

WELCOME ABOARD



IRON HORSE

ON TIME, ON TRACK, ON TARGET

USS SCRANTON (SSN 756)



Welcome Aboard!

On behalf of the officers and crew of USS SCRANTON (SSN 756), I take pleasure in extending to you the hospitality of the United States Navy and the Submarine Force. It is our privilege to have you on board as our guest.

The men of SCRANTON typify the high level of professionalism, skill, and reliability traditionally found in the Submarine Force. They come to us from all walks of life, representing almost every state, and sharing a common goal – to operate the finest ship in the Navy at the forefront of our nation's defense.

The officers and crew will do their best to answer your questions about USS SCRANTON. We hope your time on board will be informative, interesting, and enjoyable.

A handwritten signature in black ink, appearing to read "Clarence Earl Carter". The signature is fluid and cursive, with a long horizontal stroke at the end.

Clarence Earl Carter
Commander, U.S. Navy
Commanding Officer



**Commanding Officer
Clarence Earl Carter
Commander, United States Navy**



Commanding Officers

CDR J. G. Meyer, USN	OCT 1988 – JUL 1991
CDR T. J. O'Connor, USN	JUL 1991 – MAR 1994
CDR J. M. Bird, USN	MAR 1994 – NOV 1996
CDR K. D. Walker, USN	NOV 1996 – MAR 1999
CDR C. E. Carter, USN	MAR 1999 – Present

Commander Carter, a native of Birmingham, Alabama grew up in Louisville, Kentucky, and graduated from Vanderbilt University in December 1980, with a Bachelor of Engineering Degree in Civil Engineering and Mathematics. He was commissioned through the Naval Reserve Officers Training Corps Program.

Following completion of nuclear power training and the Submarine Officer Basic Course, in September 1982, he reported to the USS SAND LANCE (SSN 660), homeported in Charleston, South Carolina. His division officer tour on SAND LANCE included two Northern Atlantic deployments and a Mediterranean deployment.

In August 1985, Commander Carter reported to the staff of Commander, Submarine Group 9 in Bangor, Washington, where he served as Flag Lieutenant and Aide to Rear Admiral W. E. Rickman until October 1987.

After attending the Submarine Officer Advance Course, he reported to the USS QUEENFISH (SSN 651), homeported in Pearl Harbor, Hawaii in May 1988. During his tour as Engineer Officer, QUEENFISH completed deployments to the Arctic, Western Pacific, and Northern Pacific, and the first 637-class submarine inactivation.

In June 1991, Commander Carter reported to the staff of Commander, Submarine Force, U.S. Pacific Fleet, where he served as Material Officer for Submarines/Operational Type Desk Officer until October 1993. He concurrently earned a Master of Science Degree in Public Administration from Central Michigan University.

He returned to Bangor, Washington in February 1994 as Executive Officer, USS FLORIDA (SSBN 728) (GOLD). His tour on FLORIDA was highlighted by the ship's receipt of the COMSUBRON SEVENTEEN Battle Efficiency 'E' Award for 1994.

Commander Carter attended the Air War College at Maxwell Air Force, Alabama from July 1995 to June 1996. He was then assigned as an Operations Research Analyst, and subsequently as a Branch Chief, in the Studies Analysis and Gaming Division; Force Structure Resources and Assessment Directorate (J8); The Joint Staff; Washington, DC, until June 1998.

Commander Carter's personal awards and decorations include the Defense Meritorious Service Medal (two awards), the Meritorious Service Medal, the Navy Commendation Medal (four awards), the Navy Achievement Medal (four awards), the Navy Expeditionary Medal, and the National Defense Medal.

Commander Carter is married to Lea Ann Moreton of Windsor, Connecticut. They reside in Norfolk, Virginia. His parents, Mr. and Mrs. Clyde B. Carter, are residents of Pembroke Pines, Florida.

