

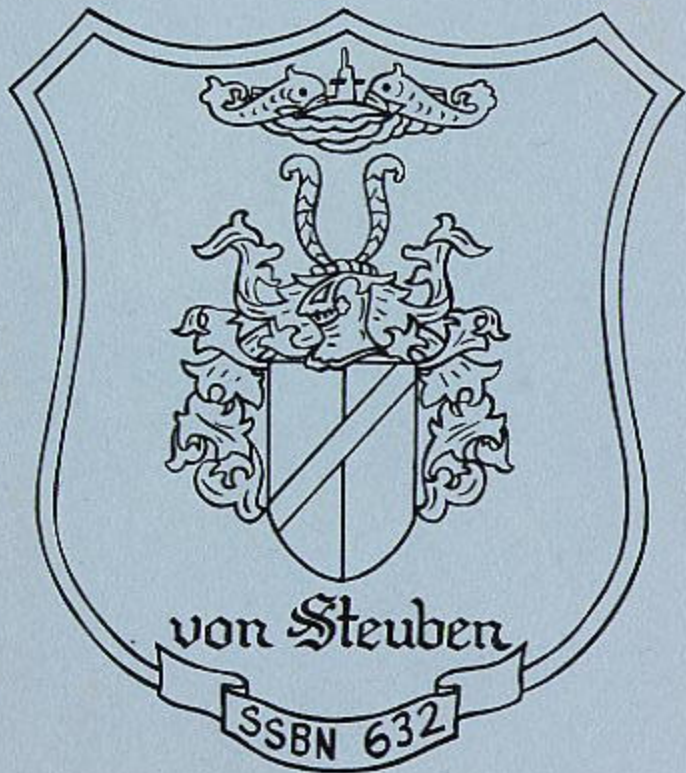


WELCOME ABOARD



VON STEUBEN





Welcome Aboard

The officers and men of USS VON STEUBEN take great pleasure in welcoming you aboard. We feel that VON STEUBEN is the best ship in the business and we stand ready to answer any questions and to assist you in every way possible.

A handwritten signature in black ink, appearing to read 'R. J. Brown', is written in a cursive style.

**Captain U.S. Navy
Commanding Officer**

HISTORY

The United States Ship VON STEUBEN, commissioned on 30 September 1964, joined the Fleet as part of the Family of POLARIS strategic deterrent missile submarines which bear the names of those patriots of our nation who secured those cherished freedoms that VON STEUBEN is designed to defend. Baron Frederick Wilhelm VON STEUBEN, the ship's namesake, was a Prussian army officer who served during the American Revolution for the cause of independence. Most notable, as Washington's Inspector-General, he was responsible for the training that forged our citizen soldiers into a successful Continental Army.

The current ship is the second United States Navy ship to bear that name. Her predecessor, a World War I Troop Transport, at one time was a German sea raider KRONPRINZ WILHELM. Seized by the United States government in 1915, she was later named USS VON STEUBEN. During her short but illustrious career, the first VON STEUBEN transported nearly 40,000 American soldiers to Europe, contributing greatly to the Allied cause.

Following construction at Newport News Shipbuilding the present ship began her peacekeeping career when her first two Commanding Officers, Commander John P. WISE, USN, Blue Crew and Commander Jeffrey C. METZEL, Jr., USN, Gold Crew, took her through her initial demonstration and shakedown operations in late 1964. Thereafter, VON STEUBEN changed homeport to Charleston, South Carolina, where she began service as a unit of Submarine Squadron EIGHTEEN. The ship commenced her first patrol in March 1965, completing seventeen patrols as a POLARIS submarine before commencing her first overhaul at the Electric Boat Company in May 1969.

Between May 1969 and November 1970, VON STEUBEN was overhauled and converted to carry the POSEIDON missile. She has completed fifty strategic deterrent patrols, received the Meritorious Unit Citation for the period 27 December 1967 to 20 June 1969, and won the Battle Efficiency "E" for the period October 1978 to September 1979.

Following overhaul and conversion to the POSEIDON Missile system, the ship operated variously as a unit of Submarine Squadrons FOURTEEN and EIGHTEEN, while home ported again in Charleston. VON STEUBEN completed thirty-three patrols as a POSEIDON submarine, and fifty strategic deterrent patrols in all, before commencing her second overhaul in January 1980.

