



August 2, 2015  
9:32 AM MST

## Admiral Rickover brought the nuclear age to the US Navy

The future nuclear branch of the United States Navy began in Poland when on January 27, 1900, Chaim (Hyman) Godalia Rickover was born. The son of Abraham Rickover and Rachel Unger, his first name in Hebrew (חַיִּים) means “life”. His middle name “Godalia”, is Yiddish for “God is great”. Rickover later changed his middle name to ‘George’ when he became a cadet at the U.S. Naval Academy. The Rickover family made their home in Maków Mazowiecki, approximately 62 miles from Warsaw, Poland, during the time of the last Russian tsar, Nicholas II.



[www.navsourc.org](http://www.navsourc.org)

During his childhood in Russian-occupied Poland, Rickover was not allowed to attend public schools due to his Jewish faith. Instead, his education began at the age of four when he attended a religious school. His lessons were in Hebrew using the Tanakh (Old Testament) as his textbook. Lessons began at sunrise and lasted until sunset, six days a week.

In March 1906, Hyman fled Poland with his mother and sister during the anti-Semitic Revolution of 1905. Over 3,000 Jews had already been killed at the time they left. The vast majority of the Jews who remained behind in Poland would later perish in the Holocaust. Abraham had gone ahead to find work and a place to live in New York City and was on hand to greet his family when they arrived.

For Hyman's first two years in America, the family lived on the East Side of Manhattan. They later moved to North Lawndale in Chicago. There Abraham worked as a tailor. Hyman was nine years old when he was hired for his first job. He earned 3¢ per hour holding a lantern so his neighbor could work on a machine. After that, he delivered groceries. In 1918, Rickover graduated from high school with honors and had a full time job delivering telegrams for Western Union. His work allowed him to cross paths with U.S. Congressman Adolph J. Sabath. Born in Czechoslovakia, Sabath was also a Jewish immigrant. In time, Sabath would nominate Rickover for an appointment to the U. S. Naval Academy.

Rickover graduated from Annapolis on June 2, 1922, #107 in a class of 540. Receiving his commission as an ensign, he received orders on September 5, 1922 to the USS *La Vallette*. Six months later, he was the destroyer's youngest engineer officer.

While still on active duty with the Navy, Rickover earned a Master of Science degree in Electrical Engineering, utilizing the opportunity made available through the Naval Postgraduate School at Annapolis. He then enrolled in Columbia University and life took a special turn for him when he met Ruth D. Masters, an international law graduate student. In 1931, the couple married and a short time later, Abraham and Rachel Rickover received a letter from their son stating he had become an Episcopalian.

Fifty-two years after Rickover left Columbia, he was invited to offer a speech at the university. In the speech, he stated:

*"In 1929 I attended the Columbia School of Engineering for postgraduate study in electrical engineering. Columbia was the first institution that encouraged me to think rather than memorize. My teachers were notable in that many had gained practical engineering experience outside the university and were able to share their experience with their students. I am grateful, among others, to Professors Morecroft, Hehre, and Arendt. Much of what I have subsequently learned and accomplished in engineering is based on the solid foundation of principles I learned from them. I am therefore especially gratified by your invitation to return and speak this evening."*

One who preferred serving on a small ship rather than a large one; Rickover soon learned young officers who volunteered for submarine duty would advance through the ranks at a more rapid rate than those on ships and carriers. At first his application was turned down, due to the fact he was now 29 years old. Rickover, however, would not give up and one day spotted a former commanding officer who he had served under on the *Nevada*. With the officer's intervention, Rickover gained his opportunity and served as a bubblehead from 1929 to 1933. During this time, Rickover translated *Das Unterseeboot* (The Submarine). Admiral Hermann Bauer of the German Imperial Navy had written the book during World War I. Rickover's translation was adopted by the Navy as the basic text for submarine service.

