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QUALITY OF LIFE

PARITY ANALYSIS

FOR POM-82

June 1980

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This is a report on the non-compensation aspects of life in the naval service. Specific Navy-wide programs that have the objective of enhancing the quality of life for servicemembers and their families are analyzed. The size of each quality of life (QOL) program is examined in comparison to counterpart Army and Air Force programs and the relative efficiency or productivity of each program is assessed. Recent indications of the servicemembers' view of their quality of life and DOD trends in the retention of personnel are also examined and contrasted with the QOL programs.

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EXECUTIVE SUMMARY

1. INTRODUCTION

(U) This is a report on the non-compensation aspects of life in the naval service. Specific Navy-wide programs that have the objective of enhancing the quality of life for servicemembers and their families are analyzed. The size of each quality of life (QOL) program is examined in comparison to counterpart Army and Air Force programs and the relative efficiency or productivity of each program is assessed. Recent indications of the servicemembers' views of their quality of life and DOD trends in the retention of personnel are also examined and contrasted with the QOL programs. This effort was performed as part of the CNO program analysis and evaluation process for the Systems Analysis Division (OP-964) of the Office of the Chief of Naval Operations under ONR Contract No. N00014-79-C-0633.

(U) This report examines six QOL programs: (1) Morale, Welfare and Recreation (MWR), (2) Family Housing, (3) Unaccompanied Personnel Housing, (4) Off-Duty Education, (5) Family Support, and (6) Alcohol and Drug Abuse. A report documenting the analysis of each Navy-wide program examined in this investigation is included as a separate appendix to this report. The report is organized into four sections. Section 1.0 presents background material and results of the most recent surveys of servicemembers' perceptions of the quality of life in the service. Section 2.0 presents comparative trends of the retention attained by the Army, Navy and Air Force. Section 3.0 introduces the parity analysis contained in the appendices and assesses the Navy's overall QOL program in relation to the survey and retention results presented earlier. Finally, in Section 4.0, program alterations are developed to illustrate how the Navy might increase the resources applied to QOL programs. Specifically, the order of magnitude of the changes required for the Navy to approximate the size of counterpart Air Force programs is estimated.

2. NAVAL SERVICE LIFE

(U) The function of the naval service is to attain victory in combat. Victory in combat usually goes to the beligerent that is capable of overcoming time and distance with a preponderance of combat power. During periods of international tension and direct hostilities, these purposes for the naval service are clearly identifiable and supportable by servicemembers, and their loved ones, at great personal sacrifice.

(U) In peacetime, national security objectives necessitate a balance between readiness, responsiveness, economy, and efficiency for the operation of the naval forces. Readiness for potential combat action requires forces be trained, maintained, and modernized in peacetime. Responsiveness

to a forward defense strategy is attained by forward deployment of adequate forces in peacetime. The morale of the Navy's personnel and their families is important to keeping sufficient trained personnel in the service and to keeping them prepared to fight.

(U) As the sophistication of the Navy's weapons systems has increased, the Navy's manpower requirements have shifted toward highly trained and experienced technicians and away from younger, less skilled laborers. Accompanying the trend to a more experienced work force is a larger reliance on career personnel. Navy career personnel are more likely to be married and have families and are less likely to view Navy life as an "adventure" rather than as a way of life.

(U) Recognizing an obligation to provide for the well being of its personnel and their families, the Navy has a number of QOL programs. The heightened need to increase retention and maintain a healthy "espirt de corps" has recently focused Navy attention on its QOL programs. This report is part of the Navy's recent attempt to assess the size and effectiveness of its QOL programs.

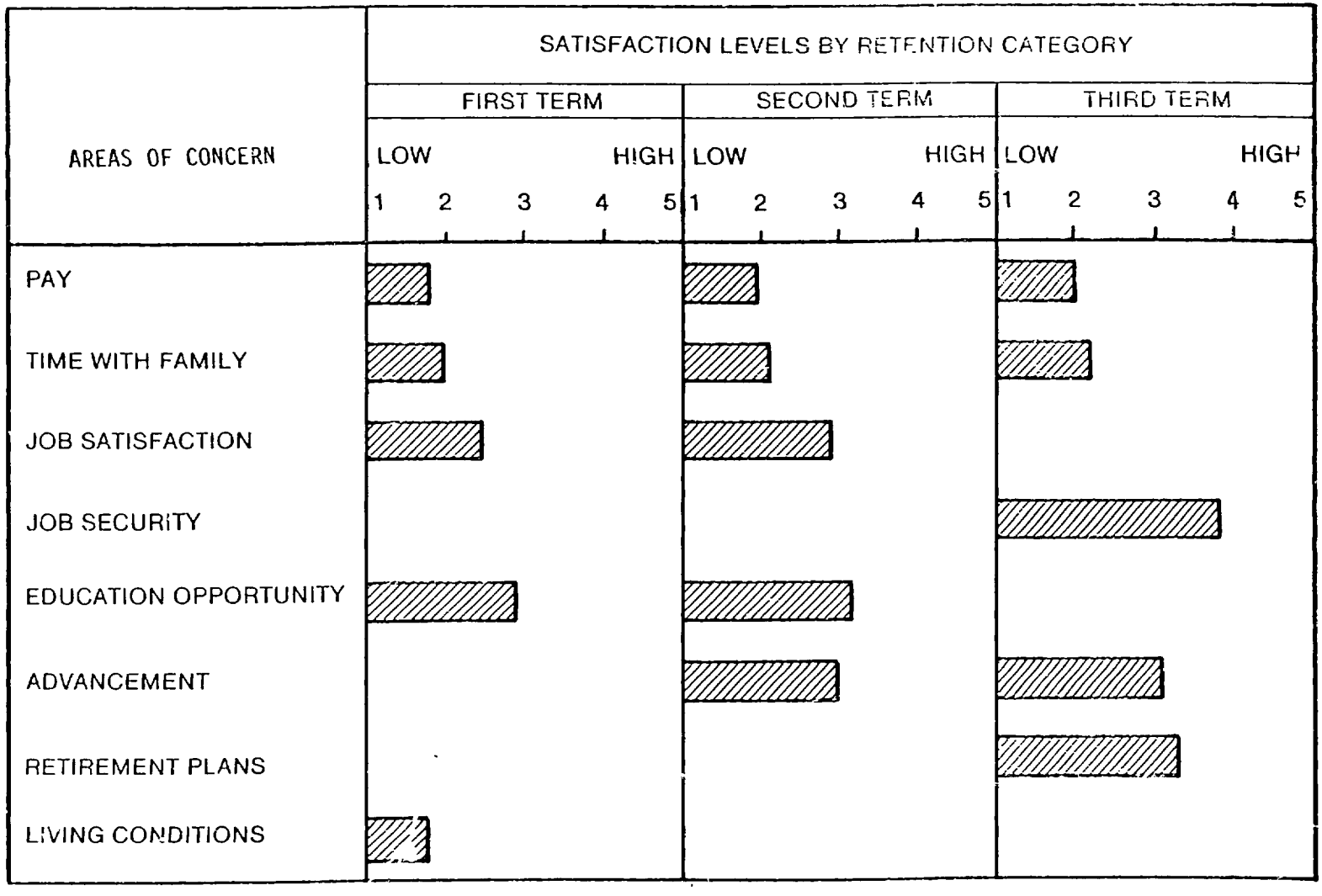
3. NON-COMPENSATION ASPECTS OF NAVAL SERVICE LIFE

(U) Compensation, that is, pay, allowances and other financial benefits, is identified as the least satisfactory aspect of naval service life by all groups of respondents. A large number of continuing efforts are assessing the issue of compensation for members of the U.S. military. Improvements in that area may make a significant impact on the accession and retention of high calibre individuals in the military services. The scope of this investigation is limited to the non-compensation aspects of naval service life.

4. QUALITY OF LIFE SURVEYS

(U) Recently, each service has conducted a survey of the perceptions of soldiers, sailors or airmen regarding the quality of service life. The Army survey of 45,000 soldiers was intended to substantiate budget initiatives in POM-82. The Air Force survey of 20,000 airmen is a triennial event. The Navy survey of 8,000 afloat sailors reports satisfaction levels by enlistment term.

Figure 1 displays the results of the Navy survey and indicates the degree of dissatisfaction reported by various categories of respondents. Compensation or pay leads the list as the most significant factor in all three retention categories and appears to be the least satisfying aspect of naval service life. Another factor that is identified as important by Navy personnel, but given a low satisfaction rating, is time with family. First term personnel afloat, identify living conditions as important and unsatisfactory. However, more mature second and third term enlisted personnel find living conditions acceptable. Personal security factors, such as job security and retirement plans, are acknowledged concerns of third enlistment personnel. Moreover, for all Navy



(U) FIGURE 7
SATISFACTION INDICATORS FOR TOP FIVE REENLISTMENT
FACTORS IN NAVY BY RETENTION CATEGORY (U)

personnel both education and family issues are viewed as relatively unacceptable.

5. RETENTION

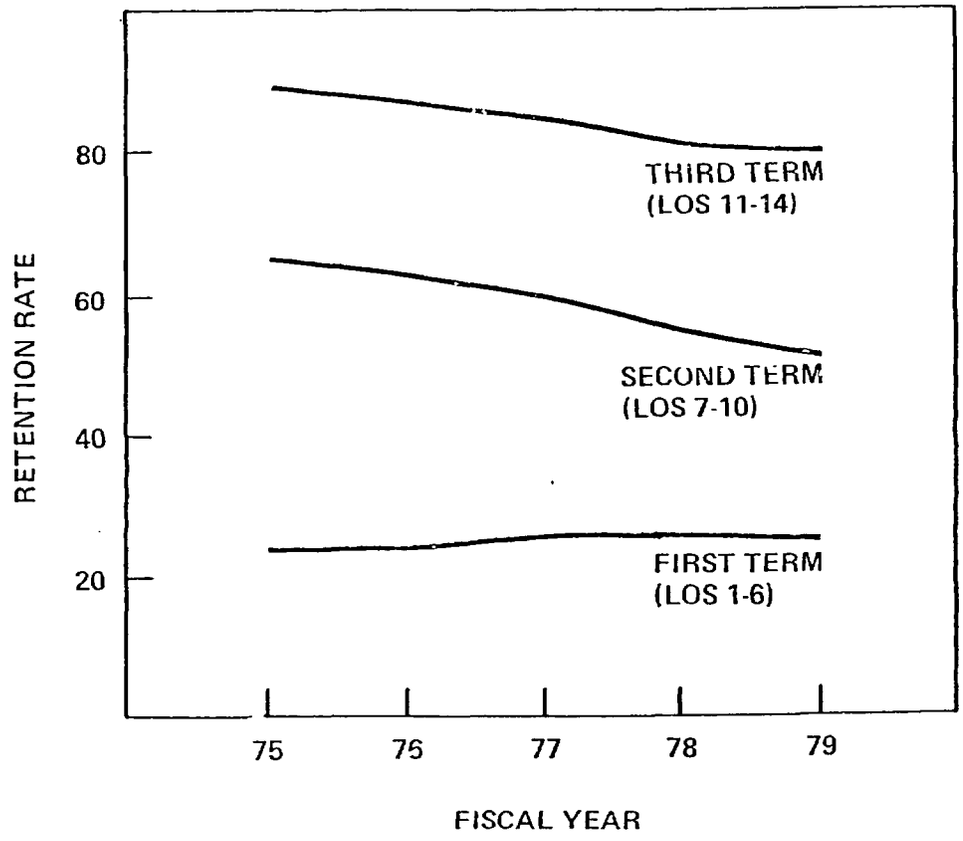
(U) Figure 2 provides a comparison of the recent trends in Navy retention of first, second and third term personnel. Throughout the period, the Navy has reported a consistently good and slightly improving trend in the retention of first term personnel. However, the Navy has not done as well in retaining second and third term sailors and holding them committed to career service. The decline in the retention of second term personnel, down from 65 percent in 1976 to 51.5 percent in 1978, shows a significant loss of confidence on the part of the 23 to 30 year old sailors. A similar decline in third term retention is reported for naval personnel who represent the early 30s age group. This is the technical competence bank of the Navy. It appears the recent comparative decline in retention in the Navy is now focused on the more mature sailors and is no longer paralleling the superior performance of the other technology-intensive military service--the Air Force.

6. SIGNIFICANT FINDINGS

(U) Morale, Welfare, and Recreation. If parity is defined as equal per capita expenditures for MWR, then the fiscal resources required to reach parity can be estimated from the difference in per capita expenditures. On a per capita basis, the Navy has lagged behind both the Army and the Air Force in appropriate support of MWR during the period FY-76 through FY-78. During the FY-76 through FY-78 period, average per capita expenditures of appropriated funds for MWR in the Navy was 16 percent lower than in the Army and 30 percent lower than in the Air Force. It is difficult to predict the size of the difference between the services that will exist in per capita MWR expenditures by FY-82. This study estimates that, by FY-82, the Navy will be $35.6 million short of parity with the Army. This estimate is expressed in FY-80 dollars and reflects amounts programmed by both services prior to POM-82. The counterpart estimate is $119.1 million to reach parity with the Air Force.

(U) Family Housing. The Navy has exceeded the Army in providing for improvement and maintenance of existing family housing units since 1977. On balance, the Navy falls far short of the Air Force performance in this area. Since 1975 the Air Force has consistently outperformed the Navy and the Army in programming for improvement and maintenance to military family housing. The Navy has, in the three year period (1977-1979), exceeded the performance of the Army. Both the Navy and the Air Force now program to retain their respective positions in the near term. After 1982, the Navy is programmed to fall below the performance of the Army.

(U) Unaccompanied Personnel Housing. The Navy is currently not providing bachelor berthing facilities for a significant share of its unmarried personnel who are serving ashore. The Navy lacks approximately 46 percent of the bachelor berthing facilities it needs at the present time. Note that ambitious programs have been established to provide additional unaccompanied housing; however, proposed reductions in these programs to implement new concepts of BAQ could jeopardize the planned improvement.



(U) FIGURE 2
NAVY RETENTION RATES BY EAOS
LESS THAN 12 MONTHS (U)

(U) Off-duty Education. The historic performance and current capability of the Navy Off-duty Education Program does not compare favorably with the performance and contribution the Air Force and Army make to military service life. Nearly 46 percent of Navy service members are bachelors. Of these, over 74 percent are of E-1 to E-4 pay status. Many of these 18 to 23 year olds are serving in their first term. Generally, first term personnel are assigned duty afloat, if not assigned for specialized training. The Navy is not providing off-duty education assistance to junior people. The PACE program selectively services only 6 percent of the personnel afloat.

(U) In contrast, the Army is expending $119 per capita in off-duty education. The Air Force traditionally expends $61 per capita. The Navy, expending $25 per capita, has been contributing less to supporting the voluntary education process for its servicemembers. In light of recent initiatives by DOD to relieve the tuition assistance burden on servicemembers, the Navy could pursue a procedure to supplement the other 10 percent of tuition needs through the MWR accounts.

(U) Without organizing to develop viable service for afloat personnel and an adequate environment for off-duty study by personnel serving ashore, it is unlikely that the perceived value of the Navy Voluntary Education program will be markedly enhanced. Because of the uniqueness of sea duty in the Navy and the practicality of the proven PACE system, innovation in delivering off-duty education services to afloat personnel might markedly adjust the perceived value of education opportunities in the Navy.

(U) Family Support. Evolving family, personal services, and community support programs in the Navy, outperform the Army and the Air Force in efficiently meeting the needs of individual servicemembers and their families. Neglect of this area in the past is exemplified by the current deficiency of the Navy child care system as compared to the size and the quality of care provided by the more efficient programs of the Army and Air Force.

(U) Drug and Alcohol Abuse. Indications are that the productivity and performance efficiency of the Navy Drug Abuse program lags behind that of the Army and the Air Force. On balance, the Navy Alcohol Abuse program is significantly more efficient and more productive than similar programs in the Army and the Air Force. Exploitation of this lead, and application of alcohol treatment efficiencies to the drug abuse program, might markedly improve retention in the naval service.

(U) Other Quality of Life Issues. The Navy has made significant improvements in sea-duty/shore rotation patterns since 1974. These patterns still fall short of the desired objective of 3:3 rotation. The principal dissatisfaction identified by personnel serving afloat is the paucity of time with families. Clearly, the work-duty week duration (which in some cases exceeds the civilian situation by up to 70 percent) is a principal determinant of this dissatisfaction. Furthermore, procedural shifts toward increasing the available free time of Navy servicemembers could reduce this deterrent and may permit a greater participation in off-duty education programs.

7. ILLUSTRATIVE QOL PROGRAM CHANGES

(U) For purposes of illustration, the program increments needed to achieve parity with the Air Force in each of the six QOL areas assessed in this report are displayed on Table 1. Values shown in Table 1 are estimates of the increments to FY-81 funding levels. The $283.7 million QOL program enhancement displayed in Table 1 would commit the Navy to a total increment of over $1.4 billion throughout the POM-period. Focusing the illustration exclusively on family and education issues would reduce the suggested increment to $62.0 million in FY-82. This would provide a Voluntary Education system comparable to the off-duty education system of the Air Force, and sufficient appropriated funds to enhance the child care capability of the Navy toward achieving parity with the Air Force. An increment of $62.0 million in FY-82 for QOL programs commits the Navy to over $310 million in the program years.

(U) Experience with reprogramming Navy funds, in the MWR areas indicates that procedural and policy adjustments may be needed to implement significant improvements in the QOL programs. The Navy lags the other services in providing APF in the MWR accounts. One reason for this is the small number of APF employees used by the Navy in MWR activities. The Navy has approximately 15,500 MWR employees, 97 percent of these are NAF employees. Labor costs represent close to 50 percent of the expenses in the Navy Military Personnel Welfare and Recreation category of MWR. Because of the ceiling point restrictions and because three aborted attempts to rebalance APF/NAF employment ratios have resulted in the loss to the Navy of over $80.0 million in APF since FY-75, it is unlikely that a more comparable balance of APF/NAF employment ratios can be developed. Alternatives to balance expenditures rather than employment ratios are available. Whatever procedural alternatives are used it is important that a clear understanding of the risks and benefits of the adjustments and the concurrence of DOD decision makers be obtained prior to implementation of significant increments to APF for QOL inititatives.

(U) TABLE 1
ILLUSTRATIVE QOL PROGRAM INCREMENTS FOR PARITY WITH AIR FORCE (U)

QOL AREA	FY-82 INCREMENT	REMARKS
MWR	$ 69.0M	• Increment to APF • Rebalance of APF/NAF mix may enhance Family support programs and provide sources for 25% Tuition Aid
FAMILY HOUSING	$ 66.0M	• Improvement and Maintenance for Government Quarters
UNACCOMPANIED PERSONNEL HOUSING	$ 98.1M	• Increment in FY-82 to start delivery of 1997 additional berths in FY-84 continuation at the incremental level annually will close requirement by FY-88
VOLUNTARY EDUCATION	$ 32.0M	• Deliver (Air Force quality) off-duty education programs to all eligible service-members ashore and afloat.
FAMILY SUPPORT	———	• $30.0 million increment to APF for CAT III MWR, included above
DRUG/ALCOHOL	$18.6M	• To extend alcohol abuse identification through NASAP enhancement • To raise performance and efficiency of drug abuse treatment programs including Drug Abuse Safety Action Program
TOTAL	$263.7M	• Commits Navy to a $1.1B QOL Program improvement

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1.0 INTRODUCTION

1.0 INTRODUCTION

(U) This report presents the results of an analysis of selected non-compensation aspects of naval service life. Evolving trends in the retention of personnel in the Army, Navy and Air Force form a framework for the study. The results of recent surveys of the quality of life as perceived by soldiers, sailors, and airmen within the military services establish a basis for the retention issues. Within these issues, a comparison of the efficiency of various (non-compensation) aspects of service life, selected to illustrate the performance of the Navy, relative to the performance of the Army and Air Force, is developed. The work presented in this report was performed for the Systems Analysis Division (OP-964D) of the Office of the Chief of Naval Operations, under ONR Contract No. N00014-79-C-0633.

1.1 SCOPE

(U) Six non-compensation aspects of naval life are examined in depth in this report. In general, the examinations are in the form of comparative analyses of the historic and potential performance of the Navy in relation to the performance of the Army and the Air Force. In other cases, the in-depth assessments are in the form of a comparison of the performance of the Navy in relation to an established and recognizable requirement. In either situation, the results of these independent assessments are stated in terms of the additional resources needed to achieve parity. Thus, to a limited extent, this analysis highlights the extent to which each service is actively striving to improve the quality of service life, the issues surrounding retention in the services, and the performance of the Navy in providing for some of the non-compensation aspects of service life.

(U) Selection of the six non-compensation programs investigated in this report is based on the availability of meaningful data. While a number of other aspects have been suggested for examination, these have been excluded principally because of the paucity of data. For example, meaningful data for comparison of family and child advocacy issues was not available. Each service defines and is organized to deal with child neglect, child abuse, spouse abuse, and rape counseling in different ways. Though the Army has had a child advocacy program since 1947, and that program is currently a part of the Army Community Service Program, centralized reporting is only now being established at Ft. Sam Houston for the Department of the Army. A separate investigation of work week duration issues provided specific data on the situation for afloat units in the Pacific Fleet but no comparative data was available from either the Atlantic Fleet, naval commands ashore, or the other services. Information obtained on some of these aspects of naval service life, but not examined in-depth in this analysis, are referenced and used to highlight the overall parity assessment wherever meaningful. The six non-compensation aspects of naval service life compared in this analysis are: (1) Morale, Welfare, and Recreation Accounts; (2) Family Housing Programs; (3) Unaccompanied Personnel Housing; (4) Off-Duty Education Programs; (5) Family Support Services, and (6) Alcohol and Drug Programs.

1.2 NAVAL SERVICE LIFE

1.2.1 Separation

(U) The function of the naval service is to attain victory in combat. Victory in combat usually goes to the beligerent that is capable of overcoming time and distance with a preponderance of combat power. Economies of force necessitate assembly of a wide variety of combat capabilities through task-organized employment of specialized combat systems. During periods of heightened international tension and direct hostilities these purposes for the naval service are clearly identifiable and supportable by servicemembers, and their loved ones, at great personal sacrifice.

In peacetime, national security objectives necessitate a balance between readiness, responsiveness, economy, and efficiency in the operation of naval forces. Readiness for potential combat action requires that forces be trained, maintained, and modernized in peacetime. Responsiveness to a forward defense strategy is attained by forward deployment of adequate forces in peacetime. Surge and massing of existing forces is essential to overcoming time and distance during periods of heightening tension, especially during less-than-full mobilization contingencies. The need for forward deployment in peacetime results in the separation of families as Navy service members are deployed on ships and to points where the company of one's family is not possible.

Economy, especially during tranquil periods of peacetime, necessitates efficient and centralized management of training installations, maintenance facilities, and operating bases. Due to the many expansions and contractions of the Navy Department in this century and because of various special considerations such as the the need for proximity to open ocean access and training environments, the existing installations, facilities, and bases of the Navy are widely dispersed, one from another. The wide dispersion of Navy facilities causes additional separation and other demands on Navy families as servicemembers are moved often, and across far distances.

1.2.2 Retention

(U) Efficiency, or a balance between readiness, responsiveness and economy, is attained by designing mobility into the structure of naval forces and, consequently, in the environment of the servicemembers and their families. This, coupled with the high competitiveness experienced in a non-conscription environment for accessing skilled individuals, places a premium on retention of trained and experienced personnel.

(U) Characteristically, service in the Navy embodies living in a society that is young, mobile, and technically oriented. Training and material preparation for combat superiority predominates. Readiness, rather than production, is the central theme. The structure of the naval community varies significantly from that of the civilian community. Additionally, the structure of the naval community also varies in many subtle ways from that of the sister services. In peacetime, the clarity of purpose so easily identifiable in wartime is clouded by the wide variances that naturally form between military and civilian life.

(U) Life in the Naval service can offer travel, adventure, meaningful challenge, and personal security to both the individual servicemember and his family. Compared to domestic life, however, the advantages of naval service life can be reduced when improvements occur in the structure of the civilian community or there is significant erosion in the compensation offered for naval service life.

1.2.3 Family Services

(U) Frequent relocation and wide separation from root communities and secondary family members (parents, siblings, grandparents) is the general rule of naval service life. Because of this, the Navy attempts to provide and promote a wide range of morale, recreation, spiritual counseling, and other services to members of its community. Some of these, such as centralized loan-pools of sporting and outdoor recreation equipments compensate for the inefficiency and potential high expense of having to relocate individual sets of personally-owned equipment in the face of repeated permanent changes in station. Other social services provided by the naval community to its members include social, free time centers such as open messes and low cost special endeavor associations such as scuba diving clubs, parachute clubs, golf courses, bowling centers, riding stables, and theaters. Throughout the naval community unique replications of community support services, typically available in the civilian community, are provided. Such features as exchanges, convenience stores, and other retail outlets are located and operated to optimize services and minimize the time an individual is away from duty sites. Other aspects of naval service life that differ from the civilian community are the standards of dress, room and board as a condition of employment, and the need for frequent relocation in peacetime.

1.3 NON-COMPENSATION ASPECTS OF NAVAL SERVICE LIFE

(U) In a recent survey, compensation, that is, pay, allowances, and other financial benefits, was identified as the least satisfactory aspect of naval service life by all groups of respondents. A large number of continuing efforts are comparing and addressing the compensation issues for members of the U.S. military. Improvements in that area may make a significant impact on the accession and retention of high caliber individuals in the military services. The analysis in this report is limited to the non-compensation aspects of naval service life. That is, those aspects of Navy life that do not involve pay and benefits.

(U) Specific aspects of naval service life scrutinized in this report include: (1) Morale, Welfare, and Recreation programs; (2) Housing programs; (3) Voluntary Education programs; (4) Special programs that operate to limit family destablization; and (5) The Work/Duty Duration phenomenon. Measures of efficiency are developed and the comparative performance of these programs in relation to that of similar programs in the Army and Air Force are documented in the appendices to this report. Attempts to statistically correlate the performance measures to both retention trends and QOL survey results failed, for two reasons. It was not possible to develop common measures in meaningful

terms for all issues examined. Secondly, statistical retention data developed for various compensation analyses was not correlatable to either the common measures developed to assess the comparisons of Army, Navy, and Air Force programs or the QOL response information. Even without specific mathematical correlation, important insights and inductive understandings of the relevance of the programs to retention can be made.

1.4 PURPOSE

(U) This is a report of the program analysis used by the Office of the Chief of Naval Operations in evaluating the macro-effect of various quality of life issues in the CNO Program Analysis Memorandum (CPAM). The CPAM is an annual review of the performance of all Navy programs. From this review, specific programming policy can be established to assist in the development of the Program Objectives Memorandum (POM), and subsequently the development of the Navy Department Budget.

1.5 QUALITY OF LIFE SURVEYS

(U) Recently each service has conducted a survey of soldier, sailor, or airman perceptions of the quality of service life. The Army survey of 45,000 soldiers, serving in 12 major Army commands within the continental United States and overseas, is intended to provide statistical substantiation for new budget initiatives of the Department of the Army.[1] The Air Force survey is a segment of the triennial service-wide survey of leadership and human resource issues. The Air Force survey is conducted every 3 years from a randomly selected sample of 20,000 airmen.[2] No comparable centralized survey of sailor perceptions is conducted. The Human Resource Management Center of the Navy, located in San Diego, California, has recently completed an 8,000 man survey of personnel serving afloat in the San Diego area.[3]

(U) Each survey consists of different questions and the response summaries are tabulated using different statistical methodologies. In general, the summaries of these surveys are organized to reflect the perceptions of service members toward specific retention categories. The Army survey, which is a highly sophisticated questionnaire executed by respondents in a classroom environment under command supervision, contains an entire section titled the Commitment Index. The Navy survey, which is of much simpler construction,

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[1] Discussions with Col. L. Standridge USA, Quality of Life Team, HQ US Army, 25 February 1980

[2] Discussions with Capt. R. Bossart USAF, Leadership Branch, Air Staff, 2 November 1979 and 25 February 1980

[3] Discussions with Capt. J.D. Scull USN, C.O. Human Resource Management Center, San Diego, California, 5 February 1980

asks respondents to indicate their service plans. They may select from one of the following: Undecided, Re-enlist, Get Out, Career/Retire. Navy respondents are also asked to indicate their current enlistment (i.e., 1st, 2nd, 3rd, other).

(U) For simplicity of comparison, the categorical terms used in the DOD-wide Compensation Study[4] are used in this report. Table 1.1 displays the retention categories taken from the DOD study and used in this report. Table 1.2 displays the top five factors that are viewed as most important in making a reenlistment decision. The information in Table 1.2 is taken directly from the various service retention surveys.

(U) In addition to its simplicity, the Navy survey is significant for three reasons. First, the sample, though limited, is sufficiently large to be statistically representative of the Navy enlisted afloat population of the U.S. Pacific Fleet, homeported in Southern California. Second, though constrained to a select grouping of sailors and therefore not representative of the Navy as a whole, it is representative of those people serving in the Navy that the Navy strives to retain--its seagoing sailors. Third, the statistical treatment and summarization of the Navy Survey is superior, at this time, to that of the Army and for that reason alone the results of the Navy survey indicate a potentially valid portrayal of the perceptions of a very retention-siginificant population, the seagoing sailors of the Navy.

(U) The Navy survey also reports a satisfaction level for each of the top five factors listed by various retention categories of respondents. Figure 1.1 displays these satisfaction indicators. As might be expected, compensation or pay leads the list as the most significant factor in all three retention categories and appears to be the least satisfying aspect of naval service life, in the perception of the respondents. From the information available, this is not the case in the other services. Time-with-family also never reaches the acceptable level. Living conditions seem to be a low satisfier for younger men serving afloat. On balance, more mature second and third term enlisted personnel find living conditions acceptable. Personal security factors such as job security and retirement plans are acknowledged concerns of third enlistment personnel. Moreover, for all Navy personnel, both pay and family issues are viewed as relatively unacceptable.

1.6 ORGANIZATION OF REPORT

(U) The following sections provide the retention trends now being experienced by the military services and the parity analyses of selected non-compensation aspects of naval and military service life. Section 2.0 presents the long term trends in retention and the comparative

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[4] Office of the Assistant Secretary of Defense (MRA&L), Report on Pay Adequacy Study (U), October 1979; Unclassified

(U) TABLE 1.1

RETENTION/QOL SURVEY RESPONDENT CATEGORIES (U)
(LENGTH OF SERVICE INTERVALS - JOINT SERVICES OSD PAY STUDY)

MILITARY SERVICE	TERM DURATION (YEARS)		
	FIRST TERM	SECOND TERM	THIRD TERM
NAVY	1-6	7-10	11-14
ARMY	1-4	5-8	9-13
AIR FORCE	1-6	7-10	11-14

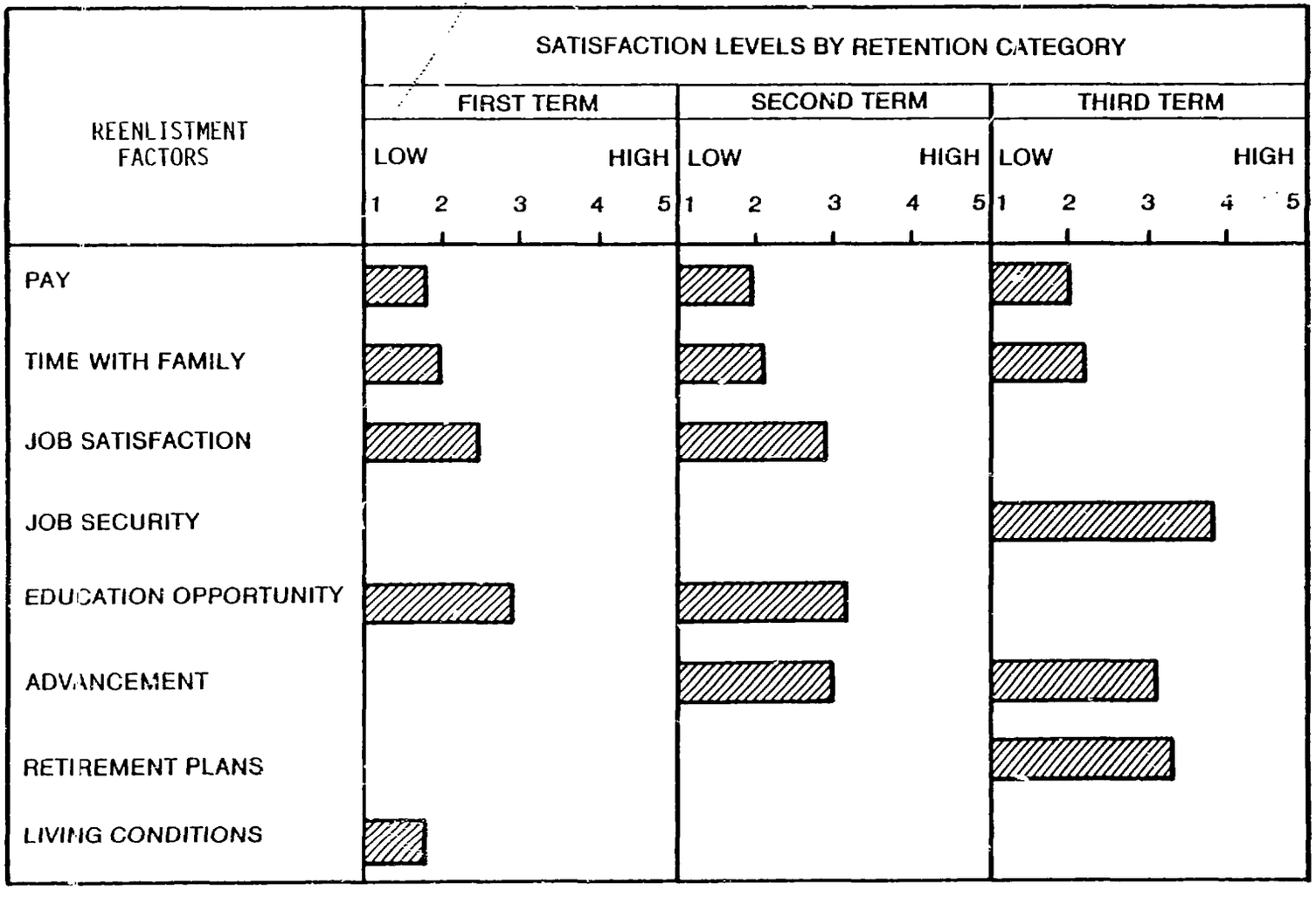
(U) TABLE 1.2

QOL RESPONDENT CATEGORIES FOR THE ASSESSMENT OF NON-COMPENSATION ASPECTS OF SERVICE LIFE (U)

MILITARY SERVICE	DURATION OF PRIOR SERVICE		
	FIRST TERM TOP FIVE FACTORS	SECOND TERM TOP FIVE FACTORS	THIRD TERM TOP FIVE FACTORS
NAVY	• Pay • Time with Family • Living Conditions Opportunities • Meaningful Work/Job Satisfaction	• Pay • Time with Family • Education/Training Opportunities • Meaningful Work/Job Satisfaction • Advancement	• Pay • Retirement Plan • Advancement • Time with Family/ Loved Ones • Job Security
ARMY	Army survey data is developed in raw form and not yet analyzed. Completion of the analysis and distribution of results is yet to be determined. Significant items revealed in the survey include:[1] • Working Conditions • Job Satisfaction • Pay • Barracks Living Conditions (Standards) • VEAP Equity to Department of Education $5-7B Grant Program		
AIR FORCE	Air Force survey data is compiled but staff action is incomplete. Release outside the Air Force is not possible at this time. Results of 1977 survey reveal the five primary negative career decision factors for all airmen are in descending order:[2] • Family Separation • Air Force Policy and Procedures • Pay and Allowances • Job Satisfaction • Promotion System		

[1] Col. L. Standridge USA, Head QOL Team, CSA Staff, 25 February 1980

[2] Major R. Bossart USAF, Leadership Branch, Air Staff, 25 February 1980, 1977 Survey titled USAF Quality of Air Force Life, Active Duty Air Force Personnel Survey Report, August 1977, Unclassified



(U) FIGURE 1.1
SATISFACTION INDICATORS FOR TOP FIVE REENLISTMENT FACTORS IN NAVY BY RETENTION CATEGORY (U)

retention performance of each of the services in recent years. Section 3.0 contains an analysis of the six selected non-compensation aspects of service life. As a conclusion to the main body of the report, Section 4.0 contains a summarization in the form of illustrative changes to QOL programs of the Navy. The appendices follow: Appendix A contains the comparative analysis of Morale, Welfare, and Recreation Accounts; Appendix B contains the comparative analysis of the Family Housing Programs; Appendix C contains the analysis of Unaccompanied Personnel Housing Issues; Appendix D contains the comparative analysis of Off-Duty or Voluntary Education Programs; Appendix E contains the comparison of Family Support Programs; Appendix F contains the comparative analysis of Alcohol and Drug Abuse Programs. Appendix G contains relevant data developed in the course of the investigation which is not displayed in other sections of the report. This includes sea/shore rotation data and the work week duration statistics, for which multi-service data sources were not developed. Finally, Appendix H contains a bibliography and a list of principal contacts who provided relevant information used in the analysis.

2.0 RETENTION

2.0 RETENTION

(U) This section contains a comparison of the past performance of the military services in retaining personnel. Additionally, the current trends being experienced by each service are reported. Where possible the shifts in various retention trends are related to the Quality-of-Life (QOL) Survey responses tabulated in Table 1.2. Summarization of the retention and QOL comparisons contained in this section are used in Section 4, along with parity assessments of non-compensation aspects of naval service life (Section 3) to identify illustrative courses of action for improving the quality of life in the naval service.

2.1 RETENTION TRENDS (1972 - 1979)

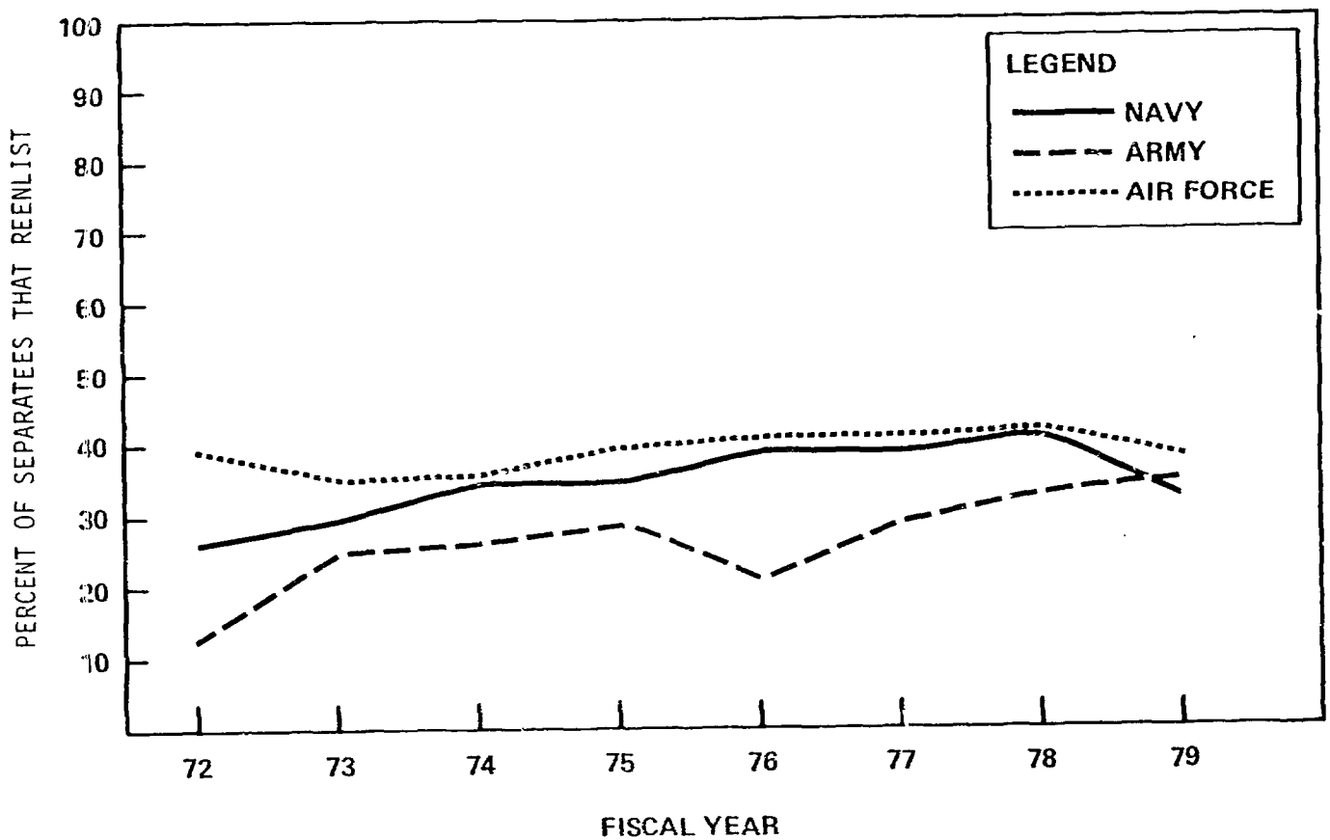
(U) In general, the Navy has been able to attract a reasonable proportion of personnel to serve more than the initial enlistment throughout the period since the termination of hostilities in Vietnam. During the period 1972 through 1978, the Air Force has retained an average of 38.8 percent of the airmen eligible for separation from the service. In comparison, the Navy has retained an average of 30.5 percent. The Army has not done as well, retaining an average of only 24.9 percent of all the soldiers eligible for seperation.

(U) Over the last three years, all services acknowledged a decline in the general trends for retention, specifically in the career force. During the three year period (1977 - 1979), the Navy reported an average retention rate for career personnel of 45.1 percent. In comparison, the average retention of career personnel for the Army and Air Force during the same period was 50.0 percent for the Army and 60.7 percent for the Air Force.

(U) During the earlier portion of the period (1972 - 1974) the Navy averaged a retention rate of 64.2 percent for career petty officers. Comparatively, the Air Force was able to retain 59.9 percent and the Army was able to retain 36.7 percent of their respective career personnel. As shown by these statistics, after the termination of the selective service and the institution of the All Volunteer Force, the retention of career force personnel declined sharply in the Navy while the comparable retention rate for both the Army and the Air Force improved.

2.1.1 Comparison of Retention Trends

(U) Figure 2.1 displays the total enlisted retention trends for the Army, Navy, and Air Force during the period 1972 through 1979. This display includes all reenlistement actions including bonus extensions for first term and career force personnel. Recruiting statistics are not included in Figure 2.1. It is apparent that the Air Force has excelled over both the Navy and the Army in retention throughout the period. The Army has had a more severe problem in retaining personnel than either the Navy or the Air Force. However, since 1976, the Army has been improving retention performance. In the last year (1979) for which complete statistics are



(U) FIGURE 2.1
TOTAL ENLISTED RETENTION PERFORMANCE
(COMPARISON OF ARMY, NAVY, AIR FORCE)(U)

available, both the Navy and Air Force have experienced slight declines in retention rates. It appears that the shift is more pronounced in the case of the Navy than it is in the case of the Air Force.

2.1.2 Retention of First Term Personnel (1972 - 1979)

(U) The comparative performance of the three services in retaining first term personnel is displayed in Figure 2.2. In general, the Navy has matched the Air Force throughout the decade. Following the advent of the All Volunteer Force in 1974, the rate of retention in the Army for first term personnel dropped sharply. The Army trend has reversed to the point of approximating the performance of the Air Force in 1979. It is interesting to note that the Navy did not suffer the 1975-77 decline in retention to the same extent as the Army. The Navy has paralleled the Air Force retention performance, but at a slightly greater rate for the past few years. In 1979, Navy retention of first term personnel was at its highest point of the decade. It has exceeded the retention performance of the other two services for the past two years.

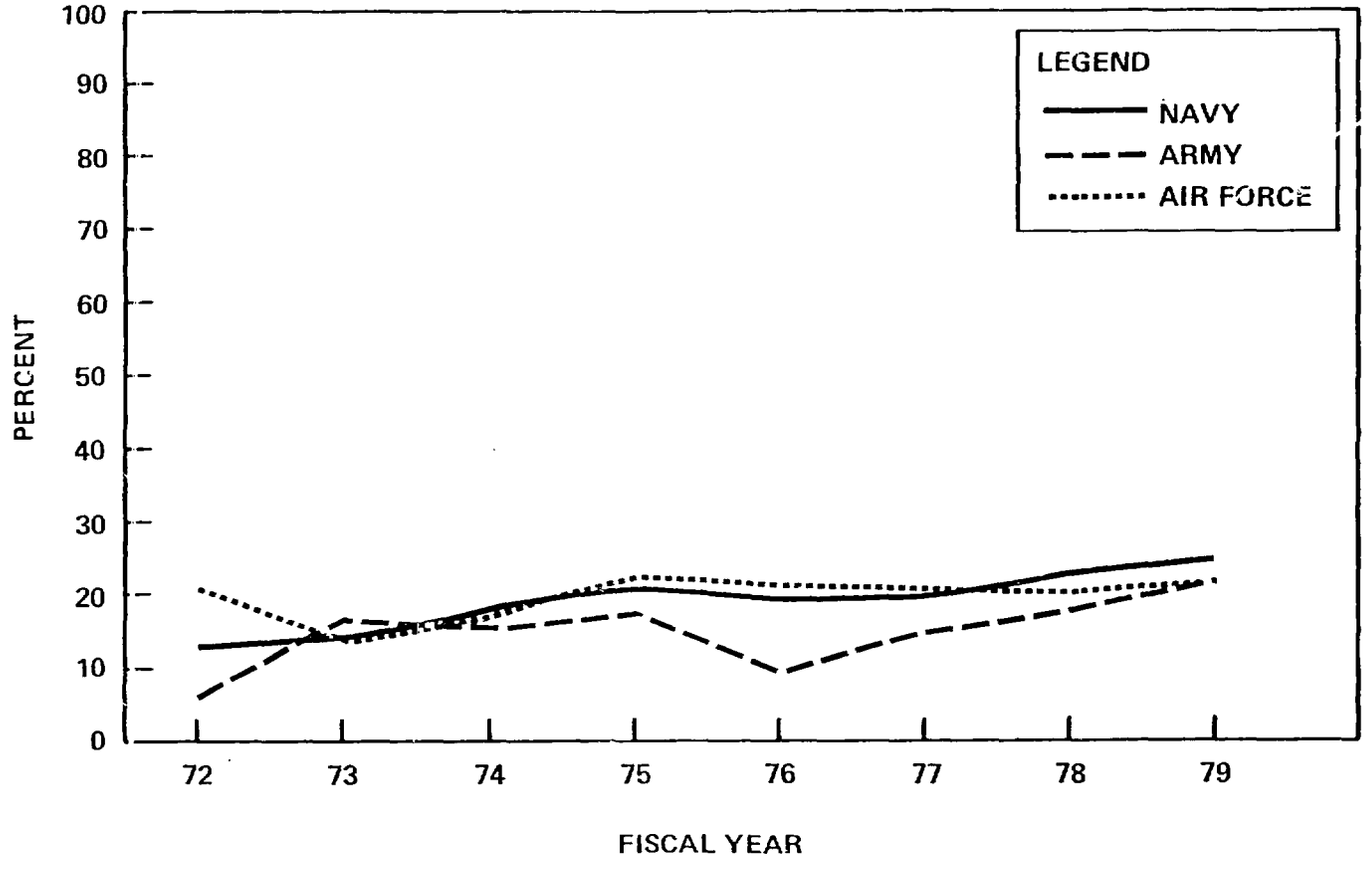
2.1.3 Retention of Career Force Personnel (1972 - 1979)

(U) The retention trends for personnel completing their second and subsequent terms is shown in Figure 2.3. The Navy exceeded the Army and Air Force in career force personnel retention during the early period. A decline in retention started in 1974 and a significant decline continues through 1978. In the last year (1979), the decline in retention of career force personnel in the Navy has intensified. Comparatively, the Air Force retention of career force personnel has been relatively stable throughout the entire period. The retention of career personnel in the Army has been erratic. Immediately following serious attempts by the United States to conclude the Vietnam War (mining of Haiphong - 1972), the Army retention rate began to climb, as did the Navy rate. In the Army, this trend continued until 1975 when a down turn occurred in both the first term and the career force retention of the Army. In the following year (1976), the Army succeeded in reversing the trend. This upturn in overall Army retention rates has been less significant in the career force statistics than in the Army first term retention statistics. Over the last two years, the retention trend for career force personnel in the Army has paralleled the performance of the Air Force but at a lesser rate.

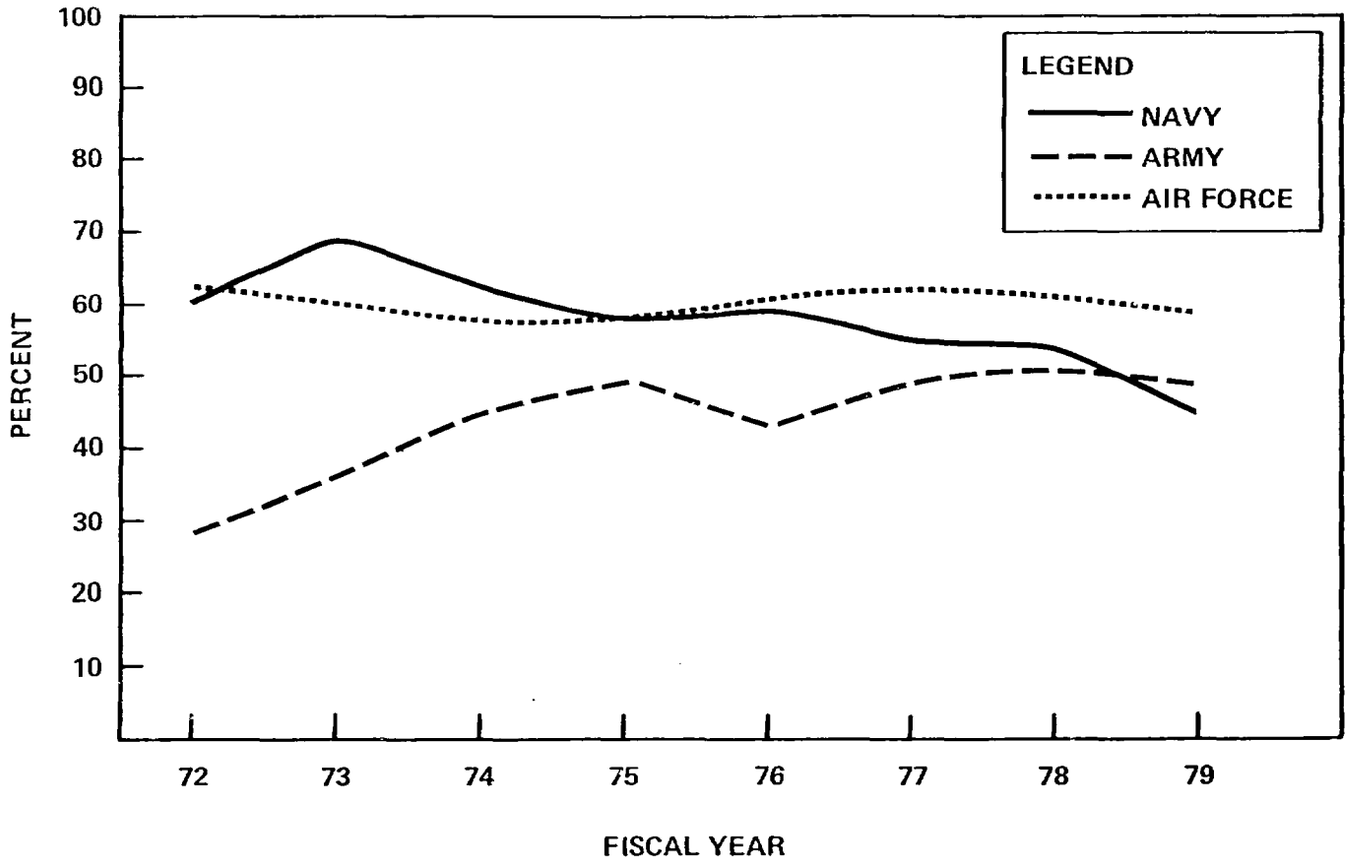
2.2 CURRENT RETENTION TRENDS

(U) A joint service compensation study[1] is investigating the recently past retention performance (1975 - 1979) for each of the services. To

[1] Office of the Assistant Secretary of Defense (MRA&L), Report on Pay Adequacy Study (U), October 1979, Unclassified



(U) FIGURE 2.2
FIRST TERM ENLISTED RETENTION PERFORMANCE
COMPARISON OF ARMY, NAVY, AND AIR FORCE (U)



(U) FIGURE 2.3

CAREER FORCE ENLISTED RETENTION PERFORMANCE
(COMPARISON OF ARMY, NAVY, AIR FORCE) (U)

standardize statistical bases, the OSD study defines specific length of service intervals for the capital-intensive (Navy, Air Force) and personnel-intensive (Army, Marine Corps) services, differently. The following figures on recent retention performance of the various services uses the enlistment interval categories defined in the OSD study. By definition, first term, second term, and third term durations are 6, 4, and 4 years for both the Navy and the Air Force. For the Army, the intervals of the terms of service are slightly shorter, being 4 years for the first term, 4 years for the second term, and 5 years for the third term.

