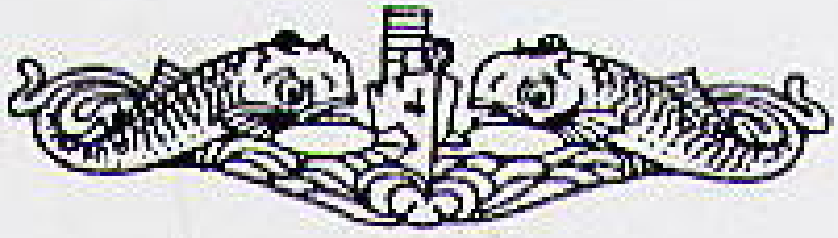
WELCOME ABOARD

UNITED STATES SHIP
TOPEKA
(SSN 754)



The Submarine

Only a submariner realizes to what extent an entire ship depends on him as an individual. To a landsman this is not understandable, and sometimes it is even difficult for us to comprehend, but is so!

A submarine at sea is a different world in herself, and in consideration of the protracted and distant operations of submarines, the Navy must place responsibility and trust in the hands of those who take such ships to sea.

In each submarine there are men who, in the hour of emergency or peril at sea, can turn to each other. These men ultimately responsible to themselves and each other for all aspects of operations of their submarine. They are the crew . They are the Ship.

This is perhaps the most difficult and demanding assignment in the Navy. There is not an instant during his tour as a submariner that he can escape the grasp of responsibility. His privileges in view of his obligations are almost ludicrously small. Nevertheless, it is the spur which has given the Navy its greatest mariners the men of the Submarine Services.

It is a duty which most richly deserves the proud and time honored title of -Submariner.

WELCOME ABOARD

The officers and crew of USS TOPEKA take great pride in extending to you the hospitality of the United States Submarine Force. It is a pleasure to have you on board as our guest.

As a warship, TOPEKA is neither spacious nor designed for large numbers of people. Only a limited number of personnel can be accommodated in the Control Room, on the Bridge, or in the Maneuvering Room. All guests must request permission from the Officer of the Deck before proceeding to the periscope stand while submerged and from the Chief of the Watch prior to proceeding to the Bridge when surfaced. Similarly all personnel must request permission from the Engineering Officer of the Watch prior to entering the Maneuvering Room.

This pamphlet has been prepared as a memento of your visit. As your hosts, the officers and crew of TOPEKA hope that your visit on board will be informative, interesting and enjoyable. If you have suggestions for improving this or future visits, please contact the Executive Officer, Supply Officer or Chief of the Boat.

STATISTICAL DATA

EVENT	DATE
Keel Laid	13 May 1986
Launched	23 January 1988
Commissioned	21 October 1989
First Deployment	August 1992 - February 1993
Second Deployment	November 1994 - May 1995
Third Deployment	October 1996 - April 1997
Fourth Deployment	April 1998 - September 1998
Sponsor	Honorable Elizabeth Hanford Dole

AWARDS

Meritorious Unit Commendation

1993

Battle Efficiency "E"
Tactical "T"
Administration "A"
Damage Control "DC"

1994

Engineering "E"
Supply "E"
COMSUBPAC Silver Anchor

1995

Battle Efficiency "E"
Supply "E"
Medical "M"
Communications "C"

1998

Tactical "T"

COMMANDER MARK D. PATTON
UNITED STATES NAVY

Commander Mark David Patton, the son of Brigadier General and Mrs. David Patton, USAF(ret), was raised in several states and overseas locations but calls Cheyenne, Wyoming his home. He is a 1981 graduate of the United States Naval Academy, receiving a bachelor of science degree in oceanography, and a 1988 graduate of the Naval Postgraduate School, where he earned master of science degrees (with distinction) in acoustic engineering and in systems technology for anti-submarine warfare.

Commander Patton's first submarine assignment was the USS ATLANTA (SSN 712) as a junior officer from 1983 to 1986, where he completed a Mediterranean and three North Atlantic deployments. His Department Head tour was on USS HAWKBILL (SSN 666) as Engineer Officer from 1989 to 1992, where he made a deployment to the Western Pacific followed by a regular overhaul at Mare Island Naval Shipyard. As Executive Officer on USS JEFFERSON CITY (SSN 759) from 1994 to 1996, he deployed to the Western Pacific with the USS KITTY HAWK Battle Group. Commander Patton reported to USS TOPEKA (SSN 754) as commanding officer in November of 1998.

