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THESIS

THE ROLE OF THE BROADENED OPPORTUNITY
FOR OFFICER SELECTION AND TRAINING (BOOST)
PROGRAM IN SUPPORTING THE NAVY'S MINORITY
ACCESSION POLICIES

by

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**The Role of the Broadened Opportunity for Officer Selection and Training
(BOOST) Program in Supporting the Navy's Minority Accession Policies**

by

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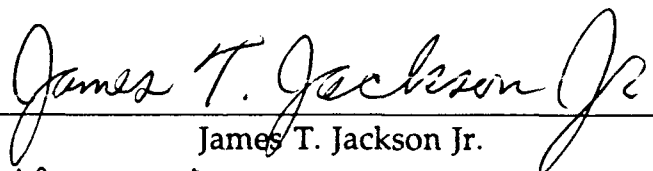
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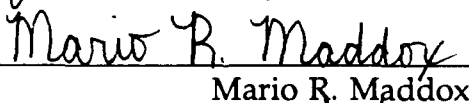
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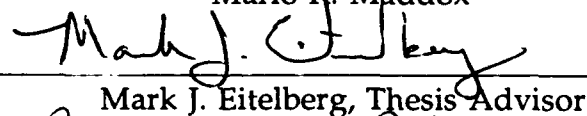
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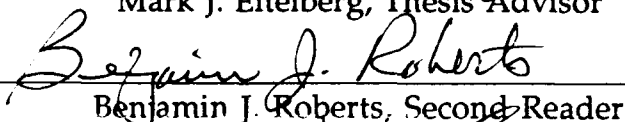
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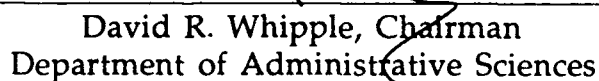

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ABSTRACT

The purpose of this thesis was to conduct a comprehensive analysis of the role of the Broadened Opportunity for Officer Selection and Training (BOOST) program in supporting the Navy's minority accession policies. The methodology used involved reviews of the history and implementation of the Navy Affirmative Action Plan (NAAP) and the BOOST program's contribution to increasing the number of Black and Hispanic officers commissioned through the Naval Reserve Officer Training Corps (NROTC) program and the United States Naval Academy. The results indicate that the BOOST program has the potential for improving the quality and quantity of minority students who enter the Navy's officer commissioning programs. Much of this potential has already been realized by the Chief of Naval Education and Training through the recent increase in minorities commissioned under the NROTC program. The full potential of BOOST has not yet been realized due to the complexity of developing reliable selection criteria for the program. Several recommendations for improving BOOST are offered here.



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I. INTRODUCTION

A. OVERVIEW

The recruitment, selection, and training of competent officers is crucial to the success of the Navy's personnel management objectives and war-fighting capability. The task of accessing new officers has grown more complicated over the last 50 years because of the requirement to attract technically trained men and women to operate a new generation of highly sophisticated ships, aircraft and weapons systems. During this same period, from World War II to the present, the Navy became racially integrated as personnel planners responded to the increased manpower demands during wartime and reductions in force size that accompanied the transition to the All-Volunteer Force. The inclusion of minorities and women in the officer corps will remain a priority as the Navy continues to decrease in size over the next several years. Navy requirements are expected to shrink from 541,000 personnel in 1990 to 501,000 in 1995 as Secretary of Defense Dick Cheney's force reduction plan is implemented. [Ref. 1:p. 1] The mechanism to mesh the objectives of competent leadership and social representation lies in the hands of policy makers overseeing the Navy's recruiting strategy.

The ideals influencing Blacks, Hispanics, and other minorities to become officers today may or may not be as lofty as when George Washington declared

It may be laid down as a primary position, and the basis of our system, that every Citizen who enjoys the protection of a free Government, owes not only a proportion of his property, but even his personal services to the defence of it. [Ref. 2:p. 23]

The forces motivating minorities to join the armed forces may even be more fundamental than patriotism or allegiance. Maybe the desire to serve one's nation is really the quest for manhood (or womanhood) and responsibility that the film *Glory*, one of the most powerful movies ever made about the American Civil War, so vividly portrayed. [Ref. 3:p. 68] This triumph of individuality was not only experienced by the slaves who joined the 54th Massachusetts Infantry Regiment in 1863, but also by 13 young men who became the Navy's first Black officers in 1944. This pride in accomplishment was realized again in 1989 when an energetic teenager became the first Hispanic female graduate of the Broadened Opportunity for Officer Selection and Training (BOOST) school to *earn* an appointment to the U.S. Naval Academy. [Ref. 4]

B. AREA OF RESEARCH

The Navy's Affirmative Action Plan (NAAP) requires that the Navy attain a minority officer population that proportionately reflects the percentage of minorities with college degrees in the general population ... provide sufficient accessions to attain and maintain demographic composition goals ... [and] enhance the image and perception of the Navy's equal opportunity commitment. [Ref. 5:p. 5]

These are three of the 13 NAAP goals that are most pertinent to this study. This study explores and documents the relative strengths or shortcomings of the Navy's oldest minority officer accession feeder program, BOOST. The analysis focuses on the Navy recruiting policies that affect the program's contribution to the accession and retention goals of the NAAP.

1. Discussion

In accordance with the NAAP, the Navy's specific goals are to have a Naval officer corps that is 11 percent minority with a distribution of six percent Black, three percent Hispanic, and two percent other minorities. The current plan to achieve this overall requirement is for each commissioning source, including the Naval Academy, Naval Reserve Officer Training Corps (NROTC), and Officer Candidate School (OCS), to commission at least seven percent Black and four percent Hispanic officers annually.

2. Scope of the Study

This study examines the BOOST program's contribution to the Navy's minority accession objectives. BOOST and the Naval Academy Preparatory School (NAPS) are the only government-sponsored feeder programs that can assist the Naval Academy and NROTC in expanding minority enrollments. BOOST can be viewed as making a positive contribution to the Navy's accession goals if the students that it prepares can successfully complete the college commissioning programs that they attend. The study will only consider BOOST graduates who elect to serve in the Navy rather than the Marine Corps upon graduation from college.

3. Methodology

The objective of this study will be to provide documentation on the relative impact of the BOOST program and the policies that define it on the minority accession goals of the NAAP.

The authors conducted an analysis of previous studies on the workforce of the future and college admission screening procedures. Additionally, the authors reviewed secondary source material from the Office of the Chief

of Naval Personnel (OPNAV), the Navy Recruiting Command and the Naval Academy. Discussions with the BOOST program manager in OPNAV were held to determine possible revisions to the screening process that may evolve as a result of a decrease in the size of the officer corps. The BOOST program manager noted that, as personnel requirements decrease, selectivity will increase, which would tend to drive up the quality of candidates that could be selected for the NROTC and BOOST programs.

The next section of this study provides a chronology of the integration of the Navy's officer corps.

C. HISTORY

Recruiting minority officers into the Navy has been a difficult task. To fully understand this problem, one should understand the background of minorities in the United States. The authors, Frank Brown and Madelon Stent, provide a provocative history of Black Americans in their book, *Minorities in U.S. Institutions of Higher Education*. As Brown and Stent write:

The first Black Americans came to the United States on a slave ship a few years before the Pilgrims arrived at Plymouth in 1620. Since that time Blacks have been fighting against great odds to achieve a full and meaningful existence in this country, with equality and freedom. Today, Blacks are continuing their fight for a bigger share of this country's resources through its colleges and universities. [Ref. 6:p. 28]

Before 1943, it was widely believed that Blacks could not be integrated aboard Navy ships unless they were messmen. The book, *Integration of the Armed Forces 1940-1965*, provides some of the reasoning at the time. According to former Secretary of the Navy, Frank Knox, "men lived in such

intimacy aboard ship that we simply can't enlist Negroes above the rank of messmen." [Ref. 7:p. 60]

During the early 1940s, the nation as a whole struggled with the untenable issue of discrimination, and the Navy, like the other services, had to cope with this social problem. Unfortunately, the Navy was perceived by civil rights groups in the Black community, such as the National Association for the Advancement of Colored People (NAACP), as the worst of all the services when it came to discrimination. To further illustrate this point of view, the following is a chronology of several important events in the history of Blacks in the Navy since the First World War.

1918—Blacks accounted for one percent of Naval forces; they served as messmen, stewards, or coal passers. The Navy enlisted 10,000 Blacks during World War I. After the Armistice, the Navy began to recruit large numbers of Philippine nationals to fill messmen vacancies, and virtually stopped enlisting Black sailors.

1940—The Navy included 4,007 Black personnel, 2.3 percent of its nearly 170,000-man total. All were enlisted men, and with the exception of six regular-rated seamen ... all were steward's mates, labeled by the Black press as "seagoing bellhops." [Ref. 7:p. 58]

The position of the Bureau of Navigation was that if Blacks were given supervisory responsibility, they would be unable to maintain discipline among White subordinates which would manifest itself in low morale and a decline in operational readiness. This chain of logic led the Bureau of Navigation to conclude that if segregation of the races was impractical, based on experiments with all-Filipino crews, that exclusion was necessary. [Ref. 7:p. 59]

1941—By the end of 1941, there were 5,026 Black enlisted personnel in the Navy; 2.4 percent of the force. All of these sailors served in the Steward's (Branch) rating. [Ref. 7:p. 58]

There were 500,000 Hispanics serving in the military; 5 percent of the armed forces. [Ref. 8:p. 1-A-6]

1942—In response to requests from civil rights organizations to enlist more minorities during the early days of World War II, Secretary Knox directed a special task force to investigate ways in which this badly needed group of able-bodied men could bolster the force. The task force's first report attempted to substantiate that the reasons for the exclusion of Blacks were not discriminatory, but "a means of promoting efficiency, dependability, and flexibility of the Navy as a whole." [Ref. 7:p. 79]

1943—The Naval establishment had no Black officers. Hundreds of highly talented Blacks (such as college-educated accountants and teachers) were drafted to serve in the enlisted ranks as a matter of policy rather than qualification. By the fall of 1943, civil rights organizations called on federal officials to address the absence of Black officers despite the Navy's acknowledgment that the presence of Black leaders would improve discipline and provide leadership for 100,000 enlisted Blacks now serving throughout the fleet. [Ref. 7:p. 79]

1944—Twelve young Black men entered the U.S. Naval Reserve as line officers and a thirteenth was commissioned a warrant officer. The "Golden Thirteen," as they were later called, served as instructors at the Hampton, Virginia, and Great Lakes enlisted training Schools and aboard harbor craft. [Ref. 7:p. 82]

President Roosevelt approved the admittance of Blacks to the Women Accepted for Volunteer Emergency Service (WAVES) component of the Navy, following charges by Thomas E. Dewey in a 1944 presidential campaign speech that the White House was discriminating against Black women. On 12 December 1944 Ensigns Pickens and Willis became the first two Black officers in the WAVES. [Ref. 7:p. 87]

The Bureau of Naval Personnel assigned 53 Black rated seamen and 14 White officers and noncommissioned officers to a patrol craft, the Subchaser 1264. The experiment demonstrated that the Navy possessed a reservoir of able Black seamen who were not being efficiently employed, and that integration worked on board ship. The *USS Mason*, a newly commissioned destroyer escort, and four other patrol craft also participated in similar experiments with all Black crews. [Ref. 7:p. 77]

- 1946—The Bureau of Naval Personnel began assigning Black officers to sea duty on integrated ships. [Ref. 7:p. 86]
- 1948—Executive Order 9981 by President Harry S Truman declared "there shall be equality of treatment and opportunity for all persons in the armed services without regard to race, color, religion, or national origin." [Ref. 9:p. 26]
- 1949—Wesley A. Brown became the first Black graduate of the U.S. Naval Academy.
- 1960—Critics accused the Vietnam-era Selective Service System of sending the best and brightest young Blacks to fight, leaving a leadership "vacuum" in the Black community. The political problem of a disproportionate number of young Blacks serving and being killed in combat caused notable spokesmen to comment on the situation, including Dr. Martin Luther King, Jr. [Ref. 9:p. 35]
- 1969—The BOOST program was founded. Its mission was to increase the number of minorities enrolled in NROTC and the Naval Academy.
- 1971—Samuel Gravely became the Navy's first Black admiral. [Ref. 7:p. 80]
- 1976—The Navy was comprised of eight percent Black enlisted personnel and 1.6 percent Black officers. [Ref. 10:p. 340]
- 1979—The proportion of Black officers had increased nine-fold since 1964, but was still less than 3 percent. [Ref. 8:p. 341]
- 1990—The Navy was comprised of 3.8 percent Black and 2.3 percent Hispanic officers.

