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**“TRAIN FOR THE KNOWN, EDUCATE FOR THE UNKNOWN:”**

**THE NAVY’S STRUGGLE FOR CLARITY WITH  
GRADUATE EDUCATION IN THE HUMANITIES,  
FROM HOLLOWAY TO RICKOVER**

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## Abstract

Over time, the Navy has developed a complex system of educating its officer corps. But how has the Navy decided what education an officer needs? This paper examines the debate over naval graduate education in the humanities between 1945 and 1980. Special attention is given to three individuals who were instrumental in directing this debate: Admirals James Holloway, Arleigh Burke, and Hyman Rickover. By 1980, the overall program of naval graduate education had become so complex that officers were able to make their own choices regarding what field to study, or even whether or not to get a degree. This lack of strong oversight led to a program that produced a vibrant and diverse officer corps. While many sources have been consulted, much of the paper comes from personal interviews with three Admirals, Rear Admiral Larry Marsh, Vice Admiral Rodney Rempt, and Admiral James Holloway III, who have been through the Navy's graduate education program. Their experiences and subsequent views on naval graduate education provide a personal insight into a complex and divisive issue.

“Train for the Known, Educate for the Unknown:”

The Navy's Struggle for Clarity with Graduate Education in the Humanities,  
from Holloway to Rickover<sup>[1]</sup>

### Introduction

Commander Elmo R. Zumwalt's interview with Admiral Hyman G. Rickover was going poorly. He had already been sent to the tank (a room with a single chair facing the wall) twice for giving answers Rickover did not like. Back for a third round, the interview continued. Rickover asked, “Suppose you were the Superintendent of the Naval Academy, what would you do with the curriculum?” “In these troubled times with the midshipmen's course as crowded as it is,” Zumwalt responded, “I would eliminate some English and history to provide more math and science.” The Admiral exploded. “Thank God you are not the Superintendent. Its [sic] just the kind of stupid jerk like you who becomes Superintendent. That's what's the matter with our curriculum today. Do you mean that you would graduate illiterate technicians?” No, Zumwalt explained, he expected the midshipmen to get their English and history on their own after graduation.

Zumwalt himself had read Plato's *Republic* after graduating from the Academy.

Rickover seized this opening: "Do you think Plato would have advocated eliminating history and English from the curriculum?" "No sir, but Plato was postulating a perfect world and we don't have one." At this point Admiral Rickover ordered him back to the tank.<sup>[2]</sup>

While this exchange was somewhat contrived – Rickover's ideas on education are more complex than they come across here – it is illustrative of the Navy's awkward stance toward education. The Navy has yet to reach a consensus in the debate on what constitutes the best education for its officer corps. While it has recognized the need for both technical courses and the humanities, engineering, math, and sciences have always been considered the more valuable for an officer's career. The Navy's incorporation of humanities courses in an officer's education, on the other hand, has generated considerable ambivalence. This ambivalence can be seen at all levels of education and training, but the struggle to include non-technical fields is most clearly evident in graduate education.<sup>[3]</sup> To better understand the historical evolution of naval thinking regarding humanities in the postgraduate education of a naval officer, this paper will analyze three instrumental officers of the Cold War era: Admirals' James Holloway, Arleigh Burke, and Hyman Rickover. Holloway, Burke, and Rickover all aimed to improve graduate education and make it more pertinent to naval officers but they differed on how this could best be achieved. In effect, their arguments and decisions caused an ebb and flow between technical training and humanities education. Between 1945 and 1980, the Navy did achieve a relative balance between technical and humanities graduate education with a number of officers earning graduate degrees in the humanities. The Navy did so, however, without any coherent goals or overarching plan for naval graduate education as a whole. Even though the Navy controlled officers' access to graduate education, individual officers sought and obtained degrees in the humanities independent of focused naval direction. While official reports and archival research supports such a conclusion, the bulk of material cited herein consists of interviews with key senior officers who have been through the naval graduate education system. While they disagree about the value of humanities in graduate education, they all agree that the modern naval line officer needs to broaden his overall education as his career advances.

## **A Balanced Education**

Graduate military education is not unique in its lack of coherent goals. All education suffers the same problem, stemming from the basic question of where education fits in society. Should a society educate people for specific jobs they will have (training them, not educating them), or should a society educate people in their system of government to make them obedient citizens? A third option is to educate people in the classics, making them more open-minded and rational, critical thinkers that are able to change or improve society.<sup>[4]</sup>

Even this most basic question of education broaches the difference between “training” and “education.” Training imparts specific skills, while education is more diverse in its objectives. This difference is most easily understood in how it ultimately manifests itself in a person’s worldview. A person receiving a majority of training will develop an object-centered worldview. Problems will have definitive answers, important values will be measurable, and logic will rule. However, when a person receives an education, they develop more of a human-centered worldview. Problems have multiple solutions, important values may not always be quantifiable, and there is always a place for emotion to be considered.<sup>[5]</sup> The United States has traditionally “democratized” learning by advocating both training and an exposure to the humanities both to prepare individuals for gainful employment as well as “educate” citizens in American forms of government. The current educational paradigm in the U.S, according to curriculum specialist Nancy Stewart Green, is that “[a] combination of factors – including the long tradition of American pragmatism, perceived changes in the current economy prompting anxiety about the future, and the dominance of business interests in politics and education – has created a situation in which preparation for work is simply a given and need not be justified.”<sup>[6]</sup>

This struggle of training vs. education is even more pronounced in graduate education. Since their inception, graduate degrees have consisted of both research and teaching components. The Johns Hopkins University, founded in 1876, awarded the first graduate degrees which were largely focused on instilling research expertise. Within a few decades, however, such degrees began incorporating teaching to provide qualified instructors for undergraduate colleges. Ph.D.s became a necessity as both the theoretical

and applied sciences and the humanities emerged as sophisticated disciplines. A scholar needed a doctorate in order to perform meaningful research.<sup>[7]</sup> Stemming from the definitions in this paper, graduate degrees, even in the liberal arts, include an element of training – a necessity for the professional to make a living from his education. Conversely, because of the realities of naval service, an officer’s training must include instruction in the humanities in order to prepare the individual for complex decisions in an ever changing world. Vice Admiral Rodney Rempt, the Superintendent of the Naval Academy, put it best: the Navy must both “train for the known and educate for the unknown.”<sup>[8]</sup>

### **Naval Education: Historical Background<sup>[9]</sup>**

Focusing on naval education merely complicates the effort to tie “training” and “education” to specific definitions. Some scholars have decided “there is no precise distinction between military education and military training.”<sup>[10]</sup> Slightly more helpful are John Masland and Laurence Radway’s ideas on the difference. “The whole learning process might be thought of as a spectrum, with “pure training” (such as a simple exercise in assembling a rifle) at one end, and with “pure education” (involving the highest level of abstraction) at the other.”<sup>[11]</sup> A problem with this definition lies with the idea of an abstraction. What exactly do Masland and Radway mean by “the highest level of abstraction?”<sup>[12]</sup> A complex engineering problem is abstract in that it deals with abstract scientific equations but might be extremely practical militarily. Philosophy also involves mental abstraction but is also abstract in its direct military benefit. Otherwise, this is a good definition. It makes clear the fact that any learning experience might (and probably will) involve aspects of both training and education.<sup>[13]</sup>

The first naval officers to receive a graduate degree were engineers who had performed well at the Naval Academy. These officers were sent overseas for degrees in naval architecture until the British Admiralty closed this avenue in 1896. After that point the Navy tried two approaches: to send promising young officers to civilian schools and to create schools specifically for naval officers. A few years after service schools were started for naval architecture, other engineering disciplines followed suit, asking for postgraduate schools at the Naval Academy. Admiral of the Navy George Dewey refused the programs.<sup>[14]</sup> A shortage of officers at the time meant any officer sent to

graduate school was one less for the operational navy. In this zero-sum game, Dewey opted for the short-term needs of the operational navy at the expense of the long-term benefit of education.<sup>[15]</sup>

His attitude toward graduate education was a precursor of things to come, and continues to prevail even today. Rear Admiral Larry Marsh, currently President and CEO of the George and Carol Olmsted Foundation, pointed out recently that the source of this problem is the Navy personnel system. The Navy only has a certain number of billets for officers. While this may seem like circular logic (why not just increase the number of billets?), it comes back to money. People are the most expensive part of the Navy, and increasing the number of billets, or the number of officers, to make room for “extraneous” programs is not a viable option.<sup>[16]</sup> Following World War I, a number of key officers began to advocate naval graduate education for the non-specialists, arguing for a professional naval officer trained and educated to meet the needs of the interwar armed forces.

