

Naval History



Butch O'Hare and the *Lex*
Battle of Sunda Strait
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Rickover Interviews

Passing Rickover's Muster

By Captain John W. Crawford, Jr., U.S. Navy (Retired)

Was Admiral Hyman Rickover's infamous interview drill tough on candidates for his Naval Reactors program? You bet it was. But according to insiders on his staff, Rickover's often "uncivil" selection process meant that only the most stable and devoted people in the Navy went on to operate reactors on board nuclear-powered ships.



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The conversion of nuclear energy from a scientific concept into a propulsion system for U.S. Navy ships stands among the outstanding achievements in the history of technology. The characteristic that distinguishes the naval nuclear propulsion program from others is the extraordinary care and attention given to the selection and training of its personnel. Surprisingly little has been published about this aspect of the program, and even that consists mostly of testimony before committees of Congress and occasional accounts of Admiral Hyman Rickover's interviews of applicants for the program. Unfortunately, the latter have obscured and often distorted important features of the selection process and the purpose for which it was designed.

The naval nuclear program began under the joint auspices of the Department of the Navy and the Atomic Energy Commission (AEC). A single, unified, highly integrated organization called Naval Reactors (NR) and headed by Rickover carried out the responsibilities of each. In broadest terms, the AEC was responsible for developing, designing, building, and operating land-based prototypes of naval nuclear plants. The Navy was responsible for building follow-on plants and manning and operating nuclear-powered ships. Acting generally within that framework, Rickover established far-reaching control of all naval personnel who participated in the program, both officer and enlisted. While several features of the program changed over the years, one remained constant; Rickover insisted that he would personally interview and approve all who entered the program. He required the same for all the many civilian engineers who eventually formed part of the Naval Reactors organization.

Officers entering the program in the early years—

from the late 1940s to about 1960—were mainly engineering duty officers and unrestricted line officers. The former took on assignments at Naval Reactors headquarters, field offices, and shipyards involving research, development, design, and construction. The latter were needed to help operate land prototypes and operate and command nuclear-powered ships. Beginning in 1949, Rickover systematically began to increase the number of engineering duty officers in his organization. He sent those he interviewed and selected to a graduate program in nuclear engineering at the Massachusetts Institute of Technology (MIT) before assigning them to the Naval Reactors organization. Working with the Bureau of Naval Personnel (BuPers), Rickover also set in motion the selection process for training unrestricted line officers in nuclear power.

Rickover's intent was to channel into the program the most highly qualified and promising individuals he could assemble consistent with the number of billets approved. In the years until about 1960, almost all officer engineering specialists came from among those engineering duty officers who had completed the graduate course in naval construction and engineering at MIT. Because volunteers from this source dropped sharply at that time, Naval Reactors began to recruit more young naval officers directly from college and university NROTC units. To be considered for selection, candidates had to stand in the top tenth of their engineering and scientific school courses. Unrestricted line officers headed for ship operation and command were required, in the absence of extenuating circumstances, to stand in the top half of their Naval Academy classes or have a comparable academic record in college. The officers in each category came from a pool

already narrowed on the basis of academic achievement.

Several steps in the process allowed unrestricted line officers to enter the program. The submarine detail office in BuPers (or another detail office, as appropriate) and Naval Reactors staff agreed informally on the prospects of those whom BuPers contemplated recommending for interview. Usually, a small cadre of experienced nuclear submariners on assignment to duty in Naval Reactors represented the organization. Collectively, they had a wide-ranging knowledge of the entire submarine officer community and could readily identify those who might have a good chance of being selected. All had keen insights into potentially disqualifying attributes.

