

**WELCOME ABOARD**



**USS  
KAMEHAMEHA  
SSBN 642**



**KAMEHAMEHA I.**

Photo of a painting owned by the late Bruce Cartwright.

# THE POWER PLANT

KAMEHAMEHA's power plant helps to make her extremely quiet and capable of speeds in excess of 20 knots.

The Kamehameha power plant consists of a nuclear reactor which provides heat, steam generators which utilize the heat to provide steam to the engineroom equipment, and steam driven turbines to provide propulsion and electrical power. Heat is produced in the reactor by nuclear fission and is transferred to the circulating primary coolant, which is pressurized to prevent boiling. This water then passes through steam generators, where it transfers its heat to the secondary coolant, forming high energy steam. This secondary cycle is kept completely isolated from the primary coolant.

Steam rises from the steam generators and flows to the engineroom turbines. 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 this generation of power which requires the presence of air or oxygen. This fact alone allows the ship to operate completely divorced 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 until the reactor is shutdown. Heavy shielding is used to protect the crew so that the average crew member receives less radiation than he would from natural sources ashore.

## AUXILIARIES

The nuclear power plant gives the KAMEHAMEHA the ability to remain deployed and submerged for extended periods of time. To take advantage of this, the ship is outfitted with extensive auxiliary equipment to provide for the needs of the crew.

The KAMEHAMEHA's atmosphere control equipment consists of oxygen generators, which furnish oxygen, and scrubbers and burners which remove carbon dioxide and other atmosphere contaminants.

The ship is equipped with two distilling plants which convert salt water to fresh water for drinking, washing, and supplying water to the propulsion plant.

## COMMUNICATIONS

Submerged radio communications have been possible for years. KAMEHAMEHA is completely outfitted with the wide variety of antennas, transmitters, and receivers necessary for this task. Interior communications are possible on a wide range of circuits, including dial telephones, announcing circuits, and sound powered phones which do not require electrical power and are reliable in a battle situation. Various alarm and indicating circuits give the Officer of the Deck and the Engineering Officer of the Watch a complete picture of what is going on throughout the ship.





## **COMMANDER J.H. ALMY II, USN**

**Commander ALMY is from Whippany, New Jersey. He graduated from the United States Naval Academy in June 1968 with a Bachelor of Science Degree in Mathematics.**

**Following graduation he attended Nuclear Power School in Vallejo, California, followed by nuclear power prototype training at the S1C prototype in Windsor Locks, Connecticut. After completing Naval Submarine School he served in USS HAWKBILL (SSN-666) from November 1971 and qualified in submarines. Following this tour he attended the Submarine Officer Advanced Course. His next assignment was as Weapons Officer in USS DACE (SSN-607) from August 1972 until February 1977. From March 1976 to march 1979 Commander ALMY was assigned as Engineer Officer in USS WILLIAM H. BATES (SSN-680). Commander ALMY then served on the staff of the Deputy Chief of Naval Operations, Submarine Warfare. He served as Executive Officer in USS JACK (SSN-605) from July 1981 until July 1984.**

**Commander ALMY is authorized to wear the Navy Commendation Medal with two gold stars and the Navy Achievement Medal.**

**Commander ALMY is married to the former Marcy Zwerling of Bay Shore, New York. They and their three children, Jennifer, Denison and Cornyn, reside in Gales Ferry, Connecticut.**

# **SHIP'S MAJOR SYSTEMS**

## **POSEIDON WEAPONS**

Named after the god of the sea in Greek mythology, **POSEIDON** was known as the "earthshaker" because of his ability to cause earthquakes far inland. But he was also called the "preserver" because he could calm the seas.

This system is peculiar to the FBM Fleet. The sixteen Missiles are multiple stage, multiple warhead units. They are stowed in vertical tubes ready to launch in quick response to proper directives. Fire Control provides the missile with all the information required for the missile to leave the ship and hit the assigned target.