### **Interwar Naval Graduate Education**

While the Navy had shown interest in pushing bright officers to earn technical degrees in order to design naval equipment, design specialists were not the only officers in need of graduate education. In 1920, Admirals Knox, King, and Pye produced a report recommending continuing education for all officers. They split an officer’s career into four stages (inferior subordinate, superior subordinate, commander of ships, and commander of small and large groups of ships).<sup>[17]</sup> The different ranks in the Navy were and are reflective of these stages and the different responsibilities and privileges that go along with them. Knox, King, and Pye’s unique contribution was to suggest that officers needed to receive additional training at each of these levels. “Inasmuch as it is obviously impracticable and impossible to equip the officer for the whole period of his service during his initial instruction (Naval Academy),” the report argued, “it becomes necessary to arrange and to provide for his further instruction and training at recurring periods.”<sup>[18]</sup> While mainly concerned with professional education, the report also covered the skills an officer must be trained in to be effective. Inferior subordinates were to learn logical reasoning, military character and leadership, and the “technical groundwork of the profession.”<sup>[19]</sup> Education for superior subordinates was to consist of more logical

reasoning, refresh professional instruction, “equalize the information acquired while performing assigned duties at sea,” introduce the “more advanced elements of their profession,” and give basic instruction in “the fundamental considerations which control economic, political, and social relations.”<sup>[20]</sup> Commanders of ships were to be trained not only to command capital ships, but also smaller ships and to serve on flag-officers’ staffs. They were to be taught more logical reasoning, more technical matters, additional naval doctrine and principles of warfare, as well as more economics, politics, and social sciences.<sup>[21]</sup> Finally, the commanders of groups of ships were to learn “the organization, administration, operations and functions of fleets and of fleet units,” the “functions of the several offices and bureaus of the Navy Department,” international relations, strategy, tactics, and logistics.<sup>[22]</sup> The general trend was for more technical and tactical training early on, with increasing amounts of humanities and strategic training/education as the officer’s career progressed.

While focused on professional education, the report also showed its breadth in dealing with the issue of specialist education as well. As mentioned previously, some of the more technical departments had already begun to provide postgraduate education for a select few officers. Knox, King, and Pye recognized the need for these programs, and discussed their overall place in the Navy. The report claimed that specialists were needed in five areas: design and production of material, the manipulation of material, special duty, requirements other than material, and the staff corps and Marine Corps. Interestingly enough, all these specialists were to come from line officers.<sup>[23]</sup> Line officers were, and still are today, the front lines of the Navy. They are the generalists, the leaders that go on to command ships and squadrons. The third type of specialist, for special duty only, had to give up his line officer dreams of command and follow a different career path. But even these men, the report continued, should reach at least lieutenant commander before breaking off, giving them a firm understanding of the regular Navy.<sup>[24]</sup>

In the end, despite Knox, King, and Pye’s recommendations leading towards graduate education for all officers, nothing changed. A footnote placed on the title of the report stated that while the recommendations had been approved, “...the shortage of officers will not permit the recommendations to be carried into effect at present.”<sup>[25]</sup> And

so, even this moderate idea of short bursts of postgraduate education/training for each phase of an officer's career was not adopted. The board itself acknowledged this likelihood, but urged the Navy to adopt "a well-considered plan in order that matters may be shaped towards the general bringing of the definite plan into full force and effect."<sup>[26]</sup> While the Knox-King-Pye Board produced little immediate change its recommendations served as the foundation of the Post World War II debate regarding the shape of naval postgraduate education.

### **In-House Graduate Education**<sup>[27]</sup>

Over time, the Navy established a three-way approach to graduate education, encompassing both the specialized officer and the generalist line officer with students either civilian institutions, the Naval Postgraduate School or the Naval War College. The War College, founded in 1884 by Rear Admiral Stephen B. Luce, is placed slightly out of chronological order, being contemporary with the initial engineering graduate programs. Especially in the beginning, the War College was not viewed by the Navy as a place to learn anything useful, but rather a place where an officer could take a break.<sup>[28]</sup> It was not until 1909 that it became an accepted and even integral part of the Navy.<sup>[29]</sup> Alexander Rilling, in his doctoral dissertation on the Naval Postgraduate School, points out that the purpose of graduate education in the Navy has always been "to serve the needs of the military establishment...[o]ther contributions...such as the personal benefits accruing to the individual students, societal gains,...or the possibly useful results of research...are secondary."<sup>[30]</sup> The War College has always tried to focus on the military's needs.<sup>[31]</sup> The overall legacy of the War College has been professional education, with a mix of technical and humanities influences.<sup>[32]</sup>

The Naval Postgraduate School, however, was primarily concerned with technical education. As mentioned earlier, after Britain refused to accept foreign students in their engineering programs, the Navy tried both civilian and in-house education as replacements. The Postgraduate School was a combination of the diverse programs started in the service during the late nineteenth and early twentieth centuries. Throughout its history, the Postgraduate School has continued its technical track, although not exclusively.<sup>[33]</sup> Although Alexander Rilling does not explain why, early on the Postgraduate School included some humanities. For example, between 1919 and 1921, it

included lectures on “The American Short Story,” “Roosevelt as a Writer,” “The Psychology of Handling Men,” “Life and Service of Admiral Farragut,” and “Leadership” mixed into the predominately technical themes.<sup>[34]</sup> Perhaps this was in an effort to give technically trained officers some broadening of their own. But the only humanities degrees offered by the Postgraduate School have been in political science or management, and those degrees were only included recently.<sup>[35]</sup>

While the Navy had offered all three avenues of graduate education for its officers, before World War II each avenue had its own relatively inviolate sphere (except perhaps the civilian programs, which have always been a distant third). The Postgraduate School was focused on technical education for specialists. The War College was the graduate education of choice for most line officers. In fact, many of the flag officers with sea commands during World War II had been through the Naval War College course. After World War II, however, officers placed less value in a War College tour – probably because officers entering the Navy during the War did not have time to get a graduate degree. Manpower needs were so critical that high performing officers could not be spared. But even as the Navy undervalued graduate education, key individuals (Holloway, Burke, and Rickover) saw its necessity and worked to improve the system.

### **Holloway Board**

While the Knox-King-Pye Board set the tone for graduate education ideology, the Holloway Board of 1945, under the direction of Admiral James Holloway, was able to finally enact some change in the system, although their improvements had unexpected consequences. Prior to 1945, the various graduate programs had evolved without much overall direction. The different bureaus had a heavy hand in controlling the direction of the programs they were interested in and changes were slow in materializing. The Holloway Board was able to capitalize on the Navy’s post World War II personnel situation, taking another look at the entire spectrum of naval education.

As World War II was coming to an end, the Navy reexamined the entire range of naval education, not because of any philosophical dissatisfaction with the traditional policies, but because increased manpower needs made the traditional pre-commissioning education of the Naval Academy insufficient.<sup>[36]</sup> In this manpower crisis, the Holloway Board’s recommendations carried more weight and gave the Board an opportunity to try

and change the whole naval education system. Unfortunately, since there was no impending crisis for graduate education, the Board's interest in it and the Navy's willingness to change it were limited.

This was most easily seen in the pages of *United States Naval Institute Proceedings*. Two years after the Navy approved the Holloway Board's recommendations, an article by Admiral Holloway ran in *Proceedings* trying to explain the Navy's decision. Holloway touched on all parts of the plan, but the bulk of the article dealt with pre-commissioning education. It is clear that he was worried about an Academy/NROTC (Naval Reserve Officers' Training Corps<sup>[37]</sup>) divide, and hoped to eliminate it with integrating the graduates in the fleet. Admiral Holloway made sure no one would misunderstand his meaning, clearly stating, "[s]uperimposing any group above another, or introducing blocs of special categories in the Line, is not envisioned."<sup>[38]</sup> In fact, when Holloway finally got around to mentioning his plans for graduate education, it was not for its own merits. "This phase [Part III, dealing with graduate education] is mentioned here," the Admiral argued, "because it plays an important part in the over-all integration of officers from all sources."<sup>[39]</sup> Holloway did not think the readers were interested in graduate education for its own sake, but only in how it would help keep the two factions of officers (Academy and NROTC) integrated.<sup>[40]</sup>

Even though Holloway did not dwell on graduate education in the *Proceedings* article, the Board did study it and recommend specific changes. The Board, in fact, advocated graduate education for every officer. Not in fields of his choice, but according to the report, all officers were to attend the same course focused entirely on professional education.<sup>[41]</sup> The Board's recommendation was to "[p]rovide curricula aimed at the exercise of thought rather than at the acquisition of information. In this connection, give consideration to shaping the courses of the General Line School around the complete activities of the Navigator, Engineer, and other Department Heads."<sup>[42]</sup>

Like the Knox-King-Pye Board before them, the Holloway Board meant this for the general Line Officers. The specialists were again given their own education, which the Board also discussed. All EDO (Engineering Duty Officers) had to spend two years at sea after earning a graduate degree.<sup>[43]</sup> As Admiral James Holloway III (Admiral James Holloway's son and the Chief of Naval Operations) recently pointed out, this was

imperative for the Navy to continue to build and man the best equipment. By forcing all the engineers to experience life in the operational Navy, the engineers could be expected to design useful equipment. The entire design process was handled by people who ostensibly knew what was needed and in what situations the equipment would have to perform.<sup>[44]</sup> This idea was not new; as mentioned earlier, it was part of the Knox-King-Pye Board's recommendations as well.

