MISSION: LIFEGUARD
American Submarines in the Pacific
Recovered Downed Pilots

by NATHANIEL S. PATCH
On the morning of September 2, 1944, the submarine USS *Finback* was floating on the surface of the Pacific Ocean—on lifeguard duty for any downed pilots of carrier-based fighters attacking Japanese bases on Bonin and Volcano Island.

The day before, the *Finback* had rescued three naval aviators—a torpedo bomber crew—from the choppy central Pacific waters near the island of Tobiishi Bana during the strikes on Iwo Jima.

As dawn broke, the submarine’s radar picked up the incoming wave of American planes heading toward Chichi Jima.

A short time later, the *Finback* was contacted by two F6F Hellcat fighters, their submarine combat air patrol escorts, which submariners affectionately referred to as “chickens.”

The *Finback* and the Hellcats were starting another day of lifeguard duty to look for and rescue “zoomies,” the submariners’ term for downed pilots. The Hellcats would help guide the *Finback* to the downed pilots and help keep Japanese fighters away while the *Finback* made the rescue.

At around 9:30 a.m., the *Finback* received a report that Japanese antiaircraft defense had shot down a torpedo bomber between the northeastern end of Minami Jima and the southern tip of Chichi Jima. The four diesel engines of the *Finback* roared to life, and the boat headed out to recover the crew of the plane.

To stay out of the range of Japanese shore batteries the *Finback* maintained a distance of seven and a half miles away from shore. It took slightly more than two hours to get to the site where a crew member had bailed out. The crew of the *Finback* managed to fish out the pilot, Lt. (jg) George Herbert Walker Bush of Torpedo Squadron 51 from the USS *San Jacinto*. Bush told his rescuers he had not seen the parachutes of his crew and thought that they either jumped while the plane was over Chichi Jima or went down with the plane.

Lt. Comdr. Robert R. Williams, the boat's commanding officer, started the *Finback* on a search pattern to look for Bush’s crew members on the chance that they had jumped out over water.

**RESCUING A DOWNED PILOT UNDER JAPANESE FIRE**

The search, however, was cut short by another report that came in at 12:36 p.m. of a yellow rubber raft spotted near Haha Jima. Aircraft in the area confirmed the location of the raft, and a plane circled overhead to mark the location. The situation for the downed pilot looked grim; the raft was a mile and a half from shore, and the Japanese were firing at it.

Williams expressed his feelings about the stranded pilot’s situation in the war patrol report: “Spirits of all hands went to 300 feet.” This rescue would need to be creative because the shore batteries threatened to hit the *Finback* on the surface if she tried to pick up the survivor there. The solution was to approach the raft submerged. But then how would they get the aviator?

It took three hours to locate the raft and approach it. The *Finback* submerged to 55 feet, and with the periscope up, she “roared” past the raft to let the pilot know that a submarine had arrived to get him. Then the *Finback* went into reverse and tried to meet up with the raft.

About a half-hour later, but almost four hours after the initial report, the pilot hooked his arms around the periscope. The *Finback* started away from the island at two-thirds speed, but when Williams looked through the periscope he saw the pilot, “with one arm around the periscope and the other around the life raft with a bailing bucket bringing up the rear.”

The submarine came to a stop so the pilot could get back into his raft, and then tried again. Going at two-thirds speed continued to fill the raft with water and dump the pilot. Once the pilot was again back in his raft, the *Finback* raised to 38 feet to keep the pilot out of the water, giving him more of the periscope shear to hold on to but not overly expose the submarine to Japanese guns.

When the *Finback* and the life raft were five miles from shore, the submarine surfaced, and the crew helped the rattled and waterlogged pilot aboard. Ens. James W. Beckman was the pilot of a Hellcat from the USS *Enterprise*. He was the last aviator rescued on this operation.
The next day, the *Finback* was released from lifeguard duty to continue her war patrol around the area. The carrier task force rendezvoused near Saipan before sailing on to participate in the invasion of the Palaus.