## **NAVIGATION**

Keeping track of the ship's position while submerged is difficult and important, and requires a complex navigational system. At the heart of the system is **SINS**, the Ship's Interior Navigational System. **SINS** integrates the ship's accelerations in three dimensions and gives a continuous report of ship's position.

This system provides the Weapons System with continuous ship's position so Fire Control can compute the exact distance and direction to the target and accurately fire any missile while submerged.



# SHIP'S HISTORY

**KAMEHAMEHA** was built at the Mare Island Naval Shipyard. The keel was laid on May 2, 1963 and the ship was launched on January 16, 1965. Mrs. Samuel Wilder King served as the ship's sponsor at the launching. Her husband was one of the first Hawaiians to graduate from the U.S. Naval Academy and as Governor of the territory of Hawaii, strove for Hawaiian statehood.

After commissioning on December 10, 1965 **KAMEHAMEHA** joined Submarine Squadron 15 at its forward base in Guam, Marianas Islands. The ship was awarded the Meritorious Unit Commendation for operations as a member of Submarine Squadron 15 while in the Pacific.

In July 1969 the ship was transferred to the Atlantic Fleet and joined Submarine Squadron 18 in Charleston, South Carolina. In July 1971 **KAMEHAMEHA** was transferred to Groton, Connecticut for weapons conversion and refueling overhaul.

Upon completion of the conversion and overhaul in October 1972, **KAMEHAMEHA** conducted operations off the east coast of the United States. In June 1973 **KAMEHAMEHA** joined Submarine Squadron 16 at Rota, Spain. In July 1979 **KAMEHAMEHA** joined Submarine Squadron 18 at Charleston, South Carolina.

The ship conducted a regular overhaul in Portsmouth, New Hampshire which completed in December 1982. Following extensive shakedown operations, the ship resumed deterrent patrols from Holy Loch, Scotland as part of Submarine Squadron 14.

To date, **KAMEHAMEHA** has completed 56 deterrent patrols in the defense of the country with more than 9 years of submerged operations.

**COMMANDING OFFICERS OF  
USS KAMEHAMEHA (SSBN-642)  
BLUE CREW**

**COMMANDER R.S. LEDDICK, USN**

December 1965 - JULY 1967

**COMMANDER F.W. KELLEY, USN**

July 1967 - September 1970

**COMMANDER L.D. NACE, USN**

September 1970 - September 1974

**COMMANDER R.J. NOREIKA, USN**

September 1974 - March 1978

**COMMANDER J.D. PORTER, USN**

March 1978 - April 1980

**COMMANDER E.R. LINZ, USN**

April 1980 - May 1981

**COMMANDER L.L. SCHMELING, USN**

May 1981 - July 1981

**COMMANDER R.W. KROM, USN**

July 1981 - February 1985

**COMMANDER J.H. ALMY, II USN**

March 1985 - Present

**GOLD CREW**

**COMMANDER R.W. DICKIESON, USN**

December 1965 - August 1968

**COMMANDER J.A. SAGERHOLM, USN**

August 1968 - July 1971

**COMMANDER L.D. NACE, USN**

July 1971 - October 1972

**COMMANDER T.R. FOX, USN**

October 1972 - February 1975

**COMMANDER G.W. DAVIS VI, USN**

February 1975 - July 1978

**COMMANDER J.A. MACGREGOR, USN**

July 1978 - February 1981

**COMMANDER E.R. LINZ, USN**

February 1981 - May 1981

**COMMANDER L.L. SCHMELING, USN**

May 1981 - July 1981

**COMMANDER R.W. KROM, USN**

July 1981 - December 1982

**COMMANDER L.M. JACOBI, USN**

December 1982 - Present



## **KAMEHAMEHA**

**USS KAMEHAMEHA (SSBN-642)** is named for Kamehameha the Great, the warrior and statesman who first united the Hawaiian Islands under a single rule.

Kamehameha was born into nobility on the island of Hawaii in 1758. He spent his youth learning the arts of war and leadership.

