Previous UNDERSEA WARFARE articles on U.S. submarines in the Pacific during World War II have focused largely on individual “submarine heroes” and their extraordinary war records. In contrast, the present two-part article attempts to step back and view the Pacific submarine campaign from a theater perspective that illuminates both its wartime context and the evolution of a top-level strategy.

Part I: Retreat and Retrenchment

Strategic Background
Since the era of the Spanish-American War, when the United States first assumed territorial responsibilities in the western Pacific, contingency plans had been prepared to deal with the possibility of war with Japan. Known as the “Orange” series in their many revisions, these war plans all assumed that the Japanese would initiate hostilities against the United States with an attack on the Philippine Islands. In response, the U.S. Asiatic Fleet and the in-country Army garrisons would be tasked with fighting a delaying action there until the U.S. Pacific Fleet could arrive from the West Coast to defeat the Japanese Navy in a classic Mahanian sea battle.

In the late-1930s, with Japanese aggression in East Asia an increasing threat, the Orange Plan – by then named “Rainbow Five” – loomed ever larger in the Navy’s strategic thinking. Consequently, just before the opening of World War II in Europe, President Franklin Roosevelt ordered the U.S. Pacific Fleet to shift its operating bases from the West Coast to Pearl Harbor. Simultaneously, the Asiatic Fleet – consisting nominally of a small surface force and a handful of antiquated submarines – was reinforced by transferring several newer submarine divisions to the Philippines from San Diego and Hawaii.

Thus, at the outbreak of war with the Japanese surprise attack on Pearl Harbor on 7 December 1941, 29 U.S. submarines were stationed in Manila Bay and 21 at Pearl Harbor itself. Of the Manila boats, six were of the old “S” class, seven were “fleet submarines” of the transitional “P” class, and 12 were more modern fleet boats of the USS Salmon (SS-182) class. These units were commanded by CAPT John Wilkes and serviced by two tenders and a converted merchant ship. The 21 submarines of the Pearl Harbor force, under RADM Thomas Withers, included six early V-class fleet boats, three “P” class, and 12 new USS Tambor (SS-198)-class submarines. When the war began, however, 11 of the Pearl Harbor boats were in the United States in various stages of overhaul.
The Japanese Onslaught – Retreat to Australia

Simultaneously with the attack on Pearl Harbor, the Japanese moved against Burma, Malaya, Hong Kong, and the Philippines. On 8 December, they bombed out most of the American air force in the Philippines; on the 10th, invaded northern Luzon; and on the 22nd, came ashore at the Lingayan Gulf, 300 miles northwest of Manila. U.S. Army GEN Douglas MacArthur had been responsible for defending the Philippine Islands since 1935. Recognizing that his small garrison and the Philippine Army were no match for the invaders – and in accordance with the original Orange/ Rainbow plans – MacArthur began withdrawing southward into defensive positions on the Bataan Peninsula west of Manila Bay and just north of the island fortress of Corregidor at its entrance.

Meanwhile, ADM Thomas Hart, Commander of the Asiatic Fleet, had moved his surface forces southward, out of range of Japanese aircraft on Formosa. This left only the submarines to oppose the coming onslaught, and by 11 December, 22 of his 29 boats had left Manila on their first war patrols to seek out and destroy the expected Japanese invasion forces. On the 10th, however, a massive Japanese air raid on the Cavite Naval Station south of Manila damaged USS Sealion (SS-195) beyond repair and destroyed the Cavite repair facility and most of the torpedoes in storage there. Sealion was the first U.S. submarine lost in World War II.

Because of inexperience, poor intelligence, and bad luck, the Manila-based submarines sent out to oppose the Japanese invasion were almost totally ineffective. Patrolling the approaches to Luzon, many succeeded in making contact with enemy forces, but their 45 separate attacks produced only three confirmed sinkings – all freighters. Six U.S. boats managed to converge on the Lingayan Gulf on 22 December, but even so, the Japanese storm-ed ashore virtually unimpeded. Finally, with the fall of Manila clearly imminent, Wilkes decided at the end of the year to abandon the Philippines and move his submarines south to Surabaja in Java. The invaders occupied Manila on 2 January 1942.

