

# ***SCUTTLED SUPERCARRIER***



## **NNS Hull #486 ~ USS UNITED STATES (CVA-58)**

Of all the nation's aircraft carriers, one that was tentatively named the USS UNITED STATES had, by far, the shortest 'life' of all. She went from keel laying to cancellation in less than a week! Once hailed as the world's first 'supercarrier', she is now only a footnote in Naval Aviation history. But she served, nevertheless. During the process of creating her design, Navy and Newport News Shipbuilding & Dry Dock Company (NNS) designers developed numerous concepts that later were incorporated in the FORRESTAL-Class and all follow-on supercarriers.

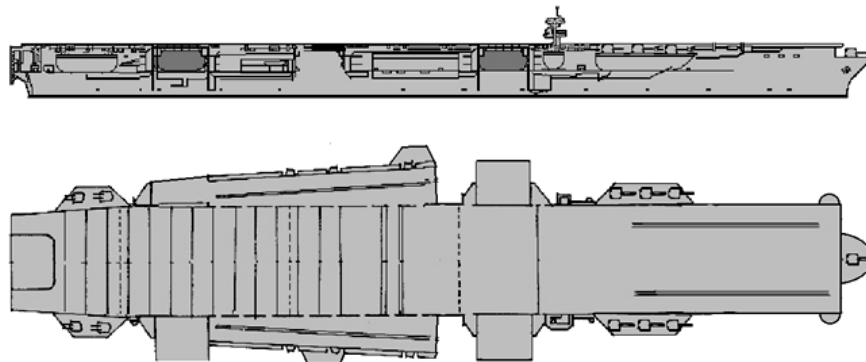
At the end of World War II, jet-propelled bombers capable of carrying early vintage nuclear weapons were being developed and introduced into the United States Navy. Their size, weight and take-off/landing minimum requirements resulted in the Navy's newest carriers, the MIDWAY-Class, being considered marginal to operate such aircraft.

Time constraints precluded lessons learned from carrier operations in the Pacific from being fully integrated in the MIDWAY-Class design. The three carriers of that class were larger, but retained many features of the mass-produced ESSEX-Class carriers of World War II. The 'as-built' Midways had a deck-edge elevator plus two more located on the vessels' centerlines. They initially had axial (i.e., 'straight-through') flight decks, rather than now-familiar angled (or 'canted') flight decks. Originally, they had two hydraulic catapults that could not launch 1940's vintage aircraft carrying heavy nuclear bombs.

With the help of NNS designers who had developed almost all the prior classes of aircraft carriers, the Navy began to create an entirely new carrier in 1947. In early 1948, a preliminary design for a vessel capable of launching and recovering jet aircraft weighing as much as 100,000 pounds was announced. Dubbed 'supercarrier', this postwar carrier design featured a flush-deck ship over a 1,000 feet long and displacing 65,000 tons.

On July 29, 1948, President Truman approved construction of five carriers of this new design. A contract was awarded to Newport News Shipbuilding on August 10<sup>th</sup> for construction of the lead ship of this projected class of supercarriers. NNS Hull #486 was assigned and detail design work commenced. The name selected for CVA-58 followed navy protocol then in vogue for naming carriers after American battles and famous former naval vessels. The first USS UNITED STATES was one of the original six American-built frigates, and a sister ship to the more famous USS CONSTITUTION.

CVA-58 late 1940's design was a radical one, as the following drawing indicates. She was a curious combination of World War II-influenced carrier design and futuristic, yet unproven ideas intended to permit her to launch and recover aircraft weighing 100,000 pounds that could carry nuclear weapons which then weighed as much as five tons each.



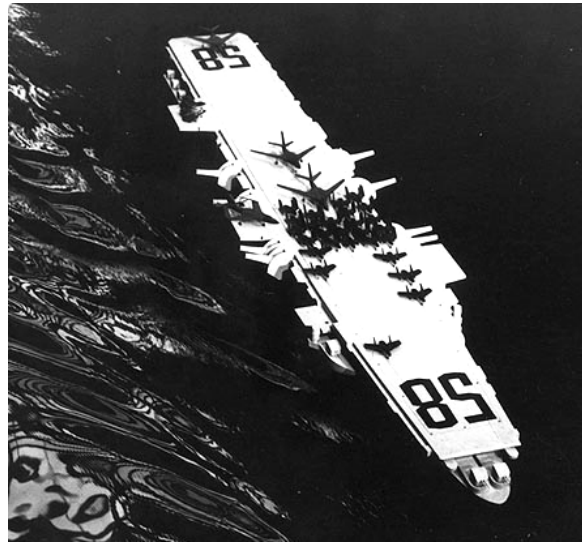
Early design discussions included debate about the carrier's primary mission. Nuclear attack advocates wanted a design suitable for supporting heavy bombers, with a small hangar deck, a limited number of fighters and a small magazine for a few heavy nuclear weapons. Navy personnel experienced in carrier combat operations wanted the ship built with a conventional attack capability, including a large hangar deck to support an entire air wing and multiple magazines for storage of a wide array of weapons. The nuclear attack supporters initially won, but the design was modified to carry more fighters.