Commander Patton's other billets have been as sailing master of the United States Naval Academy yacht HAWKE in 1981, force radiological controls officer on the staff of the Commander, Submarine Force Pacific from 1992 to 1994, and as the deputy executive assistant to the Vice Chief of Naval Operations from 1996 to 1998.

Commander Patton's personal decorations include the Meritorious Service Medal, Navy Commendation Medal with three gold stars, and the Navy Achievement Medal with one gold star.

Commander Patton resides in Pearl Harbor, Hawaii with his wife Ellen and their four children, Erik, Michael, Colleen and Claire.

USS TOPEKA (SSN 754)
43RD SHIP OF THE LOS ANGELES CLASS

USS TOPEKA is the fourth ship of the improved LOS ANGELES class nuclear powered attack submarine. These ships are among the most advanced undersea vessels of their type in the world. Our mission is to project precise power from the sea in support of naval, joint ad combined operations. USS TOPEKA can accomplish this mission through her multiple capabilities including the ability to operate in complete stealth; conduct extended and sustained high speed operation; work with Naval special warfare, surface, aviation, and amphibious forces; perform coastal surveillance; and, if necessary, deploy land-attack and anti-submarine weapons.

This 360 foot, 6,900 ton ship is well equipped to accomplish these tasks. Faster than her predecessors and equipped with the highly accurate AN/BSY-1 sonar and weapon control systems, the ship can be armed with sophisticated MK-48 ADCAP torpedoes. TOPEKA can also launch multipurpose TOMAHAWK cruise missiles from vertical launch tubes located in the bow or from torpedo tubes. Other significant improvements include full under-ice operational capability, improved ship quieting, over-the-horizon targeting capability, two towed sonar arrays, and retractable bow planes.

In August 1992 TOPEKA began its first overseas deployment which involved six months of operation in the Pacific and Indian Oceans. TOPEKA was the first attack submarine in the Pacific Fleet to deploy in support of a carrier battle group. On 4 November 1992 TOPEKA achieved another first by conducting operations in the Arabian Gulf. In January 1995 TOPEKA returned to the Arabian Gulf during her second deployment in support of a carrier battle group. In October 1996 TOPEKA deployed on its third Western Pacific Deployment participating in coordinated exercises with Japanese and South Korean submarines. In April 1998 TOPEKA deployed on its fourth Western Pacific Deployment conducting independent operations abroad.

TOPEKA has been awarded a Meritorious Unit Commendation; The Submarine Squadron ELEVEN Battle Efficiency "E" award for submarine Excellence in both 1993 and 1995; the 1994 COMSUBPAC Silver Anchor Award; and the 1998 Submarine Squadron Seven Tactical "T".

THE CITY OF TOPEKA

Indian agricultural community. A primary river crossing point for settlers headed west on the Oregon Trail. A major railroad center.

Topeka, the capital of Kansas, has played all of these roles, thanks to the pioneering spirit of its residents and its strategic location on the banks of the Kansas River.

They were roles that paved the way for the Topeka of today--a thriving retail, financial and industrial center of 121,000 people. Several Fortune 500 companies call Topeka home, and some 13 insurance companies are headquartered there.

The city also ranks high in medical services. The Menninger Foundation, world-renowned center for psychiatric treatment, education and research, is there along with six hospitals that included three medical centers.

Topeka has more than a passing acquaintance with the military. The former Forbes Air Force Base serves as headquarters for the 190th Kansas Air National Guard Refueling Squadron and as a Strategic Air Command refueling stop.

However, as in most capital cities, the business of government occupies the largest number of those in the workforce.

Today's Topeka would probably astound the nine men who met on December 5, 1854 on the banks of the Kansas River to draw up an agreement which later became the basis for the Topeka Association. That organization was mainly responsible for the establishment and early growth of the city. When Kansas became the 34th state seven years later, Topeka (an Indian word meaning "A good place to dig potatoes") was chosen as the capital.

It's a capital that has made education a hallmark over the years. The city has one of the few remaining municipal universities in the country--Washburn University, which, in addition to undergraduate and graduate programs, offers a law school. In addition, the Kaw Area Vocational Technical School, two nursing schools and other training schools provide opportunities for those seeking specific skills.