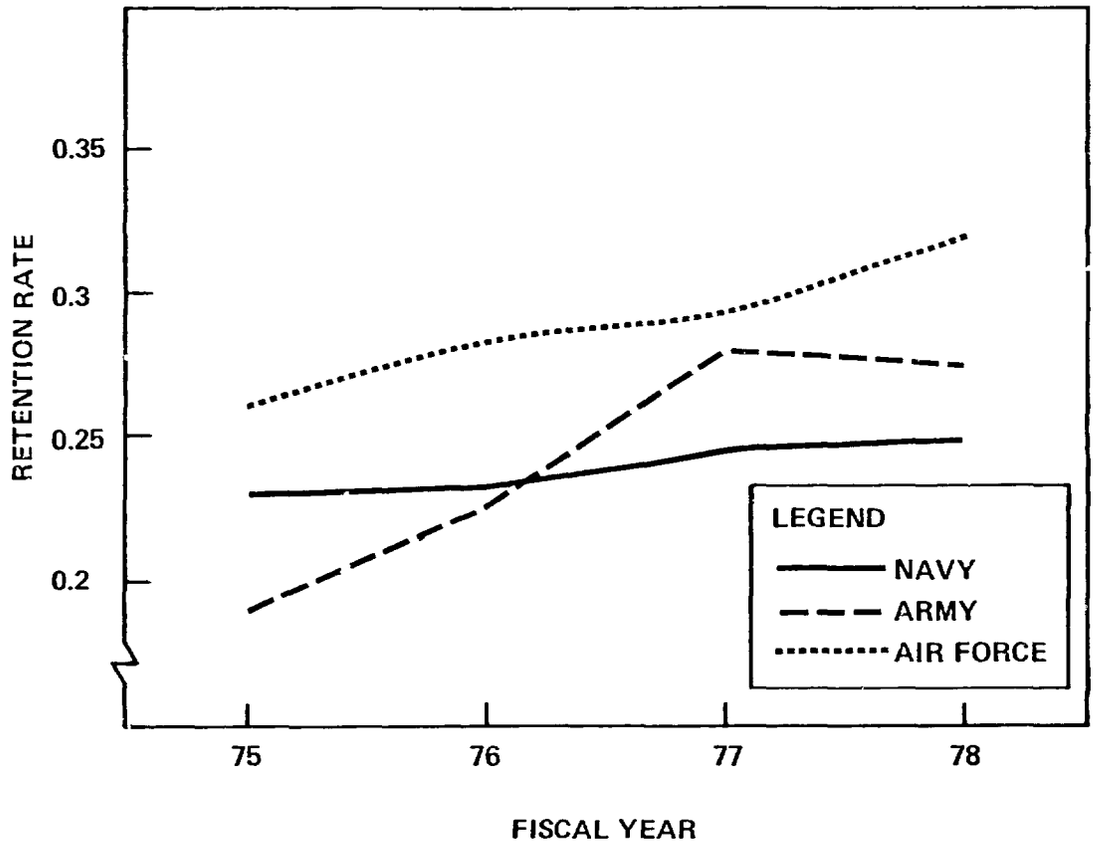
(U) The retention data developed for the OSD compensation study is displayed in Figures 2.4 and through 2.7. It includes all of the reenlistment actions that occur during the 13 month segment of time just prior to the termination of an enlistment contract. In the Navy, this termination of enlistment contract event is described as the End of Active Obligated Service (EAOS). The reason for development of retention data, in 13-month-to-EAOS slices, is to accommodate a wide variety of service-unique reenlistment inducement techniques. For example, the Army uses an airline-reservation type, computer-assisted, career counseling system. Called the RETAINMENT system, it permits an instant confirmation and guarantee of a future duty assignment at the reenlistment decision point.

The Army's reenlistment system is similar to the recruiting guarantee systems used by all the services. In the Army, the recruiting guarantee system is called REQUEST. In the Air Force, the recruiting guarantee system is called PROMISE. The Navy uses a similar computer-assisted system for recruiting which is termed the PRIDE system. At the present time, however, only the Army uses an airline-reservation type technology to support career counselors in stimulating reenlistments. Other variances between the services with respect to inducements used to increase reenlistments include the Navy's program to offer duty in ships or squadrons that are assigned residency overseas. Obviously, this offer is meaningless to soldiers and airmen of the other services. In the Air Force, predetermination of rating conversion is a popular method of reenlistment inducement. These and the many other differences in the reenlistment policies of the individual services are, at least partially, compensated for in the 13-month-to-EAOS approach used by OSD in collecting retention data.

(U) The four figures that follow (Figures 2.4 through 2.7) show recent comparative retention performance for the Army, Navy, and the Air Force. The first term, second term, and third term comparisons follow in sequence. The fourth figure (Figure 2.7) displays the Navy retention performance, comparing one term to the other.

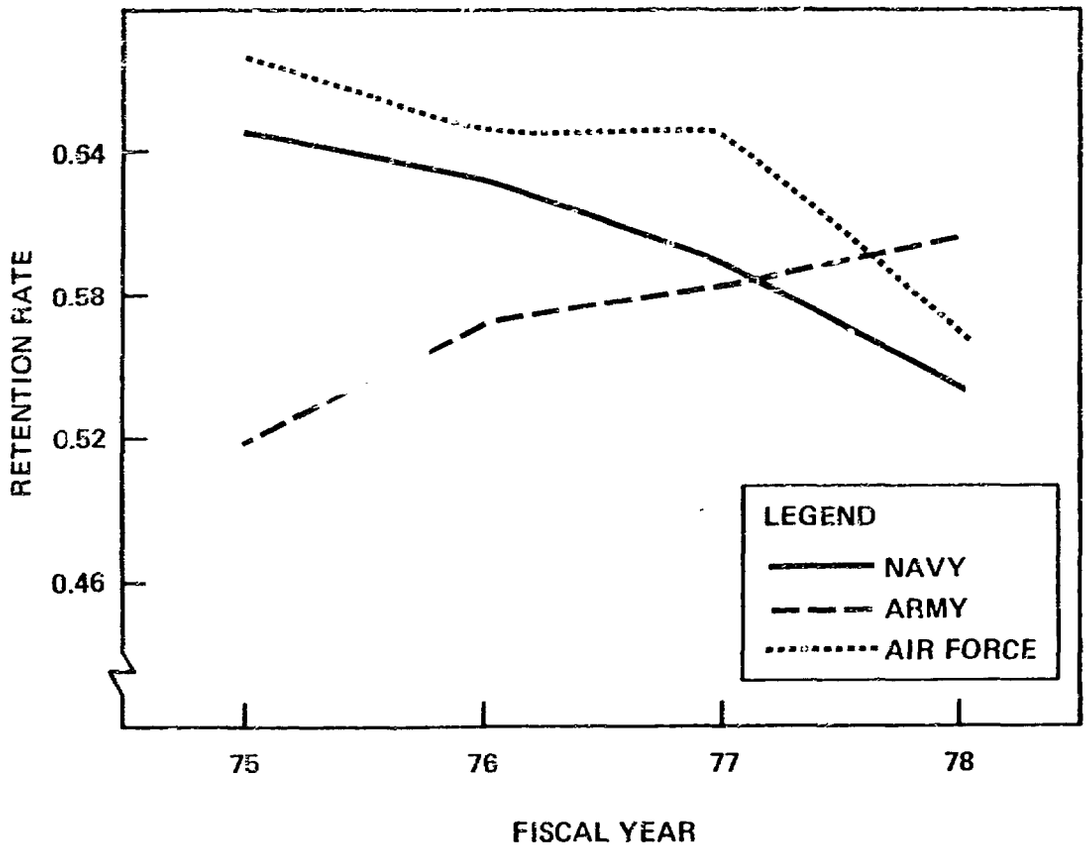
2.2.1 First Term

(U) Figure 2.4 displays the Air Force and Navy retention for personnel reenlisting or extending in the first 6 years of service, during the 13 month interval prior to EAOS. The Army retention performance is for personnel extending or reenlisting under the same conditions during the first 4 years



(U) FIGURE 2.4

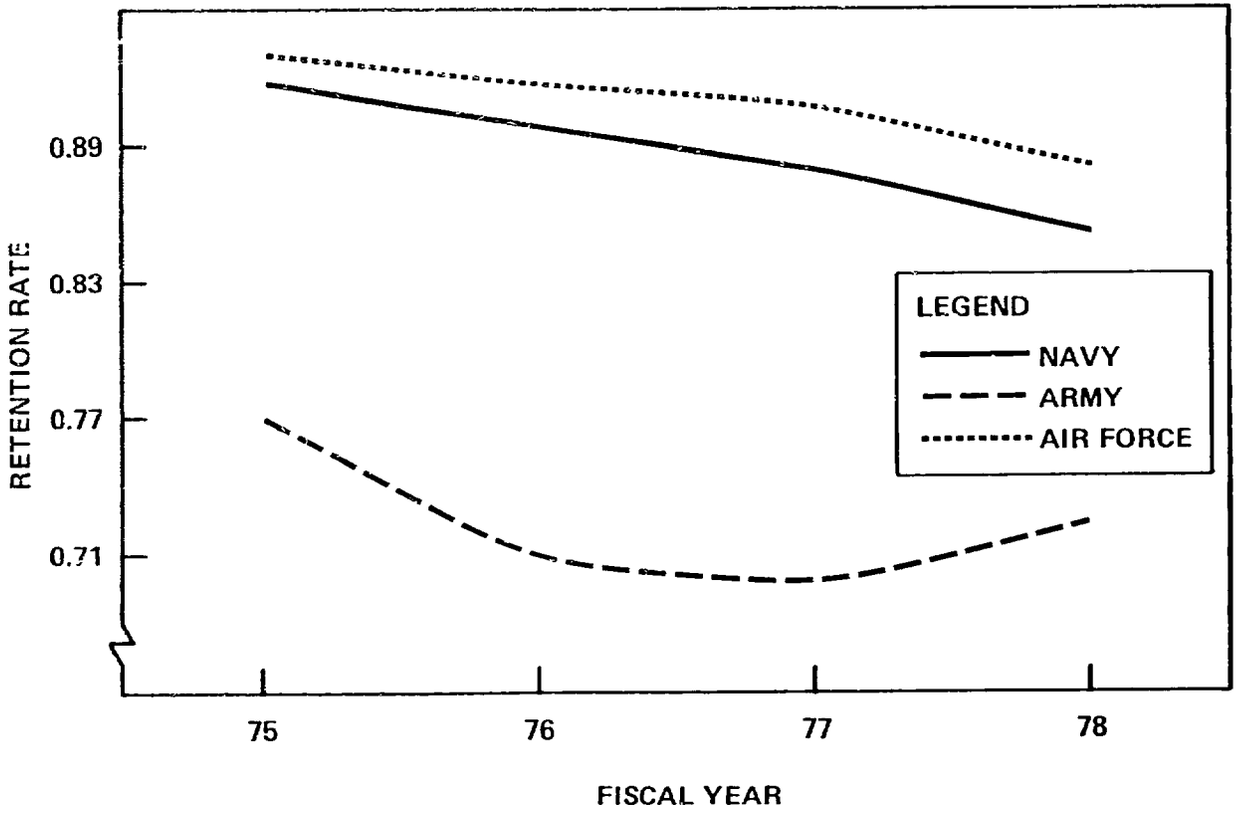
FIRST TERM RETENTION RATES BY EAOS
LESS THAN 13 MONTHS (U)



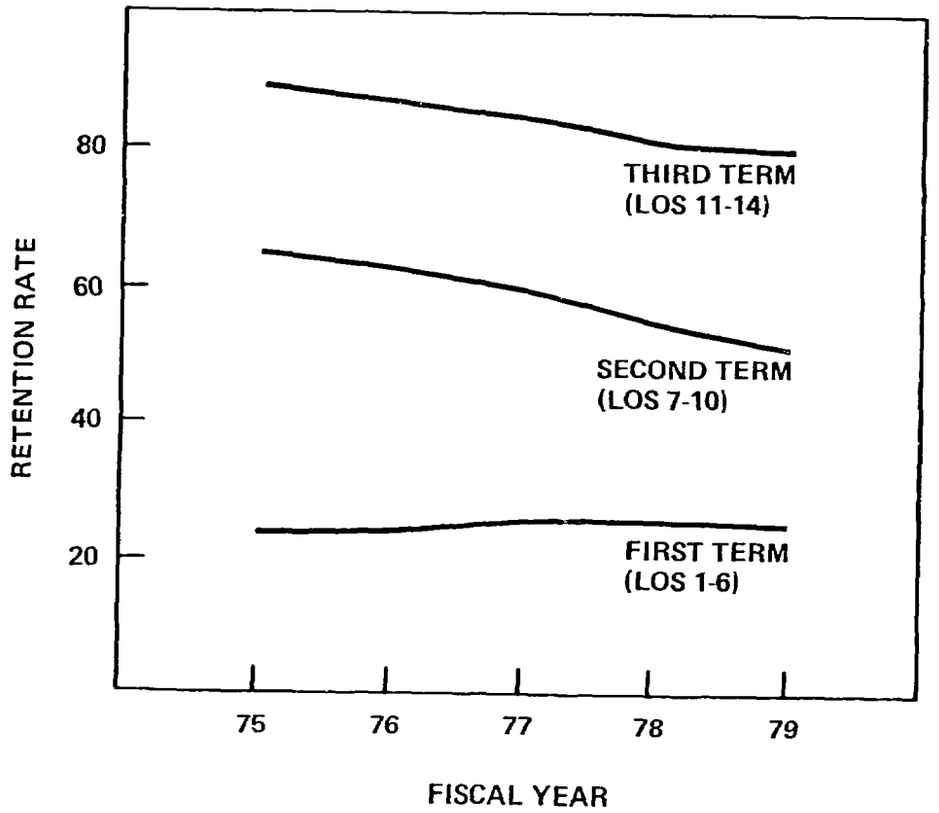
(U) FIGURE 2.5

SECOND TERM RETENTION RATES BY EAOS

LESS THAN 13 MONTHS (U)



(U) FIGURE 2.6
THIRD TERM RETENTION RATES BY EAOS
LESS THAN 13 MONTHS (U)



(U) FIGURE 2.7
NAVY RETENTION RATES BY EAOS
LESS THAN 13 MONTHS (U)

of service. Since 1976, the Navy has not been as successful as either the Army or the Air Force in retaining first term personnel under these categorizations of retention statistics. Note that the categorization of retention statistics for the Navy and the Air Force shown on Figure 2.4 is exactly the same. Comparing Figure 2.4 with Figure 2.2 shows an entirely different comparative performance for the Navy in retaining personnel at the end of the first term of naval service. Figure 2.2 ranks the Navy superior to the other services in 1978. Table 2.1 displays the numerical values for both Figures 2.2 and 2.4 side by side. The trend in retention for the Navy is the same under either calculation. In each case, it shows a slight improvement over the previous year. However, the OSD methodology indicates that retention statistics for the other two services are widely different than those that are based on the DOD retention formula.

2.2.2 Second Term

(U) Figure 2.5 displays the comparative retention performance of the Air Force and Navy for those serving in the 7-10th year and the retention in the Army for those serving in the 5-8th year of military service. Here, both the Navy and Air Force show a drastic decline in retention performance. When compared to the retention performance of the Army, this is more significant than may at first be apparent. Obviously, the compensation provided those serving in their 9th and 10th year of military service is greater than for those serving in their 8th year of service, one longevity-of-service period less. Perhaps, compensation alone is not sufficient to assure retention. On balance, the bonus extention phenomenon probably influences the Army performance in this categorization of retention statistics.

2.2.3 Third Term

(U) Figure 2.6 displays the comparative retention performance of the Air Force and the Navy for those serving in the 11-14th year and the retention in the Army for those serving in the 9-13th year. Here again, both the Air Force trend and the Navy trend are down slightly. The retention performance of the Army in this categorization is substantially lower than that of the Air Force and the Navy.

2.2.4 Summary of Navy Retention Trends

(U) Figure 2.7 provides a comparison of the recent trends in Navy performance in the retnetion of first, second, and third term personnel. Throughout the period, the Navy has reported a consistently good and slightly improving trend in the retention of first term personnel. However, the Navy has not done as well in retaining the mature sailors and holding them committed to career service. The decline in the retention of second term personnel, down from 65 percent in 1976 to 51.5 percent in 1978, shows a significant loss of confidence on the part of the 23 to 30

(U) TABLE 2.1

COMPARISON OF RETENTION STATISTICS
FOR FIRST TERM PERSONNEL (1978)(U)

SERVICE	DOD RETENTION FORMULA (4 yr. & 6 yr.) Figure 2.2	OSD PAY STUDY (13 Mos. to EAOS) Figure 2.4
ARMY	18.3%	26.9%
NAVY	23.1%	24.1%
AIR FORCE	20.3%	31.9%

* DOD RETENTION FORMULA = NAVY REENLISTMENT RATE FORMULA for 4 year obligations and 6 year obligations

$$= \frac{\text{Reenlistment + Bonus Extension}}{\text{Eligibles + Ineligibles + Bonus Extension}}$$

year old sailors. A similar decline in third term retention is reported for Naval personnel who represent the early 30s age group. This is the technical competence bank of the Navy. Comparing Figure 2.7 with Figure 2.1 and understanding that the statistical basis for these figures, though variant, encompasses the same data base, it appears the recent comparative decline in retention in the Navy is now focused on the more mature sailors and is no longer paralleling the superior performance of the other technology-intensive military service--the Air Force.

2.2.5 Comparison of Retention Statistics

(U) Table 2.1 displays a comparison of retention statistics for first term personnel of the Army, Navy, and Air Force. Table 2.1 displays the numerical values for both Figure 2.2 (traditional retention computation) and Figure 2.4 (OSD compensation study retention computation) side by side. The trend in retention for the Navy is the same under either calculation, showing a slight improvement over the previous year. The OSD compensation analysis methodology, which is intended to wash-out variances in the policies employed by each service to induce retention, indicates the Navy is not retaining first term personnel at as great a rate as either the Army or the Air Force. Recall, the purpose of the OSD compensation study is focused on developing DOD-wide program initiatives for pay and benefits of military personnel. On balance, the traditional method of calculating retention using the DOD retention formula, which in the Navy personnel management arena is the Reenlistment Rate Formula, is principally for the purpose of estimating the retention phenomenom itself. The OSD methodology provides no insight into the degree that non-compensation aspects of naval service life influence the reduction of the number of sailors that may in the past have been ineligible for reenlistment. Representative of such a program is the Alcohol Abuse Program of the Navy (Appendix F). The Navy is markedly superior to the performance of the other services in restoring previously ineligible individuals to reenlistment quality.

2.3 RETENTION COMPARED TO QOL SURVEYS

(U) Figure 1.1 of Section 1.0 displays a summary of the top five reenlistment factors and the perceived satisfaction level indicated by afloat personnel. Figure 2.7 reveals a comparison of the retention rate, by length of service category, that the Navy has experienced in the period 1975-1978. Most significantly, the retention rate for second enlistment personnel reenlisting for a third term has dropped markedly in the past few years. Thus, as a cohort, those who register personal concern about remuneration, family, job satisfication or job security, education, and advancement opportunities and signify that they find these aspects of service life unsatisfactory are indicating the degree of their concern by leaving the service. Third term personnel are also leaving the service at an alarming rate. Again remuneration and family and personal security are of significant concern ano are being identified as significantly unsatisfactory aspects of naval service life for individuals in the third term category.

(U) The evaluation in this report looks to factors other than compensation. The concentration is on specific programs that are in-being and, if effective, could contribute to altering the satisfaction of naval service life. The mechanism of comparison is a parity assessment. That is, a comparison of the performance of the size of a Navy-wide program in relation to that of the other services or in relation to an established and identifiable requirement. In-depth parity evaluations for six aspects of military service life are contained in the appendices of this report. In Section 3.0 that follows, the six evaluations are summarized and assessed for their potential contribution to the QOL perceptions presented in Section 1.0 and the retention statistics that have been displayed in this section. Section 4.0 is a summary of suggested program adjustments that could contribute to improving the non-compensation aspects of naval service life and that may influence the retention performance of the Navy.

3.0 NON-COMPENSATION ASPECTS OF NAVY SERVICE LIFE

3.0 NON-COMPENSATION ASPECTS OF NAVY SERVICE LIFE

(U) This section summarizes the results of a comparative analysis between quality of life programs in the Navy, Army, and Air Force. The concentration is on specific programs that exist in one form or another in each of the military services. Detailed reports on the examination of each program analyzed are contained in the appendices to this report. In five of the six areas examined, the mechanism of comparison is a parity assessment. In the sixth area (Unaccompanied Personnel Housing), the method used is a comparison to an approximation of housing needs. These comparative analyses are summarized in this section. From this summarization, specific issues relating to the QOL survey responses reported in Section 1.0 and the retention statistics reported in Section 2.0 are developed. Where appropriate, unique aspects of life in the naval service such as sea/shore rotation and workweek duration are used in the development of specific issues categorized as noncompensation aspects of naval service life. A sea/shore rotation and a workweek duration analysis is contained in Appendix G. Finally, Section 4.0 contains illustrative program adjustments that if adopted, could improve the quality of naval service life.

(U) In some program areas, the Navy has a clear superiority over the other services in providing for the non-compensation aspects of service life. In other areas, the Navy has recently made significant adjustments to existing programs. In general, these adjustments have moved the Navy toward achieving parity with the other services. An example of this type of program enhancement is exemplified by the recent initiatives to improve religious and spiritual counseling within the Navy. As now programmed, parity with the Air Force could be achieved by 1983. Parity with the Army would require current programs to be incremented.

(U) No attempt is made in this analysis to review progress in healthy and adequate programs. For some areas, the adequacy of parts, or all, of a program intended to benefit service members is questionable. This analysis focuses on these types of programs. This is done to provide illustrations of policy shifts the Navy could consider in programming for improvement in the quality of naval service life.

3.1 SUMMARY OF PARITY ASSESSMENTS

(U) The following paragraphs present brief summaries of the parity assessments of six relevant non-compensation programs now existing within the Navy. The programs assessed are:

- Morale, Welfare and Recreation Programs
- Family Housing Programs
- Unaccompanied Personnel (Bachelor) Housing Programs
- Off-Duty/Voluntary Education Programs
- Family Support Programs
- Alcohol and Drug Programs

3.1.1 Morale, Welfare, and Recreation (MWR) Programs

(U) A parity assessment comparing the performance of the Navy to the performance of the Army and Air Force in providing for the morale, welfare, and recreation of sailors, soldiers, and airmen is contained in Appendix A. That analysis covers the performance of MWR programs of each service during the period 1976 through 1978. Data for this analysis, both of Appropriated Fund (APF) and Non-Appropriated Fund (NAF) support, is taken from the reports made to the Department of Defense (DOD) by the various services.

(U) Figure 3.1 illustrates an overall comparison of the various service expenditures of appropriated funds for MWR programs. In FY-76, the Army spent $15, or 4.6 percent, less per capita than the Navy. In the same year, the Air Force spent 17 percent more per capita, than did the Navy. In FY-77 and FY-78, both the Army and the Air Force continued to spend more money from the Federal Treasury, per capita, than the Navy for MWR programs.

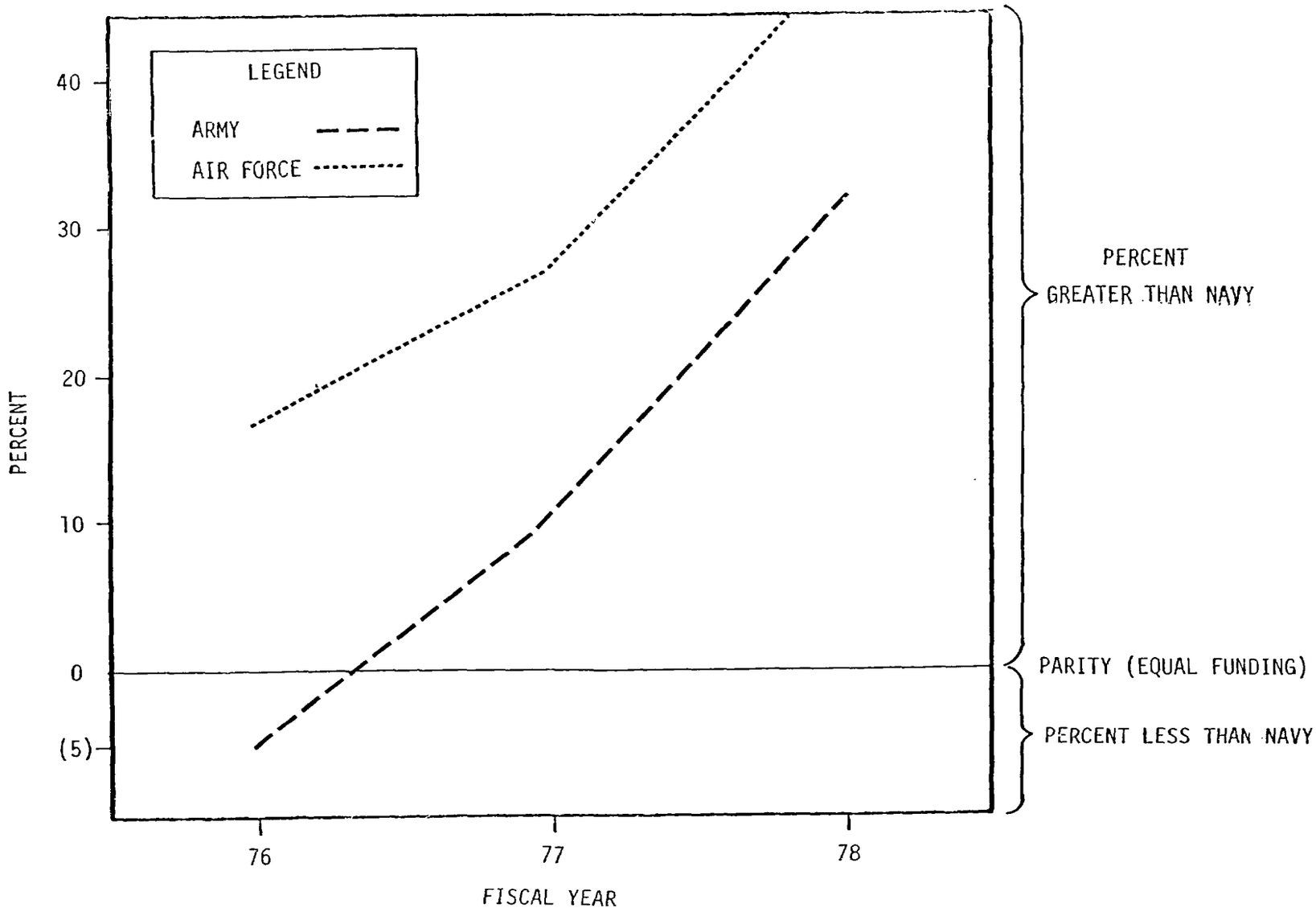
(U) Figure 3.2 provides a comparison of the 3-year (FY-76 through FY-78) average of both APF and NAF expended per capita by the Navy, Army, and Air Force. In the APF fund source area, the Army has exceeded the Navy by 19 percent and the Air Force has exceeded the Navy by 43 percent. Considering the 3-year average of NAF expenditures for MWR programs, the Navy has expended $1113 per capita. This slightly compensates for the shortage of Navy APF. Comparatively, the Army has expended $1109 per capita and the Air Force has exceeded both the Navy and the Army expending, on the average, $1206 per capita. Thus, in the NAF source area, the Air Force has exceeded the Navy by $93 per capita which is 8 percent greater than the average NAF produced by the Navy. Figure 3.2 also displays the 3-year average of APF and NAF summed together on a per capita basis. The Army has exceeded the Navy's per capita outlay for MWR programs by 4 percent. Over the same 3-year period, the Air Force has expended an average of 16 percent more than the Navy for MWR programs.

(U) Considering the trends displayed in Figure 3.1 and the average performance of each service, as shown in Figure 3.2, the following is apparent:

- Navy lags the other services in providing appropriated funds to finance the welfare and benefit of sailors.
- The gap between the Navy, the Air Force, and Army is expanding.

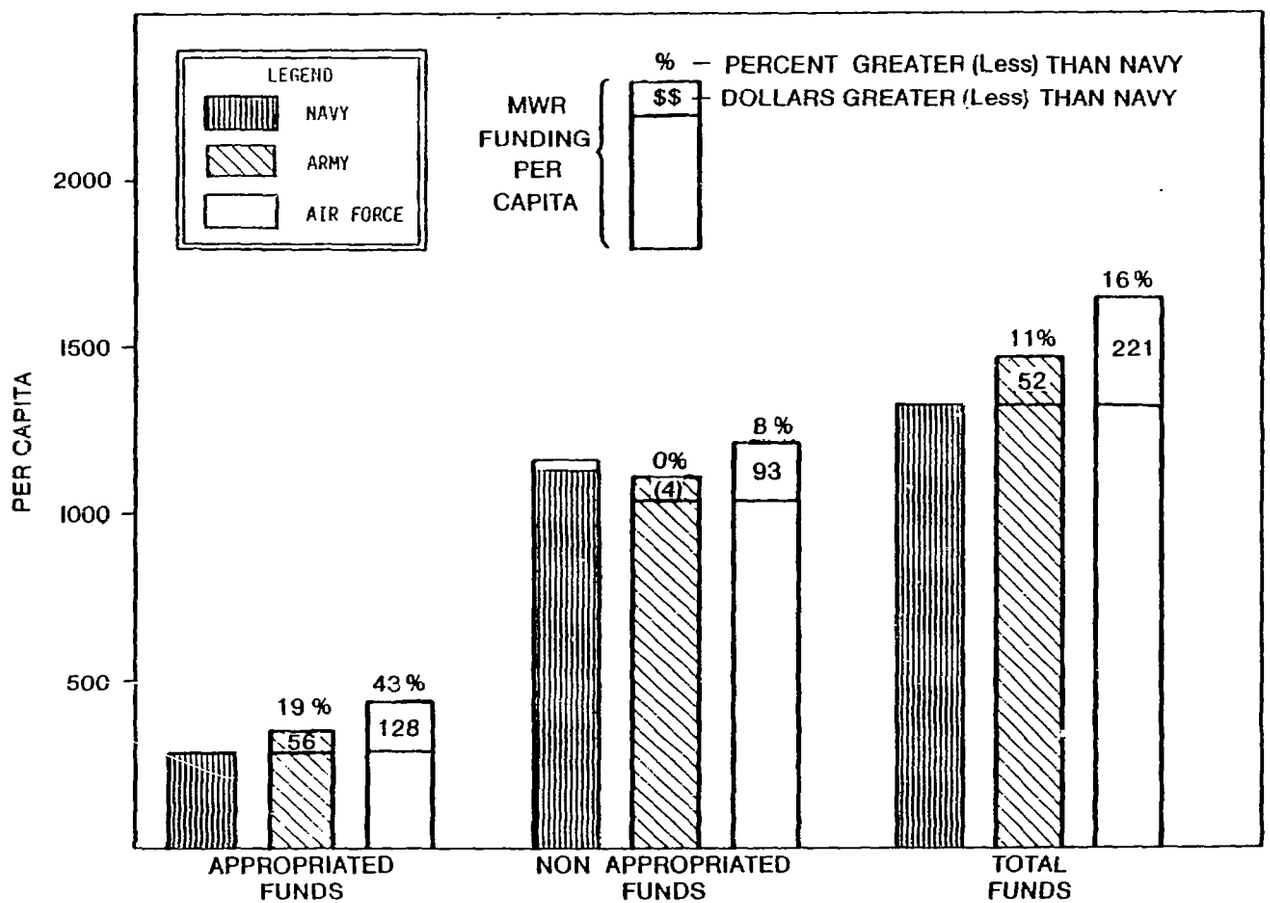
3.1.1.1 Recent Increments to MWR Programs

(U) The source data for comparing MWR programs of the Army, Navy, and Air Force and for constructing the averages displayed in Figure 3.2 are derived from annual reports made by the services to the DOD. Reliable data



(U) FIGURE 3.1

TOTAL PER CAPITA APPROPRIATED SUPPORT FOR MWR (U)



(U) FIGURE 3.2
AVERAGE MORALE WELFARE AND RECREATION FUNDS
PER ACTIVE DUTY END STRENGTH (U)

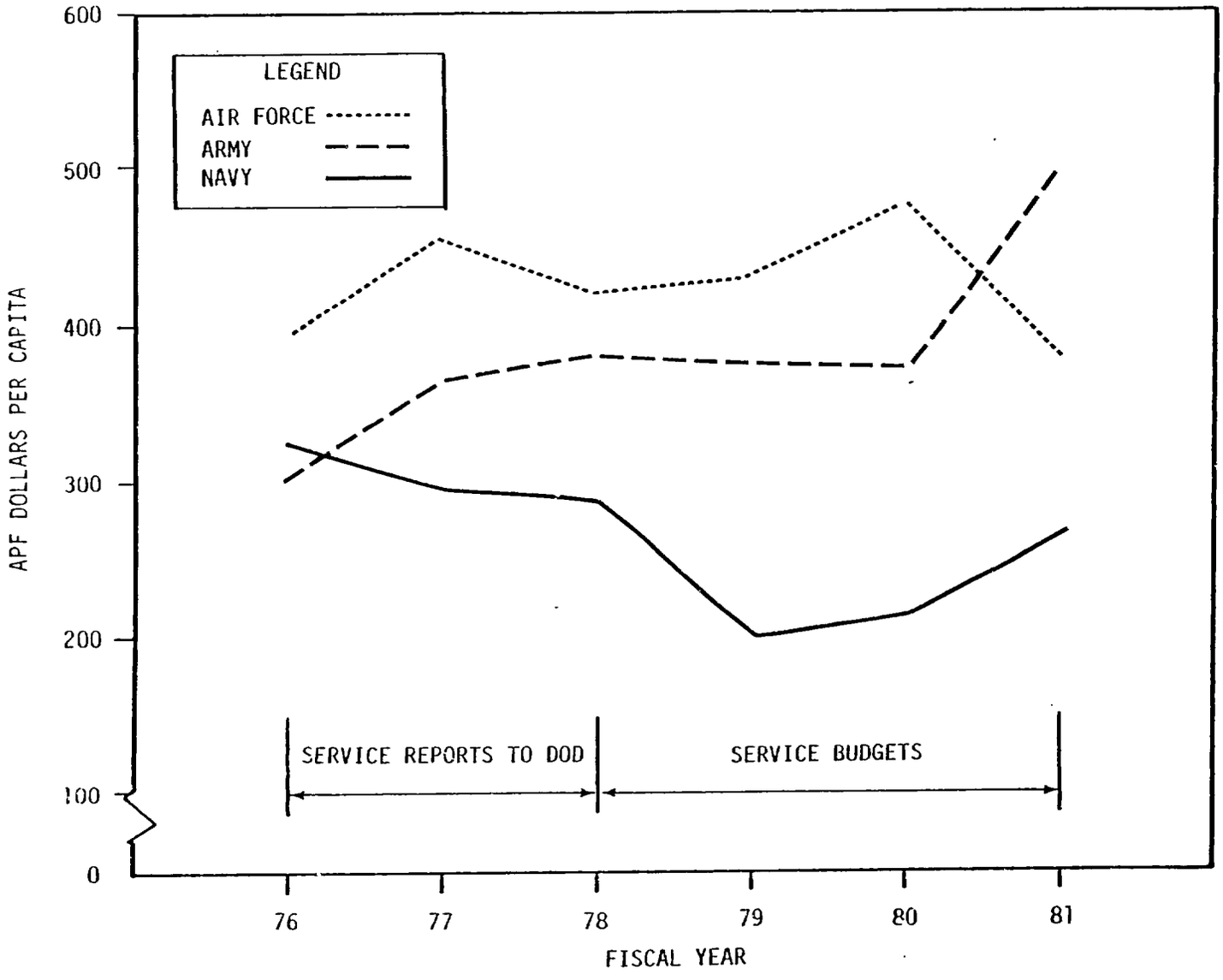
from those sources is available for FY-76, FY-77, and FY-78. Analysis of that data provides the aforementioned insights into the contributions made by both APF and NAF for MWR programs. Estimates for NAF for future years are difficult to make. Nevertheless, because APF for MWR is budgeted by the services, it is possible to approximate the extent that each service intends to support MWR programs by APF alone. Figure 3.3 provides an overview of the Army, Navy, and Air Force budget of APF for MWR in the period FY-76 through FY-81. Values shown in Figure 3.3 are expressed in constant FY-80 dollars, per capita. Comparison of Figure 3.1 with Figure 3.3 reveals the same relative proportions of APF support for MWR in each service. In FY-79, the Navy dropped significantly in its APF support for MWR. Since FY-79, the Navy has made marked improvements in the amount of APF budgeted for MWR.

Comparison of the performance of the Navy to that of the other services indicates a relatively steady performance on the part of the Air Force throughout the 6-year period. Though steady, throughout the period, the Air Force budget of APF for MWR on a per capita basis is much larger than that of the Navy. The Army has also provided APF for MWR programs at a relatively consistent rate. It is significant to note the relative position of the per capita APF budget for each service in FY-81. In constant FY-80 values, the Army budget plans on $511 per capita in FY-81 and the Air Force plans on $386 per capita. Comparatively, in FY-81, the Navy budget plans on expending $268 per capita for APF in the MWR programs. This is a decrease of 7 percent below the $287 per capita expended by the Navy in FY-78.

3.1.1.2 Adjustments to Funding for MWR Programs

(U) To achieve parity with the other services in MWR requires a total annual increment in both the APF and NAF accounts of $39.4 million to equal the Army or an annual increment of $119.1 million to equal the Air Force. The suggested increments are above the levels funded in FY-81 and are expressed in terms of FY-82 costs. Table 3.1 displays the general areas of MWR categories and the approximate amounts of the suggested total increments needed for parity in each MWR field. To attain the total $39.4 million increment in FY-82 for parity in MWR with the Army would necessitate an APF increment of $42.1 million with a compensating decrease of $2.7 million in NAF for MWR programs of the Navy. To achieve parity with the Air Force, the increment to APF needs to be $69.0 million. In this latter case, the increment of $69.0 million to MWR programs of the Navy presumes a potential increase in NAF of $50.1 million. This is a 7 percent increase in NAF for MWR programs of the Navy.

(U) The services have been instructed to distribute common support services to the MWR categories in which they are used. The Navy is far more successful than either the Army or the Air Force in following this guidance. In the service reports of MWR for FY-78, the Navy has distributed all common support services NAF and all but 4 pc cent of common support services APF. If the Army could succeed in distributing common support



(U) FIGURE 3.3
PER CAPITA APF BUDGETED BY ARMY, NAVY AND AIR FORCE (U)
(CONSTANT FY-80 DOLLARS)

(U) TABLE 3.1

FY-82 INCREASE IN TOTAL SUPPORT TO MWR ACCOUNTS
TO ATTAIN PARITY WITH OTHER SERVICES (U)
(FY-82 DOLLARS)

GENERAL MWR AREAS	WITH ARMY (DOLLARS/MILLION)	WITH AIR FORCE (DOLLARS/MILLION)
CLUBS & ASSOCIATIONS	8.4	63.0
SERVICE MEMBERS WELFARE	13.6	51.8
OTHER	17.4	4.3
TOTAL	39.4	119.1

services to a degree comparable to the Navy, there would be a decrease of $9.4 million in NAF for MWR programs of the Army. If the Air Force could succeed in distributing common support services to the same extent as the Navy, there would be a decrease of $49.3 million in NAF for MWR programs of the Air Force. Consequently, an increment of $42.1 million in FY-82 of APF for MWR programs of the Navy could result in parity with the Army for MWR service and a reduction of up to $12.1 million in aggregate NAF charges for Navy servicemembers. An increment of $69.0 million in FY-82 of APF for MWR programs of the Navy could result in parity with the Air Force for MWR services and a reduction of up to $7 million in aggregate NAF charges to Navy servicemembers.

(U) Table 3.2 summarizes the budget increments needed in the Navy MWR accounts in FY-82 to achieve parity with either the Army or the Air Force. Increments to APF and potential reductions to NAF are displayed.

3.1.2 Family Housing Programs

(U) Annually, a housing survey of the military families occupying either military or private quarters (as a result of a PCS move in that year) is conducted. This survey measures, among other things, the suitability of the quarters occupied. Suitability is identified by comparison to standard criteria. The standard criteria, categorized by pay grade, family size, and mix, are established for all military families by the DOD.[1]

(U) Appendix B provides a detailed comparison of family housing in the various military services. Figures 3.4 and 3.5 display comparative summaries of the family housing suitability surveys each fiscal year since 1976. Figure 3.4 portrays the results for military families of the Army, Navy, and Air Force moving into private quarters as a result of PCS transfer actions. Figure 3.5 displays survey results for PCS families of each service moving into government quarters.

(U) Figure 3.4 reveals that in FY-76, 67 percent of Navy families moving into private quarters were able to obtain housing that equalled or exceeded DOD standards. A greater proportion of the families of the Army and the Air Force were able to find suitable housing in that year. The percentage of Navy families moving into and suitably housed in the private sector rose and fell again during FY-77, closely matching the increasingly high percentage of Air Force families capable of locating above standard housing in the private sector. The percentage of Navy families finding suitable housing matched the declining situation experienced by Army families in FY-79.

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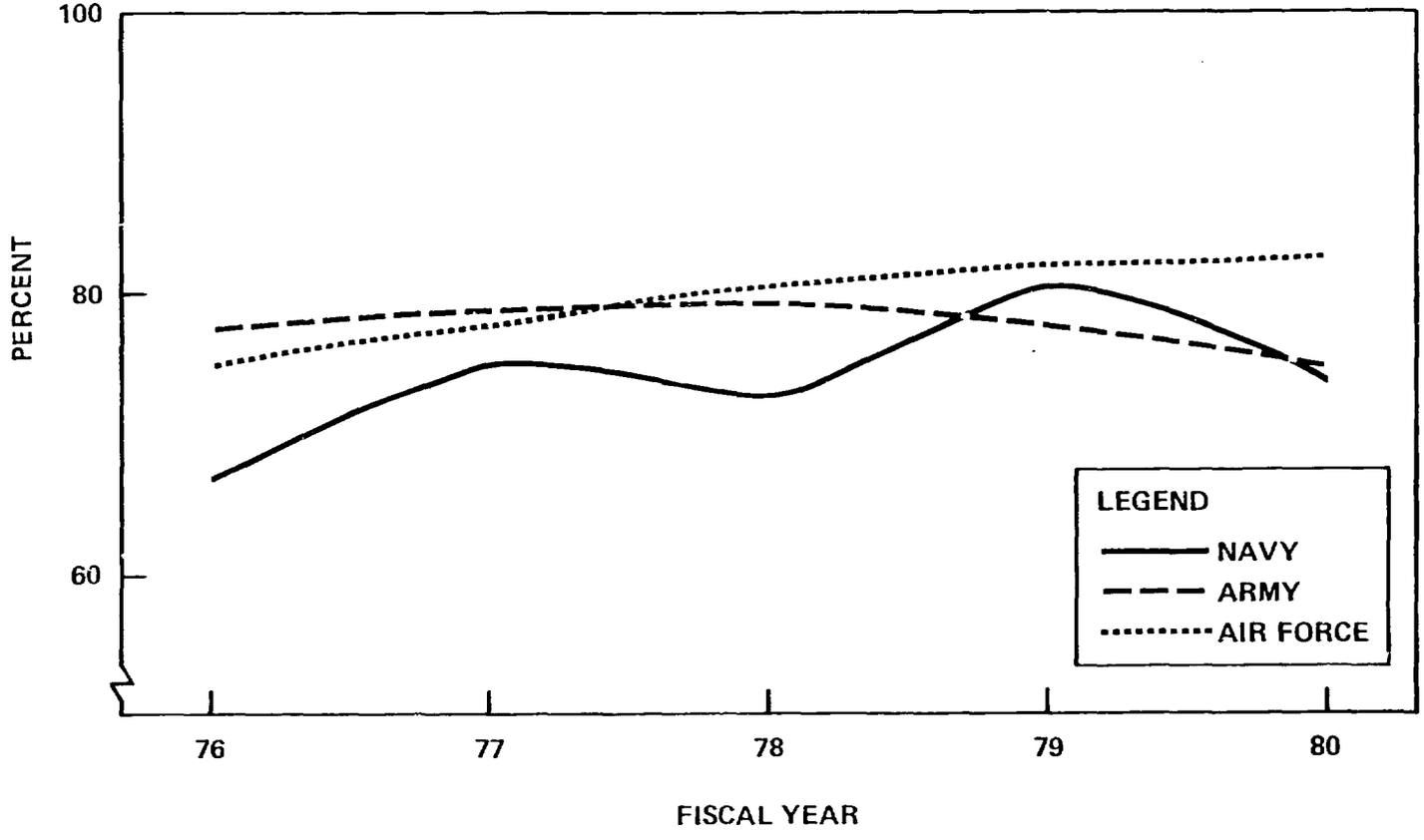
[1] Department of Defense, Determination of Family Housing Requirements (U), DOD Inst 4165.45, (U), 19 January 1972; Unclassified

(U) TABLE 3.2

FY-82 BUDGET CHANGES TO REACH PARITY

MWR ACCOUNTS	INCREMENT TO APF AND POTENTIAL REDUCTION TO NAF (DOLLARS/MILLION)			
	BUDGET INCREMENTS TO APF FOR PARITY		POTENTIAL REDUCTIONS TO NAF WITH PARITY	
	WITH ARMY	WITH AIR FORCE	WITH ARMY	WITH AIR FORCE
CLUBS & ASSOCIATIONS	+8.8	+36.5	-2.6	-3.7
SERVICE MEMBERS WELFARE	+14.2	+30.0	-4.2	-3.0
OTHER	+18.2	+2.5	-5.3	-0.3
TOTAL	+41.2	+69.0	(-12.1)	(-7.0)



(U) FIGURE 3.4

PERCENT OF PCS FAMILIES IN PRIVATE HOUSING:
SUITABLY HOUSED (U)

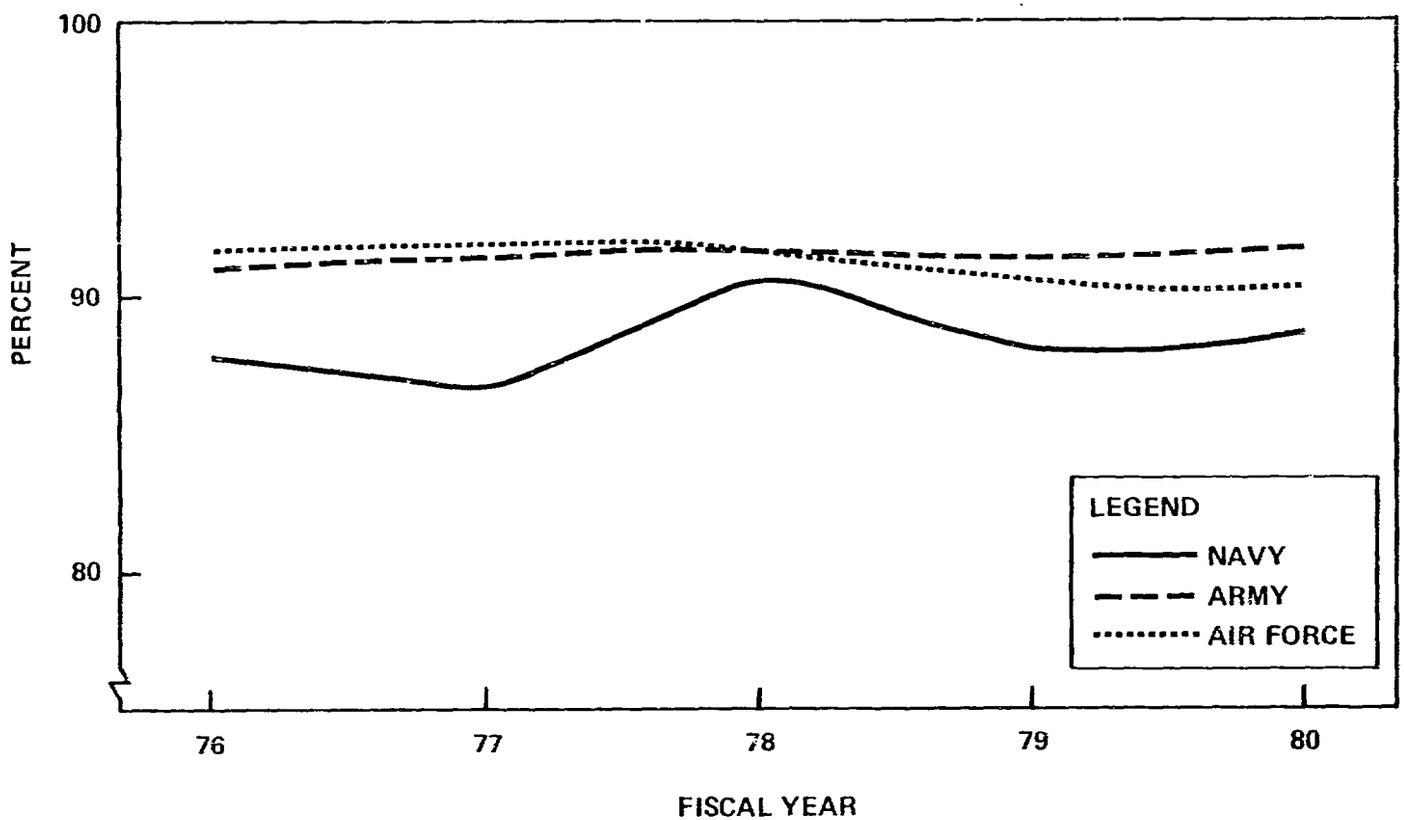
(U) Figure 3.5 reveals that the percentage of Navy families moving into suitable government quarters has consistently exceeded private sector experience, but has also been consistently less than the Army and the Air Force. Though the suitability of government quarters more closely matches the established DOD standards for all services, the Army and the Air Force appear to be more able than the Navy to adequately meet the housing quality needs of their families. For example in 1977, 88 percent of Navy families moving into military quarters were suitably housed, whereas 92 percent of counterpart Air Force families moved into suitable government quarters. In the same year, a slightly larger percentage of Army than Navy families moved into suitable government quarters. Throughout the period, the surveys indicate that the percentage of Navy families moving into government quarters each year, that were housed in quarters that were less than suitable, was larger than the counterpart percentages in the Army and the Air Force.

(U) The services and DOD exercise very little influence over the adequacy of commercially available housing in the private sector. One reason for the lesser proportion of adequate quarters in the private sector for naval families is that naval installations are more frequently located in urban areas. This is not typically the case with the other services. Investment in new above-standard, military family units increases the overall suitability of naval family housing. However, first priority in the area of new investments is for the filling of deficiencies in the number of military quarters at specific locations.

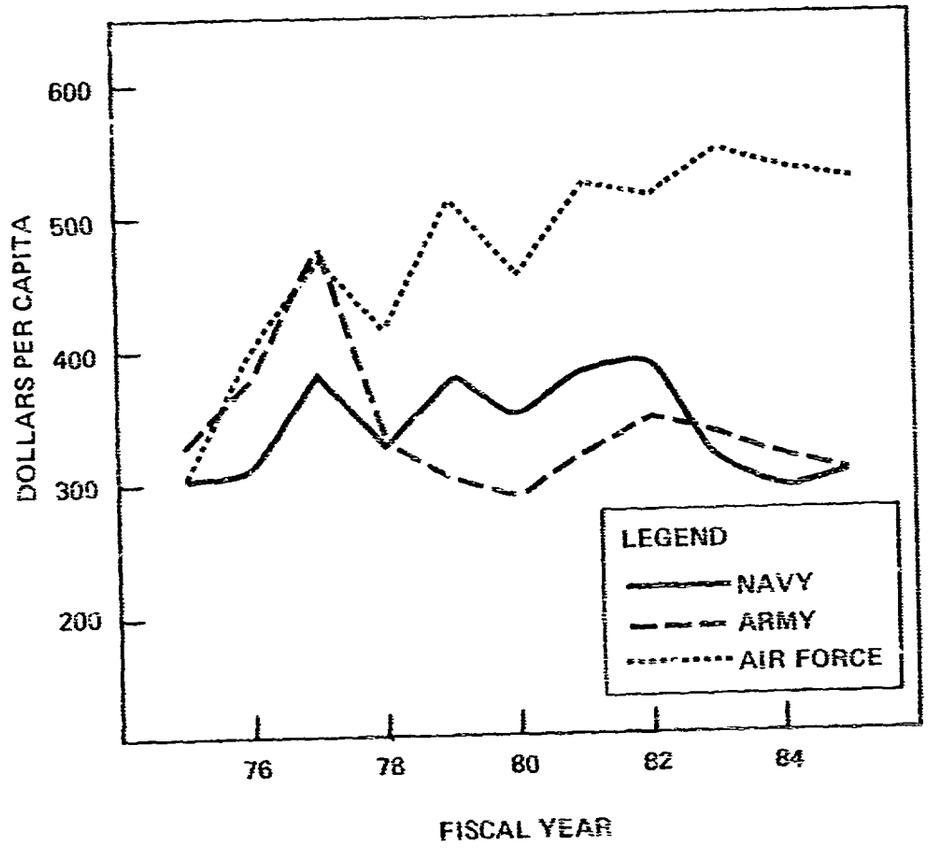
(U) Modernization and maintenance of existing quarters also contributes to improving the suitability of military quarters. The Navy has exceeded the Army in providing for the improvement and maintenance of existing family housing units since 1977. In contrast, the Navy falls far short of the Air Force performance in this area. Figure 3.6 displays a comparison of the sum of the funding for improvements and maintenance of family housing by service, on a per capita basis. Values shown in Figure 3.6 do not include expenditures for new construction, debt retirement, or utilities. Since 1976 the Air Force has consistently outperformed the Navy and the Army in programming for improvements to and maintenance of military family housing. The Navy has, in the two year period (1978-1979), exceeded the performance of the Army. Both the Navy and the Air Force now program to retain their respective positions in the near term. After 1982, the Navy is programmed to fall below the performance of the Army.

3.1.3 Unaccompanied Personnel Housing (UPH)

(U) Appendix C presents an investigation of UPH issues in the Navy. At present, unaccompanied personnel includes bachelor servicemembers, either male or female, and those servicemembers with families, who are living seperate from their dependents. Including the latter category of geographic bachelors, the Navy has identified 242,271 unaccompanied personnel serving ashore out of a total end-strength of 528,000 in FY-80. Thus, approximately 46 percent of Navy personnel are categorized as unaccompanied. Current DOD policy constrains the Navy to programming housing for only 229,639 or about 95 percent of its unaccompanied personnel. At present, the Navy has 116,854 berths that meet adequate habitability criteria to house its 242,271 bachelors



(U) FIGURE 3.5
PERCENT OF PCS FAMILIES IN MILITARY HOUSING:
SUITABLY HOUSED (U)



(U) FIGURE 3.6
IMPROVEMENT AND MAINTENANCE OF FAMILY HOUSING
PER ACTIVE DUTY END STRENGTH
(CONSTANT FY 80 DOLLARS)(U)

serving ashore. Hence, the Navy is deficient by 49 percent in meeting the programmable limits in UPH, as established by DOD policy.

(U) Ambitious programs have been proposed to close the gap in the UPH deficiency. The largest program proposed includes the expenditure of $1.1 billion in the MILCON accounts in the POM-82 program period. Under this proposal, when the last of the proposed BOQ/BEQ facilities is delivered in FY-88, the Navy will be able to house 186,254 unaccompanied personnel in adequate facilities. Though this represents 81 percent of the FY-80 needs, the Navy's planned expansion in end-strength could cause the accumulated number of berthing facilities to fall even further short of the 95 percent goal. If the current ratio of bachelors in the Navy does not alter drastically, then the POM-82 program will fall short of the projected FY-88 need by 41,600 berths. Complete closure on meeting this projected need would involve an additional $0.7 billion in POM-82.