The initial configuration did not include an island. Later, a small island was incorporated into the design; one that was to be mounted on its own elevator and capable of being lowered to clear the flight deck. Four 'deck edge' aircraft elevators were incorporated into the design, although one of them was positioned at the very stern instead of to port or starboard. Four catapults were specified, albeit located in an unusual configuration. Numerous anti-aircraft weapons were specified, reflecting World War II experience.

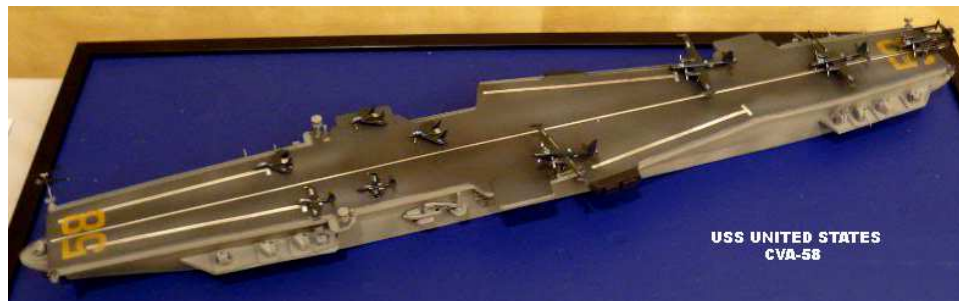
Following are the principal characteristics developed for CVA-58. The many similarities with follow-on classes of supercarriers are obvious:

- Length overall:** 1,090 feet ~ **Beam:** 190 feet (flight deck); 130 feet (hull)
- Draft:** 37 feet ~ **Displacement:** 68,000 tons (standard); 83,350 tons (full load)
- Speed:** 33 knots ~ **Aircraft:** 12-18 nuclear capable bombers, 54 jet fighters
- Armament:** Eight 5 inch/54 caliber guns; numerous smaller caliber weapons
- Complement:** 3,019 ship's crew plus 2,480 air wing personnel
- Propulsion:** Eight 1,200 psi boilers; four steam turbines, each rated at 70,000 SHP

No island structure meant there was no conventional way to exhaust boiler gasses clear of flight deck operations. Two concepts were apparently considered. This image shows a preliminary design model of CVA-58 during sea-keeping tank tests in late 1947. The eight stick-like objects, four to a side, improbably protruding outboard were identified as individual boilers' exhausts, similar to the rotating design utilized in RANGER (CV-4); the shipyard's first aircraft carrier. Apparently resurrection of this idea was discarded when large flight deck sponsons were incorporated into the vessel's design.



Later conceptual design drawings show much smaller, fixed boiler exhaust points embedded in midships flight deck sponsons on both sides, as this highlighted detail reveals. An early model of the proposed supercarrier also reflects this feature, plus it shows the relative size of a naval aircraft being developed at the same time, capable of delivering early vintage nuclear weapons. The wing span of that projected bomber was 110 feet, making it abundantly clear why a flush-deck design was considered so important.



Officially, CVA-58 and her sister ships were classified as being able to provide tactical air support for air and amphibious forces, and to conduct sea control operations. But the general perception was that they were primarily intended as platforms for long-range nuclear bombardment. The Air Force viewed the design as proof of the Navy's aspirations to challenge the Air Force's monopoly on strategic nuclear weapons delivery. The cost of the five projected carriers, estimated at \$190 million each, was making it difficult to find funding for the Air Force's new intercontinental bomber under development in the late 1940's.

As a result, in-fighting amongst the nation's armed services continued and even increased, despite Congressional support of the supercarrier concept. At one point, the majority of the Joint Chiefs of Staff maintained that the ships' main function would be a duplication of a primary role of the Air Force. James Forrestal, first Secretary of Defense and a former Secretary of the Navy vehemently disagreed.