Having been ordered by BuPers to be interviewed by Rickover, the individual first faced three experienced members of the Naval Reactors staff. The interviewer's task was to assess whether the nominee had the requisite qualifications and attributes to be able to complete the nuclear power training program successfully and then be en-



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The author—here after receiving a letter of commendation from Secretary of the Navy William Franke and Admiral Rickover for his service during construction of the Navy's first nuclear-powered vessels—served as Rickover's deputy and participated in many of the screening procedures prior to the Admiral's notorious interviews.

trusted with the safe operation of a naval nuclear power plant. There were no formally prescribed criteria or methods. However, a review of the written assessments that each interviewer was required to prepare indicated patterns in their individual approaches. As deputy manager from 1960 to 1963, I was responsible for reviewing and assembling these individual assessments and submitting them to Rickover. He did not permit interviewers to compare notes until after this had been completed.

Probably the most attention went to intelligence and academic achievement. Interviewers sought assiduously to determine the degree to which grades were a reflection of application, retentive memory, and the ability to think logically. One of the reasons for close attention to the latter was the stress placed in training and other aspects of the program upon the ability to think through the actions required in emergency situations, especially those of an unusual nature.

Another desirable attribute was a disposition to work hard. Success in the program depended on years of it: in completing the training program, in qualifying on board ship, in passing the stiff engineer officer's exam in Naval Reactors, and in meeting the standards of the nuclear Navy. The hard worker might be identified in many ways—progressively improving academic performance, speed of qualifying as a submariner, and working to help pay for one's education while maintaining good grades. Evidence of indolence or lack of perseverance was pursued thoroughly.

The interviewers recognized that apart from engineering duty officers the applicants were not aspiring to become engineering specialists. Nevertheless, the ability to operate a nuclear power plant requires a considerable amount of technical knowledge and understanding. Accordingly, the individual had to have sufficient technical bent and interest to meet this requirement. Very often, the interviewer could find out by inquiring how much the individual knew about the technical aspects of the jobs for which he was responsible.

Commitment to the Navy was another vigorously sought attribute. It was always difficult to provide enough training seats, especially at the prototypes, to keep up with the demands of a burgeoning nuclear shipbuilding program. Rickover had no intention of providing extensive and expensive training, only to lose an individual to attractive offers from the civilian nuclear power industry. In my experience, officers were willing to disclose any reservation they might have had about making the Navy a career.

Interviewing was a difficult and demanding assignment carried out above and beyond other duties. It was sobering to realize that an individual's career depended so much on the result. The tendency to err on the side of leniency, however, gave way to the awareness that the success of the program depended on selecting only those who could measure up to its demanding requirements. One serious accident in a naval nuclear plant—always in the back of everyone's mind—would devastate the prospects of a nuclear-powered navy.

With the results of the preliminary interviews, Rickover then conducted his own. As complaints about his interviewing methods spread, he required that another officer be present to protect against self-serving reports by those not accepted. This was usually an unrestricted line officer on training assignment in Naval Reactors. Rickover's interviewing methods were unique and almost totally unpredictable. Even so, we could readily discern a pattern in his expectations. First, he demanded absolute candor, no matter how uncomfortable or embarrassing the information elicited might be to the nominee. Rickover could detect evasion, equivocation, or dissimulation and severely rebuked any candidate behaving in such a manner. Second, he disliked intensely any attempt by the interviewee to give answers that he might think to Rickover's liking, rather than his own actual thoughts or views. Rickover was singularly proficient—whether by intuition, experience, or both—in spotting attempts of this kind, especially when they appeared to put the interviewee in a favorable light without justification.

For most individuals, even those who professed to be

indifferent to the outcome, a Rickover interview was an uncomfortable, even daunting experience. But if in this uncomfortable situation the individual could maintain his composure, listen to the questions, answer them candidly, think clearly, and not be shaken from strongly held convictions, he could expect to be accepted, if his qualifications warranted.

A Rickover interview might have appeared to go badly and yet result in a person's having been accepted. One young officer, who had been ordered to interview without having volunteered, told Rickover that he had already applied to be sent by the Navy to the Swiss Federal Institute of Technology for graduate study, that he had been taking courses to prepare himself and therefore wished to decline the opportunity to enter the nuclear program. Rickover dismissed him. A few days later, the same young man returned to Washington on his own initiative, secured an appointment with Rickover, and said he had changed his mind and wished to accept. The admiral promptly told him it was too late and dismissed him even more emphatically than before. Two days later, however, the young man received word that he had been accepted. Rickover undoubtedly looked favorably upon the independence of mind shown by the individual and by the deliberate manner in which he had taken action.

