

## Air and Space this Week

### Item of the Week

## The Silent Service (Part 1): The IJN Shinano Meets Joseph Enright

Originally appeared November 25, 2019

KEY WORDS: Enright Shinano Archerfish Silent Service

*The IJN Shinano was the largest aircraft carrier built up to that time. Aerial attacks on her home port during outfitting forced her to move and become vulnerable to submarine attack. The USS Archer-Fish under the command of Joseph Enright pursued her doggedly for many hours before sinking her, the largest single sinking of the War to any cause. The story has a lot of interesting connections, too...*

*The following dates/anniversaries/birthdays are tied to this two-part story:*

- *Sinking of the IJN Shinano*                      29 November 1944
- *Actor DeForest Kelley's birthday*        20 January 1920

*I've covered/updated this particular WWII sinking twice, with an update. The part immediately below first appeared on 11/25/2019, and was updated on 11/23/2020. There is also a Part 2 to this story, originally posted on 1/20/2020; see [here](#).*

*The Japanese built the two largest [battleships](#) in WWII, the IJN Yamato and the IJN Musashi. Both would be sunk by massed air attack late in the War. However, several sister ships were planned. Only one of these was built, but after the losses at Midway, it was converted to an aircraft carrier during the construction process, the [IJN Shinano](#). Since her hull was that of a battleship, the Japanese were hopeful she could withstand combat better than a more lightly-armored ship. Great pains were taken to conceal her existence from the Allies. She was afloat and undergoing outfitting, but still had a number of deficiencies, including a green crew and incomplete watertight integrity, by November, 1944.*

[Joseph Enright](#) had been in submarines for years (some of his contemporaries knew him as "O Boat Joe of the Oh-One-Oh" because his first submarine command was in the ancient sub, O-10). However, when WWII came, he became disheartened by long periods of combat and malfunctioning torpedoes, and requested assignment to other duty. After a rest period, during which the torpedo problem was corrected, he decided to apply for reinstatement to submarines, a request facilitated by a demonstration of steady nerves in a high-stakes poker game with the brass. He was assigned to be the captain of the [USS Archer-Fish](#) (SS-311).

Carrier aircraft and B-29s were by then attacking Japan's home islands. The location of the [Shinano](#) was deemed too exposed, so plans were made for her to make a two-day dash from Yokosuka, where she was fitting out, through Kii Suido to Kure, which had better aerial defenses. Alas, *en route* she encountered Enright.

*Shinano* was escorted by three battle-damaged destroyers. Her skipper was very concerned he would encounter a submarine wolfpack, based on the destructive activities of submarines hunting in coordination off Japan. He had no air cover, and would rely on *Shinano's* speed, very close escorting by his three battle-damaged destroyers, and random zig-zagging to evade danger.

Enright detected *Shinano* by radar. His best surface speed was slower than his target, and he could not readily gain a firing position. However, this was basically a shakedown cruise for *Shinano*, and she was not yet fully operational. A set of the main propeller bearings were a bit mis-aligned, and overheated, slowing the carrier to the *Archer-Fish's* maximum surface speed.

As *Archer-Fish* approached, it was seen by one of the destroyers, which turned to attack. Enright was on the verge of having to dive, which would cost him any chance at *Shinano*, when *Shinano's* captain ordered the destroyer back to its close escort position. Had he not done so, *Shinano* would have likely made port without damage. On such grave decisions depend deep outcomes. In this case, ocean-bottom deep.

Enright was pushing [Archer-Fish's](#) engineering plant really hard, and was able to keep up with *Shinano*, but not gain enough to be able to shoot torpedoes effectively. The chase had been going on for several hours, and Enright was getting increasingly concerned about his engines. Then the *Shinano* commenced a routine evasive zig that slowed her advance and allowed for *Archer-Fish* to get into firing range.

Submarine officers would talk tactics when in port, the Officers' Club was the favorite place for such bull sessions. During the long approach, Enright had remembered a bit of advice imparted by an experienced captain. He had said that if he ever had a crack at a large carrier, he would set his torpedoes to run shallow, in order to create holes high in the target's hull that would cause them to list heavily, and likely capsize (since aircraft carriers have a high center of gravity), rather than the proscribed depth that would hurt the carrier but the flooding would be deep, less likely to cause capsizing. So Enright ordered his ready torpedoes to be set to run shallow.

Battleships wear thick side armor to protect against shells fired from other battleships, which usually come in at shallow trajectories. They have less-well armored decks and bottom armor, otherwise they'd be too heavy. *Shinano's* hull was that of a big battleship, and the first ten feet of her hull below the waterline had armor much heavier than normal. The hull below, however, was designed to protect against torpedoes, comprising a double hull with water in between to dissipate torpedo explosions. The framing at the seam at the hull transition had horizontal H-shaped beams, with the bottom of the H holding the outer hull and the upper legs of the H anchored on the next compartment inboard.

Enright fired a full six-torpedo salvo from the bow tubes, spread to ensure that some would hit. Three or four did (reports vary), just a bit below that H-braced seam. The incompressibility of the seawater in the anti-torpedo lower hulls transmitted the impact shock very effectively against the inner hull, where the force was concentrated on the uprights of the H-shaped supports, which were punched into the next compartments inboard, which included large-volume engineering spaces. Rapid flooding ensued. The *Shinano's* captain did not realize the extent of flooding and maintained high speed to get nearer shore. The internal damage, compounded by rapid water flow and incomplete waterproofing and compartmentalization, caused the *Shinano* to capsize and sink in a few hours after the attack, early on the morning of November 29. Her captain and 1,435 of her crew and yard personnel were lost; her escorts rescued 1,080 survivors.

*Shinano* was the largest carrier built in the War, and was the largest ship sunk by subs or any other forces in the War.

Enright and the *Archer-Fish* were featured in an episode of *The Silent Service*, season 2, episode 1, which originally aired on March 7, 1958. Someone you'll recognize played Enright. Paul Hahn, who later played Major General George Treegar in "Angry Red Planet," played Enright's XO. More about this interesting TV series can be found in [The Silent Service \(Part 2\)](#), originally posted on January 20, 2020 (Kelly's 100<sup>th</sup> birthday) in the Item of the Week archive.

UPDATE: November 27, 1944: The Japanese super-sized aircraft carrier, *IJN Shinano*, sister to the largest battleships of the war (*IJN Yamato* and *IJN Musashi*) was sunk by Joseph Enright, the skipper of the *USS Archer-Fish* (SS-311). The official name, and name of the sub's namesake, is "archerfish," not hyphenated. But Enright and his intrepid crew sought a way to make their sub a bit more distinctive (as if sinking the largest target of the War wasn't enough), by altering the name of the sub in all of its reports and correspondence as "Archer-Fish." They actually got some "message penetration" with this ploy, which I honor with the spelling I use.

Since I wrote the initial version of this Item on 11/25/2019, and its second part on 1/20/2020, I've come across an interesting and poignant coda to that story, which you can see here: <http://www.ussarcherfish.com/captjoe/captjoe.htm>. The original *Archer-Fish* is long gone, but it does have a successor, the *USS Archerfish* (SSN-678); note how [this website](#) deals with the hyphen.

Enright wrote a very interesting book about his WWII career and the sinking of the *Shinano*: Enright, Joseph F., with James W. Ryan, 1987, *Shinano! The Sinking of Japan's Secret Supership*, New York: St. Martin's Press, ISBN 0-312-90967-5.

One of Enright's obituaries: <http://www.mishalov.com/Enright.html>

Don't miss [Part 2](#) of this story – it has a lot of interesting connections!

Last Edited on 23 November 2020