The current problems in minority officer recruiting may have evolved as a result of the Navy's slow movement to fully integrate the force during World War II, as well as new economic and social conditions which led some researchers to develop the hypothesis of a *crossover generation*. The hypothesis about a *crossover generation* states that many Black college graduates lack interest in the military because of their suspicions of Whites

and beliefs that they will face even more discrimination in the armed forces than in the civilian community in their struggle for advancement. [Ref. 9:p. 61] Currently, the Navy is failing to recruit the number of Black and Hispanic officers that has been requested by the Chief of Naval Operations (CNO). The following section of this study discusses Navy policies designed to improve minority accessions.

D. BACKGROUND

1. Affirmative Action Policies

Since 1944 when the first Black Naval officers were commissioned, the growth in the participation of Hispanics, Asians and members of many other racial minority groups in the officer corps has been a major policy concern of Navy manpower planners. This analysis traces the development of minority officer accession initiatives, beginning with the major policy decisions contained in the NAAP and recommendations of various study groups. The historical discussion then looks at the BOOST program and examines its contribution toward increasing minority participation in the Navy's college scholarship programs.

As President Nixon's highly publicized commission on the All-Volunteer Force was forming in 1969, and dozens of research projects investigating methods to improve the quality and quantity of personnel serving in the armed forces were underway, one real-life experiment was starting its first year of operation. The BOOST program, which was collocated with NAPS in Bainbridge, Maryland, was in the process of training the first class of eight minority midshipmen-candidates who would receive NROTC scholarships and ultimately enter the officer corps. It is interesting to note

that the BOOST program was already attempting to solve the problem of increasing the number of minority officers in the Navy when Morris Janowitz commented that, "Paradoxically, in the 1960s, as opportunities for Black officers in the service increased, it became more difficult to recruit them." [Ref. 11:p. 22] To appreciate the efforts made by the Navy to resolve this recruiting dilemma, a discussion of the manpower policies in effect during the early 1970s is presented below.

In 1972, Secretary of the Navy Chaffe issued an all-Navy message on race relations and equal opportunity. However, it was not until 1976 when the NAAP was developed, that a specific policy committed the Navy to attaining an officer corps that would reflect the percentage of minorities with college degrees in the general population. [Ref. 8:p. 1-8, 3-3]

Later, in 1979, the CNO chartered the Minority Officer Accession Study and set the goals of six percent Black, three percent Hispanic, and two percent other minorities for a total of 11 percent minority officer end-strength. [Ref. 8:p. 3-3] Since that time, the 1981 Minority Officer Accession Study and the 1984 Minority Officer Accession Task Force study have analyzed the contributions of the NROTC program, the Naval Academy, and OCS towards the achievement of those target figures. Both of the studies reconfirmed the 11 percent minority goal set in 1979.

The limited size of the eligible, minority recruiting population contributed to the Navy's difficulty in attaining the minority commissioning goals. For example, the number of Black male college graduates declined from 25,000 in 1977 to 23,000 in 1985. [Ref. 8:p. 3-5] As a result, the Minority Officer Accessions Task Force goals could not be achieved.

To increase the momentum in minority recruiting, the Chief of Naval Personnel directed each commissioning source to admit enough minority students to commission seven percent Black and four percent Hispanic officers annually. The Chief of Naval Personnel also directed his staff to conduct a major study of policies relating to minority accessions. The Minority Officer Accession Study Group reported its findings in 1989 and stated that the commissioning goals for the NROTC program and the Naval Academy were valid and achievable. The report predicts that the Black goal will be attained by the year 2000 and the Hispanic goal by the year 1999. [Ref. 8:p. 3-30] The BOOST program was cited in the report as "an excellent means to adequately prepare selected minorities for NROTC scholarships and Naval Academy appointments." [Ref. 8:p. 3-29]

E. SUMMARY OF RESEARCH LITERATURE

1. Minority College Enrollment and the All-Volunteer Force

There are several factors contributing to the Navy's difficulty in meeting minority commissioning goals. The primary factor is the decline in Black male college enrollments. Another important factor is the increased competition with the civilian community for a small pool of talented minority students that all of the armed forces must draw from to help man the All-Volunteer Force.

The American Council on Education reports that there has been a sharp reduction in the percentage of low-income Black high school graduates attending college, falling from 40 percent in 1976 to 30 percent in 1988. An even more distressing finding is the decline in the number of middle-income Black men on campus from 53 percent to 28 percent during this same 12-year

period. [Ref. 12:p. 75] The spiraling cost of tuition and the reduction in the number of federal grants have put college out of the price range of most middle-income families. Although minority test scores have improved in recent years, a second obstacle in the form of tighter admissions standards is preventing many students from attending the college of their choice. [Ref. 12:p. 697]

If we take one step backwards and consider the high school dropout problem among minority youths, it will provide an additional reason for the shrinking college population. While 13.6 percent of Whites between 18 and 21 years of age drop out of high school, the rate for Blacks is 17.5 percent and an alarming 29.3 percent for Hispanics. [Ref. 14:p. 2]

Looking ahead to how minority college graduates may fare in the officer corps based on their academic major is another area of concern to manpower planners. The Navy is very interested in recruiting college students who possess a technical academic background that will allow them to successfully complete basic warfare training in the aviation, surface, and submarine career paths. Recent education statistics show that only 0.7 percent and 0.4 percent of all technical degrees are awarded to Blacks and Hispanics, respectively. [Ref. 8:p. 3-5]

2. Social Representation

A discussion of the Navy's vigorous competition with the civilian business and academic community for top quality minorities should begin with some reasons why the armed services as a whole are interested in an officer corps with a broad social representation. Morris Janowitz, who conducted extensive research on the All-Volunteer Force, stated that

Race relations in the armed forces is not only a matter of numbers, but also a reflection of the larger civilian society. Yet the military is expected to operate at higher standards of social justice and due process than civilian society because it is a federal institution and one charged with such grave responsibilities. The military cannot be expected to solve the problems of civilian society, yet it is expected to solve its own problems without reference to the defects of civilian life. [Ref. 11:p. 24]

In *Representation and Race in America's Volunteer Military*, Mark Eitelberg describes how representation theory was applied to the Federal bureaucracy in the 1940s and later to the military in the 1960s. He states that

The issue of representation currently manifests itself in many ways, including numerical hiring and placement policies in education and employment (such as affirmative action); in balanced political party tickets; in public concern over ethnic, racial, and female appointments to public office; in the minority and women's rights movements; and in symbolic portrayals of the American people covering everything from war memorials to postage stamps. [Ref. 15:pp. 8-9]

He also notes that:

The driving force behind minority representation in the officer corps has more to do with achieving social equity and fairness in the managerial and administrative levels of the Navy organization. It is consequently an "equal opportunity" issue, where we assume that opportunities are fairly distributed when the organization represents society. [Ref. 15:p. 10]

A final comment on the armed forces' need to develop an officer corps representative of the society it serves is provided by Colonel Amilcar Vazquez, U.S. Marine Corps. As one of the first Hispanic graduates of the U.S. Naval Academy, Class of 1961, and a former assistant to the Deputy Assistant Secretary of the Navy for Equal Opportunity, Colonel Vazquez has firsthand knowledge of this issue. He states that

... we should not look at equal opportunity programs [to increase minority officers] as external impositions, social experiments, for *preferential treatment* for selected groups. They must be seen as an integral part of sound personnel management, as a means of ensuring

full use of all human resources and as a way of enhancing command effectiveness. [Ref. 16:p. 48]

Colonel Vazquez's comment on the effective use of human resources have even more merit when we examine the Navy's head-to-head competition with the civilian community for talented minorities to fill vacancies that will occur in the workforce in the not-too-distant future. As Robert J. Murray points out in his article, "Technology and Manpower: Navy Perspective," today's force-structure and technology will result in manpower requirements that call for fewer but more capable people. He feels that this will complicate our recruiting efforts since we want the same bright young people that commercial industry is seeking. He states that

In the end it comes down to cost: the cost of recruiting and paying young people with potential, the cost of training them, the cost of losing experienced people versus the cost of keeping them, and the opportunity costs associated with higher personnel costs--fewer new ships and aircraft, fewer new weapons, and lower readiness rate. [Ref. 17:p. 147]

Sociologist Charles C. Moskos expresses his concern that military manpower planners are using an economic approach in recruiting and retaining minority personnel in his essay, "The Marketplace All-Volunteer Force: A Critique." He remarks that

By attaching a market value to military service, econometricians and the military manpower establishment have cheapened rather than enhanced the value many soldiers and many Americans believed military service had. The ideas of citizenship obligation or social representativeness are incidental concerns in manning a military force. [Ref. 18:p. 17]

His analysis of the All-Volunteer Force underscores the many parallels that can be drawn between the *new military* and civilian enterprises that address their recruiting and retention policies from a financial

standpoint. Young professionals are looking for the best return on their personal investment in today's high cost of education. [Ref. 18:p. 16] This concept has a great deal of relevance in the context of minority officer accessions in that it may provide one explanation for the Navy's inability to achieve its recruiting goals—money. Commercial businesses have more latitude than the Navy to offer Black and Hispanic engineering graduates lucrative salaries.

"How to Get Your Share of the \$25 Billion Scholarship Bonanza" was the title of a six-page article in *Ebony* magazine targeted at Black high school graduates interested in attending college. [Ref. 19:pp. 58-64] There are two issues associated with these scholarships that may cause concern for military recruiters. The first, are stipulations attached to many of the scholarships which dictate the schools that recipients must attend. The second, are programs that implicitly tie the scholarship awards to agreements for future employment with a specific company. In 1989, the United Negro College Fund granted 1,035 scholarships for a total distribution of \$1.8 million dollars. [Ref. 19:p. 60] These awards were granted to top students who agreed to attend one of the 41 Historically Black Colleges (HBCs) associated with the United Negro College Fund. Currently, the NROTC program is only offered at six HBCs. The result is that many students who may be interested in the Navy may not make the extra effort to compete for an NROTC scholarship at one of these six schools when funds are available from another source, such as the United Negro College Fund.

The second issue of follow-on employment with organizations that sponsor scholarships is a growing phenomenon in the minority community.

Although these programs are not as legally binding as the commitment students make when they accept an appointment to the Naval Academy, which currently requires six years of obligated service in the military, these commercial scholarships may adversely affect the Navy's efforts to recruit technically-trained college graduates. General Motors' Engineering Excellence Program awards scholarships to sophomores majoring in engineering at several HBCs. This innovative idea may allow General Motors to corner the market in minority engineers before military recruiters even get an opportunity to discuss the merits of attending OCS and becoming a Naval officer. Similarly, General Electric's Engineering Scholarship Program, providing up to \$4,000 to community college students majoring in business or engineering, may lure away another group of talented students from the armed forces. [Ref. 19:p. 64] General Electric's new program is able to reach a valuable source of potential employees that the Navy has completely ignored due to the policy constraints of the NROTC program requiring students to attend a four-year institution.

William B. Johnston summarized many of these issues about recruiting strategies during the era of the *baby bust* in his book, *Workforce 2000: Work and Workers for the Twenty-First Century*. He notes that

For companies that previously hired mostly young White men, the years ahead will require major changes. Organizations from the military service to the trucking industry will be forced to look beyond their traditional sources of personnel. For well-qualified minorities and women, the opportunities will be unusually great. [Ref. 20:p. 95]

For Navy manpower planners tasked with meeting the dual objectives of recruiting a sufficient number of new officers, and recruiting a socially representative officer corps, the job will also be unusually great.

3. Bridging the Gap

Since 1969, the Navy has relied on the BOOST program to bridge the gap that exists between the minority recruiting goals and the number of high school seniors who are qualified to enter the NROTC program or the Naval Academy. Simply stated, its purpose is to increase the size of the minority applicant pool for the Navy's scholarship programs.

As previously mentioned, the Navy's current plan is for each officer program--including the NROTC program, the Naval Academy, and OCS--to commission at least seven percent Black and four percent Hispanic officers annually. BOOST is the Navy's oldest minority accession feeder program, providing one year of college preparatory academic training for enlisted members of the Navy and Marine Corps who are candidates for college scholarships.

The provisions of the program are delineated in a notice from the Office of the Chief of Naval Operations, OPNAV Notice 1500, to all Navy and Marine Corps commands. Further guidance on the administration of the program is provided by the Chief of Naval Education and Training (CNET) in the form of a comprehensive instruction, CNET Instruction 1530.6C. Both of these documents contain specific policies that directly support the NAAP.

