

PANAMA IN WORLD WAR 2



PART 14 – THE YAMAMOTO PLAN TO ATTACK THE CANAL

As has been mentioned, there had been fears from before the war that the Japanese could have launched an attack on the Canal using aircraft carriers, something that the attack on Pearl Harbor in December 1941 did nothing to dispel. While the fear of such an attack diminished during the war, as the tide of war swung against the Japanese¹, there was in fact a definite Japanese plan to attack the Canal using aircraft, but not using aircraft carriers².

In 1942, after the losses incurred in the Battle of Midway, the Imperial Japanese Navy lacked the capability to launch a major attack on the Canal using its aircraft carriers. Therefore, its commander, Admiral Yamamoto, instead proposed a plan to carry out an attack using

¹ In fact, the only (relatively) successful attack on the Americas by Japan involved, in an effort to bolster morale following the Doolittle air raid on Tokyo, plans for the use of balloons laden with high-explosive and incendiary bombs against US territory. The Fu-Go project called for sending bomb-carrying balloons from Japan to set fire to the vast forests of the US, in particular those of the Pacific Northwest. It was hoped that the fires would create havoc, dampen American morale and disrupt the US war effort. It was originally intended to launch these balloons from submarines stationed offshore but, when this proved to be impracticable, they were released from Japan itself – with some 9,000 eventually launched, but only a small percentage of them ever reaching the North American continent the first being reported in November 1944:

<https://www.npr.org/sections/npr-history-dept/2015/01/20/375820191/beware-of-japanese-balloon-bombs> and https://fas.org/irp/ops/ci/docs/ci2/2ch1_b.htm#ciops

² <https://www.historynet.com/japans-panama-canal-buster.htm>

aircraft carried by submarine instead. The War Ministry approved the plan and in December 1942 it issued orders for the construction of 18 very large submarines, the I-400 Class³.

The carriage of aircraft by submarines was not a new idea, the French and British had both built aircraft-carrying vessels – the British having abandoned them after accidents⁴. The Japanese had even used a smaller aircraft-carrying submarine to make an attack on the US west coast in 1942⁵, and had by 1942 a fleet of 11 such vessels. However, the much larger I-400 class was intended to carry 3 monoplane floatplanes in a sealed tube-shaped container on the foredeck, in addition to having a gun and torpedo armament.

However, by mid-1943 circumstances had changed, and support for the Yamamoto plan had reduced (and he had been killed in April 1943). By then 6 hulls had been laid down, but the Navy decided that no more I-400 would be begun. Of those which were in construction, one (I-402) was to be completed as a supply/tanker submarine, and only 2 other vessels (I-400 and I-401) were to be fully completed in their original proposed form – although work on the I-403, I-404 and I-405 began in 1944, with the building programme for the vessels being eventually formally cancelled in March 1945 – but by then construction of I-403 and I-405 had been suspended, and the I-404 was destroyed in an aircraft attack in 1945 when 90% complete and having been launched.

Hence, only the I-400 and I-401 were available for the planned attack on the Canal, they having been completed in December 1944 and January 1945 - the I-402 only being ready for operation as the war ended.

The eventual final plan called for the 2 large submarines to be accompanied by 2 of the smaller B1-type vessels, of the type which had made the earlier attacks on the US (but

³ 400-feet long, 5,220 tons displacement. It could travel 37,500 nautical miles at 14 knots while surfaced, equivalent to going 1½ times around the world without refuelling. See also: <https://www.stripes.com/news/researchers-unravel-the-mystery-of-japan-s-400-foot-aircraft-launching-submarine-1.258067>

⁴ As mentioned elsewhere, the Free French submarine *Surcouf*, lost while *en route* to the Canal in 1942, also included a scout aircraft as part of its equipment.

⁵ A B1-class submarine, of 2,584 tons displacement, the I-25 used a E15K floatplane which dropped bombs on two occasions, setting fire to forests in Oregon.

adapted to carry 2 floatplanes, rather than the normal single aircraft). The aircraft to be used in the attack was to have been the M6A1 Seiran, a 2-seat, twin-float, single-engine monoplane, of greater capability than the biplane type used in the attacks on Oregon.

