

# WELCOME ABOARD



## USS SAN FRANCISCO (SSN 711)

KEEL LAID:	MAY 26, 1977
LAUNCHED:	OCTOBER 27, 1979
COMMISSIONED:	APRIL 24, 1981

*SPONSORED BY*  
**Mrs. Robert Y. Kaufman**

Length:	360'
Beam:	33'
Surface Displacement:	6,200 tons
Submerged Displacement:	6,900 tons
Maximum Depth:	In excess of 400'
Maximum Speed:	In excess of 20 knots
Armament:	Four 21" torpedo tubes
Crew Complement:	12 Officers and 120 Enlisted

USS SAN FRANCISCO (SSN 711) is the thirteenth ship in the Navy's most modern class of nuclear powered fast attack submarines. From the laying of the keel at Newport News Shipbuilding and Drydock Company on 26 May 1977 through her final sea trials, SAN FRANCISCO has been fitted with the newest and most sophisticated propulsion and weapons system available so that she may perform her assigned mission of task force support and anti-submarine warfare. The ship has an overall length of 360 feet, a beam of 33 feet and a submerged displacement of 6,900 tons.

SSN 711 is the third U.S. Navy fighting ship to carry the SAN FRANCISCO name. The first SAN FRANCISCO, a steel protected cruiser, was launched on 26 October 1889 at Union Iron Works in San Francisco and commissioned the following year. Initially assigned to the South Pacific Squadron, the cruiser became the squadron's flagship and served with the other vessels as the unofficial international "police force" patrolling the South American coastline and Hawaii. SAN FRANCISCO entered Norfolk Navy Yard in 1904 to be outfitted as a mine planter. With the 1917 entry of the United States into World War I, the SAN FRANCISCO laid anti-submarine nets in the Hampton Roads area until the Armistice in 1918. Subsequently inactivated, she was designated CM-2, renamed TAHOE, then YOSEMITE to allow the name SAN FRANCISCO to be given to a heavy cruiser, CA-38, then under construction.

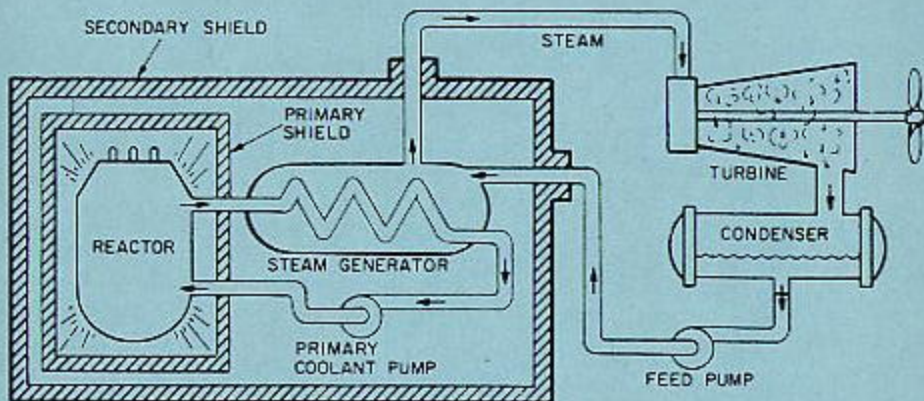
CA-38, the second SAN FRANCISCO, was launched on 9 May 1933 and commissioned the following February at the Mare Island Navy Yard, Vallejo, California. Prior to World War II SAN FRANCISCO served on the neutrality patrol. While being overhauled at the Pearl Harbor Navy Yard, SAN FRANCISCO escaped damage during the Japanese attack on December 7, 1941, and later played vital roles during the Battle of Midway and Cape Esperance. At Guadalcanal, SAN FRANCISCO fought heroically during the battle, suffering extensive damage and losing 77 of her crew, including Rear Admiral Callahan and Captain Young while wounding 105 other crewmembers. The ship received the Presidential Unit Citation for her Guadalcanal actions. SAN FRANCISCO later participated in a final show of force in the Gulf of Pohai, which led to the surrender of the Japanese naval forces in Korea. The CA-38 was decommissioned on 10 February 1946 after earning 17 battle stars.