Beckman, Bush, and the others remained on the *Finback* as “guests” while she tracked and attacked convoys, endured depth charges from Japanese escort ships, and sank two ships (an oiler and small cargo ship). The five ended their stay on the *Finback* on Midway Island on September 29, after 29 days aboard the submarine (and crossing the international date line).

**Lifeguard Rescue Mission Dangerous for Submarines**

The stories of the lifeguard rescue of the future President of the United States and the others highlight a little-known mission of the U.S. submarine fleet during World War II: rescuing downed pilots.

This duty, of course, was in addition to the primary mission of U.S. submarines in the Pacific, which was to attack and sink Japanese ships and constrict the flow of resources, including troops, necessary for Japan to continue to fight. They also conducted missions to resupply guerrillas in the Philippines, deliver Marine raiders and Army scouts behind enemy lines, and conduct photographic reconnaissance of enemy outposts.

The primary mission of the submarines was hazardous enough, and the lifeguard missions posed their own hazards—placing many sailors in harm’s way to save a downed pilot. Submarine crews had to come up with creative means to bring back the pilots.

During World War II, U.S. submarines rescued 504 airmen from all services. These pilots and aircrews were highly trained and had hours of combat experience, and rescuing them made it possible to return these experienced air crews to their duties and continue the fight.

The commander of submarine forces in the Pacific, Rear Adm. Charles Lockwood, described lifeguard missions in Submarine Tactical Information Bulletin No. 8: “It is realized that this duty seldom gives a submarine the opportunity to perform its major mission of sinking enemy ships. It is further realized that the duty is arduous and dangerous.”

As practical and clearly useful as rescuing pilots from the ocean, the origins of lifeguard missions began as an afterthought to another type of mission, which was to help guide Army Air Force bombers to Japanese-held islands across the wide-open Pacific.

**First Lifeguard Mission Involved Bombing of Wake Island**

The story of submarine lifeguard missions began in December 1942 with the planned bombing of Wake Island. The U.S. military was not prepared to recapture Wake Island, but they were not going to stand by and let the Japanese use it as an airbase to project their airpower into the Central Pacific.

The *Finback*’s report records the rescue of Lt. George Herbert Walker Bush and, nine miles away, the towing by periscope and rescue of another pilot near Haha Jima while under fire from the Japanese.
Capt. H. M. Martin described the basic concept of the submarines’ lifeguard mission in his December 10, 1942 memo, recommending that two submarines stand by at Wake Island to potentially rescue airmen downed by enemy fire.

necessary,” but the primary mission was being a navigational aide to the bombers.

The mission was successful. Wake Island was bombed with 24 B-24s, and although there were searchlights and antiaircraft fire ranging from light machine-guns to five-inch antiaircraft fire, all the bombers returned home.

Although the submarines were unneeded, this action marked the beginning of what would evolve into an independent submarine mission to lifeguard downed aviators.

During spring 1943, the Army Air Force conducted several bombing raids on Wake Island and the Gilbert Islands in which submarines guided the bombers in with radar and were stationed in the area to help any bomber crews in need of assistance. Fortunately, the submarines were not needed as lifeguards during these missions, but the submarines and the Air Force still needed to work on coordinating their efforts. The Tarpon actually showed up a day late due to a misunderstanding of the orders. The officers on deck witnessed what they thought were American B-24 Liberators flying over and did not realize their mistake until they returned to Pearl Harbor. The commanding officer wrote in his report, “It is rather ironical that planes we assumed were Liberators on April 20 off Nauru were actually Jap heavy bombers—and we were up there on the surface cheering them on!”

An Admiral Asks a Favor: Could We Borrow a Submarine?

In early 1943, several events changed the course of the war, the submarine force, and aviators.

In January 1943, the submarine force in the Pacific got a new commander, Rear Adm. Charles Lockwood, an innovative and “gung ho” officer.
Under Lockwood, a number of pro-submarine initiatives were started, including encouraging the improvement of torpedoes; radical changes to submarine doctrine, strategy, and tactics, making them more aggressive; and new missions like photographic reconnaissance and lifeguard duties.