A closer look at the program reveals that it has the dual missions of upward mobility and affirmative action. One objective is to provide an opportunity for active duty Navy and Marine Corps personnel to acquire the scholastic skills and academic credentials to pursue a commission through the established commissioning education programs. This opportunity for upward mobility is offered to all enlisted men and women regardless of race.

The other objective of the program is to provide academic reinforcement for civilian students who are competing for NROTC scholarships and appointments to the Naval Academy but have failed to be selected for those programs directly. Since the Navy is in direct competition with top colleges and universities for a relatively small pool of first-rate minority high school students, the role that the program plays in increasing the number of potential officer candidates directly supports the affirmative action goals.

The demographic objectives of the program are for the student body to be composed of 50 percent Blacks, 26 percent Hispanics and 24 percent Whites and other minorities [Ref. 21].

The Naval Recruiting Command is responsible for recruiting and screening the civilian applicants who comprise approximately one half of the 500 students enrolled in the program annually. CNET screens and selects the enlisted applicants from the active duty Navy and Marine Corps.

4. A Question of Qualification

The research pertinent to this study shows that Navy manpower policy planners and professionals in the field of education have described the BOOST program as a pivotal element in the Navy's affirmative action plan. The *Chief of Naval Operations Study Group's Report on Equal Opportunity* noted that BOOST has been highly effective in increasing the number of minorities commissioned through NROTC and recommended expansion of the program [Ref. 8:p. 3-29].

Eitelberg et al. address the effectiveness of the BOOST program in *Becoming Brass: Issues in the Testing, Recruiting, and Selection of American Military Officers*. The authors provide an insight into the small minority

student population who possess the Scholastic Aptitude Test (SAT) or American College Test (ACT) scores that will allow them to successfully gain a direct NROTC scholarship or an appointment to the Naval Academy. The authors note that a combined SAT score of at least 850 (out of a possible 1,600) is required for BOOST. [Ref. 22:p. 40] The qualification screening criteria are the *faucets* that can control the flow of new minority officers into the fleet and ultimately determine whether the Navy can reach its affirmative action goals without compromising the high level of technical expertise that currently exists in the officer corps.

5. Standardized Testing, a Help or Hindrance?

In *Subpopulation Differences in Performance on Tests of Mental Ability*, Eitelberg presents a chronology of research in the comparison of Black and White test performance. His discussion of the development of the Armed Forces Qualification Test (AFQT) in 1950 states that, although the test's primary purpose was to determine whether or not potential recruits could effectively acquire military skills, it soon became a basis for comparison of race differences. Eitelberg points out that the average (median) AFQT score for non-White males is about twenty-five percentile points below the average AFQT score for White males in the period since the end of the Korean War. [Ref. 23:p. 9] Additional sources such as *The Testing of Negro Intelligence* by Audrey M. Shuey, and the Coleman Report on *Equality of Education* document the fact that minority students perform lower on intelligence and scholastic achievement tests than do their White counterparts at all grade levels and in nearly the same degree. [Ref. 23:p. 16] The primary conclusion of these studies (that may provide reassurance to Navy policy planners and

education specialists) comes from *The Psychology of Human Differences* by Leona E. Tyler, who reminds us that test scores reflect something more basic than the influence of formal schooling; but, unfortunately, the scores do not explain what that difference is. [Ref. 23:p. 19]

Edward Haertel echoes this theme in his essay, "Student Achievement Tests as Tools of Educational Policy." He states

Although gaps between the achievement levels of Anglo Whites and of most minority groups have narrowed over the years significant disparities remain. An issue arises when these disparities are reported and interpreted. The existence of stable group differences must not be used to justify differential performance expectations across groups; the existence of a technology to measure and predict group differences neither explains nor excuses them. Any interpretive system that involves differentiated performance expectations according to student background characteristics, even something as simple as the pervasive *large city* norms available for most standardized achievement batteries, has the potential to legitimate existing differences and thereby weaken efforts to eliminate them. [Ref. 24:p. 43]

Walter M. Haney helps to explain problems associated with the questions of test bias and validity in his article, "Making Social Sense of School Testing." He notes that the confusion that often exists with the word "bias," is in the way that it is interpreted by test specialists and those non-specialists, such as commanding officers of ships or Navy recruiters, who may have a less academic understanding of the word as it applies to standardized testing. Haney concludes that the specialists may be correct in their findings that tests are not biased in a technical sense. But he also states that,

What bias means in the common lexicon is that if something is biased, it is unfair. In this sense I think that most public concern about test bias has a lot more to do with what the testing literature calls group parity models of fair selection than it does with the psychometric definitions of bias. Most testing experts have retreated from considerations of group parity because they say group parity models deal with issues of social and

political values and since they are technical experts they have no special insights into which models of group parity are most appropriate. [Ref. 25:p. 57]

In short, the experts have not attempted to clarify the problem of test *fairness* for the layman.

This topic directly relates to problems Navy manpower policy-makers face in setting eligibility requirements for college scholarship programs. There is often a difference of opinion on the appropriateness and even fairness of the use of the scores minority sailors and Marines receive on the SAT between a typical commanding officer in the fleet and the members of the selection committee for the BOOST program or admissions board for NROTC. The commanding officer may request or even expect a waiver of the low SAT scores an applicant receives because of his or her race, sex or economic background, based on the *common knowledge* the tests are "biased." Of the 313 Black and Hispanic sailors recommended for the 1991 BOOST class, over 78 percent were denied admission by the CNET selection board. [Ref. 26] Many of the applicants were rejected because their SAT scores were below the published requirement, but their commanders felt that they were strong in other areas and recommended them anyway. Rather than assuming that the commanders were simply naive in their understanding of test validity, that is, the accuracy of standardized tests, it would simply be better to suggest that they were doing the best they could to express in a short letter of recommendation what many researchers have written volumes about—cross-cultural cognition and socialization problems associated with standardized tests. The results of research in this area indicate that on average, Black and Hispanic students perform at about one standard

deviation below the mean on standardized tests of intelligence, aptitude, and achievement (Samuda 1975; Padilla 1979; Olmedo 1981; Green 1981). [Ref. 27:p. 129]

In an article entitled "Aspects of Differential Performance by Minorities on Standardized Test: Linguistic and Sociocultural Factors," Mary C. O'Connor addresses many of the factors that may be responsible for the variation in test scores submitted by students from diverse backgrounds, such as those who apply to the BOOST program. She explains that language proficiency may affect the test performance of Hispanic students who may be facing a situation where a language besides English is spoken at home. Other students who speak what is called Black English Vernacular (Labov, 1969), a dialect not specific to Blacks, originating in lower-class communities of the South, may also have difficulty with standardized tests. [Ref. 27:pp. 134-137] O'Connor notes that it may take longer to read and comprehend passages on the verbal portion of the tests which is, of course, a major liability during a timed examination. Her concluding remarks on the subject discuss problems in selection and placement that can occur following differential performance, such as the existence of multiple cutoff points for different groups of students.

6. If Not Tests, Then What?

Christopher Jencks raises an interesting argument on the use of standardized tests in his essay, "If Not Tests, Then What," where he states that there are no prospective changes in the kinds of tests that we currently use, such as the SAT or ACT, that would allow us to solve the three primary objections that people have about tests. The objections are that tests are unfair to various disadvantaged groups, they are incompatible with efficient selection procedures (in that they keep out individuals who could actually achieve passing grades in college, for example), and that tests violate our

sense of fairness because the outcomes of testing are not what we want. Jencks asks educators and policy-makers to consider whether the "... alternatives which would be likely to emerge in place of tests would be better or worse than the system that we already have." [Ref. 28:p. 115] He notes that the use of high-school grades alone might simply cause grade inflation or the creation of some unofficial measure of high school quality.

7. Standardized Tests, a Hurdle to Clear

Standardized tests may be seen as a hurdle that interested candidates must clear to gain access to the armed services. Notably, the Navy's sole criterion during initial screening for the NROTC program is performance on the SAT or ACT. Eitelberg et al. also comment that standardized test results combined with high school rank may comprise 60 percent of the criterion for admission to officer scholarship programs, such as the Naval Academy, that uses a *whole person* approach in screening candidates. They summarize the message of many researchers on this topic, which is to alert those organizations tasked with setting policy for screening young people with tests, such as the SAT or ACT, to use the test results judiciously and, most importantly, to use them along with other predictors of performance including high school rank in class and grade point averages in geometry, physics, and English. [Ref. 22:p. 50]

The judicious use of test scores becomes even more crucial in the selection of minority candidates for officer accession programs when one considers the disparity in minority test scores and Navy scholarship requirements. For example, in 1989 the national average for Black high school students on the SAT was 737 points out of a possible 1,600 (800 math and 800 verbal). [Ref. 13:p. 697] The admissions requirement for the BOOST program is 850 points. While at BOOST these top enlisted men and women

must improve their scores to 950 to become eligible for an NROTC scholarship. [Ref. 29:p. 7] The exact requirements for the NROTC program and Naval Academy are not published in any recruiting guide that high school students or counselors have access to, but reports from the Commander of the Navy Recruiting Command show that the average score of all civilian students selected to receive an NROTC scholarship in 1990 was 1,269 points. [Ref. 30] The Superintendent of the Naval Academy also reported an extremely high score of 1,240 for the class of freshmen that entered Annapolis in 1989. [Ref. 31] The large disparity between the nationwide performance of Black students on the SAT and the scores of selectees for the Navy's college scholarship programs is shown in Figure 1-1. The BOOST entry and graduation requirements of 850 and 950, respectively, highlight the relatively high quality of Black BOOST graduates compared with their high school counterparts. It also demonstrates how the BOOST program can help to bridge the gap that exists between minority test performance and the extremely high level of qualification (over 1,200 on the SAT) needed to successfully compete for a Navy scholarship. The next section of this study analyzes the Navy policies associated with the BOOST program to determine if they can adequately address the challenge of increasing minority officer representation and maintaining high personnel standards, in light of this disparity in test achievement.

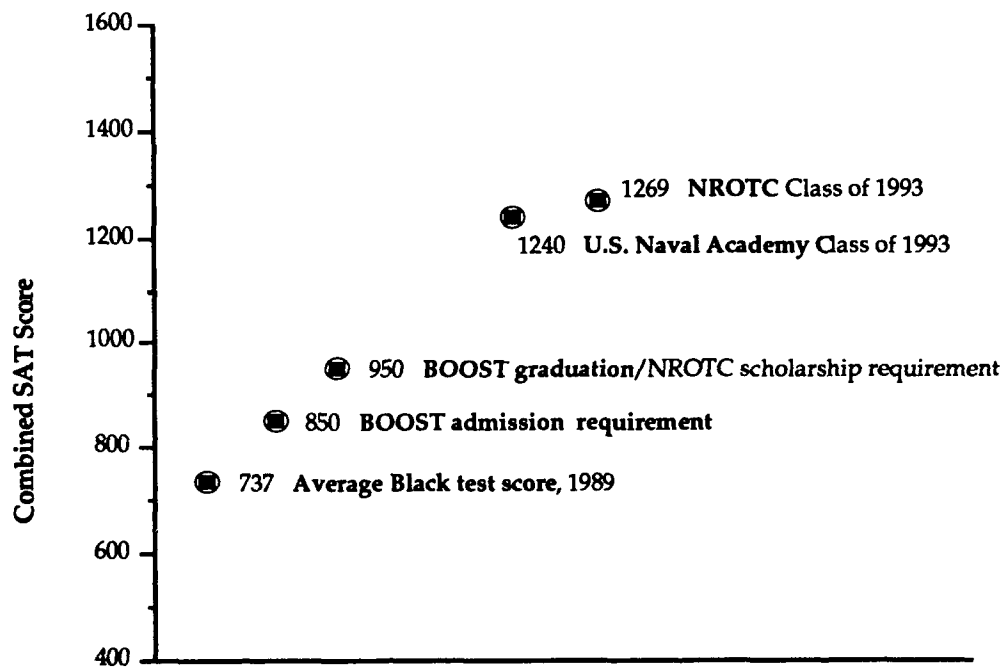


Figure 1-1. SAT Performance by Black Men and Women and Navy Program Requirements
[Refs. 13, 29, 30, 31]

II. THE RELATIONSHIP BETWEEN BOOST PROGRAM POLICIES AND THE NAVY'S MINORITY ACCESSION OBJECTIVES

A. THE REQUIREMENT FOR HIGH QUALITY OFFICERS

Technical advancements in military hardware, and the Navy's success in enlisting an increasingly talented group of young sailors to operate and maintain this equipment, underscore the need for high quality officers. The NROTC Scholarship Program and the Naval Academy have designed their academic curricula around a core of math and science courses. The exposure to these technically-oriented courses should enable newly-commissioned officers to successfully complete the rigorous warfare specialty training. The competition for the NROTC program and the Naval Academy is especially keen, as discussed previously. The selection process for the BOOST school is the topic of this section of the thesis.

