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A BRIEF HISTORY
OF THE
NAVAL POSTGRADUATE SCHOOL

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NAVAL POSTGRADUATE SCHOOL, ANNAPOLIS. Graduate education in the U.S. Navy had its origins in different programs that existed at various times about the turn of the century. For almost 50 years, the institution that fostered the development of this education to its maturity was the Naval Postgraduate School, co-located with the Naval Academy at Annapolis, Maryland.

During the late 19th century, the U.S. Navy was technologically adept and active. However, in matters of personnel policy, including officer technical education, the situation was not so bright. In the operating Navy, debates were rife over the relative status of line officers and engineers and the "evils of technicism." This classic generalist-versus-specialist argument was resolved by the Naval Personnel Act of 1899; among its many provisions setting the stage for modern officer personnel management, it mandated that all operating engineers would henceforth be line officers rather than a separate corps. This act facilitated the development of formal graduate education in the Navy.

The Navy had conducted what it called "postgraduate courses" at a number of locations, both Navy and civilian, during the 1880s; these were short and in the nature of functional technical training. Also, for twenty years small numbers of U.S. naval officers were sent to study naval construction at the Royal Naval College at Greenwich.* This ended in 1897 when the British Board of the Admiralty decided to exclude foreign students. In the first decade of the 20th century some of the navy's technical bureaus set up "graduate" courses, which were mostly self-study programs. These types of experiments eventually led to another basic issue: Should the Navy develop its own "in-house" postgraduate program or rely on the nation's already extensive civilian educational establishment?

Rear Admiral George W. Melville, of earlier Arctic exploration fame, was Chief of the Bureau of Steam Engineering from 1887 through 1903. His responsibilities placed him in the middle of both controversies. His 1901 report to the secretary of the navy recommended that (1) a postgraduate course in marine engineering and design be established at the U.S. Naval Academy* at Annapolis Maryland,* and (2) an engineering laboratory be established, also at Annapolis. Congress authorized appropriations for the Engineering Experimental Station at Annapolis in 1903. Navy Department General Order 27 of June, 1909, established the School of Marine Engineering at Annapolis, under the control of the Naval Academy superintendent.

The 1909 general order enabled the true beginning of graduate schooling in the Navy, albeit a humble one. The first class, which convened in October 1909, consisted of 10 officers. The school was allocated two Naval Academy classrooms. No faculty, either military or civilian, were assigned; academy department heads guided the program. The activities were mostly "discretionary reading," tours of engineering facilities, and guest lecturers (including one Rudolph Diesel, who spoke, appropriately, of diesel engines).

In October 1912, the school was redesignated the Postgraduate Department of the Naval Academy. This allowed for a number of substantive changes. Studies were expanded to include six basic fields of technical study instead of only marine engineering. The first steps were taken to establish a resident faculty,

which numbered six by 1916. Also, courses became more rigorous and more theoretical, and formal evaluations of the program were instituted. One hundred and fifty officer students were ordered to study in the department from 1912 through 1916, although some did not complete their studies because of "the Mexican trouble." The operation of the department was suspended in March 1917 for the duration of World War I.

In June 1919 the program, now renamed the Postgraduate School, reopened under the leadership of Captain Ernest J. King, who would later lead the U.S. Navy through World War II. The name change was essentially cosmetic; institutional arrangements at the academy were the same. However, the formalization of the Postgraduate School and its sponsors (the technical bureaus) in Navy Regulations of 1920 was significant. The regulations specified that the school was to "conduct and direct" all postgraduate education, including "general professional subjects." This meant the programs no longer had to be strictly technical. Also established was the provision that a mix of Navy and civilian institutions would be used for the programs. The school at Annapolis was often used as a basic groundwork course, with officer students being sent to civilian schools after the first year.

Discord developed during the 1920s. Rear Admiral Henry B. Wilson,* superintendent of the Naval Academy, was a strong advocate of the prevailing view that naval officers learned their profession at sea, not in classrooms, and he pressed that debate. In addition, as the Postgraduate School continued to grow, it made greater demands on the academy's resources.

