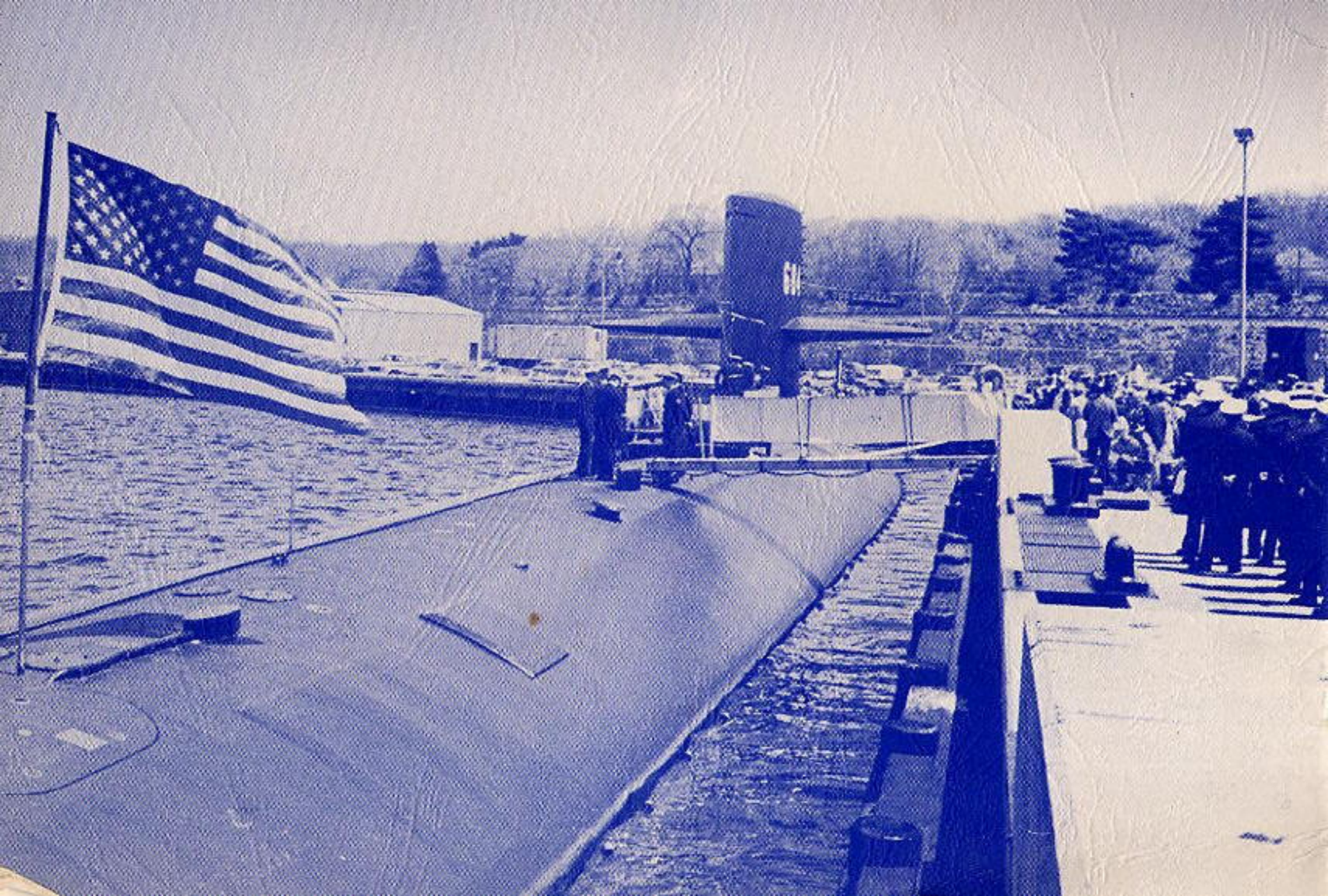


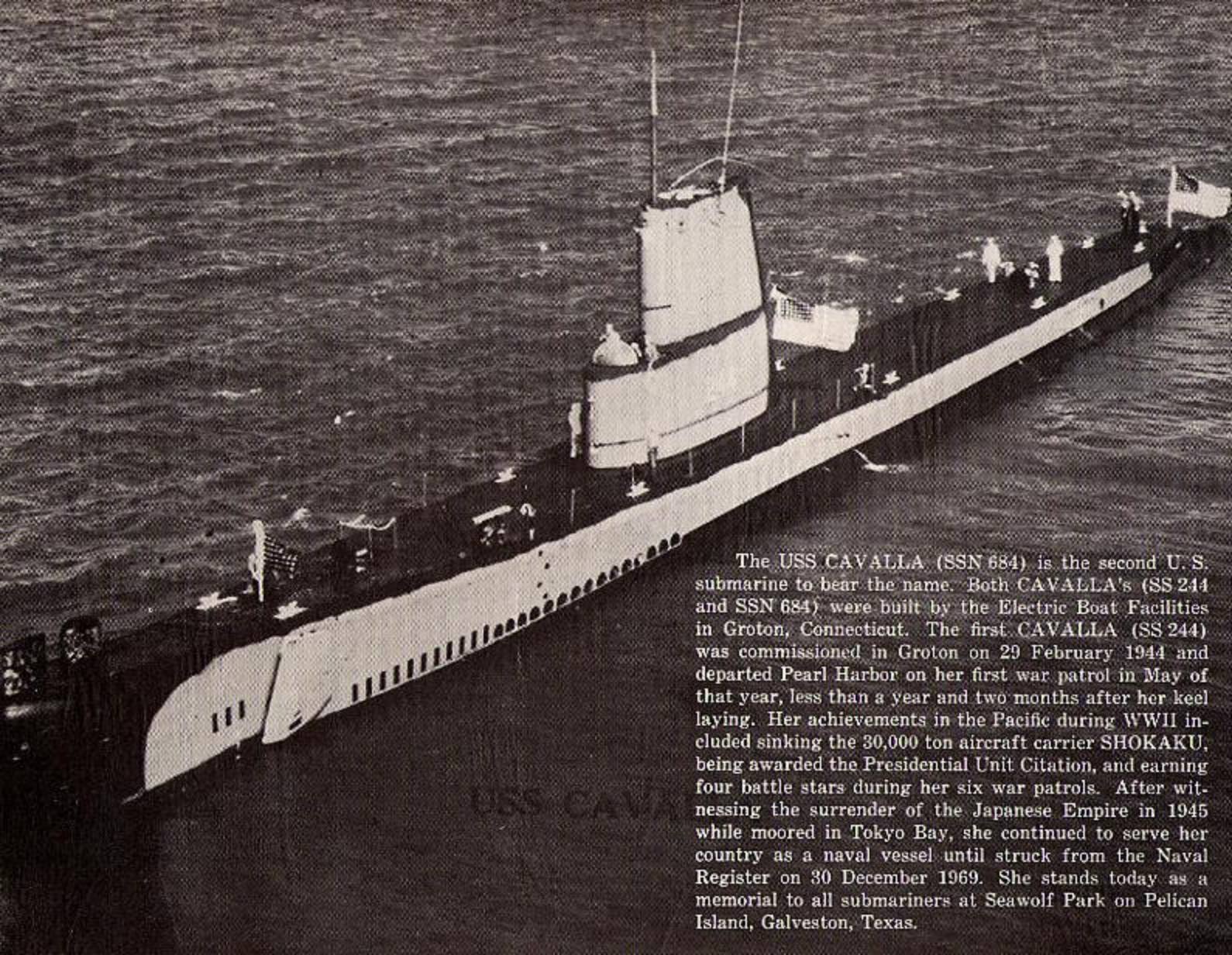
**WELCOME
ABOARD**



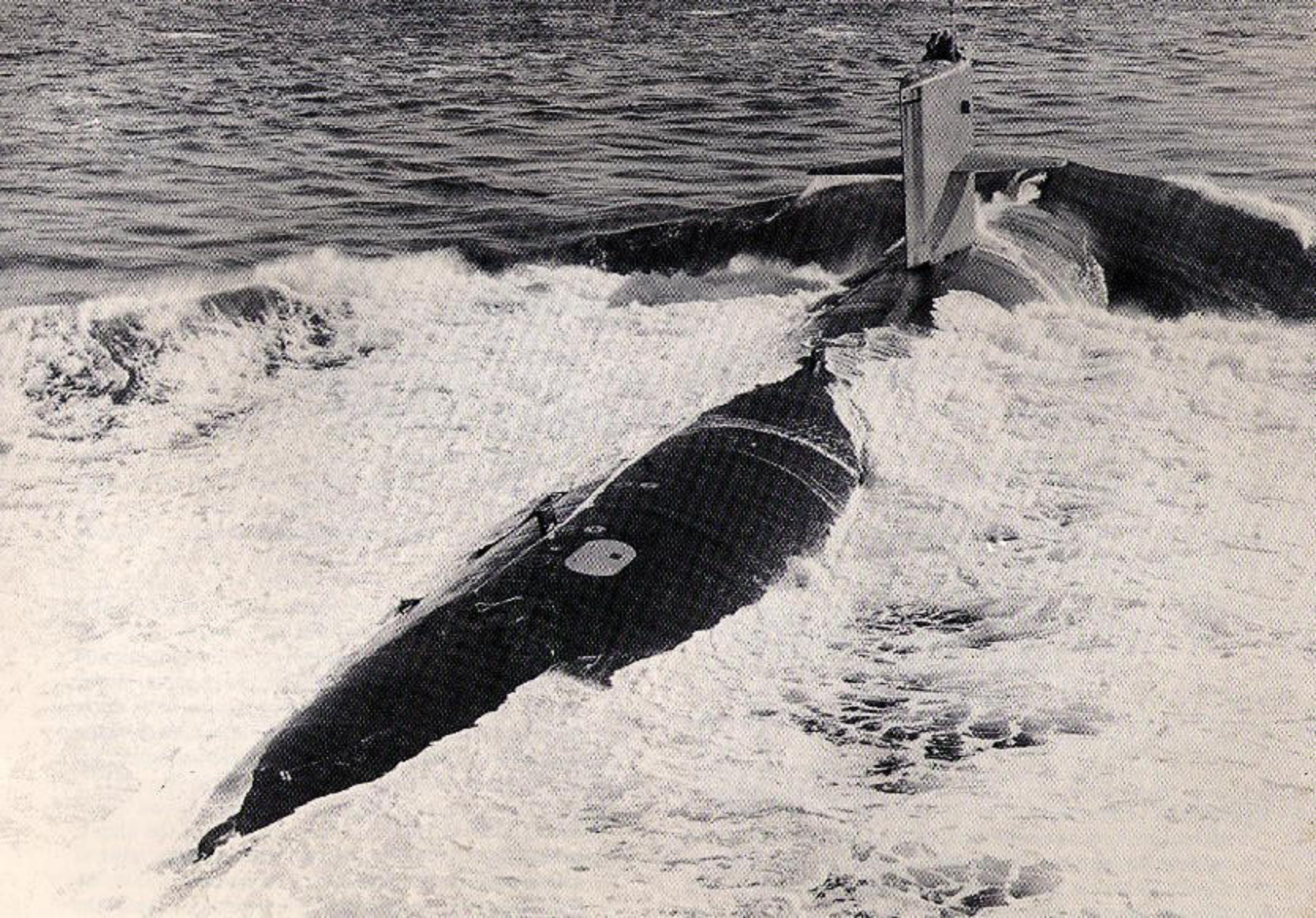
USS CAVALLA
SSN 684

KEEL LAID	May 23, 1970
LAUNCHED	February 19, 1972
COMMISSIONED	February 9, 1973





The USS CAVALLA (SSN 684) is the second U. S. submarine to bear the name. Both CAVALLA's (SS 244 and SSN 684) were built by the Electric Boat Facilities in Groton, Connecticut. The first CAVALLA (SS 244) was commissioned in Groton on 29 February 1944 and departed Pearl Harbor on her first war patrol in May of that year, less than a year and two months after her keel laying. Her achievements in the Pacific during WWII included sinking