As the Asiatic Fleet retreated southward, the Japanese overran Burma, Malaya, and Thailand. Britain’s great bastion at Singapore capitulated on 15 February, leaving the Japanese to concentrate on the Dutch East Indies, where Celebes and Borneo had already been invaded a month before. Withdrawing under relentless Japanese pressure, U.S. submarines nonetheless attempted to stem the tide by concentrating off Japanese staging bases and attacking the invasion forces wherever they could be found. But despite the Navy’s courageous rearguard defense, the Japanese were able to take Java in little more than a week after annihilating the surface forces of America, Britain, the Dutch, and Australia (the “ABDA” fleet) in the Battle of the Java Sea on 28 February.

After the loss of the East Indies, U.S. submarines withdrew to ports on the southwest coast of Australia. Since the outbreak of war, they had managed to sink only ten of the enemy: eight merchants, a destroyer, and an aircraft ferry. And of the original 29
Manila boats, four had been lost. Despite the success of nearly a dozen individual submarine missions in re-supplying the beleaguered U.S. troops on Bataan and Corregidor and removing key personnel before Corregidor’s final surrender on 6 May 1942, it was not an auspicious beginning.

First Submarines West from Pearl Harbor

Six hours after the Pearl Harbor attack, the Navy Department issued their now-famous order, “EXECUTE UNRESTRICTED AIR AND SUBMARINE WARFARE AGAINST JAPAN.” With three just-overhauled submarines newly arrived from the West Coast, the number of boats available at Pearl Harbor rose to 14 soon after the Japanese attack. Almost immediately, RADM Withers sent seven out on initial war patrols – four to reconnoiter Japanese strongholds in the Marshall Islands, and three to the home waters of Japan. The first submarine to undertake an “Empire” patrol to the Japanese homeland – some 3,500 nautical miles distant – was USS Gudgeon (SS-211), which departed Hawaii on 11 December, the fifth day of the war. The first of the Marshall Island patrols commenced on 18 December, when USS Pompano (SS-181) left Pearl Harbor for surveillance of Wake Island and Wotje.

Ultimately, 24 war patrols were mounted from Pearl Harbor in December 1941 and the first three months of 1942. Of these, eight had targeted Japanese home waters, while the remainder had patrolled the Japanese Pacific islands and the China coast. In the post-war accounting, they were credited with sinking a total of 19 enemy ships, only one of which was a Japanese combatant – the submarine I-173, ambushed by Gudgeon on 27 January 1942 near Oahu.

Defending the “The Greater East Asia Co-Prosperity Sphere”

By the end of March 1942, Japan had achieved virtually all of her initial objectives in seizing the Philippines, Southeast Asia, and the Dutch East Indies. Moreover, the continuing Japanese pressure on eastern New Guinea placed Australia itself at grave risk, and both Bengal and Ceylon were within striking distance. Japan’s primary war aim had been to insure self-sufficiency in strategic materials, and the “Greater East Asia Co-Prosperity Sphere” gained in her lightning campaigns of late 1941 and early 1942 had only to be defended successfully to consolidate that goal. To protect the supply lines that brought oil, rubber, and minerals from Sumatra, Borneo, and Malaya to the homeland, the Japanese created a powerful system of layered defenses. Their World War I mandate over former German possessions in the Mariana, Marshall, and Caroline Islands was transformed into a powerful complex of central Pacific bases centered on the fleet anchorage at Truk in the Carolines. Additionally, to protect their new colonial empire, the Japanese established staging bases in the Palau Islands east of the Philippines and at Rabaul on New Britain, just northwest of the Solomon Islands.
By March 1942, the Japanese had conquered the Philippines, the Dutch East Indies, Southeast Asia, and half of New Guinea to establish their “Greater East Asia Co-prosperity Sphere.” Their first setbacks occurred in the Battles of the Coral Sea and Midway, in May and June 1942.