(U) The quantity deficiency in UPH is significant. Over 77 percent of the unaccompanied personnel of the Navy are in the E-1 to E-4 pay grades. The average monthly Basic Allowance for Quarters (BAQ) for these pay grades is $112.17. BAQ in lieu of quarters is not an equitable substitute for shelter for these sailors when serving on shore duty. The aforementioned deficiency of 49 percent in UPH does not include personnel serving afloat. Providing a home away from the ship for sailors when in home port would necessitate the acquisition of an additional 70,500 berths.

3.1.4 Off-Duty/Voluntary Education Programs

(U) A parity assessment comparing the performance of the Navy to the performance of the Army and the Air Force in providing off-duty education opportunities for sailors, soldiers, and airmen is contained in Appendix D.

(U) DOD policy now permits services to fund 75 percent of the cost of tuition and fees for any courses taken by Army, Navy, or Air Force personnel. The other 25 percent must be paid by the servicemember or must come from sources other than the Federal Treasury or Veterans' Administration. At this time, Navy personnel do not use the available off-duty educational programs to the same extent as servicemembers in the other services. Recent studies[2] indicate that, if the efficiency of the Navy programs were improved and their use increased, approximately 13 percent of the total end-strength would be enrolled in off-duty/voluntary education programs. This represents an increase of 23,000 participants, over present levels.

(U) The availability of these programs is thought to have a positive effect on retention in the armed services. Having to pay 25 percent of the tuition and fees may be a deterrent to enrollment by servicemembers. Provision of these funds by the services rather than the servicemembers may cause

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[2] Presearch Inc., An application of Army and Air Force Educational Program Participation and Funding Profiles to the Navy Campus for Achievement Program Technical Report No. 368 (U), 24 January 1978; Unclassified

enrollment to increase. To this end, recent initiatives by DOD, requesting Congress to permit services to fund 90 percent versus 75 percent are under review.[3]

(U) Included in MWR category VIII is the "Academic Support Supplemental Mission Fund". A rebalancing to increase the NAF segment of this category could provide a source for the other 10 percent of the money needed for more servicemembers to participate in off-duty education programs in the Navy. In turn, this change in Navy Department policy may further the CNO's objective of increasing retention.

(U) The following example illustrates an estimate of a total increment that may increase the attractiveness of off-duty education programs in the Navy.

Assumptions

• Navy end-strength (FY-80)	528,000
• Average tuition and fees for one 3 semester-hour, (off-duty) course (FY-80)	$250.00
• Number of courses taken per semester (off-duty)	One
• Possible number of Navy enrollees in off-duty education programs (13% of end FY-80 end-strength)	68,000

The prospective student, if he enrolls, now must pay 25 percent of the $250.00 (for tuition and fees) or $62.50. This would be $25.00 if Congress approves a current DOD initiative for a 90 percent tuition assistance level. When these rates are applied to the 68,600 possible enrollees, the funds needed from non-appropriated sources to off-set the total cost of off-duty educational programs equates to $4.3 million annually, at the 25 percent level and $1.7 million annually, at the 10 percent level. This indicates a potential allocation of $8.12 per capita from non-appropriated fund sources under MWR category VIII at the current 25 percent level. Such an initiative should only be attempted if APF funding sources are increased in the other MWR catagory areas.

(U) Within the same criteria, it may be possible to substantially improve the performance of voluntary education programs. As an upper bound, parity could be achieved by supporting the same proportion of students as the Air Force. Historically, the Air Force is able to sustain off-duty education for 80 percent of its personnel. For a Navy of 528,000 servicemembers, this equates to an off-duty education program with 422,400 personnel enrolled

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[3] Department of Defense, Education Incentives Study (U), January 1980; Unclassified

(10 times larger than the present Navy program). Providing a 10 percent tuition supplement to such a large population would require $10.5 million annually in FY-80 dollars. This in turn equates to a potential allocation of $19.89 per capita from non-appropriated fund sources under MWR category VIII. This equates to an increase to $48 per capita for the Navy. Currently, the Army reports $71 per capita and the Air Force reports $87 per capita in average NAF for catagory VIII.

3.1.5 Family Support Programs

(U) Appendix E. contains a comparative analysis, illustrating the status of the Family programs for the various services. Each of the military services operates a structured program to provide military personnel and dependents with family and social action support services. These services range from information and referral to counseling and crisis intervention functions. The Army and the Navy have centrally managed programs that provide local commanders with resource information, reference material, and guidance. The Air Force provides guidance to its local commanders through policy structure and regulations.

(U) One common aspect of family support provided to service members by the respective services is child care centers. Within each service, the child care centers function in slightly different fashions. The Navy provides child care for an estimated range of 4,640 to 8,266 children per day in at least 68 child care centers located in close proximity to principal naval installations. The Army provides child care for up to 17,207 children per day at 245 child care centers. The Air Force provides child care for an average of 16,354 children per day at 122 child care centers. The Army differentiates child care centers into two types; day care and pre-school facilities. The Navy and Air Force differentiate types of child care categorically as full-time care (more than 6 hrs/day, 5 days per week) or convenience care (5 or less hrs/day, periodically). In the Air Force, full time care is provided to 47 percent of the children attending child care centers. In the Navy, full time care is provided to approximately 63 percent of the children in daily attendance.

(U) The Navy child care center system is significantly less responsive to the needs of Navy families as compared to the support families receive in the Army and the Air Force. On a per capita basis, the Navy child care capacity serves 0.6 to 1.9 children spaces for 10,000 service members. Comparatively, the Army provides child care capacity of 2.6 children spaces for every 10,000 service members and the Air Force provides 2.9 children spaces for each group of 10,000 servicemembers. In 1979 the indicated quantity of the Navy's child care assistance is approximately 78 percent less responsive to family needs as compared to the quantity of the service provided by the Air Force.

3.1.6 Alcohol and Drug Abuse Programs

(U) A comparative analysis of Alcohol and Drug abuse programs in the various services is contained in Appendix F. Alcohol abuse is viewed as a

treatable disease. Accordingly, it is the policy of the DOD to use a positive, non-punitive approach in the identification and treatment of alcohol abuse. Drug abuse is viewed as harmful to the health of service-members. The use of drugs is, of itself, an illegal activity. Drug rehabilitation programs are not substitutable for disciplinary or administrative action.

(U) Without considering the influence of the various safety action seminars of the services, the alcohol abuse program of the Navy is markedly more successful in quantifiable terms than the similar programs of the Army and the Air Force. The Air Force however, is more efficient than either the Army or the Navy in the conduct of its drug abuse program. The Navy spends $1,161 per successful drug abuse rehabilitee compared to $1,104 for the Army and $666 for the Air Force. The safety action seminars, such as the Navy Alcohol Safety Action Program (NASAP), are new and as yet unmeasured. The analysis in this report deals exclusively with program performance data reported by the services to the DOD.

(U) The efficiency of both Drug and Alcohol identification and treatment programs for the military services is compared in Table 3.3. Clearly, the data shows that the Navy is identifying and treating a higher percentage of its endstrength than the other two services. The cost per successful rehabilitation in the Navy, however, is almost half that for the Army and Air Force. Table 3.3 displays for comparison purposes the average end-strength for each service. The Navy is slightly smaller than the Air Force and 68 percent the size of the Army. On balance, the Navy is treating approximately 5 percent of its personnel, while the Army is treating 3 percent, and the Air Force is treating slightly more than 2 percent. The magnitude of the Navy programs coupled with its efficiency reveals the Navy performance exceeds the Army by 23 percent and exceeds the performance of the Air Force by 40 percent.

(U) Although the Navy appears to be superior to the performance of the other services in identifying and treating drug and alcohol abusers, it is deficient in the drug abuse treatment process. At $761 expended per successful recovered alcoholic, the Navy is consistently outperforming the other services by an efficiency factor of 2 and 3:1 for the Army and Air Force, respectively. At $1,161 expended per successfully recovered drug abuser, the Navy is underperforming each of the other services by a factor 1:2. Thus, over the past 5 years, the Navy has restored 58,721 alcoholics to duty, while it has lost 21,275 drug abusers.

3.1.7 Sea Shore Rotation and Work Week Duration

(U) Appendix E contains relevant data on aspects of service life unique to the Navy. In the period since 1974, the Navy has markedly improved the sea-shore rotation patterns for enlisted personnel. Navy service members are now required to serve slightly less than 6 years on sea-duty for ever 3 years of shore duty. Senior petty officers (first class petty officer through master chief petty officer) are now experiencing less than 3 years sea-duty for every 3 years of shore-duty. In general, the senior petty officers represent the preponderance of family members in the services. This population

(U) TABLE 3.3

MILITARY SERVICE ALCOHOL AND DRUG PROGRAM COMPARISON (U)
(PERIOD 1975 THROUGH 1979) (U)

MILITARY SERVICE	COMPARATIVE ALCOHOL AND DRUG PROGRAM EFFICIENCY				
	COMPARATIVE SERVICE SIZE AVERAGE END STRENGTH (000)	PATIENTS		COST CONSTANT FY-80 VALUES	
		ENTER TREATMENT (000)	SUCCESSFUL REHABILITEE (000)	TOTAL EXPENDITURE	COST PER SUCCESSFUL REHABILITEE
NAVY	527.8	129.0	83.7	$123.8M	$1491.00
ARMY	775.5	121.5	72.5	$215.5M	$2972.00
AIR FORCE	580.0	69.5	40.8	$116.7M	$2867.00

has increased by 12 percent since 1974. Thus, the trend in family separation reported as a principle dissatisfier in the QOL surveys displayed in section 1.0 of this report may not be a direct result of sea-shore duty rotations.

(U) Work week duration, or time onboard ship for duty and work while inport, is far in excess of civilian labor force norms. Navy sailors serving afloat in the Pacific fleet are experiencing typical work week durations of 58 to 74 hours per week. This exceeds the Navy standard work week criteria by 10 to 21 percent. More importantly, these work week durations exceed national norms by as much as 81 percent a week. Table 3.4 indicates that these factors may have a significant impact on available time with the family.

3.2 FAMILY ISSUES

(U) From the aforementioned parity assessments summarized in Section 3.1, two significant issues are apparent. The first issue deals with the dependents of service members. The second major issue involves the perceptions of individual service members regarding their own security or ranking of worth in the social structure. The following paragraphs are organized to address these two issue areas in the context of the parity analyses and the retention phenomenon.

3.2.1 Time with Family

(U) QOL survey responses are tabulated in Table 1.2 and relevant satisfaction indicators are displayed in Figure 1.1 of Section 1.0. Taken together, these reveal a significant concern on the part of all service members about time away from their families. As shown in Figure 1.1, time away from the family is the most significant and least satisfactory non-compensation aspect of naval service life. Both the work week data and the sea shore rotation shifts displayed in Appendix G reveal that changes are occuring in the amounts of time service members are able to spend in the family enviornment. Servicemen serving afloat are exceeding national norms in duty and onboard time while in-port by 64 to 81 percent. This is approximately 20 percent greater than the maximum established by the manpower justification criteria.[4] Additionally, over a career period, servicemen in the Navy are involved in sea-duty for more than two-thirds of the total time they are in the service. Taken together, the net effect is that this phenomenon is increasing in recent years.

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[4] Department of the Navy, Manual of Navy Total Force Manpower (Policies and Procedures) (U), OPNAV Inst 1000.16 series; Unclassified

(U) TABLE 3.4

PACIFIC FLEET ON BOARD DUTY/WORK HOURS (U)
(MAY 1979)

TYPE SHIPS	REPRESENTATIVE DUTY HOURS DURING ORGANIZATIONAL MAINTENANCE PERIODS				
	DUTY HOURS/YEAR			ACTUAL GREATER THAN	
	CIVILIAN	NAVY STANDARD	ACTUAL*	STANDARD	CIVILIAN
CARRIERS	1888	2828	3168	12%	68%
SURFACE COMBATANTS	1888	2828	3418	21%	81%
SUBMARINES	1888	2828	3384	20%	79%
AMPHIBIOUS	1888	2828	3259	15%	73%
FLEET SUPPORT	1888	2828	3100	10%	64%

* Source: VCNO Working Hour Panel, May 1979

3.2.2 Family Support

(U) To compensate for the policies which encourage absenteeism of parents within Navy families, the Navy organizes and provides a wide range of social services for the betterment of naval service life. These range from the traditional social functions of religious and spirtual services to relocation assistance, emergency aid, recreation and welfare services, and other non-compensation aspects of naval service life. Various areas evaluated in this analysis illustrate and provide an insight into the comparative performance of the Navy as related to the approaches of the other military services in providing some compensation for family concerns in the Navy.

3.2.2.1 Family Support Programs

(U) The Navy leads the other services in organizing a definitive Family Support Program. The evolution of that program and the intensive emphasis now programmed to institutionalize a positive Family Support Program is demonstrative of the intent to strenthen this area of Navy service life. The neglect in past years as compared to the other services is represented by the status of the Navy's child care centers. Modernization and new constructions are programmed; however, the achievement of parity with the other services would require a greater expenditure in this area.

3.2.2.2 Family Housing

(U) In comparison to the Army and the Air Force, the Navy operates an efficient but deficient family housing program. It is the perception of service members moving into on-base housing, that the facilities available for the family members of naval service members are less adequate than in the other services. The attempts made by the Navy to more closely align with the standards of adequacy for existing facilities are falling short of closing parity with the Army. Attempts to close parity with the Air Force are not currently possible because of the existing differentials.

3.2.2.3 Family Stabilization Factor

(U) Within society a number of approaches are employed to deal with the wide variety of destabilizing aspects of individual and family life. Such items as drug trafficking, and other forms of criminal behavior are dealt with through the forensic and justice systems. Such diseases as alcoholism, drug addiction, spouse abuse and child neglect, etc., are met by a combined effort on the part of the judicial, the medical, and the spiritual counseling communities. Bizarre behavior on the part of afflicted individuals is not tolerated and through a segregation process individuals affected are removed from contact with society and treated. Sufficient arrestment, to allow normal social contact, is the goal. Within the DOD, each military service has established a number of programs to deal with family destabilizing factors. Among these are the Alcohol and Drug Abuse Programs and the Family Advocacy Programs.

(U) Clearly, the Navy leads the other services in restoring alcoholics to productive further-service potential. Though somewhat inferior to the other services in attaining the same goal with drug addicts, the Navy is able to deal with drug addiciton as it relates to the individual service member. In society, addictive diseases in one family member are viewed as destabilizing to the entire family. For example, many of the child neglect, child abuse, rape incidence, and spouse abuse events are related to substance abuse. The ability of the Navy to deal directly with family advocacy issues within naval society appears limited. Recent organizational initiatives to phase coordination control of the Family Advocacy Program of the Navy into the Human Resource Department of the Naval Military Personnel Command should stabilize this effort within the Navy.

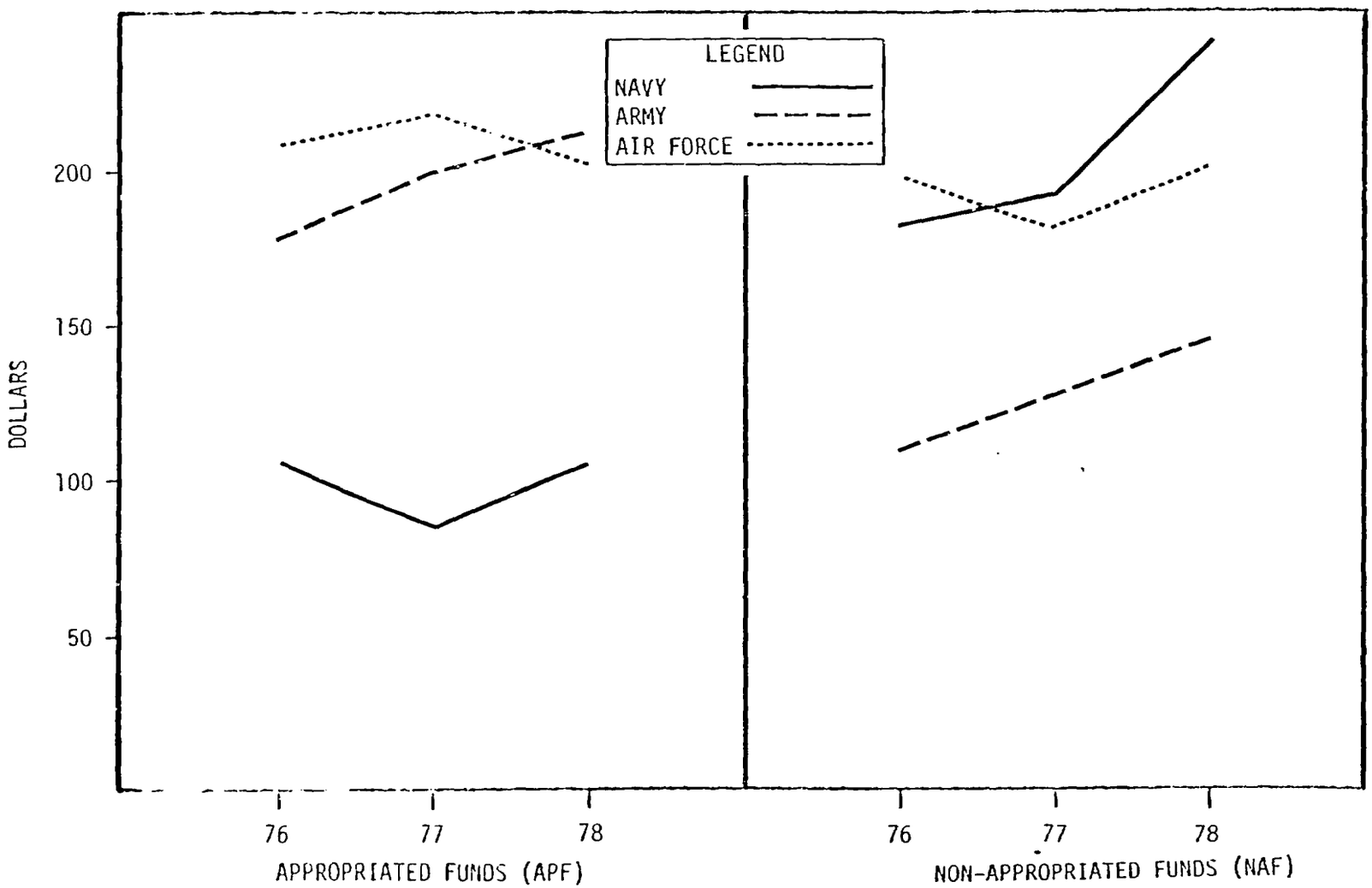
3.2.3 Morale, Welfare and Recreation Accounts and Family Support

(U) The Navy Family Support Program is established as an appropriated fund program. However, non-appropriated funds may be used to supplement appropriated funds in this area. Supplemental mission support Non-Appropriated Fund Instrumentalities (NAFI) can be established in Category VIII of the MWR accounts. The Army, for example, has established a NAFI for the receipt of gifts and donations from private individuals and organizations to fund their Community Services Program. As other examples, non-appropriated funds from installation Military General Welfare and Recreation, MWR Category III (A), may be used to purchase emergency food locker items, while child care centers operate under MWR Category III (B). Figure 3.7 shows the imbalance in the Navy (in contrast to the other services) between APF and NAF for Category III of the MWR accounts. The improvements suggested in APF support to the servicemember welfare area of MWR shown in Table 3.2 could alleviate this imbalance.

3.3 EDUCATION ISSUES

(U) In Figure 1.1 of Section 1.0, Education Opportunities and Advancement are identified as two significant areas of dissatisfaction for first term, second term, and third term service members. These, along with job satisfaction, indicate the perceived value that individual service members place on their own security. The Navy is a technically-oriented segment of society, which rewards the technical competence of its service members through advancement opportunities. Additionally, the path to advancement in the Navy is channeled by education and training criteria. Accordingly, members of the naval service are encouraged to learn and acquire advanced skills through the education process. However, the environment for boot strap improvement programs in the Navy is not particularly supportive of individuals pursuing higher education goals.

(U) Work week criteria used for manpower justification purposes in the Navy leave 37 hours per week for an individual to follow leisure time activities and other pursuits. A fully employed civilian counterpart has 58 hours per week for other pursuits. Indeed, work week realities in the Navy fall far



(U) FIGURE 3.7

PER CAPITA APF AND NAF EXPENDITURES IN CATEGORY III (U)
(MILITARY WELFARE AND RECREATION)

short of the criteria. For example, sea-shore rotation may place a Navy man on sea duty for up to 70 percent of the period of a 20 year career. In addition, the adequacy of family housing and the availability of unaccompanied housing for Navy personnel serving ashore is markedly below standards. It is interesting to note that the Navy does not provide sufficient housing for its unaccompanied personnel. In the Navy, this is colloquially referred to as Bachelor Housing. In the Air Force, the term dormitories is used to reflect the concept for housing for unaccompanied personnel. In the Army, one of the principal dissatisfiers for continued service is the general inadequacy of UPH designed to DOD standards. The significance of this in relation to off-duty education is the complete absence of adequate at home study facilities in modern barrack designs.

3.3.1 Off-Duty Education in the Navy

(U) One of the non-compensation aspects of Navy service life assessed in this investigation (Off-Duty Education) illustrates the diffulty the Navy has in providing advancement and education opportunities to its service-members. Nearly 46 percent of Navy service members are bachelors and more than 74 percent of this group is in the E-1 to E-4 pay status. Many of these 18 to 23 year olds are serving in their first term. Generally, first term personnel are assigned duty afloat, if not assigned for specialized training. The Navy is not providing off-duty education encouragement to these junior people. For example, the PACE program selectively services only 6 percent of the personnel afloat.

(U) The Navy, expending $25 per capita in off-duty education, has been relatively inefficient in supporting the voluntary education process for its service members. In comparison, the Army is expending $119 per capita in off-duty education, while the Air Force traditionally expends $61 per capita. In light of recent initiatives by DOD to relieve the tuition assistance burden on servicemembers, the Navy could pursue a procedure to supplement the other 10 percent of unfunded tuition needs through the MWR accounts

(U) A review of the types of institutions and extent of participation by individuals in the Navy's off-duty education process shows 1,399 officers, 5,228 enlisted and 4,369 dependents participated in the program in 1978. The Navy now programs to close parity with the Air Force in the funding for Off-Duty Education. However, without organizing to develop viable services for afloat personnel and an adequate environment for off-duty study by personnel serving ashore, it is unlikely that the perceived value of these efforts will be markedly enhanced. Because of the uniqueness of sea duty in the Navy and the practicality of the proven PACE system, innovation in delivering off-duty education services to afloat personnel might markedly adjust the perceived value of education opportunities in the Navy.

3.3.2 Morale, Welfare and Recreation Programs and Off-Duty Education

(U) Noticeably, acceptance of tuition assistance by officers involves a commitment on the part of officers to extend their obligated service. Additionally, all service members of all the military services are required

to provide for 25 percent of their tuition and fees from non-Federal Treasury sources. This is traditionally met by private funding on the part of the individual. As shown in Section 3.1.4 of this report, one possible vehicle for removing a disincentive to the off-duty education process could be through creative use of non-appropriated funds from MWR Category VIII sources. However, such an initiative must await adequate appropriated funding in the MWR area.

3.4 POSSIBLE POLICY ADJUSTMENTS TO THE QUALITY OF NAVAL SERVICE LIFE

(U) In the area of family and education issues, efficiencies could be achieved if destablizing influences are reduced and the delivery of assistance to service members and their families are improved.

3.4.1 Family Programs

(U) Obviously, an improvement to the principal dissatisfier, "time with family" can be achieved by considering; (1) the sea-shore rotation requirements of career patterns, (2) forward deployment rotation factors, and (3) the factors relevant to the length of the work week (including duty on board, while in home port). This examination has evaluated two of these three determinants of family separation. The CNO Naval Ship Deployment and Rotational Factors Study of 1978 examined the third aspect. Based on the analysis in this report, it appears that actual shipboard working hours have a greater impact on family separation than sea-shore duty assignment rotation. The comparative impact of ship deployment factors are not examined in this report because of new developments and yet to be determined long term impacts of Indian Ocean and other out-of-area deployments.

(U) Initiatives to improve work-week duty for fleet sailors are under review, ranging from contracting of arduous chores such as bilge and side cleaning to stabilizing six section in-port duty assignments. One aspect of naval manpower management that may contribute to work-duty inequities is the principal assumption of work week duration. Refinement of that assumption may contribute to more pragmatic shipboard manpower capabilities, especially if time-with-family is a determinant of the assumption.

(U) The Air Force is currently concentrating on establishing a statistical basis for determining the numbers of single servicemembers that are custodial parents of dependents or heads-of-household. Estimates as to the number of Geographic bachelors in the Navy vary from 8,000 to 22,000. The proportion of single heads-of-households in the Navy is unknown. No service-wide procedure exists to identify or provide for the special needs of this category of servicemember. The extent that duty assignment criteria for such service members and the extent that the inferior quantity of child care facilities in the Navy influences the family separation views of respondents to QOL surveys is unknown.

(U) The comparative quality of child care services in the Navy are significantly inferior to that of the other services. Attainment of parity

with the other services in this area will necessitate a systems approach. Such an approach should extend to include adjustments to the MWR category III funding balance. If the imbalance between NAF and APF funding is not corrected then an inferior child care system for dependents of Navy servicemembers, as compared to the other services, can be expected to continue.

(U) The performance of family and child advocacy programs of all the services are unquantifiable. This is principally because of the lack of service wide approaches in centralizing incident reports. Currently, the Army, through its family support program, is centralizing child abuse incident reporting at Ft. Sam Houston. The Army child advocacy program has been in existence since 1947. The Air Force programs started in 1952. The Navy program is now being established. Confidentiality for the abuser is a principal factor inhibiting the establishment of effective reporting systems. This aspect may also contribute to inadequate case management for treatment of those involved in child neglect or abuse, spouse abuse, or rape incidents. The Navy leads all services in the treatment of another social problem, alcohol abuse. Anonymity for the individual is a key aspect of the Navy Alcohol treatment concept. Application of similar safeguards and enlightened treatment procedures may assist in resolving this family destabalizing aspect of family life within the Navy.

3.4.2 Education Programs

(U) In addition to supporting off-duty programs with adequate funds, two aspects of the Navy Voluntary Education Program could be enhanced to improve the QOL perception of Navy servicemembers. These are the delivery of education services to personnel afloat and provision of adequate time and facilities for home study.

(U) As in the family separation aspect of naval service life. work and duty hour involvements impact on free time available for other than military duty performance. Up to 58 hours per week are available to the American worker for free time pursuits. The typical sailor serving afloat is allowed 37 hours per week for free time activities. Adjustments to work week criteria for manpower management and to the actual work/duty hours of personnel afloat may permit a greater involvement in off-duty education by naval service members.

(U) Traditional new ship habitability standards and unaccompanied housing criteria do not make allowances for home-study space. This may be an inhibitor to individuals attempting to pursue educational and advancement opportunities. It is interesting to note that the Air Force sets space criteria for many MWR activities below DOD standards. Consequently, DOD approval is not a necessary pre-condition or delaying factor as it frequently is when space planning exceeds DOD criteria.

(U) Proximity of work, study, and residence is a potentially exploitable aspect of naval service life. The seven Merchant Marine Universities in the United States have optimized these factors for delivering college accredited instruction to young men in a nautical enviornment. However, use of BAQ or

VAQ as a substitute for providing adequate berthing facilities to enlisted men of the Navy may be counterproductive to the enhancement of off-duty education programs. In a similar vein, leasing alternatives to Milcon investments for new housing facilities could also impact unfavorably on the perceived value of education and advancement opportunities.

(U) Maintenance of MWR balances at present levels may not permit creative inducements for subsidizing tuition assistance. As in the child care quantity area, adopting a policy to provide 10 percent of the individuals tuition costs through MWR category VIII will necessitate some increments to the APF aspects of the MWR system if other services are not to be sacrificed.

3.5 SUMMARY

(U) In the area of family and education oriented programs of the Navy, the Navy could markedly improve its child-care system and its off-duty education system. Increasing funding without significant adjustments to management may not deliver the types of programs the sailors percieve as valuable. Modest increments to funding, coupled with policy adjustment and management improvements could markedly alter current QOL perceptions. Altering such perceptions could influence the retention performance of the Navy. In Section 4.0 that follows, specific illustrations of such program adjustments are developed.

4.0 ILLUSTRATIVE CHANGES TO QOL PROGRAMS OF THE NAVY

4.0 ILLUSTRATIVE CHANGES TO QOL PROGRAMS OF THE NAVY

(U) Quality of Life (QOL) Surveys reported in Section 1.0 reveal a general dissatisfaction with military compensation, the extent of separation from family, and the availability of educational programs among first term and career personnel of the Navy. Retention rates reported in Section 2.0 of this report indicate a relatively consistant retention performance for first term personnel but a marked recent decline in the retention of second and third term personnel. The analysis in Section 3.0 of this report indicates the potential for a strong relationship between appropriated fund support for Morale, Welfare, and Recreation programs of the Navy and the ability of the Navy to achieve parity with the other military services in the family and education programs. In this the final section of this report, changes to ongoing Navy programs are suggested. These suggested changes are provided to establish the order of magnitude by which Navy programs may need to be adjusted if parity is to be attained with the Air Force.

4.1 ILLUSTRATIVE QOL PROGRAM CHANGES

(U) For purposes of illustration, the program increments needed to achieve parity with the Air Force in each of the six QOL areas assessed in this report are displayed in Table 4.1. Values shown in Table 4.1 are estimates of FY-82 year dollars, incremental to funds currently programmed for FY-81. Comments in the remarks column of Table 4.1 are summarizations of analytical findings reported in Section 3.0 of the report.

4.1.1 QOL Program Enhancement

(U) The $283.7 million QOL program enhancement for FY-82 displayed in Table 4.1 would commit the Navy to a total increment of over $1.4 billion throughout the POM-period. Focusing the illustration exclusively on family and education issues would reduce the suggested increment to $62.0 million in FY-82. This would provide a restructured Voluntary Education System and sufficient appropriated funds to enhance the child care capability of the Navy towards achieving parity with the Air Force. An increment of $62.0 million in FY-82 for QOL programs commits the Navy to a total of over $310 million in the program years. Table 4.2 displays an illustration of limited QOL programs improvements to attain selected parity with the Air Force.

4.1.1.1 Limited QOL Program Improvements

(U) The limited QOL program improvements suggested in Table 4.2 do not provide for enhancements to Leadership Management Education and Training (LMET) programs; do not provide for additional improvements to the quality of government quarters for Navy families; do not provide for closing the deficiency in Unaccompanied Personnel Housing (UPH); and do not provide for an

(U) TABLE 4.1
ILLUSTRATIVE QOL PROGRAM INCREMENTS FOR PARITY WITH AIR FORCE (U)

QOL AREA	FY-82 INCREMENTS	REMARKS
MWR	$ 69.0M	• Increment to APF • Rebalance of APF/NAF mix may enhance Family support programs and provide sources for 25% Tuition Aid
FAMILY HOUSING	$ 66.0M	• Improvement and Maintenance for Government Quarters
UNACCOMPANIED PERSONNEL HOUSING	$ 98.1M	• Increment in FY-82 to start delivery of 1997 additional berths in FY-84. Continuation at the incremental level annually will close requirement by FY-88
VOLUNTARY EDUCATION	$ 32.0M	• Deliver (Air Force quality) off-duty education programs to all eligible servicemen ashore and afloat.
FAMILY SUPPORT	———	• $30 0 million increment to APF for CAT III MWR, included above
DRUG/ALCOHOL	$ 18.6M	• To extend alcohol abuse identification through NASAP enhancement • To raise performance and efficiency of drug abuse treatment programs including Drug Abuse Safety Action Program
TOTAL	$283.7M	• Commits Navy to a $1.1B QOL Program improvement

(U) TABLE 4.2
ILLUSTRATIVE LIMITED QOL PROGRAM INCREMENTS FOR PARITY WITH AIR FORCE IN SELECTED PROGRAMS (U)

ILLUSTRATIVE INCREMENTS		
LIMITED QOL IMPROVEMENTS AREAS	FISCAL YEAR 1982 INCREMENT	REMARKS
MWR CAT III (CHILD CARE)	$30.0M	• Reduce fees $3.0 million • Upgrade existing facilities • Acquisition of new facilities
VOLUNTARY EDUCATION	$32.0M	• 40 percent APF for operation NCFA • Reduce VEAP • Deliver Off-Duty Education to a Serviceman Ashore and Afloat
TOTAL	$62.0M	• Limited QOL Improvement Directly Related to QOL Survey

extention of the NASAP concept to Drug Abuse. They, do, however, necessitate a significant restructuring of the Voluntary Education Program of the Navy. The limited QOL improvements suggested in Table 4.2 are limited to only those programs that influence family or education issues as were outlined in Section 3.0 of this report.

4.2 IMPLEMENTATION OF QOL PROGRAM CHANGES

(U) Implementation of QOL program initiatives are frequently inhibited by institutional resistance to change. Such resistance may take many forms. Typically the resistance to change is the result of conflicting policy guidance. For example, programming of Unaccompanied Personnel Housing (UPH) for geographic bachelors is permitted in the principal directive for determining requirements and programming construction for UPH.[1] In contrast to the construction policy, a separate policy exists for the assignment of bachelor personnel to available housing units. Geographic bachelors (married personnel who are separated from their families) in CONUS and Hawaii, of E-4 rank with over 2 years service and above, are the last of all military personnel to be permitted occupancy of available UPH. Geographic bachelors in CONUS and Hawaii, who are of E-4 rank with over 2 years service and above, are assigned UPH only on a space available basis, except for military necessity. However, all geographic bachelors who are voluntarily in Alaska and areas outside the United States, and geographic bachelors of lesser rank than E-4 with over 2 years service, are given priority of assignment to UPH over TAD students and other geographic bachelors.[2]

(U) Recent programming guidance[3] restricts programming for the construction of UPH in POM-80, and because the guidance continues unchanged, it restricts programming the construction of UPH in subsequent POMs for geographic bachelors. This latter restriction adopts the UPH assignment and occupancy policy to the UPH programming procedures and prohibits programming the construction of UPH for geographic bachelors in CONUS and Hawaii who are of E-4 rank with over 2 years service or above. Appendix C reports a population of between 8,725 and 20,524 geographic bachelors serving ashore in the Navy. Current policy prohibits the inclusion of UPH construction requirements in MILCON accounts for this polulation. Thus, the principal 1972 directive is not currently applicable. This type of procedural conflict is one of the contributing causes of the serious deficiency in UPH housing capacity in the Navy.

[1]Department of Defense, Bachelor Housing, Determining Requirements and Programming, Construction (U) DOD INST 4165.54 of 3 October 1972, Unclassified

[2]Department of Defense, Adequecy, Assignment, Utilization and Inventory of Bachelor Housing (U) DOD INST 4165.47 of 29 July 1977, Unclassified

[3]Department of Defense, Bachelor Housing in Military Construction FY-80 (U) OASD (MRA&L) Memorandum to the Assistant Secretaries, 30 May 1978, Unclassified

(U) Policy authorization is also provided for the uniform use of APF and NAF for MWR activities of the various services. Within that guidance, the heads of DOD components are specifically charged to:(a) insure that APF and NAF resources are identified in annual budgets and sufficient resources are programmed to implement MWR objectives; (b) exert a continuing effort to reduce the scope and magnitude of APF support.[4]

(U) Within MWR Category III, Military General Welfare and Recreation, over 50 percent of the overall costs of providing Navy programs are labor costs.[5] In the Navy, full-time nonappropriated funded employees represent 91 percent of the total Category III labor force. Comparable percentages for other services are 66 percent in the Air Force and 39 percent in the Army.[6] Each service has approximately 3,000 people in the MWR Category III labor force. Comparatively, the Army has 1,750 civil servants, the Air Force has 1,097 civil servants and the Navy has 298 civil servants in the MWR Category III labor force. Ceiling point restrictions prohibit growth in this segment of the MWR Category III labor force.

4.2.1 Historic attempts to Enhance NAF Accounts From APF Sources

(U) Throughout the decade (1970-1979), the Navy has attempted to improve its APF performance in the Military General Welfare and Recreation area. In both FY-74 and FY-75, the Navy initiated programming action to convert NAF employees to civil service status. Each of these initiatives involved over 3,000 ceiling points. In FY-74, $23.3 million was reprogrammed from other accounts for this initiative. In FY-75, $28.4 million was reprogrammed from other Navy accounts to provide APF for MWR labor. In both instances the initiatives were not supported by DOD and the reprogrammed funds were lost to the Navy. In FY-80 values, an aggregate of $79.0 million was lost through these unfunded initiatives.[7]

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[4]Department of Defense, Funding of Morale, Welfare and Recreation (MWR) Programs, DOD Directive 1330.2 (U), 17 March 1978, Unclassified

[5]Discussions with Mr. D.J. Cosco, Naval Military Personnel Command (NMPC-652C), 31 March 1980

[6]Department of Defense, A Financial and Personnel Profile of Morale, Welfare and Recreation Activities (Demographic Study) (U) (DOD, Management Study Group), August 1977, Unclassified

[7]Bureau of Personnel, Special Servives Division A Report on Appropriated Fund Support in MWR (U) June 1978, Unclassified

(U) From FY-76 through FY-81, a number of minor improvements were made in incrementing MWR Category III with APF. These have included:

- FY-76 $4.1 million for Fleet Motion Picture Program
- FY-77 $0.8 million for minor equipment
- FY-78 $0.2 million for minor equipment
- FY-79 $0.3 million for equipment
- FY-80 $12.5 million for QOL package including; shipboard physical fitness equipment, child care center construction, increase to CINC's recreation programs
- FY-81 $19.5 million for QOL package including; upgrade of open messes, upgrade of child care centers, library support

4.2.2 Current QOL Program Initiatives

(U) The aforementioned initiatives, none of which involved labor charges, were all approved and are reflected in the established budget base. This report suggests, as a minimum, an increment of $30.0 million in APF support to MWR, Military General Welfare and Recreation, Category III, in FY-82. That minimum increment is essential if parity with the Air Force is a goal for the QOL initiatives. Currently, the Navy is programming an increment of $23.0 million in this category for FY-82.[8] However, programming for an increment of more than $23.0 million appears a risk unless some relief is obtained in meeting the cost of labor or services in this area.[9]

(U) In the development of POM-81, the Navy initiated an action to compensate for a limited number (70) of NAF employees with $1.5 million in APF. This initiative was modeled after a successful effort by the Army to reimburse NAF for pay, travel, and associated costs for designated NAF employees. However, the successful Army initiative was limited to specific NAF employees within the constraints of DOD guidance.[10] The Navy initiative deviated slightly from the guidance. Such a deviation was essential to establish a precedence for APF relief to the NAF labor costs. By program decision memorandum, the Assistant Secretary of Defense disapproved the initiative with the following comments:

[8]Special Services Management Bulletin, 1979 Central Non-appropriated Fund Annual Report (U) January 1980, Unclassified

[9]Discussions with Cdr. R. Harms, USN, Head Financial Management Branch, Naval Military Personnel Command, (NMPC-652) 31 March 1980

[10]Department of Defense Funding of Morale, Welfare and Recreation (MWR) Programs, (U) DOD Directive 1330.2 17 March 1978, Unclassified

"If the spaces in question should be funded by appropriated funds, they should not be NAF employees. They would then count against the Navy ceiling. Navy will have to reprogram the ceiling and associated funds to accomodate this requirement".[11]

4.2.3 Policy Alternatives

(U) In essence the Navy lags the other services in providing APF in MWR accounts. One reason for this is the heavy reliance Navy places on NAF employees to operate the MWR activities. The 1976 demographic survey reveals the Army has 10,052 MWR employees, 80 percent of these are NAF employees. The same survey reports the Air Force has 30,500 MWR employees, 95 percent of these are NAF employees. Comparatively, the Navy has 15,510 MWR employees, 97 percent of these are NAF employees. Within the various MWR categories of activity, the Army has 15 percent of its NAF employees in Category III, the Air Force has 7 percent of its NAF employees and the Navy has 21 percent of its NAF employees, providing the same type of services. Within the Navy only 9 percent of the employees providing Military, Welfare and Recreation services are APF civil servants. Because of ceiling point restrictions it is unlikely that a more equitable balance of APF/NAF employment ratios can be developed. Two policy alternatives that might provide relief in this area are:

- Funding for services and functions instead of direct pay of MWR employees through APF accounts
- Reimbursing non-compensative aspects of various NAF employees benefit packages through APF.

In either case, the three unsuccessful attempts (FY-74, FY-75, FY-81) to relieve NAF labor costs, with APF funding, indicate that a clear understanding of such alternatives may be needed and an early concurence developed with the DOD decision makers prior to reprogramming APF to offset MWR labor costs.

(U) Appendix E reports a disparity exists in the Navy child care system. Additionally, Appendix E reveals significant improvements are programmed to enhance the support to Navy families. These improvements include the acquisition of up to 18 Family Support Centers in the near term and the modernization of child care facilities of the Navy across the next decade. No programs now exist to increase the aggregate capacity of Navy child care centers. Thus, the current program will rectify existing facility defeciencies. However, it will not expand the capacity of the system to provide child care services to more children of Navy servicemembers. Additionally, there is no evidence to indicate current programs are being developed to alter the characteristics or quality of child care services delivered to the families of Navy servicemembers.

[11] Deputy Secretary of Defense, Decision Package Set #38, titled "Other Personnel Support, Navy" (U) 15 November 1979. Unclassified

(U) One method of staffing the new family support centers is a combination of military and civil service manning. An estimate of up to 160 civil service ceiling points may be needed to staff the 18 family service centers. This is 54 percent more civil service billets than are currently authorized for MWR Category III. In view of ceiling point restrictions, the extensive imbalance between APF/NAF labor costs in MWR programs, and the current inability of the Navy to offset MWR labor costs from APF sources, it may be prudent to examine alternatives in the manning of the family support and child care facilities. Two policy alternatives that might provide relief in this area are:

- Funding of family support and child care services and functions on a contractual basis from APF accounts

- Expansion of child care capacity beyond the modernization of 68 child care facilities, with home start type techniques.

4.3 SUMMARY

(U) This section provides an illustration of the possible scope and magnitude of QOL program initiatives that might permit the Navy to achieve parity with the Air Force in specific program areas. These program initiatives are focused on the enhancement of several specific programs that have been analysed in this report. Illustrative program fund increments have been identified to describe the scope and magnitude of the QOL initiatives that may be needed to achieve parity with the Air Force. In addition, examples of the programming policy alternatives that may be needed to implement the illustrative programming adjustments were provided.

(U) Parity with the Air Force in the specific QOL programs of the Navy examined in this report is achievable with an aggregate increment of approximately $283 million in FY-82. Such an increment to the basic QOL programs of the Navy in FY-82 may necessitate a total of up to $1.4 billion incremented to QOL programs of the Navy in the program years. Experience with reporgramming Navy funds in the Morale, Welfare, and Recreation area indicates that procedural and policy adjustments may be needed to implement significant improvements to the QOL programs. Most importantly, a clear understanding of the risks and benefits of such adjustments and the concurrence of DOD decision makers might be needed to implement such increments.

APPENDIX A -

COMPARISON OF MORALE, WELFARE, AND RECREATION PROGRAMS IN THE MILITARY SERVICES

APPENDIX A

COMPARISON OF MORALE, WELFARE AND RECREATION PROGRAMS

IN THE MILITARY SERVICES

A1.0 INTRODUCTION

(U) This appendix presents the results of a comparative analysis of Morale, Welfare, and Recreation (MWR) Programs in the Navy, Army and Air Force. The analysis is part of a parity assessment of non-compensation quality of life programs in the military services. Information developed in this parity assessment is summarized in Section 3.0 of the report.

A2.0 DOD POLICY

(U) It is the policy of the Department of Defense (DOD) to fund a well rounded morale, welfare and recreation program. The objective of MWR is to maintain a high level of esprit-de-corps, job proficiency, military effectiveness, educational attainment, and physical well-being. The operation of a MWR program is seen as an aid in retention of personnel by making service with the DOD attractive.[1]

A3.0 DATA SOURCE

(U) Since 1974 the DOD has coordinated the MWR functions of the services. That coordination includes detailed accounting and auditing of MWR activities and functions. Annually, the services review their MWR functions including their funding, and report their performance in the MWR area to the Assistant Secretary of Defense. Data used in this analysis is taken from the historical files of the various service reports to the DOD. The reports collect data related to both the Appropriated Fund (APF) and the Non-appropriated Fund (NAF) expenditures for MWR activities made by each service.[2]

A3.1 Per Capita Comparisons

(U) In this appendix, comparison of MWR expenditures is made on a per capita basis. Per capita expenditures by the Army and Air Force are calculated by dividing MWR expenditures by active duty end-strength. Navy per

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[1] Department of Defense, Funding Morale, Welfare and Recreation (MWR) Programs (U), DOD Directive 1330.2 of 17 March 1978; Unclassified

[2] Department of Defense, Financial Management of Non-Appropriated Funds and Related Resources (U), DOD Instruction 7000.12 of 17 July 1974; Unclassified

capita values are adjusted to reflect the fact that naval personnel at sea are physically removed from the MWR services that are provided at base installations. With the exception of a ship's store and a few other minor items, ships at sea do not provide extensive MWR support. Ship's store expenditures are not included in the Navy MWR reports to DOD. Therefore, for analytical purposes, the Navy active duty end-strength has been reduced by an estimate of the number of Navy personnel actually at sea, in peacetime, less an allowance for the family units of married personnel. Obviously, families do not accompany servicemembers to sea.

A3.2 MWR Categories

(U) The DOD revised its directive for the accounting of MWR functions in March 1978. Eight categories of MWR are used in the current reporting process. These are arranged to include similar types of MWR activities in each category. Table A.1 displays examples of the types of activities included in each MWR category.[3]

(U) The objectives and definitions behind each MWR category are very similar in the Navy, Army and Air Force. In category I, however, there are organizational differences. The Army and Air Force have combined their military exchange system into the Army and Air Force Exchange System (AAFES). The Navy operates the Navy Exchange System (NES), independently.

A4.0 MORALE, WELFARE, AND RECREATION FUNDING

(U) The analysis of MWR programs is based primarily on expenditures committed by the Navy, Army and Air Force. The source of this data is service reports for FY-76, FY-77, and FY-78. Earlier data is aggregated in a noncomparative format. Data for FY-79 will not be available until the end of the second quarter of FY-80.

A4.1 MWR Support

(U) Table A.2 displays the total per capita expenditures (APF plus NAF), in constant FY-80 dollars. As shown in Table A.2, the Navy has spent less, on a per capita basis, than the sister services. Further, over the three year period, the size of the Navy shortfall in relation to the Army and Air Force has increased as shown in Figure A.1. Comparison of the Navy to the Army indicates that the Army's modest lead in FY-76, of $13, or 0.9 percent, more per capita than the Navy, has increased over five fold to $72, or 5.1 percent, more per capita in FY-78. Comparing the Navy to the Air Force indicates a larger shortfall. The Air Force outspent the Navy by $167, or 11.5 percent, on a per capita basis in FY-76 and this increased to $218, or 15.4 percent, per capita in FY-78.

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[3] Department of Defense, Funding of Morale, Welfare and Recreation (MWR) Programs (U), DOD Directive 1330.2 of 17 March 1978; Unclassified

(U) TABLE A.1

DOD MORALE, WELFARE AND RECREATION CATEGORIES (U)

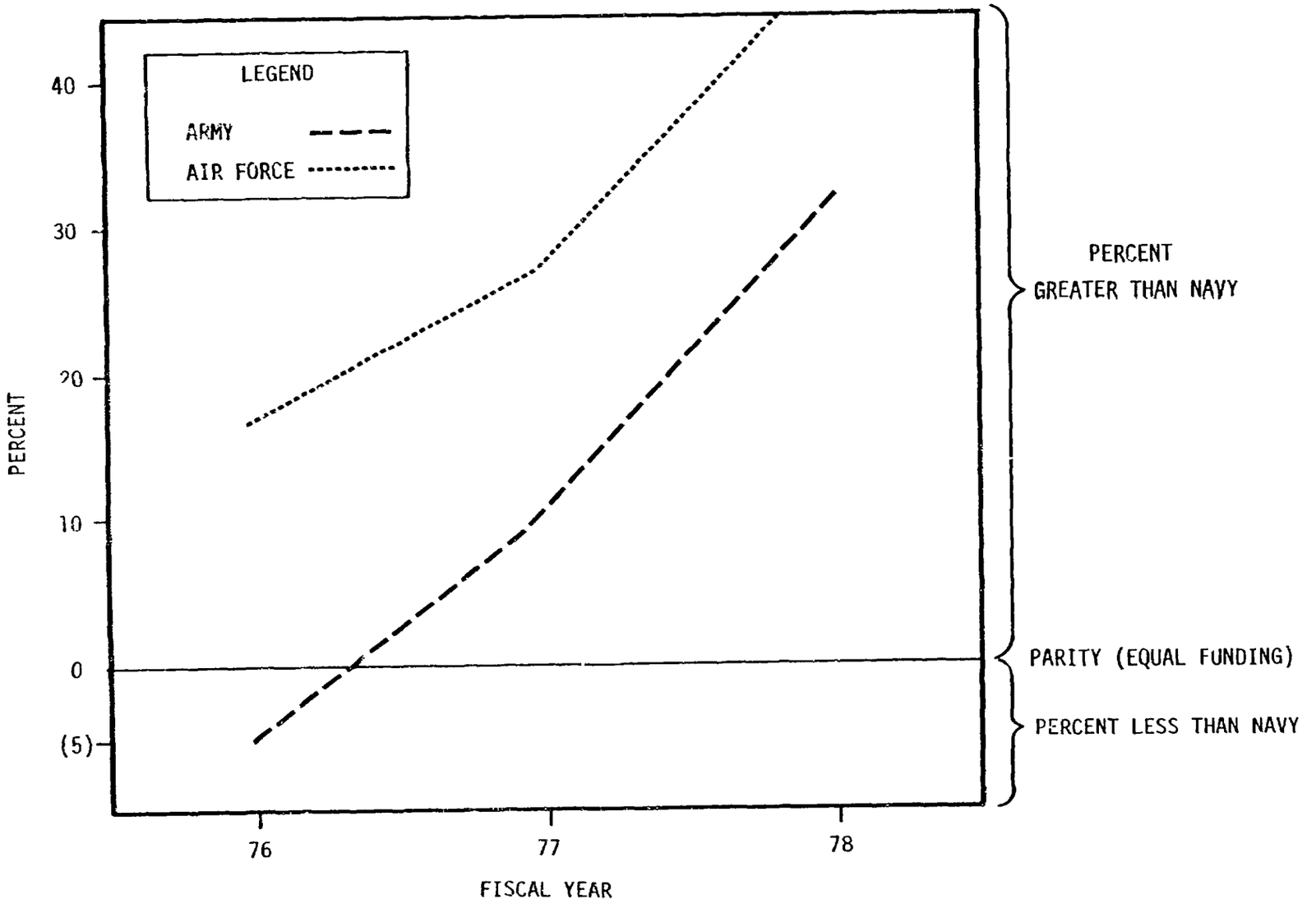
CATEGORY	EXAMPLES OF MORALE, WELFARE, AND RECREATION ACTIVITIES	
I. Armed Services Exchanges	Retail Stores Laundries Dry Cleaning	Bus Service Service Stations
II. Other Resale	Book Store Stars and Stripes	Class VI Stores
III. Military Welfare and Recreation	Welfare Funds Unit Sports Activities Child Care Centers	Recreation Centers Swimming Pools
IV. Civilian Welfare and Recreation	Civilian Welfare and Recreation	
V. Open Messes	COMO CPO CLUB	ACEY/DUCEY CLUB EM CLUB
VI. Other Membership Associations	Aero Club Parachute Clubs	Sailing Clubs Scuba Diving Clubs
VII. Common Support	Headquarters/Major Command/ Installation Common Support	Services Fund
VIII. Supplemental Mission Services	Chaplain Religious Fund In-Flight Services Academic Support Special Learning Center	Temporary Lodging Facilities and Guest Houses

(U) TABLE A.2

TOTAL PER CAPITA EXPENSES FOR MORALE, WELFARE, AND RECREATION (U)

(CONSTANT 1980 $)

Morale, Welfare, and Recreation Category	Fiscal Year 1978			Fiscal Year 1977			Fiscal Year 1976		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
I. Armed Services Exchanges	664	644	644	639	618	618	704	613	613
II. Other Resale	67	72	17	60	77	6	75	78	6
III. Military Welfare and Recreation	346	358	401	276	324	398	285	288	405
IV. Civilian Welfare and Recreation	6	2	2	3	2	2	5	2	2
V. Open Messes	249	255	342	254	240	364	274	254	375
VI. Other Membership Associations	7	28	21	6	28	21	7	28	25
VII. Common Support Service	12	39	118	44	34	134	62	98	111
VIII. Supplemental Mission Services	67	92	91	71	105	87	41	105	83
Total	1,418	1,490	1,636	1,352	1,428	1,630	1,453	1,466	1,620



(U) FIGURE A.1

TOTAL PER CAPITA APPROPRIATED SUPPORT FOR MWR (U)

(U) The totals displayed in Table A.2 include both APF and NAF. In the following two tables (Tables A.3 and A.4), APF and NAF elements of the aggregates shown on Table A.2 are displayed separately. Table A.3 displays per capita APF for each service. As shown in Table A.3, appropriated funding (that is, money sourced from the Federal Treasury) comprises the largest part of the Navy's shortfall in comparison with the Army and Air Force. Figure A.1 shows the magnitude of the current Navy shortfall. In FY-76, the Air Force spent $67, or 17.1 percent, more per capita APF than the Navy. In the two years after FY-76, the Air Force increased this to the point where it was spending $136, or 47.4 percent, more per capita APF than the Navy.