the 30,000 ton aircraft carrier SHOKAKU, being awarded the Presidential Unit Citation, and earning four battle stars during her six war patrols. After witnessing the surrender of the Japanese Empire in 1945 while moored in Tokyo Bay, she continued to serve her country as a naval vessel until struck from the Naval Register on 30 December 1969. She stands today as a memorial to all submariners at Seawolf Park on Pelican Island, Galveston, Texas.



ENGINEERING

OPERATIONS

BOW COMPARTMENT

Cavalla Arrangement

GENERAL INFORMATION

The USS CAVALLA (SSN 684) is a nuclear-powered attack type, STURGEON class submarine. Manned by a highly trained crew of 12 officers and 108 enlisted personnel, she is 300 feet in length and over 30 feet in beam, displaces almost 5,000 tons submerged, dives greater than 400 feet, and achieves speeds in excess of 20 knots. The ship is capable of producing enough electrical power to supply a small city, and is able to supply power from an installed diesel engine and a storage battery as well as from the reactor.

The ship can produce almost 10,000 gallons of fresh water daily. It also produces its own oxygen and constantly purifies its atmosphere by removing carbon dioxide, carbon monoxide, cooking odors and many other objectionable impurities. The quantity of food that can be carried is CAVALLA's limiting endurance parameter.