Approximately one half of the BOOST student body is selected from active duty sailors. These students are referred to as Track I students by CNET Instruction 1530.6C that provides guidance on the administration of the program. [Ref. 29:p. 1] The remainder of the student body is composed of young people from the civilian community who are selected by the Naval Recruiting Command. These high school graduates enlist in the Navy for the sole purpose of attending the BOOST school and are called Track II students.

A short description of the core curriculum that all NROTC scholarship recipients are required to take in college will offer a basis for understanding how CNET developed the BOOST admissions criteria and academic curriculum. All NROTC students must successfully complete one year of

study in calculus, physics, and English composition. In addition, one term of computer science, a foreign language, and an engineering-oriented introduction to Naval ships systems are also required.

1. Program Objectives

The BOOST program can make a positive contribution to the Navy's minority accession goals by producing graduates who are eligible to receive an NROTC scholarship or an appointment to the Naval Academy. Specifically, the BOOST program offers comprehensive academic remediation to prepare students for college. The program also furnishes financial guidance and college placement counseling to enhance the student's probability of success in commissioning education programs.

2. BOOST Admissions Requirements

Looking at the BOOST graduation and NROTC scholarship eligibility requirements provides a logical understanding of how the admissions standards are set. Students must attain an SAT score of 450 on the verbal component and 500 on the math, or ACT scores of 19 English and 24 math. Additionally, students must achieve a 2.5 (out of a possible 4.0) grade point average in courses they study while at BOOST (including trigonometry, chemistry and physics). Working backwards then, one may conclude that the Navy educational specialists and policy-makers feel that the daily classroom instruction, and the special SAT/ACT coaching program that the program offers, will enable students to raise their scores at least 60 points on the SAT verbal section and 40 points on the SAT math (or 2 points on the ACT English section and 4 points on the math). A quick calculation yields the

current admission requirements of 390 verbal and 460 math on the SAT and 17 English and 20 math on the ACT. [Ref. 32:p. 1]

In addition to fulfilling the academic requirements for admission and graduation from the BOOST program, the students must demonstrate a high level of motivation for pursuing an officer accession program and have unblemished military conduct.

Eitelberg et al. describe recent studies that have been conducted to determine the relationship between the performance of minority students on aptitude tests and their performance as Naval officers. Although the study points out that aptitude tests can predict training attrition and military performance ratings, it emphasized that (1) the exact relationship is not fully understood and that it should be a topic for future research and (2) the Navy uses the *whole person* concept in selecting officer candidates that allows aptitude tests to be used with other indicators of academic potential such as class rank. [Ref. 22:p. 64] The authors also developed an index that allowed researchers to determine the proportion of *above-average* officers who were in the Navy based on the national distribution of high school students who took the SAT. Their analysis revealed several significant findings that provide a basis for determining the adequacy of the BOOST selection criteria. First, the study reports that the Navy has a greater proportion of higher-aptitude officers than the other services (for example, 90.4 percent of Naval officers scored above the 50th percentile on the SAT compared with 74.6 percent of officers in the Army). [Ref. 22:p. 98] This finding is not surprising considering the highly technical nature of the current generation of aircraft and submarines that new officers will be required to operate and maintain.

Second, the report highlights the disparity in the proportion of *above-average* officers in the military based on race. The study shows that while 86 percent of White officers scored above the 50th percentile, only 71 percent of Hispanics and 38 percent of Blacks scored that well. [Ref. 22:p. 98] Last, the research indicates that a score of 850 on the SAT (the minimum requirement for admission to BOOST) falls in the 46th percentile (*below-average category*). [Ref. 22:p. 98]

3. The BOOST Academic Curriculum

The BOOST academic curriculum is offered in five sessions of approximately eight weeks each, as shown in Table 2-1.

TABLE 2-1. BOOST ACADEMIC CURRICULUM

[Ref. 33:p. 8]

SESSION	MATHEMATICS	ENGLISH	SCIENCE
I	Algebra I	Grammar	Chemistry I
II	Geometry	Composition	Chemistry II
III	Algebra II	Vocabulary	Physics I
IV	Trigonometry	Test-taking skills	Physics II
V	Pre-calculus	Research papers	Physics III

Courses are taught at the high school college-preparatory level. Classroom instruction is offered at two levels, based on the academic background of individual students. The instruction is provided under contract by the San Diego, California, Community College District. The 26 faculty members at BOOST are civilians, approximately one quarter of whom hold doctorate level degrees. The student-to-teacher ratio is 16:1.

The class day is comprised of six classes, Monday through Friday. Students also attend mandatory instruction in computer science, military drill (marching), and physical training.

B. APPLICATION PROCEDURES FOR FLEET APPLICANTS

The Chief of Naval Operations Notice 1500 provides eligibility requirements and application procedures for enlisted personnel (Track I students) interested in attending the BOOST program. Although the SAT scores for eligibility are 390 on the verbal component and 460 on the math (or 17 English and 20 math on the ACT), the policy states that a waiver may be granted to those students who score a minimum of 350 verbal and 400 math on the SAT (or 14 English and 16 math on the ACT) if the Word Knowledge and Arithmetic Reasoning score on the Armed Services Vocational Aptitude Battery (ASVAB) versions five, six, or seven is 110 or greater or they have a Verbal and Arithmetic Reasoning score on the ASVAB versions 8 through 17 of at least 110. [Ref. 32:p. 2] The ASVAB is a Defense-wide aptitude test introduced in 1976 for enlistment screening and job assignment. [Ref. 34:p. 23] The battery consists of 10 subtests which measure a variety of abilities including mathematics knowledge, mechanical comprehension and general information. The results of this test are recorded in each new enlistee's service record. Commanding officers typically review the ASVAB scores of potential BOOST applicants to gain an understanding of their level of qualification in specific skill areas.

In addition to submitting standardized test scores, applicants must be favorably recommended by their commanding officers based upon their character, personal conduct and patriotism. The commanding officer is also

responsible for appointing a panel, consisting of at least two officers in the grade of lieutenant (O-3) or above, to interview the BOOST candidate. Applicants are evaluated on their appearance, oral communications skills and motivation.

Candidates must also submit academic transcripts from any high school or college that they attended. If an applicant is not a high school graduate, a General Educational Development (GED) equivalency certificate may be submitted. Fleet applicants who are not high school graduates or who do not possess a GED are still eligible for selection.

The complete application package contains 14 separate items, including results of a medical examination and physical fitness test. Track I students must have 36 months of active obligated service remaining on their enlistment contract upon entering the BOOST program. If a student fails to complete the BOOST program for any reason, he or she will be returned to the active duty fleet to serve out the remainder of the enlistment contract.

C. THE SELECTION PROCESS FOR FLEET APPLICANTS

CNET convenes a selection board for fleet applicants each January in Pensacola, Florida. Fleet applicants must meet the prerequisites for admission described in OPNAV Notice 1500. The selection board is composed of representatives from the Naval Military Personnel Command, the Navy Recruiting Command, a Professor of Naval Science from an NROTC unit, the Officer-in-Charge of the BOOST school, the BOOST program manager from OPNAV, and the CNET BOOST program coordinator who serves as the recorder for the board. The board typically has two or three senior Naval officers of the rank of captain (O-6), that serve as team leaders for the other

board members who are officers of the rank of commander (O-5) to lieutenant (O-3). The nine members of the board meet for four days to review the approximately 700 admissions packages.

Two topics worthy of additional comment are the SAT waiver criteria and the commanding officer's recommendation. As previously mentioned, waivers may be granted to applicants who score between 750 and 850 (composite) on the SAT if their verbal and arithmetic reasoning scores on the ASVAB are 110 or greater. [Ref. 32:p. 2] At this writing, the authors cannot find any documentation on a scale that can be used to equate ASVAB performance with SAT (or ACT) test performance. The establishment of the ASVAB waiver criteria may have been a method to increase the applicant pool several years ago when applications from fleet sailors were very low and it has simply *remained on the books*. The selection of a candidate with a score of 750 on the SAT may severely handicap an individual who must attain a score of 950 on the SAT in order to graduate from the BOOST program. This comment is based on the BOOST program's *advertised* capability to assist students in improving their performance on the SAT by 100 points and the fact that no waivers, based on ASVAB achievement, can be granted to students who fail to meet the graduation requirements.

The recommendation made by a fleet applicant's commanding officer provides the selection board members with reliable information on candidates that other items in the admissions package may not address. The commanding officer is a trained observer and can describe how a young sailor reacts under pressure as well as being able to comment on the applicant's overall fitness to become an officer. The commanding officer may also

request SAT test score waivers for exceptional candidates. The results of recent selection boards indicate many of the applicants failed to qualify because of their low SAT scores, in spite of the fact that their commanding officers recommended them. The consequences of this situation are undoubtedly a disappointed young sailor and the perceived lack of attention given to the commanding officer's recommendation.

D. APPLICATION PROCEDURES FOR CIVILIAN APPLICANTS

Navy Recruiting Command Notice 1500 describes the application procedures for civilians (Track II students) desiring to attend the BOOST school. The eligibility requirements are identical to those of the active duty fleet applicants (Track I students) with a few exceptions. All civilian applicants must be a high school diploma graduate. Candidates must be interviewed by a panel of at least two commissioned officers, one of whom should be in the grade of lieutenant (O-3) or above. In addition, references are required, including one from the applicant's high school guidance counselor. The Track II selectees for the BOOST program must enlist in the Navy for a period of eight years (four active and four inactive) and complete basic military training (boot camp) at the San Diego, California or Orlando, Florida Recruit Training Commands prior to beginning BOOST school. The BOOST enlistment contract guarantees the Track II student that he or she may receive a discharge from the Navy and go home if they subsequently fail to complete the BOOST program for any reason (voluntary disenrollment, medical disqualification or academic failure). Incidences of misconduct that may result in a discharge from the Navy will be reviewed on a case-by-case basis by CNET. Track II students who are disenrolled from the BOOST program also

have the option to remain on active duty and complete their four-year active duty service obligation. [Ref. 35:p. 4]

E. THE SELECTION PROCESS FOR CIVILIAN APPLICANTS

The Navy Recruiting Command's BOOST and NROTC Programs Branch is responsible for selecting BOOST students from a pool of potential candidates identified by local recruiters around the country. The BOOST and NROTC Programs Branch head is a Navy Lieutenant (O-3) and the BOOST program manager is a Navy Master Chief Petty Officer (E-9).

The BOOST Track II recruiting goal for 1990 was 215 students. The demographic composition of the selectees was to be 92 percent men and 8 percent women. The racial/ethnic goals were 18 percent White, 28 percent Hispanic and 54 percent Black. [Ref. 36:p. 8] The actual selection results coincided very closely with these target figures.

The BOOST and NROTC Programs Branch head is the principal member of the Navy Recruiting Command's BOOST selection board. The board convenes on a continuous basis and also includes the BOOST program manager. Application packages are also reviewed by the Navy Recruiting Command's Minority Affairs Branch.

Candidates for the BOOST program are selected using the *whole person* concept. The board considers SAT and ACT scores, high school class rank, extracurricular activities and references submitted by high school teachers and counselors. Special emphasis is given to an applicant's motivation, sense of honor, leadership and other indicators that demonstrate officer-like potential. Participation in the Naval Junior Reserve Officer Training Corps (NJROTC),

Naval Sea Cadet Corps, and Boy Scouts are viewed as positive factors in a candidate's record.

An analysis of the profile of the Black and Hispanic civilian (Track II) selectees for the 1990 BOOST class reveals several significant factors about the young people who actually apply for the BOOST program and the program's intended target audience. One would expect most BOOST applicants to fall into the group of students that had SAT scores between 850 and 950—that is, a group of students who did not meet the eligibility requirements for direct entry into the NROTC program. Likewise, the group of *ideal* BOOST students would expand the minority applicant-pool by allowing the Navy to recruit students in the 850 SAT score range who could benefit from an additional year of classroom instruction and possibly raise their SAT scores to at least 950, to become eligible for an NROTC scholarship. An examination of the average (mean) SAT scores of the 1990 BOOST program selectees reveals that the new students attained scores that exceeded the BOOST graduation and NROTC scholarship criteria.