Rickover arrived in Pearl Harbor on April 10, 1942. There he began by organizing repairs of the electrical power plant on the *USS California*. Through his leadership, the motors soon operated well enough to allow the *California* to sail on her own power from Pearl Harbor to the Puget Sound Navy Yard for repairs. Due to Rickover's skills, the Navy bounced him from-pillar-to-post. He later made the cover of *Time* magazine on January 11, 1954 and was described in the article as:

*"Sharp-tongued Hyman Rickover spurred his men to exhaustion, ripped through red tape, drove contractors into rages. He went on making enemies, but by the end of the war he had won the rank of captain. He had also won a reputation as a man who gets things done."*

In 1946, Rickover began a new chapter in his naval career. A new initiative begun at the Clinton Laboratory was focused on developing an electric generating plant based on [nuclear power](#). The [US Navy](#) sent eight men to participate, one of which was Rickover. For the past year, he had served as Inspector General of the 19th Fleet on the west coast. He had also been assigned to Schenectady, New York where he worked with General Electric in an effort to create a nuclear propulsion plant for the Navy's destroyers. At the Clinton Laboratory, Rickover served as deputy manager of the entire project and his former CO, Rear Admiral Earl Mills, gave him carte blanche access to all facilities, files and reports. He now worked with numerous physicists attached to the [Manhattan Project](#) and quickly became an early convert to the use of nuclear marine propulsion.

As with most ideas which will prove fruitful in the future; at their conception, the majority of individuals made aware of the pregnant idea are soon clamoring for its abortion. Rickover's vision soon met this same fate. In 1947, Divine Intervention stepped in and procured for Captain Rickover an audience with Chief of Naval Operations, Fleet Admiral Chester Nimitz. More than just his rank made Admiral Nimitz an excellent individual to address the situation. As a former bubblehead, he could easily envision the benefit of nuclear propulsion for the fleet's submarines. Nimitz quickly presented the project to Secretary of the Navy, John L. Sullivan, who soon endorsed the *USS Nautilus*, the world's first nuclear-powered vessel.

Using his own form of creative lobbying in February 1949, Rickover landed an assignment to the Atomic Energy Commission's Division of Reactor Development. Admiral Mills headed the program and put Rickover in charge, despite the fact he was "not too easy to get along with", nor too popular. Mills based his decision on the fact Rickover was "the man whom the Navy could depend on no matter what opposition he might encounter, once he was convinced of the potentialities of the atomic submarine." Mills would not be disappointed. Rickover's team created a highly reliable nuclear reactor capable of fitting in a submarine's hull with no more than a 28' beam. This was a remarkable achievement when one considers the fact that during the 1950's, a nuclear reactor of megawatt-scale was roughly the size of a city block.

In 1958, Rickover was promoted to the rank of vice-admiral (3-stars) and awarded the first of two Congressional Gold Medals. He would run a tight ship over everything having to do with the nuclear program - ships, technology and personnel – tens of thousands of highly impressionable events - for the next 30 years. His diligent efforts are credited with zero reactor accidents. His obsession with safety was later revealed in this statement:

*"I have a son. I love my son. I want everything that I do to be so safe that I would be happy to have my son operating it. That's my fundamental rule."*

Add to that the fact Rickover made a point of being aboard during the initial sea trial of the vast majority of nuclear submarines completing their new-construction period. His very presence set his stamp of personal integrity to confirm the ship was ready for the rigors of the open seas, and ensured adequate testing to either prove as much or to establish issues requiring resolution. Rickover's diligence stands in stark contrast to the Soviet Union, America's primary competitor during the Cold War, known to have 14 reactor accidents.

Hyman Rickover had an intense interest in education, which would lead to discussions with President John F. Kennedy. During a conversation with the president, Rickover enumerated three things he felt a school must do:

- Transmit to the pupil a substantial body of knowledge.
- Develop in him the necessary intellectual skill to apply this knowledge to the problems he will encounter in adult life.
- Instill in him the habit of judging issues on the basis of verified fact and logical reasoning.