Each of the I-400 Class had a watertight hangar on deck, capable of accommodating up to 3 M6A1. These could be launched using a 26-metre long compressed-air catapult mounted on the forward deck. It was said that a well-trained crew of 4 men could roll out an M16A1 on



a collapsible catapult carriage, attach the plane's floats and have it readied for flight in approximately 7 minutes.

Aichi M6A Seiran

The first prototype Seiran flew in November 1943, with production begun in early 1944, and the first operational example was ready in October 1944. A pilot-trainer version with a retractable wheeled undercarriage was also developed⁶.

In January 1945, the 2 I-400 Class began their shakedown cruises and catapult-launch training. Trials established that a notional maximum bomb or torpedo load of 800 kg could be carried by the M16A1. Operational training was scheduled to begin in April 1945.

The exact details of the plan to attack the Canal are not known. However, it seems that a total of 10 M16A1 were intended to be used, 6 with torpedoes and 4 with bombs.

⁶ Aichi completed the first prototype in 1943, and the Navy ordered production to start immediately. The original production 44 aircraft was eventually reduced to 28 (including 2 M6A1-K trainers) due to the cost and war-driven material shortages, not to mention 2 major earthquakes and relentless bombing by B-29 bombers of Japan: <https://www.historynet.com/japans-panama-canal-buster.htm>

After Germany surrendered in May 1945 the need to block the Canal, and thus prevent the anticipated flow of men and materials transferred to the Pacific theatre, became even more important. However, in July 1945, the plan was cancelled, with the submarines and aircraft involved to be diverted to defence of the home islands. The vessels then set sail in July 1945 for a planned attack on US aircraft carriers, but their mission was cancelled whilst they were *en route*, and the vessels were ordered to return to Japan.

The I-400 were surrendered to the US Navy and both were sunk by it in 1946, after being studied at Pearl Harbor.



US Navy sailors watch the I-400 pass by in Japanese waters at the end of the war

It seems likely that, had the submarines reached their objective undetected, surprise would have been total, as by 1944 the capability of the Imperial Japanese Navy, in the form of its aircraft

carriers, had diminished considerably, and thus the perceived threat level similarly reduced. In fact, in December 1944, a senior US Army Air Force officer flew a P-51 fighter at low-level from one end of the Canal to the other, without being challenged or shot at.



Postwar planners determined that a successful attack on the Canal would have actually required a force of the equivalent of 4 of

the large US Navy *Midway*-class aircraft carriers, with their usual escorting fleet, and some 250 aircraft.

In May 2008, *Aviation History* magazine in the US carried an excellent article on the project, the text of which is reproduced below⁷.

Incidentally, as mentioned elsewhere, it is claimed that there was also a German plan that would have seen submarine-launched (or rather, carried by U-boats) Ju 87 Stuka aircraft used to attack the Canal, but evidence of this appears, to say the least, scanty.



Submarine I-400 being inspected by U.S. personnel

⁷ <https://www.historynet.com/japans-panama-canal-buster.htm>



From left, Japanese aircraft-carrying submarines I-400, I-401 and I-14 are moored next to the USS Proteus at Yokosuka in Tokyo Bay on September 7, 1945. Each of the I-400s could carry three Seiran bombers. (National Archives)

8



A rare photo shows I-400 with two Seirans on its deck during training in Japanese waters.

9

⁸ <https://www.historynet.com/japans-panama-canal-buster.htm>

⁹ Ibid.

JAPAN'S PANAMA CANAL BUSTER

The following is the text of a May 2008 article from Aviation History magazine, see the online version for some excellent photographs etc¹⁰

Had the Japanese deployed them earlier, I-400 submarines and the Seiran bombers they carried might have wreaked havoc on the Panama Canal and major U.S. coastal cities.

It was 7 minutes before midnight on 28 August 1945, when a large unidentified object appeared on the radar screen of USS *Segundo*, a *Balao*-class submarine on patrol south of Japan. It had been 13 days since Japan's surrender announcement, and *Segundo's* commanding officer, Lieutenant Commander S.L. Johnson, was on the lookout for remnants of Japan's naval fleet. *Segundo* was 18 days out from Midway, and except for an encounter with a Japanese fishing boat, the patrol had been uneventful.