As the Holloway Board recommended that all EDOs have operational experience, it stressed even more forcefully that the line-specialist distinction be both clear and wide. Recommendation (h) of the Board was to "Keep distinct the academic functions of special graduate education for Line P.G., EDO and Staff Corps officers from those of the General Line School."<sup>[45]</sup> While the EDO needed to understand the life and needs of the general line officer, once they switched over they were on a completely separate career path. Line officers and specialists might begin their careers together, but they had separate roles to fill and could not switch back and forth.

The general line officers were to learn two ways: "first, experience at sea and second, education through study ashore." The Board stressed breadth, to be obtained "by assignment, to serve in a variety of positions in the fleet." Different types of education ashore would help, it continued, to "determine how well his experience is tempered and expanded by the educational process."<sup>[46]</sup> So far, nothing really surprising had been said; everything was well within the bounds created by the Knox-King-Pye Board.

The Board's next statements were not as expected. Pointing out that officers generally reach competency in an assignment after one year, they concluded that "high ship efficiency"<sup>[47]</sup> could be accomplished by leaving officers in billets for extended periods of time. But this was not what they were looking for. Since "such assignments do not prepare an officer for wide responsibility,"<sup>[48]</sup> it was preferable to have shorter billets. To the Board, "professional development of officers is more important than excelling in ship competition."<sup>[49]</sup> This is a surprising stance for the Board to take, since ship performance would seem to be the ultimate goal of the Navy. Ship performance means getting the mission completed, something that should come well before education in the priorities of the naval service, if not the individual officer. One possibility for this seemingly counterintuitive statement is that it was made after World War II, when a long

stretch of peace seemed likely. Individual ship performance might have to take a backseat to the development of officers for the long-term benefits. By harming ship performance in the short-term, the Navy would be preparing officers for high command in the long-term. The Knox-King-Pye Board wanted graduate education to be an integral part of the naval officers' development, but they did not go so far as to say it should come at the expense of the mission.<sup>[50]</sup>

The Board was not actually saying that graduate education should be put ahead of ship performance. The shorter billets were really unattached to any increased graduate education. Shorter billets were strictly a case of how long an officer would be at a particular job (both at sea and ashore). The Board was actually calling for shorter billets to allow an officer more varied experiences at sea, not more time for graduate education. The periodic education was expected to help "temper and expand" these sea experiences, not replace them.<sup>[51]</sup> But if professional development was to be had at the expense of mission performance, one of the largest arguments against graduate education was nullified. A consistent complaint of the Navy's, and their reasoning for not sending officers for graduate education, was that there were not enough officers. And the operational navy needed first choice, since mission accomplishment was the number one priority.<sup>[52]</sup> But if an officer's professional development was now number one, then making sure they got the education needed, even at the expense of the ships, was a possibility. This incongruity did not bother the Navy, and did not change the Navy's stance towards graduate education. While the billets were shortened, the Navy still ignored graduate education as an integral component of its mission.

Where did this leave graduate education in the Navy? Initially it seems like the Holloway Board went further than any study before or since in stating the importance of graduate education to the Navy. Looked at in its entirety, however, the falseness of this statement becomes clear. Like the Knox-King-Pye board before it, the Holloway Board was passed at a time when the Navy was short of officers, giving its recommendations little chance of success. Most of what the Board tried to accomplish was professional graduate education.<sup>[53]</sup> This professional graduate education was focused on skills of an "immediately utilitarian nature," in effect more training than education.<sup>[54]</sup> This professional graduate education fell into two categories. There was the professional

graduate education for specialists, which would naturally be in technical fields – their professions within the Navy. The specialists mentioned were “Line P.G., EDO, and Staff Corps,” and their education “should be pointed toward materiel, design and design criticism.”<sup>[55]</sup> The second form was the professional education for line officers. These officers were to receive technical training in their profession: “The function of Line courses is to prepare the individual for the next stage of his sea-going career.” To further clarify, “the purpose of the Specialist Courses is the same but channeled in a different direction.”<sup>[56]</sup> Both courses were to educate professionally, but the specialists had different professions than the line officers. Like the Knox-King-Pye Board before it, the Holloway Board was interested in what could be immediately useful to the Navy. All other considerations (personal benefits, societal gains, relevant research) were secondary.<sup>[57]</sup>

### **Admiral Burke**

After the Navy implemented the Holloway Board’s recommendations for the Naval Academy and NROTC (although not at the graduate level), there was little further activity for the next few years. The Naval Postgraduate School moved in 1951 to Monterey, California from the Naval Academy’s campus in Annapolis, Maryland.<sup>[58]</sup> The Naval War College was also firmly established at this point in Newport, Rhode Island. In fact, Admiral Nimitz was to claim that the Japanese made no moves during World War II that were not already considered at the War College. As mentioned earlier, almost all of the flag officers in command during World War II had been through the War College course that was modeled on the Knox-King-Pye Board’s recommendations and included humanities.<sup>[59]</sup> Underneath this seeming calm success, however, a disturbing undercurrent of anti-War College sentiment was slowly building. Possibly attributable to the post World War II officer shortage, a tour at the War College was no longer a desirable duty.<sup>[60]</sup> But that did not mean officers were uniformly forsaking the humanities. In fact, under the leadership of Arleigh Burke, a new emphasis in humanities education was about to emerge.

After Christmas in 1948, then Captain Arleigh Burke was detailed to head Op-23, the office in charge of the Navy’s study of unification of the services.<sup>[61]</sup> With the passage of the National Security Act of 1947, Congress created the National Military

Establishment (later called the Department of Defense) to oversee the activities of the separate Army, Navy, and newly created Air Force. But as the new Secretary of Defense James Forrestal and the armed forces discovered, the fight was only beginning. As the situation began to clarify, the various services started jockeying for position – a situation that was not helped by the slashed defense budgets after World War II. In response, the Chief of Naval Operations (CNO), Admiral Louis Denfield, created Op-23 (Organizational Research and Policy Division) to champion naval interests in this struggle for appropriations and individualized missions.<sup>[62]</sup> The CNO removed Burke from sea duty to head Op-23, explaining to him the need for effective publicity: “We can’t seem to get our story across. We’re lambasted in the newspapers. We think our positions are reasonable and in the best interests of the country, but nobody seems to want to pay any attention. It will be up to you to do what’s necessary, correct, and ethical to help.”<sup>[63]</sup>

As the head of Op-23, Burke was forced to deal not only with the other military services, but also the Washington bureaucracy.<sup>[64]</sup> This would be the first of such struggles; he later served as Director of the Strategic Plans Division from 1952 to 1954 and then as CNO (1955-61) he was mired in politics. These experiences made the Admiral realize the necessity of naval officers who understood the political realm and who, through postgraduate education in the humanities, would have the skills to effectively lobby for the Navy’s needs. During his tenure as CNO, he was finally able to encourage senior officers to broaden their education (rather than technical competence) by sending senior officers to universities and think tanks for a postgraduate political science education.<sup>[65]</sup> Apparently Burke hoped that while at these universities and think tanks, the officers would cement, or maybe learn for the first time, a human-centered worldview. A number of officers benefited from Burke’s encouragement, including Paul Schratz, Joe Sestak, and Philip Dur, all three of whom went on to command their own ships and submarines.<sup>[66]</sup>

Such gains were limited however, for while Burke eventually had a graduate education program named after him, the Burke Scholars Program did not develop into what he wanted. From its inception, the Burke Scholars Program allowed junior officers to get a degree only in the hard sciences or engineering and joined a host of other

programs created by the Navy for this same limited purpose. [67] Except for the Olmsted Scholarship (established 1960), and other privately funded scholarships such as the Rhodes and Marshall (not Navy programs, but Naval Academy graduates can compete), or the Fitzgerald, Pownall, and Nolan (scholarships only available to Naval Academy graduates), there is little opportunity to pursue a humanities centered graduate education through Navy approved programs. [68]

One of the most interesting of these privately funded scholarships was founded in 1960, while Burke was CNO, by an Army General. Major General George Olmsted, along with his wife Carol, started a foundation for graduate education that allowed officers to get their graduate degrees in a foreign country and in the native language. He based the program on the idea that “the greatest leaders must be educated broadly.” [69] Olmsted firmly believed that a few officers, having specialized humanities education in a foreign nation, would be a benefit to the Navy as the students absorbed the social and cultural aspects of the host nation. [70] For Olmsted, there was no direct purpose for the education, no specific problem needing solved. Instead the Olmsted program is the epitome of “educating for the unknown.” [71] Privately funded, the Olmsted program has had incredible success. It has continued to grow and officers that have benefited from the program have done very well in their careers. [72] While such a degree has not helped officers be promoted, there is definitely no stigma attached either. [73]

Burke was not pleased with the Navy’s narrow focus for his namesake scholarship. He never intended to sponsor yet another program devoted to the sciences and engineering. Instead, he had hoped to widen an officer’s choice of graduate education.