Cultural activities abound in Topeka. The Topeka Symphony Orchestra and the City's Community Center Association sponsor concerts from October through April. The Topeka Fine Arts Society presents programs of chamber music and a Jazz Workshop provides concerts for jazz buffs. Topekans enjoy the internationally recognized Topeka Civic Theatre, the Washburn University Players and the Showcase Dinner Theatre.

PREVIOUS SHIPS NAMED TOPEKA

Two previous ships of the fleet have been named for TOPEKA, the capital city of Kansas.

USS TOPEKA (PG 35): The first, a gunboat built under name of Diogenes by G. Howaldt of Kiel, Germany, in 1881. She was purchased by the U.S. Navy on 2 April 1898 from the Thames Iron Works of London, England and placed in commission the same day. On 15 February 1899, TOPEKA was placed out of commission at the Boston Navy Yard. After 18 months of inactivity, the gunboat was recommissioned at Boston on 15 August 1900. In August 1905 she returned to Portsmouth, New Hampshire, was placed out of commission in September 1905 and served as a prison and station ship at the Portsmouth Navy Yard. In June 1916 she was towed to New York where she was recommissioned again on 14 July 1916 and assigned duty as receiving ship at New York until again being placed out of commissioned in September 1916. She was recommissioned for the last time at Boston in March 1919 then placed out of commission on 2 November 1919 and put up for sale. TOPEKA was sold in May 1930 to Union Shipbuilding Company of Baltimore, Maryland.

USS TOPEKA (CL 67): A light cruiser built by Bethlehem Steel Company of Quincy, Massachusetts. Her keel was laid 21 April 1943, and she was launched 19 August 1944 under the sponsorship of Mrs. Frank J. Warren, wife of the Mayor of Topeka, Kansas. The ship was placed in commission at Boston on 23 December 1944. TOPEKA was initially used as a ship escort in the Western Pacific and later joined several battle groups operating in the Pacific near the end of World War II. TOPEKA's rescue efforts saved two British pilots downed in Ishinomake Wan during August 1945. She was placed out of commission in reserve at San Francisco, 18 June 1949. On 15 April 1957 she arrived at the New York Navy Shipyard for conversion to a Guided Missile Light Cruiser (CLG-8). Her hull classification and number were changed to CLG-8, effective 23 May 1957. TOPEKA earned two battle stars during World War II and three more during the Vietnam conflict.

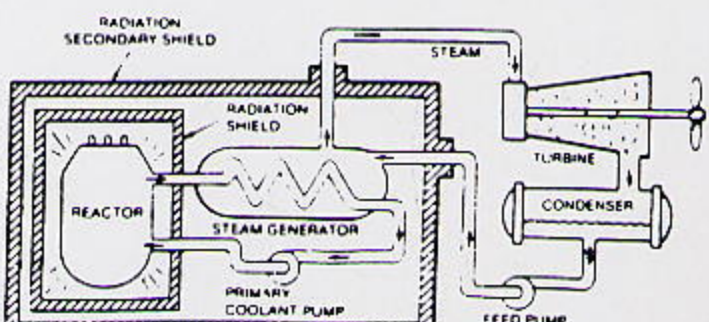
NUCLEAR PROPULSION

The propulsion plant of a nuclear powered ship is based upon the use of a nuclear reactor to provide heat. The heat comes from the fissioning of a nuclear fuel contained within the reactor. Since the fission process also produces radiation, shields are placed around the reactor so that the crew is protected.

The nuclear propulsion plant in the TOPEKA uses a pressurized water reactor design which has two basic systems: the primary system and the secondary system. The primary system circulates water and consists of the reactor, piping loops, pumps, and steam generators. The heat produced in the reactor is transferred to the water under high pressure so it does not boil. This water is pumped through the steam generators and back into the reactor for reheating.

In the steam generators, the heat from the water in the primary system is transferred to the secondary system to create steam. The secondary system is isolated from the primary system so that the water in the two systems does not intermix.

In the secondary system, the steam flows from the steam generators to drive the turbine generators, which supply the ship with electricity, and to main propulsion turbines, which drive the propeller. After passing through the turbines, the steam is condensed into water which is fed back to the steam generators by the feed pumps. Thus, both the primary and secondary systems are closed systems where water is recirculated and reused.



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


USS TOPEKA SSN 754