At the same time, American industry was producing a plethora of new destroyers, cruisers, aircraft carriers, amphibious ships, and submarines, all of which were all pouring into the Pacific. With this dramatic rise in material and men, the Allies could take the offensive and begin to dive into the Central Pacific, beginning with the Gilbert and Marshall island groups.

In the late summer, preliminary attacks on the Gilberts were being planned to soften the islands prior to their invasion, and two other attacks on Marcus and Wake Islands were being planned to give new pilots some experience while harassing the enemy. The first strike was to be on Marcus Island in September 1943.

Prior to the attack, in August, Lockwood received a call from Rear Adm. Charles A. Pownall, commander of the carrier strike group that would be conducting these air strikes. Lockwood and his force operations officer, Capt. Richard Voge, went to Pownall’s office and were met not only by Pownall but also a group of eager pilots. The odd encounter continued to develop when Pownall explained about the upcoming mission to Marcus Island and asked Lockwood if he could have one of his submarines on surface near the target area to retrieve any pilots and crew who were shot down. Lockwood was at first concerned about having a submarine on the surface in the middle of an ongoing air battle. His concerns: Japanese planes could attack it, friendly planes might mistake it for an enemy, or it might be close enough to be shelled.

Pownall explained that a submarine’s war patrol was longer than any air strike, submarines were pulled off their designated offensive patrol against Japanese shipping for the period of the air strike. The first two missions, the air strikes on Marcus Island and Tarawa Island in September 1943, were covered by the USS Snook and the USS Steelhead. Fortunately, their services were not needed.

The first strike was on Marcus Island in September 1943.

In the early hours of October 6, the American air strike began. Without any instructions on how to conduct a lifeguarding mission, the Skate remained on the surface in opposition to normal submarine doctrine, which was to submerge in the presence of enemy aircraft.

The Skate witnessed many dogfights and large amounts of antiaircraft fire. The lookouts in the watch stations on the conning tower were watching the skies for American “zoomies.”
In addition to the reward offered by the Lexington, the Skate’s commander, E. B. McKinney, was awarded the Navy Cross. An officer and two sailors received the Silver Star for exposing themselves to enemy fire on the deck and in the water as they rescued the aviators.

The next lifeguard mission came under heavy enemy attack. The USS Plunger and the USS Nautilus were assigned in November 1943 to an air strike on Mili, a Japanese air base in the Gilbert Islands important to overall U.S. strategy in the Pacific. The Nautilus was badly damaged after being shelled by a “friendly” destroyer. The Plunger did rescue one aviator, but while trying to rescue him, a Japanese Zero attacked while there were a dozen men on the bridge, including the rescue party. The executive officer and five other sailors were wounded.

Communications Problems: Developing a Secret Code

Lifeguarding was proving to be a risky business, and communication and protection were key problems. In early lifeguarding missions, the submarine surfaced, and lookouts searched the skies for falling airplanes, or radiomen listened to chatter between planes and aircraft carriers or for radio beacons from pilots’ life rafts.

Crews needed to process a lot of information to locate a downed flyer in a large ocean. And while sorting this information, the submarine had to navigate their way through attacks from enemy and sometimes friendly elements.

From the beginning, naval aviators had several devices to help them be located in a life raft.

Most life rafts came equipped with a hand-cranked radio transmitter named the Gibson Girl. It weighed 30 to 40 pounds,
and it had a balloon or kite to raise the antenna, which gave the radio transmitter a range of 30 to 300 miles depending on weather conditions.

Toward the end of the war, battery-powered radios were being considered, but because of the difference in battery life in transmitting (3 hours) and receiving (13 hours), the Navy still considered the Gibson Girl more reliable because "the energy for the transmission is furnished by 'elbow grease.'"

Another device was referred to as "corner reflectors." They were simply two-foot squares of wire mesh bent in half at a right angle. Because rafts are low to the water and made from rubber, they are difficult to pick up on surface radar. The two-foot metal extension provided a reflective surface for radar waves to bounce off and allow the raft to show up on radar of nearby surface ships.