Soon after *Segundo* changed course to intercept the blip, Commander Johnson and his men realized they were on the trail of a Japanese submarine. After tracking the sub for more than 4 hours, Johnson tired of the cat-and-mouse game and radioed for it to stop, receiving a positive acknowledgement in reply. But as *Segundo* closed in, Johnson and his crew were literally in for a big surprise.

The vessel 1,900 yards off their bow was not your average Japanese submarine; it was *I-401*, flagship of the *I-400* class known as *Sen-Toku*, or special submarines. At the time *I-400* were the biggest submarines ever built, and they would remain so for nearly 20 years after the war. The sub which Commander Johnson intercepted simply dwarfed *Segundo*.

Johnson and his men were about to discover that they'd happened upon one of the war's most unusual and innovative weapon systems. Not only was *I-401* bristling with

¹⁰ <https://www.historynet.com/japans-panama-canal-buster.htm>

topside weaponry, the submarine was also designed to carry, launch and retrieve 3 Aichi M6A1 Seiran floatplane attack bombers. In other words, *I-401* wasn't just a major offensive weapon in a submarine fleet used to playing defence — it was actually the world's first purpose-built underwater aircraft carrier.

Japan's *I-400* submarines were just over 400 feet long and displaced 6,560 tons when submerged. *Segundo* was nearly 25% shorter and displaced less than half that tonnage. Remarkably, *I-400* could travel 37,500 nautical miles at 14 knots while surfaced, equivalent to going 1½ times around the world without refuelling, while *Segundo* could travel less than 12,000 nautical miles at 10 knots surfaced. *I-400* carried between 157 and 200 officers, crew and passengers, compared to *Segundo's* complement of 81 men.

Originally conceived in 1942 to attack US coastal cities, the *I-400* submarines and their Seirans were central to an audacious, top-secret plan to stop the Allies' Pacific advance by disguising the floatplane bombers with USAAF insignia and attacking the Panama Canal. It was a desperate, *Hail Mary*-type mission to slow the American advance in the closing days of World War 2. However, when the giant subs were finished too late in the war to be effective in stemming the Allied tide, they were reassigned to attack US carrier forces at Ulithi Atoll, the launch point for a devastating air campaign against Japan in preparation for Operation Olympic, the planned invasion of the island nation.

But Commander Johnson and his men did not know any of this at the time because the US was unaware that Japan had underwater aircraft carriers and knew little about its powerful attack bombers. As a result, when Johnson got a good look at *I-401*, he marvelled at the "latest thing in Jap subs".

After *I-401* and its sister, *I-400*, surrendered in August 1945, US officials were similarly staggered by their size, long-range capability and ability to carry and launch floatplane bombers. The Allies had nothing comparable in their fleet. Had the *I-400* been built

just 6 months earlier and succeeded in their mission, they could have thrown a major wrench into the Allied advance, giving Japan valuable time to regroup and rearm.

The Smithsonian National Air and Space Museum, which has restored the last surviving Aichi M6A1, calls the *I-400*-class subs and their Seirans “an ingenious blend of aviation and marine technology”. In other words, it was a state-of-the-art sub with a similarly sophisticated plane designed to inflict serious damage.

The *I-400* boasted a maximum speed of 18.75 knots surfaced, or 6.5 knots submerged. They could dive to a depth of 330 feet, shallower than most US subs at the time, and had a draft of 23 feet — fairly deep but hardly surprising given the vessel’s size.

Nevertheless, the *I-400* were to submarines what the *Yamato*-class was to battleships. They carried Type 95 torpedoes, a smaller version of the Type 93 Long Lance torpedoes, the most advanced used by any navy in the war. The oxygen-powered 95s travelled nearly 3 times farther than the US Mark 14, carried more explosive punch, left virtually no wake and were the second-fastest torpedoes built during the war (Type 93 were the fastest). They were launched from 8 21-inch forward torpedo tubes, 4 on each side (2 upper and 2 lower). Unlike US submarines, *I-400* had no aft torpedo tubes, which could prove a shortcoming in certain situations, but topside they were all business, with a 5.5-inch rear-facing deck gun, 3 triple-barrel 25mm anti-aircraft guns on top of the aircraft hangar and a single 25mm gun on the bridge.