"I note that in OPNAVINST 1520.23 there is no mention of what I thought was to be the basic requirement for selection of candidates for the program, i.e., high motivation for continued service in the Naval Service. It was hoped that these highly educated officers would devote themselves to service (the program was later extended to include the Marine Corps) to improve the combat effectiveness of the Navy and its equipment, although there was to be no restriction[sic] to education only in the hard sciences. The idea was to have a significant number of officers with the best education possible, a high sense of obligation and who

would obtain great technical and naval experience, and who would finally become officers with capabilities similar to those of my old friend Rear Admiral 'Deke' Parsons of the Class of 1922. [Rear Admiral Parsons was instrumental in nuclear development and testing]"<sup>[74]</sup>

Part of a letter to the Executive Assistant to the Chief of the Bureau of Personnel, written in 1983, this quote by the then retired Admiral clearly demonstrated his deep interest in a broad graduate education. According to Burke, the education needed to go to officers that would stay in the Navy and have a positive impact. Additionally, this education should be in what was needed at the time, not limited to engineering. Burke would have agreed with Vice Admiral Rempt, the current Superintendent of the United States Naval Academy and past President of the Naval War College, who recently commented that graduate education should be a broadening experience, and not more depth in a field already mastered.<sup>[75]</sup> For many officers, this would mean an education in the humanities. While the junior officer's job is to be technically competent, line officers, as the Holloway Board recommended in 1945, should receive a broadening education. According to Burke, this education should be in a humanities field.<sup>[76]</sup>

By the time Burke entered the graduate education debate, two opposing viewpoints had emerged in regards to naval graduate education, enriching the discussion but reaching no consensus. Unable to make any fundamental change, proponents of broader graduate education could only add new programs. Burke felt this was sufficient – he saw no fundamental flaws in the naval officer's education and was only responding to a new need in Washington. Holloway, however, believed that the Navy could not just add in programs, but rather needed a unified graduate education program with some humanities component for all officers. These opposing views led to a system with no unifying focus or overall direction. Graduate education opportunities in the humanities were added, but officers were not required to receive such an education in order to reach the highest level of naval command.<sup>[77]</sup> In the absence of overall direction, individual officers have sought degrees they found valuable. According to interviews conducted for this paper, acquiring graduate degrees in humanities fields has not helped in promoting such officers but has helped create a diverse and vibrant officer corps nonetheless.<sup>[78]</sup>

Burke's programs began a new chapter in naval graduate education – the idea of non-technical education sponsored by the Navy. Ever since Luce, the War College was considered the place for the humanities. While this was professional education, and involved considerable training, the humanities remained a necessary part. Again this comes back to the fundamental question of what kind of education is necessary and should be supported by the Navy. Burke was the first to realize naval officers might benefit (and the Navy itself might benefit) from having officers with humanities degrees outside the War College.<sup>[79]</sup>

### **Admiral Rickover<sup>[80]</sup>**

As the Navy began to look into nuclear power, Admiral Hyman G. Rickover took charge. While he certainly did not control the entire Navy, his influence was felt throughout, and he held considerable influence in the area of graduate education. The Admiral was extremely interested in education at all levels, and even appeared before Congress to discuss the state of elementary and secondary schools.<sup>[81]</sup> Because he attached different goals to the various levels of education, his position can easily be misunderstood regarding liberal, humanities oriented education as well as extensive technical training for specific skills. It is true Rickover shaped graduate education toward technical fields. He did so, however, because of his abiding faith in humanities education for all Americans.

Rickover's interest in education began with the primary and secondary schools of America. It was this interest that brought him before Congress in 1959 and again in 1962. Making comparisons to the Russian, Swiss, and English systems of education, Rickover claimed the American system was failing to teach the basics necessary for an informed democracy. Primary and secondary schools should focus on a classical liberal education that included math, science, and the humanities.<sup>[82]</sup> Although he felt strongly about insuring a strong foundation in math and science, Rickover was dismayed by the ignorance of most people in history, geography, politics, and literature. It was a combination of both these emotions that led him to call on Congress to reform the public school system.<sup>[83]</sup>

If America improved its public school system along the lines recommended by Rickover, colleges could then offer specialized technical tracks without fear of producing

ignorant technicians. Rickover pushed for this at the Naval Academy, where he thought students had little time to discuss the classics while mastering their technical skills. This was in direct opposition to what he said in his interview with Zumwalt in the introduction of this paper. With Zumwalt, Rickover was playing devil's advocate, but probably was also personally worried about officers with no interest in the humanities. Despite what he told Zumwalt, the truth is that Rickover tried to pressure Superintendent Vice Admiral James Calvert (1968-72) to increase the school's technical focus when academic majors were first introduced.<sup>[84]</sup> Rickover called his one-time protégé Calvert, and pressured him to refashion the Naval Academy as "a preparatory school for nuclear power."<sup>[85]</sup> Rickover wanted students to receive their humanities through a proper public education and continued study on their own.<sup>[86]</sup> This would allow the Naval Academy to focus on the engineering needed for the technical competence the Navy required of its junior officers and Rickover needed in his nuclear program.

Rickover's ideas for graduate education were the result of his staff's careful documentation of the education, or lack thereof, of officers and enlisted in the nuclear navy. One of Rickover's staffers, Theodore Rockwell, tells a story of a "quiz" Rickover ordered for the crew of a submarine immediately before a nuclear reactor could go critical. Policy dictated that all enlisted and officers go through a theoretical school to learn the basics behind how the reactor worked, and also a practical school to learn how these theories were applied. After these schools, they were then trained to deal with their submarine's specific reactor. The results of the quiz were not positive. One enlisted had taken all the warning lights for pumps and manually changed their colors to show if they were port or starboard, instead of whether they were operational or not. Another said he was taught that there was no connection between nuclear theory and application.<sup>[87]</sup> Fortunately for Rickover, he had complete control over the nuclear schools. He used stories like this to help him regulate the curriculum at the schools and ensure the continued safety and rigor of the program. Even if Congress refused to reform public education along the lines he envisioned, or the Naval Academy failed to prepare students adequately, he could still teach whatever was necessary at his nuclear schools to produce a technically proficient and well disciplined sailor.<sup>[88]</sup>

Despite the fact that Rickover was focused on producing nuclear engineers for his specific programs, he maintained an ongoing interest in the humanities as indicated in the introduction of this paper. Not only was he widely read himself, mainly in the classics and biographies, but he also tried to inculcate this interest in his subordinates, often asking what they were reading and discussing it with them.<sup>[89]</sup> Admiral Rickover said himself: “technology deals with *things*; education deals with *human beings*.”<sup>[90]</sup> He added that, “in the past, general or “liberal” education was a prerogative of “gentlemen,” who presumably did not need to earn a living and so did not need to engage in “professional” studies. We have the odd situation that everyone who aspires to completeness as a human being now needs a broad general education.” If everyone received the liberal education necessary for effective American citizenship (one of education’s aims), Rickover would have had the critical thinking engineers he desired.<sup>[91]</sup> Because he could not force everyone to read the classics on their own time, he had to rely on public schools to instill (or solidify) that interest.

Although Rickover was focused on making graduate education more technical, he did so, like Holloway and Burke before him, with the best interests of the Navy at heart. While Holloway wanted every officer to be professionally educated, and Burke called for men with political science education, Rickover wanted officers with a postgraduate technical education (although he believed this would only be effective with a reformed public school system). Through it all, graduate education went back and forth between additional training and humanities based education. While all three officers played a role in shaping the debate over graduate education, no cohesive policy developed within the Navy.

#### Postscript

Even after Rickover left the Navy in 1982, his influence continued.<sup>[92]</sup> Theodore Rockwell claimed in *The Rickover Effect* that even after the Admiral retired, the people he trained continued to promote his agenda.<sup>[93]</sup> Without an overarching plan for naval graduate education, however, an increasing number of officers are earning degrees in non-technical fields. They do so despite the fact that the Navy calls for more officers with technical graduate degrees. This divergence is a direct result of the current haphazard system of graduate education. As the programs have developed, with no direct

oversight or long-term unifying mission, officers essentially select their own educational path. Like it or not, the Navy is a bureaucracy, and only with great difficulty will the service be able to alter the current programs.

