



# SAN DIEGO SHIP MODELERS GUILD

**Ship's Name:** USS HENRY B. WILSON (DDG 7)

**Model Builder:** Frank Dengler

## 1. Ship's History

a. Type/Class: Guided Missile Armed Destroyer / CHARLES F. ADAMS (DDG 2)

b. Namesake: ADM Henry Braid Wilson, Jr. (1861 - 1954) of Camden, NJ, was Commanding Officer of the battleships USS NORTH DAKOTA (BB 29) and USS PENNSYLVANIA (BB-38), and, during World War I, was Commander, Patrol Forces, Atlantic Fleet and U.S. Naval Forces, France. After the World War he was Commander-In-Chief, Atlantic Fleet, Commander-In-Chief U.S. Battle Fleet, and Superintendent of the U.S. Naval Academy.

c. Shipbuilder & Location: Defoe Shipbuilding Company, Bay City, MI

d. Date Commissioned/In-Service: 17 December 1960

e. Characteristics: Displacement: 4,526 full load, Length: 437 ft, Beam: 47 ft, Draft: 15 ft, Propulsion: 4 Babcock & Wilcox 1,275 psi boilers, 2 General Electric steam turbines, 2 5-bladed propellers, 70,000 shaft horsepower (shp), Speed: 33 knots (38 mph), Complement: 24 officers, 330 enlisted, Sensors: AN/SPS-39 3D air search radar, AN/SPS-10 surface search radar, 2 AN/SPG-51 missile fire control radars, 1 Mark (Mk) 68 Gunfire Control System (GFCS) with AN/SPG-53 radar, AN/SQQ-23 Pair Sonar, Armament: Mk 11 Missile Launcher for RIM-66 Standard (SM-1) and later RGM-84 Harpoon Anti-ship Missiles, 2 Mk 42 5"/54 Gun Mounts, 1 Mk 112 Anti-Submarine Rocket (ASROC) launcher, 2 Mk 32 Triple Torpedo Tubes for Mk 46 Anti-Submarine Warfare (ASW) homing torpedoes. .

f. Operations:

HENRY B. WILSON was christened with a bottle of Great Lakes, Saint Lawrence River, and the Atlantic Ocean water and side-launched into the Saginaw River, a tributary of Lake Huron. After shakedown in the Caribbean she proceeded to San Diego in May 1961, becoming the first DDG home ported there. After tests, type training, and exercises, WILSON deployed to the Western Pacific (WESTPAC) for duty with the U.S. Seventh Fleet from 6 January to 19 July 1962. This and subsequent deployments typically involved Anti-Air Warfare (AAW), ASW, gunnery, and pilot rescue duties and exercises. WILSON's second WESTPAC with the carrier USS KITTY HAWK (CV 63), another new ship having been commissioned 29 Apr 1961, began 17 October 1963 and continued until 16 April 1964.

The firefight between North Vietnamese patrol craft and the USS MADDOX (DD 731) that precipitated the Vietnam Conflict occurred 2 August 1964. During the deployment that began 4 June 1965, WILSON became flagship for Destroyer Squadron (DESRON) 21, which originally included destroyers involved in fighting around Guadalcanal and, as a result, retained the motto, "Solomons Onward." In addition to Anti-Air Warfare (AAW), ASW, gunnery and pilot rescue duties and exercises typical of previous deployments, WILSON conducted Naval Gunfire Support (NGFS) of U.S. Marine Corps (USMC) and U.S. Army units and shore bombardment from the Tonkin Gulf against North Vietnamese Army (NVA) and Vietnamese Communist or Viet Cong (VC) in defense of the Republic of Vietnam (RVN). WILSON returned to San Diego 24 November 1965.

In 1975, WILSON participated in Operation Eagle Pull, the evacuation of Phnom Penh, Cambodia and Operation Frequent Wind, the evacuation of U. S. and allied South Viet Nam. WILSON, along with the frigate USS HAROLD E. HOLT (FF 1074), USMC, and U.S Air Force units, participated in the 12 to 15 May 1975 recovery of the hijacked container ship SS MAYAGUEZ, owned by the SeaLand division of the Maersk Group headquartered in Miramar, FL, and its crew from "Khmer Rouge" members of the Communist Party of Kampuchea (CPK) that took over Cambodia earlier in the year and ultimately murdered up to 3 million people or approximately 25% of Cambodia's population.

WILSON's remaining peacetime deployments 10 August 1976 to 21 March 1977, 8 August 1979 to 14 February 1980, (CDR Frank Dengler, USN, was Executive Officer April 1980 to November 1981) 27 February to 21 September 1981, 16 March to 2 October 1984, 15 September 1986 to 14 March 1987, and 2 December 1988 to 1 June 1989 involved

typical activities described above, but also included coming to the aid of distressed merchant ships and yachts, responding to Russian, Chinese, and North Korean ship, submarine, and aircraft activities, and making port visits to promote good relations with Australia, Japan, South Korea, Taiwan, and the Philippines. The final deployment extended into the Indian Ocean.

g. Fate HENRY B. WILSON was decommissioned 2 October 1989 and sold to Consolidated Minerals Inc. of Leesburg, VA for conversion to an electric power generation barge 15 April 1994. This sale was voided 23 March 1999 and the ship was resold 6 April 2002. WILSON was re-acquired by the U. S. Navy and sunk as a target ship 15 August 2003.

h. Awards: Combat Action Ribbon, Navy Unit Commendation, 5 Meritorious Unit Commendations, 2 Battle Efficiency Ribbons, National Defense Service Medal, 5 Armed Forces Expeditionary Medals, Vietnam Service Medal, Sea Service Deployment Ribbon, 2 Humanitarian Service Medals, Republic of Vietnam Meritorious Unit Citation Gallantry Cross with Palm, Republic of Vietnam Campaign Medal



Starboard Bow View of USS HENRY B. WILSON (DDG 7) 1980-81.



