RICKOVER REMEMBERED

With the death last month of Admiral Hyman G. Rickover, an era in US naval history came to an end. No other single individual, with the exception, perhaps, of Albert Thayer Mahan, has ever had such an impact on the evolution of American naval forces.

Admiral Rickover was a pioneer and a visionary. The first naval officer to appreciate the strategic significance of a nuclear powered navy, he summarily initiated one of the most far-reaching programs to change the very character of the American navy. Extolling the virtues of nuclear powered vessels over conventionally powered ones, he endeavored to create a naval force devoid of the traditional limitations imposed upon fossil fueled ships. He envisioned nuclear powered submarines that would be capable of circumventing the globe entirely underwater. He envisioned nuclear powered carriers that would be capable of responding to crises around the world, unencumbered by the fuel and other operating limitations of their conventionally powered counterparts. He envisioned those nuclear carriers being protected by a nuclear powered task force of surface and sub-surface combatants that would be capable of deploying with the same speed and for the same duration as his nuclear carrier. Admiral Rickover lived to see these dreams become a reality.

A tenacious fighter, Rickover learned early on in his career how to successfully push his plans for a nuclear powered navy through the bureaucratic system in Washington. Within that system, he occupied a very unique position--one which allowed him time and time again to achieve goals others believed to be unachieveable. In that system, Rickover wore two hats--one

military as director of the Navy's Nuclear Reactor Division, managing the Navy's nuclear propulsion program, and one civilian as a member of the Atomic Energy Commission, researching reactor development. By virtue of this dual hat role, Rickover was not constrained by the traditional chain-of-command ties which limited other military officers. Accordingly, he quite effectively would wear one hat until he encountered resistance for a project he desired, at which point he would switch hats and continue to push forward with that project. Where he continued to encouner resistance, he proved to be relentless, wearing his opposition down until he prevailed in his endeavors.

People either loved or hated Rickover--there seemed to be no middle ground. He proved able to elicit almost fanatical devotion from his team of specialists who assisted him in delivering to the Navy its first nuclear powered submarine, the USS NAUTILUS, over thirty years ago as well as others who recognized the extensive military capabilities nuclear power would provide to the Navy.

In the later years of his career, Rickover came under severe criticism by those in the Department of Defense (DOD) who were responsible for ensuring the Navy was able to meet its national defense requirements on a global basis. These requirments demanded there be a sufficient number of naval platforms with which to perform such a mission. However, Rickover's nuclear program was having its impact on the Navy's ability to perform this mission. That impact becomes clear as one reflects upon the fact that three conventional aircraft carriers could be built for the price of two nuclear powered ones and that five

conventionally powered escort ships could be built for the price of a single nuclear powered escort vessel. There is no doubt that, largely as a result of Rickover's successful nuclear power program, the Navy has been unable for almost two decades now to attain its goal of a 600 ship fleet--a minimum level many experts feel is needed to provide the Navy with a better than fifty percent chance to defeat the Soviet Union in a war at sea.

While Rickover proved himself to be relentless in his pursuit of an all nuclear navy, he also proved himself to be relentless in ensuring the highest standards were maintained in the program. He gave personnel selection a high priority as evidenced by his requirement to screen, by personal interview, all officers who were competing for his nuclear power program. Such interviews were brutal, and often demeaning, as Rickover sought to test a candidate's ability to think fast on his feet.

It was part of Rickover's technique to start an interview off by immediately putting the interviewee on the defensive. He would intimidate by shouting and accusing the interviewee, whenever he attempted to amplify, of trying to conduct the interview. In this manner, he forced the interviewee to respond with very brief answers which, due to their brevity, left the respondent open to further verbal assaults by the Admiral. Repeatedly, after hounding the interviewee, Rickover would order him out of his office until the interviewee felt he could be more responsive to the questions being asked. At that point, the interviewee would be escorted into a barren room, apparently referred to as the "tank," in which there was only a table and a

chair. The chair faced a blank wall. Off to the side there was a small square window opening into a passageway through which people walking by could peer into and observe the interviewee. The effect, whether intended or not (although most likely the former), was to make the interviewee feel much like an animal in the zoo. After what seemed an eternity, the interviewee would be summoned back to Rickover's office to continue the interview, during which the interviewee would inevitably be ordered back out of the Admiral's office and escorted again to the tank. One quickly learned during the interview that there was no right answer to a Rickover inquiry.

One noted exchange with Rickover, after the interviewee had been brow beaten relentlessly and ordered back and forth between the Admiral's office and the tank, went as follows:

ADM R: How long have you been interested in nuclear power?

Interviewee: Five years.

ADM R: What have you done to prepare yourself for nuclear power?

Interviewee: I have watched for various...

ADM R: Answer the question.

Interviewee: Very little.

ADM R: Miss Jones, come in here. (ADM R's secretary comes running into the office with pad and pencil). Take a letter. To the President of Chase National Bank, New York, New York. Dear Mr. President. For five years I have wanted a million dollars. Please send me a check for same today. Yours very truly. H. G. Rickover. P.S. I have done nothing

whatsoever in the last five years to earn this money but send it anyway. (ADM R turns to the interviewee) Do you get the idea?

Interviewee: Yes, sir.

Those who survived Rickover's personnel selection process went on to receive some of the most extensive and intensive training the Navy has ever provided. On the job training (OJT) was provided in Oak Ridge, Tennessee, where a land-based prototype submarine power plant had been constructed prior to the installation of a duplicate system on board the USS NAUTILUS. It took many months of various schools and OJT before one was considered qualified and assigned to a nuclear powered vessel.

But perhaps the heaviest imprint Rickover left on the Navy's nuclear power program was in ensuring the most extensive safety standards were met. He demanded that redundant failsafe measures be designed into the ships' nuclear reactors so that the loss of a ship would not result in the release of any nuclear radiation. It is a testimonial to Rickover today that, after the construction of some 150 nuclear reactors, the Navy still has the best safety record in the world's nuclear community--a flawless one. The failsafe measures Rickover demanded be implemented have been put to the ultimate test on two separate occasions involving the loss of nuclear submarines. The first occurred in April of 1963 when the USS THRESHER had her hull crushed as she exceeded her maximum diving depth off the coast of New England with a loss of 129 sailors. The second occurred five years later in May of 1968 when the USS SCORPION disappeared off the Azores with 99 men on board. The SCORPION was lost, it is believed, when she was

damaged by one of her own torpedoes which had been activated accidentally. In both losses, however, the nuclear reactors on both submarines shut down without incident--just as Rickover had demanded they be designed to do.

While Admiral Rickover became the subject of intense debate during the later years of his career before retiring in 1982, there can be no doubt, even among his critics, as to his contribution to the US Navy. He, and he alone, was the father of nuclear propulsion in the Navy. Through his efforts, the US Navy today is able to project her seapower anywhere in the world for extended deployments in time of crisis. History will remember him for his dedication to country, his foresight in strategic planning and his creation of a highly effective and--most importantly--safe nuclear propelled component of the Navy he so dearly loved.