
GENERAL DYNAMICS
USS
PHOENIX
SSN 702
ELECTRIC BOAT DIVISION

Betty Harvey Rhodes

Betty Harvey Rhodes was born and raised in Council Grove, Kansas. She serves on the Boards of Trustees of her alma mater, Baker University in Baldwin, Kansas, and the Phoenix Symphony. Mrs. Rhodes is President of the Chevy Chase, Md., Circle of the Florence Crittenden Society and is First Vice President of the Congressional Club, an organization of Congressional wives. She was first president of the International Club, an organization composed of wives of foreign diplomats and congressmen. Mrs. Rhodes and her husband have four children and four grandchildren.

The Honorable John J. Rhodes

Representative John J. Rhodes of Arizona is currently serving his fourteenth consecutive term in the U.S. House of Representatives. Congressman Rhodes was elected House Republican Leader in December, 1973 when his predecessor, Gerald R. Ford, became Vice President of the United States. He has been elected to the post three times, each time by acclamation.

Prior to his ascendency to the top Republican leadership post, Congressman Rhodes served for nine years as Chairman of the House Republican Policy Committee.

A former member of the Committees on Education and Labor, Interior and Insular Affairs, and Appropriations, he served as ranking Republican member on the Appropriation's Public Works Subcommittee. He was also a member of the Joint Study Committee on Budget Control.

Born in Council Grove, Kansas, Congressman Rhodes received a Bachelor of Science degree in 1938 from Kansas State University. He graduated from Harvard Law School in 1941 and is a member of the bar in Arizona, Kansas, and Washington, D.C. He began practicing law in Mesa, Arizona following active duty with the United States Air Force at Williams Air Force Base near Chandler, Arizona. In 1952, he became the first Republican ever elected to the U.S. House of Representatives from the State of Arizona.

National Anthem	United States Navy Northeast Band
Welcome	P. Takis Veliotis Vice President, General Dynamics General Manager, Electric Boat Division
Greetings	The Honorable Margaret Hance Mayor of Phoenix
Remarks	David S. Lewis Chairman of the Board, General Dynamics
Introduction of the Principal Speaker	The Honorable David E. Mann Assistant Secretary of the Navy (Research, Engineering and Systems)
Address	The Honorable John J. Rhodes Minority Leader U.S. House of Representatives
Introduction of Sponsor	Mr. Lewis
Blessing of the Ship	The Reverend James D. Ford Chaplain, U.S. House of Representatives
Christening	Betty Harvey Rhodes Sponsor
	Elizabeth Rhodes Reich Matron of Honor

USS Indianapolis

Ships of the Class

Submarines of the LOS ANGELES Class, the Navy's newest class of nuclear-powered submarines, are the most advanced underseas vessels of their type in the world. Their mission: to hunt down and destroy enemy surface ships as well as submarines.

The 360-foot, 6,900-ton ships are well equipped to accomplish that task. Faster than their predecessors and equipped with highly accurate sensors, weapon control systems and central computer complexes, they are armed with sophisticated Mark 48 antisubmarine torpedoes, Harpoon and SUBROC. Each vessel carries a crew of 12 officers and 115 enlisted men, all specialists in their respective fields.

Since 1970, when the government approved proceeding with the class, Congress has authorized 33 ships of the class through fiscal year 1979. USS LOS ANGELES (SSN688), for which the class is named, was commissioned on November 13, 1976. The United States now has 74 nuclear attack submarines, 10 of which are of the 688 class.

PHOENIX is the tenth 688 Class sub built here. USS NEW YORK CITY (SSN696) was commissioned in March, 67 days ahead of schedule. In April, Electric Boat Division received a contract for two more submarines in the class, SSN719 and SSN720.