A point worth mentioning is the large disparity between the 1990 NROTC scholarship program selectees and the BOOST program selectees. The fact that there is a disparity in the student profiles of these two groups in the first place is not surprising. The important question underscored by the disparity in the student profiles is whether or not the one-year program at BOOST can sufficiently prepare its graduates to successfully compete with their direct-entry counterparts. The direct-entry students not only have higher SAT scores, as shown in Table 2-2, but appear to have much stronger records in terms of participation in varsity athletics and scouting, the recruiting

command's proxy indicators of *leadership potential*. For example, as shown in Table 2-2, the NROTC direct entry students scored over 250 points higher on the SAT than did the minority BOOST selectees. While nearly half of the NROTC and BOOST selectees served as class officers in high school, only 69 percent of the Black BOOST selectees played on varsity sports teams compared to 76 percent of the NROTC selectees. Table 2-2 also indicates that over a quarter of the minority BOOST selectees participated in the NJROTC program in their high school, as opposed to participating in scouting, which may not have been available in their community. The NJROTC program is offered in many inner-city high schools and provides uniforms and equipment free of charge to its members. The program encourages patriotism and provides an opportunity for young people to exhibit their leadership skills. Table 2-2 shows that only 11 percent of the Black and 7 percent of the Hispanic BOOST selectees participated in scouting, compared to 14 percent of the NROTC selectees.

The BOOST program can provide students with an opportunity to study courses they may not have been exposed to in high school, such as physics or chemistry. It also allows the young men and women to mature emotionally as well as to improve their intercultural skills (for some students it may be the first time that they have had to interact with people from an ethnic background different from their own). The students also learn how to cope in a large bureaucratic organization, which may reduce attrition when they reach college. But, in spite of these positive aspects of the program, for many Track II students it appears that the BOOST program may simply be a holding pattern or a *rite of passage* that they must endure in order to earn a college scholarship with otherwise weak academic credentials. Likewise, from the

Navy's perspective, the size of the applicant pool has not really been expanded to include the lower scoring candidates in the 850 SAT score range.

**TABLE 2-2. DESCRIPTIVE STATISTICS ON NROTC AND BOOST
SELECTEES, BY SAT SCORE AND PARTICIPATION IN
EXTRACURRICULAR ACTIVITIES, 1990**

[Ref. 31]

Number, SAT Score, and Activity	NROTC (Direct- Entry)	BOOST (Black)	BOOST (Hispanic)
Number selected	1,189	106	59
Average SAT Scores	1,269	976	1012
Percent Participating			
Varsity sports	76	69	75
Scouting	14	11	7
Class officers	51	49	49
NJROTC	8	23	29

The problem of clearly defining the BOOST program applicant pool and in developing valid admissions criteria is complicated by another simple truth in minority recruiting: a large amount of self-selection *out* of the program. BOOST program coordinators in the Office of the Chief of Naval Personnel have noted that some of the top Black and Hispanic high school students do not want to attend the BOOST program. Students who score above the national SAT average for their particular racial/ethnic group are often highly sought after by civilian universities. The bottom line is that many of the most competitive minority students want to go to college with their peers. Of the 578 Black applicants screened for the NROTC scholarship program in 1987, only 120 offers were made and only 35 enrolled in the program. Likewise, for Hispanics, of the 460 applications reviewed, only 83

offers were made and only 30 students actually enrolled in the program. Taking the analysis of the 1987 NROTC program applicant pool one step further, one finds that, of the hundreds of scholarship program non-selects who were offered an opportunity to attend the BOOST program, only 24 Blacks and 12 Hispanics accepted the offer. [Ref. 37:p. 2]

F. BOOST SELECTION TARGETS

The OPNAV BOOST program manager, the Total Force Training and Education Policy Division (OP-11), establishes the racial/ethnic selection targets for each entering BOOST class. The demographic characteristics of the 216 Track I (fleet input) students were to be 90 percent men and 10 percent women, with an ethnic composition of 46 percent Blacks, 24 percent Hispanics, and 30 percent White and other minorities. The actual selection results indicated that there was a shortage of qualified Black applicants. The selection board chose several more Hispanic men to fill up the remaining vacancies, which increased the proportion of Hispanics in the class from 23 percent to 28 percent. [Ref. 26]

The racial/ethnic composition of the 229 Track II (civilian input) students selected by the Navy Recruiting Command was 56 percent Black, 28 percent Hispanic and 16 percent White and other minorities. The racial/ethnic selection quotas underscore the dual missions of the BOOST program, which are to provide upward mobility for all enlisted personnel, regardless of race, who are interested in gaining a commission, and affirmative action.

G. SELECTION RATIO

Human resources development managers often use a factor called "selection ratio" to judge the usefulness of a set of selection criteria or predictors of job performance. The selection ratio is defined as the number of student openings available divided by the number of applicants. When the

numerical value of the selection ratio is equal to one, the selection process has little meaning. As the selection ratio decreases, the utility of the screening criteria increases in importance and standards tend to be raised. Simply stated, the fussier the selection boards are in admitting students to the BOOST program (the smaller the selection ratio), the more likely it is that the people admitted will rank high on measures of qualification. [Ref. 38:p. 199] The 1990 Track I selection board resulted in 216 selectees from a pool of 722 applicants that yielded a selection ratio of 0.30. The Track II selection board screened 612 applicants to fill its 229 openings and had a selection ratio of 0.37. [Refs. 26 and 40]

H. BOOST SELECTION BOARD RESULTS

The average SAT scores of the Track I students selected for the BOOST program exceeded the SAT graduation requirement, as seen in Table 2-3. For example, Table 2-3 shows that Black and Hispanic fleet selectees (men only) typically scored above the graduation requirement by 30 and 65 points, respectively. Likewise, White (and other) male sailors entered the BOOST program with SAT scores over 90 points above the 950 required for graduation.

TABLE 2-3. BOOST TRACK I SAT PERFORMANCE
[Ref. 26]

BOOST Eligibility Requirement	BOOST Graduation Requirement	1990 Track I Selectees		
		Black Male	Hispanic Male	White/Other Male
390 Verbal	450 Verbal	476 Verbal	473 Verbal	487 Verbal
460 Math	500 Math	505 Math	542 Math	556 Math
850 (Composite)	950 (Composite)	981 (Composite)	1,015 (Composite)	1,043 (Composite)

The selection board results also indicate that 37 of the 216 Track I selectees (approximately 17 percent) failed to meet the SAT eligibility requirement and were granted waivers based on the strength of their overall record. These figures illustrate the varying academic qualifications of the Track I students and the dilemma that the BOOST school instructors face in developing lesson plans that can provide the necessary remedial training to strengthen the weaker students while challenging the brighter students with new concepts and course material that is more advanced. A restructuring of the BOOST selection criteria may allow the Navy to obtain a more homogeneous group of students and reduce academic attrition, which is the primary reason why students are disenrolled from the program. [Ref. 33:p. 21] By more closely aligning the pace of classroom instruction, which is considered to be quite fast by young sailors who were not exposed to physics or chemistry in high school, to the level of students in the 850-950 SAT score range, academic attrition may be reduced. Overall attrition has been nearly 29 percent for the most recent BOOST classes (1987, 1988 and 1989), with academic failure being the reason for disenrollment in 55 percent of the cases. [Ref. 39]

The results of the 1990 Track II selection board also indicate that the average composite SAT scores of the new students exceed the BOOST graduation requirements, as shown in Table 2-4. The SAT scores of the Black and Hispanic civilian selectees were 33 and 68 points above the graduation requirement, respectively. Notably, the White and other minority students scored 52 points above the graduation requirement, slightly lower than their Hispanic counterparts.

TABLE 2-4. BOOST TRACK II SAT PERFORMANCE

[Ref. 40]

		1990 Track II Selectees		
BOOST Eligibility Requirement (Composite)	BOOST Graduation Requirement (Composite)	Black Male	Hispanic Male	White/Other Male
850	950	983	1,018	1,002

The Track II students fared better than their Track I counterparts on the SAT, with only 9 percent requiring waivers for low SAT scores. Notably, a significant number of selectees had scores over 1,100, with 6 students over 1,200.

The high quality Track II students who continue to improve their academic backgrounds while at BOOST have assisted in improving the image of the BOOST program graduates. Admissions officers from some of the most competitive universities in the country actively recruit BOOST graduates to come to their campuses. For example, in 1989 BOOST students were accepted at the University of California at Berkeley, Georgia Institute of Technology, and Spelman College.

I. BOOST ENROLLMENT AND GRADUATION TRENDS

The number of Navy students enrolled in the BOOST program grew from 336 students in 1986 to 442 students in 1990, as shown in Table 2-5. The number of minority students in the program also increased during this five-year period as a result of the Navy Recruiting Command's emphasis on Black and Hispanic accessions. For example, Table 2-5 shows that the percentage of Black Track II students increased substantially from 39 percent in 1986 to 56 percent in 1990. Likewise, the percentage of Hispanic Track II students grew from 28 percent to 33 percent of the class. In spite of the overall increase in

the size of the BOOST program by 100 students, the percentage of White Track II students selected to attend the school decreased from 19 to 7 percent between 1986 and 1990 to accommodate the increase in the number of minority students. It is also apparent from Table 2-5 that the Track I input to the BOOST program remained relatively unchanged in both size and racial/ethnic composition.

TABLE 2-5. PERCENTAGE DISTRIBUTION OF PERSONS ENROLLED IN BOOST BY TRACK AND RACIAL/ETHNIC GROUP, 1986-1990

[Ref. 34:p. 15]

Track and Racial/Ethnic Group	Year of Graduation				
	1986	1987	1988	1989	1990
Track I					
White	45	36	29	33	37
Black	34	42	44	35	35
Hispanic	17	14	20	22	22
Asian, Native American	4	8	7	10	6
TOTAL					
PERCENT	100	100	100	100	100
(NUMBER)	(139)	(182)	(209)	(182)	(142)
Track II					
White	19	22	20	6	7
Black	39	44	51	52	56
Hispanic	28	24	18	26	33
Asian, Native American	14	10	11	16	4
TOTAL					
PERCENT	100	100	100	100	100
(NUMBER)	(197)	(226)	(199)	(247)	(300)

In recent years the Navy has failed to enroll the number of Black Track I students to meet the goal of 46 percent of the incoming class. The selection board filled the remaining Track I vacancies by increasing the percentage of Whites, Asians and Native Americans from the CNO's goal of 30 percent of the incoming class to 42 percent of the incoming class.

During the school year students may be disenrolled from BOOST due to academic failure, medical disqualification or disciplinary problems. Students may also request to be dropped from the program based on their own personal reasons. Students who fail to maintain an overall grade point average of 2.50 (on a 4.0 scale) are subject to disenrollment. There are provisions in the program that allow students who are only having problems in one course to be placed on academic probation. As mentioned previously, the BOOST curriculum is taught on two levels so that weaker students may be placed in slower-paced classes. In recent years the overall attrition rate has been approximately 30 percent. [Ref. 33:p. 21]

Academic attrition based on unsatisfactory classroom performance is the principal reason why students are disenrolled from the program. In recent years only a very small number of students have failed to attain the SAT graduation requirement of 450 on the verbal and 500 on the math component. In 1989, 3.7 percent of the students failed to meet the SAT requirements. CNET considered the eligibility of each of these students for an NROTC scholarship on a case-by-case basis. Although all of the students had over a 950 SAT composite score, many failed to attain the 450 verbal score requirement. Waivers were granted to all of these students.

The fact that so many students experience difficulty with the BOOST academic curriculum even though they enter the program with SAT scores that surpass the NROTC scholarship requirement, underscores the role that

the program can play in improving study habits and enhancing classroom performance. BOOST school officials also point out that students are able to improve their oral communication skills as well as gain experience in conducting research for term papers, neither of which can be accurately measured by the SAT but are essential for success in college.

Personal requests for disenrollment are the second leading cause of attrition. Many of the Track I (fleet input) students experience difficulty in transitioning from shipboard life to a classroom environment. Many who were frustrated by the pressures of testing and homework in high school may find the BOOST program somewhat overwhelming. Likewise, the Track II students who were fairly competitive students in high school find the additional pressures brought on by the military requirements of weekly room and personnel inspections, military drill, and mandatory physical training too much for them to handle. These students get an opportunity to improve their time management skills and study habits at BOOST prior to reaching their NROTC unit or the Naval Academy where the pace is even faster, and much less forgiving.