The most innovative aspect of the *I-400*, however, was their role as underwater aircraft carriers. Each packed 3 Seirans in a huge, 115-foot-long watertight hangar that projected from the bridge structure onto the deck. The hangar was so large that the conning tower had to be offset 7 feet to port of centerline to accommodate it. The hangar in turn was offset 2 feet to starboard to compensate for its size. A massive hydraulic hangar door opened onto a 120-foot-long compressed-air catapult that launched the Seirans. A collapsible hydraulic crane lifted the planes back on board for hangar storage. It was the unusual, bulbous shape of *I-401*’s hangar that especially captured the interest of Johnson and his men.

In a recent interview at his son's home outside Tokyo, Lt. Cmdr. Nobukiyo Nambu, who captained *I-401*, said the *I-400* were manoeuvrable for their size. "*I-401's* manoeuvrability under the sea was no different than other subs, though it had a greater turning radius on the surface", recalled the 97-year-old, who is surprisingly tall for a submarine captain and still maintains an erect bearing.

Born in 1911, Nambu is a living history lesson. Though he walks with a cane and is hard of hearing, he recently authored a successful book about his adventures aboard *I-401*. His navy career began with a scholarship to Etajima, Japan's naval academy, attending submarine school and graduating as a member of class number 62. Nambu served as the chief torpedo officer on *I-17* during the Pearl Harbor attack and later shelled Santa Barbara in February 1942, an incident that became the basis for Steven Spielberg's movie *1941*. After the war he served in Japan's Maritime Self Defense Force, achieving the rank of rear admiral.

Lieutenant Muneo Bando, Nambu's chief navigator and a sometime observer aboard a *Seiran*, remembered *I-401* as harder to navigate than a smaller sub. He said the big boat required a kilometer to stop and the crew experienced a 30-second delay in response to steering commands. But *I-400* gained a reputation for riding smoothly in rough seas due to their double hull construction — essentially 2 large steel tubes laid side by side.

The *I-400* were specifically designed as underwater aircraft carriers to support the M6A1 *Seiran*, designed by Aichi's chief engineer, Toshio Ozaki, and built in the company's Nagoya factory. The *Seiran* was intended to strike directly at the US mainland. Unlike previous submarine-based aircraft designed for reconnaissance or defensive measures, it was a purely offensive weapon built to command respect.

In the book *I-400: Japan's Secret Aircraft-Carrying Strike Submarine*, Lieutenant Tadamashi Funada, a test pilot who flew the first *Seiran* prototype, is credited with naming the aircraft. The name *Seiran* is composed of 2 Japanese words that can be translated as "storm out of a clear sky". According to the authors, Lieutenant Funada's hope was

that the bomber would gain the key element of surprise by suddenly seeming to appear out of nowhere.

Aichi completed the first Seiran prototype in the fall of 1943, and the Imperial Japanese Navy was happy enough with the result to order production to start immediately. The original production goal of 44 aircraft was eventually reduced to 28 (including 2 M6A1-K trainers) due to the cost and war-driven material shortages, not to mention 2 major earthquakes and relentless bombing by B-29, both of which damaged Aichi's Seiran factory.

Former Lieutenant Atsushi Asamura, the leader of Squadron Number 1, which was responsible for the planned attack on the Panama Canal, confirmed the difficulties surrounding Seiran production. Interviewed in his Tokyo apartment, the 86-year-old former pilot said, "The Seirans that were custom-built were of good quality, but as they scaled back production the quality became poor due to material shortages and difficult manufacturing conditions". In fact, many of the Aichi employees responsible for building the Seirans were high school students.

Nevertheless, Lieutenant Asamura, who remains fit and speaks in a strong voice, recalled the Seiran as "a good performance aircraft," confirming its reputation as streamlined and responsive, with excellent attack power. "It was a versatile plane since it was both an attack bomber and had long distance range", Asamura said, illustrating the Seiran's easy handling by holding his arms out like wings, then grabbing an imaginary stick. "But there was no big difference in how it handled a sea landing compared to other planes".