After seizing control of most of the island of Hawaii from his cousin, he started on a campaign for the conquest of all the Hawaiian Islands. His conquest of Oahu in 1795 was followed by the peaceful capitulation of Kauai and Niihau and final unification of the islands.

Kamehameha then sought to develop a stable government. He established strict laws of conduct and was responsible for making the islands safe for all citizens. His policy toward foreigners, an increasingly important factor in the social and economic life of the islands, was one of protection, encouragement of trade and fair dealing. By the time of his death he had consolidated the islands under one government and put an end to the feudal wars and anarchy that had ravaged the islands before his rule.

The fleet ballistic missile submarine **KAMEHAMEHA** serves today to deter war and make the world a safe place to live just as Kamehameha did as ruler of the Hawaiian Islands.

# GENERAL REMARKS

**SECURITY:** Our submarine, of necessity, has aboard many highly classified pieces of equipment. Many of her operating characteristics are classified confidential or higher. We request that when you leave the ship, you keep in mind the dangers involved in discussing the classified aspects of the ship.

**WARNING SIGNS:** Please observe all warning signs. Consult members of the ship's crew for assistance in any matter. Do not operate any equipment, flip any switch, turn any valve, or enter any posted area without prior approval to do so. Observe posted precautions and procedures in all operations.

**EMERGENCIES:** Should any emergency situation arise, alarms will be sounded and the word will be passed. You are requested to **STAND FAST, BUT CLEAR**, of all passageways and operating areas. Do not obstruct ladders, hatches, or watertight doors. The member of the ship's company in charge of the compartment will explain the situation as soon as he is able. Please follow his instructions without hesitation.

**INJURY or ILLNESS:** You are requested to report all injuries, however minor, to the Medical Department for treatment. A medical corpsman is available for medical advice at all times. Sick Bay is located in the middle level missile compartment, port side. Auto-motion sickness medication may be obtained from a Medical Department Representative. It is recommended that those susceptible to motion sickness should take medication if joining us underway.

## SHIP'S GENERAL CHARACTERISTICS

OVERALL LENGTH . . . 425 FEET  
BEAM . . . 33 FEET  
DISPLACEMENT SURFACED . . . 7500 TONS  
SUBMERGED . . . 8200 TONS  
DEPTH . . . . . OVER 400 FEET  
SPEED . . . . . OVER 20 KNOTS  
PROPULSION . . . NUCLEAR POWER  
ARMAMENT . . . 4 TORPEDO TUBES  
16 MISSILE TUBES

PERSONNEL ALLOWANCE  
OFFICER . . . . . 16 per CREW  
ENLISTED . . . . . 134 per CREW



# **TACTICAL WEAPONS**

**KAMEHAMEHA is armed with four torpedo tubes. The ship's wide variety of torpedoes and advanced fire control system enable her to meet the challenge of any target.**

## **SUPPLY**

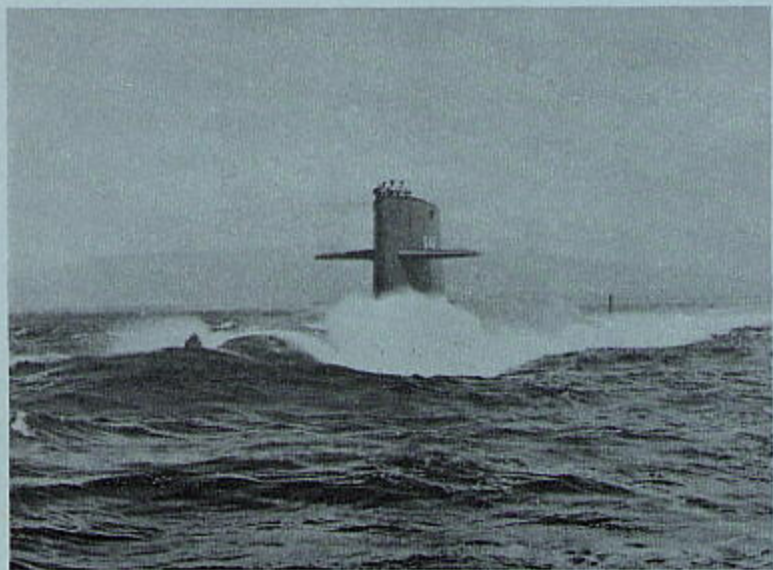
**None of the complex equipment and machinery of the ship could function without the support of the supply department. The repair parts carried on board number in the hundreds of thousands, yet any one can be provided in a matter of minutes. The Supply Department also carries enough food to feed the crew of over one hundred and fifty for as long as 90 days, in the quality for which the Submarine Force is famous.**