After the Allied retreat to Australia in March 1942, the U.S. high command decided to leave the remaining submarines of the Asiatic Fleet “down under,” rather than withdraw them to Pearl Harbor. Not only would they be well positioned there to attack Japanese supply lines between southeast Asia and the homeland, but they could also support the larger Allied decision to divide the theater into two major command areas – one for the southwest Pacific under GEN MacArthur in Australia; and the other for the central and northern Pacific under ADM Chester Nimitz on Oahu. These separate responsibilities also reflected a spirited difference of opinion on how to regain the offensive, with MacArthur – not surprisingly – intent on driving northward from Australia to retake New Guinea and the Philippines – and Nimitz recommending a move westward across the Central Pacific against the Japanese island bases and the enemy homeland. In fact, the two strategies were eventually pursued simultaneously, with frequent top-level squabbling about materiel and manpower priorities.
Initial Moves in the Southwest Pacific

When CAPT John Wilkes re-established his headquarters at Perth/Fremantle in southwestern Australia in March 1942, he had 25 submarines under his command. This force was augmented by four fleet submarines from Pearl Harbor, but his five S-boats were sent to Brisbane – on Australia’s east coast – when six Atlantic Fleet counterparts under CAPT Ralph Christie were reassigned there from Panama. This left 20 submarines in Fremantle to deploy against Japanese supply lines in the southwest Pacific, as well as to undertake “special missions” ordered by GEN MacArthur to pick up and deliver personnel and supplies behind enemy lines. In March and April, the Fremantle boats scored only a half-dozen sinkings.

In late April, the Japanese moved again, mounting a dual sea-borne thrust to occupy Tulagi in the Solomon Islands and complete their conquest of New Guinea by seizing Port Moresby. Although Tulagi fell easily, the Port Moresby force was intercepted in the Battle of the Coral Sea the first week of May, and despite the loss of the aircraft carrier USS Lexington (CV-2) by the United States, Japanese designs on the last remnants of New Guinea were thwarted. Four of the Brisbane S-boats managed to get to sea in time to attack several elements of the Japanese invasion force, but their only confirmed kill was a minelayer. Three weeks after the Battle of the Coral Sea, newly-promoted RADM Charles Lockwood relieved John Wilkes as commander of the Fremantle force. He chose CAPT James Fife, formerly Wilkes’ Chief of Staff, to lead a newly re-formed SUBRON TWO, and – more importantly – undertook the first in-water tests to investigate growing evidence that U.S. torpedoes were malfunctioning in combat and were at least partially responsible for the apparent lack of effectiveness of his submarines. Almost immediately, he found that the standard Mark XIV torpedoes were running at least ten feet deeper than their settings and reported those findings to Washington as the first step in fixing torpedo problems that would take at least another year to resolve.

When the Japanese attempted to build on their success on Tulagi by constructing an airstrip on neighboring Guadalcanal, the renewed threat to Port Moresby and Australia’s supply lines stimulated the invasion of Guadalcanal by U.S. Marines on 7 August 1942. Planning the initial attack on the Solomons revealed one disadvantage of the Pacific theater’s separate commands. The original dividing line between the two areas of responsibility passed east of the Solomon Islands, putting them in GEN MacArthur’s domain. However, the only amphibious forces and supporting combatants available for the assault lay under the control of ADM Nimitz, who was naturally loathe to “chop” them to the general. Accordingly, the authorities in Washington dictated a compromise: The boundary line of the Southwest Pacific Area was moved westward to the 159-degree meridian, just west of Guadalcanal, and the initial invasion of that island was entrusted to VADM Robert Ghormley’s South Pacific command, reporting to ADM Nimitz. Then, after Guadalcanal was secured, the responsibility for reducing the rest of the Solomons and regaining New Guinea would revert to GEN MacArthur. To further complicate matters, when the submarine force at Brisbane, under CAPT Christie, was beefed up in anticipation of the Solomons campaign, it functioned under Commander, Submarines Southwest Pacific (COMSUBSOWESPAC – then RADM Lockwood) for operations west of 159 degrees east longitude and under Commander, Submarines Pacific (COMSUBPAC) for operations on the other side of the line.

