international law: armed merchant ships are legitimate military targets that can be attacked without warning.

And yet the rules are hardly practical. In the case of unarmed merchant ships, would a nuclear submarine commander actually give up his greatest asset, stealth, in order to carry out the rules of visit, search, and capture? Moreover, although modern nuclear submarines are larger and carry more personnel than their diesel-electric predecessors, few submarines can spare the crew to man a prize.

Submarines are not the only type of platform that may have problems with the *San Remo Manual*. In a peculiar explanatory note, the *San Remo Manual* admits that it "was" impossible for fixed-wing aircraft to conduct visit and search.⁶⁶ Unfortunately, the *San Remo Manual* does not explain how this particular situation has changed, if at all. Since most modern militaries hardly use

seaplanes, it seems safe to say that it is still impossible for fixed-wing aircraft to conduct visit and search.

Regardless of what the San Remo Manual of 1994 says, unrestricted submarine warfare is here to stay. While acknowledging that the London Submarine Protocol is still technically the law of the land, Samuel Flagg Bemis wrote that the protocol is law "only in the thinnest stratosphere of reality." During the Nuremberg trials, Fleet Admiral Chester W. Nimitz declared that the United States would probably wage unrestricted submarine warfare in future naval wars, based on its success in the Pacific War. After Nimitz's testimony, another naval officer, Lieutenant Commander William H. Barnes, argued that "commerce and trade are now so identified with military power in total warfare that merchant ships, armed or unarmed, are in effect warships to be attacked and sunk without warning."

A PACIFIC WAR WITHOUT UNRESTRICTED SUBMARINE WARFARE

Did history have to turn out this way? To answer such a question requires posing the counterfactual question: What would have happened if the United States had not immediately conducted unrestricted submarine warfare on December 7, 1941?

Although the policymakers in Washington probably did not know it as they issued their orders, Japan had already begun unrestricted submarine warfare within minutes of the Pearl Harbor attack, by sinking the unarmed merchant ship *Cynthia Olson*. In hindsight, this attack did not matter since the United States had planned to conduct unrestricted warfare no matter what the Japanese did. If the United States had not planned to conduct unrestricted warfare, the sinking of *Cynthia Olson* would certainly have been sufficient cause for the United States to declare unrestricted submarine warfare in reprisal for the Japanese action.⁷⁰

What if Japan had *not* immediately conducted unrestricted submarine warfare and the United States had not planned unrestricted warfare? The published submarine force doctrine gives a hint of how the U.S. submarine force might have acted in a war bound by treaty limitations. Due to the threat of armed merchant ships, the submarine force doctrine prohibited submarines from even attempting visit and search against a merchant ship found alone. The doctrine did allow surprise attacks on merchant ships traveling in convoys or clearly armed merchant ships, as well as enemy troopships.⁷¹ Ironically,

this doctrine would have been ideal for the Japanese, because Japanese naval authorities made no consistent or concerted effort at forming convoys or providing convoy protection until March 1944. Since this would have meant that most ships would have traveled alone, and hence would not have been legitimate targets for unrestricted submarine warfare or even attempts at cruiser warfare, prewar U.S. submarine doctrine would have allowed a number of merchant ships to slip by.⁷² Furthermore, the Japanese might have figured out that American doctrine prohibited attacks against single unarmed merchant ships, and exploited this weakness. In short, under the restrictive rules of the U.S. submarine force prewar doctrine, commerce warfare might have been virtually impossible.

If the Japanese supply lines had remained generally untouched, then the war in the Pacific might have been quite different. U.S. Marines and Army units would have made amphibious landings against well-supplied enemy islands. As it was, landings against Japanese garrisons at Tarawa and Iwo Jima were costly enough without giving Japanese troops the advantage of relatively uninterrupted supply lines. If unrestricted submarine warfare had not severed the supply lines of the Japanese war machine, the war in the Pacific might have stretched on far longer, and might never have been decisively resolved. It seems highly improbable that the American people or their political and military leadership would have accepted this state of affairs.