Asamura also recalled that the Seiran's liquid-cooled engine provided pilots with much better visibility than the bulkier and more common air-cooled engines in use at the time. The Atsuta 30 series 12-cylinder inverted Vee engine (Japan's version of a German Daimler-Benz DB 601A) delivered 1,400 hp, and its liquid-cooled design meant it didn't need as much warm-up time as an air-cooled engine, so the plane

could launch faster. Given the danger subs faced on the surface, this was a distinct advantage.

The Seiran featured a metal frame construction with a riveted metal fuselage and triple-blade propeller. It required a crew of 2: a pilot and an observer who sat in a tandem configuration. The observer served as radio operator and navigator, also manning the flexible rear-facing 13mm machine gun, which flipped up from a recess in the fuselage and locked into place for firing. The aircraft carried either a 551 lb bomb with its floats attached or a 1,764 lb bomb (or torpedo) without floats. The heavier ordnance meant that the pilot would have to ditch the plane upon his return, or it was a one-way suicide mission.

By necessity, the Seiran had hydraulically-folding wings similar to the Grumman F6F Hellcat's that rotated 90 degrees to ensure the aircraft fit inside its small, tubelike hangar, which was only 11 feet 6 inches in diameter. Part of the horizontal stabilizer and the tip of the vertical stabilizer also folded down to accommodate the tight fit. The plane's floats were detachable and stored separately, as were their support pylons and spare parts.

One of the key requirements of the Seiran was that it could be rolled out on a dolly, assembled by its ground crew and launched in a very short time. Reports vary on how fast this could be accomplished. According to Commander Nambu, intensive training enabled the *I-401* crew to launch 3 planes within 45 minutes. But Nambu also noted that given the rough handling the Seirans received during sea launches and landings, it was difficult to keep all 3 in good operating condition at the same time.

The Smithsonian notes the Seirans had "interesting design features built in...that ranged in engineering quality from the ingenious to the seemingly absurd". The fact that some of the floatplane's parts were painted with luminescent paint for night assembly certainly has to fall into the former category. Lieutenant Asamura claimed the Seiran cost "50 times more than a Zero to produce," and though it's not possible to confirm the exact cost, clearly they were expensive to manufacture.

Although some German and British submarines had carried reconnaissance aircraft on their decks during World War I, Japan was the only nation to use submarine-launched aircraft in WW2. At the beginning of the war, it had approximately 63 oceangoing subs, 11 carrying 1 catapult-launched reconnaissance plane each. Eventually, Japan would expand this to a total of 41 aircraft-carrying subs.

Admiral Isoroku Yamamoto, commander in chief of the Combined Fleet and architect of the Pearl Harbor attack, gets credit for the *I-400* class of submarines and its Seiran bomber, though *I-401*'s Commander Nambu says the actual idea for an underwater aircraft carrier probably originated from lower down in the command structure.

Admiral Yamamoto's vision in 1942 was for the underwater aircraft carriers to launch their Seiran attack bombers against US coastal cities such as Washington, New York, San Francisco and Los Angeles, to deliver a Doolittle-like blow to American morale. The original plan was to build 18 *I-400*-class subs, but after Yamamoto was ambushed and killed by Lockheed P-38 Lightnings in April 1943, the guiding hand behind the *I-400* was gone. Construction plans were scaled back to 9 vessels, due in part to steel shortages. Actual construction began on 5 subs but was later reduced to 3, of which only 2 (*I-400* and *I-401*) made it into service. A third, *I-402*, was converted into a fuel tanker and completed in July 1945 but never saw active duty.

Final design plans for the underwater aircraft carriers were finished by May 1942, and construction on the first sub (*I-400*) began at Kure's dockyards in January 1943. *I-401*'s construction quickly followed. By 30 December 1944, *I-400* was complete, and *I-401* was completed less than 2 weeks later. Both subs immediately deployed for their shakedown cruises.