This dispute, plus others in which President Truman and Forrestal had strong differing opinions about the necessity to maintain a strong navy led to Forrestal's forced resignation in March of 1949. Truman picked Louis Johnson, a political crony to replace Forrestal. Johnson's extreme bias against the Navy was crystallized by this statement, made shortly after he became the second Secretary of Defense:

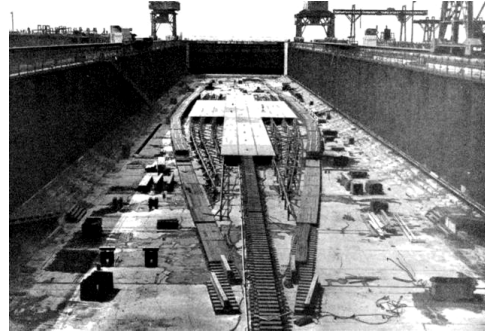
*"The Navy is on its way out. There's no reason for having a Navy and a Marine Corps. We'll never have any more amphibious operations. That does away with the Marine Corps. The Air Force can do anything the Navy can, so that does away with the Navy".*

Johnson soon underscored that opinion by proposing drastic budget cuts for the Navy. Alarmed, Navy brass asked NNS to expedite the keel laying for CVA-58. This 'hurry-up' and seemingly symbolic act was conducted on Easter Monday morning, April 18, 1949. Instead of customary double bottom sub-assemblies, the keel for NNS Hull #486 consisted of just several bottom plates. There was no official ceremony. The event was witnessed by just a few workmen and the shipyard's photographer.



The Navy may have won a tactical victory that day, but just six days later, the Air Force won a much greater strategic victory (and boasted of 'sinking' a carrier). Without consulting Congress, Defense Secretary Louis Johnson ordered cancellation of the USS UNITED STATES on April 23, 1949 and diverted CVA-58 funding to the B-36 bomber program. A last photo of the scuttled supercarrier was published in the March-April, 1949 issue of the *Shipyard Bulletin*, with an uncharacteristic pithy caption:

*“View of Shipway 11 showing 19 assemblies in place for the Aircraft Carrier UNITED STATES. Laid on Easter Monday, these plates symbolically formed a perfect cross.”*



But that was not the end of the story. The Defense Secretary's actions prompted the immediate resignation of Navy Secretary John Sullivan. Predictably, Congress held hearings in the summer of 1949. Those hearings included examination of a draft budget for Fiscal Year 1951 that called for further deep cuts in naval aviation. The Navy used that forum to fight back. Several admirals strenuously and publicly objected. Their presentations made to Congress were called “The Revolt of the Admirals”. Their actions cost the Chief of Naval Operations his job, but carrier-based naval aviation was saved.

However, a more ominous, albeit less publicized development was Johnson's steady reduction of force in Navy ships, landing craft, and equipment needed for conventional force readiness. The folly of that policy soon became obvious when the Korean War broke out on June 25, 1950. As the United States scrambled to mobilize a response, Johnson received much of the blame for the initial setbacks in Korea and the widespread reports of ill-equipped and inadequately trained U.S. forces. President Truman was forced by public opinion to call for his friend's resignation in mid-September, 1950.

Mothballed World War II carriers were quickly pressed back into service and performed admirably as war raged up and down the Korean peninsula for the next several years. Once again, naval aviation proved its worth in a conventional conflict. The Navy resumed the fight for modern carriers to be designed and built, and with strong political support revamped their supercarrier plans.

On July 12, 1951, an order for CVA-59 was placed with Newport News Shipbuilding. The name assigned to that vessel...FORRESTAL...posthumously honoring the first Secretary of Defense whose health failed him under the stress of his efforts to maintain a strong military deterrent for the United States.

The keel for NNS Hull #506 was laid a year and two days later in Shipway #11. Less than 51 months after contract award, the USS FORRESTAL left Newport News to enter the fleet. Over time, fourteen more supercarriers were designed and constructed by Newport News Shipbuilding. A 15<sup>th</sup> one is under construction.

The scuttled supercarrier's trail-blazing efforts have been vindicated.

## Postscript ~

Although still in grammar school at the time, I remember vividly the widespread disappointment and anger voiced throughout the Newport News community when CVA-58 was scuttled. Little did I know then that the first ship I would work on when entering the Apprentice School in 1954 would be the FORRESTAL. In the winter of 1954/55, I worked on her wind-swept flight deck and in unheated gallery deck spaces.

The following summer, I spent a great deal of time in the ship's machinery spaces, where heat and humidity were magnified by dockside testing of her boilers and engines. During noon hours, I usually consumed the contents of my black lunch pail and then napped in the shade on this gun sponson, using rags as a pillow. That was one of the many 'tricks of the trade' I learned during my brief sojourn as a waterfront apprentice.



Occasionally, someone asks me something about the 'USS UNITED STATES', mistakenly meaning to inquire about the world-famous liner of the same name that was built as NNS Hull #488. I patiently (well, most of the time) explain the difference between a United States Ship (USS) and a Steamship (SS). In a further effort to impart knowledge, I try to explain why the name UNITED STATES was used for a passenger ship. It had nothing to do with the scuttled supercarrier; it was an obvious choice to replace the NNS-built liner AMERICA as the United States Lines' flagship.

That explanation is usually greeted with various forms of thinly-veiled disbelief.

You'd think, by such a reaction that shipbuilders have a reputation for telling tall tales!

Next time, I'll just hand over a copy of this article...

*Bill Lee*