USS LOS ANGELES	(SSN688)
USS BATON ROUGE	(SSN689)
USS PHILADELPHIA	(SSN690)
USS MEMPHIS	(SSN691)
USS OMAHA	(SSN692)
USS CINCINNATI	(SSN693)
USS GROTON	(SSN694)
USS BIRMINGHAM	(SSN695)
USS NEW YORK CITY	(SSN696)
USS INDIANAPOLIS	(SSN697)
USS BREMERTON	(SSN698)
USS JACKSONVILLE	(SSN699)
USS DALLAS	(SSN700)
USS LA JOLLA	(SSN701)
USS PHOENIX	(SSN702)
USS BOSTON	(SSN703)
USS BALTIMORE	(SSN704)
USS SAN FRANCISCO	(SSN711)
USS ATLANTA	(SSN712)
USS HOUSTON	(SSN713)

(SSN's 705 — 710 and 714 — 720 unnamed)

USS PHOENIX

SSN 702

WELCOME ABOARD

USS PHOENIX

KEEL LAID: July 30, 1977

CHRISTENED: December 8, 1979

COMMISSIONED: December 19, 1981

SPONSOR: Mrs. Betty Harvey Rhodes

LENGTH: 360 feet

BEAM: 33 feet

DISPLACEMENT: 6,900 tons

PROPULSION: Steam turbine powered by pressurized water reactor

MAXIMUM SPEED: In excess of 20 knots

MAXIMUM DEPTH: In excess of 400 feet

ARMAMENT: Four 21 inch torpedo tubes

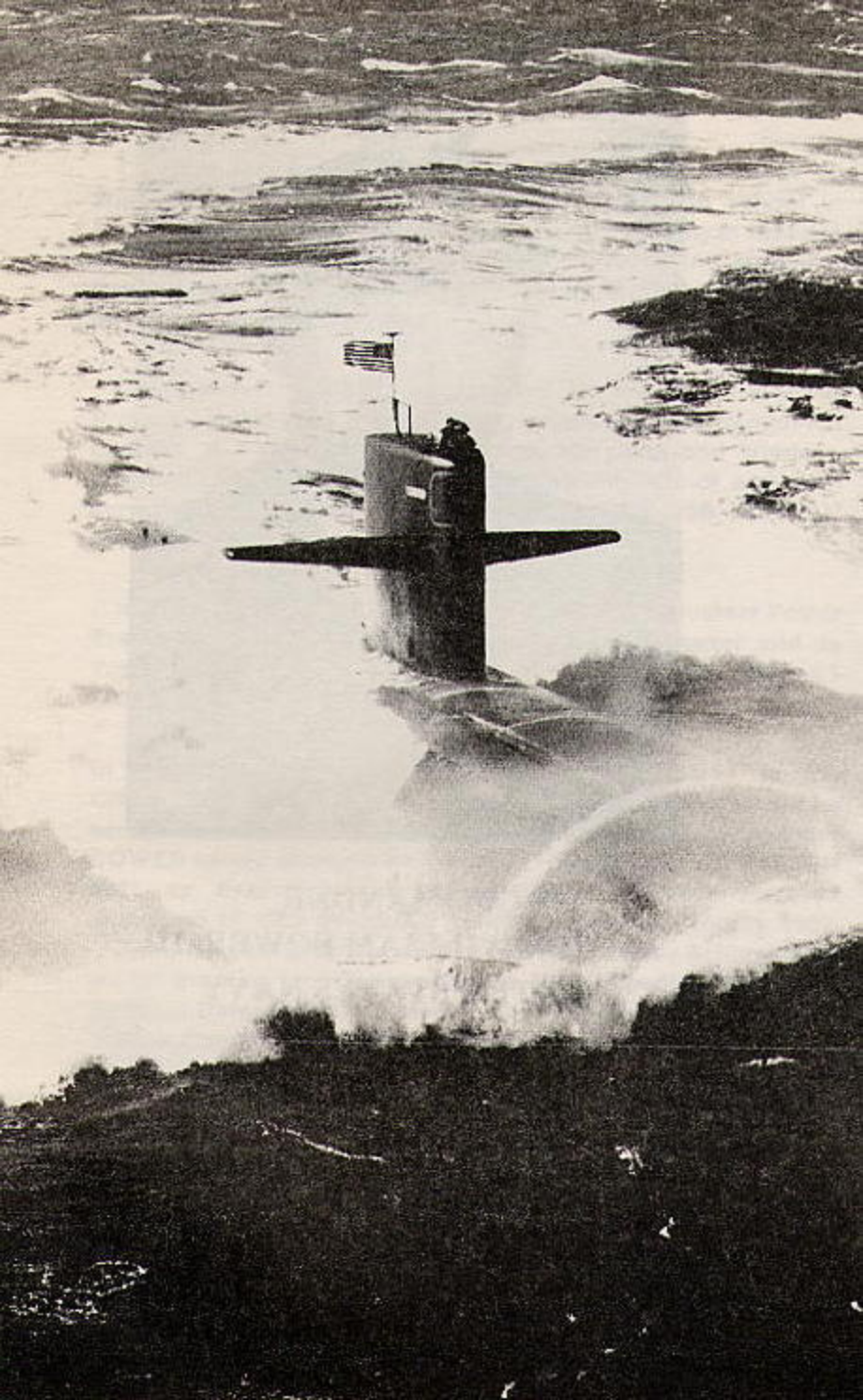
COMPLEMENT: 13 Officers and 115 Enlisted