In December 1944, the Imperial Japanese Navy organized the 1st Submarine Flotilla and 631st *Kokutai* (Air Corps), with Captain Tatsunoke Ariizumi commanding both units. The force consisted of *I-400*, *I-401* and 2 AM-class submarines, *I-13* and *I-14*, which were smaller and carried 2 Seirans each, for a total of 10 Seiran bombers. An

experienced naval officer from a distinguished military family, Ariizumi and had been in charge of the midget sub attacks at Pearl Harbor.

In March 1945, Vice Admiral Jisaburo Ozawa, vice chief of the navy general staff, toyed with a plan to use the Seirans to unleash biological weapons on a US West Coast city in revenge for the firebombing of Tokyo. The notorious Japanese Unit 731 had already conducted successful experiments in Manchuria using rats infected with bubonic plague and other diseases to kill Chinese citizens. But the operation was cancelled later that month by General Yoshijiro Umezu, chief of the army general staff, who declared, "Germ warfare against the United States would escalate to war against all humanity". Instead, the Japanese decided to target the Panama Canal. By 1945 there was little doubt among the Japanese that the war was going badly. If Germany was defeated, the Allies would be on their doorstep next. The Panama Canal was a major transshipment point for war materiel essential to the Pacific theatre. Closing it off would slow down if not stop the Allied advance, which would give Japan much-needed breathing room. As a result, the plan to attack the Canal, drain Gatun Lake and block Allied shipping made strategic sense.

Japanese engineers had helped to build the Canal, so Japan had construction plans to work from. Since Japanese carriers couldn't get close enough to attack without being discovered, the 1st Submarine Flotilla and 631st *Koku-tai* were selected for the task. The 4 submarines were to leave Japan in June 1945 and surface 100 miles off the coast of Ecuador, where they would launch their 10 Seirans at night. The Seirans, painted to resemble USAAF planes, would fly north-east over Colombia, turn west over the Caribbean, then attack from the north at dawn, torpedoing the Gatun locks. After returning to their launch point, the pilots would ditch their planes and swim to their respective subs.

Before *I-400* and *I-401* crews could begin training for the mission, however, the Japanese had to deal with a severe fuel shortage resulting from the Allies' sinking their tankers. The *I-400* did not have enough diesel to complete their mission, so *I-401*, disguised as a frigate with a false funnel, was ordered to Manchuria to get more

fuel. On 12 April, shortly after departure, it was damaged by a mine and had to return to port for repairs, but *I-400* was sent in its place and returned with the necessary fuel.

By 4 June, the sister submarines had arrived in Nanao Bay for battle training. There the crews practised speeding up the assembly of the Seirans, night catapult launches, and submerging and surfacing the submarines in preparation for launches.

“The sub’s pitching and rolling made catapult launches difficult; the navigator had to time it just right”, Lieutenant Asamura remembered. “Nevertheless, compressed air made it a smoother launch than catapults that used gunpowder”. Asamura also recalled the importance of launching against the wind to make sure the Seiran got enough lift. As a result, he said, “It could be dangerous if the wind direction changed on you during a catapult launch”.

A full-scale mock-up of the Gatun locks was constructed to practice Seiran torpedo runs, but training conditions proved extremely difficult. The *I-400* had to deal with relentless Allied bombing and strafing as well as heavily mined waters. There were not enough experienced pilots for the mission, and 2 Seirans were lost during training. In fact, only 1 pilot had the requisite torpedo experience, so it was decided the Seirans would carry a single large bomb instead of a torpedo. To ensure success, the pilots would fly their aircraft directly into the locks rather than risk inaccurate bomb drops.

Born in Osaka in 1922, Asamura now lives in Tokyo’s Nezu section in a high-rise apartment with his wife. A small, balding man, he has an interest in history and a fair understanding of English. Asamura remembered that for the pilots, “life on a submarine was 180 degrees different than flying in the air. You couldn’t tell night from day on the sub, so I never knew what meal I should be eating”. But he also noted that though they ate canned rather than fresh food, there was enough to go around, which often wasn’t the case for the Japanese army. Pilots had no duties to perform on the sub, and he recalled that crew relations were good.

Asamura said the Panama Canal mission was an open secret among *I-401*'s crew. But with the US already positioning an enormous armada of ships, aircraft and troop transports in the Pacific for the planned invasion of Japan, the Japanese navy's high command decided the Seirans should attack US carriers at Ulithi Atoll instead of the Canal.