Her electronics equipment and weapons are among the most sophisticated and effective in the world. Several on-board computers aid in virtually all phases of her operations, from navigation through weapons delivery.

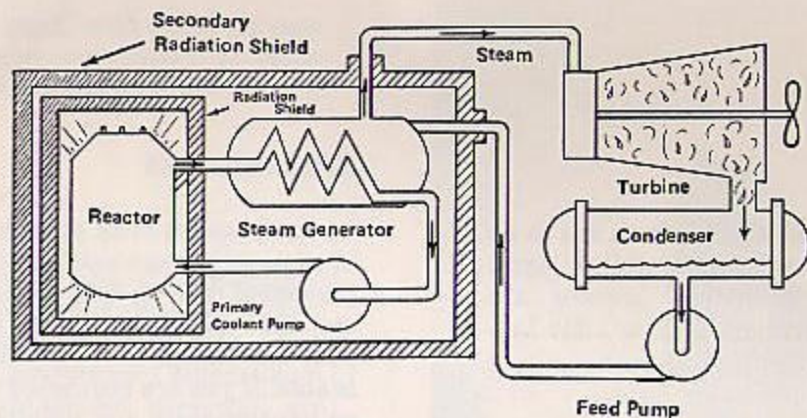
As apparently the last new submarine to be named after a fish, CAVALLA is carrying on the tradition of nearly 70 years of U. S. Submarine Service.

ENGINEERING — These spaces provide room for the pressurized-water type nuclear reactor, the turbine-generators which produce electrical power, and the propulsion turbines which drive the ship. The propulsion turbines are accompanied by reduction gears which transmit the power to the shaft, ultimately turning the screw to give motion to the ship. The engineering spaces are filled with complex electrical and fluid systems which support the main and auxiliary components of the propulsion plant.

OPERATIONS — This area between the bow compartment and engineering spaces provides space for navigational equipment, ship control, and various habitability areas. The radio room, sonar room, officers' staterooms, wardroom, and ship's offices are also located here. The lower level of the operations compartment is primarily occupied by the torpedo room.

BOW COMPARTMENT — This portion of the ship is primarily a habitability space and includes most of the crew's berthing, quarters for the chief petty officers, and a small machinery space housing the auxiliary diesel generator.

The Nuclear Power 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 for piping, primary coolant pumps and steam generators. Heat produced in the reactor by nuclear fission is transferred to the circulating primary coolant water. 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 ships 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.

ACCESS TO BRIDGE

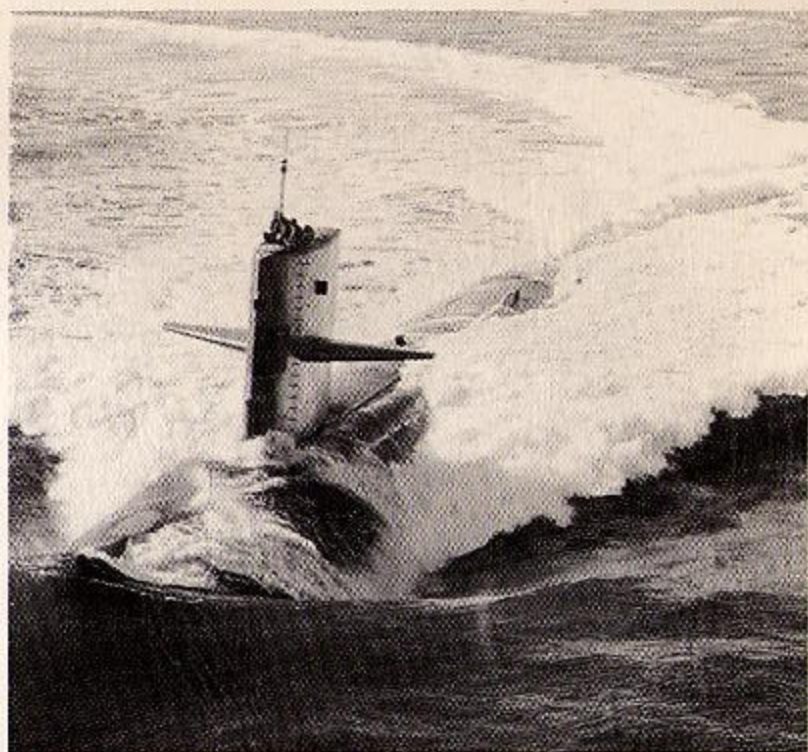
The bridge area is very small, with room for only two men. Guests cannot be accommodated in order to permit the watchstanders sufficient room to carry out their duties.