This is as far, however, as this counterfactual exercise can reasonably go. History is filled with contingencies that could have created an entirely different chain of events. What if submarines had been successfully abolished after the First World War? What if the interwar treaties had been drafted to prohibit armed merchant ships? What if the United States had stood up for its neutral rights, as in the First World War, instead of implicitly legitimizing German unrestricted warfare in a combat area? What if the recommendations of the General Board had been carried out and the *Instructions for the Navy of the United States* had included more specific injunctions against unrestricted warfare? What if the United States had somehow avoided war with Japan, thus negating the entire need for an economic war of attrition in the Far East? Exactly how history might have turned out if any one of these possibilities occurred simply beggars the imagination.

It seems safe to say, however, that the United States would eventually have waged unrestricted submarine warfare against Japan. Given the strategic reali-

ties facing the United States and the capabilities of the U.S. Navy in 1941, the total defeat of Japan hinged upon winning an economic campaign of attrition. To win such a campaign against the naval might of Japan required the use of unrestricted submarine warfare. While the U.S. decision to conduct unrestricted submarine warfare did not necessarily have to happen on December 7, 1941, or in the manner that it did, it would eventually have happened.

Conclusion

With the passage of so many years since the Second World War, it may be difficult to understand how unrestricted submarine warfare could have been considered so controversial and despicable before the United States entered the war. And yet, the United States did go to war in 1917 over unrestricted submarine warfare, and during two subsequent decades national and military leaders repeated numerous high-minded statements that nothing could be more foreign to the American notion of freedom of the seas than unrestricted warfare. But within one day, the United States abruptly turned about from that position and waged a determined and pitiless maritime war against Japan that ended only in the destruction of Japan's merchant marine. For that reason alone, the U.S. decision to conduct unrestricted submarine warfare remains an important moment in history.

Understandably, the deaths of civilian mariners have not received the attention they deserve. After all, the Second World War targeted and killed civilians on a scale never before seen in history, with a body count of at least 40 million civilians. That number is at least twice as many as the number of soldiers killed in all nations. Compared with the massive number of civilians killed during the Nazi Holocaust, the Japanese conquest of China and Southeast Asia, or the merciless war in Eastern Europe, the deaths caused by the unrestricted submarine warfare may seem insignificant.¹

But the unrestricted submarine campaigns were arguably among the most dangerous of all the campaigns in the Second World War. The unarmed British merchant marine lost almost 33,000 sailors out of 185,000 who went to sea, a 17 percent fatality rate that proportionally exceeded the fatality rates of any of the British armed services. As noted previously, the Japanese merchant marine was essentially annihilated. Among the submariners, three-quarters

of German U-boat sailors never returned, and one out of five U.S. submariners remained on "eternal patrol." While the actual numbers of those killed may seem relatively low, those who did fight in these campaigns had far lower chances of survival than many of their counterparts in other parts of the Second World War.²

The true cost of U.S. unrestricted submarine warfare, however, did not lie at sea. Rather, its greatest impact lay ashore, where untold numbers of Japanese soldiers and civilians suffered and died from malnutrition and starvation. The U.S. submarine campaign so successfully interdicted food supplies to the home islands that during the period immediately after the Japanese surrender, the Japanese people relied upon American food shipments to survive. The American unrestricted submarine campaign not only starved Japan of food, but also denied it the materials necessary to make war. Submarine torpedoes sank valuable supplies seized in Southeast Asia, preventing the Japanese military and people from obtaining the very foundations of industry and energy supplies. The dire conditions in Japan at the end of the war are proof of unrestricted submarine warfare's massive impact on Japan and on the course of the Second World War.

The conditions for unrestricted submarine warfare were created during the interwar period by impractical and poorly written naval treaties. One may argue whether outlawing armed merchant ships would have prevented unrestricted submarine warfare in the Second World War. The failure to prohibit armed merchant ships made cruiser warfare impossible, however. The impossibility of cruiser warfare and U.S. neutrality legislation, which ensured the United States would not stand up for its neutral rights, paved the path for German unrestricted submarine warfare. German unrestricted submarine warfare, in turn, though condemned by U.S. leaders like President Roosevelt, created a strategic environment in which U.S. unrestricted submarine warfare seemed permissible.