History of USS SCRANTON (SSN 756)

Deployments

Mediterranean Sea (1993, 1994, 1996)

North Atlantic Ocean (1994, 1998)

Indian Ocean / Arabian Gulf (1996)





Awards

Submarine Squadron Six Damage Control Red "DC" (1992, 1997)

Submarine Squadron Six Communications Green "C" (1994)

Submarine Squadron Six Supply Blue "E" (1993, 1995, 1997)

Submarine Squadron Six Engineering Red "E" (1995, 1997)

Sixth Fleet "Hook 'Em" ASW Award (1993)

Meritorious Unit Commendation (1993)

Captain Edward F. Ney Memorial Award (1995)

Submarine Force Nominee for Battenberg Cup (1995)

Submarine Squadron Six Battle Efficiency "E" (1994, 1995, 1998)

Submarine Squadron Six Tactical Operations White "T" (1996)

Vital Statistics

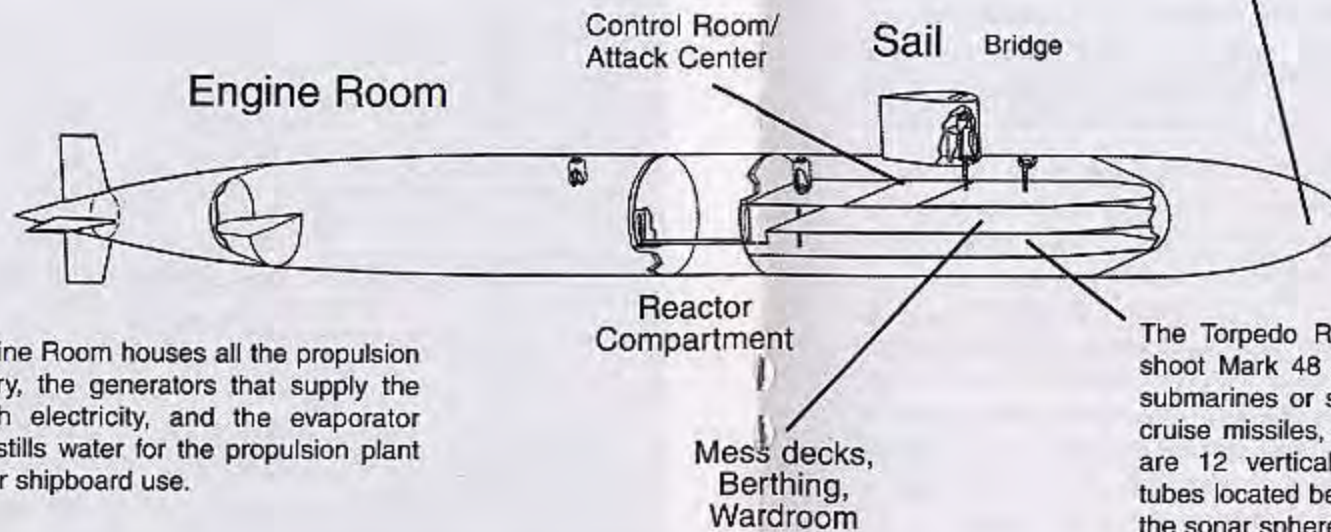
Keel Laid	June 27, 1986
Christened	April 15, 1989
Launched	July 3, 1989
Commissioned	January 26, 1991
Sponsor	Mrs. Sarah McDade (Wife of Congressman Joseph McDade of Pennsylvania)
Length	360 feet
Diameter	33 feet
Displacement (submerged)	6900 tons
Speed	Greater than 25 knots
Maximum diving depth	Greater than 800 feet
Endurance	Unlimited
Armament	12 Tomahawk missiles (vertical launch), 28 Mk 48 ADCAP torpedoes/ Tomahawk missiles (torpedo tube launched)
Complement (approx.)	14 Officers, 16 Chief Petty Officers, 110 E-6 and below (140 total)

The Los Angeles Class

Submarines of the Los Angeles class, the U.S. Navy's most prolific class of nuclear-powered attack submarines, are among the most advanced undersea vessels of their type in the world. Their mission: to hunt down and destroy enemy surface ships and submarines. With the advent of the Tomahawk cruise missile, they have the additional role of a tactical strike mission against land-based targets.

The 360 foot, 6900 ton ships are well equipped to accomplish these tasks. Faster than their predecessors and equipped with highly accurate sensors and weapon control systems, they are armed with sophisticated Mark 48 ADCAP (advanced capability) anti-submarine/anti-ship torpedoes and Tomahawk cruise missiles. The newest ships of the class, including SCRANTON, carry additional Tomahawk cruise missiles in vertical launch tubes in the bow. Each vessel carries a crew of about 140, 14 officers and 126 enlisted men, all specialists in their respective fields.

The Sonar Sphere, an array of over 1,000 hydrophones, is located in the bow. This is the best listening position on board since it is far removed from the propulsion machinery.