(U) Non-appropriated funds (NAF) are the income that results from sales, dues, fees, and charges collected by MWR activities. With the exception of a few modest gifts, all NAF funds originate from the pockets of servicemembers. The system used in the DOD to account for expenditures of MWR is much more standardized and reliable for NAF than for APF. Therefore, the quality of the NAF data taken from service reports is probably higher than the quality of the APF data. This is reinforced by an inspection of the data in Table A.4 which shows, for the most part, consistent NAF expense data for FY-76 through FY-78. It should be noted that there is one large change in the Navy's Category VII, Common Support Service Non-Appropriated Fund Instrumentalities (NAFI) data. In FY-78, no expenditures were reported in Category VII. The reason for this large decrease is a result of DOD instructions to distribute Common Support Services to the categories in which they were used. Thus, the Navy data is correct. Apparently, the Army and Air Force have not been able to distribute these expenses with the same success as the Navy.[4]

(U) As shown in Figure A.2, in FY-76, the Navy lagged behind both the Army and the Air Force in NAF funding. In FY-77, the Navy surpassed the Army and continues to be bracketed by the Army and Air Force in FY-78. In addition, the Navy appears to be gaining ground on the Air Force in FY-78. In FY-76, the Air Force outspent the Navy by $100, or 8.9 percent, more per capita. This was reduced to $82, or 7.3 percent, more per capita in FY-78.

A4.2 Armed Service Exchanges

(U) Category I, the Armed Services Exchanges, generates the largest amount of MWR funds. In this category, there is an organizational difference between the exchange operations of the services. The Army and Air Force have combined their exchanges into the Army and Air Force Exchange System (AAFES). The Navy operates the Navy Exchange System (NES) independently. In aggregate, the Navy spends slightly more per capita than the Army and Air Force. In FY-78, the total, per capita expense of NES was 3 percent

[4] Per Discussions with Mr. Claire A. Moelk of the Office of the Assistant Secreatary of Defense (MRA&L), 4 February 1980

(U) TABLE A.3

PER CAPITA APPROPRIATED EXPENSES FOR MORALE, WELFARE, AND RECREATION (U)

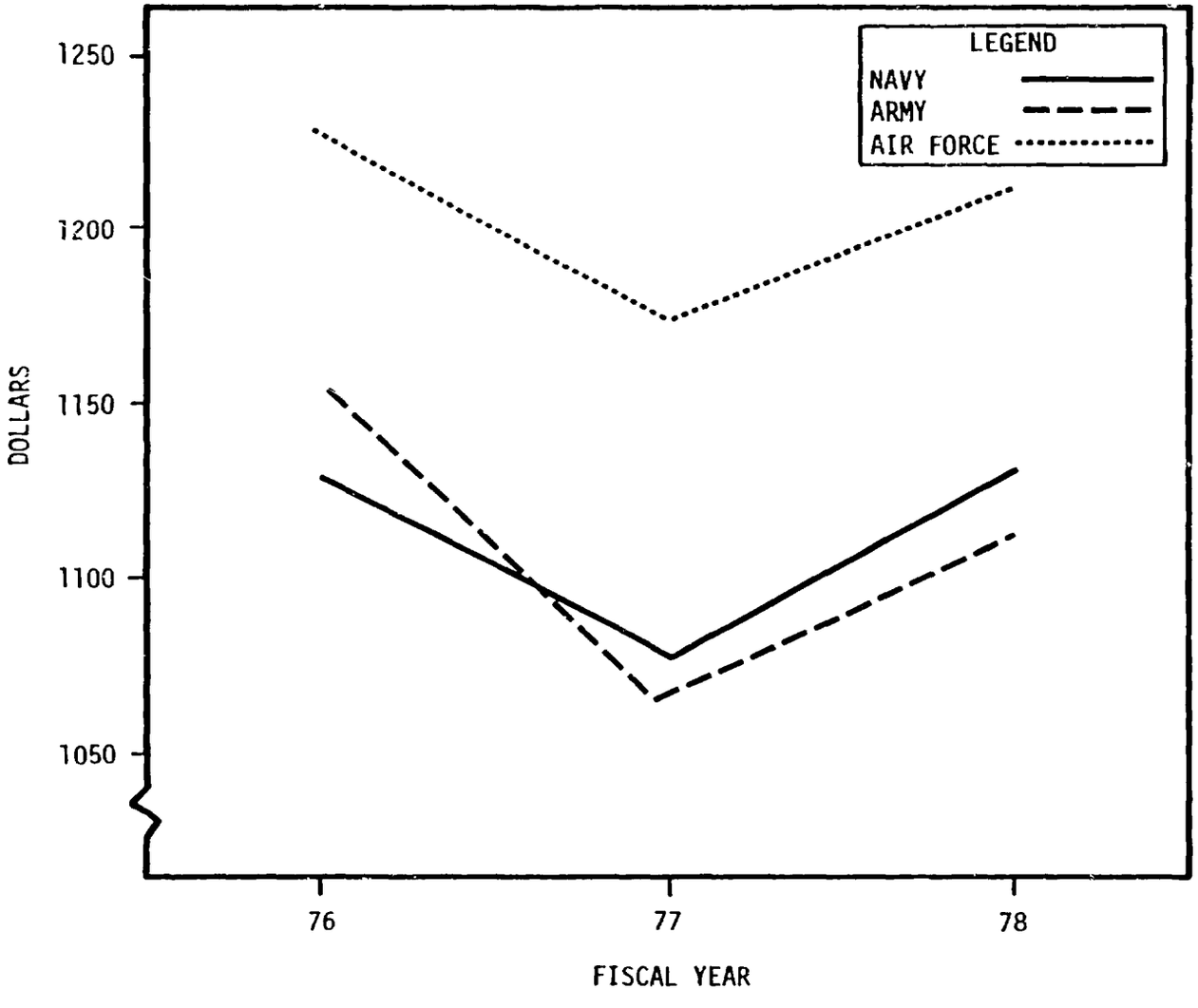
(CONSTANT FY80 $)

Morale, Welfare, and Recreation Category	Fiscal Year 1978			Fiscal Year 1977			Fiscal Year 1976		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
I. Armed Services Exchanges	65	84	84	60	73	73	69	39	39
II. O[illegible]	4	5	2	2	7	1	3	6	1
III. Military [illegible] and Recre[illegible]on	105	212	202	85	198	217	103	178	209
IV. Civilian Welfare and Recreation	1	-	-	1	-	-	1	-	-
V. Open Messes	61	48	61	68	46	76	102	44	66
VI. Other Membership Associations	-	3	2	-	3	2	-	4	2
VII. Common Support Service NAFIs	12	6	72	13	5	85	23	3	74
VIII. Supplemental Mission Services NAFIs	39	22	-	46	32	-	23	35	-
Total	287	380	423	275	364	454	324	309	391

(U) TABLE A.4

PER CAPITA NON-APPRORIATED EXPENSES
FOR MORALE, WELFARE, AND RECREATION
(CONSTANT FY80 $) (U)

Morale, Welfare and Recreation Category	Fiscal Year 1978			Fiscal Year 1977			Fiscal Year 1976		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
I. Armed Services Exchanges	599	560	560	579	545	545	635	574	574
II. Other Resale and Revenue Sharing	63	67	15	58	70	5	72	72	5
III. Military Welfare and Recreation	241	146	199	191	126	181	182	110	196
IV. Civilian Welfare and Recreation	5	2	2	2	2	2	4	2	2
V. Open Messes	188	207	281	186	194	288	172	210	309
VI. Other Membership Associations	7	25	19	6	25	19	7	24	23
VII. Common Support Service NAFIs	-	33	46	31	29	49	39	95	37
VIII. Supplemental Mission Services NAFIs	28	70	91	25	73	87	18	70	83
Total	1,131	1,110	1,213	1,078	1,064	1,176	1,129	1,157	1,229



(U) FIGURE A.2
TOTAL PER CAPITA NON-APPROPRIATED EXPENSES FOR MWR
(CONSTANT FY 80 DOLLARS) (U)

greater than the Army and Air Force expense of AAFES. More importantly, the per capita expense of NAF for NES was 7 percent greater than for AAFES.

(U) Per capita sales provide a greater indication of servicemember benefit in terms of usage. On this basis, the NES and AAFES are approximately equal. Navy sales per capita are at a level of $2,365 per servicemember. Army and Air Force sales per capita are $2,384 or less than 1 percent greater than the Navy sales.[5] Because of the larger size of the AAFES, a question arises as to whether AAFES is realizing relative economies-of-scale; if so, this could result in lower prices. On the contrary, both systems continually work toward price parity through their efforts in the Armed Forces Exchange Coordinating Committee. Thus, the smaller size of the NES compared to the duo-service exchange system does not appear to place it at a disadvantage.[6]

A4.3 Military Welfare and Recreation

(U) Military Welfare and Recreation, Category III, receives the second largest allocation of MWR funding support. As shown in Figure A.3, the Navy has lagged behind the Army and Air Force in total per capita support in Category III. For example, in FY-78, the Air Force outspent the Navy by $55. or 15.9 percent, per capita.

(U) On balance, the Navy has gained ground on the Army and Air Force in total per capita Category III spending. Unfortunately, the bulk of the Navy expenditures has been obtained from non-appropriated funds, which come from the servicemembers. During FY-76 through FY-78, 68 percent of the Navy expenditures were derived from NAF sources. Comparatively, the Army and Air Force NAF source has averaged 39 and 48 percent, respectively.

(U) Figure A.4 displays per capita APF and NAF spending by each of the services in Category III. As shown in Figure A.4, the Navy APF for military welfare and recreation is considerably lower than the Army and the Air Force. In comparison, the Navy leads both the Army and the Air Force in NAF expenditures. This appears to indicate that either the Navy fees and charges to sailors for Category III services are higher than the Army and Air Force, or that a greater number of Navy personnel use their morale and recreation facilities thus yielding greater income. Information on servicemember use of facilities is not available. If charges and fees are higher in the Navy than in the Army and Air Force, this would place sailors at a relative economic disadvantage in comparison with soldiers and airmen, for the same types of welfare and recreation support.

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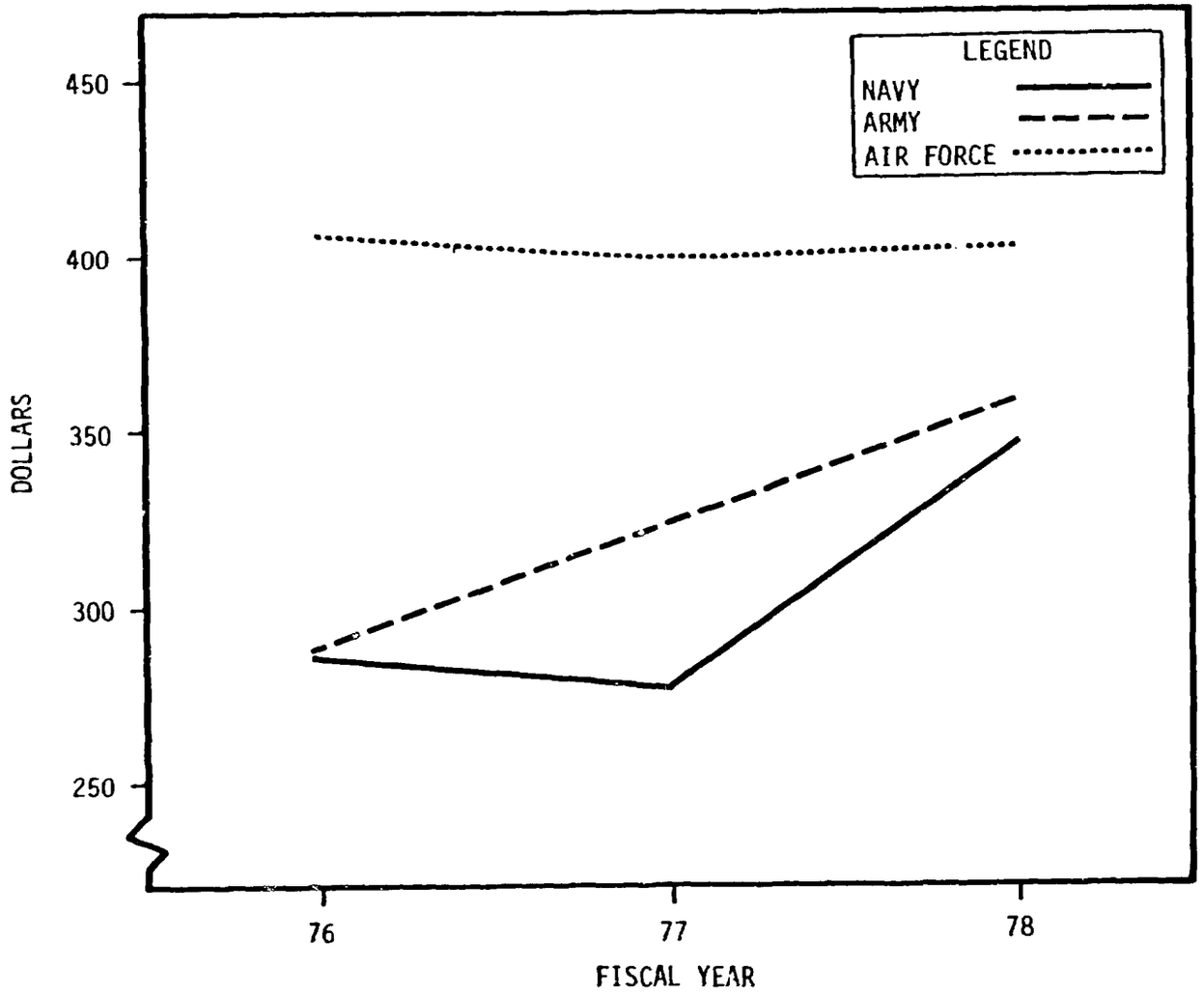
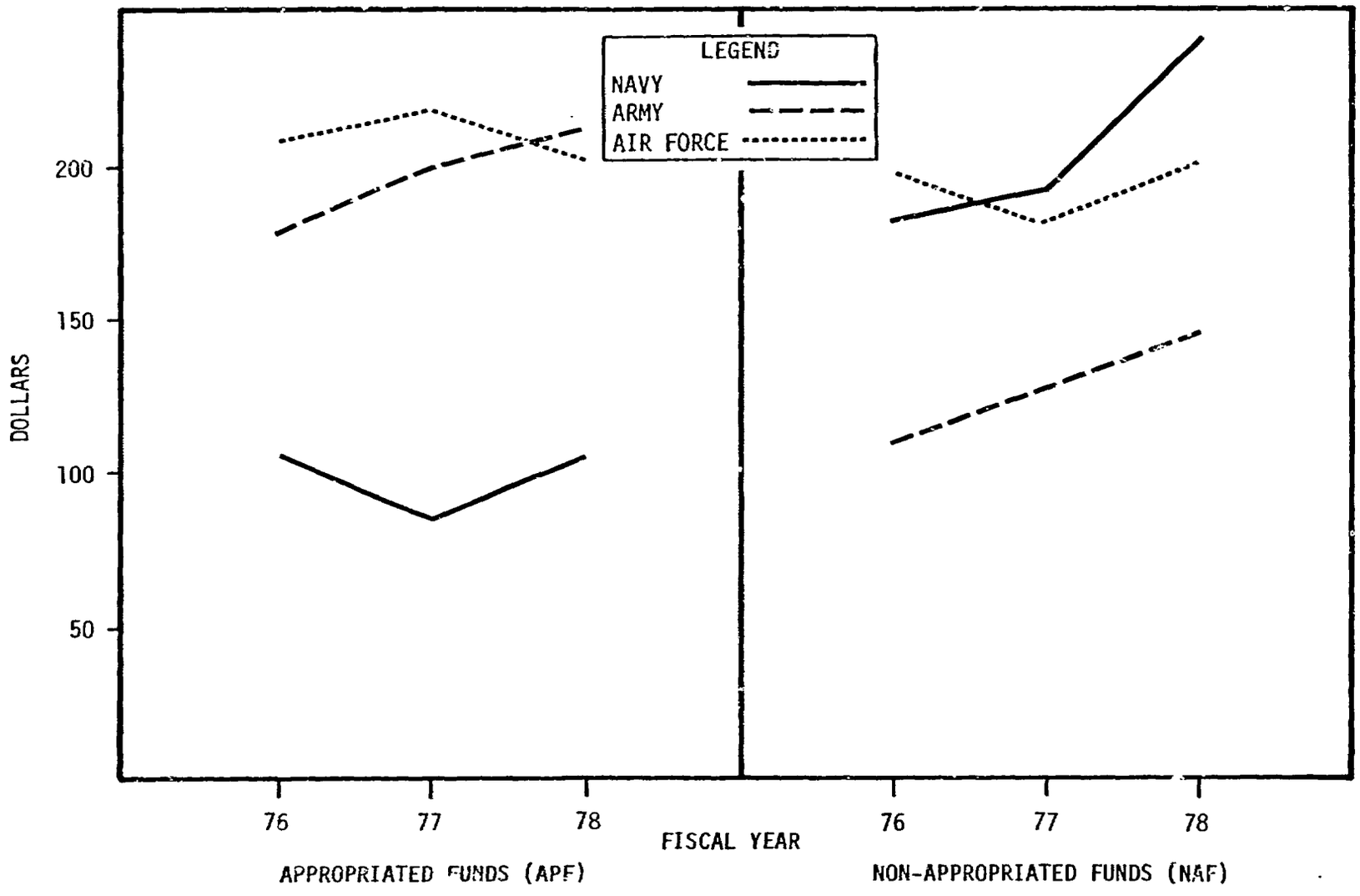
[5] Executive Business Media, Inc., Exchange and Commissary News (U), 15 February 1980

[6] Navy Resale Systems Office, Letter on Setting the Record Straight Concerning Navy Resale and Service Support System's Contribution to the Navy MWR programs, PLDD:6HM; ndb (U), at 30 November 1979; Unclassified



(U) FIGURE A. 3
TOTAL PER CAPITA EXPENDITURES FOR CATEGORY III (U)



(U) FIGURE A.4
PER CAPITA APF AND NAF EXPENDITURES IN CATEGORY III (U)
(MILITARY WELFARE AND RECREATION)

A4.4 Military Clubs

(U) In terms of total per capita expenditure, military clubs (MWR Category V) receives the third largest amount of funding support of the eight categories. As shown in Figure A.5, the Navy was bracketed by the Army and Air Force in per capita expenditures for Category V in FY-76. In FY-78, Navy spending was lower than spending in both the Army and the Air Force. Moreover, in all three years, the Air Force outspent the Navy by an average of $101 annually. The bulk of this deficit has occurred on the NAF side. The principal reason for the deficit can be attributed to the fact that the Army and Air Force charge dues for club membership. The Navy clubs do not have dues-paying memberships with the exception of certain officer clubs.

(U) Military clubs are one of the major components of the DOD's MWR program. The DOD considers clubs to be important to the morale and well-being of servicemembers and believes they contribute to unit identity, esprit-de-corps, and improved readiness. Accordingly, usage of the clubs can be considered as an indicator, if the clubs are successful, of the contribution being made to the QOL of military personnel. Based on a survey conducted by the General Accounting Office (GAO),[7] Navy junior and senior enlisted personnel used military clubs less than their counterparts in the Army, but more than their counterparts in the Air Force. This is illustrated in Figure A.6. In the officer ranks, Navy officers used clubs less than their counterparts in both the Army and the Air Force. It is also significant to note that Navy officers used clubs less than Navy enlisted personnel. In contrast, in the Army and the Air Force officer personnel used the clubs more than enlisted personnel.

A4.4.1 Reason for Club Participation

(U) The GAO survey also asked respondents to indicate the single most important reason for joining or using military clubs. Table A.5 displays the top five responses in this survey for each service. Responses of junior enlisted personnel to the survey indicate that, with the exception of responses from the Air Force juniors, drink prices seem to be the most attractive feature of clubs. This was especially true among junior enlisted personnel of the Navy. Common influencing factors among all the services were: entertainment; one of the few places available; location; and clubs are places to meet new people. About 10 percent of Air Force personnel felt that the check cashing service was the most important reason to use clubs. Check cashing was not a significant influencing factor in the Navy and the Army.

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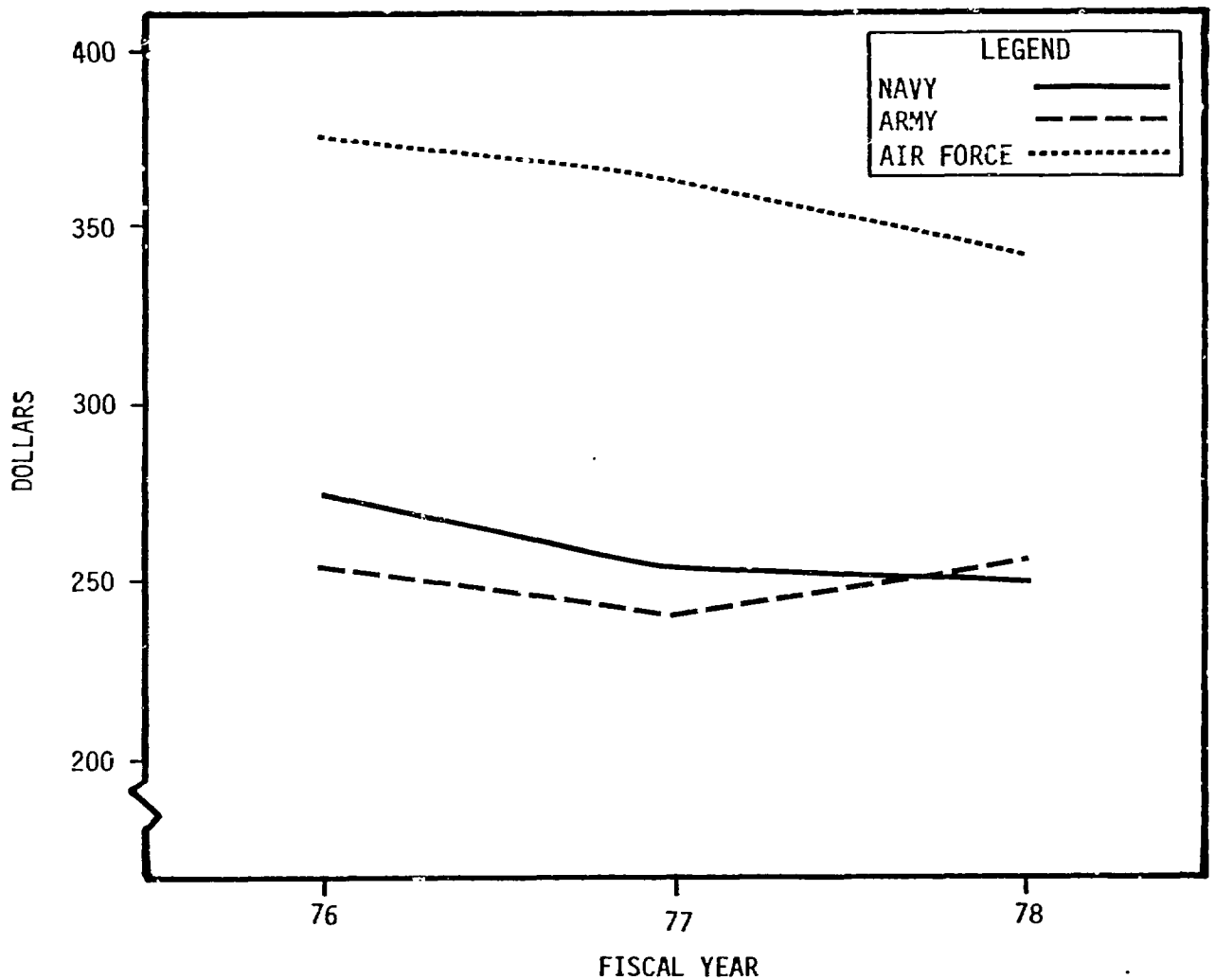
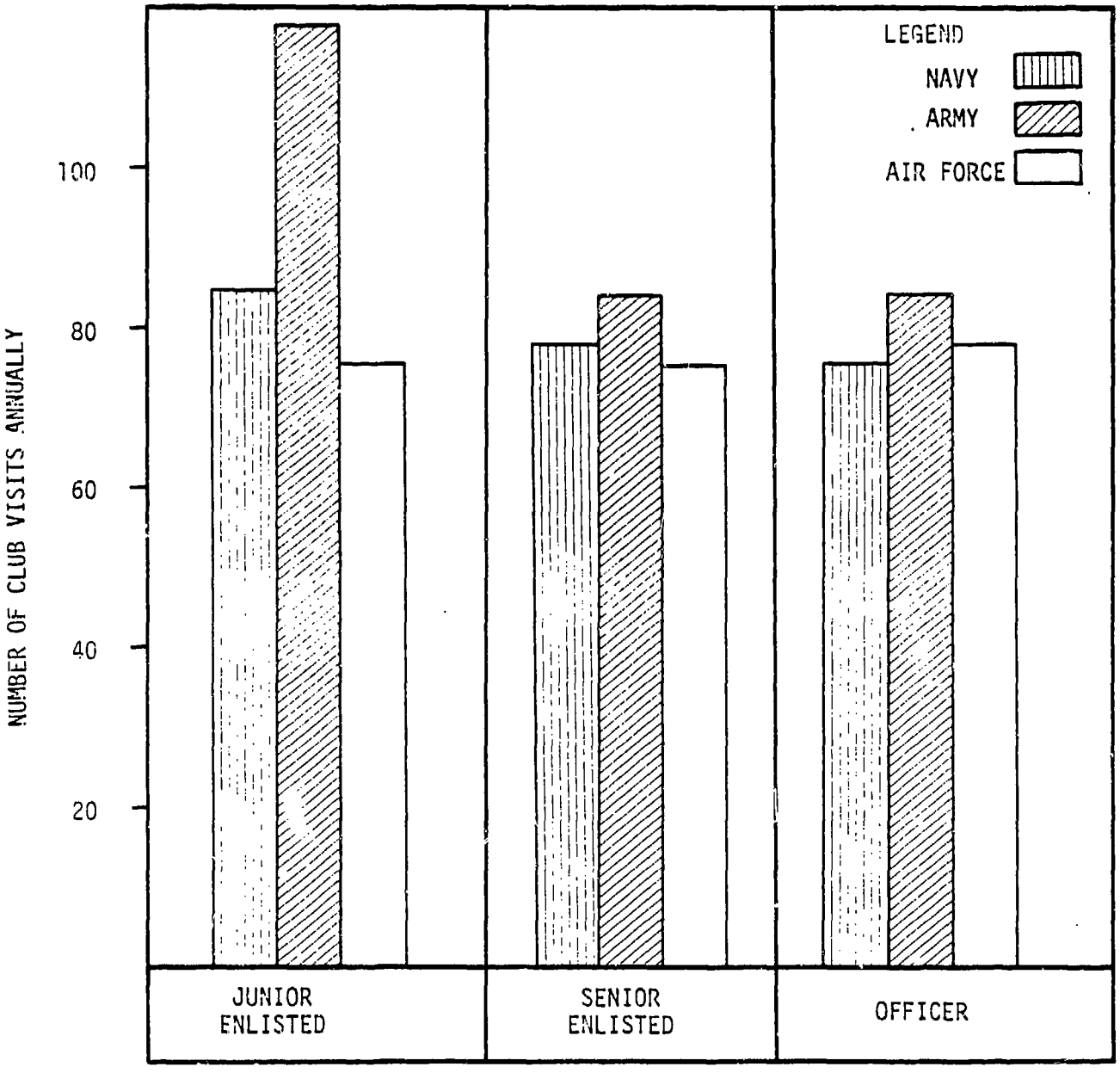
[7] General Accounting Office, Changes Needed in Operating Military Clubs and Alcohol Package Stores, Volume II (U), 23 April 1979, Unclassified



(U) FIGURE A.5

TOTAL PER CAPITA EXPENDITURES FOR CATEGORY V (U)

(OPEN MESSES)



(U) FIGURE A.6
AVERAGE YEARLY USE OF MILITARY CLUBS (U)

TABLE A.5

MOST IMPORTANT REASONS TO JOIN OR USE MILITARY CLUBS (U)
(RESPONSE TO GAO SURVEY AND PERCENT OF RESPONDENTS
INDICATING IMPORTANCE FOR EACH REASON)

CATEGORY OF PERSONNEL	TOP FIVE RESPONSES (PERCENT OF TOTAL)		
	NAVY (%)	ARMY (%)	AIR FORCE (%)
JUNIOR ENLISTED	• DRINK PRICES (25) • ENTERTAINMENT (14) • ONE OF FEW PLACES (12) • LOCATION (8) • PLACE TO MEET NEW PEOPLE (7)	• DRINK PRICES (19) • ENTERTAINMENT (19) • PLACE TO MEET NEW PEOPLE (12) • LOCATION (11) • ONE OF FEW PLACES (8)	• ENTERTAINMENT (19) • ONE OF FEW PLACES (12) • CHECK CASHING (10) • PLACE TO MEET NEW PEOPLE (9) • LOCATION (7)
SENIOR ENLISTED	• SOCIALIZING WITH MILITARY PERSONNEL (22) • DRINK PRICES (15) • FOOD QUALITY (10) • LOCATION (8) • ONE OF FEW PLACES (7)	• ENTERTAINMENT (13) • DRINK PRICES (13) • ONE OF FEW PRICES (11) • LOCATION (10) • SOCIALIZING WITH MILITARY PERSONNEL (9)	• CHECK CASHING (31) • ONE OF FEW PLACES (9) • SOCIALIZING WITH MILITARY PERSONNEL (8) • FOOD PRICES (8) • DRINK PRICES (7)
OFFICER	• SOCIALIZING WITH MILITARY PERSONNEL (18) • LOCATION (13) • DRINK PRICES (11) • FOOD PRICES (11) • FOOD QUALITY (9)	• PRESSURE OR OBLIGATION (29) • CHECK CASHING (13) • SOCIALIZING WITH MILITARY PERSONNEL (13) • ONE OF FEW PLACES (11) • LOCATION (9)	• PRESSURE OR OBLIGATION (35) • SOCIALIZING WITH MILITARY PERSONNEL (19) • CHECK CASHING (14) • LOCATION (6) • ONE OF FEW PLACES (5)

(U) Responses of senior enlisted personnel to the survey indicate that: drink prices, being one of the few places available, and socializing with military personnel attracted senior enlisted personnel in all the services. Drink prices and socializing with military personnel both influenced senior enlisted personnel of the Navy more than they influenced senior enlisted personnel in other services. According to the survey, check cashing is the single most important reason why senior enlisted personnel of the Air Force use the clubs. Entertainment was more influential an interest among senior enlisted personnel of the Army.

(U) By far, the single most important reason to join or use military clubs in the Army and Air Force was pressure or obligation. This was not true among Navy officers. Referring to Figure A.6, Army and Air Force officers use clubs more than Navy officers. However, responses to the survey seem to indicate that Navy officers use clubs more on their own accord. Intuitively, this is the true intent of the MWR. Navy officers indicated that socializing with military personnel was the single most important reason for using military clubs. Again, drink prices also influenced Navy officers more than their counterparts in the Army and Air Force.

A4.4.2 Reason for Club Non-Participation

(U) Based on the GAO survey, Table A.6 displays the five most important reasons given by personnel in each service for not joining or using military clubs. Atmosphere, entertainment, quality of service, and hours of operation were cited consistently by all the services as negative influences. It is interesting to note that junior enlisted personnel in the Navy considered socializing with military personnel to be the most significant reason not to join or use military clubs. This is in contrast with senior Navy enlisted personnel and officers who cited socializing with military personnel as a significant reason for using the clubs. (Table A.5).

(U) Senior enlisted personnel considered: entertainment, atmosphere, quality of service, and location, to be the most negative aspects of clubs. Location was more often cited by Navy personnel, but this could result from the unavailability of clubs to Navy personnel at sea. Also, Navy senior enlisted personnel were less negative toward socializing with their peers.

(U) Officers cited: location, food quality, entertainment, and atmosphere as reasons not to use clubs. Location appears to be a greater deterrent among Navy and Air Force officers. Army officers were less satisfied with food quality.

A4.4.3 Gross Sales Revenue

(U) Another indicator of club usage is gross sales revenue. The military clubs in all services include dues and the distribution of package store profits as part of their normal operating revenue. Thus, a more

TABLE A.6

MOST IMPORTANT REASON NOT TO JOIN OR USE MILITARY CLUBS (U)
(RESPONSE TO GAO SURVEY AND PERCENT OF RESPONDENTS
INDICATING IMPORTANCE FOR EACH REASON)

CATEGORY OF PERSONNEL	TOP FIVE RESPONSES (PERCENT OF TOTAL)		
	NAVY (%)	ARMY (%)	AIR FORCE (%)
JUNIOR ENLISTED	• SOCIALIZING WITH MILITARY PERSONNEL (18) • ATMOSPHERE (14) • ENTERTAINMENT (11) • HOURS OF OPERATION (7)	• ATMOSPHERE (16) • ENTERTAINMENT (15) • QUALITY OF SERVICE (11) • QUALITY OF DRINKS (8) • HOURS OF OPERATION (7)	• ENTERTAINMENT (21) • ATMOSPHERE (15) • SOCIALIZING WITH MILITARY PERSONNEL (10) • QUALITY OF SERVICE (8) • HOURS OF OPERATION (7)
SENIOR ENLISTED	• LOCATION (28) • ENTERTAINMENT (12) • QUALITY OF SERVICE (11) • ATMOSPHERE (8) • VARIETY OF MENU (5)	• ATMOSPHERE (16) • ENTERTAINMENT (15) • QUALITY OF SERVICE (12) • SOCIALIZING WITH MILITARY PERSONNEL (8) • LOCATION (6)	• ENTERTAINMENT (22) • ATMOSPHERE (14) • QUALITY OF SERVICE (8) • LOCATION (7) • SOCIALIZING WITH MILITARY PERSONNEL (6)
OFFICER	• LOCATION (21) • ENTERTAINMENT (11) • ATMOSPHERE (10) • QUALITY OF FOOD (8) • DRINK PRICES (7)	• QUALITY OF FOOD (18) • QUALITY OF SERVICE (13) • LOCATION (12) • ENTERTAINMENT (11) • ATMOSPHERE (7)	• LOCATION (23) • QUALITY OF FOOD (12) • ENTERTAINMENT (11) • QUALITY OF SERVICE (8) • ATMOSPHERE (6)

accurate picture of military club revenue in the services is the gross sales revenue excluding dues and package store distributions. Table A.7 displays these gross revenue elements. On a per capita basis, the revenue of Navy clubs is bracketed by the revenue reported by the Army and Air Force.

(U) While it can be seen from Table A.7 that the military clubs generate a substantial gross revenue, an analysis of net income reveals the need for greater efficiency, economy, and effectiveness in the management and operation of military clubs. Each service reports net income which includes dues and package store profit distributions. When these elements are subtracted from net income, all of the services club systems incurred a net loss. Table A.8 displays the comparative net income of military clubs. Table A.8 indicates that the Navy club system did substantially better than the Army and the Air Force club systems. However, the Navy clubs still lost close to $5 million in FY-77.

A5.0 COMPARISON OF ARMY, NAVY AND AIR FORCE MWR PROGRAMS

(U) Table A.9, repeats Table A.2 and displays the total per capita expenditure (APF plus NAF) for MWR in FY-76 through FY-78. As shown in the table, between FY-76 and FY-78, both the Army and the Air Force have made modest increases in real spending on a per capita basis, as measured in constant 1980 dollars. In contrast, total Navy expenditures for the same time period have declined slightly.

A5.1 Average Per Capita Expenditure

(U) Table A.10 displays the average FY-76 through FY-78 expenditures per capita for the MWR categories in each military service. The average per capita expenditures are displayed for both appropriated and non-appropriated fund sources. All values shown in Table A.10 are in constant FY-80 dollars for comparison purposes. Table A.10 reveals that the Army expended an average of $1460 per service member of MWR. Of that total, $1109, or 76 percent, is derived from non-appropriated fund sources. Comparatively, the Navy expended $1408 per not-at-sea (not underway) servicemember. Of the total $1408 Navy expenditure, $1112, or 79 percent, was derived from non-appropriated sources. During the same period (FY-76-78), the Air Force expended $221 more annually per servicemember than did the Navy. Though the Air Force expended 16 percent more per service member, only 74 percent of the Air Force MWR money is derived from non-appropriated sources.

5.2 Recent Increments To MWR Programs

(U) The source data for comparing MWR programs of the Army, Navy and Air Force and for constructing the averages displayed in Table A.10 are derived from annual reports made by the services to the DOD. Reliable data from those sources is available for FY-76, FY-77, and FY-78. Analysis of that data provides insights into the contributions made by both APF and NAF for MWR programs. NAF estimates for future years are difficult to make. However, because APF for MWR is budgeted by the services, it is possible

TABLE A.7

COMPARATIVE REVENUE OF MILITARY CLUBS EXPRESSED IN GROSS RESOURCE TERMS AND TOTAL PER-CAPITA (U)

(FISCAL YEAR 1977)

MILITARY SERVICE	GROSS REVENUE ELEMENTS (DOLLARS/MILLION)				PER CAPITA CLUB SALES (DOLLARS)
	GROSS SALES REVENUE	MEMBER FEES OR DUES	PACKAGE STORE DISTRIBUTION	GROSS SALES LESS DUES + PACKAGE STORE	
NAVY	97.4	0.9	8.7	87.8	179.20
ARMY	139.7	15.2	11.4	113.1	144.70
AIR FORCE	150.7	23.0	12.9	114.8	201.20

TABLE A.8
COMPARATIVE NET INCOME OF MILITARY CLUBS (U)
(FISCAL YEAR 1977)

MILITARY SERVICE	NET INCOME ELEMENTS (DOLLARS/MILLION)				
	REPORTED NET INCOME	PACKAGE STORE DISTRIBUTION	LOSS BEFORE PACKAGE STORE DISTRIBUTION	DUES	NET LOSS EXCLUDING PACKAGE STORE DISTRIBUTION+DUES
NAVY	4.7	8.7	4.0	0.9	-4.9
ARMY	10.4	11.4	-1.0	15.2	-16.2
AIR FORCE	2.8	12.9	-10.1	23.0	-33.1

(U) TABLE A.9

TOTAL PER CAPITA EXPENSES FOR MORALE, WELFARE, AND RECREATION

(CONSTANT FY-80 $) (U)

Morale, Welfare, and Recreation Category	Fiscal Year 1978			Fiscal Year 1977			Fiscal Year 1976		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
I. Armed Services Exchanges	664	644	644	639	618	618	704	613	613
II. Other Resale	67	72	17	59	77	6	75	78	6
III. Military Welfare and Recreation	346	358	401	276	324	398	285	288	405
IV. Civilian Welfare and Recreation	6	2	2	3	2	2	5	2	2
V. Open Messes	249	255	342	254	240	364	274	254	375
VI. Other Membership Associations	7	28	21	6	28	21	7	28	25
VII. Common Support Service	12	39	118	44	34	134	62	98	111
VIII. Supplemental Mission Services	67	92	91	71	105	87	41	105	83
Total	1,418	1,490	1,636	1,352	1,428	1,630	1,453	1,466	1,620

(U) TABLE A.10
AVERAGE PER CAPITA MWR EXPENDITURE
(CONSTANT FY-80 $) (U)

MORALE, WELFARE, AND RECREATION SERVICES	AVERAGE EXPENDITURE PER CAPITA (FY 76-78)								
	NAVY			ARMY			AIR FORCE		
	APF	NAF	TOTAL	APF	NAF	TOTAL	APF	NAF	TOTAL
RESALE CATEGORIES I & II	68	668	736	71	629	700	67	568	635
RECREATION CATEGORIES III & IV	99	208	307	196	129	325	209	194	403
CLUBS & MEMBERSHIP ASSOCIATIONS CATEGORIES V & VI	77	189	266	49	228	277	70	313	383
OVERHEAD CATEGORY VII	16	23	39	5	52	57	77	44	121
SUPPLEMENTAL SERVICES CATEGORY VIII	36	24	60	30	71	101	-	87	87
TOTAL AVERAGE EXPENDITURE	296	1112	1408	351	1109	1460	423	1206	1629

to approximate the extent that each service intends to support MWR programs by APF alone. Table A.11 displays the budgeted APF for MWR activities of the services by fiscal year. Appropriated funds budgeted by the services for FY-78 through FY-81 are displayed in Table A.11 in constant FY-80 values for comparison purposes. Table A.11 also displays the per capita conversions of the APF for MWR that each service is budgeting in the FY-78 through FY-81 period. The per capita values are displayed in two columns. The first per capita column shows the contribution that each service is making from the Federal Treasury for MWR of its service members. The second per capita column reveals the amount by which the Army or the Air Force has exceeded the Navy for the years indicated. The last column of Table A.11 provides the percentage by which the MWR for each year exceeds the FY-78 budgeted amount. This in effect is the proportional real growth of APF expenditures that each service has budgeted on a per capita basis.

(U) Table A.11 reveals that, in FY-78, the Navy appropriated $140.7 million (stated in FY-80 values) for MWR. This equates to $287 for every sailor who is not at sea. In FY-78, the Army appropriated $293 million (stated in FY-80 values). This amount equates to $380 per soldier. More importantly, the Army was able to provide $93 more per soldier than the Navy was able to provide for each inport and ashore sailor. In FY-78, the Air Force exceeded the Army by 11 percent in APF for MWR support per airman.

(U) Innumerable shifts have occurred during the four year period (FY-78 through FY-81). For example the Navy has incremented APF for MWR programs by $19.5 million in FY-81. This increment provides for the upgrade of open-mess, food services and the upgrade of existing child care centers to meet fire and safety standards. APF also has been provided by the Navy for recreation facility special projects and library support. Initially, some of this increment was earmarked to reimburse NAF salary costs with APF. At present, this latter initiative, which was intended to permit the reduction of charges for recreation services, [8] is no longer operative.

(U) Returning to Table A.11, which shows APF budget projections for FY-78 through FY-81, the Navy is planning to appropriate $139.1 million for MWR in FY-81. This equates to $132.0 million in constant FY-80 values. Comparable APF for the Army and the Air Force are $397.2 million and $217.6 million in FY-81. On a per capita basis, the Navy has decreased APF for MWR since FY-78 by 7 percent. The Army has increased APF for MWR by 35 percent. The Air Force lags the Army and the Navy in budgeting increasing amounts of APF for MWR. However, from a parity standpoint, the Navy continues to lag the other two services in this area by substantial amounts. In FY-81, the Army will exceed the Navy per capita allocation of APF for MWR by $243. Thus, in FY-81 the Army will exceed the Navy by

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[8] Office of the Chief of Naval Operations, Funding of Morale, Welfare, and Recreation (MWR) Programs and Family Support Centers for POM-81, (U) OP-12 Memo of 6 April 1979; Unclassified

(U) TABLE A.11

BUDGETED APF FOR MORALE, WELFARE AND RECREATION ACTIVITIES
OF THE NAVY, ARMY AND AIR FORCE (U)

SERVICE	FISCAL YEAR	BUDGETED APPROPRIATED FUNDS FOR MWR ACTIVITIES*				
		APF(DOLLARS MILLION)		PER CAPITA (FY-80 DOLLARS)		PERCENT GROWTH SINCE FY-78
		ACTUAL-YR DOLLARS	CONSTANT FY-80 DOLLARS	MWR/APF	ANNUAL AMOUNT GREATER THAN NAVY	
NAVY	FY-78	122.7	140.7	287	-	-
	FY-79	90.1	96.0	200	-	-30
	FY-80	103.3	103.3	212	-	-26
	FY-81	139.1	132.0	268	-	-7
ARMY	FY-78	255.4	293.0	380	93	-
	FY-79	268.4	285.9	375	175	-1
	FY-80	288.6	288.6	373	161	-1
	FY-81	418.5	397.2	511	243	+35
AIR FORCE	FY-78	210.0	240.9	423	136	-
	FY-79	227.4	242.2	431	231	+2
	FY-80	266.7	266.7	477	265	+13
	FY-81	229.3	217.6	386	118	-9

*SOURCES: (1) FY-78 SERVICE REPORTS TO DOD IN RESPONSE TO DOD INST. 7000.12
(2) FY-79, FY-80; APPROPRIATED FUND SUPPORT OF MORALE, WELFARE AND RECREATION ACTIVITIES (FY-1980 PRESIDENT'S BUDGET), (U) 22 MARCH 1979 UNCLASSIFIED
(3) FY-81; PHONE CONVERSATION MR. M. CLEVELAND OASD (MRA&L), 20 MARCH 1980

91 percent on a per capita basis. Also in FY-81, the Air Force will exceed the Navy per capita allocation of APF for MWR by $118. Thus, the Air Force will exceed the Navy by 44 percent.

A6.0 PARITY ASSESSMENT

(U) If parity is defined as equal per capita expenditures for MWR, then the fiscal resources required to reach parity can be estimated from the differences in per capita expenditures. Because the operation of MWR programs is heavily dependent on NAF, (74 percent in the Air Force, 76 percent in the Army, and 79 percent in the Navy) both NAF and APF must be considered in the parity analysis. Estimates of future NAF funds are difficult to project accurately. Averages of the APF/NAF balance over the FY-76 through FY-78 period provide a means of defining equal per capita expenditures for MWR. Table A.12 displays the amounts by which the Navy's per capita MWR expenditures differed from parity during the FY-76 through FY-78 period.

(U) In Table A.12, the eight MWR categories used to standardize the service reports to the DOD are compressed into related fields. Thus, both Category I, Armed Forces Exchanges, and Category II, Other Resale Activities, are combined into a single field, entitled Resale. This compression permits concentration on major issues of difference between the services. Negative (bracketed) values in Table A.12 indicate Navy superiority in per capita expenditures. Conversely, positive values indicate Navy shortfalls in per capita expenditures. For example, in the second field, Recreation (a combination of both military and civilian welfare and recreation funds) the Navy would have had to increase per capita APF by $97 on the average to achieve parity with the Army based on the FY-76 through FY-78 average. At the same time the Navy needed to reduce fees and charges (NAF) for such things as child-care centers by an average of $79 per capita to achieve parity with the Army.

A6.1 Open Messes

(U) Table A.12 also indicates other specific areas where the Navy could concentrate funding to achieve parity. As shown in Table A.12, clubs and membership associations (categories V and VI) contributed significantly to the Navy shortfall. Specifically, the shortfall occurred from non-appropriated support. As mentioned previously and displayed on Table A.8, the clubs of the military services operate at a loss. Both the Army and the Air Force were able to distribute larger amounts of package store profits to offset operating losses. In FY-77, Army distributed $11.4 million of package store profits to military clubs. The Air Force, a much smaller service, distributed even a larger amount, $12.9 million. The Navy did not do as well in offsetting club losses with package store profits. The Navy distributed only $8.7 million, 67 percent as much as the Air Force, from package store profits to offset club operating losses. This may be a result of the Josephous Daniels rules for consumption of alcoholic beverages at sea coupled with a much greater awareness in the

(U) TABLE A.12

CHANGES IN NAVY PER CAPITA EXPENDITURES TO ACHIEVE PARITY WITH THE ARMY AND THE AIR FORCE BASED ON AVERAGE OF FY-76 THROUGH FY-78 EXPENDITURES (CONSTANT FY-80 $)

FIELDS OF MWR CATEGORIES	DOLLARS PER CAPITA TO ACHIEVE PARITY					
	WITH THE ARMY			WITH THE AIR FORCE		
	APF	NAF	TOTAL	APF	NAF	TOTAL
RESALE CATEGORIES I & II	3	(39)	(36)	(1)	(100)	(101)
RECREATION CATEGORIES III & IV	97	(79)	18	110	(14)	96
CLUBS AND ASSOCIATIONS CATEGORIES V & VI	(28)	39	11	(7)	124	117
OVERHEAD CATEGORY VII	(11)	29	18	61	21	82
SUPPLEMENTAL SERVICES CATEGORY VIII	(6)	47	41	(36)	63	27
TOTAL MWR PARITY	55	(3)	52	127	94	221

Navy relative to the disease of alcoholism. Appendix F of this report provides an analysis of the comparative performance of the Alcohol and Drug Abuse programs of the Army, Navy and Air Force. From that analysis, it is interesting to note that the Air Force is spending 326% more per successful recovered alcoholic than the Navy. All alcoholism treatment funds come from appropriated sources.

(U) Table A.8 also reveals the extent that military clubs of the various services depend on dues and fees from members to offset operating losses. The Navy obtained $0.9M in FY-77 from overseas slot machine operations to offset a $4.9 million annual deficit in club operations. Traditionally, naval club and open mess fees are minimal or non-existent. This is partially explained by the mobility of naval service life in peacetime as opposed to the relatively static, geographic positioning of the Army and the Air Force personnel in garrisons. In FY-77, the Army compensated club operating losses by $15.2 million obtained from membership fees and slot machine operations. The Air Force in the same year compensated club operating losses by $23.0 million, from the same NAF sources.

(U) Possibly, the Navy could develop a non-geographic, Navy-wide system for club dues and fees. If such a system were developed, analysis of the values shown in Table A.12 indicates parity with the Air Force would have involved an additional out of pocket expenditure of $257 per naval officer or a monthly fee of $21, and an annual average of $89 per enlisted servicemember or a monthly fee, for sailors, of $7.50. Though not inequitable, this in itself could be perceived as a dissatisfier on the part of naval personnel. Recent indications of the intent of the Congress[9] reveals action may soon be taken to eliminate club fees and membership dues for all military servicemembers. One possible congressional action could be to provide either additional subsistance allowances or equivalent compensation for all servicemembers participating in open messes and specialized clubs.

(U) Alternatively, parity with the Air Force in clubs and membership associations could have been achieved by an additional expenditure of $117 per servicemember for a total incremental outlay of $61.8 million annually in APF. Under this method, parity with the Army could have been achieved by an additional expenditure of $11 per servicemember or a total incremental outlay of $5.8 million annually in APF support for open messes of the Navy.

A6.2 Recreation and Welfare

(U) Recreation and Welfare, Categories III and IV, is the main thrust of the MWR programs. Figure A.7 displays the types of military welfare and recreation activities funded within these categories. As shown in Table A.12, the Navy shortfall in recreation and welfare funding occurred on the APF side. In this area, the Navy lagged behind the Army and the Air Force by an average of $18 and $96 per capita, respectively. The disparity is

[9] Discussions with Mr. Clare A. Moelk of the Office of the Assistant Secretary of Defense (MRA&L) 10 March 1980

MILITARY GENERAL WELFARE AND RECREATION ACTIVITIES *

GROUP A	GROUP B	GROUP C
• LIBRARIES	• ARTS & CRAFTS	• BOWLING (>6 LANES)
• UNIT ATHLETICS	• AUTOMOTIVE SHOPS	• PAID MOVIES (BASE)
• INTRAMURAL ATHLETICS	• ENTERTAINMENT (MUSIC/THEATER)	• BINGO
• RECREATION CENTERS	• OUTDOOR RECREATION	• GOLF
• SHIPBOARD MOVIES	• SWIMMING POOLS	• PRO SHOPS
• PROFESSIONAL ENTERTAINMENT (OVERSEAS)	• YOUTH ACTIVITIES	• SKATING RINKS
• UNIT RECREATION PROGRAMS	• COMPETITIVE ATHLETICS	• SNACK BARS
	• CHILD CARE CENTERS	• SKEET/TRAP RANGES
	• STABLES	• CABINS/COTTAGES
	• MARINAS/BOATING	
	• BOWLING (<6 LANES)	

* The funding APF or NAF varies for utilities, rents, janitorial costs and the use of Government owned vehicles across the different groups. DOD Directive 1330.2, 17 March 1978

(U) FIGURE A. 7
TYPES OF MILITARY WELFARE/RECREATION ACTIVITIES (U)

further increased when one considers that in FY-78 the Navy distributed its NAF overhead in Category VII back to the other MWR activity categories and Category III (Military General Welfare and Recreation) received the majority of this distribution. Thus, a more accurate picture of recreation and welfare spending in Category III includes NAF Category VII expenditures. This assumption is somewhat weakened by the fact that Army and Air Force reports to the DOD are suspected to contain some double counting.[10] More about this will be known when the FY-79 reports are analysed by DOD. Presuming that the Army and Air Force reports are not significantly inaccurate, the Navy shortfall to the Army increases by $29 per capita to $47. Parity with the Army would have required an additional APF expenditure of $24.8 million, annually. The Navy shortfall relative to the Air Force would increase by $21 per capita to $140. This translates into an additional APF expenditure of $75.0 million annually to have been at parity with the Air Force in the Welfare and Recreation Category III and IV area.

A6.3 Annual Average Increase to MWR Accounts for Parity

(U) From Table A.12 it is apparent the Navy lagged behind the other services in providing for Morale, Welfare, and Recreation. On a total average per capita basis, the Navy was deficient by $52 compared to the Army and by $221 compared to the Air Force. Achievement of parity with the Army would have involved an aggregate increase from APF sources of $56 per capita and a corresponding decrease of $4 per capita from NAF sources. A number of factors relating to the Air Force MWR reports to DOD are suspect. For example, Air Force resale package store profits far exceed the performance of the other services. This clouds the data for both resale categories and the Club and Association categories. Additionally, double counting in category VII could be more extensive in the Air Force than in the Army. Clarity in this area will develop with the analysis of the yet to be assembled FY-79 reports. For the purpose of this analysis, it is clear that increasing charges to servicemembers in order to increase NAF to the levels indicated in the Air Force data may not be the most efficient method of improving the perceived value of MWR support to servicemembers and may intensify dissatisfaction from the standpoint of retention. Nevertheless, to reach parity with the Air Force in MWR services the Navy needed to increase aggregate support in the MWR area by $221 per capita.

(U) Table A.13 provides an approximation of the average annual increase in MWR programs the Navy would have had to make to have achieved parity with the Army or with the Air Force based on the FY-76 through FY-78 average. For simplicity of display, the Clubs and Associations field (categories V and VI) and the Welfare field (categories III and V) are

[10] Discussions with Mr. Clare A Moelk of the Office of the Assistant Secretary of Defense (MRA&L), 11 March 1980

(U) TABLE A.13

ANNUAL INCREASE IN SUPPORT TO MWR ACCOUNTS
TO ATTAIN PARITY WITH OTHER SERVICES (U)

SPECIFIC MWR FIELDS	WITH ARMY	WITH AIR FORCE
CLUBS & ASSOCIATIONS	$ 5.4m	$ 57.1m
SERVICE MEMBERS WELFARE	$ 8.8m	$ 46.9m
OTHER	$ 11.2m	$ 3.9m
TOTAL	$25.4m	$ 107.9m

shown separately in Table A.13. All of the other fields of MWR categories are aggregated under the title "Other". If the Navy intended to achieve parity with the Army in support of MWR activities, it needed an annual average increment of $25.4M. This presumes that parity could have been achieved with the Army and that fees for MWR services could have been reduced slightly. Of that $25.4 million, $5.4 million was needed to support Clubs and Associations; $8.8 million was needed to increment Category III, the Military General Welfare category; and $11.2 million was needed to attain a balance between APF and NAF equivalent to that of the Army in the other categories of MWR. To reach parity with the Air Force would have required an annual average increment of $107.9 million with distribution to the various fields of MWR as shown on Table A.13.