But the U.S. decision to conduct unrestricted submarine warfare was ultimately predicated on strategic rationale: Japan simply could not wage war without a steady flow of supplies to the home islands and its outlying Pacific outposts. Although the failure of international law and German unrestricted submarine warfare made U.S. unrestricted submarine warfare more permissible, it was the strategic realities of 1941 that made U.S. unrestricted submarine warfare necessary.

Throughout the interwar period, the only Americans who seriously considered the strategic necessity of submarine warfare in any form were the officers of the U.S. Navy. Unlike their civilian counterparts, who considered the question of submarine warfare from an emotional and legal viewpoint, U.S. naval officers professionally studied the issue strategically and realistically. This state of affairs, in which naval officers were the sole evaluators of the strategic necessity for submarine warfare, stretched into the Second World War. Indeed, the chief of naval operations developed Plan Dog, which became the U.S. national military strategy in the Second World War and necessitated unrestricted submarine warfare against Japan.

Given Germany's failure regarding unrestricted submarine warfare in both the First World War and the Second World War, the U.S. unrestricted submarine campaign may not have seemed a wise choice for strategists. But in reality, the two campaigns were fundamentally different. The U.S. campaign consciously exploited Japan's inability to replace its merchant marine, while the Germans found themselves fighting in vain against the phenomenal industrial capability of the United States. Germany also suffered from superior Allied aerial and naval antisubmarine measures, the limited capabilities of German U-boats, and the German Navy's poor geographic position, which required U-boats to brave either the perilous North Sea or the Bay of Biscay. American submarines, in contrast, enjoyed a relatively safe transit to their operating areas, inferior Japanese antisubmarine efforts, and a versatile submarine design that permitted U.S. submarines to conduct long-range patrols for extended periods. Even more important, the United States did not rely solely on the unrestricted submarine campaign to achieve its strategic goals. Rather, the U.S. unrestricted submarine war was just one part of a much larger and cohesive strategy that overwhelmed Japan's defenses.3

But while the American strategic decision-making process of the Second World War led to Allied victory, the military's dominance over strategy allowed the Navy to essentially implement unrestricted submarine warfare on its own. The decision to conduct unrestricted warfare was made almost entirely divorced from the civilian chain of command. Just as the U.S. Constitution makes ratified international treaties the supreme law of the land, it also mandates that the military is subservient at all times to the will of the civilian government and populace. In short, while military leaders can formulate, recommend, and carry out policy, it is not their duty or even privilege to make

policy.⁴ That Admiral Stark and his subordinates developed and implemented a strategy that directly conflicted with the repeated public statements of the president and the State Department should be troubling to any observer of the American civil-military relationship.

Despite the troubling manner in which the United States embarked on unrestricted submarine warfare, the numerous obstacles the U.S. submarine force had to overcome, and the toll that unrestricted submarine warfare took on noncombatants, it is undeniable that unrestricted submarine warfare played a decisive role in defeating Japan. Indeed, unrestricted submarine warfare's impact went far beyond the economic holding action envisioned by Plan Dog, but instead significantly contributed to the overall ORANGE strategy to advance across the Pacific and encircle Japan. As Edward S. Miller concluded: "The old concept of blockade by surface vessels could not have been made effective until late in the war. The decision for undersea predation magnified the success of one of the Orange Plan's most basic prescriptions." 5

On December 7, 1941, the naval leadership of the United States finalized a decision that had been in process of formulation since the end of the First World War. It was not made on a whim or in reprisal. The U.S. decision to conduct unrestricted submarine warfare reflected the failure of twenty years of international law regarding submarines, thirty years of planning for an ORANGE blockade, and one final year of strategic planning and ethical debate within the U.S. naval service. It was a difficult decision made for strategic reasons that annulled the cherished notions of noncombatant status for civilian mariners and their cargoes. The leaders who made the decision, however, boldly gambled that by forsaking absolute freedom of the seas and recognizing the gritty realities of warfare in the Second World War, they might win a world in which the seas were not at the mercy of the Axis powers. That gamble ultimately paid off.