## SUBMARINE NUCLEAR PROPULSION PLANT

The power plant of a nuclear submarine is based upon a nuclear reactor which provides heat for the generation of steam. This, in turn, drives the main propulsion turbines and the ship's turbo-generators for electric power.

The primary system is a circulating water cycle and consists of the reactor, loops of piping, primary coolant pumps and steam generators. Heat produced in the reactor by nuclear fission is transferred to the circulating primary coolant water which is pressurized to prevent boiling. This water is then pumped through the steam generator and back into the reactor by the primary coolant pumps for reheating in the next cycle.



In the steam generator, the heat of the pressurized water is transferred to a secondary system to boil water into steam. This secondary system is isolated from the primary system.

From the steam generators, steam flows to the engine room where it drives the turbo-generators, which supply the ship with electricity, and the main propulsion turbines, which drive the propeller. After passing through the turbines, the steam is condensed and the water is fed back to the steam generators by the feed pumps.

There is no step in the generation of this power which requires the presence of air or oxygen. This fact alone allows the ship to operate completely independent from the earth's atmosphere for extended periods of time.

During the operation of the nuclear power plant, high levels of radiation exist around the reactor, and personnel are not permitted to enter the reactor compartment. Heavy shielding protects the crew so that the crew member receives less radiation on submerged patrol than he would receive from natural sources ashore.



The ship's emblem is truly representative of both the city and ship SAN FRANCISCO. The miner and mariner were borrowed from the city's seal to honor the namesake city. The city's great motto, Oro en Paz — Fierro en Guerra, which means Gold in Peace — Iron in War, is especially appropriate as it reflects the strong purpose of the city, her people, and the ship and her crew. The submarine portrays the present ship and the anchor represents both the Navy and the city. The two previous naval ships named SAN FRANCISCO are represented by stars and includes the Presidential Unit Citation colors for the World War II Cruiser's (CA-38) heroic efforts during the Battle of Guadalcanal.

The emblem is a composite of many drawings submitted by the people of the San Francisco Bay area. The most significant input that formed the basis of the ship's emblem was submitted by Mr. Vincent M. Cresci of San Francisco. It was his drawing that utilized the city's seal as the dominant theme for the emblem of USS SAN FRANCISCO.

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**USS SAN FRANCISCO (SSN 711)**