The Engine Room houses all the propulsion machinery, the generators that supply the ship with electricity, and the evaporator which distills water for the propulsion plant and other shipboard use.

The Torpedo Room has 4 tubes that can shoot Mark 48 ADCAP torpedoes at either submarines or ships, Tomahawk land-attack cruise missiles, or mines. Additionally, there are 12 vertical-launch Tomahawk missile tubes located between the pressure hull and the sonar sphere.

How a Submarine is Organized

Few modern submarines rival the nuclear submarine for complexity and absolute self-efficiency. The often-inhospitable environment of the sea only intensifies the need for coordination of each crewman's activities. The keystone of the submarine organization is the Commanding Officer – the Captain of the ship. He is ultimately responsible for the successful completion of the missions assigned, and he is empowered to employ whatever measures he deems necessary in order to accomplish them. It is the necessary conferral of discretion in an isolated circumstance that lends to the submarine command a sense of creativity and individuality.

Second in command is the Executive Officer – next senior in rank to the Captain and not very far from attaining his own command. The Exec, or XO as he is formally called, offers his wide-ranging experience to the submarine organization through direct coordination of administrative training and operational activities of the ship.

The remainder of the ship's force is comprised of four departments: Navigation/Operations, Combat Systems, Engineering and Supply. Senior officers who rank just below the Executive Officer lead these. Junior officers act as division officers. Divisions are the smallest organizational units, consisting of groups of enlisted specialists organized according to skill.

Each piece of material on the ship from the propeller to the paint job is assigned to division, and finally to an individual technician for its care. Each of these men soon becomes an expert not only in the technical functions to which his special training has been directed, but also in the demands of administration, leadership, and instruction of his shipmates.

There is a second organization aboard the ship: the watch organization, which is designed to conduct the actual operations of the ship around the clock. The crew is divided into three similar groups called sections, with representatives from each division in each section. At any given time, one of these sections "has the watch". A watch section is headed by the Officer of the Deck, who carries out the Captain's orders and controls the ship's course, speed, and depth during the hours of his watch. The Engineering Officer of the Watch, who controls the propulsion plant, assists him. Enlisted specialists operate the ship's equipment to accomplish desired functions. Since one-third of a submariner's day is spent on his watch, it is the principal determinant of his routine.

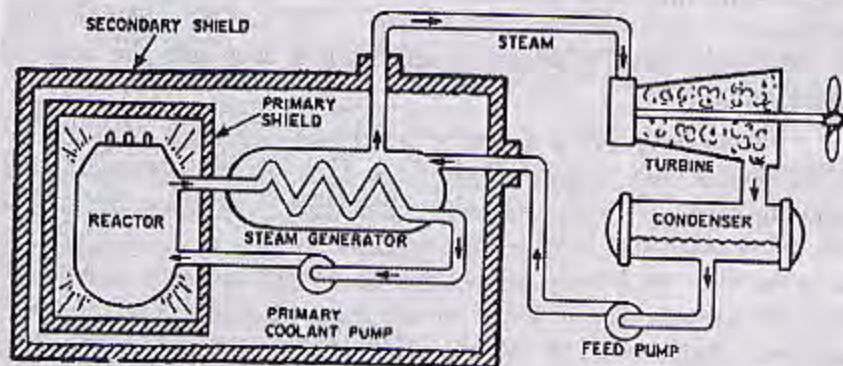
The Submarine Nuclear Propulsion Plant

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

The nuclear propulsion plant in SCRANTON uses pressurized water reactor, which has two basic systems: a primary system and a secondary system. The primary system circulates ordinary water and consists of the reactor, piping loops, steam generators, and pumps. The heat produced in the reactor is transferred to the water, which is kept at high pressure so that it does not boil. This water is pumped through the steam generators, and back to 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 the main propulsion turbines, which drive the propeller. After passing through the turbines, the steam is condensed into water, which is pumped back into the steam generators. Thus, both the primary and the secondary systems are closed systems where the water is recirculated and reused.



