Welcome Aboard

USS HYMAN G. RICKOVER (SSN 709)

The United States Navy's Only Four Star Submarine

WELCOME ABOARD

On behalf of the officers and crew of the USS HYMAN G. RICKOVER it is my pleasure to extend to you a warm and sincere welcome. We are most pleased to have you onboard as our guest.

Whether you are onboard for a short visit, or an underway period, we will work to make your stay informative, interesting and enjoyable. The name of the ship honors a great American patriot and we are proud to serve on this fine submarine.

The information contained in this pamphlet is designed to give you a better understanding of our ship and the Submarine Force. Again, Welcome Aboard and enjoy your stay.

Peter H. Young
Commanding Officer

MEAL HOURS

AT SEA		INPORT	
Breakfast	0500 - 0600	Breakfast	0600 - 0645
Lunch	1100 - 1200	Lunch	1100 - 1200
Dinner	1700 - 1800	Dinner	1630 - 1730
Midrats	2300 - 2400		

USS HYMAN G. RICKOVER
(SSN 709)

USS HYMAN G. RICKOVER (SSN 709) is the first United States warship to be named in honor of Admiral Hyman G. Rickover, USN.

USS HYMAN G. RICKOVER (SSN 709) is a nuclear powered fast attack submarine of the Los Angeles (SSN 688) Class. She is 360 feet long, displaces 6900 tons, and carries a crew of 14 officers and 120 enlisted. The ship was launched on 27 August 1983 at Electric Boat Shipyard, Groton, Connecticut and commissioned on 21 July 1984 at Naval Submarine Base, Groton, Connecticut. Her principle missions are to: conduct offensive strikes against land targets, operate against enemy submarines and surface ships; conduct mining operations; deploy Naval special warfare teams and conduct covert surveillance.

Surpassing the underwater capabilities of any class of ship before her, RICKOVER carries detection, communications, navigation, propulsion and computerized weapons systems of the most advanced design. For months, she can cruise quietly submerged with a maximum of comfort for her crew, and with an ever ready potential to deliver any submarine tactical weapon the Navy possesses against submerged or surface targets. When coupled with the talents of a well trained crew, RICKOVER provides a tactical capability of major importance to our nation's defense.

Commander Peter H. Young
United States Navy

CDR Young was raised in Vienna, Virginia. He graduated from the U. S. Naval Academy in 1982 with a Bachelor of Science Degree in Mechanical Engineering.

After completing initial nuclear power and submarine training, he reported to the USS MICHIGAN (SSBN 727) (GOLD), where he completed five strategic deterrent patrols and served as Electrical Division Officer, Main Propulsion Assistant, and Engineer Officer.

In August 1986, CDR Young reported to the U. S. Naval Academy where he served as a Company Officer. After attending the Submarine Office Advanced Course in 1988, he reported to USS DANIEL BOONE (SSBN 629) (GOLD), where he served as Engineer Officer until June 1991, completing four strategic deterrent patrols. In July 1991, he reported to the staff of the Commander in Chief, U. S. Atlantic Fleet, where he served as a junior member on the Nuclear Propulsion Examining Board.

CDR Young served as Executive Officer of the USS PROVIDENCE (SSN 719), which completed a North Atlantic deployment and a combined North Atlantic and Mediterranean Sea deployment while he was on board. In February 1996 he reported to the staff of the Commander, Submarine Force, U. S. Atlantic Fleet, where he served as a member of the Tactical Readiness Evaluation Team.

CDR Young has been awarded the Meritorious Service Medal (two awards), the Navy Commendation Medal (three awards), the Navy Achievement Medal (four awards), and various unit awards.

He and his wife, the former Maura Matheson Preece of Washington, D. C., reside in Virginia Beach with their two daughters, Caitlen and Carey, and their son, Sam.

ADMIRAL HYMAN G. RICKOVER

"Through Vice Admiral Rickover's skillful technical direction, unusual foresight and unswerving perseverance, the United States has attained a preeminence in the field of naval nuclear propulsion."

Accolades such as this, when the Distinguished Service Medal was presented to him in 1961, followed Admiral Hyman George Rickover throughout his colorful and distinguished 64-year Naval career.

That career began in 1918, when as a young man from Chicago, he entered the United States Naval Academy. It went on to span two world wars and the nation's progression into the nuclear era, earning him the title "Father of the Nuclear Navy."

For 15 years after he graduated from the Naval Academy in 1922, he served mainly on board battleships and submarines and also commanded a minesweeper. During this time, he also received a Master of Science Degree in Electrical Engineering from Columbia University.