Table 2-6 indicates that academic failure was the primary reason for 46 to 60 percent of all disenrollments from 1987 to 1990. While personal requests by students to leave the program were declining steadily from 28 to 11 percent between 1987 and 1989, a sharp increase to 45 percent occurred in 1990 as a result of a change in the service obligation policy. [Ref. 33:p. 21] In a move to standardize the service obligation policy for students enrolled in college preparatory programs such as NAPS and BOOST, the Commander of the Naval Recruiting Command changed the Track II service obligation policy. The new contract permits students who enter the Navy for the purpose of attending the BOOST program to be discharged upon request.

Students may be disenrolled due to disqualifying medical conditions that develop while attending BOOST. Table 2-6 shows that medical attrition declined sharply from 18 to one percent between 1989 and 1990. The significant improvement in medical attrition occurred as a direct result of requiring BOOST selectees to pass an officer's commissioning physical examination, as opposed to the more lenient enlistment physicals that had been administered to BOOST students in previous years.

TABLE 2-6. BOOST ATTRITION: PERCENTAGE DISTRIBUTION BY REASON, GRADUATION YEARS 1987-1990

[Ref. 34:p. 21]

Reason for Attrition	Year of Graduation			
	1987	1988	1989	1990
Academic	49	60	60	46
Personal	28	20	11	45
Medical	18	10	18	1
Disciplinary	4	6	7	8
Poor Potential	1	4	4	0
TOTAL	100	100	100	100

Table 2-6 also shows the small proportion of students, typically less than 10 percent a year, who are disenrolled due to their poor commissioning potential (unsuitable character traits) or a pattern of disciplinary problems.

As seen in Table 2-7, the number of Blacks and Hispanics graduating from the BOOST program grew steadily between 1983 and 1990. For example, Table 2-7 shows that the number of Black students graduating from the BOOST program increased from 57 to 147. Similarly, the number of Hispanic students graduating from the school rose from 29 to 90. The expansion in minority enrollments from 117 Blacks and 60 Hispanics in 1983 to 218 Black and 130 Hispanics by 1990, was one factor contributing to the increase in the

number of graduates. The second factor was the decline in minority attrition from 51 to 33 percent for Blacks and from 52 to 31 percent for Hispanics during this eight-year period. [Ref. 33:p. 25 and Ref. 37:p. 2]

**TABLE 2-7. NUMBER OF BOOST ENROLLEES AND GRADUATES, AND
ATTRITION RATE (PERCENT) BY RACIAL/ETHNIC GROUP, 1983-1990**
[Ref. 33:p. 15 and Ref. 37:p. 2]

GRADUATION YEAR	BLACK			HISPANIC		
	Enrollees (number)	Graduates (number)	Attrition (percent)	Enrollees (number)	Graduates (number)	Attrition (percent)
1983	117	57	51	60	29	52
1984	127	82	35	79	54	32
1985	115	59	49	79	42	47
1986	123	73	41	79	57	28
1987	176	94	47	80	59	26
1988	193	117	39	78	58	26
1989	194	132	31	106	78	26
1990	218	147	33	130	90	31

Further analysis of the BOOST attrition statistics shown in Table 2-7 reveals that Black attrition (fluctuating between 31 and 51 percent) has been above the class average of 30 percent, which may have had a negative impact on the Navy's capability to achieve its minority commissioning objectives. The primary cause of attrition for Blacks and Hispanics has also been academic failure.

J. BOOST INPUT INTO NROTC

The NROTC program is the Navy's largest single source of regular Navy and Marine Corps officers. In 1990, there were 66 NROTC units in operation, including six located at Historically Black Colleges (HBCs). The Commander of the Navy Recruiting Command recruits nearly 33,000 four-year scholarship applicants each year for the NROTC program. Out of this number, about

16,500 are determined to be eligible for selection based upon minimum SAT scores. CNET convenes a continuous scholarship selection board which meets each week from October through March. The CNET board evaluates about 13,000 application records to determine primary, alternate and non-select status. These procedures allow the Navy to select the top students early and develop a list of alternates for possible scholarship selection. The average number of students on scholarship is 6,350. In 1990, the average cost per graduate was \$63,600, which included the cost of tuition, books, lab fees, and a subsistence allowance of \$100 per month. [Ref. 41:p. 1]

BOOST students are assisted by the College Placement Officer, a full-time civilian educational specialist on the BOOST school staff, in selecting a college that participates in the NROTC program. Students are given an opportunity to indicate their college preferences during an interview with the placement officer. Based on the information acquired during the interview, such as SAT scores, academic standing at BOOST, and demonstrated financial responsibility for attending college, students will be authorized by the Officer-in-Charge of the BOOST program to submit an application to a specified college. Most students apply to two or three colleges in which they are competitive for admission. The placement officer sponsors two college information seminars at the BOOST school each year that allow the students to meet with university admissions officers, financial aid representatives, and former BOOST students from colleges all over the country. CNET started a BOOST Advisory Board in 1990 to provide students with specific guidance on financial problems that they may encounter once they graduate from the BOOST program and are discharged from the Navy. Although many colleges

offer generous room and board packages to BOOST graduates to help them face the financial setback that results from the loss of their military paycheck, many students experience financial difficulties. In the spring of 1990, the advisory board discovered that 20 percent of the BOOST students had applied to colleges out of their price range and recommended they revise their choice of schools. [Ref. 42:p. 3]

The BOOST program guarantees each of its graduates an NROTC scholarship. Therefore, CNET *reserves* a certain percentage of the national scholarships for BOOST students each spring. Due to the increasing number of BOOST graduates, the Navy has been able to grant more scholarships to Black and Hispanic students, which will have a direct impact on the Navy's capability to meet its minority commissioning objectives. Table 2-8 shows that in 1984, BOOST graduates comprised slightly over 7 percent of the freshman scholarship recipients. By 1988, BOOST graduates made up nearly 23 percent of the new NROTC class as a result of a decrease in overall size of the NROTC program from 2,501 students in 1984 to 1,160 students in 1988. The Navy also witnessed an increase in the number of Black and Hispanic freshmen in the NROTC program from 10 percent in 1984 to over 23 percent in 1988, as indicated in Table 2-8 [Ref. 37:p. 2].

A better understanding of the importance of the BOOST program and its impact on achieving the NROTC minority recruiting goals can be obtained from Figure 2-1, which displays BOOST graduates as a percentage of all scholarship recipients during 1989. Figure 2-1 shows that the Black and Hispanic BOOST graduates comprised 9.9 and 6.0 percent of the new NROTC class, respectively. The BOOST input was disproportionately larger than the

7.2 percent Black and 5.1 percent Hispanic direct-entry NROTC students who were recruited nationwide. [Ref. 42]

TABLE 2-8. BOOST GRADUATES, BLACKS, AND HISPANICS AS A PERCENT OF FRESHMAN SCHOLARSHIP RECIPIENTS IN NROTC, 1984-1988
[Ref. 37:p. 2]

BOOST Graduates, Blacks, and Hispanics	1984	1985	1986	1987	1988
Total Number of Scholarships	2,501	1,809	1,817	1,338	1,160
BOOST Graduates (percentage)	7.2	8.4	10.6	18.5	23.0
Black (percentage)	4.0	5.2	9.6	11.5	15.0
Hispanic (percentage)	6.0	5.5	4.9	6.6	8.1

Tables 2-9 and 2-10 provide some indication of the increasing trend in minority NROTC commissionees from BOOST and again highlights the contributions of the program. Table 2-9 shows that the number of Black NROTC graduates rose from 29 to 55 percent between 1983 and 1988. The increase in the number of Black commissionees directly reflected the rising percentage of former BOOST students who successfully completed the NROTC program. Similarly, Table 2-10 points out that the number of Hispanics gaining commissions rose from 7 to 37, commensurate with the increasing percentage of former Hispanic BOOST students (from zero to 48 percent) graduating from college between 1983 and 1988. [Ref. 8:p. 3-14]

The NROTC commissioning goals were revised in the spring of 1990 to reflect the overall decrease in the size of the Navy as a result of federal budget reductions. The NROTC minority commissioning objectives will remain 7 percent Black and 4 percent Hispanic, although the actual number of minority

ensigns will decrease. Table 2-11 shows the current minority commissioning targets.

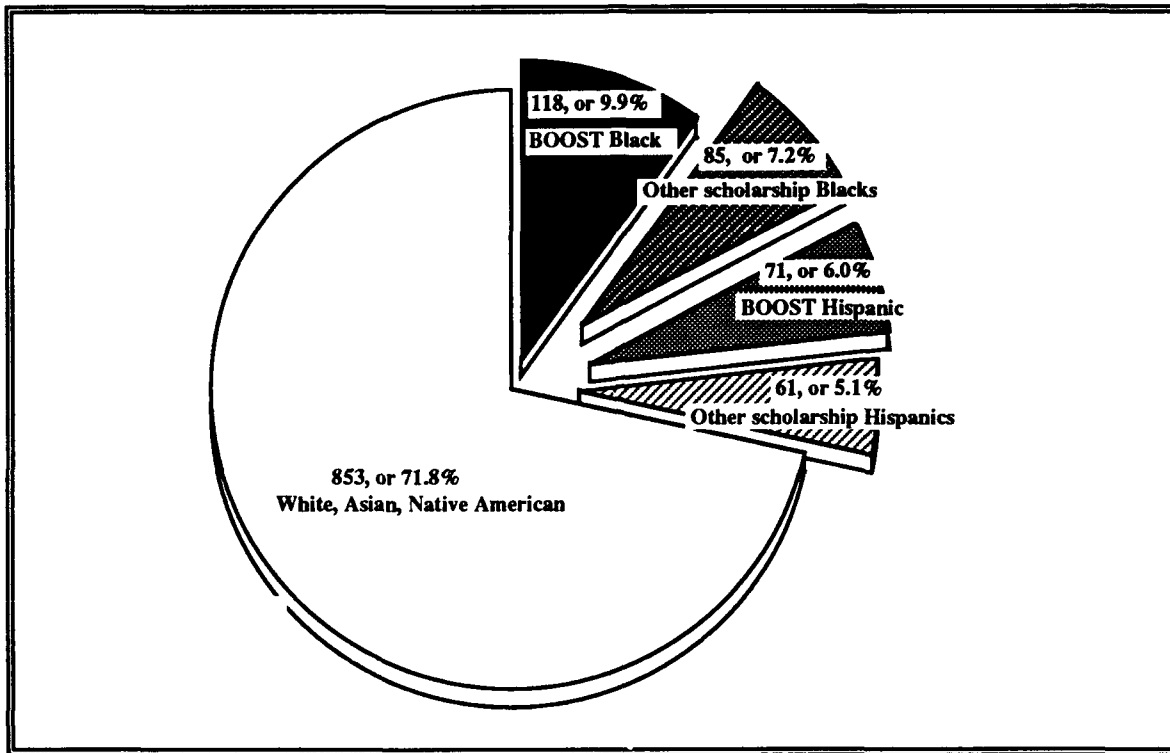


Figure 2-1. NROTC Scholarship Enrollment by Racial/Ethnic Group and BOOST/Non-BOOST Source, 1989
[Ref. 45]

TABLE 2-9. NROTC PROGRAM: TOTAL NUMBER OF BLACK GRADUATES AND PERCENTAGE OF FORMER BOOST STUDENTS, BY YEAR OF GRADUATION, 1983-1988
[Ref. 8:p. 3-14]

Year of Graduation	Number of Black NROTC Graduates	Percentage of Former BOOST Students
1983	29	17
1984	55	13
1985	57	17
1986	65	37
1987	88	30
1988	55	40
Total 1983-88	349	27

TABLE 2-10. NROTC PROGRAM: TOTAL NUMBER OF HISPANIC GRADUATES AND PERCENTAGE OF FORMER BOOST STUDENTS, BY YEAR OF GRADUATION, 1983-1988

[Ref. 8:p. 3-14]

Year of Graduation	Number of Hispanic NROTC Graduates	Percentage of Former BOOST Students
1983	7	0
1984	14	14
1985	18	22
1986	35	28
1987	38	26
1988	37	48
Total 1983-88	149	29

TABLE 2-11. NROTC COMMISSIONING GOALS (NUMBER), 1990-1994

[Ref. 43:p. 1]

Commissioning Goal	Commissioning Year				
	1990	1991	1992	1993	1994
Black Goal	116	112	102	88	77
Hispanic Goal	66	64	58	50	44
Total NROTC Commissions	1,650	1,600	1,450	1,250	1,100

It is apparent that the quality of the minority and majority BOOST school graduates will have a direct impact on the overall quality of students in the NROTC program and ultimately the Navy officer corps. In addition to assisting in the selection of students for the BOOST program, CNET must also attract 500 top students who are qualified to study a technical major if they accept an NROTC scholarship. While the attrition rate for BOOST graduates in the NROTC program is lower than that of all four-year direct scholarship recipients, only a small number of BOOST graduates major in engineering or

math. In 1987, only 39 percent of the BOOST graduates dropped out of the NROTC program compared with 48 percent of direct-entry students. During that same year, only 24 percent of the BOOST graduates had technical majors compared with 39 percent of other scholarship graduates. [Ref. 37:p. 3]

BOOST students may apply for admission to the college of their choice as long as they can satisfactorily meet the academic and financial requirements of the institution. The BOOST College Placement Officer noted that a significant number of Black BOOST graduates typically choose to attend one of the six NROTC units at HBCs listed in Table 2-12.