MISSION: Destroy enemy ships, primarily submarines, in order to prohibit the employment or such forces against the United States.

The USS PHOENIX (SSN-702), is the fourth American ship to bear this name. The first ship was the sailing packet, which maintained crucial lines of communication during the American Revolution; the second, a schooner, served before the Civil War. The USS PHOENIX (CL-46) was a Brooklyn Class cruiser displacing 12,207 tons fully loaded and 600ft in length. She distinguished herself by being one of the few ships to get underway during the Japanese attack on Pearl Harbor. The name PHOENIX also belonged to a submarine in Her Majesty's Navy British Royal Forces, which was lost while serving in World War II.

Since its commissioning in 1981, the ship has conducted deployments to the Indian Ocean in 1983, the Mediterranean Sea in 1985, and two deployments to the Atlantic Ocean in 1986 and 1987.

Her awards include the Meritorious Unit Commendation for superior performance covering the period of February 1985 to February 1986, two Navy Expeditionary Medals, and three Sea Service Ribbons. In addition, PHOENIX has been selected for the following Departmental Awards for Excellence: Communications "C" in 1985, Supply "Blue E" in 1986, and the Medical Readiness "M" in 1987.



COMMANDER
AMMON WILLIAM BOWER, III
UNITED STATES NAVY

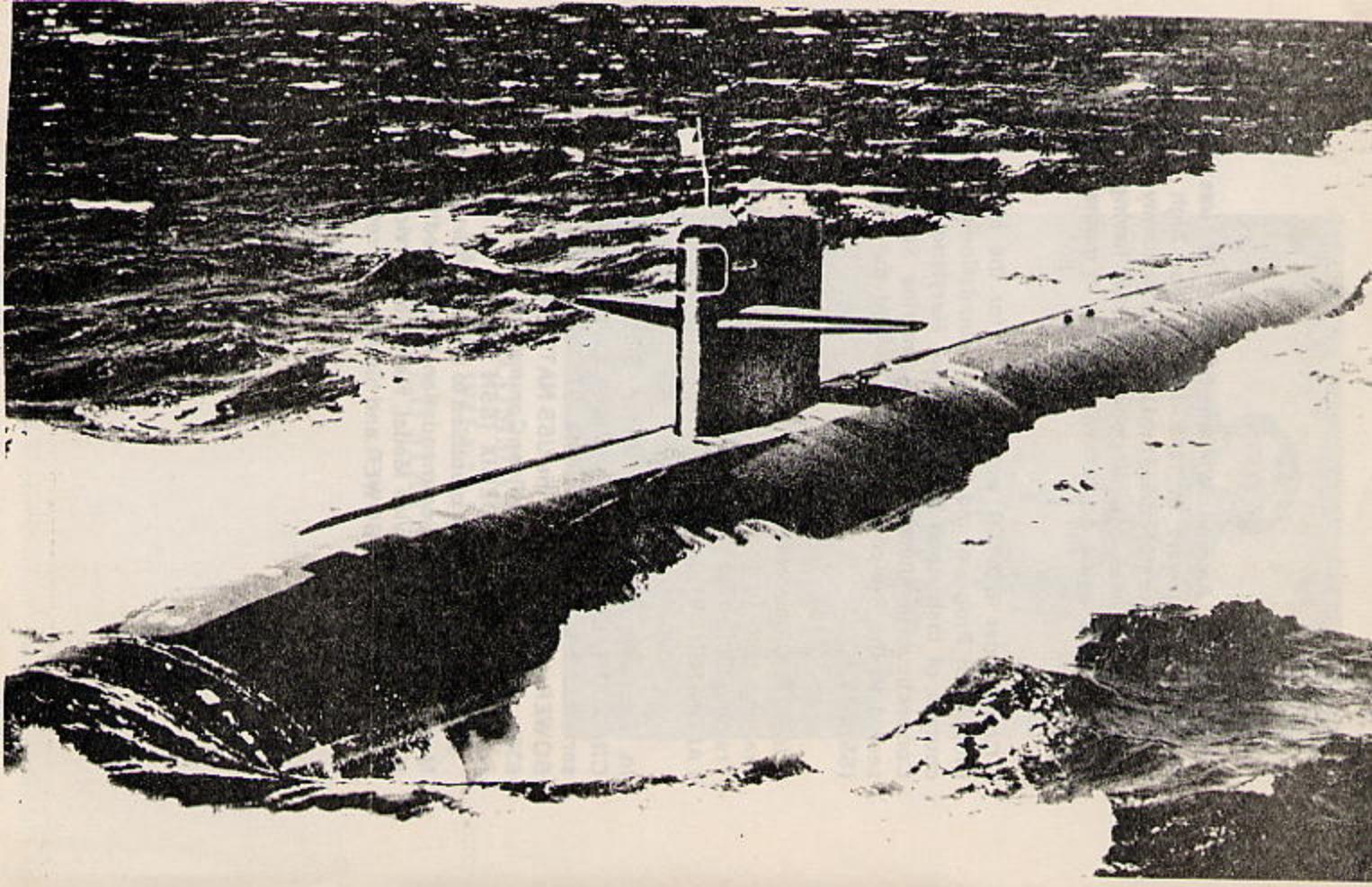
Commander Ammon William BOWER, III was born in Wilmington, Delaware in 1942. He attended high school in Newark, Delaware and enterd the U.S. Naval Academy in 1961. He graduated and was commissioned in 1965, having earned a Bachelor of Science degree, with majors in mathematics and physics.