Captain Ariizumi was disappointed that the Panama mission had been cancelled and argued the decision with his superior officers. According to Captain Zenji Orita in his 1976 book *I-Boat Captain*, Ariizumi was told, "A man does not worry about a fire he sees on the horizon when other flames are licking at his kimono sleeve!".

Asamura recalled that he was not disappointed at the change in mission objective despite the intensive preparation because he knew the situation. "I understood the importance of the Panama mission, but the US was on our doorstep and that was more imperative," he said.

I-400 and *I-401* received orders on 25 June for a two-part operation. The first phase was called *Hikari* (light). *I-13* and *I-14* were to offload 4 Nakajima C6N1 Saiun reconnaissance aircraft at Truk Island, where the planes would scout the US fleet at Ulithi and relay target information to *I-400* and *I-401*. The second part of the operation, called *Arashi* (storm), involved the 2 *I-400* launching their 6 Seirans to carry out kamikaze attacks on the US carriers and troop transports in coordination with *Kaiten* (manned torpedoes).

Fake US markings were applied to the Seirans on 21 July, and 2 days later *I-400* and *I-401* set out following separate routes to reduce their chance of discovery. The mission, however, was plagued by problems. *En route*, a Japanese shore battery accidentally shelled *I-401*, and *I-13*, carrying 2 of the Nakajima surveillance planes, was sunk, most likely by an US destroyer. Additionally, *I-400* failed to pick up a crucial radio message, which led to its missing its rendezvous with *I-401*. As a result, the attack was postponed until 25 August, giving the 2 submarines time to regroup.

I-401's Commander Nambu recalled picking up Allied broadcasts on 14 August announcing that Japan would soon surrender, but he did not believe them at the time, assuming they were either propaganda or a trick. Even when Emperor Hirohito made his 15 August radio broadcast asking the Japanese people to "endure the unendurable", the captain and lieutenant commander debated whether to continue the mission, return to Japan or scuttle the ship. Asamura said he missed the emperor's surrender announcement because he was sleeping at the time, but was not surprised that Japan had to surrender as he knew the war was going badly.

Some of *I-401*'s crew wanted to go ahead with the plan to attack US forces at Ulithi. In fact Nambu said that even after *I-401* received specific instructions cancelling the operation and ordering the submarine back to Japan, some crew members wanted to keep the submarine and become pirates instead.

Finally, *I-401*'s crew hoisted the black triangular surrender flag and on 26 August fired all of its torpedoes. The crew destroyed its codes, logs, charts, manuals and secret documents, and after punching holes in the Seirans' floats, either pushed or catapulted them into the sea. *I-400* surrendered on 27 August on its way back to Japan, and 2 days later *I-401* encountered USS *Segundo*.

Captain Ariizumi appointed Lieutenant Bando, *I-401*'s chief navigator, to negotiate the surrender of his flagship to *Segundo*, in part because Bando spoke some English. Despite the Japanese navigator's English training, however, Commander Johnson wrote in his war patrol report that he and Bando "held a doubtful conversation...in baby talk plus violent gestures".

Johnson initially responded with disbelief to Bando's assertion that *I-401* carried 200 men, stating, "This could quite possibly be an error on his part, as I think the war interrupted English instruction". But of course Bando's figure was correct. Bando remembered Captain Ariizumi becoming impatient with the surrender negotiations, preferring to scuttle the submarine and have the officers and crew commit suicide. Johnson was also concerned about the possibility of mass suicide

aboard the sub, but after some haggling, terms were agreed upon and a prize crew from *Segundo* boarded *I-401*, checked that there were no torpedoes left, chained the hatches open to prevent the sub from diving and accompanied it on its return to Japan.

At 0500 hours on 31 August, the US flag was hoisted aboard *I-401* and Commander Nambu delivered 2 samurai swords as a symbol of surrender to Lieutenant J.E. Balson, *Segundo's* executive officer and prize crew chief. Shortly thereafter, Ariizumi shot himself in his cabin with a pistol; his body was subsequently buried at sea. "It was a small boat," Asamura said. "Everyone knew the commander had killed himself". Nambu recalled that the officers and crew of *I-401* "received gentle treatment by the US Navy after the surrender". Bando noted that Johnson even invited him to visit the US after the war.