SECURITY

Most features of the ship are of a classified nature. In addition, Sonar Control, Radio/ESM Room, Sonar Equipment Space, Nucleonics Laboratory and the entire ship aft of the Operations Compartment are security areas. Only authorized personnel are permitted in these spaces. Information concerning speed, depth, weapons, fire control, sonar, ESM, and the propulsion plant are classified.

IMPROVED HABITABILITY

The ship is completely air-conditioned and has equipment for revitalizing the air. Other facilities include a crew's lounge, library, laundry, hi-fi stereo systems, and ice cream machines.



Built by

GENERAL DYNAMICS

Electric Boat Division

Eastern Point Road, Groton, Connecticut 06340

Change of Command



**USS CAVALLA
PEARL HARBOR
23 NOVEMBER 1994**

SCHEDULE OF EVENTS

ARRIVAL OF OFFICIAL PARTY

NATIONAL ANTHEM

INVOCATION

Lieutenant Randal B. Craft

REMARKS

Captain Donald P. Miller

REMARKS AND READING OF ORDERS

Commander John E. Colville

READING OF ORDERS AND REMARKS

Commander Charles J. Leidig

BENEDICTION

Lieutenant Randal B. Craft

DEPARTURE OF OFFICIAL PARTY

The Commissioning Pennant - The Flag of Command



The commissioning pennant is believed to date from the 17th century. During the first Anglo-Dutch War, the Dutch Admiral Maarten Tromp hoisted a broom at his masthead after the victory at Dungeness to signify his sweep of the English from the English Channel. This gesture was answered by the English Admiral William Blake who hoisted a horse whip, indicating his intention to chastise the Dutch. The English were ultimately victorious and ever since, the coach whip, pennant (symbolizing the original horse whip) has been adopted by many nations as the distinctive mark of a ship of war.

I RELIEVE YOU SIR -

I STAND RELIEVED

Few words carry the weight of symbol and substance as the two phrases to be spoken today. Change of Command: The total and absolute transfer of authority, responsibility and accountability from one individual to another, witnessed by ship's company, is nearly unique in the world today and constitutes a time honored Naval tradition.



CAPTAIN DONALD P. MILLER, U. S. NAVY

Captain Donald P. Miller of Flemington, New Jersey is a 1971 graduate of the United States Naval Academy, receiving his degree in Mechanical Engineering.

Following Nuclear Power and Basic Submarine training, Captain Miller's first sea duty assignment included various division officer assignments on USS HADDO (SSN 604). Following Submarine Officer Advanced Course training, Captain Miller next reported to the pre-commissioning unit of USS CINCINNATI (SSN 693) as Engineer Officer. While serving on CINCINNATI, Captain Miller completed all post shakedown availability trials and the ship's first deployment.

Captain Miller's next assignment was to Nuclear Power School in Orlando, Florida where he served as the Director of the Enlisted School. Returning to sea duty in 1982 as Executive Officer of USS DANIEL BOONE (SSBN 629-(GOLD), Captain Miller completed three strategic deterrent patrols before the crews combined for overhaul.

In May 1984, Captain Miller reported to the Office of the Deputy Chief of Naval Operations, Submarine Warfare, where he served as the Head, Manpower branch. He began perspective commanding officer training in the fall of 1986.

Captain Miller relieved as Commanding Officer, USS BUFFALO (SSN 715) in June of 1987. During his 29 months as Commanding Officer the BUFFALO completed two Western Pacific Deployments, was awarded the Navy Meritorious Unit Commendation, and was the Battle Efficiency "E" winner for Submarine Squadron ONE for three consecutive years.

After leaving the BUFFALO, Captain Miller reported as the Deputy Commander for Training at Submarine Squadron SEVEN, a position he served in until early 1992. His next assignment was as Senior Member, Nuclear Propulsion Examining Board on the staff of Commander in Chief, U.S. Pacific Fleet.

Captain Miller relieved as the forty third Commander of Submarine Squadron ONE in August 1994.

Captain Miller's personal decorations include the Legion of Merit, the Meritorious Service Medal (three awards), the Navy Commendation Medal, and the Navy Achievement Medal (two awards).

Captain Miller and his wife Adriane live in Aiea. They have two children: Mr. Francis Lee who lives with his wife in Honolulu, Hawaii and Pamela Miller who lives in Orlando, Florida.



COMMANDER JOHN E. COLVILLE, U.S. NAVY

Commander Colville graduated from Virginia Polytechnic Institute and State University with a Bachelor of Science Degree in Electrical Engineering.