A7.0 BUDGETING FOR PARITY IN MWR

(U) Table A.11 reveals that the Army and the Air Force have made significant increases to APF for MWR in the period FY-78 through FY-81. The Navy has decreased its APF support by close to 7 percent on a constant-value, per capita basis. The Army has increased its APF support by 35 percent and the Air Force has slightly increased its APF support in both FY-79 and FY-80. The increments proposed to reach parity in MWR with the Army or the Air Force displayed on Table A.13 are expressed in constant FY-80 values based on the average APF and NAF balances for the period FY-76 to FY-78. In the discussion that follows, for budget estimating purposes, all calculations are rooted to the single year FY-78. That year is significant because definitive data on APF and NAF balances are available and because, as shown in Table A.11, growth in APF for MWR in each service is calculated from the FY-78 actual budget base.

A7.1 Estimate of Potential Adjustments to APF/NAF Balance

(U) Table A.14 repeats the format of Table A.10 and displays the actual total per capita MWR expenditures during FY-78. Amounts shown in Table A.14 are expressed in constant FY-80 values. Comparing Table A.14 with the three year averages displayed in Table A.10 reveals that the Navy is still underfunding APF in FY-78. Table A.15 displays an estimate of the potential adjustment that could occur to the various service APF and NAF balances given the budgeted adjustments to APF funding in the services. It is important to note that the estimates displayed in Table A.15 assume that budgeted increases in APF are used to offset user fees and charges, thereby reducing NAF on a dollar for dollar basis. Hence, total MWR funding (APF plus NAF) is held constant at its FY-78 level for each service. Obviously, to the extent that APF is not used to reduce NAF the totals will increase.

(U) TABLE A.14
ACTUAL PER CAPITA MWR EXPENDITURE IN FY-78
(CONSTANT 1980 DOLLARS)(U)

MORALE, WELFARE, AND RECREATION SERVICES	EXPENDITURE PER CAPITA								
	NAVY			ARMY			AIR FORCE		
	APF	NAF	TOTAL	APF	NAF	TOTAL	APF	NAF	TOTAL
RESALE CATEGORIES I & II	69	662	731	89	627	716	86	575	661
RECREATION CATEGORIES III & IV	106	246	352	212	148	360	202	201	403
CLUBS & MEMBERSHIP ASSOCIATIONS CATEGORIES V & VI	61	195	256	51	232	283	63	300	363
OVERHEAD CATEGORY VII	12	0	12	6	33	39	72	46	118
SUPPLEMENTAL SERVICES CATEGORY VIII	39	28	67	22	70	92	—	91	91
TOTAL AVERAGE EXPENDITURE	287	1131	1418	380	1110	1490	423	1213	1636

(U) TABLE A.15

ESTIMATE OF POTENTIAL ADJUSTMENT THAT MAY OCCUR TO APF AND NAF BALANCE WITH RECENT INCREMENTS TO APF IN EACH SERVICE (U)

SERVICE	PER CAPITA IN FY-80 DOLLARS			
	TOTAL MWR FUNDING IN FY-78	TOTAL APF FUNDING IN FY-81	ESTIMATED NAF IN FY-81	PERCENT OF POTENTIAL CHANGE
NAVY	1418	268	1150	<1
ARMY	1490	511	979	-17
AIR FORCE	1636	386	1250	0

A7.2 Budgeting for Parity in FY-82

(U) If parity is defined as equal per capita expenditures for MWR, then the Navy needs to match the total per capita experience of either the Army or the Air Force. Thus, to reach parity with the Army, the Navy needs to increase the per capita outlay (from all sources) from $1418 per servicemember to $1490 per servicemember. To reach parity with the Air Force will necessitate an increase from $1418 per servicemember to $1636 per servicemember. Considering that the Navy is close to parity in NAF accounts (Table A.14), then all increments need to be in the form of increased APF. Table A.16 displays the magnitude of the increased APF that needs to be budgeted in FY-82 to reach parity with either the Army or the Air Force.

(U) TABLE A.16

INCREMENTS TO FY-82 BUDGET OVER FY-81 APF FOR MWR OF THE NAVY TO ACHIEVE PARITY WITH THE ARMY OR THE AIR FORCE (U)

PARITY WITH OTHER SERVICE	PER CAPITA INCREASE IN APF (DOLLARS)	TOTAL INCREMENT	
		FY-80 VALUES (DOLLARS MILLION)	FY-82 VALUES (DOLLARS MILLION)
PARITY WITH ARMY	$72	35.6	39.4
PARITY WITH AIR FORCE	$218	107.6	119.1

APPENDIX B

COMPARISON OF FAMILY HOUSING PROGRAMS IN THE MILITARY SERVICES

APPENDIX B

COMPARISON OF FAMILY HOUSING PROGRAMS IN THE MILITARY SERVICES

B1.0 INTRODUCTION

(U) Presented in this appendix is an analysis of housing for military families. Private housing, as well as housing provided by the military services, is examined. DOD requirements and standards of habitability are outlined. Operation and maintenance costs, as well as investments in family housing, are analyzed.

B2.0 BACKGROUND

(U) In compliance with guidance provided by DOD[1], the Department of the Navy conducts an annual survey to determine family housing requirements. The findings of the survey are used to effectively manage the DOD Family Housing Program, and also to provide input for the Five Year Defense Program (FYDP).

(U) The requirements resulting from the survey are to be applied by the military departments and defense agencies when preparing proposals for a) new construction of housing; b) improvements to existing housing; c) leasing of privately-owned housing; d) provision of off-base rental housing; and other similar requests.

(U) The same instruction delineates the standards that military family housing must meet in order to be considered "suitable". Housing is considered "unsuitable" if any of the following conditions prevail: utilities or equipment are inadequate, the structural condition is poor, cost is excessive, the distance from the installation is unreasonable, the number of bedrooms is too few (to accommodate children), or the surrounding conditions are unsuitable.

B3.0 ANALYSIS

B3.1 Military Housing

(U) Figure B.1 illustrates the percentage of permanent change of station (PCS) families in military housing who were suitably housed; fiscal years 1976 through 1979 are represented. As shown, 88 percent of the Navy families moving into military quarters in 1976 were suitably housed. Comparatively, 92 percent of Air Force families had suitable

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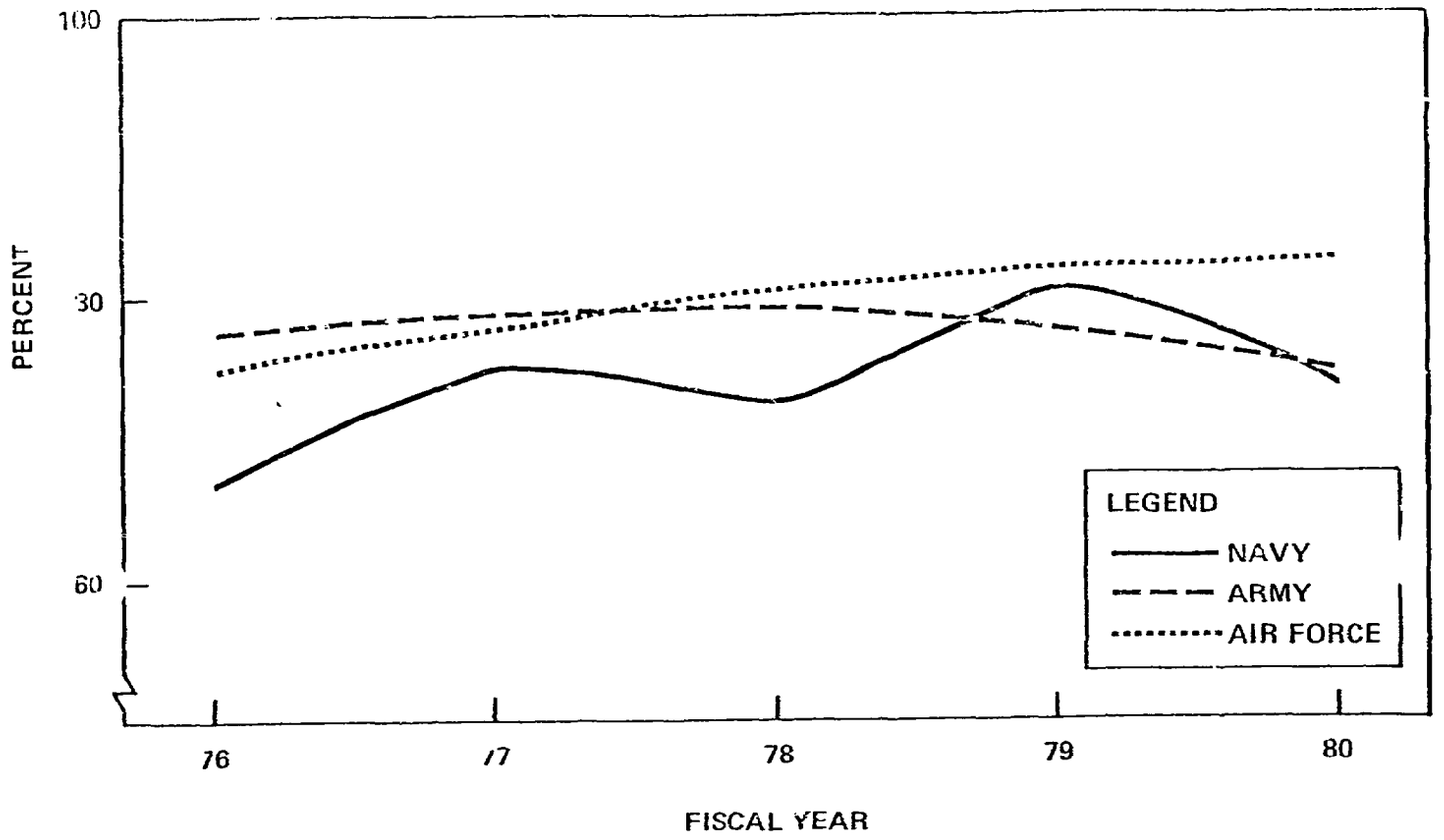
[1] Department of Defense, Determination of Family Housing Requirements (U) DOD Instruction 4165-45, of 19 January 1972; Unclassified



(U) FIGURE B.1

PERCENT OF PCS FAMILIES IN PRIVATE HOUSING:
SUITABLY HOUSED (U)

housing. In the same year, a slightly larger percentage of Army families are reported as suitably housed in military quarters. Throughout the period, survey results indicate that a larger proportion of Navy families were housed in unsuitable quarters.

B3.2 Private Housing

(U) Turning to private housing concerns, Figure B.2 displays the percentage of families suitably housed in private quarters. At the beginning of FY-76, 67 percent of Navy families moving into private housing were living under suitable conditions. While the trend for this proportion generally rose to its highest percentage in FY-79 (with a small decline in FY-78), more recent surveys indicate that the percentage of Navy families in suitable private housing is on the decline.

B3.3 Operating Costs

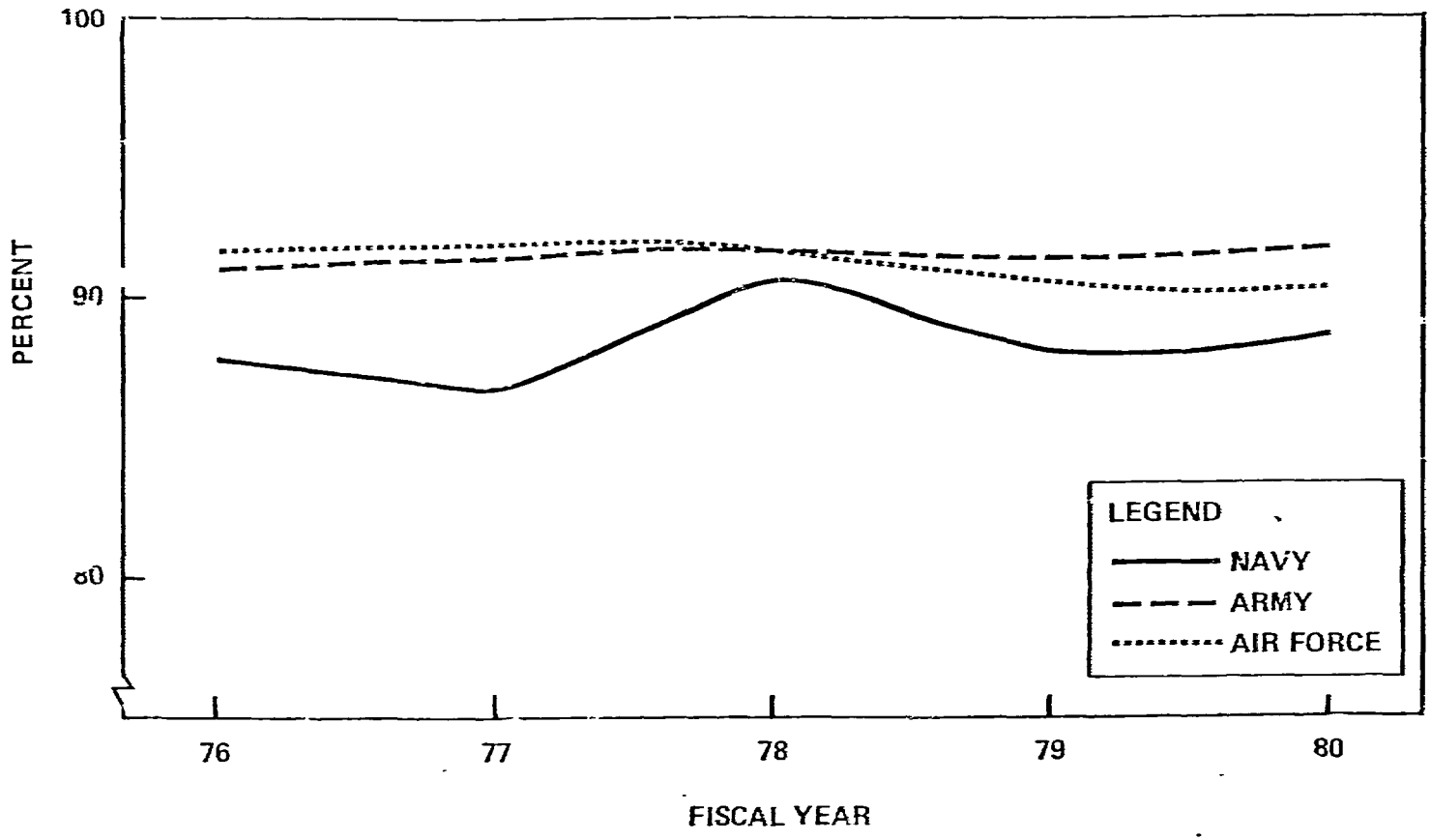
(U) The operating costs for family housing include items such as utility payments, repair, and maintenance, but does not include any investments in new housing or modernization. Shown in Figure B.3 is the per capita dollar expenditures that were made or that are programmed for all operating costs on armed forces family housing, FY-75 through FY-85. Although large differences existed in FY-75, by FY-79 the expenditures have taken on constant relative proportions that are projected to continue through FY-85. The Navy's expenditures for operating costs have been consistently lower than the Air Force and the Army; this policy is continued in the program years.

B3.4 Investment

(U) Ivestments in family housing may be totally new construction or renovation and modernization of existing housing. Figure B.4 indicates that in FY-75 investments made by the Navy in family housing (on a per capita basis) totaled more than those made by the Air Force, but were less than those made by the Army. A substantial dip in investments in housing by all three services occurs in FY-80. This may be a reflection of the OSD action on variable housing allowances. Presuming this situation is not resolved, the projected figures for FY-85 place the Army and the Navy at reasonably comparable levels. Air Force figures show significantly more fiscal support for housing on a per capita basis.

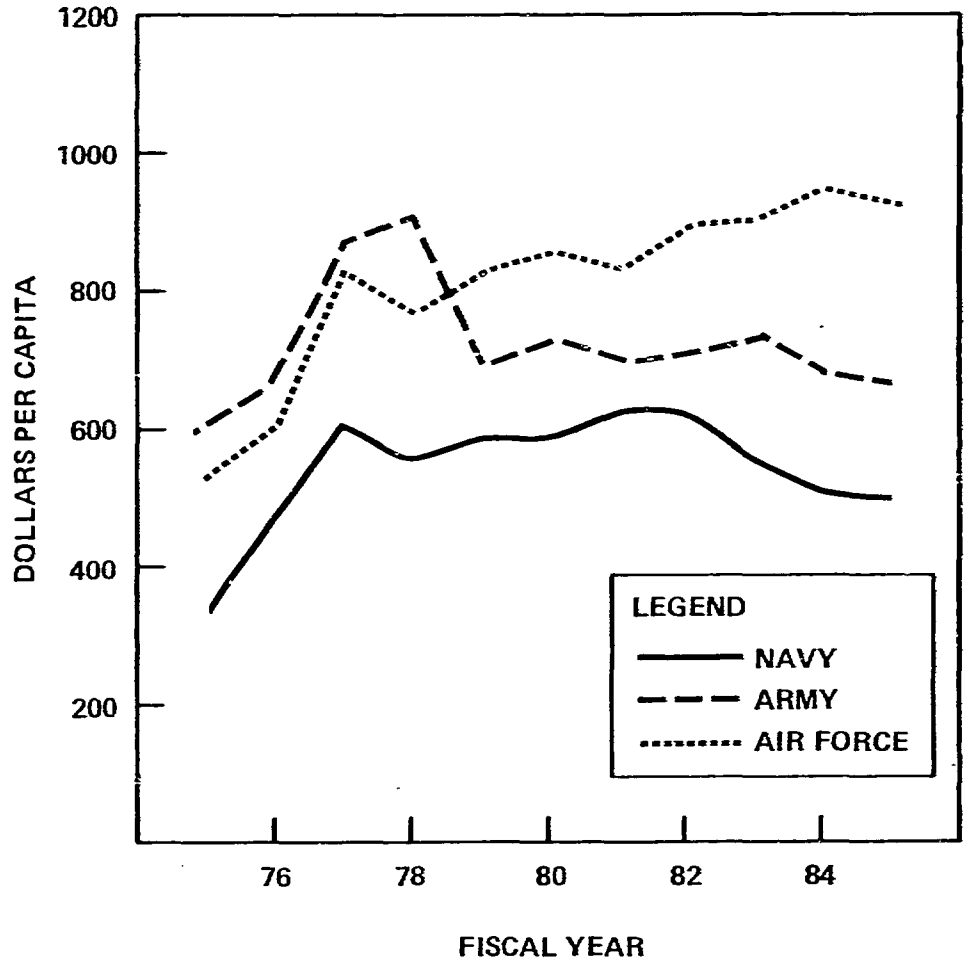
B3.5 Operating Costs and Investment

(U) Summing the investment and operating expenditures for family housing for the recent past and in the program years indicates (on a per capita basis) that the Navy is below the other services in providing housing for its families. As shown in Figure B.5, on a per capita basis, the Navy currently provides $624 per man, while the Army exceeds Navy by $172 and the Air Force exceeds Navy by $308, or almost 50 percent. This situation continues in the program years.

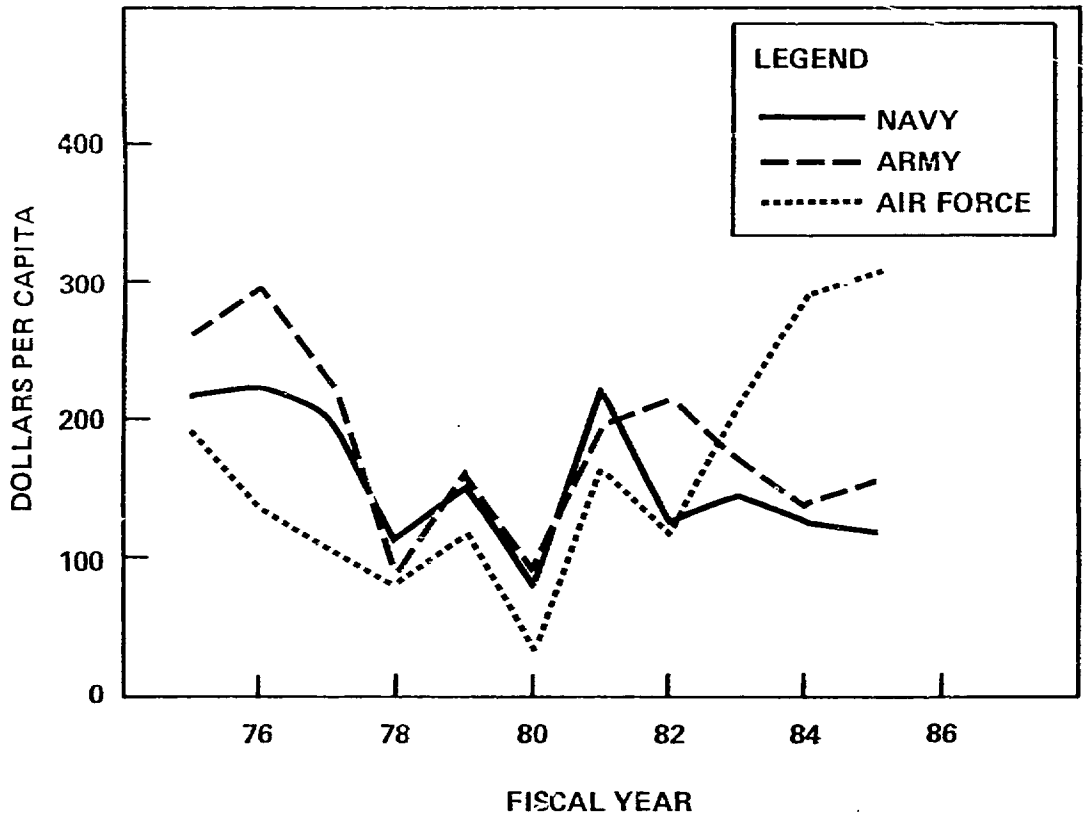


(U) FIGURE B.2

PERCENT OF PCS FAMILIES IN MILITARY HOUSING:
SUITABLY HOUSED (U)

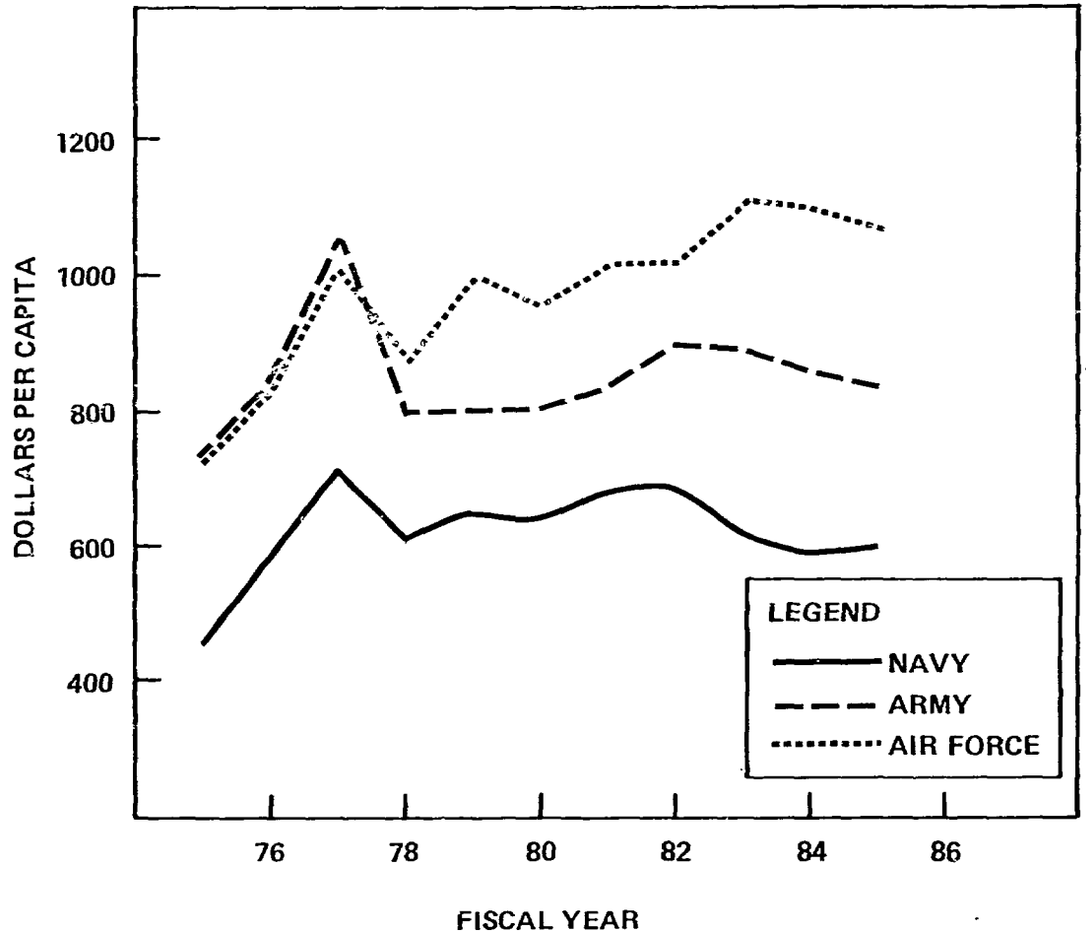


(U) FIGURE B.3
OPERATING EXPENDITURES FOR FAMILY HOUSING
PER ACTIVE DUTY END STRENGTH
(CONSTANT FY-80 DOLLARS) (U)



(U) FIGURE B.4

INVESTMENTS FOR FAMILY HOUSING PER ACTIVE DUTY END STRENGTH
(CONSTANT FY-80 DOLLARS) (U)



(U) FIGURE B.5
TOTAL INVESTMENT AND OPERATING EXPENDITURES
FOR FAMILY HOUSING PER ACTIVE DUTY END STRENGTH
(CONSTANT FY-80 DOLLARS) (U)

B3.6 Visable Expenditures

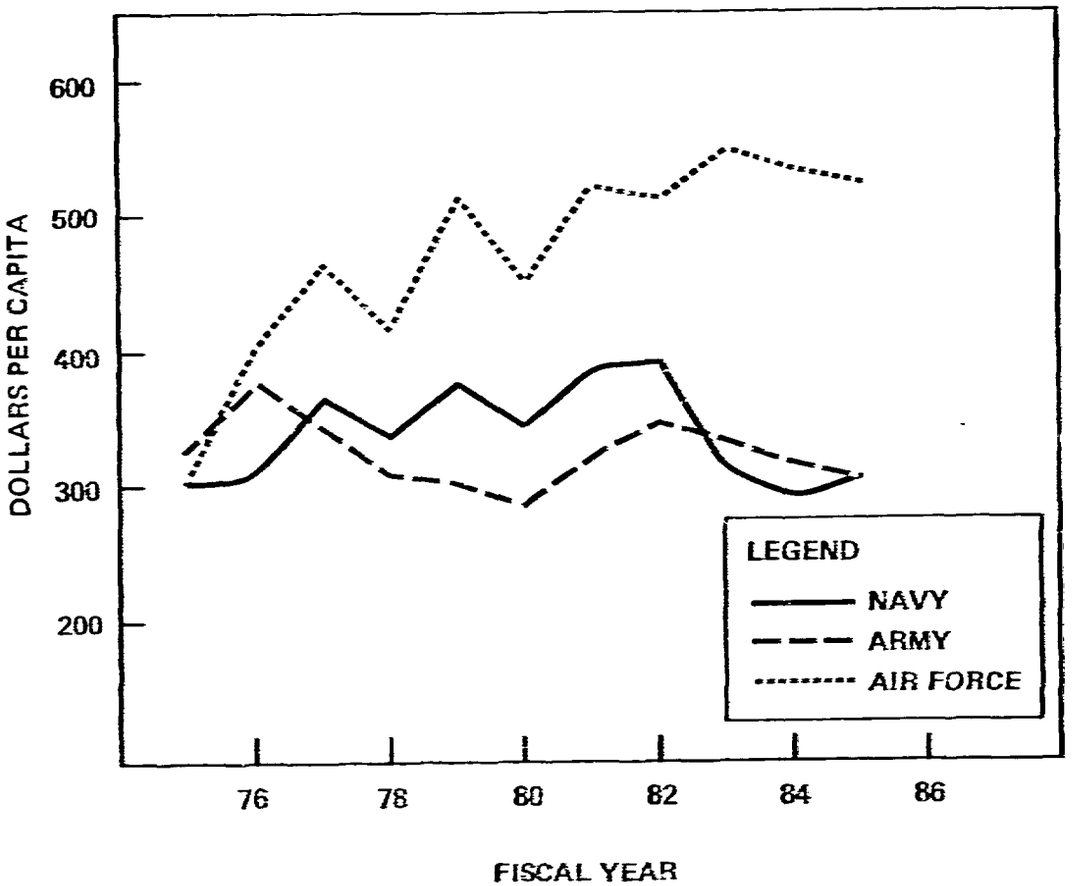
(U) A slightly different comparison results if only those investments and the operating accounts that contribute immediately to the housing expenditures that are visable to servicemembers are considered. To approximate the visable expenditures, the costs of construction, debt retirement, lease funding, and growth in utility costs were netted out of the sum of investment and operating costs. This allows a focus on those aspects of family housing which a soldier or sailor is likely to perceive as affecting the well being of his family. This comparison, as shown in Figure B.6, indicates that the Navy has done much better than the Army in recent years, but still lags the performance of the Air Force. Looking to the future, it appears that the Navy is now programming to fall below the performance of the other services.

B4.0 SUMMARY

(U) In general, there are not as many Navy families suitably housed (in military housing) as in the Army and Air Force. With regard to private housing, surveys indicate that the percentage of Navy families suitably housed is on the decline.

(U) Expenditures for operating costs for family housing in the Navy have consistently been lower than the Army and the Air Force. In the case of investment in family housing the Army and the Navy are spending comparable amounts, while the Air Force spends significantly more.

(U) Examination of the improvement and maintenance accounts (those accounts which fund the most visible efforts to upgrade family housing) reveals that the Navy has done much better than the Army in recent years. However, it appears that the Navy is not programming to continue this policy. The parity analysis presented here shows that the Navy lags the other services in terms of providing funds for a variety of family housing needs. Accordingly, this lower level of support may ultimately have an effect on retention.



(U) FIGURE B.6
IMPROVEMENT AND MAINTENANCE OF FAMILY HOUSING
PER ACTIVE DUTY END STRENGTH
(CONSTANT FY-80 DOLLARS) (U)

APPENDIX C -

UNACCOMPANIED PERSONNEL HOUSING IN THE NAVY

UNACCOMPANIED PERSONNEL HOUSING
(NAVY)

C1.0 INTRODUCTION

(U) This appendix examines the status of Unaccompanied Personnel Housing (UPH) in the Navy. Unaccompanied Personnel Housing (formerly called Bachelor Housing) is living space in barracks, dormitories, bachelor enlisted quarters (BEQs), and bachelor officer quarters (BOQs). This report provides a technique for approximating the need for UPH in the Navy during the 1980s. Additionally, the report draws on recent surveys and various program structures to predict the Navy's capability to meet the UPH needs. Finally, illustrations are developed to measure the impact of a variety of optional policies that might be considered in developing programs for UPH.

C2.0 DOD POLICY[1]

(U) It is the Policy of the Department of Defense that the housing accommodations assigned to unaccompanied personnel shall meet the basic physiological needs, and provide the space, privacy and furnishings required for comfortable living. The minimum standards for the adequacy of bachelor housing apply worldwide, except for shipboard duty or field duty and specific foreign areas. Adequacy standards apply equally to male and female personnel and to civilian personnel of equivalent rank, except where contracts with civilian personnel specifically define a standard of adequate housing to be provided.

(U) Civilian employees are expected to rely on the civilian communities for housing support. In foreign countries and U.S. overseas areas where U.S. citizen civilian employees cannot enjoy the facilities of the civilian community without restriction, or where appropriate housing and adequate community services and support facilities (including bachelor housing) do not exist or are inadequate, bachelor housing is allocated to provide reasonable and equitable treatment to both eligible military personnel and to eligible DOD (appropriated and non-appropriated fund) civilian employees recruited from the United States. Non-DOD civilians who contribute to mission accomplishment may also occupy bachelor housing. Finally, it is the policy of the Department of Defense that temporary duty/transient personnel will be housed at the same standards of adequacy as permanent party personnel.

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[1] Department of Defense, Bachelor Housing, Determining Requirements and Programming Construction, (u) DOD, Instruction 4165.54 of 3 October 1972; Unclassified

C2.1 Definition

(U) Unaccompanied Personnel are service members that do not have dependents. This includes:

- those who are divorced or legally separated
- those who have dependents but who are voluntarily in an unaccompanied status
- personnel of a rotating or mobile unit deployed at forward sites
- temporary additional duty (TAD) students
- official duty transient personnel
- recruit/trainee personnel

In some cases, civilian personnel are included in the calculation of unaccompanied personnel. Civilian personnel included are:

- civilians in the above categories at overseas or remote locations
- teachers or contract personnel when agreements of employment specify provisions of housing
- unaccompanied civilians who should reside at a military installation because of the nature of their duty assignments.[2]

C3.0 NAVY REQUIREMENT FOR UNACCOMPANIED PERSONNEL HOUSING

C3.1 Bachelor Housing

(U) During the period January - October 1979, the Navy conducted a world-wide UPH survey. The survey encompassed close to 200 activities. The results of the survey show a deficit of 66,239 berths for unaccompanied Navy personnel. That deficit consists of 58,012 enlisted personnel berths and 8,227 officer personnel berths. The total requirement statement summarized from the survey is displayed in Table C.1.[3] The current requirement calculations do not make provision for personnel serving afloat (in surface ships of over 1000 tons) to be berthed ashore while in home port.

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[2] Department of Defense, Adequacy, Assignment and Inventory of Bachelor Housing (U), DOD Inst 4165.47 of 29 July 1977; Unclassified

[3] Office of the Chief of Naval Operations, OP-04 Memo to VCNO titled: "Unaccompanied Personnel Housing" (U), Ser: 441/322428, of 2 November 1979; Unclassified

(U) TABLE C.1

REQUIREMENTS FOR BACHELOR PERSONNEL HOUSING
(NOVEMBER 1979) (U)

CATEGORY	OFFICERS	ENLISTED	TOTAL
Permanent Party*	12,210	93,534	105,744
Transients**	11,010	104,943	115,953
Total	23,220	198,477	221,697

* Permanent Party Personnel include: shore duty personnel, PCS students, crews of ships of less than 1000 tons, crews of attack submarines, and security duty personnel.

**Transient Personnel include: temporary duty personnel, TAD students, rotational unit personnel, mobile unit personnel and crews of fleet ballistic missile submarines.

C3.2 Geographic Bachelors

(U) Table C.1 reflects the fact that 221,697 berthing spaces are needed in November 1979 to house bachelor personnel of the Navy. This requirement does not include an allowance for Geographic Bachelors. The principal directive for determining requirements and programming construction for UPH[4] describes Geographic Bachelors as:

> "Personnel with dependents, who for whatever reason are in an unaccompanied status. However, only those permanent party geographic bachelors who are voluntarily separated will be included in the requirements determination of bachelors."

The latest tabulation of the family housing survey[5] reflects a total of 23,116 personnel with dependents in an unaccompanied status. Of these 2,820 officers and 17,754 enlisted personnel, a total of 20,574 people, are acclaimed as

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[4]Department of Defense, Bachelor Housing, Determining Requirements and Programming Construction (U), DOD Inst 4165.54, of 3 October 1972; Unclassified

[5]Department of the Navy, Tabulation of Family Housing Survey Report DD I&L A666 (U), of 31 July 1979; Unclassified

voluntarily separated. Other sources[6] indicate a minimum population of approximately 8,725 Geographic Bachelors in FY-80. This is under review. Best estimates of ongoing surveys indicate there may be as many as 20,300 Geographic Bachelors. Table C.2 repeats Table C.1 and includes the largest estimate of 20,574 Geographic Bachelors in the requirements statement.

(U) TABLE C.2

REQUIREMENT FOR UNACCOMPANIED PERSONNEL HOUSING (U)

CATEGORY	REQUIREMENT		
	OFFICER	ENLISTED	TOTAL
Permanent Party*	12,210	93,534	105,744
Transients**	11,010	104,943	115,953
Geographic Bachelors***	2,820	17,754	20,574
TOTAL REQUIREMENT	26,040	216,231	242,271

* Permanent Party Personnel include: shore duty personnel, PCS students, crews of ships of less than 1000 tons, crews of attack submarines, and security duty personnel.

** Transient Personnel include: temporary duty personnel, TAD students, rotational unit personnel, mobile unit personnel and crews of fleet ballastic missile submarines.

*** Geographic Bachelor is a family service member in a permanent party who is voluntarily living separately from his family.

C3.3 Proportion of Unaccompanied Personnel in the Navy

(U) The 242,271 bachelors and voluntarily separated family members displayed in Table C.2 (for FY-80) represent 46 percent of the Navy programmed end-strength. It is interesting to note that an independent survey of naval personnel without primary dependents, conducted in March 1979, represented 46 percent of the end-strength programmed for that year. Table C.3 displays the FY-79 and FY-80 Unaccompanied Personnel proportions.

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[6] Deputy Chief of Naval Operations (MP&T), Memorandum titled Geographic Bachelors (U), OP-153 Ser. 12-80 of 31 January 1980; Unclassified

(U) TABLE C.3

PROPORTION OF UNACCOMPANIED PERSONNEL IN THE NAVY (U)

PERSONNEL CATEGORIES	FISCAL YEAR	
	FY-79	FY-80
End-Strength	519,200	528,000
Unaccompanied Personnel	238,942*	242,271**
Proportion	46.02%	45.89%

* Bureau of Naval Personnel, Officer and Enlisted, Without Primary Dependent Tabulation (U), 31 March 1979, Unclassified

** Office of the Chief of Naval Operations, Resume of Results of 1979 Annual Survey of UPH Requirements (U), 26 November 1979, Unclassified

C3.4 Programming Limitations

(U) The instructions for completion of DD Form 1657, "The Determination of Bachelor Housing Requirements" provides, among other things, specific guidance for programming UPH. The specific guidance for Programming Limitations is:

> "Programming Limitation - In general, programming for permanent party personnel and PCS students will be limited to 90% of the requirement to preclude overbuilding and to account for uncertainties in future strength projections. Temporary duty students (20 weeks or less) and transient personnel will be programmed at 100% of the average monthly requirement. Programming in excess of 90% for permanent party personnel and PCS students will require detailed justification and should occur only at isolated locations or when all installations have attained a reasonable level of adequate bachelor housing, or where immediate adequate housing of special organizations is considered critical."

The programming limitations are not to be confused with the Occupancy Standards established by the Department of Defense. Efficiency of UPH management suggests occupancy rates of 90 percent for permanent party personnel and 65 percent for transients.[7] Table C.4 combines the data in Table C.2 and Table C.3 and displays the derivation of the Total Attainable Requirement under the programming limitation constraints.

[7] Department of Defense, Adequacy, Assignment and Inventory of Bachelor Housing (U), DOD Inst 4165.47 of 29 July 1977; Unclassified

(U) The proportion of the attainable UPH under programming limitation constraints, derived from comparing Table C.2 and Table C.4 equates to an aggregate value of 94.79 percent. Table C.5 displays the relationship of officer and enlisted attainable limits derived from Table C.2 and Table C.4. Thus, to comply with the DOD established programming limitation for permanent party personnel, Navy must not exceed 94.8 percent of the unadjusted need for UPH.

(U) TABLE C.4

ATTAINABLE REQUIREMENT FOR UNACCOMPANIED PERSONNEL IN THE NAVY (U)

CATEGORY	OFFICER	ENLISTED	TOTAL
Permanent Party*	12,210	93,534	105,744
Geographic Bachelor**	2,820	17,754	20,574
Total Prior to Limitation	15,030	111,288	126,318
Permissable	13,527	100,159	113,686
Transients**	11,010	104,943	115,953
Total Attainable Requirement	24,537***	205,102	229,639

* Table C.2
** Table C.3
*** Officers represent 10.7 percent of Requirement. Historically Navy has programmed 3 percent of UPH for Officers.

(U) TABLE C.5

PROPORTION OF ATTAINABLE REQUIREMENT FOR UNACCOMPANIED PERSONNEL HOUSING IN THE NAVY (U)

CATEGORY	OFFICER	ENLISTED	TOTAL
Total Requirement*	26,040	216,231	242,271
Attainable**	24,537	205,102	229,639
Proportion Attainable	94.23%	94.85%	94.79%

* Table C.2
** Table C.4

C3.5 Sustaining BAQ

(U) The unattainable (due to policy) portion of the total requirement for UPH was identified in Table C.5 as 5.21 percent of the total unadjusted UPH requirement. Thus, the Navy never will provide quarters for a small proportion of its unaccompanied personnel. The needs of individuals not provided quarters are met by an allowance for housing. This is paid either in the form of a Basic Allowance for Quarters (BAQ) or in a daily rate for shelter (per-diem). For simplicity of discussion, the term "sustaining BAQ" will be used in this report to represent the costs of providing BAQ to those personnel who will not be housed due to policy constraints on the amount of UPH that can be programmed for. Table C.6 displays the sustaining BAQ needed to support the currently programmed end-strength. The amounts shown in Table C.6 are required regardless of the acquisition strategy used to program for UPH. The ability to authorize BAQ permits efficient management and maximum occupancy in the permanent party and transient segments of UPH. However, until such time as sufficient quarters are available, the total BAQ needs for unaccompanied personnel will exceed the sustaining BAQ. In other words, for the purpose of discussion in this report, the Navy's total BAQ has been divided into two categories: (1) the BAQ needed to adhere to policy restrictions on the percentage of UPH needs that can be programmed for; and (2) the BAQ needed to overcome a shortage in total UPH facilities.

(U) TABLE C.6

SUSTAINING BAQ NEEDS TO SUPPORT UPH OF THE NAVY (U)
(IN FY-80 DOLLARS, MILLIONS)

PERSONNEL	FISCAL YEAR						
	FY-79	FY-80	FY-81	FY-82	FY-83	FY-84	FY-85
OFFICERS	0.2	0.2	0.2	0.2	0.2	0.2	0.2
ENLISTED	20.9	23.6	23.8	24.1	24.2	24.2	24.2
TOTAL SUSTAINING BAQ	21.1	23.8	24.0	24.3	24.4	24.4	24.4

3.6 Facilities for Unaccompanied Personnel Housing

(U) The Resume of Results of the 1979 Annual Survey of UPH Requirements reveals that the Navy has the capability to provide 116,854 berths for unaccompanied personnel in the form of adequate facilities ashore. Table C.1 displays the adequate, substandard, and private quarters available for housing both officer and enlisted unaccompanied personnel. The private quarters category includes both government leased housing and BAQ in lieu of housing.

(U) TABLE C.7

NAVY CAPABILITY TO PROVIDE UNACCOMPANIED PERSONNEL HOUSING (U)
(NOVEMBER 1979)

NUMBER OF PERSONNEL HOUSED	OFFICERS	ENLISTED	TOTAL
Adequately	6,821	110,033	116,854
In Sub-Standard Quarters	1,967	20,307	22,274
Private Quarters* (On the Economy)	6,609	14,300	20,909
TOTAL	15,397	144,640	160,037

* Includes those living off-base without compensation.

3.7 Prediction of Unaccompanied Personnel Housing Needs

(U) Within the standards for adequacy established by the Department of Defense, the future needs for Unaccompanied Personnel Housing can be approximated as a function of end-strength. The tabulation of personnel without primary dependents reveals that 6.56 percent are officers and 93.44 percent are enlisted. Applying these ratios to the proportions of programmable UPH and in turn applying these to the programmed end-strength provides an approximation of the need for programmable UPH in the program years. Table C.8 displays the results of these calculations for the period FY-79 through FY-88.

(U) TABLE C.8

ESTIMATED ATTAINABLE NAVY UNACCOMPANIED PERSONNEL HOUSING NEEDS (THOUSANDS)(U)

HOUSING	FISCAL YEAR									
	FY-79	FY-80	FY-81	FY-82	FY-83	FY-84	FY-85	FY-86*	FY-87*	FY-88*
OFFICER HOUSING**	14.9	15.1	15.3	15.6	15.7	15.7	15.7	15.7	15.7	15.7
ENLISTED HOUSING**	211.5	214.4	217.4	221.5	222.5	223.2	223.2	223.3	223.3	223.3
TOTAL HOUSING	226.4	229.5	232.7	237.1	238.2	238.9	239.0	239.0	239.0	239.0

* Values shown for Post FY-85 period are straight lined from FY-85

** Based on proportion of Officer and Enlisted personnel tabulated by BUPERS as being without primary dependents on 31 Mar. 1979 (15,671 officers = 6.56%, 223,271 enlisted = 93.4% out of a total unaccompanied personnel population of 238,942).

C3.8 BAQ in Lieu of Quarters

(U) With 139,100 UPH berths of all types available and a total aggregate need (at the end of FY-79) for 226,400 berths, the Navy is deficient in capability to meet its UPH need by 87,300 berths ashore. Currently, the difference between capacity and need is met by BAQ supplements in lieu of quarters. If the existing 10,300 berths available in the form of berthing barges can be employed at 80 percent occupancy then (in FY-79) the Navy is spending approximately $117.3M for supplemental BAQ in lieu of quarters to meet its programmable requirements. The inclusion of the basic BAQ capability used to meet unattainable needs (displayed in Table C.6) raises the end of FY-79 BAQ approximation to $138.4M. Over a 25-year period (the normal period of use for a UPH facility) this annual expenditure for BAQ, in lieu of quarters, equates to $3.5 billion.

C3.9 Representative Population and BAQ Equivalency Cost Factor

(U) A representative population of unaccompanied personnel of the Navy is computed from the tabulation of officer and enlisted personnel without primary dependents. The BAQ rates for unaccompanied personnel by pay grade category are taken from a cost approximation analysis conducted by the Systems Analysis Division of the Naval Facilities Engineering Command.[8] The analysis reported in this paper uses the same representative population. Table C.9 displays the representative population and the computed average annual BAQ expenditures by pay grade category. Table C.10 repeats Table C.9 and includes a display of a proportional cost factor for BAQ per person. The specific utility of Table C.10 is that, given any representative population of unaccompanied personnel, the multiple of $1489.25 provides a rapid means for approximating the annual BAQ expenditure in FY80 constant values for such a population.

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[8] Naval Facilities Engineering Command, Life Cycle Cost Comparison of BAQ versus MILCON for Unaccompanied Personnel Housing (U), 19 October 1979; Unclassified

(U) TABLE C.9

REPRESENTATIVE POPULATION FOR UNACCOMPANIED PERSONNEL
AND AVERAGE ANNUAL BAQ EXPENDITURE BY PAY GRADE CATEGORY (U)

Pay Grade Category	Percent of Population*	Average Annual BAQ($)**
03-010	2.6%	3159.00
W1-02	4.0%	2257.00
E7-E9	0.7%	1998.00
E5-E6	15.7%	1697.00
E1-E4	77.0%	1346.00

* Computed from a total population of 238,942, which is the number of personnel without primary dependents, as derived from the BUPERS Officer Primary Dependent Tabulation and Enlisted Primary Dependent Tabulation as of 31 March 1979.

** BAQ rates effective 1 October 1979 are from NAVCOMPTNOTE 7220 of 7 September 1979.

(U) TABLE C.10

BAQ EQUIVALENCY COST FACTOR (U)

Pay Grade Category	Percent of Population	Average Annual BAQ ($)	Factor ($ Per Person*)
03-010	2.6%	3159.00	82.13
W1-02	4.0%	2257.00	90.28
E7-E9	0.7%	1998.00	13.99
E5-E6	15.7%	1697.00	266.43
E1-E4	77.0%	1346.00	1036.42
TOTAL	100%	---	1489.25

* Factor is derived by multiplying percent of total population times average annual BAQ

C3.10 Historic Construction Performance

(U) Over the past decade (1970-1979), the Navy has constructed 228 UPH projects.[9] As a percentage of the Navy's total MILCON budget during the 1970's, the 228 UPH projects represent 9.5 percent. The 228 UPH projects provided a total of 71,290 berths. Of these, 2,279 were for officers, 16,285 were for senior enlisted (E5-E9 pay grades), and 52,726 were for junior enlisted (E1-E4 pay grades). Referring to Table C.8, the Navy has a total of 116,854 quarters that meet the standards of adequacy; of these, 6,821 are for officers and 110,033 are for enlisted. Presuming that all new quarters meet the standards of adequacy, 61 percent of the adequate quarters have been built in the past decade. Table C.11 displays the numbers of adequate quarters taken from Table C.8 and the performance of the past decade in building new quarters. Though 62 percent of all adequate quarters are new, only 1/3 of the adequate officers quarters are new.

(U) The next table displays the annual performance in programming and constructing UPH. Cost values shown in the right column are in FY-80 constant values for comparison purposes. Inspection of Table C.12 reveals an extensive modernization program in the earlier period with a subsequent decline in effort since 1973. Thus, in constant FY-80 values, the Navy expended $495.8 million in the four-year period (FY-70 through FY-73). From 1974 through 1979, Navy expended the equivalent of $254.2 million to produce 18,053 quarters. In FY-80, the Navy has budgeted for an additional 1,237 quarters for a total cost of $30.3 million. This data is shown in Table C.12.

(U) TABLE C.11

ADEQUATE OFFICER AND ENLISTED QUARTERS THAT ARE NEW (U)

QUARTERS	NUMBER OF ADEQUATE QUARTERS		
	OFFICER	ENLISTED	TOTAL
NEW*	2,279	70,248	72,527
TOTAL**	6,821	110,033	116,854
PERCENT NEW	33%	64%	62%

* Table C.12
** Table C.8

[9] Naval Facilities Command, Construction Status of Unaccompanied Personnel Housing (UPH FY1970-1980 (U), 7 March 1979; Unclassified

(U) TABLE C.12

ANNUAL PERFORMANCE FOR IMPROVING THE ADEQUACY AND NUMBERS OF UNACCOMPANIED PERSONNEL HOUSING (U)*

FISCAL YEAR	PROJECTS	PERSONS	COSTS (THEN YEAR $M)	PERCENT OF TOTAL MILCON	FY-80 COSTS ($M)
1970	24	12,898	54.7	16.9	119.8
1971	23	9,139	48.1	14.5	98.5
1972	52	16,754	77.2	21.5	146.1
1973	45	14,446	72.1	13.9	131.4
1974	28	6,393	56.5	8.7	91.8
1975	16	3,505	31.8	5.3	46.1
1976	10	2,826	30.3	3.9	41.0
1977	7	926	15.3	2.4	18.9
1978	7	1,069	13.7	2.6	15.7
1979	16	3,334	38.2	5.0	40.7
1980	7	1,237	30.3	5.3	30.3
TOTAL	235	72,527	468.2	9.1	780.3

* Source: Naval Facilities Command, Construction Status of Unaccompanied Personnel Housing (UPH) FY1970-1980 (U), 8 February 1980; Unclassified

C4.0 COMPARISON OF REQUIREMENT AND CAPACITY

C4.1 Requirement (Navy Policy)

(U) The Department of Defense suggests that Geographic Bachelors be included in the calculation for programmable requirements for UPH. This policy is complicated by recent guidance[10] to not program UPH for Geographic Bachelors in CONUS or Hawaii unless they are not entitled to move dependents or household goods. Table C.4 reveals the total of 229,639 berths needed when Geographic Bachelors are included in the requirement calculation. It is the implicit policy of the Navy to permit Geographic Bachelors to occupy unaccompanied personnel housing but the Navy does not program for this need in CONUS or Hawaii. Thus, elimination of the 20,574 Geographic Bachelors identified in the latest family housing survey reduces the requirement statement to an aggregate of 209,186 berths. Because a recent program review of this policy[11] includes, as an alternative, the inclusion of Georgraphic Bachelor needs in the statement of UPH requirements, this assessment will do likewise.

C4.2 Increment of Requirement

(U) Table C.7, as previously shown, provides a prediction of the programmable UPH needs from FY-79 through FY-85. In the aggregate, the need increases from 229,600 berths in FY-80 to 239,000 berths in FY-85. That is an increment of 9,400 berths through the program years. Of the 9,400 increase in berth requirements, 620 berths are needed for officers and 8,780 are for enlisted personnel. Table C.13 reflects an approximation of the total predicted increment in terms of the representative population.

C4.3 Capability Predictions

(U) The capability of the Navy to provide for UPH is a function of the number of new facilities that are brought into existence. Traditionally, a new facility is obtained by modernizing substandard housing and also by construction of new housing through use of the MILCON account. Three alternative programs are being considered to accomplish this end. For simplicity of description these may be viewed as (1) the Basic Level Program, (2) the Enhanced Level Program and (3) the POM-82 Program. Table C.14 summarizes the level of effort involved in the alternative MILCON programs for UPH. Because of the greater BAQ cost avoidance represented by the more intensive POM-82 construction program the overall effect on outlays is $50 million less than the Enhanced Program between now and FY-88. Table C.15 displays the cumulative increase in facility capability under the alternative MILCON programs.

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[10] Office of the Secretary of Defense, Memorandum titled Bachelor Housing Military Construction Program for Fiscal Year 1980 (U), 30 May 1978; Unclassified

[11] Chief of Naval Operations, Draft CNO Program Analysis Memorandum for Manpower, Personnel and Training (U), 6 December 1979;

(U) TABLE C.13

PROGRAM YEARS (FY81-85) INCREMENT IN REQUIRED UNACCOMPANIED PERSONNEL HOUSING BY PAY GRADE (U)

PAY GRADE	REPRESENTATIVE POPULATION RATIO	BERTHS INCREASE
03-010	2.6%	244
W1-02	4.0%	376
E7-E9	0.7%	66
E5-E6	15.7%	1476
E1-E4	77.0%	7238
TOTAL:	100%	9400

(U) TABLE C.14

ALTERNATIVE MILCON PROGRAMS FOR UNACCOMPANIED PERSONNEL HOUSING (FY80-88) (U)

PROGRAM	TOTAL BERTHS DEVELOPED*			TOTAL CUMULATIVE FY-80 COST ($M)**
	Officer	Enlisted	Total	
Basic	7666	137,396	145,062	$171.4M
Enhanced	8369	160,139	168,508	$741.2M
POM-82 Program	8912	177,715	186,627	$691.2M

*Berths meeting DOD criteria for adequacy. Modernization of the existing 22,274 substandard berths is viewed as one source for developing adequate standard berths. Modernization is included in all three alternatives.