**TABLE 2-12. HISTORICALLY BLACK COLLEGES (HBCs)
WITH NROTC UNITS**

[Ref. 41]

- | |
|---|
| <ul style="list-style-type: none">• Florida A&M University• Southern University and A&M College• Savannah State College• Prairie View A&M University• Morehouse College• Consortium at Hampton University (HBC), Norfolk State University (HBC), and Old Dominion University |
|---|

Students are often attracted to these schools because of their reputation for low attrition, affordable prices for room and board, and geographic location. Campus activities (such as fraternities and sororities) and an opportunity to study courses not offered at other universities may be additional reasons for wanting to attend an HBC, but according to the BOOST

College Placement Officer, many Black teenagers simply want to avoid the "culture shock" that often accompanies enrollment into predominantly White colleges. As shown in Table 2-13, the number of Blacks graduating from the BOOST program increased from 94 to 147 between 1987 and 1990. While over one-third of all Black BOOST graduates still go on to study at an HBC, Table 2-13 indicates a declining trend in their enrollment from 49 to 32 percent between 1988 and 1990, which is shown graphically in Figure 2-2. [Ref. 33:p. 26] One explanation for this phenomenon may be the aggressive recruiting techniques employed by many other colleges interested in attracting BOOST graduates to their campuses. For example, George Washington University offers all BOOST graduates free room and board. [Ref. 39]

TABLE 2-13. BLACK GRADUATES FROM BOOST: NUMBER AND PERCENTAGE ATTENDING A HISTORICALLY BLACK COLLEGE, 1987-1990
[Ref. 33:p. 26]

	1987	1988	1989	1990
Black Graduates from BOOST (number)	94	117	132	147
Number Attending HBC	25	57	46	47
Percentage Attending HBC	27	49	37	32

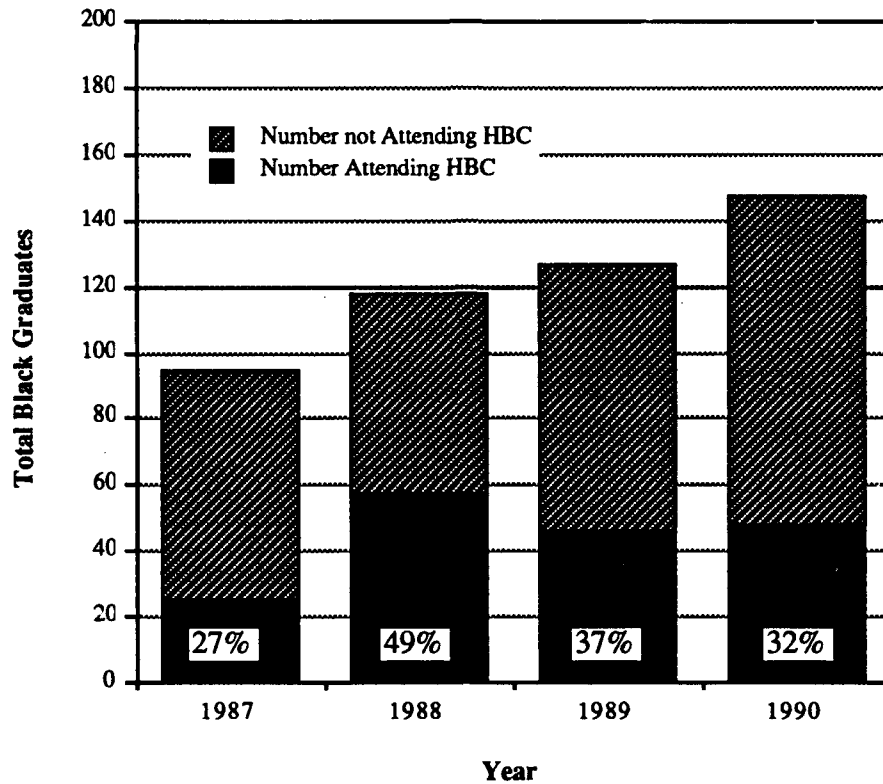


Figure 2-2. Black Graduates from BOOST: Number and Percentage Attending a Historically Black College, 1987-1990

K. BOOST INPUT TO THE UNITED STATES NAVAL ACADEMY

The United States Naval Academy was founded by Secretary of the Navy George Bancroft in 1845. In those days, it was a Naval School that taught navigation and seamanship skills. In 1850, the Naval School formally became the Naval Academy and expanded its curriculum to include mathematics and science in a comprehensive four-year program. The Naval Academy began awarding bachelor of science degrees in 1933 to prepare its new officers to operate effectively in an increasingly technical environment. Today, the Naval Academy offers 18 major fields of study, including aerospace engineering, Naval architecture, and physics. The student body has

grown from its original size of 60 young men in 1845 to over 4,500 men and women today. [Ref. 44:p. 6]

In 1872, James Conyers was the first Black man to receive an appointment to the Naval Academy, but it was not until 1949 that Wesley A. Brown became the first Black and the 20,699th midshipman to graduate from Annapolis [Ref. 45:p. 142]. Notably, the Naval Academy student body has grown in its diversity over the years, and now enrolls nearly 260 minority midshipmen, representing 18 percent of each entering freshman class. [Ref. 31]

BOOST students are eligible to apply for admission to the Naval Academy in addition to other colleges. Although all successful BOOST graduates are guaranteed an NROTC scholarship, they must compete for an appointment to the Naval Academy like any other enlisted member of the Regular Navy or Naval Reserve. OPNAV Instruction 1531.4 describes the applications procedures and scholastic requirements for admission to Annapolis. BOOST students must submit to the Naval Academy a complete application package, which includes their SAT scores, high school transcript, BOOST transcript and rank in class, results of the Naval Academy Physical Fitness Screening Test, and a letter of recommendation from the Officer-in-Charge of the BOOST program. Like the NROTC program, admission to the Naval Academy is based on the *whole person* concept. Applicants must also obtain a congressional nomination or a nomination from the Secretary of the Navy, who may nominate up to 170 enlisted members each year. The BOOST College Placement Officer and a member of the BOOST staff who has completed the Naval Academy's week-long training program for field

recruiters (Blue and Gold Officers), assist the BOOST students with the complicated admissions procedures.

As previously mentioned, the BOOST College Placement Officer hosts representatives from NROTC universities and the Naval Academy to provide students with one-on-one counseling on admissions procedures and campus life at their particular institution. Minority Admissions Counselors from the Naval Academy's Candidate Guidance Office visit the BOOST school to participate in this program. In 1989, the Director of Candidate Guidance initiated a Naval Academy Orientation Program that allowed all interested BOOST students to visit Annapolis for three days to gain first-hand knowledge of the academic opportunities available at the Naval Academy and experience life as a midshipman for a short period of time.

BOOST students must attain an SAT score of 950 to be considered for the Naval Academy. As noted earlier, the average SAT score of freshmen entering the Naval Academy in 1989 was 1,240, which emphasizes the need to carefully screen the BOOST applicants to ensure that they will be able to handle the rigorous academic program that requires 70 percent of the student body to study a technical major.

In 1988, the *Chief of Naval Operations Study Group's Report on Equal Opportunity in the Navy* recommended that the Superintendent of the Naval Academy include the BOOST program as a principal part of the Academy's minority accession plan [Ref. 8:p. 3-29]. Unfortunately, in 1989, the Naval Academy failed to meet the Equal Opportunity Study Group's goal to select 15 Blacks from the BOOST program [Ref. 46:p. 4]. On the positive side, the Naval Academy was able to reverse its declining trend in awarding appointments to minority BOOST graduates, as Table 2-14 indicates. For

example, Table 2-14 shows that six Black and seven Hispanic BOOST graduates entered the Naval Academy in 1989, a significant increase above the two Black and three Hispanics who were appointed the year before.

TABLE 2-14. BOOST GRADUATES (NUMBER) ENTERING THE NAVAL ACADEMY, BY RACIAL/ETHNIC GROUP, 1986-1990

[Ref. 47]

Racial/Ethnic Group	Year of Entry				
	1986	1987	1988	1989	1990
White	10	5	3	3	9
Black	4	2	2	6	10
Hispanic	5	2	3	7	7
Asian, Native American	4	3	2	3	2
Total	23	12	10	19	28

The BOOST program has made marginal contributions to the Naval Academy's minority commissioning objectives. The number of Black BOOST students who graduated from the Naval Academy is shown in Table 2-15. Although the small sample size does raise a question about the reliability of any conclusions drawn here, it appears that the attrition rate of Black BOOST students is higher than the overall attrition rate of the Black students who attend the Naval Academy. Academy admissions counselors pointed out that academic failure is the primary cause of BOOST student attrition.

Table 2-16 shows the Hispanic BOOST students who have graduated from the Naval Academy since 1985. Even though the number of BOOST graduates is relatively small, they have contributed to the Naval Academy's success in meeting the Hispanic commissioning goal of four percent of the graduating class.

**TABLE 2-15. BLACKS IN THE NAVAL ACADEMY: COMPARISON OF
ENROLLEES, GRADUATES, AND ATTRITION RATES FOR BOOST
STUDENTS AND ALL BLACK MIDSHIPMEN, 1985-1990**

[Refs. 47, 48]

Year of Graduation	BOOST Student			Total Black*		
	Enrollees (number)	Graduates (number)	Attrition (percent)	Enrollees (number)	Graduates (number)	Attrition (percent)
1985	1	1	0	51	38	25
1986	5	2	60	72	46	36
1987	3	0	100	68	36	47
1988	5	3	40	61	38	36
1989	3	1	66	80	60	25
1990	4	3	25	92	63	31
Total 1985-90	21	10	52	424	281	33

*Total Black figures include Black BOOST graduates.

**TABLE 2-16. HISPANICS IN THE NAVAL ACADEMY: COMPARISON OF
ENROLLEES, GRADUATES, AND ATTRITION RATES FOR BOOST
STUDENTS AND ALL HISPANIC MIDSHIPMEN, 1985-1990**

[Refs. 47, 48]

Year of Graduation	BOOST Student			Total Hispanic*		
	Enrollees (number)	Graduates (number)	Attrition (percent)	Enrollees (number)	Graduates (number)	Attrition (percent)
1985	1	1	0	51	32	37
1986	3	3	0	63	43	32
1987	5	4	20	65	42	20
1988	8	4	50	74	47	36
1989	7	5	28	73	52	25
1990	5	2	40	76	47	37
Total 1985-90	29	19	34	402	263	41

*Total Hispanic figures include Hispanic BOOST graduates.

The overall Naval Academy attrition rate from 1985 to 1990 was approximately 23 percent, significantly lower than the attrition rate for Black (33 percent) and Hispanic (27 percent) midshipmen. [Ref. 48] Naval Academy

Admissions Counselors stated that academic failure was the primary reason for both minority and non-minority midshipman attrition. They also pointed out that the disparity in the attrition rates may be due in part to the fact that the minority midshipmen had weaker academic credentials than did their non-minority counterparts. For example, 39 percent of the Black and 37 percent of the Hispanic midshipmen in the Naval Academy Class of 1993 were appointed after completing one year of remedial education at NAPS or BOOST, compared with only 11 percent of the non-minority midshipmen. It is also significant to note that eight of the 29 former minority BOOST students graduated from the Naval Academy as Marine Corps officers, which reduced the Navy's capability to achieve its minority accession goals. [Ref. 47]

L. ALTERNATIVES TO THE BOOST PROGRAM

1. Minority Accession Initiatives

The NAAP and the recommendations made by the CNO Study Group on Equal Opportunity have encouraged the Naval Academy and CNET to develop new methods to increase minority officer accessions. [Ref. 5:p. 3-30] The Naval Academy has responded by initiating a minority marketing strategy that calls for the increased usage of NAPS to provide Black and Hispanic *non-selects* an opportunity to strengthen their academic credentials. Although NAPS has been in operation for over 30 years, its stated mission has been to provide an opportunity for enlisted members to gain a commission and not affirmative action. The formal admission standards for NAPS are vague, but applicants who attain an SAT score of 950 and stand in the top 40 percent of their high school class may be selected based on the *whole person* concept. [Ref. 49:p. 2]

The NAAP goal for 75 Blacks from NAPS to enter the Naval Academy in the summer of 1990 was not met. On a positive note, the 38 Blacks from the NAPS and the 10 Blacks from the BOOST program enabled the Naval Academy to enroll over 100 Black freshmen for the first time since 1978. [Ref. 46:p. 4 and Ref. 47]

A new initiative that has the potential to increase the number of minority high school students entering the NROTC scholarship program was started by CNET in the spring of 1988. The commanding officers (Professors of Naval Science (PNS)) at four HBCs have been granted the authority to award up to five NROTC scholarships annually to students on their campuses that have SAT scores of at least 1,050 and stand in the top 30 percent of their high school class. At this time, it is too early to determine the success of this new recruiting strategy, although its public relations impact is obviously very positive. [Ref. 50:p. 1]

During the spring of 1990, the BOOST program graduated 332 students that included 147 Blacks and 90 Hispanics. [Ref. 33:p. 15] These figures alone illustrate that the alternative minority accession programs currently in place are simply not large enough to produce the number of qualified minority students needed to enter the Naval Academy and NROTC program so that the Black and Hispanic commissioning goals can be attained.