In 1931, initiatives were taken by the Postgraduate School leadership to move to the University of California at Berkeley. Conspirators in this drama included the university president, Robert G. Sproul; Rear Admiral Thomas C. Hart, academy superintendent, who would later be involved in the traumatic opening stages of World War II in the Pacific; and some of the technical bureau chiefs. At the behest of the Annapolis Chamber of Commerce, advanced plans for the move were killed by the House Naval Affairs Committee under the leadership of Chairman Carl Vinson.

As a result, the school stayed at the Naval Academy. From 1931 to the opening of the World War II, 2,130 officers attended the program at Annapolis, and 943 attended civilian institutions. During the depression years the General Line Course, more professional than technical in nature, was the entry program for most officer students. It later evolved into the undergraduate program at Monterey, California.* Programs during World War II focused on officers' technical skills, mostly in communications and electronics. In 1944, Captain (later Rear Admiral) Herman A. Spanagel came from two years of continuous combat duty in the Pacific to assume duties as head of the Postgraduate School. In this position, he was instrumental in initiating and guiding the developments in the postwar period which made the Postgraduate School a viable institution of higher education.

There were three seminal events which took place following World War II.

Public Law 250 of December 1945 authorized the Postgraduate School to confer advanced degrees "in engineering and related fields." In June 1947, the position of Academic Dean was established by Public Law 402 to provide for attracting a "top-notch civilian faculty" to the school. Finally, in October 1949, the Engineer's Council for Professional Development gave initial accreditation to three of the school's curricula. Accreditation of others followed over the years.

Moreover, the search for a new location to escape the constraining (and sometimes hostile) conditions at Annapolis was started in 1945. Under Public Law 302 of July 1947, it culminated in the acquisition of the school's current site at Monterey: the old Del Monte Hotel on 600 acres that had been used by the Navy as a preflight and electronic training school during the war. The Postgraduate School moved to Monterey during 1951.

With these four actions in the relatively short period of five years, four decades after its modest beginnings, the Naval Postgraduate School was ready for continuing growth and diversification.

Source:

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

Alexander W. Rilling

NAVAL POSTGRADUATE SCHOOL, MONTEREY. Since 1951, the U.S. Navy's resident college offering a variety of technical and management educational programs at the graduate level, with emphasis on the application of these areas of knowledge to the Navy's special needs.

The impact of new military technologies as a determinant of victory in World War II reaffirmed the importance of the Navy's advanced technical education program. A series of postwar Secretary of the Navy instructions and congressional acts redefined the scope and authority of the Naval Postgraduate School (NPS) and laid the foundation for the present-day institution.

The cross-country move from Annapolis, Maryland,* to Monterey, California, in late 1951 and the construction of a new academic campus marked a key turning point in the school's history. The actions were taken, in part, to enhance faculty recruiting and address critical needs identified in the 1947 Heald Board study of the school, which had been conducted under the auspices of the American Council on Education. The engineering educators on this committee had noted that "the essential ingredients of a good graduate school are students, qualified by training and intelligence for graduate work; a competent faculty, well trained and active in research and professional activities; and a proper environment and facilities for instruction and research." While they found that the Postgraduate School at Annapolis was "properly conceived, well organized, and presented curricula of a quality deserving academic degrees," they also noted deficiencies: the lack of opportunity for research, excessive teaching loads,

a poor library, overcrowded facilities, and a sometimes unstable budget. The needed facilities were built around the old Del Monte Hotel, requisitioned by the Navy during World War II and used to train thousands of electronic technicians.

The decades of the 1950s and 1960s were marked by refinements in the philosophy and operating principles of the school and by continued experimentation in program administration. The NPS organization of the early 1950s included an engineering school, the General Line School, and an administrative command. In addition, NPS provided a one-year, nondegree program for line officers, had responsibility for a subordinate Naval Intelligence School in Anacostia, D.C., and administered contracts with civilian universities. The school earned provisional accreditation to award degrees and initiated its first funded research programs in 1955 and, in 1956, conducted a detailed study of postgraduate education and added a management school at the direction of the Navy Department. In a summary letter to the Secretary of the Navy, Vice Admiral James L. Holloway, Jr., Chief of Naval Personnel, stated that the study "reaffirmed our long-held desire that Line officers, as a matter of policy, should hold baccalaureate degrees, and averred the value of professional postgraduate education for the maximum number of Line officers. Considerable increases in technical postgraduate education were recommended; this in recognition of a need to stay with, and ahead of, technological developments."