In the aftermath of Rickover's focus on technical education a reaction occurred at the Naval War College under the direction of President Vice Admiral James Stockdale (October 1977 to the summer of 1979).<sup>[94]</sup> Stockdale was happy to be back in the classroom. "I wanted to teach people about war," the Admiral remembered. "I had been a ringside witness to the disaster of a nation trying to engage in war while being led by business-oriented systems analysts who didn't know anything about it."<sup>[95]</sup> Getting right to work, Stockdale laid out his philosophy in his address at the change of command ceremony. Quoting Alfred Thayer Mahan, he said: "the great warrior must study history."<sup>[96]</sup> Mahan believed, according to Stockdale, "that an educated man with sufficient classical background can often perceive recognizable trends in events" allowing him "that quickness to seize the decisive features of a situation and to apply at once the proper remedy."<sup>[97]</sup> Practically speaking, Stockdale did not change the curriculum at the War College, instead bringing the emphasis back to the art of war within the current courses.<sup>[98]</sup> Stockdale pointed out that, "(1) War is a serious business; (2) People get mad in war; (3) The laws of logic are valueless in bargaining under those circumstances."<sup>[99]</sup> Stockdale's view was that the only way to train officers for their specific jobs was through education, mainly in the humanities. This was in line with what the Knox-King-Pye Board decided almost 60 years before; again the pendulum of graduate education was swinging.<sup>[100]</sup>

Also around this time the Naval Postgraduate School conducted a self study of its own programs and the Navy's programs at civilian universities. The *Report of Navy Graduate Education Program* (1975) contained "a detailed examination of each program in terms of its special relevance in meeting the Navy's needs," but the results show that these needs were tangible and concrete.<sup>[101]</sup> The study pointed out that some programs were better taught at the Postgraduate School, with its unique environment. It was noted that some students might not be accepted at civilian schools. Also, the curriculum could be tailored to what the Navy wanted the officers to know, focusing on naval applications.<sup>[102]</sup> Interestingly, while the technical fields were split between programs at

the Postgraduate School and programs at civilian schools, the non-technical fields were recommended exclusively for programs at civilian schools. While some engineering might be better taught at civilian schools, all the business and political science should be at civilian schools.<sup>[103]</sup> Much of this decision can be explained with economics. The non-technical programs were so small that it was not feasible to have a special naval program at the Postgraduate School for such a small number of officers.<sup>[104]</sup> In effect, without Navy control, the tendency has been for naval officers to be introduced to liberal philosophies in the humanities at civilian schools. Without any design, this brings an influx of new ideas that would otherwise be absent as officers are exposed to an academic culture outside the Navy.

Nearly 20 years later, Lieutenant Deborah Cashman analyzed graduate education of naval officers at both the Postgraduate School and civilian schools. Repeating a 1973 study, Cashman found that officers with graduate education overwhelmingly intended to stay in the Navy for a full career. In general, officers got their graduate degrees “to remain competitive with their contemporaries for further assignment and promotion.” Also, most officers (more than 80 percent) were able to choose their curriculum.<sup>[105]</sup> This is not surprising, since by 1993 there were many programs from which to choose. This excessive number of graduate education programs available to naval officers caused control to flow from the service to the individual men and women who were free to choose what course of study to follow in spite of what the Navy wanted.<sup>[106]</sup> What is more surprising is that the officers thought they needed a degree (and not necessarily a technical degree) to remain competitive for promotions. For Admiral James Holloway III (CNO and son of the Admiral Holloway who chaired the 1945 Holloway Board) recently pointed out that promotion was based on ability, not on education.<sup>[107]</sup> For example, while he believes that Rhodes Scholarships are a necessary part of the Navy and promote both the Naval Academy and the Navy itself, they are “sacrificial lambs.” They will never, or at least rarely, reach high command because of their postgraduate time and experiences.<sup>[108]</sup> Vice Admiral Rempt also believes that graduate education still has little bearing on promotion. Rempt recognizes, however, that this is slowly changing.<sup>[109]</sup>

Conclusion

The history of graduate education for naval officers is as complicated as the subject itself. On its own, graduate education is expected to broaden line officers, educate specialists, allow diversity and creativity, and give officers all the tools they need for the next step in their career – all without losing valuable time in operational experience. Some programs are so far outside the Navy's focus their graduates are almost guaranteed not to advance, while other programs are necessary for a career. With such diverse goals and curricula, it is little surprise the Navy has struggled over what graduate education must be.

In general, the debate has gone back and forth between the humanities and science and engineering, generally as pieces in professional education. The Knox-King-Pye Board started the debate by calling for purely professional education (really more training than education) for every stage in the officer's career. Admiral Holloway confirmed this need in theory, but in practice it was ignored. Burke was interested in giving senior officers education, especially in political science, to enhance their ability to argue before Congress and to compete with the other services. Olmsted joined the debate calling for purely humanities education, and while his program lives on, it has had little influence on the state of naval graduate education as a whole. Rickover was interested in more technical education because of the new needs of nuclear power and was successful in getting the Navy as a whole to follow his lead. Stockdale brought the focus back toward the humanities at the War College. After all that time, the debate had hardly changed.

Surprisingly (and fortunately), this seems to have benefited the Navy rather than hurt it. As the debate has continued overhead, junior officers continue to receive graduate degrees. Maybe not as many as some want, and maybe not in the fields some hope, but degrees in a variety of areas and for a variety of reasons. These officers add to the Navy, not necessarily in specific billets (although much of the drive from 1970 on has been for degrees that support specific billets), but mostly in their own ways. There is no way of knowing if the Navy would have been better off with a centralized program for graduate education. Perhaps a few senior officers making decisions on education would have benefited the Navy more than it hurt it. But the Navy had no overall direction and between 1945 and 1980 it still managed to have a successful graduate education program.

#### Bibliography

## **Archives Consulted**

National Archives, College Park, Maryland.

Naval Historical Center, Washington, D.C.

Burke, Arleigh, Bethesda, Maryland, to Captain Anthony Maness, Executive Assistant to the Chief of the Bureau of Personnel, 2 June 1983, Arleigh Burke Papers, Box 107, Naval Historical Center, Washington, D.C. (accessed by Captain David Rosenberg).

## **Personal Interviews**

Holloway, Admiral James. Interview by author. Tape recording. Alexandria, VA. 25 October 2004.

Marsh, Rear Admiral Larry. Interview by author. Tape recording. Falls Church, VA. 3 November 2004.

Rempt, Vice Admiral Rodney P. Interview by author. Tape recording. Annapolis, MD. 17 October 2004.

Rosenberg, Captain David.

Rosenberg, Captain David. Email to author. 3 November 2004.

Rosenberg, Captain David. Email to author. 13 December 2004.

Rosenberg, Captain David. Telephone conversation with author. 25 January 2004.

## **Government Documents**

Holloway Board on Naval Training. "Report." Washington, D.C.: Chief of Naval Personnel, 1945.

Navy Graduate Education Program Select Study Committee. *Report of Navy Graduate Education Program. Select Study Committee*. Washington: Office of the Chief of Naval Operations, 1975.

Nevzer, Stacey. *Military Cutbacks and the Expanding Role of Education*. Washington, D.C.: U.S. Dept. of Education, Office of Educational Research and Improvement, Office of Research, 1992.

Office of the Assistant Secretary of Defense: Manpower and Reserve Affairs. *Officer Graduate Education Study: Draft*. Washington: The Office, 1973.

“Junior Line Officer Advanced Educational Program (Burke Program).” OPNAVINST 1520.18G. Found at <<http://neds.daps.dla.mil/Directives/1520g18.pdf>> on 13 December 2004.

“Report and Recommendations of a Board Appointed by the Bureau of Navigation Regarding the Instruction and Training of Line Officers.” As printed in *United States Naval Institute Proceedings*, August 1920. 1265-1292. (Knox-King-Pye Board report).

“Graduate Education Programs for Midshipmen.” USNA INSTRUCTION 1520.2Y. Found at <[http://www.blackboard.usna.edu/webapps/portal/frameset.jsp?tab=courses&url=/bin/common/course.pl?course\\_id=\\_2357\\_>](http://www.blackboard.usna.edu/webapps/portal/frameset.jsp?tab=courses&url=/bin/common/course.pl?course_id=_2357_>) on 13 December 2004.

### **Published Primary Source Documents**

Ahern, Donald, and Robert Shenk, eds. *Literature in the Education of the Military Professional*. Colorado Springs: Dept. of English, U.S. Air Force Academy, 1982.

Bowers, R. H. "Post-Graduate Training for Submarines." *Proceedings* 1948 74(2).

Hartmann, Frederick H. "Sailors as Scholars." *U.S. Naval Institute Proceedings* 1971  
97(9): 40-46.

Holloway, Rear Admiral James L. Jr. "The Holloway Plan – A Summary View and  
Commentary." *United States Naval Institute Proceedings*, November 1947, 1293-  
1303.

Katzenbach, Edward Jr. "The Demotion of Professionalism at War Colleges." *U.S. Naval  
Institute Proceedings*. 1965 91(3): 34-41.

Korb, Lawrence J., ed. *The System for Educating Military Officers in the U.S.* Pittsburgh:  
International Studies Association, 1976.

Marshall Scholarship. < <http://www.marshallscholarship.org/>>.

Meulendyke, Lieutenant Commander Bruce, U.S. Naval Reserve (Inactive), "The  
Holloway Plan." *United States Naval Institute Proceedings*, June 1948, 760.

Pers 440. <<http://www.bupers.navy.mil/pers440/>>. (Information on Navy graduate  
education).

Rhodes Scholarship. < <http://www.rhodesscholar.org/>>

Rickover, H. G. *American Education – A National Failure: The Problem of Our Schools  
and What We Can Learn From England*. New York: E. P. Dutton, 1963.

Rickover, H. G. *Education and Freedom*. New York: Dutton, 1959.

Rickover, H. G. *Swiss Schools and Ours: Why Theirs are Better*. Boston: Little, Brown and Company, 1962.

Schratz, Paul R. "The Ivy-Clad Man on Horseback." *U.S. Naval Institute Proceedings*. 1965 47-48.

Stillman, R.J. "The Pentagon Whiz Kids." *U.S. Naval Institute Proceedings*. 1966 53-60.

Stockdale, Vice Admiral James B. *A Vietnam Experience: Ten Years of Reflection*. Stanford: Hoover Institution, Stanford University, 1984.