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

The Submarine Heritage

Although inventors had been toying with submersible craft for years, none had produced a really practical naval submarine until John P. Holland designed and built a boat, which was purchased by the U.S. Navy in 1900 and commissioned as the USS HOLLAND. Other countries were quick to adopt this and other designs, and within a decade, submarine forces had become a feature of most major navies. However, almost all, naval authorities of the period viewed the submarine as a coastal and harbor defense craft. The submarine was a boat, not a major warship, and the term "boat" has remained common usage to this day. The HOLLAND was initially looked upon as an experimental curiosity. The Navy violated a century of tradition by naming the little vessel after a living person, but thought the submarine would be a passing, non-essential step in the advancement of naval warfare. John P. Holland, however, saw beyond the current limitations of his primitive prototype. His vision was that of a new class of warship, powerful enough to engage major fleets in any waters and dominate the seas.

Following the Japanese attack on Pearl Harbor on December 7, 1941, the Pacific Fleet was heavily damaged and unable to mount any kind of credible offensive action...with the exception of the Submarine Force, which was initially discounted by the Japanese. USS TRITON attacked and damaged enemy warships on 10 December 1941. Asiatic Fleet submarines stationed in the Philippine Islands were already on patrol. Within three days of the devastation of Pearl Harbor, Pacific Fleet submarines GUDGEON, PLUNGER, POLLACK, POMPANO, TAUTOG, and DOLPHIN commenced patrols deep into the heart of enemy waters.

Submarine attrition of Japanese shipping prevented consolidation of the empire and accounted for over 55% of all shipping losses, including 29% of Imperial warships. Although comprising only 2% of U.S. Navy personnel, submarines kept the country in the Pacific war while the fleet was rebuilding. As the war progressed, they starved the Japanese war machine of badly needed men, oil, machinery, tools and supplies, which ended up on the ocean floor. The costs were high. Submarine casualty rates were 6 times higher than other naval forces. 52 submarines and 3,500 submariners were lost. It is the sacrifices made by these men, who remain on eternal patrol, that must be treasured, carried forward, and emulated today by the men who wear the gold and silver dolphins of the Submarine Force. This is our submarine heritage.

Origin of Submarine Dolphins



The insignia of the U.S. Navy Submarine Service is a submarine flanked by two dolphins. Dolphins, traditional attendants to Poseidon, deity of sailors, are symbolic of a

calm sea and are sometimes called the "sailor's friend". The origin of the U.S. Navy Submarine Service insignia dates back to 1912. On June 13 of that year, Captain Ernest J. King, Commander Submarine Division Three, later a Fleet Admiral and Chief of Naval Operations during World War II, suggested that a distinguishing device for qualified submariners be adopted. (The original design was based on his own pen and ink sketches.) Submarine qualification pins were first authorized for use in 1941, the officers wearing gold dolphins on the left breast, while enlisted men wore silver dolphins embroidered on the right sleeve. Today, both officer and enlisted insignia are worn on the left breast. In order to "Qualify in Submarines", a submariner must possess an in-depth knowledge of ship's construction, operation, and damage control, as well as demonstrate his reliability under battle conditions.

"The Submariner"

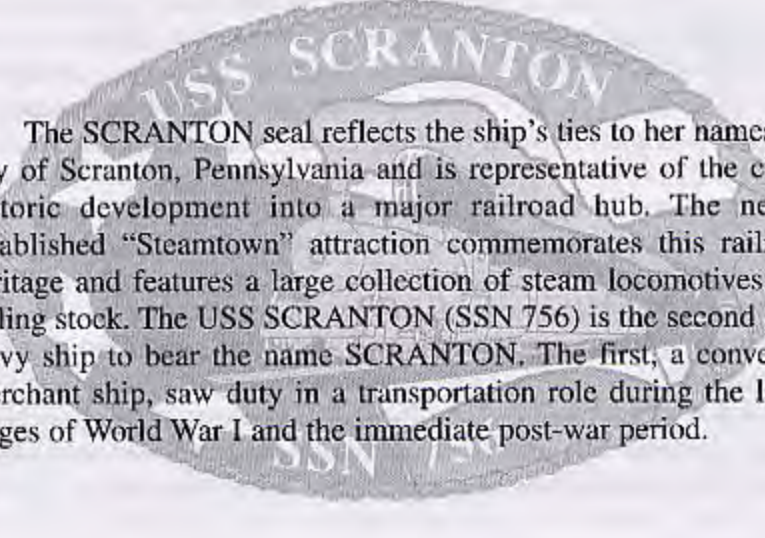
Only a submariner realizes to what great extent an entire ship depends on him as an individual. To a landsman this is not understandable and sometimes it is even difficult for us to comprehend it, but it is so!