**Includes cost avoidance for reduction in above the baseline BAQ during the period FY-82 to FY-88. Numbers of new construction quarters shown on Table C.20.

(U) TABLE C.15

ESTIMATED INCREASE IN INVENTORY OF UNACCOMPANIED PERSONNEL HOUSING UNDER VARIOUS MILCON ALTERNATIVE PROGRAMS (FY-79 TO FY-88)*

Alternative Program Facility Capabilities		FISCAL YEAR									
		79	80	81	82	83	84	85	86	87	88
BASIC	OFF**	6821	6853	6953	6990	7161	7243	7369	7468	7567	7666
	ENL	110,033	111,070	114,304	115,504	121,047	123,695	127,775	130,982	134,189	137,396
ENHANCED	OFF**	6821	6853	6953	6990	7161	7260	7386	7779	8172	8369
	ENL	110,033	111,076	114,304	115,504	121,047	124,254	128,334	141,056	153,778	160,139
POM-82	OFF**	6821	6853	6953	6990	7161	7536	7929	8322	8715	8912
	ENL	110,033	111,070	114,304	115,504	121,047	133,188	145,910	158,632	171,354	177,715

* Estimate based on 2 year delay between funding and delivery in MILCON programs.
** Officer increment estimated at 3% of total plan based on historic performance and POM-82 (FY-82 plan) for 2.87% officer facilities.

C4.4 Shortfall in Capability

(U) The next series of tables reflect the variance between the predicted requirement and the programmed capabilities that may result under the alternative MILCON programs. Table C.16 displays the shortfall in capability resulting from the Basic LevelProgram. Table C.17 and Table C.18 portray the program performance for the Enhanced Level Program and the POM-82 program respectively. Data displayed in Tables C.16 through C.18 are organized to reflect changes to officer and enlisted unaccompanied housing postures separately.

(U) Table C.19 displays the aggregate shortfall in capacity resulting from each alternative MILCON program. Table C.20 provides a summary of the aggregate number of berths produced and the resulting aggregate shortfalls under each alternative MILCON program. The Basic Level program continues the practices of the 1970s, building new facilities and modernizing substandard facilities at a modest rate. The Enhanced Level Program includes a 360 percent increase in investment for a 10 percent increase in the total number of adequate berths. The POM-82 program involves a 495 percent increase in investment for a 18 percent increase in the number of berths by the end of FY-88. It is significant to note that the POM-82 program provides for 83 percent of the requirement calculated in Table C.7. A program designed to meet the total estimated attainable UPH needs of the Navy would cost $1.6 billion more than the Basic Level Program.

C4.5 Program Cost Trade-Off

(U) Table C.21 displays the comparative program cost for the alternative UPH Programs. All costs displayed in Table C.21 are in constant 1980 dollars for comparison purposes. The MILCON costs shown are those needed to produce the number of berths shown in Table C.20. The operating cost estimates are derived from the Equivalent Uniform Annual Costs developed by the Systems Analysis Division of the Naval Facilities Engineering Command.[12] The operating costs are for: operations, maintenance, management, linen, and refurbishment of appurtenances. BAQ cost estimates, derived from the same source, are for payment in lieu of quarters to compensate for the shortfall in facility capability.

(U) Inspection of Table C.21 reveals that, on a total system basis, the MILCON investment represents only a modest portion of the total system cost. At the Basic Level, MILCON is 1.3 percent of the total system cost and at the POM-82 level, MILCON represents 5.3 percent of the total system costs. Thus, under all three alternatives, MILCON is only the tip of the iceberg on a total system cost basis. Additionally, the total system cost variance between the three alternatives is relatively slight

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[12] Naval Facilities Engineering Command, Life Cycle Cost Comparisons of BAQ Versus MILCON for Unaccompanied Personnel Housing (U), 19 October 1979, Unclassified

(U) TABLE C.16

ESTIMATED VARIANCE BETWEEN THE REQUIREMENT AND CAPABILITY OF THE BASIC LEVEL MILCON PROGRAM FOR UNACCOMPANIED PERSONNEL HOUSING (U)

CAPACITY/REQUIREMENT/ VARIANCE	FISCAL YEAR						
	82	83	84	85	86	87	88
	OFFICERS						
Officer Capacity	6,990	7,161	7,243	7,369	7,468	7,567	7,666
Attainable BOQ* Requirement	15,600	15,600	15,700	15,700	15,700	15,700	15,700
Approximate BOQ Variance	8,600	8,400	8,500	8,300	8,200	8,100	8,000
	ENLISTED PERSONNEL						
BEQ Capacity	115,504	121,047	123,695	127,775	130,932	134,189	137,396
Attainable BEQ* Requirement	221,500	222,500	223,300	223,300	223,300	223,300	223,300
Approximate BEQ Variance	105,996	101,453	99,605	95,525	92,318	89,111	85,904

*Attainable under programming limitation constraints, see paragraph C3.4.

(U) TABLE C.17

ESTIMATED VARIANCE BETWEEN THE REQUIREMENT AND CAPABILITY OF THE ENHANCED LEVEL MILCON PROGRAM FOR UNACCOMPANIED PERSONNEL HOUSING (U)

CAPACITY/REQUIREMENT/ VARIANCE	FISCAL YEAR						
	82	83	84	85	86	87	88
	OFFICERS						
Officer Capacity	6,990	7,161	7,260	7,386	7,779	8,172	8,369
Attainable BOQ* Requirement	15,600	15,600	15,700	15,700	15,700	15,700	15,700
Approximate BOQ Variance	8,600	8,400	8,400	8,300	7,900	7,500	7,300
	ENLISTED PERSONNEL						
BEQ Capacity	115,504	121,047	124,254	128,334	141,056	153,778	160,139
Attainable BEQ* Requirement	221,500	222,500	223,200	223,300	223,300	223,300	223,300
Approximate BEQ Variance	105,996	101,453	98,946	94,966	82,244	69,522	63,161

*Attainable under programming limitation constraints, see paragraph C3.4.

(U) TABLE C.18

ESTIMATED VARIANCE BETWEEN THE REQUIREMENT AND CAPABILITY OF THE POM-82 INCREMENT MILCON PROGRAM FOR UNACCOMPANIED PERSONNEL HOUSING (U)

CAPACITY/REQUIREMENT/ VARIANCE	FISCAL YEAR						
	82	83	84	85	86	87	88
	OFFICERS						
Officer Capacity	6,990	7,161	7,536	7,929	8,322	8,715	8,912
Attainable BOQ* Requirement	15,600	15,600	15,700	15,700	15,700	15,700	15,700
Approximate BOQ Variance	8,600	8,400	8,200	7,800	7,400	7,000	6,800
	ENLISTED PERSONNEL						
BEQ Capacity	115,504	121,047	133,188	145,910	158,632	171,354	177,715
Attainable BEQ* Requirement	221,500	222,500	223,200	223,300	223,300	223,300	223,300
Approximate BEQ Variance	105,996	101,453	90,012	77,290	64,568	51,846	45,485

*Attainable under programming limitation constraints, see paragraph C3.4.

(U) TABLE C.19

SHORTFALL IN UNACCOMPANIED PERSONNEL HOUSING, (CAPABILITY VS. REQUIREMENT) FOR ALTERNATIVE MILCON PROGRAMS (U)
(in Thousands of Berths)

ALTERNATIVE	FISCAL YEAR						
	FY-82	FY-83	FY-84	FY-85	FY-86	FY-87	FY-88
Basic Level	102.3	97.6	95.7	93.0	89.7	86.4	83.1
Enhanced Level	102.3	97.6	95.1	92.3	79.3	66.2	59.7
POM-82 Program	102.3	97.6	85.9	74.4	61.3	48.2	41.6

(U) TABLE C.20

ALTERNATIVE MILCON INVESTMENT PROGRAMS, NUMBER OF BERTHS PRODUCED, RESULTING SHORTFALLS BY FY-1988, PROPORTION OF REQUIREMENT ACCOMPLISHED AND MILCON EXPEDITURE (FY-82 TO FY-86)*

ALTERNATIVE**	BERTHS CONSTRUCTED BY FY-88 (000 BERTHS) ***	SHORTFALL FY-88 (000 BERTHS) ****	REQUIREMENT ACCOMPLISHED (%)	MILCON FY 82-86 ($/M)
Basic Level	13.6	83.1	65%	$214.5M
Enhanced Level	40.3	59.7	75%	$774.0M
POM-82	58.4	41.6	83%	$1,061.1M

* Investment only, does not include operating costs or cost avoidance, does include funds for modernization of a limited number of substandard quarters.

** Two year delay between programming investment and delivery of facility. i.e., two years to survey, plan, contract, construct, inspect, and certify prior to availability for occupancy.

*** New berths constructed for investment in MILCON, these are additive to existing berths.

****Shortfall in meeting need reflecting all new construction and modernization action included in investment profiles.

(U) TABLE C.21

COMPARATIVE PROGRAM COST FOR ALTERNATIVE UNACCOMPANIED PERSONNEL PROGRAMS (U)

Alternative UPH Program Levels	Cost Catagories	24-Year System Cost (Dollars Million, FY-80 Costs) Fiscal Years								Total System Cost
		82	83	84	85	86	87	88	89-06 (18yrs) ****	
BASIC LEVEL	MILCON*	39.6	54.4	39.8	37.6	---	---	---	---	171.4
	OPERATIONS**	363.8	380.8	388.9	401.4	411.2	421.0	421.0	7,578.2	10,366.3
	BAQ***	141.1	135.1	132.5	127.2	123.0	118.7	114.5	2,061.0	2,953.1
	TOTAL OUTLAY	544.5	570.3	561.2	566.2	534.2	539.7	535.5	9,639.2	13,490.8
ENHANCED LEVEL	MILCON*	45.0	54.4	184.9	185.1	92.5	---	---	---	561.9
	OPERATIONS**	363.8	380.8	390.6	403.1	447.0	481.0	500.5	9,009.0	11,970.8
	BAQ***	141.1	135.1	131.6	126.4	109.5	92.8	84.3	1,517.4	2,338.2
	TOTAL OUTLAY	549.9	570.3	707.1	714.6	644.0	573.3	584.8	10,526.4	14,870.9
POM-82	MILCON*	190.6	177.9	184.9	185.1	92.5	---	---	---	831.0
	OPERATIONS**	363.8	380.8	418.0	456.9	495.9	534.8	554.3	9,977.0	13,181.5
	BAQ***	141.1	135.1	119.9	103.2	86.5	69.6	61.2	1,101.6	1,818.2
	TOTAL OUTLAY	695.5	693.8	722.8	745.2	674.9	604.4	615.5	11,078.6	15,830.7

* MILCON Program converted to FY-80 cost
** Operations/Maintenance/Management of existing facility in FY-80 costs
*** BAQ for shortfall in capability in FY-80 costs
**** 18-year estimate calculated as straight line of FY-88 posture. End year 2006 corresponds to outyear of the Extended Planning Annex (EPA).

with the POM-82 Program representing only a 17 percent increase over the Basic Level Program. The Basic Level Program is BAQ intensive, which, in itself, is a substandard method of meeting needs. On balance, the POM-82 Program provides for an 18 percent increase in capability for a 17 percent increase in total system cost.

C5.0 POLICY OPTIONS IN LIEU OF CONSTRUCTION

(U) Two optional policies are under review[13] to provide adequate quarters for Unaccompanied Personnel at an accelerated rate. These are a lease/construct option and a pure lease option. Under the lease/construct concept it is suggested that inducements be developed to attract a commercial hotel operation onto a naval base. Conceptually, this includes the provision of government land and the guarantee of long-term (25 year) 100 percent occupancy to the commercial operator. The commercial operator would construct and operate a hotel-like facility, dedicated to Unaccompanied Personnel. Under the pure lease option, off-base facilities would be acquired on a short-term lease.

C5.1 Relative Cost Comparisons for Policy Options

(U) Table C.22 displays the initial relative cost comparisons developed by the Deputy Chief of Naval Operations (Logistics) for comparing BAQ, MILCON, Lease/Construct and Leasing options.[14] The lower values in each range of comparative relative costs are for the E-1 to E-4 pay grade levels, which contribute 77% of the representative population of Unaccompanied Personnel. Table C.22 also displays a conversion of the various relative costs for use in comparison to a MILCON outlay. These values are used to approximate the relative impact of the policy options that follow.

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[13] Chief of Naval Operations, Draft CNO Program Analysis Memorandum for Manpower Personnel and Training, 6 December 1979; SECRET

[14] Office of the Chief Naval Operations, OP-041, Memo to VCNO titled: Unaccompanied Personnel Housing (U), Ser. 441/322428 of 2 November 1979; Unclassified

(U) TABLE C.22

RELATIVE COST COMPARISON: FOR POLICY OPTIONS (U)

OPTION	RANGE OF RELATIVE COST*	RELATIONSHIP TO MILCON**
BAQ	1.0	---
MILCON	1.8 to 2.8	1.0
LEASE/CONSTRUCT	1.7 to 2.5	0.94
LEASE	1.6 to 2.5	0.89

* The cost of paying BAQ (no matter what pay grade) is assumed to be unity. The cost associated with other options is displayed as a range of multiples of unity depending on pay grade. Relative costs are based on an independent present value analysis by the Naval Facilities Engineering Command for a 25 year expected lifetime. This work complies with OMB circular A-94 discounting procedures and includes all known costs.

** This row is a simple conversion of the lower values of the relative cost ranges to illustrate the MILCON comparison for E-1 to E-4 pay grade personnel.

C5.2 Comparison of Unaccompanied Personnel Housing Policies

(U) Of the three alternative Unaccompanied Personnel Programs assessed in this report, only the POM-82 Program closes the FY-80 established requirement. Because of the likely growth in the requirement between now and FY-88, it is estimated that the POM-82 Program will provide for only 83 percent of the adjusted requirement. Table C.23 displays a comparison for the total of the Basic Level Program and three variants of the POM-82 Program. All costs are in constant FY-80 values for comparison purposes. In the lease/construct option and the leased housing option, the MILCON investment is reduced by 54 percent in comparison to the MILCON option offer a slight reduction in total systems cost.

(U) TABLE C.23

ILLUSTRATIVE COMPARISON OF VARIOUS UNACCOMPANIED PERSONNEL HOUSING POLICY OPTIONS (U)

Policy Options	Total System Cost (FY82-06) (Dollars Million FY-80 Costs)			MILCON as % of Total System	Percentage Increase Over Basic Level Program
	By Account		Total System		
BASIC LEVEL PROGRAM	MILCON	171.4	13,490.8	1.3%	--
	OPERATIONS	10,366.3			
	BAQ	2,953.1			
POM-82 MILCON PROGRAM	MILCON	831.0	15,830.7	5.2%	17.3%
	OPERATIONS	13,181.5			
	BAQ	1,818.2			
POM-82* LEASE/ CONSTRUCT	MILCON	368.5	15,684.9	2.4%	16.3%
	OPERATIONS	13,498.2			
	BAQ	1,818.2			
POM-82** LEASE HOUSING	MILCON	368.5	15,563.4	2.4%	15.4%
	OPERATIONS	13,376.7			
	BAQ	1,818.2			

* Completes FY-83 MILCON Program as structured then shifts to lease/construct policy in FY-84
** Completes FY-83 MILCON Program as structured, then shifts to lease housing policy in FY-84

APPENDIX D -

COMPARISON OF OFF-DUTY/VOLUNTARY EDUCATION PROGRAMS IN THE MILITARY SERVICES

APPENDIX D

COMPARISON OF OFF-DUTY/VOLUNTARY EDUCATION PROGRAMS IN THE MILITARY SERVICES

D1.0 INTRODUCTION

(U) This appendix analyzes the Navy's Off-Duty, Voluntary Education Program. As background, the historic shifts in funding for off-duty education in the military services are reviewed. The established policy of the Department of Defense (DOD) and a comparison of service approaches to conform to this policy are provided. Next, the performance of each service program is displayed in quantitative terms. From this analysis, the performance of the other services is described and assessed in relation to the Navy's program.

D2.0 BACKGROUND

(U) In general, each of the military services encourages its personnel to participate in off-duty education programs. Courses are provided by accredited education institutions on military installations. Service members may also attend on-campus instruction at educational institutions located in close proximity to military installations. Funding for these educational programs is provided by a tuition assistance program, and by the Veterans Administration (VA) through G.I. Bill educational benefits.

D2.1 Historic Shifts[1]

(U) Tuition assistance has been provided for the off-duty education of military personnel since World War II. Prior to the mid-1950's, the emphasis was primarily directed toward identifying individuals eligible for tuition assistance. Initially, tuition assistance funds were limited to enlisted personnel and were considered to be a benefit of service. In 1945, Congress expanded the scope of tuition assistance to include officers.

(U) During the period of 1952 through 1972, little was said to further define the purpose of tuition assistance or to specify the types of courses which could be funded. Since 1972, Congress has increasingly indicated that much of the fully-funded graduate education could be accomplished through the use of tuition assistance. This is a shift away from the enhancement of the services' graduate-level education. This trend culminated in 1978 when the House Appropriations Committee directed the Department of Defense (DOD) to establish a system of educational objectives and to implement a system of priorities for the use of tuition assistance funds to focus on occupations that are in short supply.

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[1] Department of Defense, Graduate Education in the Department of Defense, (U) A report to the House Appropriations Committee, March 1979; Unclassified

(U) The Veterans Administration reports that the cost of in-service G.I. Bill educational benefits for the active duty military personnel enrolled in college courses during FY-78 was approximately $48 million. In comparison, total DOD appropriated funds for off-duty education programs for FY-78 equalled $105.6 million.

(U) Public Law 94-502, the Veterans' Education and Employment Assistance Act of 1976, terminated G.I. Bill educational benefits for all individuals who entered active duty after 31 December 1976. In its place, an educational matching assistance program for peacetime military volunteers was established. Under the Veterans' Educational Assistance Program (VEAP), as the contributory plan is known, servicemembers may not use their educational funds until after their initial tour of duty or six years, whichever occurs first. Thus, for those servicemembers who are no longer eligible for the G.I. Bill, tuition assistance may be the only source of funding for off-duty voluntary education until they attain career status or leave the service.

D2.2 DOD Policy

(U) DOD provides guidance for the management of the off-duty education programs of the services.[2] That guidance defines various aspects of the voluntary educational system, directs DOD-wide policies, and establishes standards for the various off-duty education programs of the military services. Recent adjustments in the DOD policy for off-duty education programs shifts the emphasis from one of maturing individuals through educational improvement, to the achievement of managerial efficiency for voluntary educational programs. Figure D.1 displays the new policy alongside the earlier policy. Additionally, the DOD policy suggests that military personnel be encouraged to use voluntary educational programs to meet specific goals. As in the case of the basic policy shift displayed in Figure D.1, the intended purposes of voluntary, off-duty education programs have been altered. Figure D.2 displays the adjusted goals alongside the earlier goals. The earlier goals of fulfilling individual aspirations and enhancing individual capabilities have been dropped. The earlier set of goals and the off-duty education program policies were established in an era of G.I. Bill benefits and at the outset of the All-Volunteer Force.

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[2] Department of Defense Voluntary Education Programs for Military Personnel (U), DOD Directive 1322.8 series; Unclassified

DOD POLICY 20 AUGUST 1975*	DOD POLICY 4 FEBRUARY 1980*
• Improve the competence of active duty military personnel • Assist the career progression of servicemembers • Strengthen the personnel base of the Armed Forces • Provide educational services and courses at or near a servicemembers place of duty.	• Rely on accredited institutions • Employ resources of other federal agencies - Department of Labor - Department of Education - Veterans Administration - State Resources • Use civilian institutions responsive to military personnel • Include counseling by qualified military service educational personnel • Systematically record educational accomplishments of military service members.

* Source DOD INST 1322.8 series

(U) FIGURE D.1
ADJUSTMENTS TO DOD OFF-DUTY EDUCATION POLICY (U)

DOD GOALS, 20 AUGUST 1975*	REVISED DOD GOALS, 4 FEBRUARY 1980*
Military personnel shall be encouraged to use voluntary education programs to develop (educationally and professionally) toward the following goals:	Military personnel shall be encouraged to use voluntary education programs to:
• Perform military assignments more effectively • Prepare for positions of higher military responsibility • Improve quality of advanced military training and educational programs • Adjust to productive post-service careers • Fulfill individual aspirations • Enhance individual aspirations	• Enhance their military effectiveness • Prepare for positions of greater responsibility in the Armed Forces • Prepare for productive post-service careers

* Source DOD INST 1322.8 series

(U) FIGURE D.2
ADJUSTMENTS TO DOD OFF-DUTY EDUCATION GOALS (U)

D2.3 Veterans Educational Assistance Program (VEAP)

(U) Table D.1 displays the number of enlisted VEAP participants in 1977 and 1978. Totals shown for each service have been reduced by the continuation ratios of 68 percent for the Navy and Air Force and 48 percent for the Army, as reported by DOD.[3] Officers are not included in the data because the total number of officers enrolled in VEAP, DOD-wide, was 177 in 1977, and 824 in 1978. Table D.1 reveals a definite variance in the intensity of VEAP participation by airmen in the Air Force as compared to the other service members. The Air Force favors other educational inducement programs, such as tuition assistance.

(U) TABLE D.1
NUMBER OF ENLISTED VEAP PARTICIPANTS
AFTER TWO YEARS OF VEAP EXISTENCE (U)
(1977 AND 1978)

SERVICE	Enlisted Participants by Year*		Continuing Total	Proportion To FY-78 End Strength
	1977	1978		
ARMY	24,509	40,819	31,357	4.0%
NAVY**	12,753	20,729	23,103	4.0%
AIR FORCE	482	4,694	3,571	0.6%

* Source: DOD Report to Congress in April 1979

** Does not include Marine Corps (69% continuance equates to 5,322 Marines, or approximately 3% of their FY-78 end strength.)

[3]Assistant Secretary of Defense, Second Annual Report to the Congress on Post-Vietnam Era Veterans Educational Assistance Program (U), April 1979; Unclassified

(U) Experience with the G.I. Bill substitute, the VEAP, during the years 1977 to 1978, reveals that (DOD-wide) 552,801 servicemen were eligible to participate in the VEAP contributory plan.[4] Of those eligible, 111,731 or approximately 20 percent set aside from $50 to $75 per month by allotment in the VEAP. In the course of the two year period, 9,378 participants, or 8 percent, discontinued participation voluntarily. One of the principal reasons for in-service voluntary discontinuance is fiscal hardship. Thus, after two years, less than 16 percent of all possible VEAP participants are continuing to set aside money for post service education.

D2.4 Tuition Assistance

(U) Specific criteria for management of tuition assistance funds in the voluntary education programs of the military services is also established by the DOD. In 1978, tuition assistance represented 68 percent of all federal funds expended in the off-duty education programs of the services. The continuing decline in the number of servicemembers eligible for VA in-service benefits may influence an increasing reliance in the future on tuition assistance as a principal source of funds for voluntary education programs. The specific criteria established by DOD for the use of tuition assistance by servicemembers are:

- The use of appropriated funds to support servicemembers participation in voluntary educational programs will be limited to no more than 75 percent of the charges for tuition and fees.

- Tuition assistance provided by the services may not duplicate other benefits received from the Federal Treasury or the Veterans' Administration.

- Officers incur a 2-year active service commitment when they accept tuition assistance.

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[4]Assistant Secretary of Defense (Education and Training) DOD Educational Incentives Study (U), 9 February 1980; Unclassified

D2.5 Comparison of Service Approaches for Tuition Assistance[5]

(U) Each Service varies the criteria and management of tuition aid funding. For example, the Army does not provide tuition assistance for courses or degree programs beyond the master's degree level, or for a second degree at the educational level already achieved by an individual. Further, tuition assistance is not granted G.I. bill-eligible officers at the graduate degree level unless the degree is one for which validated billets exist.

(U) Since July 1976, use of tuition assistance by naval officers has been limited to graduate studies in disciplines in which there is an inventory shortage in validated billet requirements. The Naval Postgraduate School reviews all officer requests for tuition assistance and approves them only if the graduate courses or degree programs are directed toward the attainment of educational objectives which satisfy specific Navy billet requirements. In the Marine Corps, graduate courses are approved only if they do not duplicate previous graduate study and only at a level beyond any degree previously earned, regardless of the funding source.

(U) The Air Force provides tuition assistance to all personnel (officers and enlisted) subject to the criteria established by DOD. Air Force officers receiving tuition assistance are not limited to graduate education that is directly related to their military occupation or to shortage specialities. However, individual counseling emphasizes the shortage areas and encourages selection of courses and degree programs in corresponding academic disciplines.

(U) Table D.2 shows the FY-79 allocation of appropriated funds to each of the services' off duty, voluntary education programs and the amount and relative proportion of these funds expended directly on tuition assistance. As shown in the table, the Army's allocation of their total appropriated funding to tuition assistance is 40 percent, which approximates the DOD-wide average of 43 percent. The Air Force and Marine Corps allocate substantially more, 55 and 61 percent, respectively, than the DOD-wide average. In sharp contrast, the Navy allocates 29 percent of its off duty, voluntary education funding to tuition assistance. Consequently, 71 percent of funds appropriated for Voluntary Education in the Navy is for purposes other than tuition assistance.

(U) Service tuition assistance may not duplicate other benefits received from the Federal Treasury or the Veterans' Administration. Other forms of non-duplicative educational aid include support from state and municipal governments, grants and non-appropriated funds. In the past (1975 - 1977), non-appropriated funds have represented less than 1 percent of the instructional funding for Army and Air Force voluntary education programs. All other forms of non-duplicative funding have represented 5 percent

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[5]Department of Defense, Graduate Education in the Department of Defense a Report to the House Appropriations Committee, (U) March 1979; Unclassified

(U) TABLE D.2
OFF-DUTY VOLUNTARY EDUCATION PROGRAM (U)
(TOTAL APPROPRIATED FUNDS SUPPORT AND TUITION ASSISTANCE PORTION)

SERVICE	FY-79 Appropriated Funds ($000)		
	Total Program*	Tuition Assistance Portion**	Tuition Assistance Proportion
Army	71,695	28,900	40%
Air Force	26,403	14,600	55%
Navy	10,598 ***	3,055	29%
Total ATT-DOD	112,297	48,755	43%

* January 1980 FYDP - Operation and Maintenance Funds, less DANTES (Defense Activities for Non-Traditional Educational Support) which was formerly the United States Armed Forces Institute (USAFI) now under the single management of the Secretary of the Navy

** Source: DOD Graduate Education in the Department of Defense, March 1979.

*** Program $13,978 thousand, less $3,380 thousand SECNAV DANTES funds

of the Army instructional funding and 1 percent of the Air Force instructional funding. No information is available on the extent of non-duplicative funding support to the instructional segment of the voluntary education programs of the Navy.[6]

D3.0 PERFORMANCE OF SERVICE PROGRAMS

D3.1 Funding Sources

(U) In addition to appropriated fund support, the services encourage servicemembers to use VA in-service educational benefits and other sources, when available. Table D.3 displays three comparisons of the aggregate funding for various categories of use in the Army and Air Force Off-Duty, Voluntary Education Programs. The values displayed in Table D.3 represent the composite proportion for the three year period immediately following the establishment of the All-Volunteer Force. Note that comparative data for the Navy is not available.

(U) Table D.3 displays Army and Air Force information individually. The instructional funds and operating funds are identified separately. Instructional costs consist of tuition costs, funds expended for instructors, and other costs related to the direct delivery of education. Operating or overhead costs comprise all other costs, which are administrative in nature and consist of management and support expenses.

(U) Inspection of the funding data in Table D.3 reveals that funding sources categorized as "other" (self-pay and state or municipal agency funding) and "non-appropriated funds" are relatively negligible sources of support to off-duty, voluntary education in the military services. In both services, appropriated funds provided for more than 99 percent of the operating funds in support of off-duty education. Appropriated funds and VA benefits combined, provided for 94 percent of the instructional costs in the Army and for over 99 percent of the instructional costs in the Air Force.

(U) The first comparison column in Table D.3 (the percent of each source of off-duty education funds as compared to total appropriated funding for off-duty education) shows that 42 percent of appropriated funds were allocated for instructional purposes and the remaining 58 percent used to support operating expenses for both the Army and Air Force during the FY-75 through FY-77 time frame. In the Army off-duty education program, VA benefits for instructional purposes were 174 percent of total appropriated funding. Likewise, in the Air Force, VA benefits for instructional purposes were 105 percent of total program appropriated funding.

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[6] Presearch Inc., An Application of Army and Air Force Education Program Participation and Funding Profiles to the Navy Campus for Achievement Program (U), Technical Report No. 368, 24 January 1978; Unclassified

(U) TABLE 5.3
PROPORTION OF OTHER SOURCE FUNDING FOR ARMY
AND AIR FORCE OFF-DUTY VOLUNTARY EDUCATION PROGRAMS (U)

Service	Use of Funds	Source of Funds	Three-Year Total Funding (FY-75-77)** dollars-thous.	Comparison Percent of One Category to Another		
				Service Appropriated Funds	Service Instructional Funds	Service Off-Duty Education Funds
Army	Instructional Funds	App. Funds	54,204	42%	34%	23%
		Non-App. Funds	201	0%	0%	0%
		VA-Funds	94,836	174%	60%	41%
		Other*	8,166	6%	5%	4%
		Subtotal	157,407	---	100%***	68%
	Operating Funds	App. Funds	74,663	58%		32%
		Non App. Funds	313	0%		0%
		Subtotal	74,976	58%		32%
	Total Army Funds		232,383	---		100%
Air Force	Instructional Funds	App. Funds	29,126	42%	29%	21%
		Non App. Funds	226	0%	0%	0%
		VA-Funds	72,038	105%	71%	51%
		Other*	737	1%	1%	1%
		Subtotal	102,127	---	100%	72%
	Operating Funds	App. Funds	39,425	58%		28%
		Non App. Funds	394	1%		0%
		Subtotal	39,819	58%		28%
	Total Air Force Funds		141,946	---		100%

*Other Includes Self-Pay and State or Municipal Agency Funded Courses.
**Source = Presearch Inc. TR 368, tables 2.2 and 2.5

*** The sum of the individual cost element percentages does not add to 100 percent due to rounding-off their values at a 1 and 2-digit level of detail.

(U) The second comparison column in Table D.3 shows the relative contribution of each source of funding for instructional services in the Army and the Air Force in relation to the total funding for instructional purposes. As shown in the Army, appropriated funds accounted for 34 percent of the total instructional services. Consequently, approximately 66 percent of the Army instructional costs were covered by VA and other sources of funds. The Air Force also has been heavily dependent on VA benefits to meet instructional costs. Appropriated funds accounted for 29 percent and VA funding approximately 71 percent of the total instructional funds. A decline in the use of in-service VA benefits may necessitate a heavier reliance on tuition assistance or other forms of educational assistance, in all services.

(U) The final comparison column in Table D.3 displays the relationship of various costs for off-duty education as a percent of the entire cost of off-duty education in each service. The Army used 32 percent of all its program funds for operational overhead. In comparison, the Air Force appears slightly more efficient with a 28 percent allocation of total program funds to operational overhead costs. Comparative data for the Navy is not available.

D3.2 Operating Costs for Voluntary Education Programs

(U) Tuition Assistance Funding is part of all funds used for instructional purposes. Table D.3 displays the proportions of costs for Army and Air Force off-duty education programs during the three year period FY-75 through FY-77. Both the Army and the Air Force used an average of 42 percent of all funds appropriated for voluntary education programs during the three year period FY-75 through FY-77 for instructional purposes. Table D.2 reveals that in FY-79 the Army and the Air Force together, used an average of 44 percent of all appropriated funds for tuition assistance. Obviously, in FY-79, the average bi-service proportion of appropriated funds that were used for tuition assistance exceeded slightly (by 2 percent) the amount of appropriated funds used for instructional purposes during the earlier period. This is principally because of the greater proportion of appropriated funds used by the Air Force for tuition assistance in FY-79 (55 percent).

(U) Since the size of the Army voluntary education program exceeds the size of the Air Force program (in terms of appropriated funds) by a factor of 2.7:1 and because the DOD-wide average proportion of tuition to appropriated funds in FY-79 is 43 percent, it is not unreasonable to assume that at least 40 percent of appropriated funds should be channelled towards tuition assistance. This assumption holds for FY-79, and for the years immediately following. Thus, 60 percent of appropriated funds may be needed for both instructional costs other than tuition assistance, and for the costs of operating voluntary education programs, in the near term.

(U) An average of 58 percent of both the Army and Air Force appropriated funds, during the period FY-75 through FY-77, was used to meet operational costs. Accordingly, it might be reasonable to assume that appropriated funds for the service voluntary education program may split out as follows:

(40 percent for tuition assistance, 2 percent for other instructional purposes, and 58 percent for operating costs). Table D.2 reveals that the Navy, in FY-79, apportioned 29 percent of appropriated funds for tuition assistance. In FY-79, the split between other instructional costs and operating costs, is not known in the case of the Navy. Assuming that other instructional costs in the Navy were 2 percent as they were in the Army, the Navy may be spending as much as 69 percent of all appropriated funds for operational purposes. Comparatively, in FY-79, the cost of operating voluntary education programs could have been: $41.6 million for the Army, $15.3 million for the Air Force, and $7.3 million for the Navy. Historically, the Army and the Air Force are able to support off-duty education for close to 80 percent of their respective personnel. Thus, in FY-79, the operating cost per off-duty student for each service was approximately $68.26 in the Army, $34.02 in the Air Force, and $160.09 in the Navy. On balance, the Navy voluntary education system appears somewhat less efficient than comparative programs in the other services.

D4.0 ANALYSIS OF SERVICE PROGRAMS

(U) The purposes of off-duty education programs for each service vary from one to another. The Army focuses on assisting a large number of servicemembers with the achievement of high school diplomas. The Air Force provides a widely enhanced range of services to all personnel. The Navy is evolving an intensive program for personnel on shore-duty, but has difficulty delivering accredited courses to a large number of servicemembers serving afloat. The Program for Afloat College Education (PACE) is one approach that the Navy uses to provide off-duty education to servicemembers on sea duty. In FY-78, there were 22,287 Navy personnel enrolled in PACE, which accounted for 36 percent of the Navy's total off-duty voluntary education enrollment. Appropriated funding support was provided to PACE at a level of $2.9 million for the entire program. This amounts to 21 percent of the total FY-78 appropriated funds that were expended by the Navy for all off-duty, voluntary education.[7]

D4.1 Comparative-Funding Performance

(U) Table D.4 displays the comparative-funding performance of each service in support of their off-duty education programs. The total appropriated funding for operation, maintenance, tuition assistance, and military personnel pay associated with each of the service's off-duty educational programs is the basis for the funds shown.[8] The respective service end-strengths, including officer and enlisted personnel, are

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[7] Department of Navy, DOD Educational Services Program Report, DD-M(A)1101(15) of 30 September 1978

[8] Department of Defense, Historic Five Year Defense Plan (FYDP), and January issue of FYDP and Construction, Procurement and RDT&E Annexes (U), 28 January 1980; Secret

(U) TABLE D.4
COMPARATIVE PER CAPITA APPROPRIATED
FUNDING FOR OFF-DUTY EDUCATION
BY FISCAL YEAR (U)
(CONSTANT FY-80 VALUES)

FISCAL YEAR	NAVY			AIR FORCE			ARMY		
	Total ($M)	End Strength (000)	$Per Capita	Total ($M)	End Strength (000)	$Per Capita	Total ($M)	End Strength (000)	$Per Capita
1975	2.7	534.8	5.04	29.8	613.0	48.61	54.7	783.9	69.78
1976	6.7	524.9	12.76	24.4	585.0	41.72	55.3	779.0	70.99
1977	11.5	529.7	21.71	23.7	570.0	41.58	81.6	781.8	104.37
1978	15.7	530.1	29.62	29.6	569.7	51.96	72.3	771.1	93.76
1979	11.3	519.2	21.76	31.7	562.1	56.40	76.6	761.8	100.55
1980	13.5	528.0	25.57	34.1	559.0	61.00	92.5	774.0	119.51
1981	15.0	533.7	28.11	34.6	564.7	61.27	92.6	777.6	119.08
1982	16.9	543.8	31.08	29.9	566.1	52.82	92.4	782.7	118.05
1983	16.3	546.1	29.85	33.1	566.7	58.41	98.2	786.6	124.84
1984	16.4	547.8	29.94	33.6	569.8	58.97	99.9	784.9	127.28
1985	16.9	548.1	30.83	34.0	574.9	59.14	98.5	784.6	125.54

shown across the years to provide an approximation of the size of each service. All cost values are shown in constant FY-80 dollars for comparison purposes. Values are also displayed, for reference purposes, in actual year dollars in Table D.5. The Navy program fund costs have been adjusted to remove the steady funding of $3.6 million (in FY-80 values) for the Defense Activities for Non-Traditional Educational Support (DANTES) Program. Formerly the United States Armed Forces Institute (USAFI), DANTES now operates under the single management of the Secretary of the Navy.

(U) Matching funds for the VEAP are provided by the Veterans Administration through FY-81. In the event the Congress extends the legislation to include 1982 and beyond, each service will be required to provide the matching funds from its own resources. The Navy program from the VEAP set-aside after 1981 amounts to $28.3 million in 1982, and approximately $18.1 million for each of the following years. Based on the VEAP participatory rate, VEAP discontinuance rates and 6-year average end-strength of the Army and Air Force, approximations for VEAP set-asides are developed for the Army and Air Force programs. For the Army, this equates to $19.9 million in FY-1982 and $19.2 million through the following years. For the Air Force, the VEAP set-aside approximations are $5.3 million in FY-82 and $3.4 million in the following years. The cost values shown in Table D.4 have been adjusted by removal of the VEAP set-asides for each service.

(U) Since the costs shown in Table D.4 exclude military construction costs, DANTES funding, and approximations of VEAP set-asides, they in effect, represent the appropriated funds each service plans for instructional and operating support to their Voluntary Education Programs. As previously shown, Table D.3 reveals that in an enviorment of substantial Veterans Administration support through the G.I. Bill, both the Army and the Air Force apply 58 percent of their appropriated funds for the operation of their off-duty education programs. When all sources of program funds are considered, the Army's use of appropriated funds for the operation of their off-duty education program funding amounted to 32 percent of their total program funding. Comparatively, under the same conditions, the Air Force's utilization of appropriated funds to support overhead or operating requirements equated to 28 percent of total program funds. For the Navy to reach parity-in-efficiency for the management of their off-duty education programs, it is likely that it may need to dedicate from 28 to 32 percent of their total program funds to the operation of the Navy Volunteer Education Program.

(U) The values shown in Table D.4 have not been adjusted to reflect the Navy goal of delivering off-duty education to 85 percent of Naval servicemembers. This goal, set in 1977, reflects the difficulty of providing adequate off-duty education support to individuals serving afloat. Alternative off-duty, education-support goals of 85, 90, and 95 percent of Naval servicemembers are assessed in Table D.6.

(U) TABLE D-5
COMPARATIVE PER CAPITA APPROPRIATED
FUNDING FOR OFF-DUTY EDUCATION BY FISCAL YEAR (U)
(ACTUAL YEAR DOLLARS)

FISCAL YEAR	NAVY			AIR FORCE			ARMY		
	Total ($M)	End Strength (000)	$Per Capita	Total ($M)	End Strength (000)	$Per Capita	Total ($M)	End Strength (000)	$Per Capita
1975	1.9	534.8	3.55	20.6	613.0	33.60	37.7	783.9	48.09
1976	5.0	524.9	9.53	18.0	585.0	30.77	40.9	779.0	52.50
1977	9.3	529.7	17.56	19.2	570.0	33.68	66.0	781.8	84.42
1978	10.6	530.1	22.92	25.8	569.7	45.29	63.0	771.1	81.70
1979	10.6	519.2	20.42	29.7	562.1	51.59	72.0	761.8	94.51
1980	13.5	528.0	25.57	34.1	559.0	61.00	92.5	774.0	119.51
1981	15.8	533.7	29.60	36.5	564.7	64.64	98.0	777.6	126.02
1982	18.7	543.8	34.39	33.1	566.1	58.47	102.3	782.7	130.70
1983	18.9	546.1	34.61	38.3	566.7	67.58	113.7	786.6	144.55
1984	19.8	547.8	36.14	40.5	569.8	71.08	120.7	784.9	153.78
1985	21.2	548.1	38.68	42.7	574.9	74.27	123.7	784.6	157.66

(U) TABLE D.6
MAXIMUM INCREMENTS TO NAVY OFF-DUTY EDUCATION PROGRAM
FOR PARITY WITH ARMY OR AIR FORCE (U)
(85%/90%/100% PARITY)

PARITY WITH OTHER SERVICE (PROPORTION OF SUPPORT)		ACTUAL YEAR FUND INCREMENTS (Dollars, Millions)			
		FISCAL YEAR			
		FY-82	FY-83	FY-84	FY-85
ARMY	85%	+ 60.6	+ 62.3	+ 66.3	+ 66.6
	90%	+ 64.2	+ 66.3	+ 70.5	+ 70.9
	100%	+ 71.3	+ 74.2	+ 78.9	+ 79.6
AIR FORCE	85%	+ 27.3	+ 26.6	+ 27.8	+ 27.8
	90%	+ 28.9	+ 28.4	+ 29.7	+ 29.8
	100%	+ 32.0	+ 32.1	+ 33.6	+ 33.9

D4.1.1 Expenditures Per Capita

(U) Table D.4 displays a comparison of per-capita appropriated funding for off-duty education in the Army, Navy, and Air Force. Table D.4 reveals that the Navy spends significantly less than the other two services. For example, over the past 5 years, the Navy has averaged an expenditure of $18.18 per servicemember for off-duty education. Comparatively, the Army has averaged $87.89 per servicemember, and the Air Force has averaged $48.05 per capita. Thus, in the recent past, the Army has exceeded the Navy's per capita expenditures of appropriated funds by 383 percent, while the Air Force has exceeded the Navy by 164 percent.

(U) At the 85 percent goal level for Navy off-duty educational support, the performance of the Navy (an average per capita expenditure of $21.39 over the past 5 years) lags the performance of the Army by 311 percent. More importantly, at the 85 percent goal level, the performance of the Navy has lagged that of the Air Force by 125 percent. This latter distinction is made because the Navy more closely resembles the Air Force than the Army. Both the Navy and the Air Force are capital-intensive, technology-oriented services. The Army, being manpower intensive, concentrates a greater proportion of its educational effort toward the attainment of basic skills by lower-rank enlisted personnel.

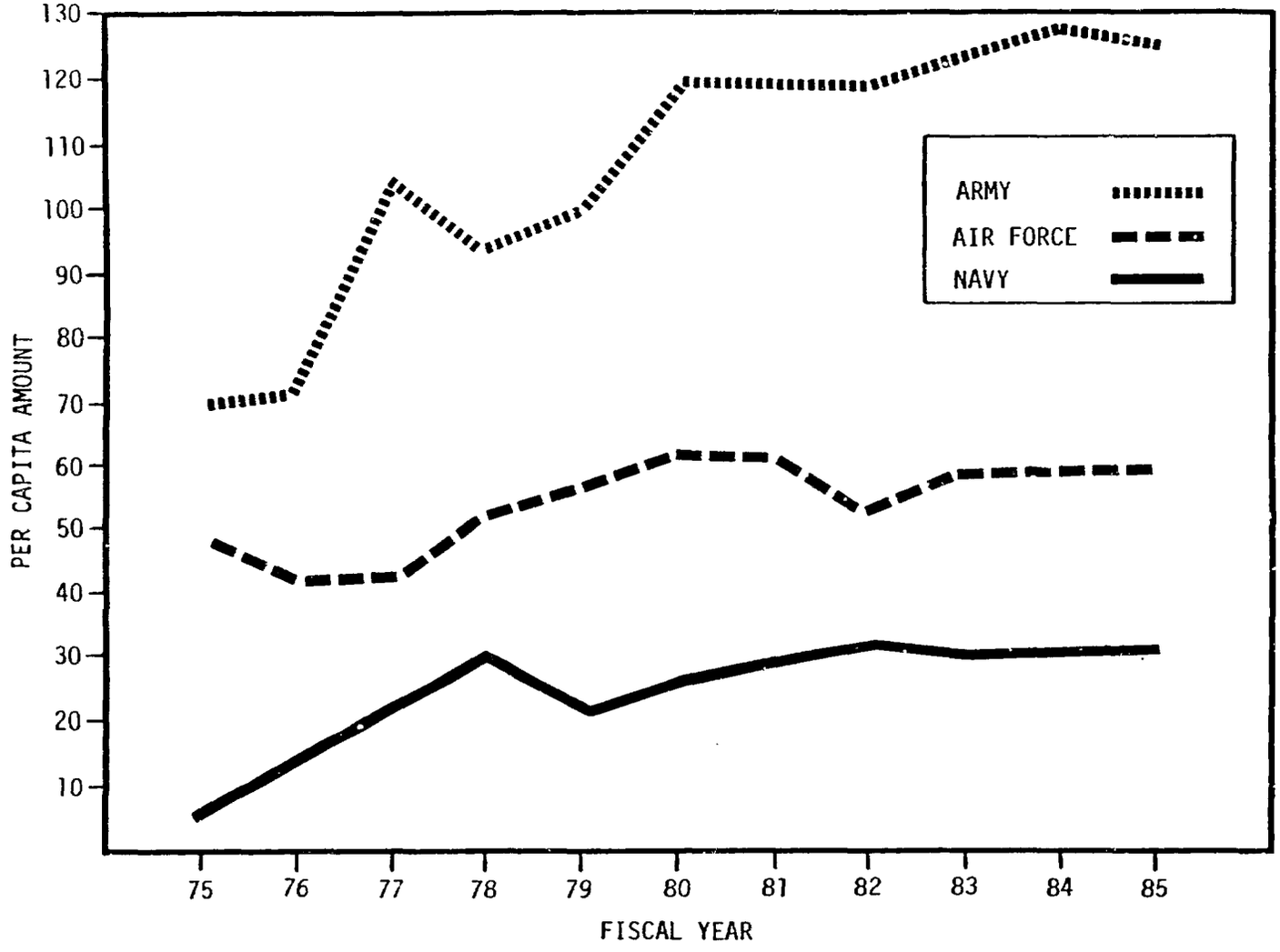
(U) Table D.4 displays an even larger disparity between the Army, Navy, and Air Force programs for the next 6 years. The Navy now programs an average of $29.96 per capita for both the operation of their off-duty education programs and the appropriated support for instructional purposes. Comparatively, the Air Force is programming an average of $58.12 per capita, or approximately 94 percent more than the Navy, for the same functions.

4.2 Off-Duty Education Parity with Air Force

(U) Figure D.3 displays the relative proportions of per capita expenditures in the Army, Navy, and Air Force. Attainment of parity with the Air Force necessitates closure of the Navy profile to that of the Air Force. In addition to funding increments, parity with the Air Force will necessitate an intensification of managerial efficiency goals, such as:

- Limiting operating costs for the Navy Voluntary Education Program to 40 percent of all funds appropriated, annually.

- Expand access to off-duty education programs from the present goal of 85 percent to 90 percent and if possible to 100 percent of all servicemembers (ashore and afloat). This might possibly include a new emphasis on non-traditional means of delivery such as video-cassette and other means of delivery to mobile units. Additionally, an expected participation rate in the program of up to 80 percent of all eligible personnel would be needed for parity with the Air Force.



(U) FIGURE D.3

COMPARATIVE PER CAPITA APPROPRIATED FUNDING FOR OFF-DUTY EDUCATION BY FISCAL YEAR (U)

(U) If the above managerial goals are attained by the Navy, the increments for off-duty education funding displayed in Table D.6 could approach quantity parity with the Air Force. VEAP participation can be de-emphasized under this approach and that in itself may enhance the perceived value of voluntary education to Navy servicemembers. Table D.6 shows the aggregate appropriated funding increment profiles needed to meet 85 percent, 90 percent and 100 percent parity with either the Army or the Air Force for FY-82 through FY-85.

D4.3 Manpower Resources

(U) Each member of the professional staff providing off-duty education services to Navy personnel serves approximately 3,000 people, while the comparable staff member under the Air Force or Army program only serves 600 people or 1/5 of the Navy workload. To the extent that the Navy's greater workload is indicative of or a proxy measure for the quality of service provided to off-duty education participants, then it is not comparable to the program quality of the other two services. Table D.7 indicates that the Navy now plans only a modest improvement in the ratios of manpower resources to total servicemembers in the program years.

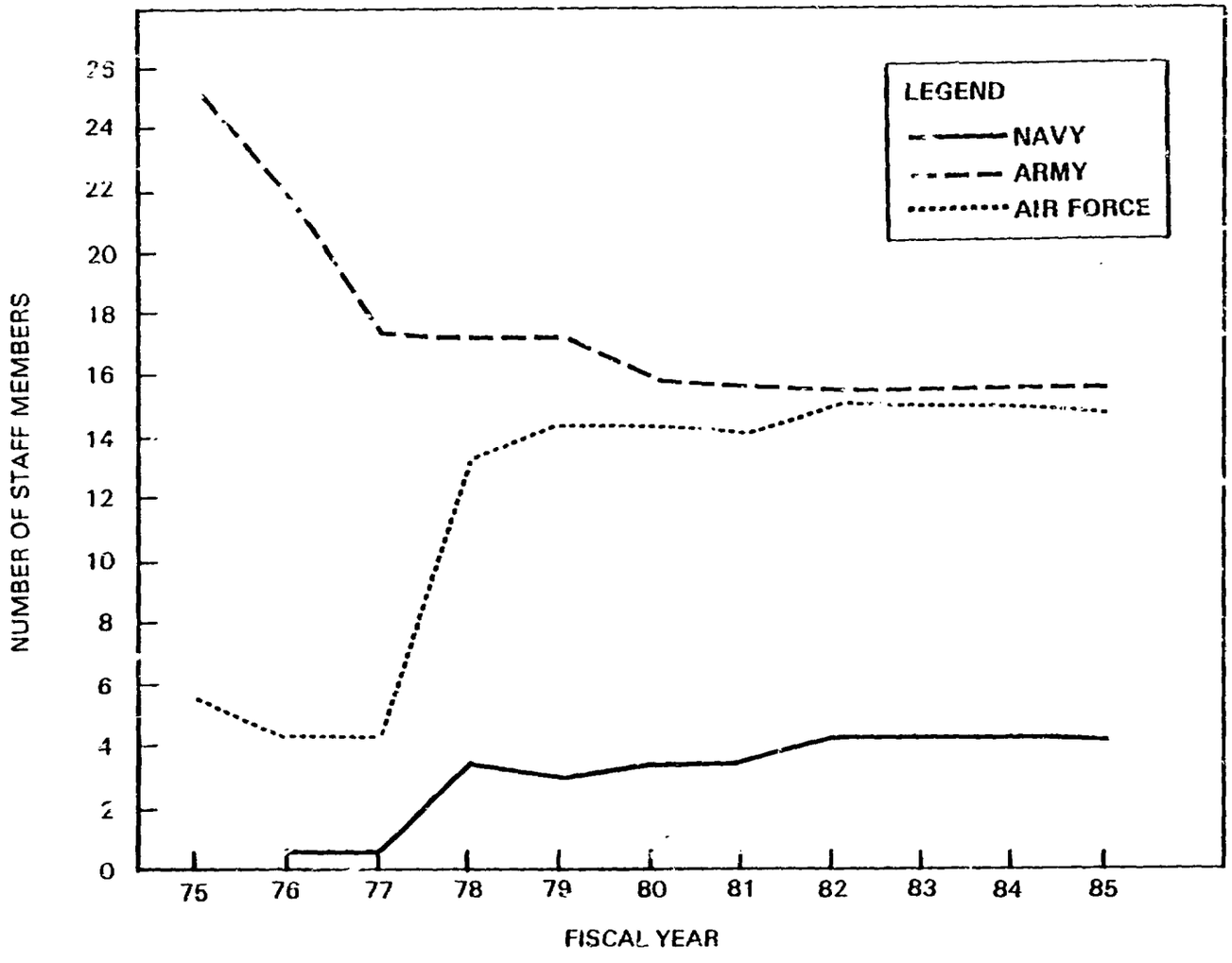
(U) Figure D.4 displays the number of off-duty education staff resources per 10,000 servicemembers for the Army, Navy and Air Force. The Navy has recently (1978) increased its staff by 668 percent. However, the Air Force, in the same year increased its off-duty education staff by 202 percent, closing toward parity with the Army. The Navy is not dedicating its manpower resources to off-duty education at the same level as the other two services. Additionally, the Navy is not programming to close the gap. Table D.8 displays the manpower resource values used to construct Figure D.4. It is apparent that with 4.2 staff members per 10,000 servicemember, the Navy is not equalling the performance of the Air Force with its 11.8 staff members per 10,000 servicemen.

D5.0 SUMMARY

(U) Table D.9 repeats Table D.5 and displays the comparative per capita appropriated funding for Navy, Air Force, and Army for voluntary, off-duty education programs by fiscal year. Since 1975, the voluntary education program within the Navy has increased by 710 percent. Comparably, through 1980, the Army program has increased by 245 percent and the Air Force program has increased by 166 percent. The greatest improvement in the Navy program has been since 1977. In 1980, the Navy is providing $25.57 per capita from appropriated funds for voluntary education. The Air Force exceeds this by 239 percent per capita and the Army exceeds the Navy by 468 percent. It is significant to note the appropriated fund support for off-duty education programs remains relatively constant in 1977, 1978, and 1979. At this modest level of approximately $10 million per year, close to 69 percent of the Navy's funds are used to support the program's overhead structure. Increments of $32 to $33.9 million per year, as previously shown in Table D.6, will permit economies of scale and with appropriate management control could drive the Navy's overhead proportion and overall program support to 100 percent parity with the Air Force.