Yet another device was the lowest technology of all: a light reflector of some type—a mirror, a piece of metal, or glass. Basically, a “zoomie” could use anything shiny to attract the attention of a passing plane or ship.

Toward the end of the war, some new technology was used to help locate downed pilots. The Navy began to use Identification Friend or Foe (IFF) transponders in aircraft to distinguish Allied planes from the enemy’s. The instruments that receive these transmissions could also be used to locate pilots if they stayed near their aircraft and if the aircraft stayed above water for a while.

Another device, named “Walter,” first developed by the British, was a three-pound radar transmitter with a battery life of 18 hours. At the end of the war, Walter was still used only on a trial basis because of its transmission range. Airborne radar could pick up the transmissions from 20 miles, while surface radar could pick up the transmissions from only 5 or 6 miles.

For the next major operation after the Gilberts, the Navy worked a communication scheme so the pilot or crew of the plane did not have to make lengthy encryptions.
to transmit their coordinates while crashing. It was easier to transmit in plain English, but to do this would give the pilot’s position away to the enemy.

Air Support Is More Vital To Subs’ Lifeguard Mission

In January 1944, during the planning for the Marshall Islands campaign, a series of navigation names were determined and given code names using the names of cartoon characters. All the pilot had to do was transmit how many miles he was off a point, the point’s code name, and what bearing off that point.

For example, “14 Papa Bugs 135” would mean 14 miles off of Point Papa Bugs at bearing 135 degrees. This became known as the Reference Point method. This method later had to be refined because the Japanese began to figure out the purpose of the transmissions, and they started to call submarines on red herrings.

In later engagements, the cartoon characters chosen to name reference points had to include an “L” sound. The change made it easier to detect who was making the call because it is difficult for a native Japanese speaker to make a proper English “L” sound.

The Reference Point method solved many of the communications issues between crashing pilots and lifeguarding submarines, but the question of protecting the submarines on red herrings.

Since the death of Lieutenant Maxson, other incidents had damaged lifeguarding submarines and resulted in crew casualties. The need for fighter cover was raised but not realized until the historic lifeguarding mission of the USS Tang near Truk Island in late April 1944.

During this mission, the Tang was able to rescue 22 airmen. Comdr. Richard O’Kane, commanding officer of the Tang, urgently requested the assistance of Navy fighters to hold off the enemy so the Tang could rescue three downed pilots in the water. Because the life rafts were so close to shore, O’Kane thought he would have to submerge and abandon the downed airmen.

The Navy fighters that came in and strafed the Japanese positions allowed the Tang to complete her rescue. The Submarine Combat Air Patrols not only kept the enemy from attacking the lifeguard submarine, but they also assisted in locating downed pilots.

An April 1945 review of 74 lifeguarding missions conducted in 1944 showed that with air support in 60 calls for help, 51 were rescues. Seventy-five calls for help with unescorted submarines responding resulted in only seven rescues.

The analysis, done for the commander-in-chief of the U.S. fleet, also emphasized that escorting aircraft increased the search capabilities and communication between rescuers and the rest of the task force. In addition, the escorts widened radar and radio reception and increased protection of both the submarine and downed pilot.

During the war, Navy pilots found themselves either crashing near or drifting toward enemy-held islands, complicating the lifeguarding submarines’ missions. If the pilot was too close to shore, would the submarine run aground? Would the Japanese fire on the submarine when it was on the surface rescuing the pilots? These problems led to some innovative solutions.

Subs Create New Ways For Rescues Under Fire

The USS Harder off Woleai in the Marshall Islands was sent on to rescue an aviator on April 1, 1944. Ens. John R. Galvin had reached the beach on the northeast corner of Woleai.

Fighter planes gave the Harder reports on the condition of the pilot, and the submarine sailed to about 1,200 to 1,500 yards away from the beach. What made the rescue tricky was a coral reef that began just about where the Harder was trying to hold her position.

The skipper, Comdr. Samuel Dealey, was constantly maneuvering the submarine against the surf to prevent it from turning broadside and crashing against the reef. Three volunteers swam a rubber raft connected with a tow line to the Harder over the reef toward the beach.