Rickover depended heavily on the results of the preliminary interviews. In fact, most of those with a favorable consensus gained his approval. On occasion, however, he would counter the consensus, having noticed attributes we had missed in the preliminary interviews. For example, on one occasion three of us had approved a young officer stationed in Newport based on his apparent dedication to the Navy. Rickover, on the other hand, found out that he was spending his weekends in Boston, selling stocks and bonds. We were immediately summoned "to the cabin," as it was termed, and upbraided for failing to see through the facade.

Rickover was more inclined than many of the interviewers to be lenient with those whose record reflected accomplishments in the face of adversity. One of his dicta was that individuals who steadily improved their performance were better bets than those whose records had shown evidence of decline. He explained by saying that you never knew how high the former would climb and that the latter would not likely pull out of the decline. When in doubt, Rickover would often seek another opinion by ordering the individual interviewed by a senior staff member in whose judgment he had special confidence.

The temptation here is to conclude that the selection process could well have been left to the preliminary interviews. But this would have deprived it of several strengths. By interviewing each candidate, Rickover could constantly demonstrate his conviction that the strength of the program resided first and foremost in its people. In this way, he could set his own standard of excellence for the process. Each interviewer understood that he, as much as the interviewee, was being judged, however incrementally, for his understanding of the principle involved and the integrity brought to the process.

Rickover's insistence on interviewing does not mean



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The underlying purpose behind Rickover's exhaustive interviews was to ensure that he was picking the best people for the job of operating the reactors in his nuclear fleet—here, the *Enterprise* (CVAN-65), the *Long Beach* (CGN-9), and the *Bainbridge* (DLGN-25) in the Mediterranean in 1964. Given the record of the nuclear Navy, the pain that was often involved seems to have been worth it.

that he discounted the value of officer fitness reports. On the contrary, he expected that those recommended to him by BuPers would have outstanding records. In fact, for the most important nominations, such as prospective commanding officer of a carrier or a submarine officer entering the program en route directly to command, a member of the Naval Reactors staff would review the individual's fitness reports in BuPers. But Rickover recognized the weaknesses in relying on such reports alone.

In one instance, BuPers had recommended an individual who had just completed a successful tour as a carrier air group commander for training as a prospective executive officer for the carrier USS *Enterprise* (CVAN-65). His fitness reports were uniformly outstanding. All three preliminary assessments, however, indicated that he was dull, unimaginative, and otherwise lacking in qualifications. And I had established that he had never qualified as an officer of the deck. Having served in carriers as a deck officer, I was well aware of the responsibilities of the "exec" for ship handling and therefore noted that in my assessment. Rickover picked it up and called the chief of BuPers, noting that two carrier collisions had recently taken place off the Virginia Capes. A collision involving a nuclear carrier would be intolerable, he said. The nominee was recalled.

Still, I was troubled by the anomaly between the interview and the individual's fitness reports. I called the commanding officer who had rated him "outstanding" as air group commander and discussed the matter. He explained

that he found himself in a quandary: he had not sufficiently observed the individual and did not think highly of him from what he had seen. On the other hand, he figured that the individual would not have been assigned air group commander if he had not performed well and that he felt unjustified in marring the record. Just such defects in the system are the factors for which Rickover's interviews provided compensation.

Rickover fiercely insisted that no outside influence be countenanced in the selection process. On one occasion, I had the opportunity to test how influence-proof it was. I suspected from his name that the young man before me was the son of a highly placed Atomic Energy Commission official, well above Rickover in the latter's reporting chain to the commissioners. The young man confirmed my conjecture, but then asked that I not tell the admiral. He said that he had always stood in the shadow of his well-known father and "wanted to make this on my own." I assured him that this was the only way he would make it; but that I would not tell Rickover until the results were in. When Rickover signed his approval, he said, "That was a fine young man." When I acquainted the admiral with his identity, he said, "Don't you think you might have told me?" I reminded him of his principle and he nodded in agreement.