In December 1945, he was assigned as Inspector General of the U.S. NINETEENTH FLEET, engaged in mothballing vessels of the Pacific Fleet.

While assigned to the Manhattan Project at Oak Ridge, Tennessee, he received a Letter of Commendation from the War Department "for outstanding service in connection with the development of the atomic bomb as Assistant Director of Operations, Manhattan District."

In 1947, he was assigned to duty in connection with nuclear ship propulsion in the Bureau of Ships. From there he moved to the Division of Reactor Development of the U.S. Atomic Energy Commission in Washington D.C.

Those assignments set the stage for the Admiral's historic involvement with the NAUTILUS, the world's first nuclear-powered vessel.

Rickover, then a Captain, was chosen to direct work on the land-based prototype (STR Mk 1) for the NAUTILUS at the AEC's National Reactor Testing Station near Idaho Falls, Idaho. For his work with that project, he received a Gold Star in lieu of a second Legion of Merit.

NAUTILUS was built in Electric Boat's south yard and was christened on 21 January 1954 by Mrs. Dwight D. Eisenhower. On 17 January 1955, she put to sea for the first time, signaling her historic message - "Underway on Nuclear Power."

Rickover went on to champion and develop the nuclear Navy for another 28 years; through several generations of nuclear submarines and surface ships. In fact, today's entire U.S. nuclear submarine and surface fleets bear Rickover's imprint.

In addition to his contributions to the development of the Nuclear Navy, Rickover also led the scientific, technical and industrial team that developed and constructed the first nuclear powered electric utility central station in the United States at Shippingport, Pennsylvania. First authorized in July 1953, the station achieved initial criticality on 2 December 1957.

Rickover's value to the nation was perhaps best exemplified by the fact that he served, by act of Congress, on active duty for 20 years beyond the mandatory retirement age of 62. When he retired on 19 January 1982, he had served for 64 years; longer than any other person.

Over the years, Rickover received 13 military medals and decorations, 61 civilian awards, including the prestigious Enrico Fermi Award, and 15 honorary degrees. He was also the author of five books and two reports to Congress.

His career is perhaps best summed up by this comment from President Gerald R. Ford: "His countless achievements will be everlasting and indelibly written on the pages of America's history as a challenge for future generations."

LAUNDRY

For extended underway periods and when deployed, the ship runs a small laundry. Its scheduling and use is controlled by the COB.

SECURITY

As most features of a submarine are classified, the adage "what you see here, stays here" is a rule of the silent service. The ship's Security Officer will advise you what material may be taken from the ship. He will also authorize and review any photographs that are taken. Spaces aft of Crew's Mess, Sonar, Radio and ESM are security areas. The Security Officer will advise you as to which spaces to enter.

WATCHSTATIONS AND EQUIPMENT

Visitors are always welcome in any authorized space. Please ask the watchstanders permission to enter. The Chief of the Watch controls access to the bridge. Check with him immediately before laying to, and after returning from, the bridge. Only watchstanders may operate ship's equipment, valves and switches. Cautions are posted where needed to warn of hazards and special requirements. If you have any questions feel free to ask the watchstander responsible for the space. He will be glad to help you.