*The Olmsted Scholar Program*. The George and Carol Olmsted Foundation, 2000.

Thucydides. *On Justice, Power, and Human Nature*. trans. Paul Woodruff. Indianapolis: Hackett Publishing Company, 1993.

Zumwalt, Admiral Elmo R. *On Watch*. New York: The New York Times Book Co., 1976.

### **Thesis and Dissertations**

Cashman, Deborah M. Z. "Opinion Survey of Naval Officers Who Have Received a Navy-sponsored Graduate Degree: a 20-year Perspective." Masters Thesis, Naval Postgraduate School, 1994.

Rilling, Alexander. "The First Fifty Years of Graduate Education in the United States Navy, 1909-1959." Ph.D. diss., University of Southern California, 1972.

Schwartz, Rudolf. "Non-Military Education in the United States Army and Air Force, 1900-1960." Ed.D. diss., School of Education, New York University, 1963.

## Secondary Sources

- Buell, Thomas B. *The Quiet Warrior: A Biography of Admiral Raymond A. Spruance*. Boston: Little, Brown and Company, 1974.
- Burns, Robert Carter. *George Washington University Program in International Affairs at the War Colleges*. Washington: George Washington University School of Public and International Affairs, 1982.
- Cherpak, Evelyn. "Naval War College." In *Professional Military Education in the United States: A Historical Dictionary*, ed. William Simons, 222-225. Westport: Greenwood Press, 2000.
- Duncan, Francis. *Rickover and the Nuclear Navy: The Discipline of Technology*. Annapolis, Naval Institute Press, 1990.
- Duncan, Francis. *Rickover: The Struggle for Excellence*. Annapolis: Naval Institute Press, 2001.
- Florman, Samuel C. *The Existential Pleasures of Engineering*. New York: St. Martin's Press, 1976.
- Grigg, Charles M. *Graduate Education*. New York: The Center for Applied Research in Education, 1965.
- Holder, Leonard D. Jr. and Williamson Murray. "Prospects for Military Education." *Joint Forces Quarterly* Spring 1998: 81-90.
- Janowitz, Morris. *The Professional Soldier, A Social and Political Portrait*. Glencoe: Free Press, 1960.

- Jones, Ken and Hubert Kelley Jr. *Admiral Arleigh (31-Knot) Burke: The Story of a Fighting Sailor*. Annapolis: Naval Institute Press, 2001.
- Joseph, Pamela Bolotin, et al. *Cultures of Curriculum*. Mahwah: Lawrence Erlbaum Associates, 2000.
- Kurz, Laura. "2004 Distinguished Graduate Award Recipients Honored." *Shipmate*, September 2004. Accessed at <[http://www.usna.com/News\\_Pubs/Publications/Shipmate/2004/09/DGA.htm](http://www.usna.com/News_Pubs/Publications/Shipmate/2004/09/DGA.htm)> on 6 December 2004.
- Lovell, John P. *Neither Athens Nor Sparta?* Bloomington: Indiana University Press, 1979.
- Masland, John W. and Laurence I. Radway. *Soldiers and Scholars: Military Education and National Policy*. Princeton: Princeton University Press, 1957
- McBride, William M. *Technological Change and the United States Navy, 1865-1945*. Baltimore: The Johns Hopkins University Press, 2000.
- Newfield, Christopher. *Ivy and Industry: Business and the Making of the American University, 1880-1980*. Durham: Duke University Press, 2003.
- Olmsted Foundation Brochure, January 2003.
- Palatas, Michael D., ed. *Conference on Military Education for the 21st Century Warrior*. Monterey: Naval Postgraduate School, 1998.
- Parsons, Rear Admiral William "Deke." <<http://www.atomicarchive.com/Bios/Parsons.shtml>>.

- Polmar, Norman and Thomas B. Allen. *Rickover: Controversy and Genius*. New York: Simon and Schuster, 1982.
- Potter, E. B. *Admiral Arleigh Burke*. New York: Random House, 1990.
- Reynolds, Clark G. *Famous American Admirals*. New York: Van Nostrand Reinhold Company, 1978.
- Rockwell, Theodore. *The Rickover Effect: How One Man Made a Difference*. Annapolis: Naval Institute Press, 1992.
- Sanders, John. "Naval Postgraduate School, Monterey." In *Professional Military Education in the United States: A Historical Dictionary*, ed. William Simons, 216-9. Westport: Greenwood Press, 2000.
- Schratz, Captain Paul R. *Submarine Commander: A Story of World War II and Korea*. Lexington: The University Press of Kentucky, 1988.
- Simons, William. *Liberal Education in the Service Academies*. New York: Bureau of Publications, Teachers College, Columbia University, 1965.
- Simons, William E. ed. *Professional Military Education in the United States: A Historical Dictionary*. Westport: Greenwood Press, 2000.
- Thorn, Martha. "Distinguished Grads Inspire Those Who've Made Mistakes." *Trident*, 17 September 2004. Accessed at [http://www.dcmilitary.com/navy/trident/9\\_33/local\\_news/31245-1.html](http://www.dcmilitary.com/navy/trident/9_33/local_news/31245-1.html) on 6 December 2004.
- van Creveld, Martin. *The Training of Military Officers: From Military Professionalism to Irrelevance*. New York: The Free Press, 1990.

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[1] This quote: “Train for the known, educate for the unknown,” comes from Vice Admiral Rodney P. Rempt, interview by author, tape recording, Annapolis, MD., 17 October 2004.

[2] Elmo R. Zumwalt, *On Watch* (New York: The New York Times Book Co., 1976), 88-92.

[3] The topic of pre-commissioning education has already been well researched. Most notable are: William Simons, *Liberal Education in the Service Academies* (New York: Bureau of Publications, Teachers College, Columbia University, 1965) and John P. Lovell, *Neither Athens Nor Sparta?* (Bloomington: Indiana University Press, 1979).

[4] Pamela Bolotin Joseph et al., *Cultures of Curriculum* (Mahwah: Lawrence Erlbaum Associates, 2000), 29-37, 53-55, 74-76, 98-101, 117-119, 139-142. The authors discuss six different approaches to educating people. The authors call these: “Training for Work and Survival,” “Connecting to the Canon,” “Developing Self and Spirit,” “Constructing Understanding,” “Deliberating Democracy,” and “Confronting the Dominant Order.” Generally these boil down to training, educating for citizenship, or educating for personal improvement (with the rationale that better people will be better citizens and more productive).

[5] This idea of training vs. education was developed in talks with the author’s father, Dr. James Powell, Assistant Professor of secondary educational methods at Ball State University.

[6] Joseph, 33-7. The history of education in America is covered quickly, showing at every stage an interest in training students for work. The Federal Government’s actions with relation to education also show a strong interest in having students trained.

[7] Charles M. Grigg, *Graduate Education* (New York: The Center for Applied Research in Education, 1965), 1-24. Grigg dates the beginning of graduate education in America at the founding of Johns Hopkins University in 1876.

[\[8\]](#) Vice Admiral Rempt, interview.

[\[9\]](#) The debate over what education is most beneficial to the military can be traced back to Thucydides. During the Peloponnesian War, Pericles, in his famous funeral oration, touched on this. “And as for education, our enemies train to be men from early youth by rigorous exercise, while we live a more relaxed life and still take on dangers as great as they do.” Thucydides, *On Justice, Power, and Human Nature*, trans. Paul Woodruff (Indianapolis: Hackett Publishing Company, 1993), 41.

[\[10\]](#) Rudolf Schwartz, “Non-Military Education in the United States Army and Air Force, 1900-1960” (Ed.D. diss., School of Education, New York University, 1963), 5, quoted in Alexander Rilling, “The First Fifty Years of Graduate Education in the United States Navy, 1909-1959” (Ph.D. diss., University of Southern California, 1972), 9.

[\[11\]](#) John W. Masland and Laurence I. Radway, *Soldiers and Scholars: Military Education and National Policy*, (Princeton: Princeton University Press, 1957) 51, quoted in Rilling, 10. Masland and Radway also point out on page 50 that “Although the terms “training” and “education” as used in military parlance usually indicate two different functions, the former frequently is employed all-inclusively.” quoted in Rilling, 9. By using the word training in so many aspects, even when it is not the best description of what is happening, the military helps mask the actual difference between training and education.

[\[12\]](#) Masland and Radway, 51, quoted in Rilling, 10.

[\[13\]](#) As far as the Navy is concerned, officer education can be split into two categories. There is the pre-commissioning education, typified by the United States Naval Academy. Since World War II there has also been the NROTC program, and there is OCS, but the culturally significant pre-commissioning education is at the Academy. Morris Janowitz, *The Professional Soldier, A Social and Political Portrait*, (Glencoe: Free Press, 1960), 127. Janowitz is discussing the Navy prior to 1950. On page 137 he discusses the

situation after 1950 and the place of “non-graduates” of the service academies. “To reserve officers, who have not attended the academies, academy graduates are thought to be members of a ‘mutual protective society.’ To academy graduates, the system is not thought to manifest undue favoritism, and is believed essential for the effectiveness of the profession.” Everything not pre-commissioning education is graduate education.