(U) TABLE D.7
COMPARATIVE STAFFING FOR OFF-DUTY
EDUCATION PROGRAMS OF THE MILITARY SERVICES
(MILITARY, CIVILIANS, DIRECT AND INDIRECT HIRE)

FISCAL YEAR	NAVY			AIR FORCE			ARMY		
	Staff	End Strength (000)	Service Members Per Staff	Staff	End Strength (000)	Service Members Per Staff	Staff	End Strength (000)	Service Members Per Staff
1975	—	534.9	—	343	613.0	1,787	1975	783.9	397
1976	23	524.9	22,82[illegible]	251	585.0	2,330	1705	779.0	457
1977	23	529.7	23,03[illegible]	251	570.0	2,271	1372	781.8	570
1978	177	530.1	4,531	760	569.7	750	1343	771.1	574
1979	152	519.2	3,416	809	562.1	695	1325	761.8	575
1980	176	528.0	3,000	853	559.0	695	1226	774.0	631
1981	180	533.7	2,965	892	564.7	704	1227	777.6	634
1982	229	543.8	2,375	853	566.1	654	1223	782.7	640
1983	229	546.1	2,385	853	563.7	654	1236	785.6	636
1984	229	547.8	2,392	853	565.8	663	1236	784.9	635
1985	229	548.1	2,393	853	574.4	674	1236	784.6	635



(U) FIGURE D.4
NUMBER OF OFF-DUTY EDUCATIONAL STAFF
PER 10,000 SERVICEMEMBERS (U)

(U) TABLE D.8
COMPARATIVE STAFFING (PER 10,000
SERVICEMEMBERS) FOR OFF-DUTY
EDUCATION PROGRAMS OF THE MILITARY SERVICES
(MILITARY, CIVILIAN, DIRECT AND INDIRECT HIRE)

FISCAL YEAR	NAVY			AIR FORCE			ARMY		
	Staff	End Strength (000)	Staff Per 10,000	Staff	End Strength	Staff Per 10,000	Staff	End Strength (000)	Staff Per 10,000
1975	—	534.9	—	343	613.0	5.6	1975	783.9	25.2
1976	23	524.9	.44	251	585.0	4.3	1705	779.0	21.9
1977	23	529.7	.43	251	570.0	4.4	1372	781.8	17.5
1978	177	530.1	3.3	760	569.7	13.3	1343	771.1	17.4
1979	152	519.2	2.9	809	562.1	14.4	1325	761.8	17.4
1980	175	528.0	3.3	803	559.0	14.4	1226	774.0	15.8
1981	180	533.7	3.4	802	564.7	14.2	1227	777.6	15.8
1982	229	543.8	4.2	853	566.1	15.1	1223	782.7	15.6
1983	229	546.1	4.2	853	566.7	15.1	1236	785.6	15.7
1984	229	547.8	4.2	853	569.8	15.0	1236	784.9	15.7
1985	229	548.1	4.2	853	574.9	14.8	1236	784.6	15.7

(U) TABLE D.9
COMPARATIVE PER CAPITA APPROPRIATED
FUNDING FOR OFF-DUTY EDUCATION BY FISCAL YEAR (U)
(ACTUAL YEAR DOLLARS)

FISCAL YEAR	NAVY			AIR FORCE			ARMY		
	Total ($M)	End Strength (000)	$Per Capita	End Strength (000)	End Strength (000)	$Per Capita	Total ($M)	Total ($M)	$Per Capita
1975	1.9	534.8	3.55	20.6	613.0	33.60	37.7	783.9	48.09
1976	5.0	524.9	9.53	18.0	585.0	30.77	40.9	779.0	52.50
1977	9.3	529.7	17.56	19.2	570.0	33.68	66.0	781.8	84.42
1978	10.6	530.1	22.92	25.8	569.7	45.29	63.0	771.1	81.70
1979	10.6	519.2	20.42	29.7	562.1	51.59	72.0	761.8	94.51
1980	13.5	528.0	25.57	34.1	559.0	61.00	92.5	774.0	119.51
1981	15.8	533.7	29.60	36.5	564.7	64.64	98.0	777.6	126.02
1982	18.7	543.8	34.39	33.1	566.1	58.47	102.3	782.7	130.70
1983	18.9	546.1	34.61	38.3	566.7	67.58	113.7	786.6	144.55
1984	19.3	547.3	36.14	40.5	569.8	71.08	120.7	784.9	153.78
1985	21.2	548.1	38.68	42.7	574.9	74.27	123.7	784.6	157.66

APPENDIX E -

COMPARISON OF FAMILY SUPPORT PROGRAMS

IN THE MILITARY SERVICES

APPENDIX E

COMPARISON OF FAMILY SUPPORT PROGRAMS
IN THE MILITARY SERVICES

E1.0 INTRODUCTION

(U) This appendix addresses Family Support Programs of the Army, Navy and Air Force. The emphasis in the management, funding and organization of family support type programs varies from service to service. The Army Community Services Program is a centrally managed social services assistance program. The Navy Family Program is a centrally coordinated support program. The Air Force has a decentralized social services program, located at each major installation. Similarities do exist in all the family support programs of the services. For comparison purposes, the analysis in this appendix examines those similarities.

E2.0 NAVY FAMILY SUPPORT PROGRAM

(U) The mission of the Family Program is to improve the Navy's awareness of the availability of reliable and useful information and resources to support and enrich the lives of Navy families and individual service members.

(U) The Navy Family Program has five major objectives:

- To establish a network of Family Service Centers;
- To provide training, technical assistance, positive support, and guidance to improve local family support programs;
- To develop awareness programs emphasizing the importance of families to the Navy's mission;
- To increase effective coordination and use of existing Navy and civilian resources;
- To conduct research and studies which document and guide future Navy family efforts and policy.

E2.1 Evolution Of The Navy Family Program

(U) Prior to 1972, the Navy provided limited assistance to its families directly and indirectly by publicizing the availability of help from groups with which it had close and long-standing relationships. Among some of the major types of assistance provided directly were for housing, housing referral and dependents' medical care information. A wider array of assistance was available from non-Navy groups with close Navy ties. Financial assistance and counseling, alcohol abuse counseling, relocation assistance, education referral,

emergency communication assistance, are all examples of the types of help given to Navy families by affiliated and friendly organizations. Just a few of these groups are:

- The Navy Relief Society
- Navy League
- United Service Organization (USO)
- Armed Forces YMCA
- American Red Cross
- Navy Wives Clubs

(U) Many other significant family oriented activities began before 1972. In 1966, a series of family programs was initiated to help Navy families relocate. Staffed by volunteers, these Dependent Assistance Teams (DAT) were principally oriented towards assisting Navy families relocating overseas. Another undertaking was the establishment in 1970 of the Ombudsman program which provided liaison between Navy families and Navy officials and institutions. The Ombudsman office is staffed by a volunteer, usually a Navy spouse, who attempts to make systems work when normal procedures and communication paths fail to solve family and personal problems. During the 1960's, the Navy began offering counseling, referral, education and other help to personnel and family members with alcohol or drug abuse problems.

(U) A major milestone in the evolution of Navy family assistance activities was achieved in 1972 when Personal Services Centers[1] were established. These were intended as consolidated facilities carrying out a wide range of functions aimed at improving Navy life and satisfaction with a Navy career. At 58 Naval facilities, the Personal Services Centers provided centralized assistance of the following types:

- Welcome Brochure
- Liaison with wives' organizations
- Organization of volunteer programs
- Welfare assistance
- Hospitality kits
- Waiting wives program
- Publicity about available services
- Reference/loan libraries with materials describing military bases, their environment and family-oriented facilities throughout the U.S. and abroad
- Information and referral on Navy and community resources, services and agencies
- Resources for handicapped family members

1 Chief of Naval Operations Personal Services Centers; Establishment and operation of, (OPNAV INST 1740.1A) (U) 7 February 1972; Unclassified

Besides these essential functions, Personal Services Centers were encouraged to provide many other services, such as employment assistance and referral, orientations on benefits and entitlements, babysitter registry and referral, listing of summer camps, and want-ad services.

(U) The Navy took many actions in the 1970's to examine families' needs and address them. Some key events were:

- Joint Conference on Military Families, (1976)
- San Diego, Conference on Military Families, (1977)
- Norfolk, Navy-Wide Family Awareness Conference, (1978))
- Orlando, Navy Recruiting Command Family Awareness Conference, (1979)
- Alexandria, Navy Family Program Planning Workshop, (1980)

E2.2 The Navy Family Program

(U) In early 1979, the Navy established the Navy Family Support Program. To conform with the major objectives of the program, self-help, awareness research and Family Service Centers are emphasized. For self-help, the Family program assists individual commands and activities in developing family support programs. The Program provides resource information and reference materials, suggests appropriate resource people and offers guidance with regard to analyzing, planning, or improving the existing family support services and systems. The Navy family program is also developing an awareness program to highlight existing Navy practices that support and strengthen families. Wide media coverage is directed toward increasing the overall awareness of the importance of families to the Navy's mission. An essential element of the Navy family program is the development of appropriate data and information with which to formulate and guide future policy and direction of the family program effort. Navy and civilian research is reviewed and analyzed to determine needs, to plan and implement programs, and to measure family program effectiveness.

E2.2.1 Family Service Centers

(U) Family Service Centers are a focal point for a full range of Navy and civilian resources and assistance for Navy families as well as single Navy men and women. The Centers offer information and referral for a wide array of personal and family matters, counseling, assistance and crisis intervention. Additionally, Navy Family Service Centers function to embrace and build on existing family assets and strengths. They are staffed by military, professional and volunteer service members and civilians. Two pilot Family Service Centers are now in operation, one in Norfolk, VA., and one in San Diego, CA. An additional seven Centers are scheduled for 1981 (Yokosuka, Japan; Charleston, SC;

Jacksonville, FL; Long Beach, CA; North Island, CA; Miramar, CA; San Diego, CA. In FY-82, another 14 FSCs will be implemented.

E2.3 Navy Child Care Centers

(U) There are 68 Child Care Centers in the Navy operated by Special Services (Military General Recreation MWR Category III activities). The Navy Exchange is in the process of transferring the operation of their last two child care centers to Special Services. Others are managed by wives clubs and other private organizations supportive of the Navy.[2]

(U) The Navy is now programming two initiatives to improve child care facilities in the Navy. Under the first initiative, the Navy is programming $2.8M annually to upgrade existing child care centers to meet minimum fire and safety codes. This program, which will commence in FY-81, will be completed by the end of FY-90. The other child care facility improvement program involves the construction of new child care centers. Twenty new child care centers are programmed starting in FY-82. At a construction rate of 3 to 5 child care centers per year, 20 new centers will be provided by FY-86. All new centers will replace present inadequate facilities and the Navy inventory of child care centers will not be increased in this time-frame. By the end of 1990, all centers will meet minimum fire and safety standards.[3]

(U) Discussions with the child care center fiscal coordinator reveals that no accurate capacity data for Navy child care centers exists.[4] However, a recent test survey of the assets of the Navy Family Support Program completed in January 1980[5], reveals (with response returns for 9 of the 10 Naval bases queried) an aggregate capacity to care for 1,094 children at the 9 child care centers inspected. This equates to an average capacity of 122 children per child care facility. Applying this average to the existing 68 child care centers in the Navy provides a rough estimate of total child care capacity in the Navy. In 1979, total NAF income and expenses in NAF operations of naval child care centers was $3.9 million in income and $4.1 million in expenses.[6]

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2 Office of Assistant Secretary of Defense (MRA&L) Letter to Honorable Fortney M. Stark, Jr., (U) 21 December 1978; Unclassified

3 Naval Military Personnel Command, Naval Child Care Centers (U) Ltr. N-651C-SB 27 March 1980; Unclassified

4 Discussions with Ms. Susan Diamonte, Naval Military Personnel Command, 26 February 1980

5 Office of the Chief of Naval Operations (OP-152) Inventory of Navy Family Support Program Assets (U) October 1979; Unclassified

6 Discussions with Mr. Raymond E. Brule, Jr., Naval Military Personnel Command 7 January 1980

E3.0 Army Community Service

(U) The Army Community Service (ACS) Program is a community-oriented, social service program designed to assist commanding officers by identifying emerging social problems and to assist service members and their families through the development and provision of programs and services designed to meet individual and community needs.

(U) Each Army installation with a community population of 2,000 or more is required to operate an ACS Center if dependents are authorized at the installation. Once established, each ACS offers the following programs and services as a minimum[7]:

- Information and referral
- Financial planning and assistance
- Relocation services
- Handicapped dependents' assistance
- Child advocacy program
- Army Emergency Relief Program
- Child support services, consisting of:
  - day care services
  - preschool services

(U) At certain Army posts where there are only a limited number of children, it is not necessary to operate a full scale Child Support Services (CSS) Program. Installation commanders determine whether there is a sufficient need and operate only those CSS activities for which there is a demonstrated need. Conversely, services other than those shown above may be provided based on local recognition of other needs. At posts which are not required to operate an ACS Center, an ACS point of contact is designated to provide information about the installation to ACS Centers at other installations, to provide local referral assistance to service members and their families, and to provide such other ACS services as may be needed.

(U) ACS Program personnel work closely with local military and civilian social services agencies and their representatives to develop community resources, to make them available to all military personnel and their dependents, and to ensure compliance with procedures established by these agencies. ACS Program personnel develop working relationships with civilian community agencies, in order to ensure that the military community obtains maximum use of local civilian services for which they are eligible.

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7 Department of the Army Personnel Affairs, Army Community Service Program, Army Regulation No. 608-1, (U) 1, October 1978; Unclassified

(U) The ACS Program is dynamic and responsive to the needs of the Army. It is the focal point for the assessment of community needs and the existing sources of agencies to satisfy these needs. When unmet needs exist, the ACS Officer coordinates with military and civilian social service agencies in order to provide services. In addition, the ACS Program serves as the central point for coordinating ACS volunteers to supplement the paid staff in providing services and to serve as a source of information concerning community needs.

(U) As a minimum, the ACS facility includes space for reception, administration, household loan items, rest rooms, counseling rooms, a waiting room, storage room, and conference room. Space allowances are as follows:

MILITARY STRENGTH	GROSS SQ. FT.
Up to 3,000	1,150
3,001 to 5,000	1,500
5,001 to 7,000	2,500
7,001 to 10,000	2,750
10,001 to 15,000	3,000
over 15,000	3,200

For installations exceeding 7,000 military strength, an additional 900 square feet may be provided for a classroom.[8]

E3.1 Army Child Support Service Centers

(U) The Army operates 89 child care, nursery school and pre-school centers in the continental United States (CONUS). In Hawaii, the Army operates 4 centers and one is located in Korea. In Europe, the Army operates 151 nurseries and pre-school type child care centers. The CONUS facilities have an average capacity of 111 children. The offshore facilities have an average capacity of 45 children. In total, the 245 child support service centers now existing in the Army have an aggregate capacity for 17,207 children. No data on fund support for Army Child Support Services Centers is available.[9]

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8 Department of the Army Quality of Life Minimum Standards (U) DAPE-HRQ) 6 September 1979; Unclassified

9 Discussions with Mr. H.W. Jerome, Department of the Army (Child Care Services Centers), 27 February 1980

E4.0 Air Force Child Care Centers

(U) The Air Force child care centers support the base child care program. The Air Force operates 88 child care centers in CONUS and Alaska, 25 centers in Europe, 3 centers in Japan, 2 centers in Hawaii and 1 each in the Phillipines and Guam. The aggregate capacity of all 122 child care centers in the Air Force is 14,083 children. However, the documented average daily attendance exceeds capacity by 16 percent. Thus the Air Force provides child care for approximately 16,354 children daily.[10] Total NAF income and expense for Air Force child care centers in FY-79 was income of $15.0 million and $14.1 million in expenses.[11]

E5.0 Comparison of Child Care Center Capacity

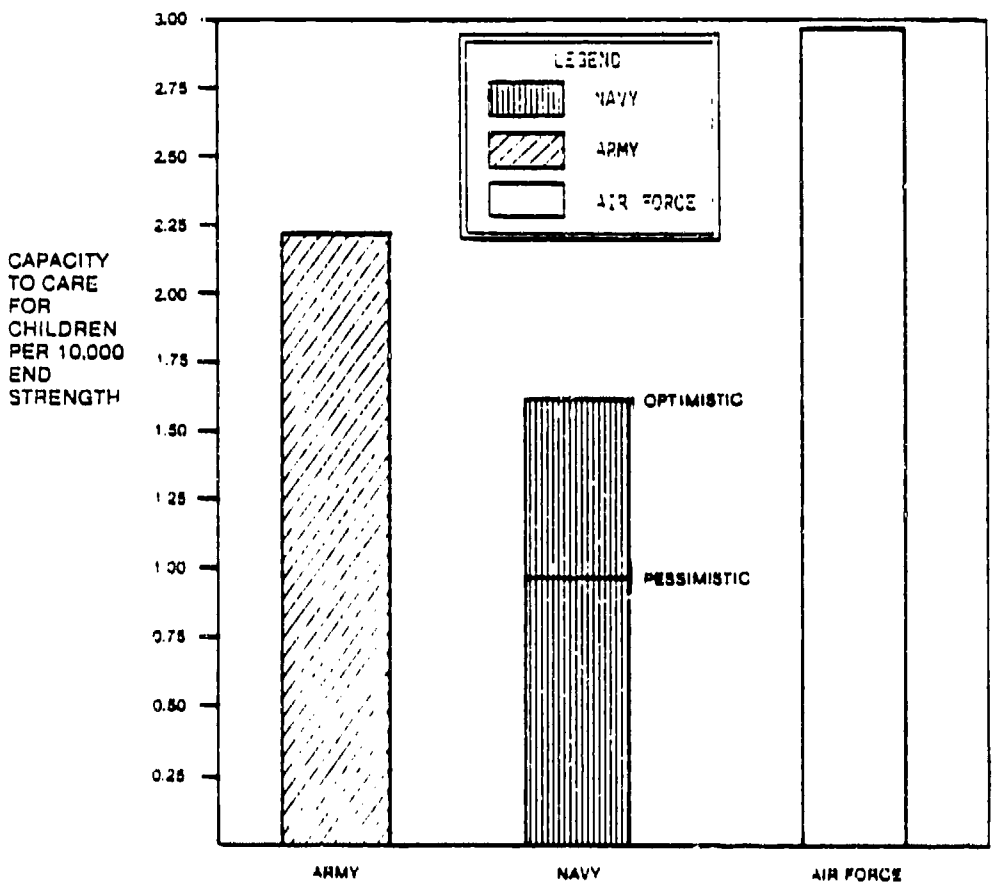
(U) Child care centers are common to all services. The Army operates 245 centers, the Air Force operates 122 centers and the Navy operates 68 child care centers. The Army reports an aggregate capacity for 17,207 children. The Air Force has documented an aggregate, average daily attendance of 16,354 children. An optimistic approximation of the total Navy capacity is for 8,266 children. Based on the proportion of NAF income for child care operations reported by the Air Force and the Navy in FY-79, the Navy has an income only 28 percent the amount of the Air Force. On this basis, a more probable approximation of Navy child care capability is for 4,640 children. Figure E.1 displays the child care capacities for each service on a capacity per 10,000 servicemember basis. A range of uncertainty is displayed for Navy capacities based on optimistic and pessimistic capacity assumptions.

E5.2 Relative Quality

(U) As an indication of the quality of child care provided, Table E.1 displays the NAF expenditures for both the Navy and Air Force over the past three years on a per capita basis. The values displayed in Table E.1 presume the optimistic capacity assumption for Navy child care centers. All values shown in Table E.1 are in constant FY-80 costs for comparison purposes. Table E.1 indicates that the Air Force has improved the quality of its child care by 12 percent since FY-77. Comparatively, the Navy may have improved the quality of child care by as much as 42 percent. It is significant to note that Navy lags the Air Force by 78 percent in the indicated quality of child care in FY-79.

10 Chief of Staff USAF Air Force Child Care Centers, Capacity, Average Attendance and Employees as of 10 October 1979; Unclassified

11 Military Personnel Center USAF. Child Care Program Income and Expense Statement (U) 1 November 1979; Unclassified



(U) FIGURE E.1.
COMPARATIVE CAPABILITIES OF CHILD CARE CENTERS, END FY - 1979
(DAILY CHILDREN CAPACITY PER 10,000 END STRENGTH)

(U) TABLE E.1

RELATIVE QUALITY OF CHILD CARE PROGRAMS (U)

SERVICE (Children Capacity)	NAF Dollars Expended Per Child Served (Constant FY-1980 Dollars)		
	FY-1977	FY-1978	FY-1979
AIR FORCE* (16,354 Children/day)	820	902	920
NAVY** (8,260 Children/day)	364	426	516

*Air Force and Army provide nursery and pre-school programs at some installations

**Navy primarily provides custodial care.

APPENDIX F -

COMPARISON OF ALCOHOL AND DRUG PROGRAMS IN THE MILITARY SERVICES

APPENDIX F

COMPARISON OF ALCOHOL AND DRUG PROGRAMS IN THE MILITARY SERVICES

F1.0 INTRODUCTION

(U) This appendix presents the results of a comparative analysis of alcohol and drug programs in the Navy, Army and Air Force. The analysis is part of a parity assessment of non-compensation aspects of military service life. The results of the comparisons develped in this appendix are summarized along with the comparisons of other aspects of naval service life and related to current retention issues in the main body of the report.

(U) A wealth of information related to alcohol and drug programs exists in the services and in the various offices of the Department of Defense (DOD). However, the information has not been systematically collected, analyzed and published for general use within the Department of Defense.[1] To assure comparability in this assessment, data used herein is taken from the historic records. These records consist of program justification data reported by each of the military services to the Assistant Secretary of Defense (Health Affairs), since 1972.

F1.1 Organization

(U) This appendix is organized into five major segments. In the segment following this introduction, the overall DOD policy for dealing with alcohol and drug abuse is outlined. The military services conform to the DOD policy with different procedures and with various emphasis. In the third segment, a macro comparison of the identification process used by the Navy, Army and Air Force is documented. This is followed in the fourth segment by a parity assessment of each services' treatment programs. Finally, in the fifth major segment, the performances of each service's drug and alcohol programs, taken together, are compared. These final comparisons are summarized in the main body of the report and used along with other aspects of military service life to evaluate, along with retention trends, specific issues dealing with the quality of naval service life.

F2.0 DEPARTMENT OF DEFENSE POLICY

F2.1 Alcohol Abuse Policy

(U) On March 1, 1972, the DOD issued its first directive addressing the problem of alcohol abuse. The policy was designed to prevent alcohol abuse and alcoholism, and to attempt to restore to effective functioning all individuals with problems attributable to alcohol abuse. The DOD recognizes alcoholism as a disease which is preventable and treatable. Further, it requires the application of enlightened attitudes and techniques by command, supervisory, and health service personnel. Specifically, this includes recognition of the signs and symptoms of alcoholism for early identification, and reducing the stigmatizm associated with the disease. A positive non-punitive approach is emphasized.

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[1] Office of the Assistant Secretary of Defense (Health Affairs), Drug and Alcohol Abuse Control Data Book (Draft) (U), Memorandum of 24 August 1979; Unclassified

The DOD directs the military services to expand treatment and rehabilitation facilities and to assure the availability of treatment to all service personnel. The effort is intended to correct the negative perceptions that alcoholism: represents a moral failing; is an incurable medical problem; and warrants only expulsion from the service.[2]

F2.1.1 Emphasis of Alcohol Programs Within the Services

(U) Each of the military services administers its own program within the policy established by DOD. The programs vary among the services; however all are required to have the program elements of (1) prevention, (2) identification, (3) treatment and (4) rehabilitation. Each of the military services is also required to establish programs for civilian employees.[3]

(U) The Army operates an integrated drug and alcohol abuse program. This program is decentralized at installations throughout the United States and overseas. Following identification, a therapeutic plan is developed for the individual soldier. Normally, the treatment/rehabilitation process in the Army consists of an active phase of about 60 days and a follow-up phase of about 300 days duration. Residential treatment is provided for those who need a drug/alcohol free environment, which is typically in the form of a halfway house. However, the vast majority of drug/alcohol abuse identified soldiers do not need such a rigid structure or supportive environment. These individuals remain with their unit and are counseled throughout the treatment process.

(U) The Navy experience in treating alcoholics predates DOD's formal program. The Navy program consists of a large number of treatment facilities, a safety action program and a wide network of volunteer counselors in the form of active duty recovered alcoholics. Civilian community resources are used extensively to supplement the Navy program. In addition to treating active and reserve personnel, the Navy system provides for dependents, retired personnel, and members of other naval services such as the United States Coast Guard and the United States Marine Corps. From time to time, servicemembers on active duty in the other military services of the DOD are treated in the Navy facilities. This frequently occurs when anonymity or other safeguards are missing in local programs of the other services.

(U) One unique feature of the Navy Alcohol Program is the Navy Alcohol Safety Action Program (NASAP). This is modeled after the safety action program developed for the various state constabularies as outlined by the Department of Transportation. The Navy Safety Action Program attempts to include all accidents, fights, arrests, cronic tardiness, driving while intoxicated, and other situations where alcohol abuse involves servicemembers with a pattern of crisis situations. The emphasis of this program is on education. Additionally, the NASAP program provides a means of early identification and structured referral for treatment.

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[2]Department of Defense, Alcohol Abuse by Personnel of the Department of Defense (U), DOD Directive 1010.2 of 1 March 1972; Unclassified

[3]U.S. Civil Service Commission, Instruction on Federal Civilian Employee Drug and Alcohol Program (U), FPM Ltr. No. 792-7; Unclassified

(U) The Alcohol Program of the Air Force is an integral part of the Social Action Program. The Social Action Program assists the installation commander in conducting drug and alcohol abuse control, equal opportunity and treatment and human relations education. The Air Force emphasizes a prevention policy including stringent entry standards and extensive education of all personnel. Following identification, the Air Force treatment program closely parallels that of the Army. The preponderance of the treatment is done locally. However, for more serious cases centralized treatment is available.

F2.2 Drug Abuse Policy

(U) The DOD directives on drug abuse are designed to prevent and eliminate drug abuse within the military services by all effective methods, and to attempt to restore affected members to useful service. The DOD asserts that the improper use of drugs is damaging to health, jeopardizes the safety of a servicemember, leads to criminal prosecution, and to other than honorable discharge.

(U) Responsibility for counseling and protecting servicemembers against drug abuse, and attempting to rehabilitate members using drugs, who evidence a desire and willingness to undergo rehabilitation, lies with the services. However, appropriate disciplinary and administrative actions in cases of drug abuse will be dependent on the facts and circumstances of each case. Rehabilitation programs are not to be used in lieu of appropriate disciplinary or administrative actions, but they may be used in connection with such actions. Military services are authorized by DOD to establish amnesty programs. Under this exemption policy, medical assistance is made available and action under the Uniform Code of Military Justice may be suspended.[4]

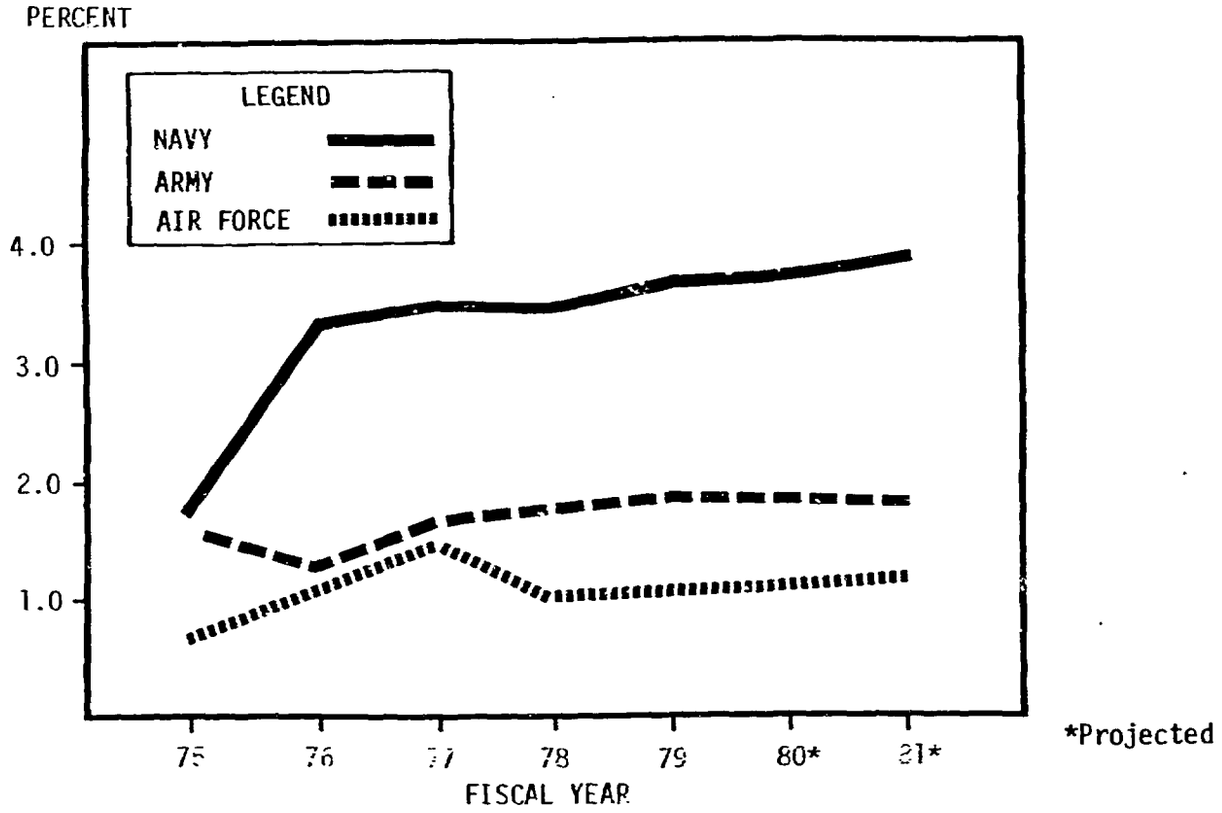
F3.0 IDENTIFICATION

(U) To prevent drug and alcohol abuse, and to restore affected servicemembers to effective functioning duty, the military departments identify abusers and refer them to treatment programs. Thus, identification is the first of many important steps in the rehabilitation process.

F3.1 Identification of Alcoholics and Alcohol Abusers

(U) Figure F.1 displays the number of persons entering treatment and rehabilitation programs for the Navy, Army and Air Force. The data is shown as a percentage of active duty end-strength. As shown in Figure F.1, the Navy has been far superior to the Army and the Air Force in identifying individuals afflicted with alcohol problems. In 1978, the number of persons entering treatment as a percentage of active duty end-strength in the Navy, Army, and Air Force were 3.4 percent, 1.8 percent, and 1.0 percent, respectivily. The Navy Safety Action Program (NASAP) is one reason for the Navy's

[4]Department of Defense, Illegal or Improper Use of Drugs by Members of the Department of Defense (U), DOD Dirctive 1300.11 of 23 October 1970; Unclassified



(U) FIGURE F.1
REFERRALS TO ALCOHOL TREATMENT PROGRAMS
PER ACTIVE DUTY END-STRENGTH (U)

superior identification process. Because the NASAP phenomenon is restricted to Navy only, this comparative analysis does not assess either the education or identification aspects of service safety action programs.

F3.2 Identification of Drug Abusers

(U) The number of drug abusers entering treatment as a percentage of total active duty end-strength for each service is shown in Figure F.2. As with alcohol, the Navy has been more effective in recent years in identifying drug abusers, but to a lesser degree. For example, in 1978, the Navy referred 1.9 percent of its population to drug treatment, compared to 1.3 percent and 1.0 percent for the Army and Air Force, respectively.

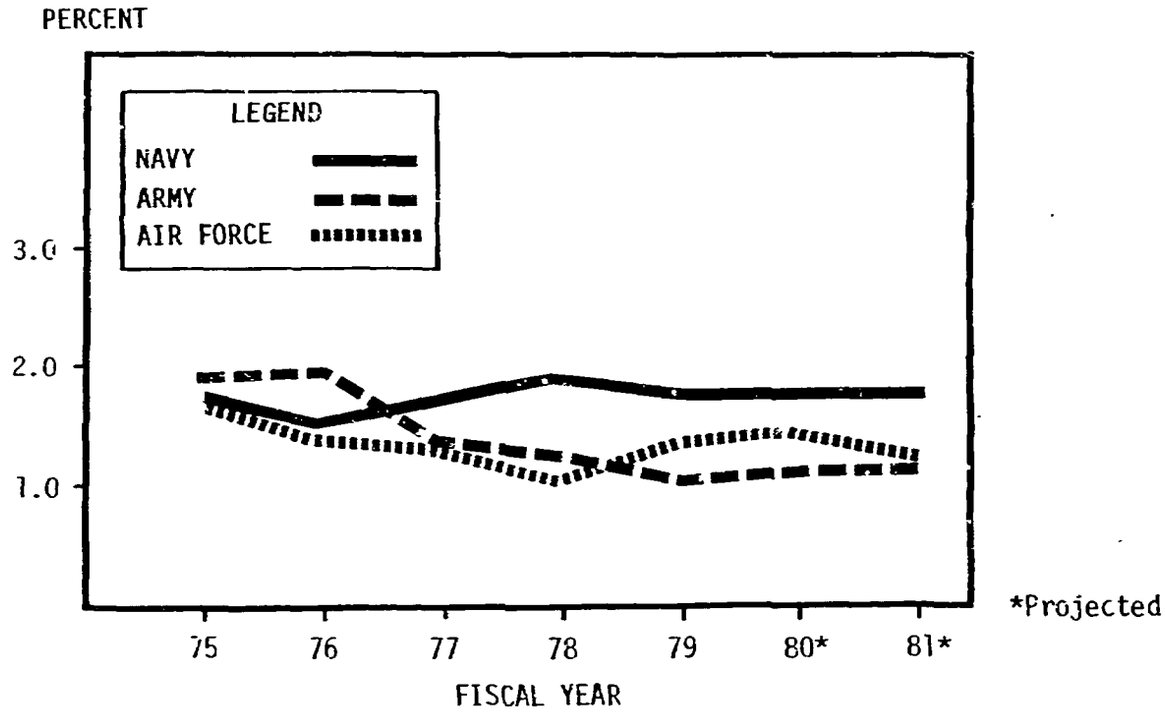
(U) The lack of success in drug identification by all of the services compared to the Navy's success in alcohol suggests substantial variances in the identification practices among the military services. Figure F.3 displays total drug identifications by method of discovery for each service. Collective data from 1976 through 1979 is used to calculate the ratios. The majority of the identifications by the Navy and Air Force are from law enforcement referral with 78.6 percent and 80.4 percent, respectively. The Army identifies only 24.7 percent of its drug abusers by law enforcement referral.

(U) DOD requires each service to implement a systematic drug abuse testing program. Biochemical testing (urinalysis) is used more extensively by the Army than by the Navy or by the Air Force. The Army identified 23.7 percent of its members by this method, compared to 5.9 percent by the Navy and 4.4 percent by the Air Force.

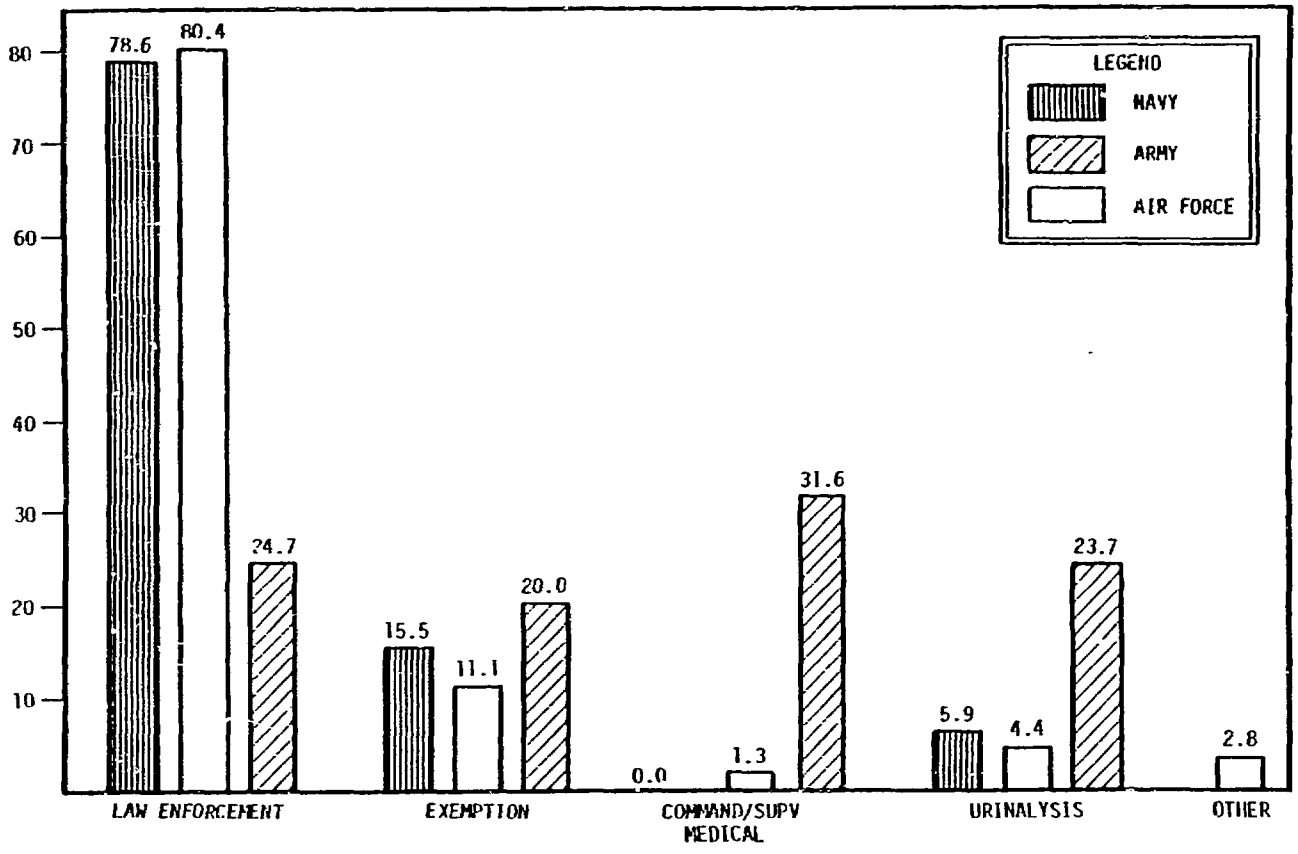
(U) Some of the Army's success in drug identification is attributable to its expenditures for urinalysis. As shown in Figure F.4 the Army has surpassed the Navy and Air Force in expenditures for urinalysis. The Army appears to be more efficient in administering its urinalysis program. One means of approximating the comparative efficiency of urinalysis in the services is the dollar expenditure per person identified by urinalysis. As shown in Table F.1, the Army's urinalysis program is more efficient. It costs the Army $2,696 per person identified by urinalysis, compared to $4,704 and $4,555 for the Navy and Air Force, respectively. Urinalysis is an expensive means of identification for all the services.

(U) The largest percentage of drug abuser identifications for the Army is attributable to command, supervisor, or medical referrals. The Army identifies 31.6 percent of its drug abusers by this method. Comparatively, the Navy has not reported any referral by this method and the Air Force only 1.3 percent. This, in itself, may be a lack of clarity of the reporting system. For example, non-judicial punishment may be a law enforcement action in one service and command action in another.

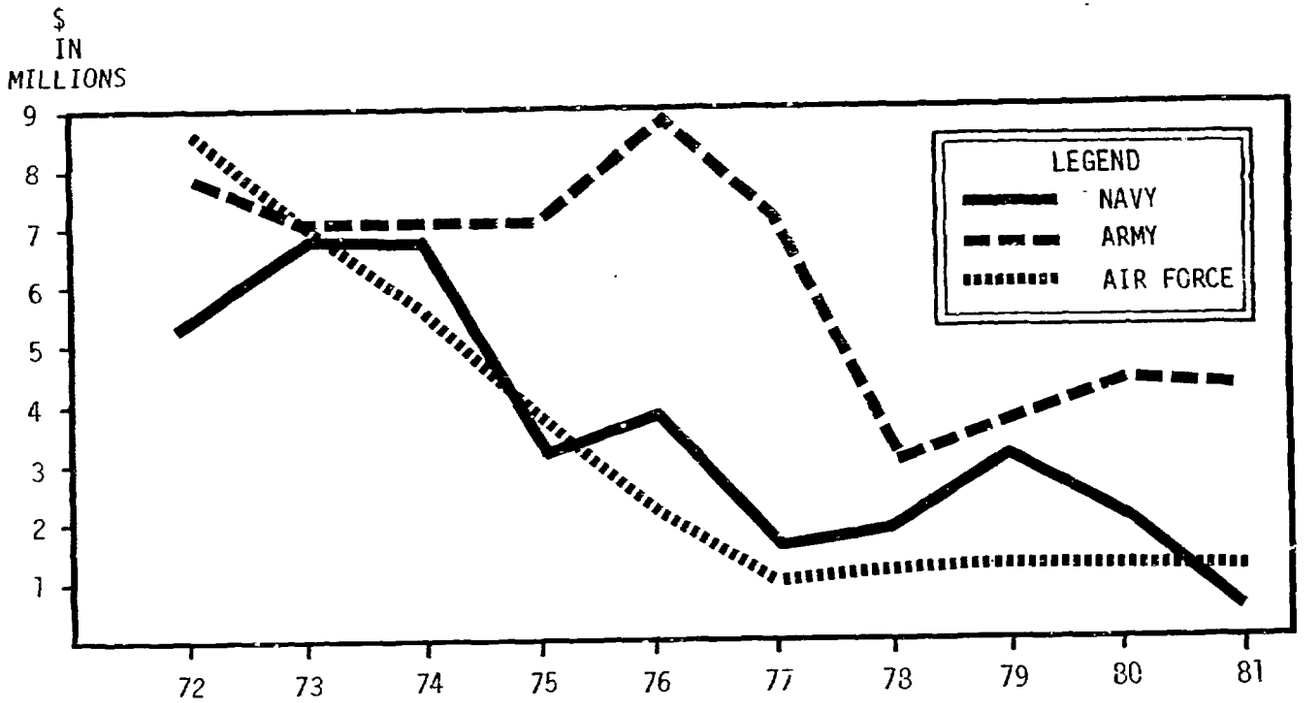
(U) In accordance with the DOD Directive, each of the military services established an exemption policy to encourage individuals with drug abuse



(U) FIGURE F.2
PERCENT OF END-STRENGTH REFERRED
TO TREATMENT



(U) FIGURE F.3
PERCENT OF DRUG IDENTIFICATIONS BY METHOD (U)



(U) FIGURE F.4
URINALYSIS EXPENDITURES (U)
(CONSTANT 1980 DOLLARS)

(U) TABLE F.1
URINALYSIS PROGRAM EFFICIENCY (U)
(CONSTANT 1980 DOLLARS)

MILITARY SERVICE	TOTAL EXPENDITURES 1976 - 1979	NUMBER OF IDENTIFICATIONS BY URINALYSIS 1976 - 1979	URINALYSIS COST PER CAPITA
NAVY	$10.5 M	1133	$4704.00
ARMY	$22.9 M	8501	$2696.00
AIR FORCE	$ 5.6 M	1222	$4555.00

problems to seek assistance through voluntary disclosure without fear of punishment.[5] Figure F.3, as previously shown, indicated that the exemption plans have not worked well. The Army again leads the Navy and Air Force with 20 percent of its identifications by exemption. The Navy identifies 15.5 percent of its abusers by exemption and the Air Force 11.1 percent.

F4.0 DRUG AND ALCOHOL TREATMENT PROGRAM ANALYSIS

(U) Treatment of drug and alcohol abusers is the second step of the rehabilitation process. (This comparative analysis uses a parametric approach to approximate various measures of each of the services' treatment programs.)

F4.1 Alcohol Treatment Programs

F4.1.1 Alcohol Treatment Facilities and Capacity

(U) The number of people treated is, in part, dependent on the facilities available and the aggregate capacity of the facilities. Table F.2 displays the number of residential alcohol treatment facilities that the Navy, Army, and Air Force operate. The Navy operates 46 facilities compared to 12 and 11 for the Army and Air Force, respectively. The aggregate capacity of these facilities is shown in Table F.3. The Navy's capacity is 140 percent greater than the Army and approximately 558 percent greater than that of the Air Force.

F4.1.2 Number of People Treated for Alcohol Abuse

(U) The number of servicemembers entering treatment or rehabilitation programs is shown in Figure F.5. The Navy's superiority is evident, as shown. For example in 1978, the Navy treated 18,212 military members, compared to 13,517 and 5,425 persons treated by the Army and Air Force, respectively.

(U) Table F.4 displays the alcoholic treatment configuration of the Navy, Army and Air Force. Treatment configuration, in this analysis, is defined as a ratio of the number of persons entering a particular type of care to the total number of persons entering treatment. Table F.4 displays only detoxification and residential treatment types of care. Typically a problem drinker is identified, confronted, detoxified, assigned to a residential treatment facility, and then returned to duty. At each stage individuals are lost to the Veterans Administration, to other types of treatment programs, or returned to duty after evaluation. In other instances the total typical treatment process is unwarranted and the individual passes directly from one stage or another into a non-alcohol dependence life style. In other cases, the treatment is unsuccessful. The ratios displayed on Table F.4 are developed from data reported by the services. Because the data does not represent the entire dynamics of the recovery process, the ratios displayed on Table F.4 will not add to 100 percent.

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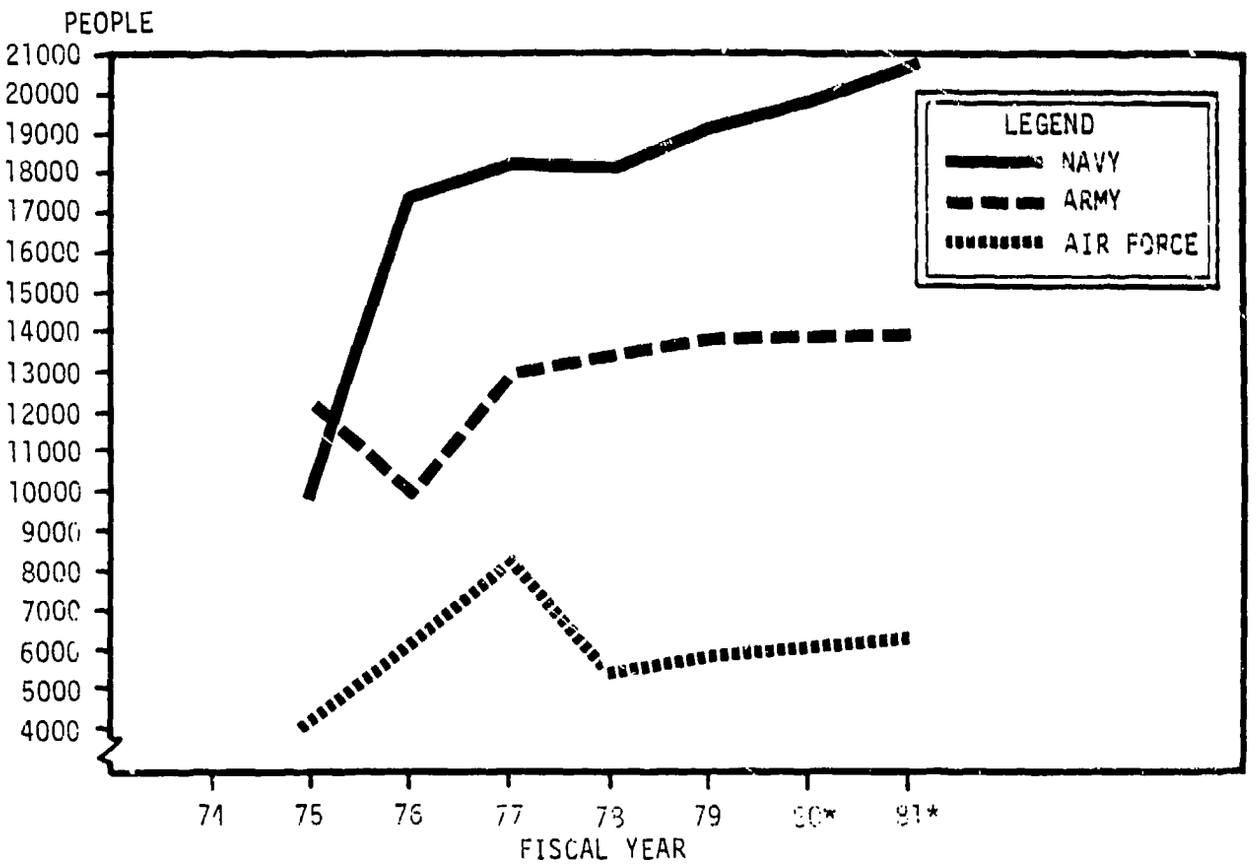
[5] Ibid.

(U) TABLE F.2
NUMBER OF RESIDENTIAL ALCOHOL FACILITIES (U)

TYPE OF FACILITIES	NAVY	ARMY	AIR FORCE
ALCOHOL	28	1	10
DRUG AND ALCOHOL	18	11	1
TOTAL	46	12	11

(U) TABLE F.3
AGGREGATE CAPACITY OF ALCOHOL FACILITIES (U)

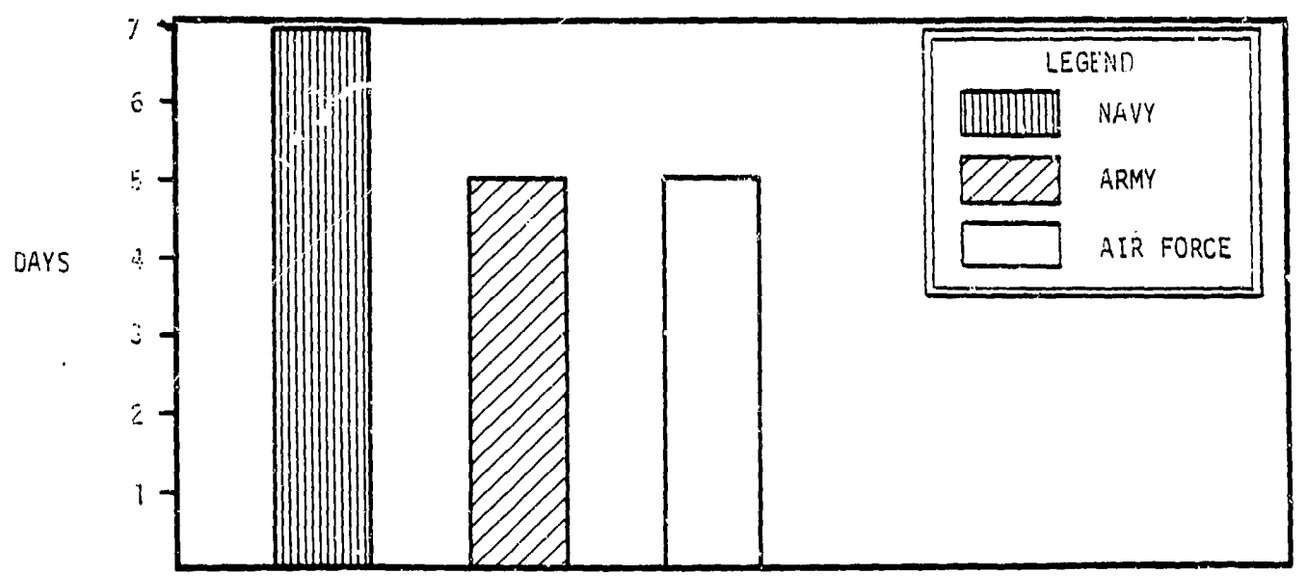
TYPE OF FACILITIES	NAVY	ARMY	AIR FORCE
ALCOHOL	631	80	112
DRUG AND ALCOHOL	270	295	25
TOTAL	901	375	137



(U) FIGURE F.5
NUMBER OF PATIENTS ENTERING ALCOHOL TREATMENT (U)

(U) TABLE F.4
ALCOHOL TREATMENT PROGRAM CONFIGURATION (U)

TYPE OF CARE	PERCENT OF TOTAL TREATED, ENTERING TYPE OF CARE		
	NAVY	ARMY	AIR FORCE
DETOXIFICATION	22.5	5.0	24.7
RESIDENTIAL	45.1	13.6	21.2



(U) FIGURE F.6
ALCOHOL DETOXIFICATION (U)
(AVERAGE LENGTH OF STAY)

(U) The ratios displayed on Table F.4 are a two year average of 1978 and 1979 data. Using a limited period of two years exerts a bias in that some people entering treatment will enter detoxification in one year, but will not receive residential care or outpatient care until the following year. If the total number of persons treated every year remains constant, then a reasonable assumption is that the treatment configuration will remain constant each year. However, where the number of people treated each year changes, there will be a lag between the time a person enters a second or third phase of treatment, thus distorting the treatment configuration. However, each service experienced a slight upward trend in the number of people treated between 1978 and 1979. Therefore, for comparison purposes, the bias is approximately equal for each service.

(U) With this bias in mind, as shown in Table F.4, the percentage of people entering detoxification in the Navy (22.5 percent) is less than for the Air Force (24.7 percent) but greater than the Army (5.0 percent). The Navy leads both the Army and Air Force in residential care, with 45.1 percent, compared to 13.6 percent and 21.2 percent for the Army and Air Force, respectively.

F4.1.3 Extent of Alcohol Treatment

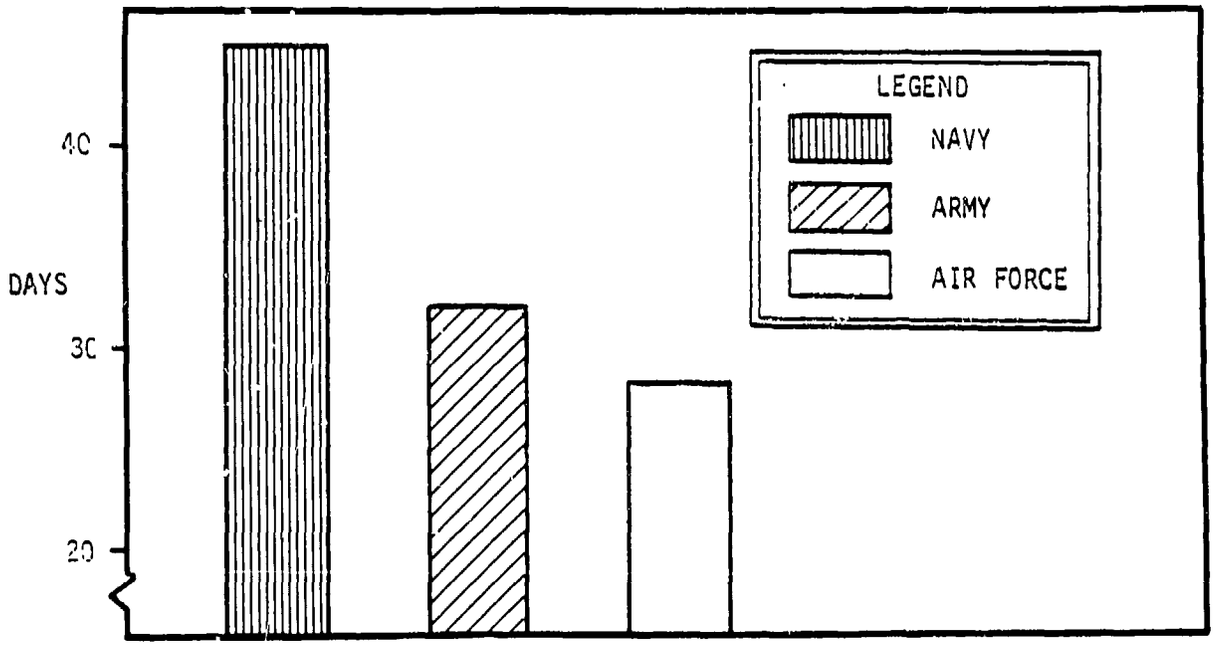
(U) The period of incarceration, as measured by the length of time a patient spends in each phase of treatment, is an indicator of the extent of treatment. Figure F.6 displays the average length of stay in days for detoxification by military service. The Navy's average is 6.9 days, as compared to 5 days for both the Army and Air Force.