His first assignment in July 1977 was to USS L. MENDEL RIVERS (SSN 686) where he served as Main Propulsion Assistant/Chemistry Radiological Controls Assistant and as Weapons Officer. He made a deployment to the Mediterranean and to the North Atlantic.

His next assignment in December 1979 was to the PRECOMUNIT OHIO (SSBN 726) as Reactor Control Assistant. Following commissioning of OHIO, he was assigned to the (GOLD) Crew for the post commissioning shakedown.

He was then assigned in October 1982 as Engineer Officer on USS MICHIGAN (SSBN 727)(BLUE) where he completed post commissioning shakedown, post shipyard availability, and three deterrent patrols.

From September 1985 until December 1987 he served as a member of the CINCPACFLT Nuclear Propulsion Examining Board.

He served as Executive Officer on USS PORTSMOUTH (SSN 707) until April 1990. He made a deployment to the Northern Pacific and to the Western Pacific.

Following a tour of duty from May 1990 to June 1992 as the COMSUBPAC Force Nuclear Power Officer, he reported for duty as Commanding Officer USS CAVALLA (SSN 684) in December 1992. During this tour, CAVALLA completed a Western Pacific deployment and was awarded the COMSUBPAC Silver Anchor Award.

Commander Colville is authorized to wear the Meritorious Service Medal with one gold star, the Navy Commendation Medal with two gold stars, the Navy Achievement Medal with one gold star, and several service and unit awards.

Commander Colville is married to the former Barbara Ann Czerwenka of Alexandria, VA. They and their two children, Kimberly and Ken reside in Aiea, Hawaii.



COMMANDER CHARLES J. LEIDIG, JR., U. S. NAVY

Commander Leidig, a native of Baltimore, Maryland, graduated with honors from the U.S. Naval Academy in 1978. Following completion of nuclear power and submarine basic training in December 1979, Commander Leidig served as a division officer aboard USS HENRY L. STIMSON (SSBN 655) in Charleston, South Carolina, completing five deterrent strategic patrols. In June 1982, he returned to the U.S. Naval Academy in Annapolis, Maryland, where he served as an instructor in the Weapon and Systems Engineering Department until January 1985.

In July, 1985, he completed the Submarine Officer Advanced Course in Groton, Connecticut, where he was awarded the David Lloyd Leadership Award and the L. Y. Spear Award. Commander Leidig was subsequently assigned as Engineer Officer on USS SAM RAYBURN (SSBN 635) during its conversion to the Navy's first Moored Training Ship and nuclear power training unit in Charleston, South Carolina. In December 1987, he transferred to USS STONEWALL JACKSON (SSBN 634), also in Charleston, where he completed post-overhaul trials and two strategic deterrent patrols as Navigation and Operations Officer.

From July 1989 to June 1991, Commander Leidig served as Material Officer on the staff of Commander Submarine Squadron Eleven in San Diego, California. His next assignment was as Executive Officer on USS POGY (SSN 647), homeported in San Diego, from September 1991 to January 1993. During his tour, the ship completed a Northern Pacific deployment and earned the Battle "E".

In March 1993, Commander Leidig was assigned to the Naval War College in Newport, Rhode Island. Graduating with distinction in March 1994, he earned a Master's Degree in National Security and Strategic Studies.

Commander Leidig is entitled to wear the Meritorious Service Medal, Navy Commendation Medal (four awards), and Navy Achievement Medal.

Commander Leidig is married to the former Mary Elizabeth Gembicki of Baltimore, Maryland. They have two daughters, Elizabeth and Jacqueline.

BRIEF HISTORY OF USS CAVALLA

Ship's History

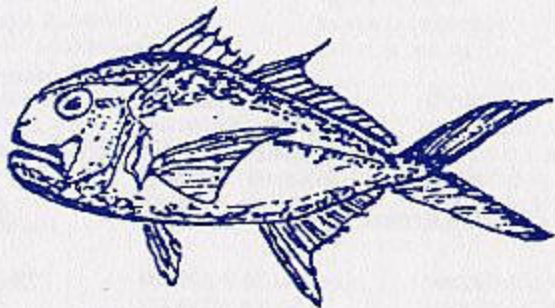
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The second USS CAVALLA (SSN 684) was commissioned on 9 February 1973. The ship operated as a unit of Submarine Squadron TEN from January 1974 to March 1975 receiving two consecutive Battle "E" awards. The ship became a unit of Pacific Submarine Force in October 1978 and entered overhaul at Puget Sound Naval Shipyard in November 1978.