I once asked him when he had first learned to give such extraordinary attention to the selection of people. He said without hesitating that it had come to him first while he was standing the command duty watch on a Pacific Fleet battleship where he served in the engineering department. On this quiet Sunday afternoon, a large draft of seamen came aboard. He asked for their personnel jackets and spent the time preparing a list of those whose records showed them to have the most promise. The next day he requested the executive officer to assign those on the list to his department. Since no one else had asked for these men, the XO readily approved. The contribution they made toward winning the engineering "E" convinced Rickover of the importance, above all else, of picking the right people.

As Rickover's control over personnel in the Naval Reactors program grew, objections to his interviews increased. He faced essentially no resistance to his interviewing engineering duty officers. Being turned down had no adverse impact on their career prospects. As the careers of progressively larger numbers of unrestricted line officers were being severely affected, however, substantial objections arose in many quarters. Complaints surfaced on a number of grounds. Some saw the problem as a single officer having far too much influence on other careers. A submariner turned down by Rickover could expect never to command a nuclear submarine. Others objected to this influence being placed in the hands of an engineering duty officer; especially one who, while qualified in submarines, had not commanded one. As reports of Rickover's severe and sometimes uncivil interviewing methods circulated and gained currency, opposition intensified.

Why, then, in the face of this strong opposition, did the interviews continue? A major reason was Rickover's use

of the issue of nuclear safety. He was convinced that such considerations demanded that the design, construction, and operation of nuclear plants be entrusted only to people with intelligence, education, experience, diligence, and dedication. The technical knowledge would come packaged in courses of academic and practical instruction that he instigated at nuclear power schools and AEC-owned prototypes. Since he was responsible to the AEC commissioners for the safe operation of the prototypes, Rickover was accepted as the arbiter of those allowed to operate them. And the only avenue to a nuclear power assignment on board ship was through the prototypes.

To help ensure that the interviews would continue, Rickover could call on powerful assistance; and he did so whenever anything threatened the continuation. The AEC commissioners themselves and their top staff were satisfied with the nuclear safety record of the prototypes and other aspects of the naval program for which they were responsible. Also, members of the powerful Joint Congressional Committee of Atomic Energy were enthusiastic about the accomplishments of the program and regularly reminded by Rickover of the extent to which success depended on the attention given to the selection and training of personnel. Lack of progress in other AEC reactor development programs, both civilian and military, just intensified their support of Rickover.

Senior members of his staff would sometimes discuss among themselves whether or not Rickover's objective in selecting and training officers might not extend beyond assuring success of the nuclear Navy. Specifically, did he see it as a means of extending his standards of excellence to the Navy as a whole, as nuclear-trained officers rose to positions of increasing influence? Opinions were mixed. On one or two occasions, Rickover's remarks to me indicated that he foresaw such influence as a likely consequence of the program's success. But this was in the early 1960s. It is significant to note that four recent Chiefs of Naval Operations served in the naval nuclear propulsion program.

In the ten years since Rickover was replaced as head of the program, it has maintained a high level of effectiveness. And it must continue to do so for three simple reasons. First, it is the only guarantee that the nuclear Navy will keep its conspicuously successful record of safe and reliable performance. Second, it provides a standard of excellence and a source of personnel for extending and applying that standard to other elements of the Navy. Third, it provides the nation, which needs energy resources badly, with evidence that nuclear power is reliable and can be safe as an energy option. Above all, the naval nuclear propulsion program is a constant reminder that the price of nuclear power is unremitting attention to selecting and training superior personnel. Seen in this large context, that process established by Rickover provides a measure of understanding that other stories on the subject fail to convey.

Captain Crawford is a member of the Defense Nuclear Facilities Safety Board. During his naval career, he was Deputy Manager of Naval Reactors under Admiral Hyman Rickover. Later, he was Principal Deputy Assistant Secretary of the Department of Energy for Nuclear Energy.