**NUCLEAR POWERED ATTACK SUBMARINE**

**BUILT BY**

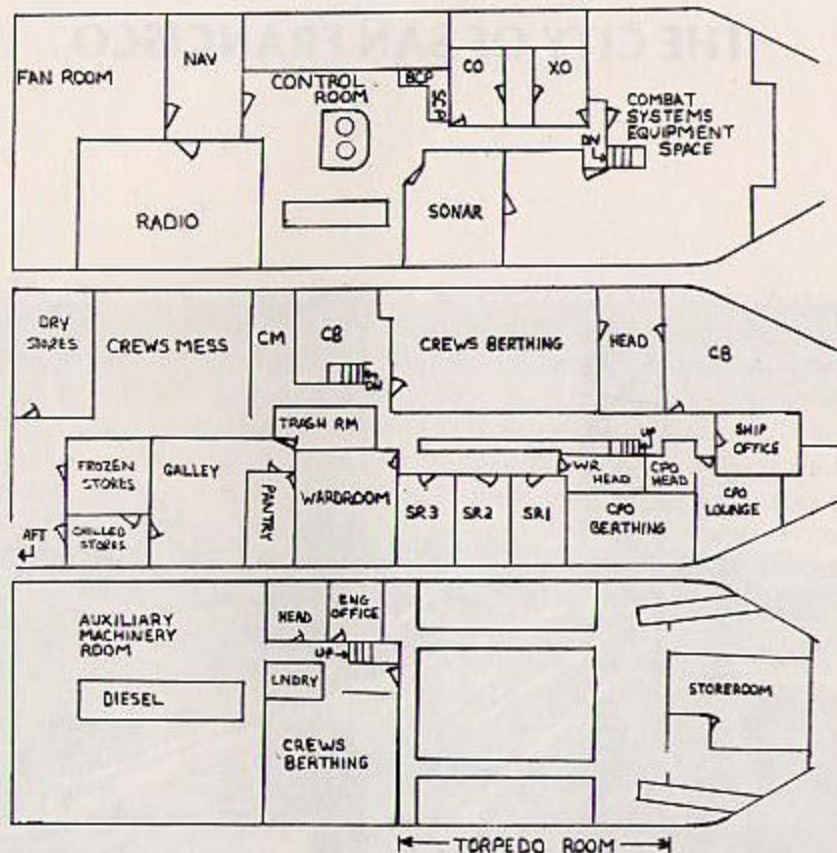
**NEWPORT NEWS SHIPBUILDING  
AND DRYDOCK COMPANY  
NEWPORT NEWS, VIRGINIA**

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# THE CITY OF SAN FRANCISCO





The ship's name honors the city of San Francisco: California's "Port of Gold"; the financial and insurance capital of the west; a dominant port in world trade and "THE CITY" to northern and central Californians. This 200 year old port occupies a 46 square mile fingertip between the Pacific Ocean and one of the world's greatest natural harbors. The Presidio, established in 1776 by the Spanish, and the Mission San Francisco de Asis, which was founded by the Franciscan fathers at about the same time, were San Francisco's first permanent settlements. With the discovery of gold in 1848, the sleepy settlement sprang almost overnight to a city of 900 people and then steadily grew to nearly 5 million residents today. San Francisco's cosmopolitan character comes primarily from the fact that three out of every ten inhabitants of the Bay Area were born outside of the United States or have at least one foreign-born parent. The city—known variously as the Paris of the West, Baghdad-by-the-Bay, and the Gateway to the Orient — has some 30 foreign language publications. Its culture has been enriched by the traditions and folkways of countless ethnic groups. Within its boundaries are Chinatown, North Beach, Fisherman's Wharf and Nob Hill. It is truly a city of great charm.

In the words of Robert Lewis Stevenson — "Everyone should be allowed to love two cities, his own, and San Francisco."

# THE COMMANDING OFFICER



## **COMMANDER JAMES ALLEN MARSHALL**

Commander James A. Marshall, Commanding Officer of the new SAN FRANCISCO is a 1962 graduate of the U.S. Naval Academy. He is from Maryland, and is married to the former Phoebe Joanne Adams of Annapolis. They reside in Hampton, Virginia, with their two children, James and Lee.

In his nineteen years of service since graduation from the Academy, Commander Marshall has served in the submarine service, including more than two years as Commanding Officer of the USS SHARK (SSN-591), his sea assignment immediately before being assigned by the Navy as Commanding Officer of the SAN FRANCISCO.

Following his graduation from the Naval Academy in 1962 he entered Nuclear Power Training in Vallejo, California, and the S1W prototype in Idaho. In 1964 he graduated from the Naval Submarine School and was assigned to the USS HENRY CLAY (SSBN 625) in the Engineering Department.

Then in 1966 he reported to the precommissioning crew of the USS PARGO (SSN 650), where he served in the engineering department and as Operations Officer.

In 1969 he was transferred to USS LEWIS AND CLARK (SSBN 644), in Charleston, S.C., for duty as the Engineer Officer.

From February 1971 to September 1973 he was assigned to the Bureau of Naval Personnel, Washington, D.C., in the Enlisted Plans Branch, after which he returned to sea as Executive Officer of USS JOHN C. CALHOUN (SSBN 630).

Following his assignment in SSBN 630, he served a period of temporary duty on the staff of Commander Submarine Squadron TWO; then on 20 July 1977 he was assigned as Commanding Officer of USS SHARK (SSN-591), where he served until relieved on 3 October 1979.

Commander Marshall holds the Meritorious Service Medal, the Navy Commendation Medal (Fifth Award) and the Navy Achievement Medal.





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