Following overhaul in March 1980, CAVALLA established a reputation for excellence by earning four Navy Unit Commendations and one Meritorious Unit Commendation on five consecutive Western Pacific deployments. CAVALLA received three ASW "A", two Supply "E" one Engineering "E", one Communications "C" and one Damage Control "DC", during this period.

CAVALLA entered refueling overhaul in September 1987 at Mare Island Naval Shipyard. Overhaul was completed in February 1990. CAVALLA completed a sixth Western Pacific Deployment in September 1991. CAVALLA received the ASW "A" and Medical "M" awards in 1991, and the Medical "M" and Deck Seamanship "D" awards in 1992.

In April 1993, CAVALLA deployed for her seventh Western Pacific Deployment. The ship is currently preparing for a scientific ice expedition scheduled from March to June 1995.



THE NAME CAVALLA

The Cavalla is known technically as the Cero. It is a fish of the tropical seas, often coming in immense numbers to the coasts of Florida and the Carolinas, and ranging North to Cape Cod and South to Brazil and Africa. It is common on our South Atlantic Coast and among the Florida keys. At Key West it is, next to the Grunt, the most important food-fish. It usually appears in November and remains until April, during which time it is usually caught by trolling. It is justly regarded as one of the greatest of all game-fishes.

As a food-fish it takes a very high rank, the flesh being firm and of excellent flavor.

The Cavalla reaches a length of five feet and a weight of 100 pounds. The average size of those taken at Key West is only ten pounds, or less. The mouth is large with maxillary reaching below the eye. The adult fish is iron-gray in color. The young have sides with darker yellowish spots.

USS CAVALLA (SSN 684)

Keel Laid..... 4 June 1970
Launched..... 19 February 1972
Commissioned..... 9 February 1973
Sponsor..... Mrs. Melvin Price
Built by..... General Dynamics Corporation

COMMANDING OFFICERS

Commander Bruce Demars, USN..... 9 February 1973
to
28 December 1974
Commander John J King USN..... 28 December 1974
to
29 April 1978
Commander Fredric W. Rohm, USN..... 29 April 1978
to
10 August 1981
Commander Edward R. Losure, Jr., USN..... 10 August 1981
to
February 1984
Commander Timothy B. Moore, USN..... 18 February 1984
to
3 April 1987
Commander Larry C. Johnson, USN..... 3 April 1987
to
16 March 1990
Commander Stephen W. Larimer, USN..... 16 March 1990
to
22 January 1993
Commander John E. Colville, USN..... 22 January 1993
to
23 November 1994
Commander Charles J. Leidig, USN..... 23 November 1994

SHIP'S COMPANY

USS CAVALLA (SSN 684)

LCDR K. J. VOORHEES
 LT J. S. ARMSTRONG
 LT D. A. CHAMBERS
 LT R. L. KIRMIS
 LT M. B. RYAN
 LTJG C. K. CREECH
 LTJG J. M. REIMANN

LCDR T. M. CALABRESE
 LT J. J. BROWN
 LT J. D. CRAIN
 LT M. R. LEFORT
 LTJG C. R. BAIER
 LTJG S. O. MCINTOSH
 ENS M. H. WELSH

MMCM(SS) R. B. CARROLL
 STSCS(SS) S. G. WEAVER
 MSC(SS) P. E. COLGAN
 ETC(SS) T. M. KING
 EMC(SS) D. C. SILVA
 ICC(SS) A. L. ZIMMERMAN