In the meantime, a passing plane dropped a rubber raft to the stranded airman, who then got into the surf and began to paddle.

After some time, the two rafts met up. Unfortunately, a seaplane trying to assist in the rescue cut the tow line, and one of the men had to swim back to Harder to get a new one. Eventually, the tow line was set up, and the Harder was able to drag all four men, the aviator and three submariners, to safety. The skipper was grateful for the air cover provided by the Navy fighters, who fended off Japanese attacks during the rescue.

Another method to rescue pilots that was developed, and which has already been introduced, was “scoping.”

“Scoping” an aviator was a bit more than looking at a pilot; it was literally using the periscope to rescue the pilot instead of exposing the whole submarine to enemy shore batteries. Only two submarines used this method of rescue. The first was the USS Stingray and the second, as already described, was the USS Finback.

The concept of using a periscope had been discussed but had not been put into practice

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To learn more about

- How the Japanese were preparing for a decisive naval battle in the South Pacific, go to “The Z Plan Story” at www.archives.gov/publications/prologue/2005/fall.
until June 13, 1944, during the invasion of Guam. The USS _Stingray_ was on lifeguard station and received a call about a downed pilot. The fighters providing air cover reported that the pilot was adrift near the shore. Japanese antiaircraft batteries were targeting the raft-bound pilot.

As the _Stingray_ approached, the shore batteries retracted their guns on to the submarine. The skipper decided to dive and approach the pilot submerged.

For the next two hours the _Stingray_ attempted to "scope" the pilot, who seemed confused about the situation because during some passes he swam away from the periscope. At other times he communicated with the submarine by showing that his left hand was cut.

On the fourth attempt, the pilot finally grabbed onto the scope. The _Stingray_ made two knots and headed away from the island with the poor pilot skipping along the white caps of waves for about an hour before the crew pulled him out of the water.

### What Is Good for The Navy Is Good for The Air Force

Even though lifeguard missions had their origins in guiding Army Air Force bombers to remote islands and being ready if the crews were shot down and needed help, once lifeguard missions became official in late 1943, the Army Air Force was still skeptical. They questioned whether Navy submarines could really be helpful in recovering B-24 Liberators and B-29 Superfortress crews if they had to make water landings.

It was the USS _Tang_'s April 1944 mission near Truk Island that changed the Army Air Force's mind. During the two-day strike on Truk, 35 men were shot down, and the _Tang_ rescued 22 of them. The remaining 13 were either shot down over land or within the lagoon of the atoll and thereby out of the reach of submarine.

After that mission, the Army Air Force requested submarines for lifeguard duty in all parts of the Pacific campaign. Until then, bomber pilots distrusted submarines because they could not be sure that a submarine could know where they were when they crashed. B-29 pilots would rather fly a damaged plane back to base rather than ditch it in the ocean and wait for a submarine.

The Navy and Army Air Force created a number of plans to help ensure the safety of the bombers. Before taking off, bombers were given specific radio designations to identify zones where submarines would be waiting. Even with the well-thought-out plans, there were initially some complications due to the differences in terminology used by Army Air Force pilots and Navy submariners. But as the two services continued to work together, these communication issues were worked out.

From late 1944, the majority of B-29 bombers took off from the Marianas, and the control lifeguard submarines were also from the Marianas from an advanced base in Saipan.

The commander of Task Force Group 17.7, the advanced base for submarines, referred to submarines going out on lifeguard
missions for B-29s bombing Japan as the “Lifeguard League.” The first rescue of a B-29 crew by a lifeguard submarine did not occur until December 19, 1944. The USS Spearfish rescued seven airmen in the Bonin Islands Area. The next rescue was not until March 31, 1945.

A Postscript: Stories and Gratitude

These few of the many stories of lifeguard submarines during World War II illustrate the flexibility of submarine warfare and the innovative thinking of the American Navy to look out for others and save lives of those in need.

In concept, it seemed simple to place a submarine between the aircraft carriers and their target area to scoop up any pilots that should get shot down. In practice, some situations could harm the pilot in need of rescue and the submarine coming to the rescue. Like any concept, experience guided its evolution as each new problem found a solution.