## **LIVING CONDITIONS**

**The large size of KAMEHAMEHA provides for spacious working and living spaces. Every man has his own bunk and ample storage space. The airy, well organized engine room, a far cry from those of earlier diesel submarines, is the envy of the Navy.**



# WELCOME ABOARD



USS  
**KAMEHAMEHA**  
SSBN 642

**COMMANDING OFFICERS  
of the  
USS KAMEHAMEHA (SSBN 642)**

**GOLD CREW**

CDR R.W. DICKIESON ..... DEC 65 - AUG 68  
CDR J.A. SAGERHOLM ..... AUG 68 - JUL 71  
CDR T.R. FOX ..... OCT 72 - FEB 75  
CDR G.W. DAVIS, VI ..... FEB 75 - JUL 78  
CDR J.A. MACGREGOR ..... JUL 78

**BLUE CREW**

CDR R.J. LEDDICK ..... DEC 65 - JUL 67  
CDR F.W. KELLY ..... JUL 67 - SEP 70  
CDR L.D. NACE ..... SEP 70 - SEP 74  
CDR R.J. NOREIKA ..... SEP 74 - MAR 78  
CDR J.D. PORTER ..... MAR 78 - APR 80  
CDR E.R. LINZ ..... APR 80



**COMMANDER EDWIN R. LINZ**

Commander Edwin Raymond LINZ, USN, was born in Dayton Kentucky on 18 September 1943. He was raised in northern Kentucky and graduated from Covington Latin School in 1959. He then attended Villa Madonna College in Covington Kentucky for two years prior to attending the U.S. Naval Academy from which he was graduated and commissioned an Ensign in 1965.

Following temporary duty at the Naval Academy he completed Nuclear Propulsion Training and served for 3 months in USS TIGRONE (AGSS 419) in New London as Assistant Engineer. Upon completing Submarine School in July 1967 Commander LINZ reported to GURNARD (SSN 662) Pre Commissioning unit at Mare Island Naval Shipyard, where he helped place GURNARD in commission in December 1968. He continued to serve aboard GUNARD until July 1971, completing qualification as Nuclear Engineer and holding various billets within the Engineering and Operations departments.

Commander LINZ then received assignment to USS NATHANIEL GREENE (SSBN 636)(BLUE) completing Poseidon conversion in Newport News, Virginia. As Navigator and Operations Officer aboard GREENE he made five SSBN deterrent patrols out of Holy Loch, Scotland.

Having been selected as a Chief of Naval Operations (CNO) Scholar in 1974 Commander LINZ attended Christ Church, Oxford, England for the next two years, obtaining a Masters Degree in Politics and Economics. In September 1976 he reported as Executive Officer USS TINOSA (SSN 606), undergoing a reactor refueling overhaul in Pascagoula Mississippi. He served as Executive Officer aboard TINOSA until August 1979.

Commander LINZ's awards include the Navy's Commendation Medal with Gold Star, The Navy Achievement Medal with Gold Star, the Meritorious Unit Commendation and various service and campaign ribbons.

Commander LINZ is married to the former Sharon Frances Madigan, of Manhattan, New York. They live in Gales Ferry, Connecticut with their son Aaron, and daughters Nelle and Emily.