Escorted by *Segundo*, *I-401* sailed to Yokosuka in Tokyo Bay, where it officially surrendered to the US. The sub was stricken from the Imperial Japanese Navy's active duty roster on 15 September.

The *I-400* submarines only saw 8 months of service from their launch to their surrender, and the *Seirans* likely never flew in combat. But the US Navy was so impressed by the underwater aircraft carriers that it decided they merited further study. On 11 December 1945, *I-400* and *I-401* sailed with an US prize crew of 4 officers and 40 enlisted men (as well as a load of smuggled Japanese war souvenirs in *I-400's* hangar) from Yokosuka to Pearl Harbor. They were escorted by a submarine rescue vessel, and after an uneventful trip arrived in Pearl on 6 January 1946.

According to the late Thomas O. Paine, who served as executive officer and navigator during *I-400's* trip to Pearl Harbor, the absence of manuals for the *I-400* did not stop US crews from figuring out how to operate the subs because "Japanese submarine design...followed fairly standard practice". In an unpublished memoir, Paine wrote that the prize crews developed their own drawings and colour codes for *I-400's*

operating systems as well as “learned under the critical eyes of Japanese petty officers”.

Paine explained that *I-400*'s interior included a “large torpedo room, chief's quarters, radio shack, capacious wardroom featuring fine wooden cabinet work, a Shinto shrine, officer's staterooms, and a large control room”. He also described the sub's aft crew compartment as having “raised wooden decks polished like a dance floor—you took your shoes off before walking there”.

Both were extensively studied at Pearl, though the Navy never tried submerging either one. When the Soviets asked for access to the *I-400* as part of an information-sharing agreement, US officials decided to prevent them from obtaining potentially disruptive technology by scuttling the submarines. *I-402* was sunk off Japan's Goto Island in April 1946, and *I-401* was torpedoed by the submarine *Cabazon* and sunk off Pearl Harbor on 31 May. *I-400* quickly followed it to the bottom.

In March 2005, the Hawaii Undersea Research Laboratory, using 2 deep-diving submersibles, located *I-401* off the coast of Kalaheo in 2,665 feet of water. The main hull sits upright on the bottom. The bow is broken off just forward of the airplane hangar, and the “I-401” designation is still clearly visible on the conning tower. Otherwise it appears in remarkably good condition. *I-400* and *I-402* have yet to be found.

Nambu, who knows that his old submarine command has been rediscovered on the ocean floor, believes *I-401* and its *Seirans* comprised a strategic weapon. But though he feels the Panama Canal bombing mission was an objective worthy of his flagship sub, he thinks the mission would have needed to occur at least a year earlier than planned in order to be truly effective.

Some reports have suggested that the *I-400* submarines' technology was incorporated into future US submarine innovations like the Regulus sub-launched missile programme, much as Wernher von Braun's V-2 program became the backbone of

future US ballistic missile and space programmes. Though this may give the technology more credit than it warrants, the underwater aircraft carriers were clearly superior in important ways to submarines at the time.

And though Nambu is proud of what he accomplished in defence of his country, he feels Japan did not make full strategic use of submarines during World War 2. "Subs were not meant to be deployed as cargo carriers", he said, referring to the many missions in which submarines were used to provide supplies to the Japanese army on remote island outposts. "Subs were meant to attack".

Fortunately for the US, *I-401* and its Seirans never got the chance.

John Geoghegan, who frequently writes about marine and aviation adventure and exploration, is a director of the SILOE Research Institute in Marin County, California.

Additional reporting for this article was done by Takuji Ozasayama.

Further reading: *I-400: Japan's Secret Aircraft-Carrying Strike Submarine*, by Henry Sakaida, Gary Nila and Koji Takaki.

Want to add the "Canal Buster" to your collection? Build your own Seiran [here!](#)

"Japan's Panama Canal Buster" originally appeared in the May 2008 issue of Aviation History Magazine.

<https://www.historynet.com/japans-panama-canal-buster.htm>