A submarine at sea is a different world in herself, and in the consideration of the protracted and distant operations in submarines, the Navy must place responsibility and trust in the hands of the men 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 are ultimately responsible to themselves and to each other for all aspects of operations on 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 ludicrously small, nevertheless, it is the spur which has given the Navy its greatest mariners, the men of the Submarine Service. It is a duty which most richly deserves the proud and time honored title of "Submariner".

The USS SCRANTON Seal

The seal is an oval-shaped emblem. At the top, the words "USS SCRANTON" are written in a curved path. In the center, there is a detailed illustration of a steam locomotive pulling a train. At the bottom of the oval, the number "SSN 756" is written in a curved path.

The SCRANTON seal reflects the ship's ties to her namesake city of Scranton, Pennsylvania and is representative of the city's historic development into a major railroad hub. The newly established "Steamtown" attraction commemorates this railroad heritage and features a large collection of steam locomotives and rolling stock. The USS SCRANTON (SSN 756) is the second U.S. Navy ship to bear the name SCRANTON. The first, a converted merchant ship, saw duty in a transportation role during the latter stages of World War I and the immediate post-war period.

The City of Scranton, Pennsylvania

Located in the Lackawanna River Valley in northeastern Pennsylvania, Scranton grew from a tiny commercial settlement in 1800 to a giant producer of iron ore and anthracite coal and by 1900 was one of the country's major railroad centers. As anthracite coal's usefulness as a fuel took hold in America, European immigrants flooded into Scranton to work in the mines. The city grew from a population of 1,000 in 1850 to over 45,000 in 1880 when Charles Woolworth opened his first "five and dime" store in Scranton.

By the late 1920's, the early boom town days ended with the decline of the railroads and the shift in the national fuel market from coal to the cheaper oil and natural gas. Building on its former entrepreneurial spirit, Scranton has begun a rebirth within the last generation of new businesses and diversified industries. Once a railroad hub, the city today is a transportation center attracting visitors to historic sites and a wealth of outdoor activities in the area's vast natural beauty. The region is nationally recognized as an increasingly appealing place to visit, work, and raise a family.

General Information

Please observe the following procedures while you are on board.

WARNING SIGNS: Please observe all warning signs. Consult a crewmember for assistance in any matter. Signs restrict access to some parts of the ship, such as the Engine Room and Radio Room; these signs are for your safety, as well as the security of the ship.

EMERGENCIES: Should any emergency situation arise, alarms will be sounded and the appropriate word passed. You are requested to **STAND STILL BUT REMAIN CLEAR** of all passageways and operating areas. Do not obstruct ladders, hatches, or the watertight door to the Engine Room. Allow ship's personnel to perform required actions without interference. The member of ship's company in charge at the scene will explain the situation as soon as he is able. Please follow his directions without hesitation.

OPERATION OF SHIP'S EQUIPMENT: Do not operate any equipment, switches, or valves without prior approval from ship's force. Observe posted precautions and procedures in all operations.

SECURITY: Certain aspects of the ship's operational characteristics and certain areas of the ship are classified. The Radio Room and Engine Room are always classified areas; underway, the Sonar Room becomes one. Please do not discuss ship's operations you may see or hear about once you leave the ship.

MEDICAL FACILITIES: The ship has a Hospital Corpsman available at all times; he should be consulted for any illness or injury that may occur underway. Passengers susceptible to motion sickness are advised to obtain medication prior to getting underway. The Corpsman can usually be found in the 3-inch launcher space or Crew's Mess, or may be contacted through the Chief of the Watch.

LAUNDRY: The ship's laundry is located just forward of the Auxiliary Machinery Room in Forward Compartment Lower Level. The Chief of the Boat (COB) assigns laundry days, normally on a divisional basis.

HEADS: There are heads throughout the Forward Compartment. Only Officers will use the Officer's Head, and the Chief Petty Officers, the CPO Head. Avoid excessive use of potable water. When you shower, soap down with the water off, and then rinse; do not let the water run. There is a small push button on the side of the showerhead that acts as an on-off button without changing temperature. Ensure no article such as pencils, rags, toothpicks, etc., fall into the commodes, as such articles can foul the pumps, valves, and piping associated with the sanitary system.



*"I have no wish to be associated with a ship that does not sail fast,
for I intend to go in harm's way."*

John Paul Jones