He believed there was a need to nurture careers built on excellence and leadership in the fields of science and technology so that young scholars could play an important role in the United States' national and global future. Thus, in 1983, retired Admiral Rickover founded the Center for Excellence in Education.

On March 28, 1979, a partial core melt occurred at the Three Mile Island power plant. Then President Jimmy Carter commissioned a study regarding the failure and Admiral Rickover was called to testify before Congress. Questioned as to why naval nuclear propulsion had incurred no reactor accidents, Rickover responded:

*"Over the years, many people have asked me how I run the Naval Reactors Program, so that they might find some benefit for their own work. I am always chagrined at the tendency of people to expect that I have a simple, easy gimmick that makes my program function. Any successful program functions as an integrated whole of many factors. Trying to select one aspect as the key one will not work. Each element depends on all the others."*

In retrospect, Admiral Hyman G. Rickover has been labeled, *"the most famous and controversial admiral of his era."* An unexcelled workaholic, Rickover was not at all hesitant to demand of others, regardless of their rank or position. He had little tolerance for mediocrity and no tolerance for stupidity. A friend of his from Chicago once stated, *"If a man is dumb, Rickover thinks he ought to be dead."*

While still at the rank of captain, Rickover was not known to hold his tongue and regarded as dumb a number of officers; many of which rose to the rank of admiral and were assigned to the Pentagon. Such thoughts can be the ultimate damper on promotions. Captain Rickover was passed over on two occasions for promotion to admiral. Eventually, with the intervention of the White House, Secretary of the Navy and the U.S. Congress, the flag-selection board welcomed Rickover into their ranks; despite the fact a double pass-over is normally seen as a career-ending event.

In 1973, Rickover was promoted to the rank of admiral (4-stars). During the award ceremony, President Richard Nixon stated:

*"I don't mean to suggest ... that he is a man who is without controversy. He speaks his mind. Sometimes he has rivals who disagree with him; sometimes they are right, and he is the first to admit that sometimes he might be wrong. But the greatness of the American military service, and particularly the greatness of the Navy, is symbolized in this ceremony today, because this man, who is controversial, this man, who comes up with unorthodox ideas, did not become submerged by the bureaucracy, because once genius is submerged by bureaucracy, a nation is doomed to mediocrity."*

On January 31, 1982, Admiral Hyman Rickover lost his fight to remain in the Navy. Now in his 80s, he had served 63 years under 13 presidents – from Woodrow Wilson to Ronald Reagan. The dubious task of dealing with the Rickover 'problem' was awarded to Secretary of the Navy John Lehman shortly after his appointment to the post by President Reagan. By now, Rickover's career had been tarnished with a few 'little trinkets' which Secretary Lehman felt should be weighed alongside the immense contributions Rickover had made to the Navy during his extended career. Rickover later had a meeting with President Reagan and Secretary of Defense Casper Weinberger in which he ranted:

*"The contractors want me fired because of all the claims and because I am the only one in the government who keeps them from robbing the taxpayers."*

At the time of his retirement, Rickover had served as an officer for 63 years. This was a record made possible by an act of Congress specially exempting him from having to retire at the normal age for senior admirals.

Admiral Hyman Godalia (George) Rickover was 86 when he died in his home on July 8, 1986, the same age as his father, Abraham. He was buried in Arlington National Cemetery on July 11, 1986. Buried next to him is his first wife, Ruth Masters Rickover, who preceded him in death in 1972. He later remarried, taking for his second wife Eleonore A. Bednowicz who was a commander in the Navy Nurse Corps at the time they met. Her name is seen on his gravestone.

The location of Rickover's grave overlooks John F. Kennedy's eternal flame. During Kennedy's administration, Admiral Rickover presented him a Breton fisherman's prayer plaque on which are displayed the words *"O God, thy sea is so great and my boat is so small."* This plaque is now on display in the John F. Kennedy Presidential Library and Museum in the Oval Office exhibit.