Commander BOWER was selected for the Naval Nuclear Propulsion Program and following commissioning completed courses of instruction in Bainbridge, Maryland and Windsor, Connecticut.He attended Naval Submarine School and then served in the Pre-commissioning Unit of the USS SUNFISH (SSN649).

In 1970 Commander BOWER reported to the Nuclear Power Training Unit in Idaho Falls, Idaho as an Instructor and as Training Officer for two years. He then was assigned to the USS LAPON(SSN 661) as Engineer Officer.

In February 1976 Commander BOWER reported to the CINCLANTFLT Nuclear Propulsion Examining Board where he served for two years. From June 1978 to March 1981 Commander BOWER served onboard the USS NATHANAEL GREENE (SSBN 636) as Executive Officer.Commander BOWER assumed command of USS PHOENIX (SSN 702) on 16 January 1982.

Commander BOWER is entitled to wear the Navy Achieve ment Medal, the Navy Unit Commendation, Navy Expeditionary Medal, National Defense Service Medal, Navy Sea Service Deployment Ribbon.Commander BOWER and his wife Ann reside in Virginia Beach, Virginia.



THE NUCLEAR POWER PLANT

The PHOENIX is powered by a nuclear power plant consisting of a nuclear reactor which provides heat for the generation of steam to drive 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, identical port and starboard loops of piping, primary coolant pumps and the tubes of the steam generators. Heat is produced in the reactor by nuclear fission and is transferred to the circulating primary coolant water which is pressurized to prevent boiling. This water isthen pumped through the steam generators and boils water to form steam. It is then pumped back to the reactor by the primary coolant pumps and reheated for the next cycle.

The secondary system is the steam producing cycle and is made up of the shell side of the steam generators, turbines,condensers, and steam generator feed pumps. It is completely isolated from the primary system since the primary water goes through the tubes of the steam generator while the water which is boiling to make steam is on the shell side of the steam generator. Steam rises from the steam generators, then flows to the engineroom where it drives the ship's service turbo-generators which supply the ship with electricity and 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 the 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 inside the reactor and personnel are not permitted entrance into the reactor compartment until after the reactor is shut down.Heavy shielding is used to protect the crew so that the average crew member receives less radiation than he would receive from natural sources ashore.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