During the most recent overhaul at Newport News Shipbuilding, VON STEUBEN was converted to the TRIDENT I missile system. Since completion of that overhaul in June 1982, under her present Commanding Officers, Captain Robert E. La GASSA, USN, Blue Crew and Commander Gerald J. PRUSAITIS, USN, Gold Crew, VON STEUBEN has successfully completed TRIDENT demonstration and shakedown operations and has commenced strategic deterrent patrols as a TRIDENT BACK-FIT submarine assigned to Submarine Squadron SIXTEEN at Kings Bay, Georgia.



CAPTAIN ROBERT EDWARD LA GASSA
UNITED STATES NAVY

Captain Robert E. La GASSA was born in Detroit, Michigan on 10 April 1940. Following graduation from Detroit's Cass Technical High School in 1959, he entered the United States Naval Academy at Annapolis, Maryland. He was graduated in June of 1963 and received his commission as an Ensign, U. S. Navy.

Following submarine school and nuclear power training, Captain La GASSA served his initial submarine tour on board USS SKIPJACK (SSN585) until 1968. He then served as Engineer Officer of the USS ETHAN ALLEN (SSBN608)(BLUE) until 1971 when he was assigned to a tour of instructor duty at the U. S. Naval Submarine School, New London, Connecticut. From 1973 until 1976 he served as Navigator and Operations Officer of the USS TREPANG (SSN674). Thereafter, he served as Executive Officer of the USS SHARK (SSN591) until October 1978. Following advanced training at the Division of Naval Reactors, Washington, D.C. and at the Prospective Commanding Officer's course at Commander Submarine Force Atlantic Fleet Headquarters in Norfolk, Virginia, Captain La GASSA relieved Commander Neil S. CARNES as Commanding Officer of VON STEUBEN's BLUE Crew in August 1979. In November 1979, he relieved Commander Arland W. KUESTER as Commanding Officer of the GOLD Crew, assuming duties as Commanding Officer of the combined crew of the USS VON STEUBEN (SSBN632).

Since assuming command of the VON STEUBEN, Captain La GASSA conducted that ship's fiftieth strategic deterrent patrol (33rd and final patrol as a POSEIDON missile submarine) before entering overhaul at Newport News Shipbuilding and Drydock Company at Newport News, Virginia in January 1980. Since overhaul completion in June 1982, Captain La GASSA has commanded VON STEUBEN through Demonstration and Shakedown Operations (DASO) and two strategic deterrent patrols as a TRIDENT BACK-FIT submarine.

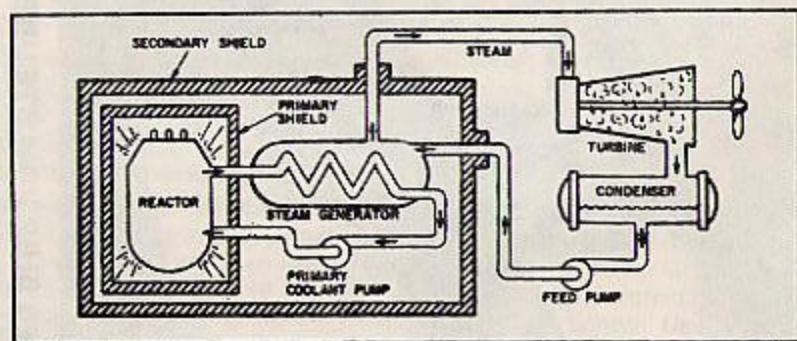
Captain La GASSA is married to Barbara Zoe KUNAR of Elmont, Long Island, New York. Captain and Mrs. La GASSA reside with their children Laura Lee and David at their home in Newbury, New Hampshire.