Not every submarine sent on a lifeguard mission was needed, and many commanders weighed the time used on lifeguard duty versus the time that they could have used to attack Japanese shipping. Some of them may have felt cheated, while others may have felt that they were there only as a precaution.

The 504 airmen who were rescued were surely glad they were rescued. The submarine force also had the gratitude of the countless other pilots and crew who had not needed their assistance, but who were made more confident in flying their missions knowing they were there—just in case.

Admiral Lockwood praised the submarine force. “This outstanding performance of lifeguard duty by our submarines,” he said, “has been a very important factor in giving a reasonable assurance of rescue to our flyers.”

These actions are not forgotten, and good deeds are rewarded. Between September 2, 1944, and January 20, 1989, Lt. (jg) George H. W. Bush came home, became a successful businessman, got involved with politics, and was elected President of the United States. He was able to express the gratitude that probably every pilot and aircrew wished they could express to the submarine crews that rescued them from an uncertain fate.

At Bush’s invitation, the remaining officers and sailors who had been aboard the USS Finback on her 10th War Patrol the day they plucked him out of the water walked with him in his inauguration parade in January 1989.

After being rescued, all the “zoomies” were also able to contribute both to the war effort and to their families and communities when they returned home. The crews of lifeguard submarines deserve acknowledgment in being instrumental in giving those people a second chance.

When I was in high school, George H. W. Bush was elected President of the United States. My father, Cephas T. Patch, became quite agitated a few weeks before the inauguration because he had read in the paper that they were going to include former crew members of his submarine, the USS Finback, but only those who were onboard during the 10th War Patrol. He had literally missed Bush by nine days (give or take a day for the International Date Line) when Bush was deposited on Midway on September 29, and my father was received aboard the Finback on October 7 at Pearl Harbor.

Keeping this story in my mind over the years, I chose to investigate lifeguard missions as a topic for a paper during my master’s degree program. The primary sources of Theodore Roscoe’s book U.S. Submarine Operations during World War II and Adm. Charles Lockwood’s book Zoomies, Subs and Zeroes provided the outline for the evolution of lifeguard missions. Additionally, my independent research on the USS Finback in Samuel Morison’s History of U.S. Naval Operations during World War II led me to the “pre-lifeguard” missions.

The primary sources for researching this topic were the submarine war patrol reports, operational orders, and plans; World War II Command Files; and the administrative files of the Commander-in-Chief, Pacific Fleet (CINCPAC) and Commander, Submarine Forces, Pacific (COMSUBPAC). The submarine war patrol reports can be found at the National Archives in College Park in Record Group 38, Records of the Chief of Naval Operations, and in Record Group 313, Records of Naval Operating Forces. They are a great resource into the application and experience of submarine warfare between the chronology of events and the evaluation of equipment and crew while on patrol.

Record Group 38 contains the operational orders and plans, the World War II submarine war patrol reports, the World War II action reports and other operational records, and the World War II Command Files. The operational orders and plans provided information on what naval commanders wanted to happen and how they thought it should be done. This helped illustrate the evolution of lifeguard missions. Record Group 38 holds the submarine war patrol reports and other submarine operations during World War II, which provided the stories of valor and heroism on the part of the Submarine Force, Pacific to rescue downed pilots by putting themselves into harm’s way. The patrol reports gave insight to the thoughts and feelings of the commanding officers of the submarines on duty, for better or for worse.

Within the World War II Command Files in the portion relating to the Commander-in-Chief, US Fleet was the April 1945 Monthly Historical Summary of Submarine Operations, and the Submarine Tactical Bulletin No. 8. April 1945 monthly summary gave a detailed description on the devices used to assist pilots to get rescued. The tactical bulletin gave a description of Lockwood’s point of view on the diverse missions that submarines can perform beyond sinking enemy ships.

The records of Naval Operating Forces, also known as the Flag Files, are a great resource for understanding the commanders at various levels within the chain of command, especially CINCPAC and COMSUBPAC for the topic of lifeguard missions.

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