2. Alternative Approaches to Minority Recruiting

Previous sections of this analysis address the merits of increasing the minority-applicant pool by developing academic reinforcement programs such as BOOST and NAPS. The following discussion considers refocusing the Navy's recruiting efforts from a *quantity-based* to a *quality-based* emphasis.

The quality of the BOOST graduate, based on incoming SAT scores, is less than the Four-Year Scholarship National Board selectee. In 1988 the combined SAT score of Black BOOST graduates was 64 points below those of Black students who won scholarships directly out of high school. For Hispanics, there was a 100-point difference in test scores. [Ref. 37:p. 2]

While the attrition rate for BOOST graduates in the NROTC program is lower than that of all the four-year direct scholarship recipients, the probability of a student entering BOOST and ultimately receiving a commission is approximately 40 percent. This figure may be compared to the probability of a four-year scholarship recipient graduating and becoming a new ensign, which is 52 percent. [Ref. 37:p. 3]

The Navy may have to reorient its efforts in minority recruiting to attract the top students who can qualify for direct admission to NROTC and the Naval Academy. Of the 578 Black applications screened in 1988 for a direct NROTC scholarship, 120 offers were made and only 35 students enrolled with the scholarship. This means that just six percent of all Blacks who applied were ultimately given a scholarship, though 21 percent received an offer. In the case of Hispanics, of the 460 applicants which resulted in 83 offers to qualified students, only 30 young men and women accepted the scholarship (approximately six percent of those who applied). [Ref. 37:p. 2] Similarly, the Naval Academy, which had 949 Black and 677 Hispanic applicants for the class of 1994, witnessed a significant number of its most qualified minority candidates turn down the offer of appointment. Less than three weeks prior to the beginning of the arduous *plebe summer* indoctrination period, the director of admissions had only received

acceptances from 99 of the 116 Blacks and 97 of the 114 Hispanics offered appointments to Annapolis. [Ref. 51:p. 2] Although the Black and Hispanic declination rates of 8.6 and 14 percent, respectively, were lower than the overall class declination rate of 16.3 percent, the relatively small number of minorities who were offered appointments but later declined them had a substantial impact on the attainment of the minority accession goals.

Many recruiters and Naval Academy admissions officers feel that the key to improving the Navy's success in attracting the top quality minority students is by making a commitment to a young candidate as soon as possible in his or her senior year. Civilian college recruiters have the authority to screen and select a bright student on the spot, compared to the lengthy paperwork process and slow bureaucratic admissions board procedures that are dictated by the Navy's admissions policies.

To summarize, the Navy may be able to increase the quality and quantity of minority officer accessions by awarding scholarships to Black and Hispanic students earlier in the annual admissions cycle, since the statistics support the notion that there are a large number of talented minority youths interested in the Navy. Anxious students are similar to hungry puppies in that they both show a great deal of loyalty to the first person who actually delivers the goods. Promises and "a phone call next week on your competitive status" have very little credibility in most minority households.

III. CONCLUSIONS AND RECOMMENDATION

Manpower policy planners need to reevaluate their current screening policies to determine ways to increase the number of direct entries to NROTC and the Naval Academy. Their main objective should be to streamline the admissions process and not lower standards. The BOOST admissions criteria contained in the CNO's and the Navy Recruiting Command's Notice 1500 should be modified. Changes should be made to the screening procedures that would enable the BOOST selection board members to be provided with enough information on a candidate's leadership potential and academic aptitude to allow the board to choose new BOOST students with less reliance on SAT or ACT scores. Academic aptitude can be determined using high school class rank and recommendations from English and math teachers. Additional information, such as an applicant's grades in courses such as trigonometry, physics, and chemistry should also be considered since these grades may provide a more comprehensive understanding of a student's capabilities than the SAT math score alone. This recommendation is based on the data presented in this study that standardized test scores tend to blur, rather than refine, the BOOST selection process. On one hand, nearly all minority BOOST selectees typically score above the BOOST SAT eligibility requirement, and in most cases they score above the graduation requirement. But, on the other hand, these students tend to experience difficulty in satisfactorily completing classroom assignments and examinations while at BOOST, resulting in a high attrition rate (over 30 percent for Blacks and Hispanics). [Ref. 33:p. 15 and Ref. 37:p. 2]

The commanding officer's recommendation (required for fleet applicants) and the high school counselor's recommendation (for civilian applicants) should be given more emphasis in determining the "whole person score" of potential BOOST students in a systematic and quantifiable manner. A new procedure such as this would allow board members to compare BOOST candidates more objectively and increase their probability of selecting the most qualified applicants. Likewise, OPNAV could develop a point-scheme or some form of ranking scale would allow examples of leadership potential, such as athletic participation or serving as an officer in the student government, to be more formally quantified.

The implementation of these recommendations to refine the BOOST screening and selection procedures may help to improve the low commissioning rate that BOOST students currently experience. The probability of a student entering BOOST and ultimately receiving a commission is approximately 40 percent. [Ref. 37:p. 2] Developing a more complete record of a BOOST candidate's academic strengths and weaknesses will have important spillover effects for the BOOST College Placement Officer. Armed with more detailed information about a student's interests and qualifications, the Placement Officer will be in a better position to counsel students on colleges to attend. The Placement Officer would also be able to encourage the stronger students to study a technical major and enroll in those NROTC units (and universities) that can prepare the students for selection into the nuclear power program. In 1987, 24 percent of BOOST graduates had technical majors, compared with 39 percent of other scholarship graduates.

[Ref. 37:p. 3] Today, there are no BOOST graduates from commissioning year groups 1985, 1986, or 1987 still in the submarine program.

Many minority high school students who are interested in pursuing a college education must rely on the military for their financial support. The brighter students compete for ROTC scholarships and Academy appointments, while others may have to enlist to take advantage of the military's educational benefits. The current educational benefit program, the Montgomery GI Bill, allows service members to contribute \$1,200 toward their education. This amount can then be matched by government funds and ultimately entitle the individual to \$10,800 in educational benefits after 36 months of active duty. [Ref. 35:p. 5] Additionally, some new recruits may be eligible to participate in the Navy College Fund program, which can provide up to \$25,200 in educational benefits. In light of the fact that the other services can offer similar educational benefits, the importance of maintaining an aggressive Navy recruiting and advertising campaign in the minority community cannot be overstated. Teachers, counselors, and other people, such as coaches and clergymen who work with young people on a daily basis, need to be aware of educational programs such as BOOST and NAPS so that they can be recommended to potential candidates. The 1990 NROTC scholarship acceptance statistics reveal that only 46 percent of Black applicants and 59 percent of Hispanic applicants accepted a Navy scholarship offer. The primary reason that some talented students turned down the scholarship was because they had received an earlier offer from the Naval Academy, West Point, the Air Force Academy or another service's ROTC program [Ref. 52]. The main point here is that the Navy might be able to increase its minority

accessions by making scholarship offers, or offers to attend the BOOST program, to students as early as possible in their senior year of high school. The success that the Navy will have in competing for the best and brightest of the nation's top Black and Hispanic young scholars will be contingent upon the ability of manpower planners to design more innovative recruiting programs. The local awarding of NROTC scholarships at HBCs, and the Naval Academy's efforts to increase the number of minority Blue and Gold officers (volunteer counselors) are examples of new programs that can enhance minority officer accessions.

There appears to be a larger disparity between the professional qualification of the members of CNET's Track I (fleet input) selection board and the Navy Recruiting Command's Track II (civilian input) selection board. The Navy Recruiting Command's board should be expanded to include representatives from the BOOST school, a commanding officer (Professor of Naval Science) from an NROTC unit that typically receives a large number of BOOST graduates, and be chaired by a senior Naval officer with command experience like the Track I selection board.

The Navy should consider "piggy-backing" the advertising of its many educational programs in the publications it currently uses for recruiting. The Navy must also be specific in its advertising and state that minority officer recruiting is an important aspect of its overall recruiting objectives. In the 18-page 1991 *Navy-Marine Corps ROTC College Scholarships Bulletin*, the brief three-paragraph note on the BOOST program fails to state its affirmative action objectives. The 1990-1991 *United States Naval Academy Catalog* does not mention the BOOST program at all. Its description of alternative routes

for admission to Annapolis only discusses NAPS and the U.S. Naval Academy Foundation, Inc., both of which have similar missions to that of the BOOST program, which is to strengthen the academic background of incoming candidates. [Ref. 44:p. 26]

There are several ways the Navy may be able to advertise the existence of the BOOST program to attract talented minority sailors. The Navy's *internal labor market* can be contacted by means of a personal message from the Chief of Naval Personnel to commanding officers in the fleet to solicit their active support for the program. This effort may enable the BOOST program to overcome the difficulties it has experienced in meeting its target recruiting figures for Black fleet applicants. The problem may be solved by more involvement by senior officers in addressing the Navy's minority commissioning objectives, especially if individual commands can be recognized in some manner for their contributions. Ships are typically recognized for achievements such as high reenlistment rates. The Naval Military Personnel Command may be able to assist commanding officers by ensuring that timely replacements can be identified for personnel losses resulting from the selection of some of their most outstanding sailors for the BOOST program. There needs to be an incentive for senior personnel to spend the time and effort to assist BOOST program applicants. Winding up one or two crew members short is no way to stimulate participation in an altruistic program such as BOOST, NROTC, or OCS.

The application process for fleet applicants outlined previously in this study is paperwork-intensive and time-consuming. CNET may want to consider developing a one-page application form that can provide a *snapshot*

of the applicant's academic qualifications and the commanding officer's recommendation on the sailor's suitability for an officer accession program. The Naval Academy uses a one-page, optically-scanned form called the Precandidate Questionnaire to gather basic information on a prospective applicant. [Ref. 44:p. 178] The implementation of a streamlined application procedure may significantly increase the minority applicant pool.

CNET may be able to reduce academic attrition by instituting a mandatory daily study period for all BOOST students. The Naval Academy has a four-hour study period for midshipmen, which allows the weaker students to have some guaranteed study time, free of the many pressures of academy life. [Ref. 44:p. 36] A revision to the BOOST program regulations, CNET Instruction 1530.6, to include a dedicated study period, may help to focus the students' priorities on academic endeavors and ultimately increase minority accessions to NROTC and the Naval Academy.

CNET may also want to reevaluate the BOOST academic curriculum to determine why such a large percentage of students, especially those whose SAT score exceeds the BOOST graduation requirement, appear to have such difficulty. There seems to be a BOOST selection criterion and curriculum mismatch. The curriculum, which is designed to be remedial in nature, may be too advanced for the young sailors returning to the classroom from the fleet, who may be disenrolled from the BOOST program in as few as eight weeks if they experience academic difficulty. [Ref. 29:p. 4]

The BOOST program has played a pivotal role in the Navy's efforts to improve minority officer accessions, however, further research should be undertaken to determine the BOOST program's impact on minority officer

retention. Longitudinal data to support this type of analysis was unavailable from Navy sources for incorporation in the thesis. Additional improvements to the BOOST program will not only enable more minority youths to fulfill their dreams of becoming Navy fighter pilots or submarine commanders, but also allow the Navy to achieve its minority officer accession goals. Ultimately these changes will make the nation's premier fighting force the very best it can be.

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