QMCS(SS) S. J. CRIST
 RMCS(SS) B. L. HAMMOND
 TMC(SS) T. D. CULVER
 FTC(SS) S. P. MARCZAK
 MMC(SS) S. M. VEAL

ETCS(SS) M. D. UPDIKE
 ETC(SS/DV) C. A. BAYE
 EMC(SS) G. F. HOTTINGER
 MMC(SS) G. M. REAR
 HMC(SS) M. S. WHIPPS

STS3(SS) T. D. ARBULU
 MM2(SS) F. X. ARIAS
 ET3(SS) B. P. ARMSTRONG
 RMI(SS) M. J. BANDY
 MM2(SS) C. J. BIGGS
 MM2(SS) W. J. BISHOP
 ET1(SS) A. C. BLATZ
 MM2(SS/DV) W. E. BORST
 QM1(SS) D. W. BRADDOCK
 ET2(SS) J. M. BRANDOW
 MS2(SS) R. P. BROWN
 SK3(SS/DV) S. L. BROWN
 STS3(SS) W. K. BROWN
 MM2(SS) R. J. BURBANK
 SK3(SS) F. G. BUSBY
 MM3(SS) C. D. CARLUCCI
 FT2(SS/DV) T. A. CARPENTER
 SN(SS) S. M. CHATELIN
 ET1(SS) B. S. CRAFT
 SK1(SS) M. J. CRAVALHO
 MM2(SS) V. E. CRUTCHFIELD
 SA(SU) C. L. CUPPS
 STS2(SS) D. A. CUSHMAN
 RM2(SS) J. C. DAMEWOOD
 EM3(SU) R. L. DAVIS
 STS2(SS) T. F. DEEDS
 RM3(SS) J. E. DEUTCH
 MM2(SS) C. DOMBROWSKI
 ET3(SS) G. K. DRURY
 MM3(SS) R. A. DUNCAN
 QMSN(SU) J. W. DUNCAN
 MMI(SS) B. C. EUBANKS
 EM2(SS) M. C. FITZSIMMONS
 EM2(SS) A. J. FLEMING
 STS2(SS) L. K. FOSDYCK
 FN(SU) D. A. FULKS
 ET2(SS) M. E. FULLERTON

MM2(SS) W. B. GARDINER
 ET2(SS/DV) B. E. GRAY
 MMSN(SU) D. L. GROLLMAN
 FT3(SS) R. A. GUENTHER
 STS2(SS/DV) C. L. GULLETT
 QM2(SS) J. V. HAGA
 QM2(SS) C. A. HARDY
 MMI(SS) D. V. HARGIS
 YN3(SS) G. E. HEADDEN
 MM3(SS) D. K. HOFFMAN
 MMI(SS) K. L. HOLLAND
 ET2(SS) J. A. HORTON
 YN1(SS) D. T. HUGHES
 STS3(SS) R. F. HUTTON
 MS2(SS) S. L. JENNINGS
 QM3(SS) S. F. JOHNSON
 MS3(SS) H. JOSEPH
 EM3(SS) B. T. KANE
 MMI(SS) B. N. KELHOFFER
 ET2(SS) R. D. KLOBERDANZ
 SKSN(SU) J. A. LIKENS
 EMI(SS) J. "L." LINDEMAN
 ET1(SS) J. B. LOACH
 TM2(SS) T. J. LOPER
 MM3(SU) T. J. LOUQUET
 ET2(SS) C. C. MANGELS
 EM2(SS) T. S. MARCINONIS
 MM3(SS) J. H. MARTIN
 ET3(SU) D. L. MASLONKA
 MMI(SS) M. E. McDONALD
 YNSA(SU) J. R. MCINTYRE
 STS2(SS) D. V. MCKEAN
 RM3(SS) P. F. MCSWEENEY
 TM2(SS) J. S. MOODY
 FN(SS) M. B. NEISWENDER
 MM2(SS) C. S. OAKLEY
 MMSN(SS) J. D. O'BRIEN

MM2(SS) G. D. PARNELL
 MM2(SS) T. C. PATTERSON
 IC3(SS) A. J. RADLOVIC
 ET3(SU) L. J. REDDICK
 MMI(SS) L. G. RICE
 EM2(SS) R. S. ROBINSON
 FT3(SS) C. E. ROGERS
 IC3(SS) E. A. RUFFIN
 MMFA(SU) G. N. SCHLAPFER
 EMI(SS) T. E. SELLON
 TM3(SS) J. L. SHIPP
 MM3(SU) J. P. SHULTZ
 IC3(SS) J. R. SMITH
 TM1(SS) P. L. SMITH
 STSSA(SU) J. A. L. SOPHER
 FT2(SS) M. D. STEELE
 RMSR(SU) E. M. STEELE
 MM3(SS) J. S. STIEBEN
 ET1(SS) G. W. SUMNALL
 MM2(SU) D. W. TALK
 RM3(SU) C. A. THIBODEAUX
 FT3(SS) C. M. THIES
 EM2(SS) D. W. THOMAS
 STS2(SS) R. A. TROUTMAN
 STSSA(SU) B. E. VANBUREN
 MM2(SS) M. E. VANDERRHOER
 IC3(SS) C. VASQUEZ
 ET3(SS) N. D. VEEDER
 FT1(SS) D. W. WARTEMAN
 STS2(SS) S. L. WERLEY
 MM2(SS) S. E. WHITMIRE
 TMSA(SU) J. A. WILSON
 EMI(SS) M. C. WOOD
 TM2(SS) W. I. WOOD
 MSSA(SU) C. G. WRHEL
 MM3(SU) B. F. ZOOK