The previously discussed need for researchers to have a graduate degree had a direct impact on the Navy. Originally officers were expected to be gentlemen (or at least have basic social graces) before entering the service. They would receive the training necessary on board ship and work their way through the ranks, learning on the job as they went. Rilling, 52-53. This generally worked with the technology of sail, which was almost as much an art as a science. But with the advent of steam propulsion, the job of an officer continued to become more complicated. Trying to teach an officer everything he needed to know about a steam plant while on the ship was inefficient at best. And the Navy needed not only to run the ships, but design new ones as well. Thus was graduate education introduced to the Navy.

[\[14\]](#) William M. McBride, *Technological Change and the United States Navy, 1865-1945* (Baltimore: The Johns Hopkins University Press, 2000),24-32.

[\[15\]](#) McBride, 29-30.

[\[16\]](#) Rear Admiral Larry Marsh, interview by author, tape recording, Falls Church, VA., 3 November 2004.

[\[17\]](#) “Report and Recommendations of a Board Appointed by the Bureau of Navigation Regarding the Instruction and Training of Line Officers,” *United States Naval Institute Proceedings*, August 1920, 1275. (Knox, King, Pye Board report)

[\[18\]](#) Knox, King, Pye, 1266.

[\[19\]](#) Knox, King, Pye, 1276.

[\[20\]](#) Knox, King, Pye, 1277.

[\[21\]](#) Knox, King, Pye, 1277-8.

[\[22\]](#) Knox, King, Pye, 1279.

[\[23\]](#) Knox, King, Pye, 1269. This idea of specialists coming from the unrestricted line has not died. In an interview with Admiral James Holloway (CNO and son of Admiral Holloway), it was mentioned that only by using naval officers for the design of naval material, can the job be done right. Interview by author, tape recording, Alexandria, VA., 25 October 2004.

[\[24\]](#) Knox, King, Pye, 1270.

[\[25\]](#) Knox, King, Pye, 1265.

[\[26\]](#) Knox, King, Pye, 1271.

[\[27\]](#) On the one hand, a naval officer needs to be technically proficient. This requires technical training, which naturally leads to an object-centered worldview as mentioned earlier. But an officer must also be a leader, and must interact with both his subordinates and his superiors. This is best accomplished with a human-centered worldview, which cannot be had with technical training. The Navy tries to find other ways to include it (like the culture at the Academy, where the dormitory is sometimes called a leadership laboratory). Admiral Holloway, interview. Holloway (the son) discussed the idea that the Academy should instill a lifelong pursuit of the humanities. An officer cannot be spared to attend schooling for a humanistic worldview. They should acquire one through outside reading mostly, a trait that is learned at the Academy. This is a great idea in theory, but how well does it actually work? And as an officer advances, technical

proficiency becomes even less important, as administration and politics and economics all play larger parts in the job.

<sup>[28]</sup> James Stockdale writes of Mahan that other officers would harass him when he was in Washington, D.C. They would ask, “are you going to do anything practical this time?” *A Vietnam Experience: Ten Years of Reflection* (Stanford: Hoover Institution, Stanford University, 1984), 16. Alexander Rilling discusses the War College as well. Initially it had trouble getting funding and finding students and the sessions were for a few months only. It was not until 1911 that an 18 month course was adopted; Rilling decides “The Navy had apparently accepted the German premise that ‘war could be taught in school.’” 69-71.

<sup>[29]</sup> Evelyn Cherpak, “Naval War College,” in *Professional Military Education in the United States: A Historical Dictionary*, ed. William Simons (Westport: Greenwood Press, 2000), 223. By World War II, “The vast majority of...flag officers in sea commands were educated at the college.”

<sup>[30]</sup> Rilling, 259.

<sup>[31]</sup> Cherpak, 224. She claims that today, “graduates of the late twentieth century are well prepared to serve on joint staffs worldwide and to assume leadership roles in the Armed Forces.”

<sup>[32]</sup> Rilling, 71. He quotes Luce on where the balance should lie between the professional (Cherpak calls it “political-military education.” Luce thought it should include “naval history, international law, [and] strategy and tactics.” 222) and the technical. Arguing against the technical education espoused by the bureaus, Luce said, “Your profession is the art of war, and nature will be avenged if you violate one of its laws in undertaking to make a part greater than the whole.” He was cognizant that technology was a vital part of naval warfare, but wanted to be sure it was recognized as a part, not the entirety.

<sup>[33]</sup> Rilling, 94-96.

[\[34\]](#) The lectures are listed in Rilling, 366-371 (Appendix F). He discusses these courses on 130-135.

[\[35\]](#) John Sanders, "Naval Postgraduate School, Monterey," in *Professional Military Education in the United States: A Historical Dictionary*, ed. William Simons (Westport: Greenwood Press, 2000), 216-9.

[\[36\]](#) Rear Admiral James L. Holloway, Jr. "The Holloway Plan – A Summary View and Commentary" *United States Naval Institute Proceedings*, November 1947, 1296.

[\[37\]](#) William E. Simons, ed., *Professional Military Education in the United States: A Historical Dictionary*, (Westport: Greenwood Press, 2000), xii.

[\[38\]](#) Holloway, Jr., 1294.

[\[39\]](#) Holloway, Jr., 1297.

[\[40\]](#) The only response to the article *Proceedings* printed was seven months later by an inactive reserve Lieutenant Commander. His letter was focused on adding Universal Military Training to the pre-commissioning officer pipeline. Lieutenant Commander Bruce Meulendyke, U.S. Naval Reserve (Inactive), "The Holloway Plan," *United States Naval Institute Proceedings*, June 1948, 760.

[\[41\]](#) Holloway Board on Naval Training, "Report," Washington, D.C.: Chief of Naval Personnel, 1945, "Study of Proper Form, System, and Method of Education of Officers of the Postwar United States Navy, Part III," Flowchart.

[\[42\]](#) Holloway Board, Part III, 4.

[\[43\]](#) Holloway Board, Part III, 2.

[\[44\]](#) Admiral Holloway, interview.

[\[45\]](#) Holloway Board, Part III, 4.

[\[46\]](#) Holloway Board, Part III, 1.

[\[47\]](#) Holloway Board, Part III, 1.

[\[48\]](#) Holloway Board, Part III, 1.

[\[49\]](#) Holloway Board, Part III, 1.

[\[50\]](#) The ship competitions mentioned by the Board are seen by most officers as having little bearing on the ship's ability to perform the mission. However, it stands to reason that newer officers who are not contributing to ship efficiency will also have trouble contributing to the mission. Less time on the job means a larger percentage of time training and less competency, both for the competitions and the mission.

[\[51\]](#) Holloway Board, Part III, 1. The quote is actually "tempered and expanded."

[\[52\]](#) Knox, King, Pye, 1265 Also in Admiral Holloway, interview.

[\[53\]](#) Rilling, 222. Also Holloway Board, Part III, 2.

[\[54\]](#) Rilling, 10.

[\[55\]](#) Holloway Board, Part III, 2.

[\[56\]](#) Holloway Board, Part III, 2.

[\[57\]](#) This idea comes from Rilling, 259, although he does not aim it at the Holloway Board.

[\[58\]](#) Sanders, 216.

[\[59\]](#) Cherpak, 222-225.

[\[60\]](#) Admiral Holloway, interview.

[\[61\]](#) E. B. Potter, *Admiral Arleigh Burke* (New York: Random House, 1990), 312.

[\[62\]](#) Potter, 315-18.

[63] Potter, 313.

[64] Potter, 318-330.

[65] Captain David Rosenberg, email to author, 3 November 2004; Captain David Rosenberg, email to author, 13 December 2004.

[66] Burke's program initially did not lead to a degree, but many officers have used it to earn one. Captain David Rosenberg, telephone conversation with author, 25 January 2004.

[67] OPNAVINST 1520.18G, found at <http://neds.daps.dla.mil/Directives/1520g18.pdf> on 13 December 2004.

[68] Information on all official Navy graduate education programs is under the direction of Pers 440b and can be found at <http://www.bupers.navy.mil/pers440/>. The private scholarships (Rhodes and Marshall) can be found at <http://www.rhodesscholar.org/> and <http://www.marshallscholarship.org/>. Information on Naval Academy's requirements for graduate education is in USNA INSTRUCTION 1520.2Y found at [http://www.blackboard.usna.edu/webapps/portal/frameset.jsp?tab=courses&url=/bin/commom/course.pl?course\\_id=\\_2357\\_>](http://www.blackboard.usna.edu/webapps/portal/frameset.jsp?tab=courses&url=/bin/commom/course.pl?course_id=_2357_>).

[69] Olmsted Foundation brochure, January 2003.

[70] The Olmsted program was, and still is, for officers with three to eleven years in the Navy and who are likely to stay in for a career, thus using their experiences for the Navy's benefit. Olmsted Foundation Brochure, January 2003.

[71] Vice Admiral Rempt, interview.

[72] Rear Admiral Marsh, interview.

[73] Rear Admiral Marsh, interview.