In a 1959 commencement address, marking the 50th anniversary of NPS, Admiral Arleigh Burke, Chief of Naval Operations, commented on the return-on-investment for the Navy's long-term commitment to postgraduate education:

> Rapid technological advance . . . did not come by accident, nor did it come overnight. It has been the result of educating carefully selected officers in each succeeding generation of officers. . . . The naval leaders of 50 years ago . . . recognized that ships and naval weapons were becoming more complex, that their proper employment at sea would require officers who were familiar not only with the age-old profession of the sea, but who could understand and could use effectively the complex weapons of the years to come.

The Naval Postgraduate School was reorganized in 1962, merging the Engineering School, Management School, General Line and Naval Science School (formerly the General Line School), and the administrative command into one unit with unified policies and procedures. The school also received full accreditation from the Western Association of Schools and Colleges in 1962. Although execution-year budgets often fell short of projections, funding for the Postgraduate School was generally stable. In subsequent years, as war in Southeast Asia escalated and noncombat programs were cut back, the Navy would eliminate the nondegree program and the General Line and Naval Science School and make drastic cuts in the officer-student population at NPS.

Austere defense budgets in the 1970s prompted a series of studies on the role and value of postgraduate education for military officers. Three major studies, completed in 1975, illustrate the nature of the debate: A Department of Defense

Select Committee on Excellence in Education, chaired by Deputy Secretary of Defense W. P. Clements, Jr., noted that officers with postbaccalaureate education were "absolutely vital to defense programs" and outlined several initiatives for the management of DoD's fully funded graduate education programs. A study by a panel representing the National Academy of Public Administration stated: "Throughout this inquiry, no serious question has been raised about the value of graduate education or the need for it among military officers. The problem is how much is needed, and how, and at whose expense, should it be acquired?" A Navy Graduate Education Program Select Committee, chaired by the University of California Provost George Maslach, looked specifically at the Naval Postgraduate School and Air Force Institute of Technology.* The Navy Select Committee, which included future Secretary of Defense William Perry, then president of Electromagnetic Systems Laboratory, and future Secretary of the Air Force Donald Rice, then president of the RAND Corporation, examined key issues such as costs, curriculum content, utilization, faculty qualifications, and research relevance. This committee reported that programs relevant to the Navy at the Naval Postgraduate School could not be developed or offered at civilian institutions at equal or lower costs. But the controversy over fully funded advanced education would continue into the first term of Ronald Reagan's presidency.

Earlier studies, even those which were critical of fully funded postgraduate education, had consistently commended the Postgraduate School for its ability to develop programs to meet emerging Navy needs. The school leadership had become skilled in the integration of courses from traditional academic tracks with specialized courses focused on warfare issues, including classified lectures, laboratory work, and thesis research.

The Naval Postgraduate School expanded this capability in the latter part of the 20th century and accelerated the development of warfare-oriented interdisciplinary studies. Programs in anti-submarine warfare and electronic warfare were in place when the Navy Select Committee conducted its study. Programs that emerged after the study included command, control, and communications (later expanded to become command, control, communications, computers, and intelligence); space systems operations and engineering; combat systems; total ship systems engineering; special operations and low-intensity conflict; undersea warfare (replacing anti-submarine warfare); and information warfare. Faculty research and associated student thesis research provided several striking examples of direct benefit to combat forces, and several groups of researchers provided real-time operational support during the brief *Desert Storm* campaign in 1991.

From World War II through the 1990s, the Naval Postgraduate School strengthened its scientific and technological foundation and bolstered its ties to the operating forces. At the same time, the school diversified with the addition of management and national security affairs programs and built a reputation for a unique ability to address emerging and over-the-horizon military issues.

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