SUBPAC Operations and the Battle of Midway

Just before the Battle of the Coral Sea, ADM Nimitz had appointed RADM Robert English to succeed RADM Withers as COMSUBPAC. English promptly concluded an agreement with CAPT Wilkes to exchange submarines between their two bases so that Fremantle’s boats could be cycled back to the United States for overhaul. Moreover, in transiting to Australia, the Pearl Harbor submarines could undertake war patrols off the Japanese-held islands. Under this arrangement – and with new arrivals from the United States – the number of war patrols from Pearl Harbor increased sharply during April and early May 1942, evenly divided between “Empire” forays and “stake-outs” of the Japanese bases in the Central Pacific. All told, however, between January and
May 1942, the Pearl Harbor boats were eventually credited with sinking only 33 enemy ships – approximately 130,000 tons – almost all on patrols to Japanese home waters and the East China Sea.

Then, in mid-May, “ULTRA” crypto-graphic intelligence provided advance warning of a major Japanese offensive intended to seize first the Aleutians, and then Midway Island, only 700 miles from Pearl Harbor. ADM Nimitz immediately deployed his three remaining aircraft carriers to intercept the multi-pronged enemy attack, and the result was the U.S. victory in the Battle of Midway, 4-6 June 1942, often described as the “turning point” of the Pacific war. As a key element of the riposte, RADM English had sorted all his available submarines and deployed them in two groups: 12 boats west of Midway and seven to the west and north of Oahu. Simultaneously, the Japanese assigned 16 submarines to support their invasion force, but U.S. ULTRA intercepts and radio-direction-finding (RDF) kept them at bay. Unfortunately, the American submarines did no better. Confusion, indecision, and poor contact reporting limited them to making only negligible contributions to the U.S. victory. Four Japanese carriers and a heavy cruiser were lost to U.S. aircraft, but of the submarines, only USS Nautilus (SS-168) managed to score a hit – on the already-damaged carrier, IJS Kaga – and her torpedo was a dud. In contrast, a Japanese submarine, I-168, got within range of the crippled aircraft carrier, USS Yorktown (CV-5), and sank both her and an escorting destroyer before the former could be taken under tow for Pearl Harbor.

In the northern Pacific, a total of ten old S-boats had been transferred to Dutch Harbor, Alaska, to defend the Aleutians. This was no impediment, however, to a Japanese carrier-based air attack on Dutch Harbor in early June and the seizure of the outer islands of Attu and Kiska as a diversion from the main Japanese thrust at Midway. After that battle, seven fleet submarines joined the S-boats in Alaskan waters, where they mounted an attrition campaign against Japanese occupation and support forces there. Operating in vicious weather and challenging ocean conditions, the Dutch Harbor submarines ultimately sank two destroyers and a pair of patrol craft, but it cost them two of their own number – one to enemy action, and the other to grounding. Notwithstanding the dedication of disproportionate U.S. resources, the Alaskan theater remained a backwater for the duration of the war.

A Disappointing 1942 Winds Down

The U.S. invasion of the Solomon Islands in August 1942 followed the Japanese rebuff at Midway by only two months. Thus, for the remainder of 1942, the U.S. focus shifted to the Southwest Pacific, and even SUBPAC submarines from Pearl Harbor were regularly assigned interdiction missions in support of the Solomons effort. Guadalcanal was not completely secured until February 1943, and for the Navy, the Solomons contest devolved into preventing the Japanese from
reinforcing their island garrisons by sea. This led to a series of violent surface actions up and down the island chain, the diversionary attack on Makin Atoll in the Gilberts by Carlson’s Raiders, and a concerted submarine campaign to cut Japanese communications from Truk and Rabaul.

For this reason, the submarine force in Australia was significantly augmented in the latter half of the year. After VADM William Halsey relieved VADM Ghormley as the South Pacific commander in November 1942, SUBRONS EIGHT and TEN were transferred from Pearl Harbor -- giving Brisbane, under CAPT Christie the largest concentration of U.S. submarines in the Pacific. Earlier -- despite RADM Lockwood’s strong objection -- SUBRON TWO had also been transferred from the Fremantle area, leaving him only eight boats to cover Japanese supply lines from the East Indies and Malaya. Meanwhile, the Pearl Harbor force, now numbering less than 20 boats -- but making increasing use of an advanced base at Midway to shorten transit times -- was split between blockading Truk and undertaking commerce raiding in Japanese home waters and the East China Sea.