[74] Arleigh Burke, Bethesda, Maryland, to Captain Anthony Maness, Executive Assistant to the Chief of the Bureau of Personnel, 2 June 1983, Arleigh Burke Papers, Box 107, Naval Historical Center, Washington, D.C. Brought to the author's attention by Dr. David Rosenberg. Information on "Deke" Parsons comes from < <http://www.atomicarchive.com/Bios/Parsons.shtml>>. Parsons was an ordinance expert, and was in charge of the ordinance aspects of "Little Boy," the atomic bomb dropped on Hiroshima.

[75] Vice Admiral Rempt, interview; Rear Admiral Marsh, interview; Admiral Holloway, interview. The broadening experience is a key part of the career. It does not necessarily need to be a master's degree. The important thing is for it to push the officer to think in new ways. Admiral Holloway was also appreciative of his own broadening experience at the National War College and interested in giving others the same opportunity under some restrictions.

[76] Rosenberg, telephone conversation; Rosenberg, email, 3 November 2004; Rosenberg, email, 13 December 2004.

[77] Vice Admiral Rempt, interview; Admiral Holloway, interview. Rempt says bluntly that the Navy from 1945 to 1980 did not value graduate education and there was no incentive to get it. Holloway goes further. He stresses the need for good officers in the fleet, and that an officer that could be spared for graduate education was not an officer that was effective.

[78] Two points need to be made here. First, this lack of direction lets officers get degrees in a wide range of fields. No officer knows everything, but instead know more about a few things. Rear Admiral Marsh, interview; Vice Admiral Rempt, interview. Secondly, an officer's career is short, and trying to fit everything in leads to compromises, like the Holloway Board pushing for shorter billets at the expense of ship performance. Holloway Board, Part III, 1. The year or two saved in graduate education was another post, and another chance both to learn on the job and be an effective leader. The officers that are good, and advance to high command, are hard to spare in a position where they are not directly contributing to the Navy. Admiral Holloway, interview.

[79] This is not entirely true – the Naval Academy has been sending officers to Oxford on the Rhodes Scholarship since 1929. However, as mentioned earlier, the Rhodes Scholarship, while it has benefited the Navy, has not benefited the officers who get it. Admiral Holloway, interview.

[80] Theodore Rockwell quotes Rickover:

The professional person's standing in the community depends, in final analysis, on the public's insight of his work, that is, on the educational level of the man in the street. When specialized knowledge of professional people is incomprehensible to the average man, his is apt to flounder between frustrated suspicion and excessive awe, leading him either to interfere unduly with professional independence or to accept naively every claim made by anyone who calls himself a professional. The relationship between the expert and the public is one of the central problems of our day...

Thus we observe a widening gap between the experts and the public who depend for their well-being on the work of these experts. This disturbing cleavage exists in the humanities no less than in science. Thus most people are not well informed in such vital matters as the languages and cultures of the various peoples who share this earth with us; the historic, geographic and economic background of current events; the place of American civilization in the estimation of the world; and the real strength of our country in the shifting sands

of power relations. *The Rickover Effect: How One Man Made a Difference*, (Annapolis: Naval Institute Press, 1992), 278.

This sums up Rickover's interest in educating the American people in both technology and the humanities. In order to pursue this he pushed for "back-to-basics" as Rockwell puts it on page 298. His ideas on graduate education make more sense when seen next to his ideas here for primary and secondary education.

[81] H. G. Rickover, *American Education – A National Failure: The Problem of Our Schools and What We Can Learn From England*, (New York: E. P. Dutton, 1963), v- viii.

[82] Rickover, *American Education*, v, 1, 73, 103, and H. G. Rickover, *Swiss Schools and Ours: Why Theirs are Better*, (Boston: Little, Brown and Company, 1962).

[83] One of Rickover's key staffers, Theodore Rockwell, has a story about a Rickover encounter with the product of a public school. On their way to a meeting, Rickover started a conversation with the enlisted sailor driving. After some preliminary small-talk, Rickover asked about the Civil War. The driver thought it had taken place two or three hundred years ago. Rockwell says Rickover went on to ask about more history, geography, politics, and literature, and that "the sailor consistently revealed an appalling ignorance." Rockwell, 279-81. These are humanities topics, but Rickover was still interested in knowing the extent of this man's knowledge.

[84] Laura Kurz, "2004 Distinguished Graduate Award Recipients Honored," *Shipmate*, September 2004. Accessed at <[http://www.usna.com/News\\_Pubs/Publications/Shipmate/2004/09/DGA.htm](http://www.usna.com/News_Pubs/Publications/Shipmate/2004/09/DGA.htm)> 6 on December 2004.

[85] Martha Thorn, "Distinguished Grads Inspire Those Who've Made Mistakes," *Trident*, 17 September 2004. Accessed at <[http://www.dcmilitary.com/navy/trident/9\\_33/local\\_news/31245-1.html](http://www.dcmilitary.com/navy/trident/9_33/local_news/31245-1.html)> on 6 December 2004.

<sup>[86]</sup> Admiral Holloway, interview. According to the Admiral, students from the Academy should have both the ability and the drive to do outside reading. They should be able to tailor this to their own needs, and while a superior might try to help, like Rickover was fond of doing, it was not their place to force this. Holloway firmly believes that Midshipmen can study humanities on their own time and to do so formally in the Naval Academy curriculum is a waste of time.

<sup>[87]</sup> Rockwell, 284-93.

<sup>[88]</sup> Francis Duncan, *Rickover and the Nuclear Navy: The Discipline of Technology*, (Annapolis, Naval Institute Press, 1990), 279.

<sup>[89]</sup> Admiral Holloway, interview.

<sup>[90]</sup> Rickover, *American Education*, 71.

<sup>[91]</sup> Rickover, *American Education*, 71.

<sup>[92]</sup> Rockwell, 362.

<sup>[93]</sup> Rockwell, 376-83.

<sup>[94]</sup> Stockdale, *A Vietnam Experience*, 13-4, 87.

[\[95\]](#) Stockdale, *A Vietnam Experience*, 13.

[\[96\]](#) Stockdale, *A Vietnam Experience*, 15.

[\[97\]](#) Stockdale, *A Vietnam Experience*, 15.

[\[98\]](#) In the same speech, he quoted an article on how war had changed: “waging war is no different from any resource transformation process and should be just as eligible for the improvements in proficiency that have accrued elsewhere from technological substitution.” It was this very view Stockdale was interested in fighting. Stockdale, *A Vietnam Experience*, 17.

[\[99\]](#) Stockdale, *A Vietnam Experience*, 17.

[\[100\]](#) His boss, Admiral Holloway, did not agree. Holloway had attended the National War College, which had been a broadening experience for him and was very effective. Holloway also realized that each officer was different, and what was good for one might be useless or even harmful for another. So, while he was pleased that Stockdale was able to get a philosophy education at Stanford, it did not automatically make that same education the best for other officers. Admiral Holloway, interview. Marsh also points out the necessity of a broadening experience, but that no single program is best for everyone. Rear Admiral Marsh, interview.

[\[101\]](#) Navy Graduate Education Program Select Study Committee, *Report of Navy Graduate Education Program. Select Study Committee* (Washington: Office of the Chief of Naval Operations, 1975), 1, 6. Programs were studied that “[met] naval specialty and subspecialty requirements.”

[\[102\]](#) Navy Graduate Education Program Select Study Committee, 7-16.

[\[103\]](#) Navy Graduate Education Program Select Study Committee, 17-8.

[\[104\]](#) Navy Graduate Education Program Select Study Committee, Appendix D, D31-3.

[\[105\]](#) Cashman, Deborah M. Z., "Opinion Survey of Naval Officers Who Have Received a Navy-sponsored Graduate Degree: a 20-year Perspective," Masters Thesis, Naval Postgraduate School, 1994, 2, 52.

[\[106\]](#) Control has always been an issue for naval graduate education. This is control of the degrees officers earn. But one of the unique characteristics of both the Naval Postgraduate School and the Naval War College is the level of control the Navy has. It does not merely control the curriculum, but also the faculty and staff, the physical campus, and the general environment of the school. Navy Graduate Education Program Select Study Committee, 7-16. Even earlier, the Navy was worried about having control over officers at civilian universities. In 1897 the Navy was looking for a university for naval architecture specialists. A line officer from the Bureau of Navigation, Captain Dickens, visited the Massachusetts Institute of Technology. Naval Historian William McBride discusses Dicken's conclusions. "Judging budding naval constructors fresh from Annapolis incapable of maturity and self-discipline, Dickens warned that 'there is no method by which students can be kept up to their work by any means of discipline at the disposal of the Institute' and recommended that the navy establish the postgraduate naval architecture course at the Naval Academy. These students could be kept on a short leash." *Technological Change and the United States Navy, 1865-1945* (Baltimore: The Johns Hopkins University Press, 2000), 25-6.

[\[107\]](#) Admiral Holloway, interview.

[\[108\]](#) Admiral Holloway, interview.

[\[109\]](#) Vice Admiral Rempt, interview. Of course, Cashman only surveyed officers with graduate education. With more invested in the program, they probably were more apt to feel it had positive benefits. It would be interesting to see what other officers felt as a group, instead of individual or anecdotal information.



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