**UNITED STATES SHIP VON STEUBEN
(SSBN 632)**

NUCLEAR PROPULSION

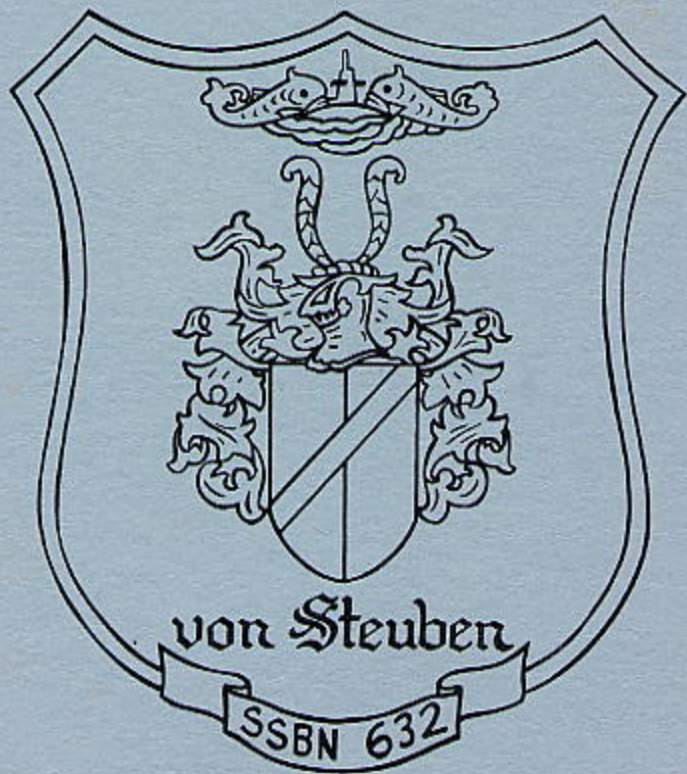
In January of 1955, USS NAUTILUS (SSN 571) announced to the world that she was "...underway on nuclear power". This historic event marked the culmination of the mammoth effort between the scientific and military communities which began with the Manhattan Project during World War II and resulted in the development of the nuclear submarine. Although the theory and technology associated with a nuclear power plant is extremely complex, the basic principles of operation are readily comprehensible. We hope that the unindoctrinated among our visitors will find the following explanation a viable introduction into the world of nuclear power.



The heart of a nuclear submarine, the source of the large amounts of energy required to propel the ship and maintain the proper environment within her, is a nuclear fission reactor (See the basic propulsion plant diagram above). A nuclear reactor is a device designed for the safe and controlled production of nuclear energy. Inside the reactor, contained within strong metal clad modules, uranium fuel is made to undergo the nuclear reaction known as fission. During the fission process, individual uranium atoms split apart releasing energy in the form of intense heat. This energy raises the metal fuel modules to extremely high temperatures, and they in turn transfer their heat to water which is continuously circulated through the reactor. The water which flows through the reactor is termed primary coolant and the pumps used to circulate it are called primary coolant pumps. It is important to note here that the reactor and its associated piping form one integral unit of strong metal alloys

designed to completely contain and encapsulate the primary coolant. The heat which was transferred from the reactor to the primary coolant is then transferred from the primary coolant to the steam generator where it is used to make steam. This exchange of heat takes place across primary piping which runs inside the steam generator and causes secondary water which circulates around and between the piping to boil. Steam produced in the steam generator is then used to turn high speed turbogenerators for the production of electricity and the main propulsion turbines which drive the ship's propeller. As noted above, the primary system forms a single integral unit. This means that the water used to make steam, termed secondary water, is separated by the primary piping so that it never comes into direct contact with the primary coolant. In the last stage of the process, steam exiting the turbines is condensed back into the condenser and then pumped back to the steam generator where it can be reboiled. In this manner, energy from the reactor can be continually transferred to the primary coolant where it is utilized to produce steam in the steam generator and thus supply all the energy needs of the ship. As a final note, during plant operations high levels of radiation exist in and around the reactor. To provide protection, the crew is separated from the reactor by both a primary and a secondary shield. These shields consist of almost four feet of radiation absorbing material including lead, water and polyethylene. This double protection reduces the average radiation exposure of crew members to levels that are less than those received from natural sources ashore.

On May 25, 1979, USS NAUTILUS (SSN 571) again made history when she sent the world the following message: "...after nearly a quarter century, USS NAUTILUS (SSN 571) shutdown her reactor for the final time". She has since been decommissioned, but the legend of the world's first nuclear submarine still remains. Her accomplishments serve as inspirations, and the traditions she started have become standards of excellence and professionalism aspired to throughout the Navy.



von Steuben

SSBN 632