In late 1942, only RADM Lockwood's Fremantle boats and perhaps half of the Pearl Harbor submarines were actively engaged in attacking the supply lines that sustained the enemy war effort. Virtually all of the Brisbane war patrols focused on the Solomons and Rabaul, while many of Pearl Harbor’s were targeted at Truk and similar bases, often in reaction to fruitless ULTRA clues. Despite extraordinary individual accomplishments, the resulting dilution of effort seriously limited the effectiveness of U.S. submarines in undermining Japan’s war-making capability early in the conflict. As Clay Blair points out in his classic account of the Pacific submarine campaign, *Silent Victory*, the 180 Japanese ships destroyed by U.S. submarines in all of 1942 were matched by German sinkings in the Atlantic during February and March of that year *alone*. Significantly, 45 percent of all the successes that *were* achieved resulted from the 15 percent of war patrols identified as “Empire” missions from Pearl Harbor -- which should have been a powerful argument for concentrating on Japanese shipping early in the game.

The record against Japanese combatants was even more disappointing: U.S. submarines sank only two major warships in all 1942 -- a heavy and a light cruiser. In contrast, Japanese submarines destroyed two U.S. carriers and a light cruiser, as well as heavily damaging another carrier, a battleship, and a heavy cruiser. Japanese submariners paid a stiffer price, losing 23 boats during the first year -- whereas U.S. losses since the beginning of the war totaled only seven submarines, and three of these came from running aground.

*For Want of a Nail...*
After the retreat southward from the Philippines, initial Allied counter-offensives concentrated first on defending the approaches to Australia in the Southwest Pacific. U.S. submarines operated from both Fremantle/Perth and Brisbane to attack Japanese supply lines between the Solomons and their bases at Truk, Rabaul, Palau, and the Marianas.

Our relatively poor submarine performance early in the war was due to a number of factors. First – as in the opening phase of any conflict – gaining combat experience, shedding peacetime attitudes, and winnowing out “less-aggressive” and tactically-inept commanding officers took months of actual fighting. Second, it was only the test of war that revealed materiel problems in both the submarines themselves and their torpedoes that crippled the Submarine Force until well into 1943. The older S-boats, for example, were largely inadequate for the demands placed on them in the Pacific, and even nine of the newer fleet boats – to be joined by a whole squadron in 1943 – were equipped with the notoriously unreliable Hoover-Owens- Rentschler (H.O.R.) main propulsion diesels, which frequently broke down on patrol.

But the gravest and most demoralizing technical problems emerged in torpedo performance. As early as the withdrawal toward Australia, many skippers had begun to suspect incidents of torpedo failure that robbed them of “sure” kills. Even as the experience of more and more inexplicable misses and dud hits began to accumulate, and the operators tried to raise the alarm through the chain of command, they were thwarted by a technical community that preferred to blame “human error” for their own failures. It was only when RADM Lockwood undertook his “unofficial” in-water tests in southwestern Australia that the truth about U.S. torpedoes began to be believed, and it was late-1943 before the problem was completely solved. In the interim, countless submarine crews put their lives in danger stalking enemy targets, only to be cheated of their quarry by defective...
torpedoes.

**Early 1943 – the End of the Beginning**

On 20 January 1943, COMSUBPAC RADM English departed Hawaii by air to inspect submarine support facilities on the West Coast. Caught in a storm off northern California, English’s aircraft was driven off course and crashed 115 miles north of San Francisco. All on board were killed. Just prior to this tragedy, Brisbane’s CAPT Christie had been transferred to command the Newport (Rhode Island) Torpedo Station and promoted to rear admiral. Although Christie had high hopes for becoming RADM English’s replacement at Pearl Harbor, the Navy’s Commander-in-Chief, ADM Ernest King, instead selected RADM Charles Lockwood for the job. To the Submarine Force, Lockwood soon proved that he was the right man at the right time, and from then on, their mutual fortunes turned sharply upward.

*(Part II of this article, which will appear in the Summer issue of UNDERSEA WARFARE, will describe the turning of the tide under VADM Lockwood’s leadership and the concerted anti-shipping campaign that led to the Navy’s decisive undersea victory in World War II.)*