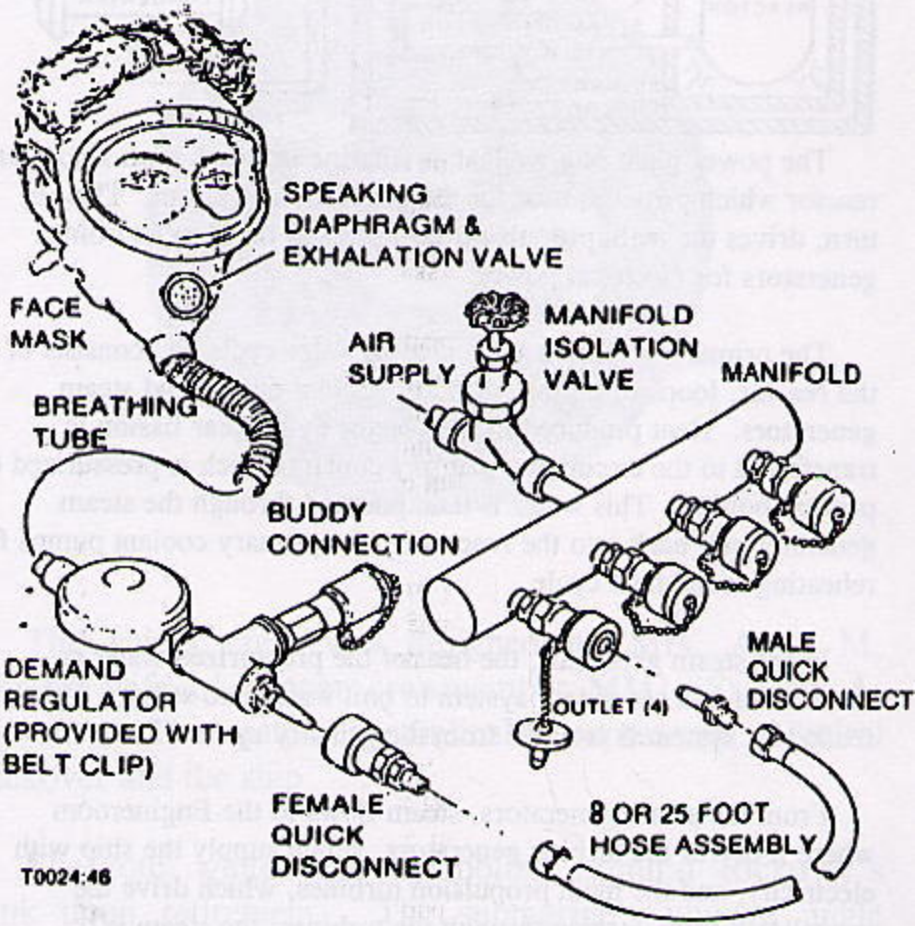
EMERGENCIES

Emergencies are announced with one of several alarms over the ship's loudspeakers. Visitors should initially stand fast but clear of doors and passageways. The crewmember in charge of the space will explain the situation and advise you of what further action to take as soon as he is able to. Casualty drills are frequently run, and are treated as actual emergencies. Drill monitors will advise you what, as a visitor, you should do.

EMERGENCY AIR BREATHING (EAB) SYSTEMS

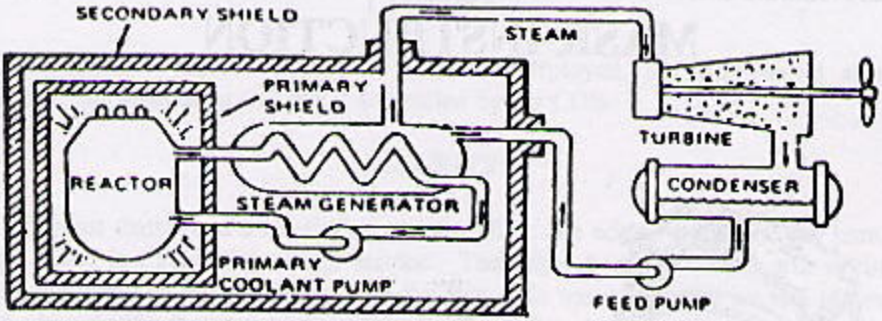
Should an actual fire occur, the ship could quickly fill with smoke. Throughout the ship there are breathing masks stowed in marked "EAB" lockers. Throughout the ship are fresh air manifolds for t he masks. A red non-skid strip is located beneath each manifold. The procedure for wearing an EAB mask is shown on the next page. As a matter of personal safety, you should become familiar with EAB locations and their use.

EMERGENCY AIR BREATHING (EAB) MASK INSTRUCTION



Tighten side straps first, then tighten the top strap. Completely loosen all straps upon removal.

HOW NUCLEAR POWER OPERATES A SUBMARINE



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 turbine generators for electrical power.

The primary system is a circulating water cycle and consists of the reactor, loops of piping, primary coolant pumps and steam generators. Heat produced in the reactor by nuclear fission is transferred to the circulating primary coolant which is pressurized to prevent boiling. 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 Engineroom where it drives the turbine generators, which supply the ship with electricity, and the main propulsion turbines, which drive the propellor. 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 ship to operate completely independent from the earth's atmosphere for extended periods of time.

The Ship's Crest

The ship's crest was designed by Mrs. Anita M. Tipton, wife of former crewmember MM1(SS) Carl A. Tipton. The patch symbolically represents Admiral Rickover and the ship.

The four white stars symbolize Admiral Rickover's rank upon retirement. The submarine's upward angle represents seeking out our nation's enemies. The nuclear power symbol is a reminder that Admiral Rickover is father of the nuclear Navy, and the motto, "Committed to Excellence, " symbolizes the Admiral's 64 years of active naval service.

THE SUBMARINER

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

A submarine at sea is a distant 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 ship there are men who, in the hour of emergency or peril at sea, can turn to each other. These men are ultimately responsible to themselves and each to the other for all aspects of operation 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; it is the spur which has given the Navy its greatest mariners - the men of the submarine force.

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