Starboard Beam View of USS HENRY B. WILSON (DDG 7) 1980-81.



Discarded DDG-7 Ensign



DDG-7 Bridge Ribbons Bought from Consolidated Minerals Inc

## 2. Model

a. Materials: Carved basswood, cast resin, plastic, cast Britannia Metal (Copper, Lead, Tin Alloy)

b. Scale: 1:192

c. Era & Configuration Depicted: 1980-82

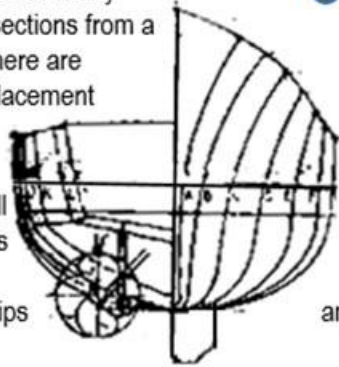
d. Model Construction Period: ≈12 months

e. Techniques: There is no 1:192 scale kit to build a DDG-2 Class destroyer model. The relatively dramatic flare (angle at which a ship's side departs from the vertical in an outward direction) and sheer (longitudinal main deck curvature typically increasing in height above the waterline from aft to forward) to cleave head seas and increase buoyant volume if/as the bow plunges make scale reproduction complex. The following diagram depicts an "Interior Template Hull Shaping" solution to this problem.

f. Issues & Solutions: I was fortunate enough to have a DDG-2 Class plan by former Philadelphia Navy Shipyard design engineer Ed Wisswesser. Ed died at age 100 in 2018 so if you can't find a plan for the type of ship you want to build on eBay.com, try floatingdrydock.com/, www.windjammer-arts.com/, or <https://www.taubmansonline.com/WISWESSERHEADER.htm>. Even if you can't find plans in the scale you want, you can enlarge or shrink the plans you obtain using a photo-copy machine.

- 1 Copy twice as many half hull sections from a plan as there are section placement notes on the keel

Half hull sections aft to amidships

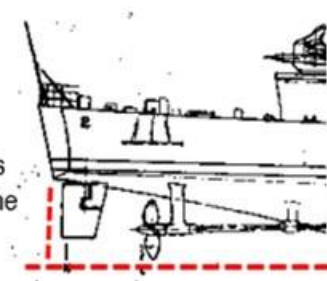


- 2 Paste the port & starboard sections to thin plywood and cut the half sections out minus a 1/8" strip on the hull centerline side.

Half hull sections bow to amidships

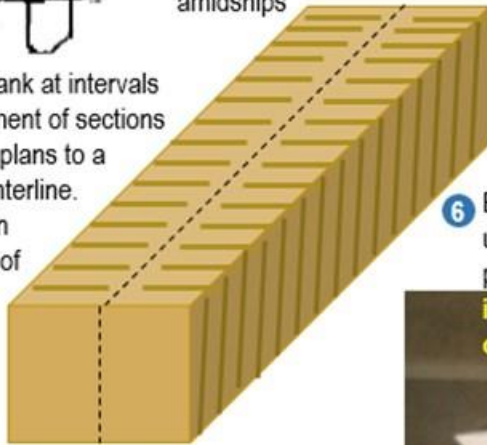


- 3 Add an thin inboard "strut" equal to the distance from the bottom of the sections nearest the stern to the keel. Color the half section edges red.

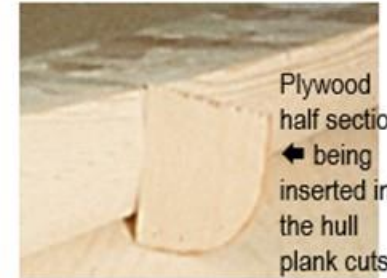


- 4 Cut a hull size basswood plank at intervals corresponding to the placement of sections per keel notations of model plans to a depth equal to 1/8" from centerline.

Glue a copy of the deck plan to the plank top and a copy of of the hull profile to the plank side (not shown). The saw blade cut should be just wide enough to allow the thickness of the plywood to be inserted in the cuts with plank to plywood contact.



- 5 Coat the cut out plywood cross sections with slow drying wood glue. Insert them in the cuts in the wood plank corresponding to each section's location along the keel. Most sure section bottom edges align to the bottom of the plank and they're fully inserted.



Plywood half section ← being inserted into the hull plank cuts.

- 6 Band saw around the deck plan. Leave one cut-away piece under the plank rotated on its side. Band-saw just above the profile main deck sheer line and under the raised stern until it

**intersects the keel . Sand the plank down to the red edges of the inserted half sections.**



## Interior Template Hull Shaping



Starboard Beam View 1:192 Model of USS HENRY B. WILSON (DDG 7)



Overhead View 1:192 Model of USS HENRY B. WILSON (DDG 7)