(U) Figure F.7 displays the average length of stay in days for residential care. The Navy average is 45 days, whereas the Army and Air Force averages are 32 and 28 days, respectively.

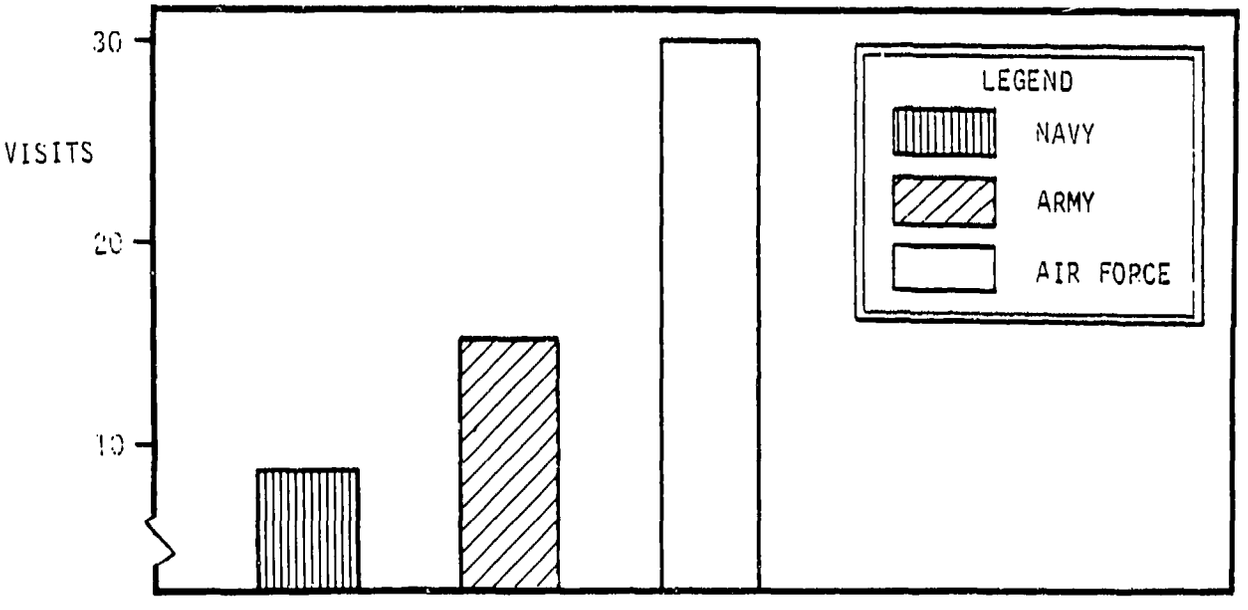
(U) Figure F.8 displays the average number of outpatient visits an individual receives. The Navy lags behind the other services with an average of 5 visits, compared to the Army average of 15 visits and the Air Force average of 30 visits. In contrast, within the Navy, a wide network of successfully recovered alcoholics on active duty, voluntarily counsel post treatment individuals. Because of anonimity for both the newly recovered alcoholic and the old hand, no recorded data exists for this type of follow-up.

F4.1.4 Effectiveness of Alcohol Treatment Programs

(U) The effectiveness of treatment programs is evaluated by approximating the post treatment success rate for each service. The Navy tracks patients for two years following treatment. The Army and Air Force have established single year recovery rates following treatment. Figure F.9 displays the effectiveness rates for each of the services. The Navy program appears to be superior



(U) FIGURE F.7
ALCOHOL RESIDENTIAL CARE (U)
(AVERAGE LENGTH OF STAY)



(U) FIGURE F.8
ALCOHOL OUTPATIENT CARE (U)
(NUMBER OF OUTPATIENT VISITS)

with an effectiveness rate of 71 percent[6], compared to 65 percent for the Army[7] and Air Force.[8] The Navy's superiority may be due to two reasons: (1) as shown in Table F.4, a larger numbers of patients enter detoxification and rehabilitation than in the Army or the Air Force, and (2) the average length of stay at these facilities is longer than for the Army and the Air Force as shown previously in Figures F.6 and F.7. Taken together, more patients and more treatment may add up to more effectiveness.

(U) Applying the effectiveness rates for each of the services to the number of persons entering treatment in a given year results in an estimate of the number of patients successfully completing treatment and remaining recovered for the next few years. As shown in Figure F.10, the Navy by far surpasses the Army and Air Force. In terms of percentages of active duty end strength, the Air Force successfully treats 0.7 percent of its population. The Army successfully treats 1.2 percent of its population. In contrast, the Navy successfully treats 2.8 percent of its population.

(U) Figure F.11 displays the reported expenditures in constant 1980 dollars by each of the services. All of the services show an increasing trend in expenditures for alcohol treatment in recent years. Army data reported for the years 1974-1976 is not clear. Data for drug and alcohol programs was aggregated. For DOD reporting purposes,the Army assumed that an equal amount was expended for drug and alcohol treatment.

F4.1.6 Alcohol Treatment Efficiency

(U) Approximations of efficiency are the final evaluation of the alcohol programs of each service. To measure efficiency an input/output ratio is used, or in this case, dollars expended per number of persons successfully rehabilitated, the real output of the system.

(U) Figure F.12 displays the alcohol program efficiency for each of the services. The Navy's treatment program is more efficient in using resources than the Army and the Air Force. For example in 1978, the Navy spent $848 per successful rehabilitee, compared to $1,124 and $2,896 for the Army and Air Force, respectively. This efficiency is further substantiated when the treatment

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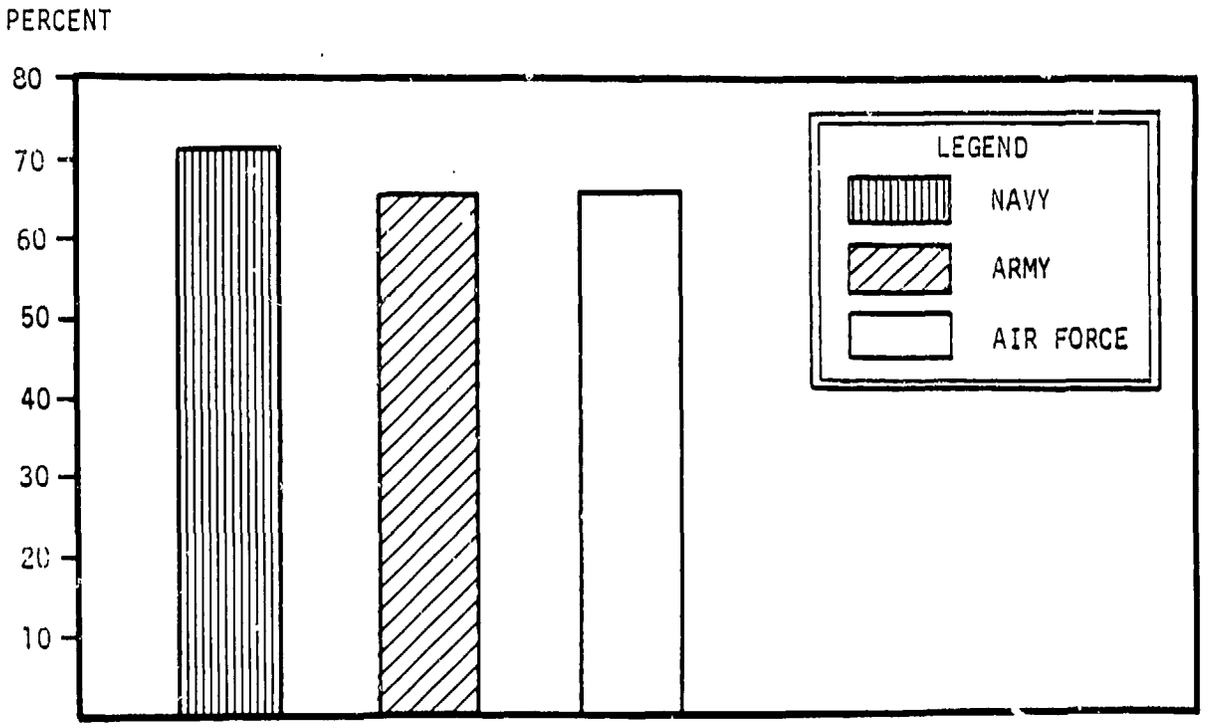
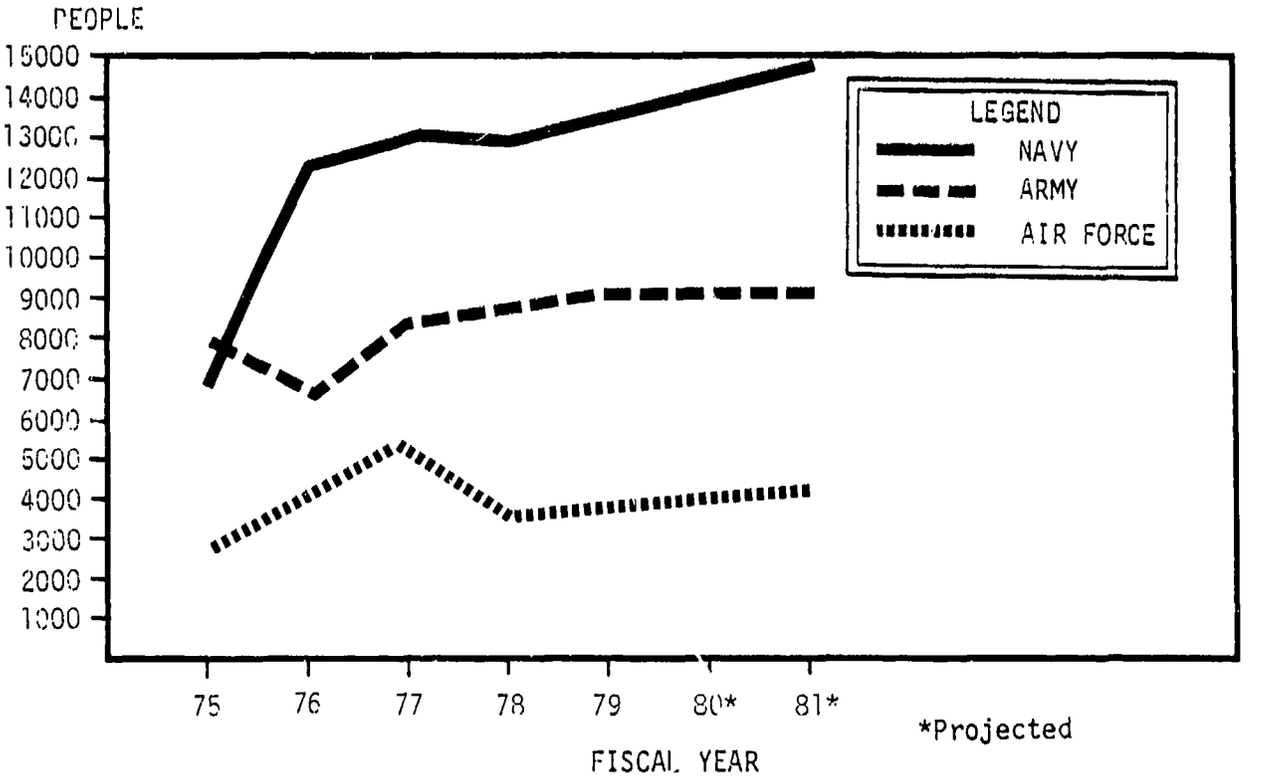
[6]Navy effectiveness rates established through information reported to the Navy Alcohol and Drug Information System (NADIS).

[7]Research Technical Report 291, "Cost and Benefit Assessment of the Alcohol and Drug Treatment Programs of the Department of the Army" (U), 29 December 1978; Unclassified.

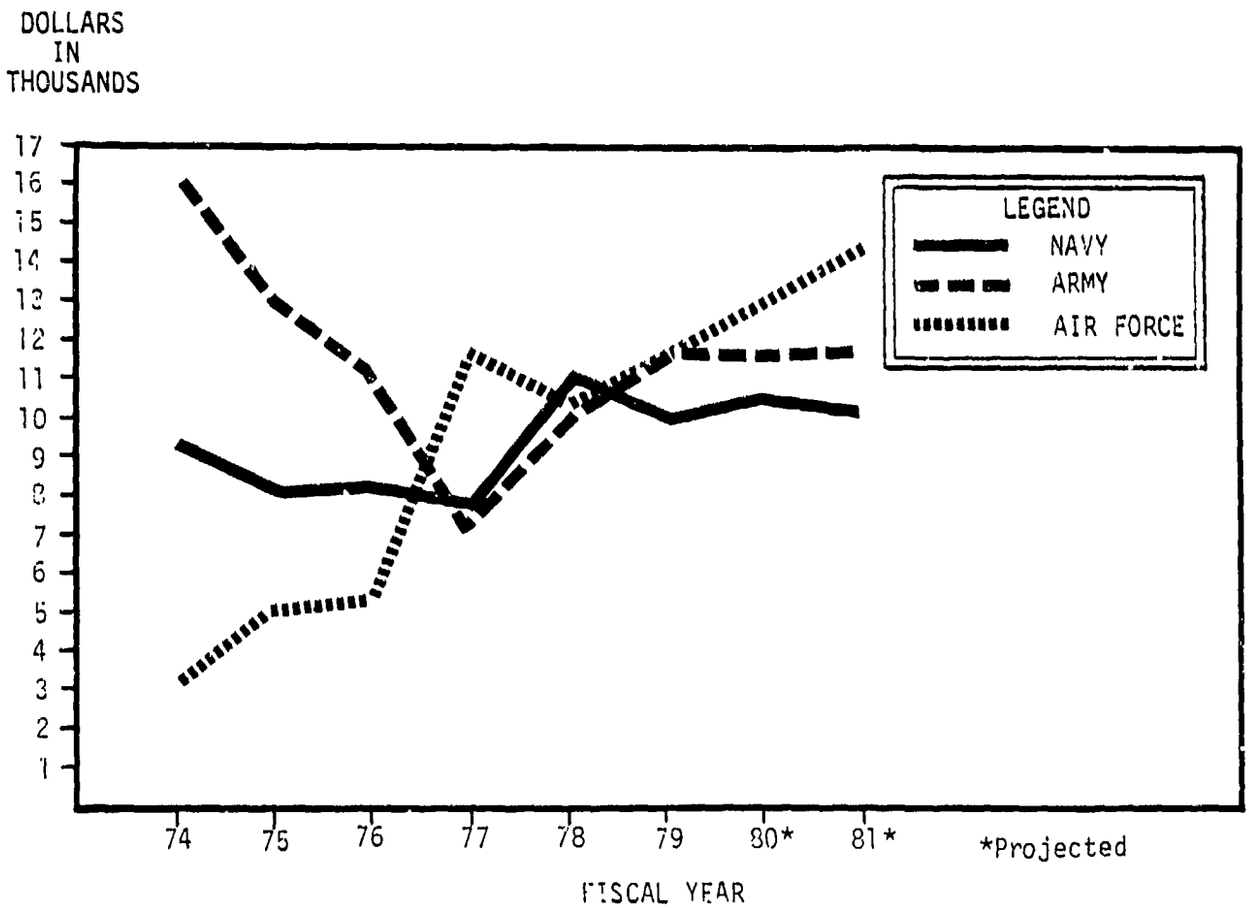
[8]Per telephone conversation with Lt. Col. Fred A Wagner, U.S.A.F., Human Resource Development Division, Air Staff, 10 January 1980.



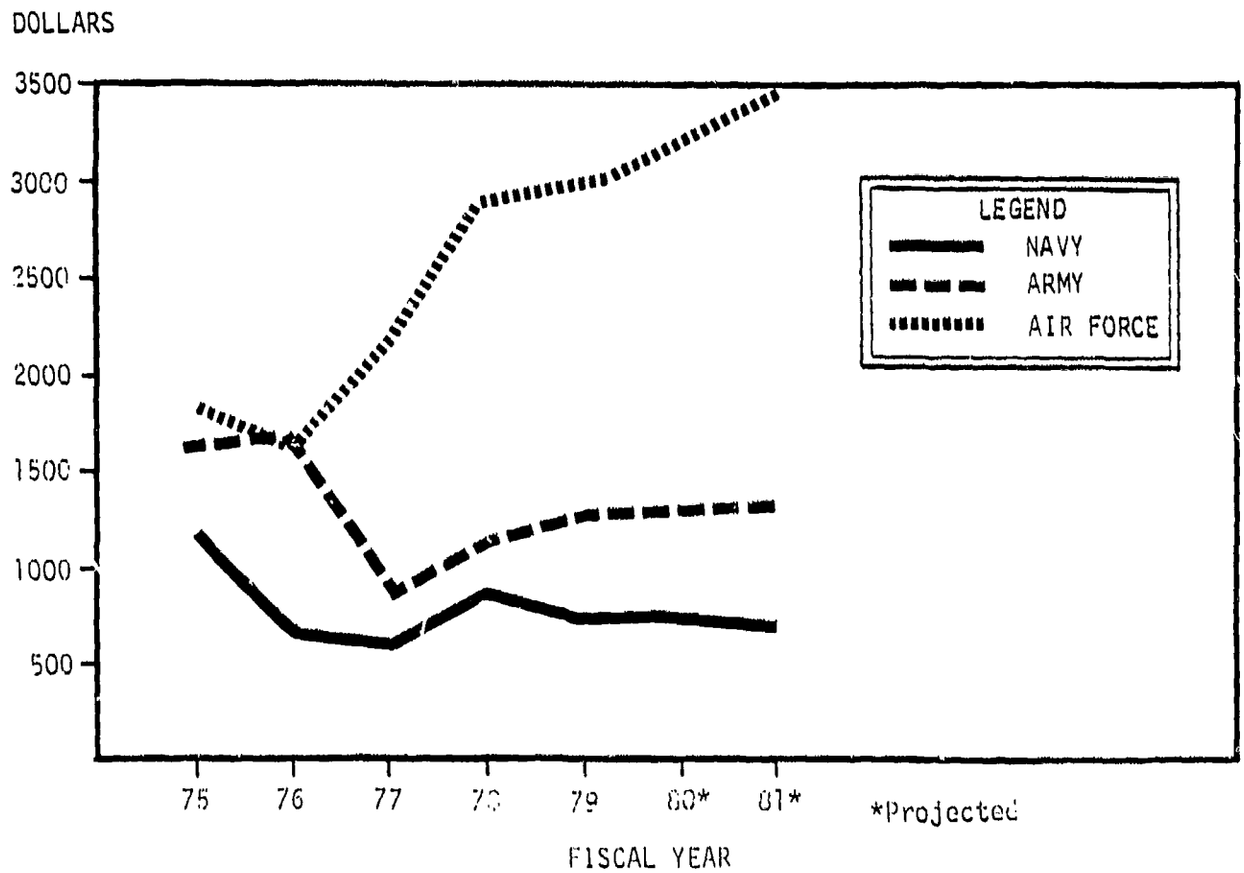
(U) FIGURE F.9
ALCOHOL TREATMENT EFFECTIVENESS RATE (U)



(U) FIGURE F.10
NUMBER OF ALCOHOL PATIENTS SUCCESSFULLY TREATED ANNUALLY (U)



(U) FIGURE F.11
ALCOHOL PROGRAM COST (U)
(CONSTANT 1980 DOLLARS)



(U) FIGURE F.12
ALCOHOL TREATMENT EFFICIENCY/EXPENDITURE PER SUCCESSFUL RECOVERY (U)

configuration is considered. As discussed previously in Section F3.1, a larger percentage of those entering treatment in the Navy, as compared to the other services, are referred to detoxification and residential care, which is more costly than outpatient care.

(U) The alcohol treatment program assessment is summarized in Table F.5. The Navy surpasses both the Army and Air Force in the total number of patients entering treatment from 1975 to 1979. A total of 82,705 individuals entered the Navy's program over this period. Comparatively, the Army and Air Force admitted 62,726 and 30,101 patients to their respective programs. The Navy advantage in recovery rate appears small, only 6 percentage points. However, when combined with its advantage in the number of people entering treatment, it results in a large disparity in the number of successful rehabilitees. Of the 82,705 individuals who entered treatment, 58,721 are shown as successfully rehabilitated, which exceeds the number of rehabilitees in the Army and Air Force by 44 percent and 200 percent, respectively.

(U) The second half of this efficiency assessment focuses on cost of treatment. Navy expenditures total $44.9 million on treatment from 1975 to 1979. This was less than the Army expenditure of $52,9 million and approximately equal to the Air Force outlay.

(U) Efficiency, as previously defined, is measured by dollar expenditure per successful rehabilitee. As shown in Table F.5, the Navy is more efficient in using its alcohol rehabilitation resources than the Army and Air Force. The Navy expended $761 per successful rehabilitee. This is approximately 40 percent less than the Army expenditure of $1,297 and 67 percent less than the Air Force expenditure of $2,295.

(U) A large portion of the Navy's superiority in efficiency can be attributed to economies of scale because the Navy's treatment program admits more patients. From 1975 to 1979, the Navy treated 19,979 more patients than the Army, and 52,604 more patients than the Air Force.

F4.2 Drug Treatment Programs

F4.2.1 Drug Treatment Facilities and Capacity

(U) Table F.6 shows the number of residential facilities which have the ability to treat drug abusers. Facilities with the ability to treat only drug abusers, and those facilities which treat both drug and alcohol abusers are indicated. The Navy operates 19 facilities compared to 11 and 2 for the Army and Air Force, respectively.

(U) As shown in Table F.7, the Navy has the advantage compared to the other services in aggregate facility capacity. The Navy's capacity is 59 percent greater than the Army and 276 percent greater than the Air Force.

(U) TABLE F.5
ASSESSMENT OF ALCOHOL TREATMENT PROGRAMS (U)
(PERIOD 1975 THROUGH 1979)

MILITARY SERVICE	EFFICIENCY OF ALCOHOL TREATMENT PROGRAMS				
	PATIENTS			COST (CONSTANT 1980 DOLLARS)	
	TOTAL ENTERED TREATMENT	EFFECTIVENESS RATE*	SUCCESSFUL REHABILITEES	TOTAL** EXPENDITURES	EXPENDITURE PER SUCCESSFUL REHABILITEE
NAVY	82705	71%	58721	$44.9M	$ 761.00
ARMY	62726	65%	40772	$52.9M	$1297.00
AIR FORCE	30101	65%	19566	$44.9M	$2295.00

* Based on experience documented separately by each service.
** Expenditures for treatment and rehabilitation exclusively.

(U) TABLE F.6
NUMBER OF RESIDENTIAL DRUG FACILITIES (U)

TYPE FACILITIES	NAVY	ARMY	AIR FORCE
DRUG	1	0	1
DRUG AND ALCOHOL	18	11	1
TOTAL	19	11	2

(U) TABLE F.7
AGGREGATE CAPACITY OF DRUG FACILITIES (U)

TYPE FACILITIES	NAVY	ARMY	AIR FORCE
DRUG	200	0	100
DRUG AND ALCOHOL	270	295	25
TOTAL	470	295	125

F4.2.2 Number of People Treated for Drug Abuse

(U) Figure F.13 indicated that despite the Navy's advantage in the number of treatment facilities and total facility capacity, the Army leads both the Navy and Air Force in the number of drug abusers entering treatment. The Army's emphasis in drug identification and rehabilitation has tapered off since the early 1970s. However, identification of drug abusers in the Army is more broadly based than in the other services.

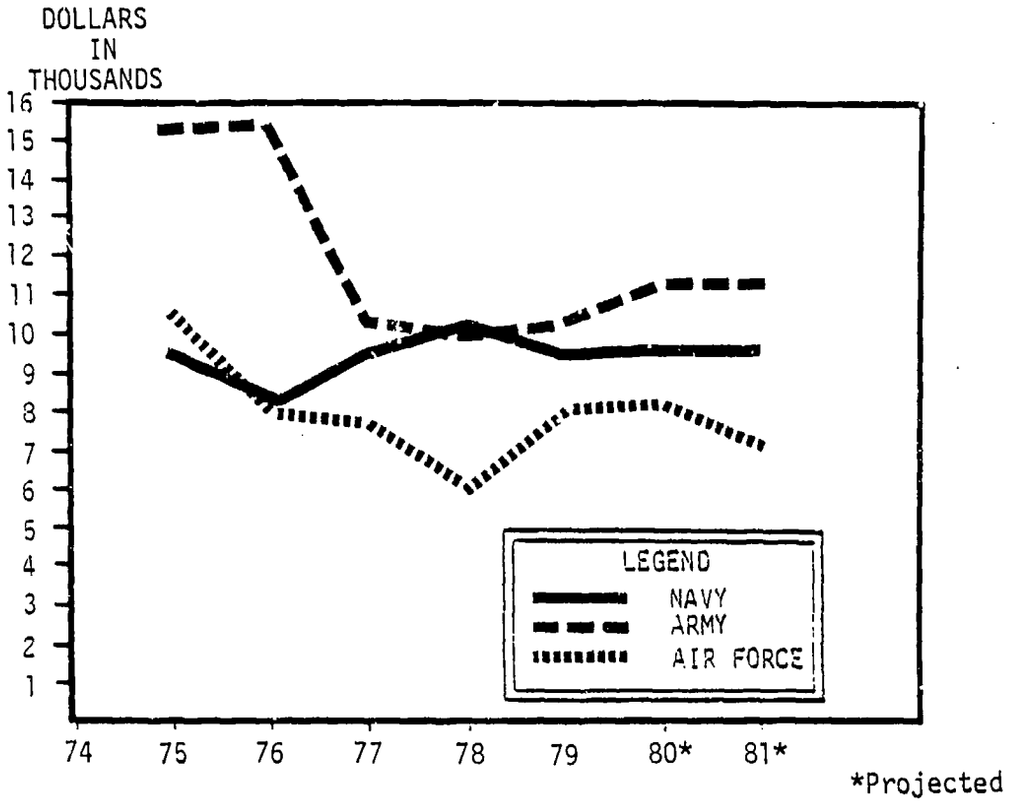
(U) The drug treatment configuration for each service is displayed in Table F.8. As in the case of alcohol treatment, drug treatment configuration, in this analysis, is defined as the ratio of the number of persons entering a particular type of treatment to the total number of persons entering treatment. In the Navy program, 14.1 percent of drug abusers enter detoxification compared to 4.9 percent for the Army and 2.6 percent for the Air Force. For residential type treatment, the Navy lags behind the Air Force, but is superior to the Army. As with alcohol, a bias exists in that only two years of data, 1978 and 1979, were used to calculate the ratios. When compared to the alcohol treatment configuration in Table F.4, it can be seen that a much smaller percentage of drug abusers are admitted to detoxification and residential care facilities.

F4.2.3 Extent of Drug Treatment

(U) As with alcohol treatment, an indicator of the extent of care is the average length of time a patient spends in each phase of treatment. The average length of stay in days for detoxification is shown in Figure F.14. The Navy average of 6.5 days is slightly greater than the Air Force average of 6 days. Comparable Army data is not available.

(U) Figure F.15 shows the average length of stay in days for residential care. Again, the Navy program exceeds the other services' average length of stay with a 61.5 days average as compared with the Army and Air Force averages of 28 and 12 days, respectively. When compared to the average length of stay in residential care for alcoholism, drug abusers stayed an average of 16 days longer in the Navy. However, drug abusers in the Army and Air Force spent 4 and 14 days less, respectively, than patients in their alcohol programs.

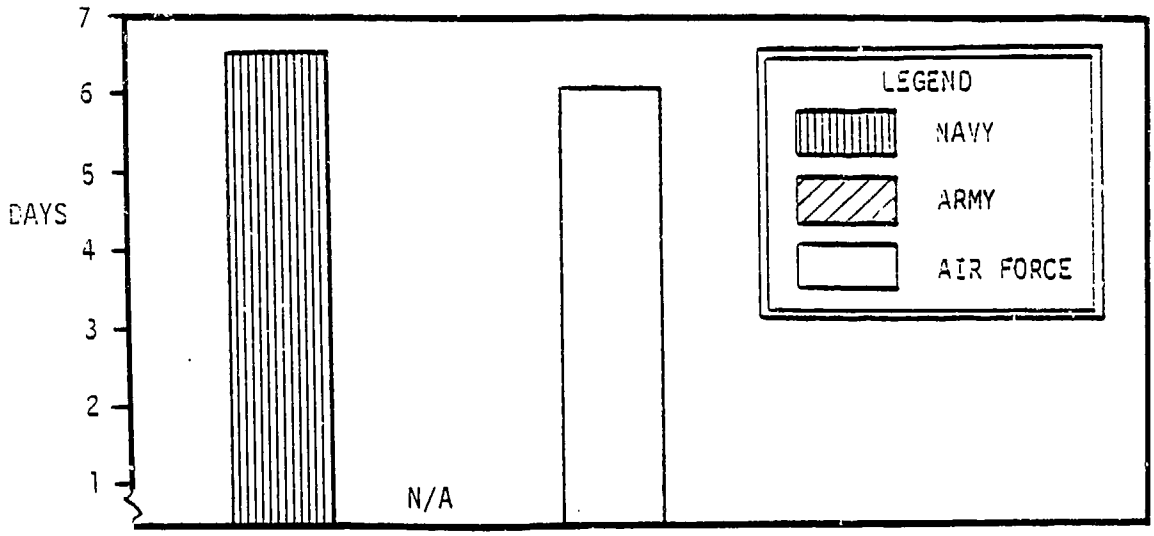
(U) The Navy's drug outpatient care is similar to its alcohol outpatient care in that the average number of visits is less than the Army and Air Force. As shown in Figure F.16, the Navy average is 5 visits, compared to 15 and 20 visits in the Army and Air Force, respectively. The Navy average number of outpatient visits is one less than their alcohol outpatient care, whereas, the Army average is equal for both drug and alcohol, and the Air Force drug abusers averaged 10 less visits than Air Force alcohol abusers.



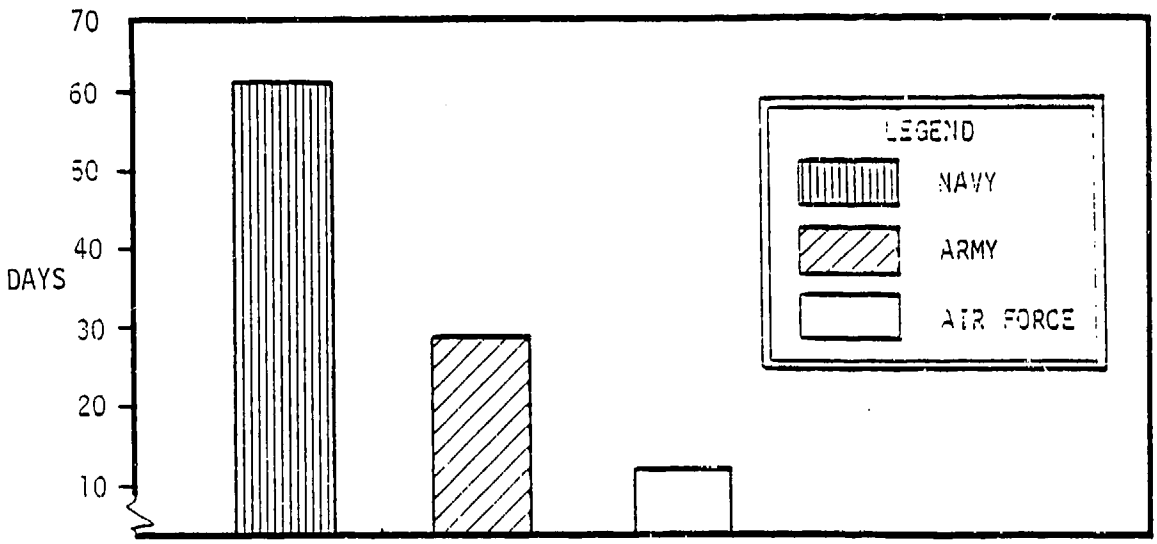
(U) FIGURE F.13
NUMBER OF PATIENTS ENTERING DRUG TREATMENT (U)

(U) TABLE F.8
DRUG TREATMENT CONFIGURATION (U)

TYPE OF CARE	PERCENT OF TOTAL TREATED ENTERING TYPE OF CARE		
	NAVY	ARMY	AIR FORCE
DETOXIFICATION	14.1	4.9	2.6
RESIDENTIAL	7.3	4.8	9.1



(U) FIGURE F.14
DRUG DETOXIFICATION (U)
(AVERAGE LENGTH OF STAY)



(U) FIGURE F.15
DRUG RESIDENTIAL CARE (U)
(AVERAGE LENGTH OF STAY)

F4.2.4 Effectiveness of Drug Treatment Programs

(U) The effectiveness of drug programs, as measured by their recovery rates, is not available for all the services. The Air Force has compiled a recovery rate of 54 percent.[9] Because the Navy and Army overall drug recovery rates are unknown, it is assumed in this analysis that they are equivalent to the Air Force rate. This assumption is somewhat substantiated by alcohol recovery rates. The Air Force and Army are equivalent (65 percent) and the Navy was 6 percentage points higher.

(U) Using the Air Force drug recovery rate for all the services and applying that rate to the number of people entering treatment in a given year results in an estimate of the number of patients successfuly completing treatment. As shown in Figure F.17, the Army has led the Navy and Air Force in successful rehabilitees until 1979, when it was surpassed by the Navy.

F4.2.5 Program Cost

(U) Figure F.18 displays the reported expenditures in constant 1980 dollars by the Navy, Army, and Air Force. All of the services show a decreasing trend in expenditures from 1972 to 1977 and a leveling off after that period. The Navy has spent less than the Army with the exception of 1978, but more than the Air Force. As mentioned previously, Army data is not clear before 1976. Expenditures used in Figure F.18 are consistent with the Army's expenditures reported to the Department of Defense.

F4.2.6 Drug Treatment Efficiency

(U) Approximations of efficiency are the final evaluation of the drug treatment programs of each service. As with alcohol an input/output ratio is used to measure efficiency, specifically, total dollars expended for drug treatment per successful rehabilitee.

(U) Figure F.19 displays the drug treatment efficiency of the Navy, Army and Air Force. The Air Force treatment program has been more efficient in using resources than the Navy and Army. The Navy has surpassed the Army in efficiency in recent years.

(U) The drug treatment programs for each service are assessed in Table F.9, which summarizes data from 1975 through 1979. As shown, the Navy surpassed the total number of Air Force patients entering treatment, but had fewer reported patients than the Army. A total of 46,251 individuals entered the Navy's program, compared to 58,769 and 39,388 for the Army and Air Force, respectively. Applying the success rate in the Air Force to the number of people entering treatment in each service indicates the approximate number of successful completions. Since the success rate has been assumed to be equal for all three services, the successful completions are a function of the number entering treatment.

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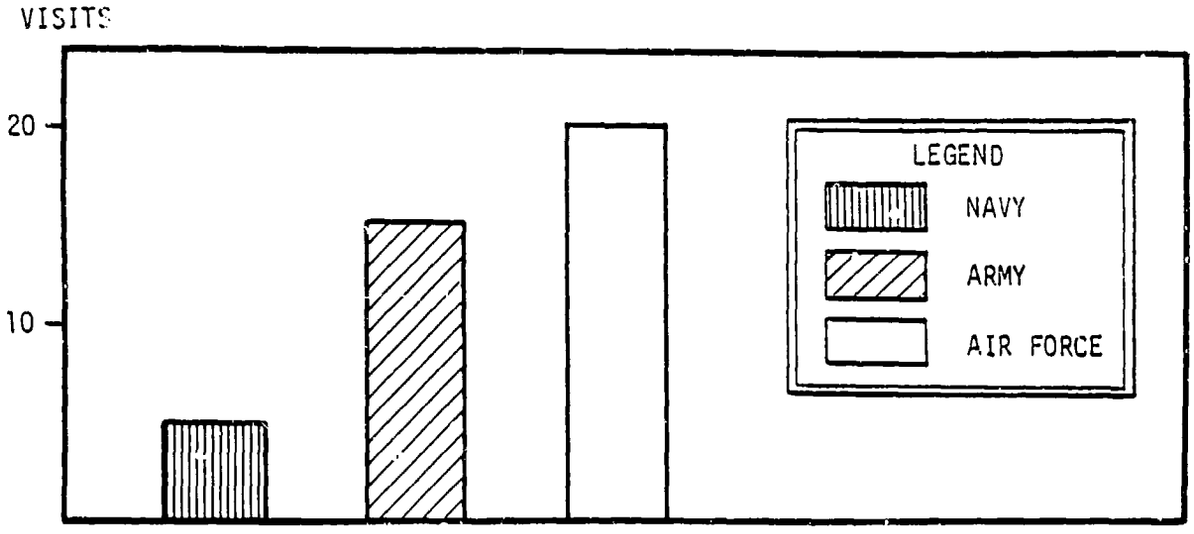
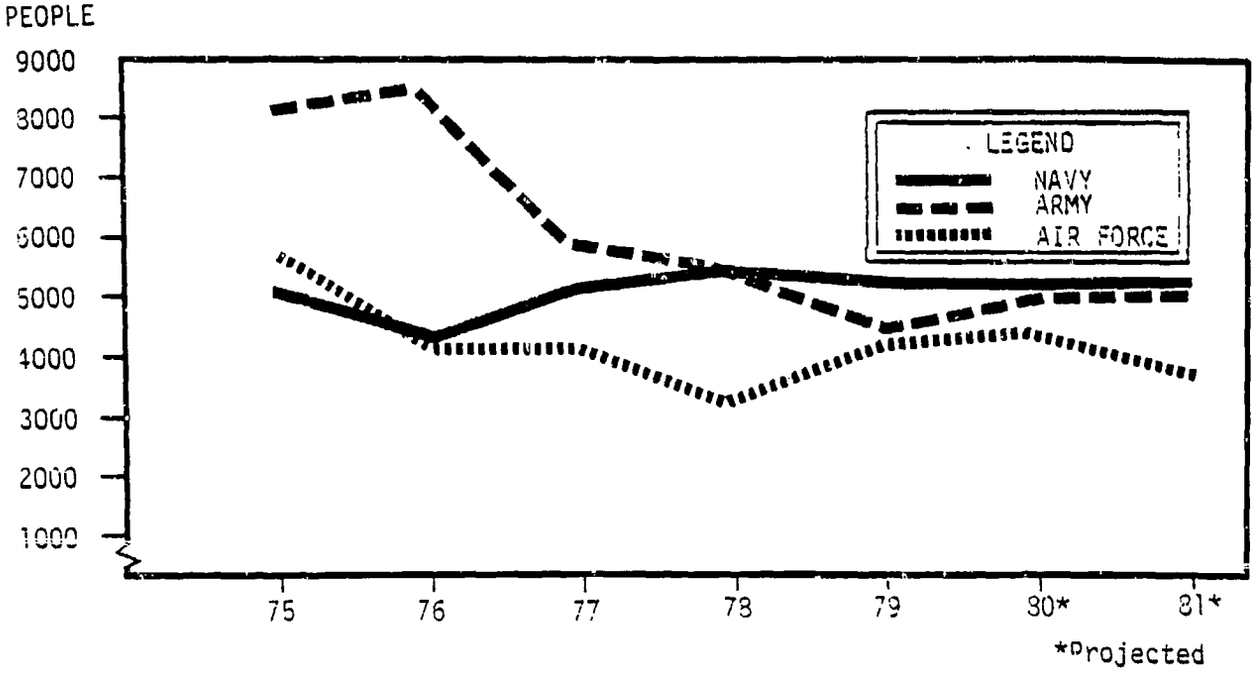
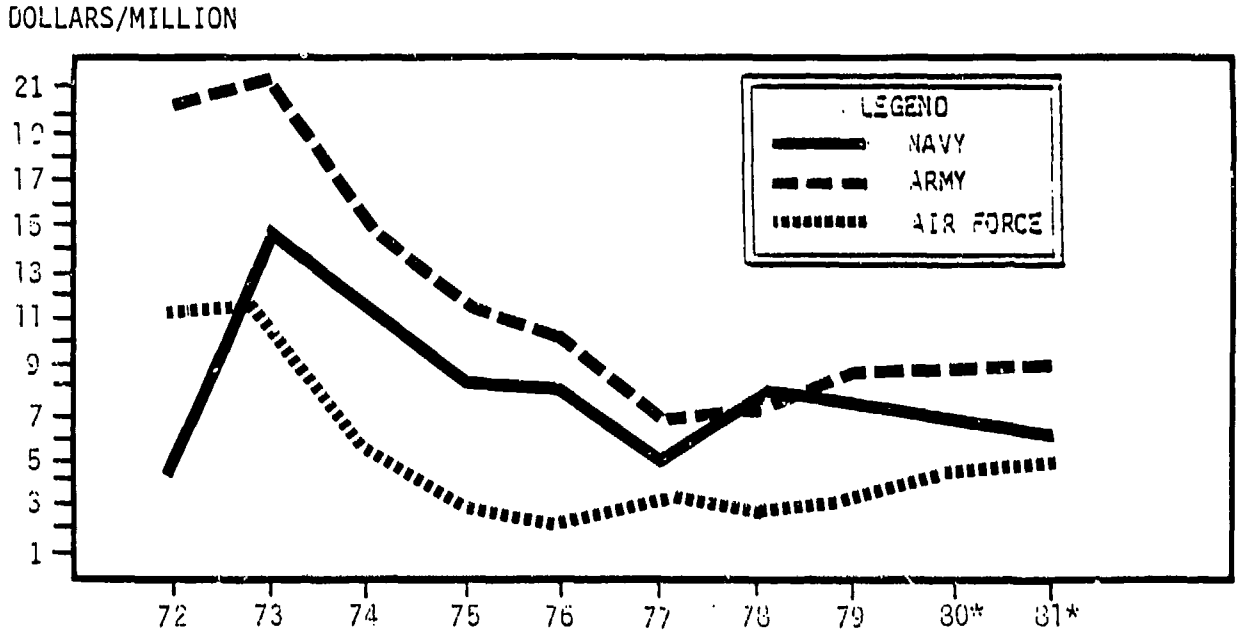
[9] Ibid



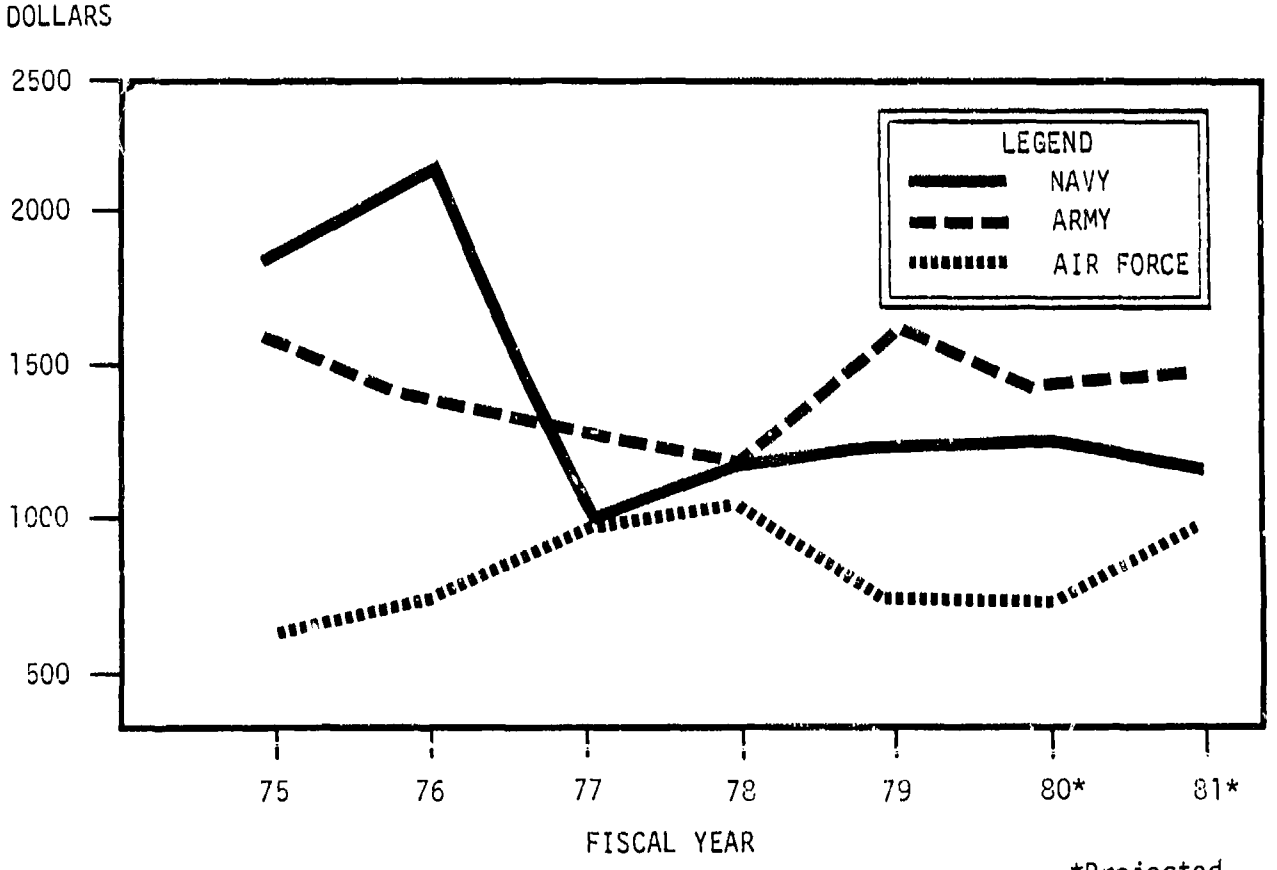
(U) FIGURE F.16
DRUG OUTPATIENT CARE (U)
(AVERAGE NUMBER OF VISITS)



(U) FIGURE F.17
NUMBER OF DRUG PATIENTS SUCCESSFULLY TREATED ANNUALLY (U)



(U) FIGURE F.18
DRUG TREATMENT COST (U)
(CONSTANT 1980 DOLLARS)



*Projected

(U) FIGURE F.19
DRUG TREATMENT EFFICIENCY (U)
(CONSTANT 1980 DOLLARS)

(U) TABLE F.9
ASSESSMENT OF DRUG TREATMENT PROGRAMS (U)
(PERIOD 1975 THROUGH 1979)

MILITARY SERVICE	EFFICIENCY OF DRUG TREATMENT PROGRAMS				
	PATIENTS			COST (CONSTANT 1980 DOLLARS)	
	TOTAL ENTERED TREATMENT	RECOVERY * RATE	SUCCESSFUL REHABILITEES	TOTAL ** EXPENDITURES (1975-1979)	EXPENDITURE PER SUCCESSFUL REHABILITEE
NAVY	46251	54%	24976	$29.0M	$1161.00
ARMY	58769	54%	31735	$35.0M	$1104.00
AIR FORCE	39388	54%	21270	$14.2M	$ 666.00

* Based on Air Air Force experience because the other services have not documented their drug treatment recovery rates.

** Expenditures for treatment and rehabilitation, exclusively.

(U) In viewing the cost portion of Table F.9, Navy expenditures total $29.0 million over the 5 year period. This was less than the Army expenditure of 35.0 million, but greater than the Air Force expenditure of $14.2 million.

(U) Efficiency, as measured by dollar expenditure per successful rehabilitee, places the Navy behind both the Army and Air Force. The Navy treatment program cost $1,161 per successful rehabilitee compared to $1,104 and $666 for the Army and Air Force, respectively. These approximations of efficiency might alter significantly when specific success rates are established for the drug treatment programs of the Army and Navy.

F5.0 SUMMARY

(U) This appendix has analyzed the two steps in the rehabilitation process, identification and treatment. Any attempt to compare the drug and alcohol programs in the Navy, Army and Air Force must focus on these two steps. Comparisons of the process for identifying drug and alcohol abusers and programs were addressed. Finally, a comparison was made of the efficiency of the overall drug and alcohol programs in the Navy, Army and Air Force.

F5.1 Identification

(U) Based on data taken from OSD/OMB budget submissions for drug and alcohol programs, the Navy leads the Army and Air Force in identifying drug and alcohol abusers and entering members so involved into treatment. In 1978, the number of persons entering Navy alcohol treatment as a percentage of active duty end-strength was 3.4 percent. This exceeded the Army by 89 percent and the Air Force by 240 percent.

(U) The level of success achieved by the Navy in alcohol identification is significantly higher than in the Army and Air Force. Additionally, the level of success achieved by the Navy in its alcohol program is significantly higher than drug identification rates by all the services. Note, however, that only drug treatment recovery rates were available for the Air Force.

F5.2 Treatment Programs

(U) The size, success, and cost of treatment programs is summarized in the efficiency ratios of the services. The Navy alcohol program is more efficient in treating alcohol abusers and alcoholics than the Army and Air Force. The Navy is spending $761 per successful rehabilitee compared to $1,297 and $2,295 by the Army and Air Force.

(U) The Navy's superiority may be due to several factors. First, the Navy treats more patients. From 1975 to 1979 the Navy treated 19,979 more patients than the Army and 52,604 more patients than the Air Force. It can be inferred that the Navy is achieving economies of scale that the Army and

Air Force are not. Second, the Navy's effectiveness rate is higher. This may be due to the fact that the Navy enters more of its patients into residential care than the Army and Air Force. The Navy enters 45.1 percent of those treated to residential facilities compared to 13.6 percent and 21.2 percent by the Army and Air Force, respectively. In addition, the average length of stay at Navy residential facilities is longer. Third, from 1975 to 1979 the Navy expenditure on treatment was $44.9 million. This was equal to the Air Force expediture and $8 million less than the Army expenditure. Thus, for an equal amount of money, the Navy successfully rehabilitated 39,155 or 200 percent, more patients than the Air Force. When compared to the Army, the Navy successfully treated 17,949, or 44 percent, more patients for $8 million less in expenditures.

(U) In comparison to its alcohol treatment, the Navy's drug treatment is not doing as well. The Navy's drug treatment is less efficient than the Army and Air Force programs. The Navy spent $1,161 per successful rehabilitee, compared to $1,104 for the Army and $666 for the Air Force. There are two reasons for the Navy's lower efficiency rate: (1) The number of patients treated and, (2) the dollar expenditures for treatment. When compared to the Army, the Navy spent 17 percent less, but treated 23 percent fewer patients. Compared to the Air Force, the Navy spent 104 percent more money, but treated only 17 percent more patients.

F5.3 Program Efficiency

(U) The efficiency of each program, as summarized in the following paragraphs, is measured by an input/output ratio. In this ratio, input consists of the costs of identification, education, training, treatment/rehabilitation, research, evaluation, and planning and coordination. Output again is the number of successful rehabilitees.

F5.3.1 Alcohol Program Efficiency

(U) The Navy's total alcohol program is more efficient than Army or Air Force programs. As shown in Table F.10, the Navy spent $1,058 per successful rehabilitee compared to $2,360 and $3,447 by the Army and Air Force, respectively. This seems to indicate that the Navy is more efficient in allocating its alcohol program resources

F5.3.2 Drug Program Efficiency

(U) As shown in Table F.11, the Navy is less efficient in allocating its drug program resources than the Air Force, but more efficient than the Army. The Navy spent $2,512 per successful rehabilitee compared to $3,759 and $1,555 for the Army and Air Force, respectfully. This suggests that the Navy should concentrate more on its drug program if parity is to be achieved with the Air Force. In this case, parity means spending less per rehabilitee, but the achievement of this goal is contingent upon developing a more effective program. What the attributes of the Air Force's program are that account for their greater relative

(U) TABLE F.10
EFFICIENCY OF TOTAL ALCOHOL PROGRAM (U)
(PERIOD 1975 THROUGH 1979)

MILITARY SERVICE	ALCOHOL PROGRAM EFFICIENCY				
	PATIENTS			COST (CONSTANT 1980 DOLLARS	
	ENTERED TREATMENT	EFFECTIVENESS RATE	SUCCESSFUL REHABILITEE	TOTAL * EXPENDITURES	EXPENDITURE PER SUCCESSFUL REHABILITEE
NAVY	82705	71%	58721	$62.1M	$1058.00
ARMY	62726	65%	40772	$96.2M	$2360.00
AIR FORCE	30101	65%	19566	$67.4M	$3447.00

* Total expenditures for entire Alcohol Abuse program includes; education, training, research, evaluation, planning and coordination; in addition to treatment and rehabilitation.

(U) TABLE F.11
EFFICIENCY OF TOTAL DRUG PROGRAM (U)
(PERIOD 1975 THROUGH 1979)

MILITARY SERVICE	DRUG PROGRAM EFFICIENCY				
	PATIENTS			COST (CONSTANT 1980 DOLLARS)	
	ENTERED TREATMENT	EFFECTIVENESS RATE *	SUCCESSFULLY REHABILITATED	TOTAL EXPENDITURES **	EXPENDITURE PER SUCCESSFUL REHABILITEE
NAVY	46251	54%	24976	$62.7M	$2512.00
ARMY	58760	54%	31735	$119.3M	$3759.00
AIR FORCE	39388	54%	21270	$49.3M	$1555.00

* Based on Air Force experience because the other services have not documented drug treatment recovery rates.

** Total expenditure for entire Drug Abuse Program includes; education, training, research, evaluation, planning and coordination; in addition to treatment and rehabilitation.

success than that in the Navy is beyond the scope of this appendix. In light of the paucity of drug abuse recovery rate data in the Navy and the Army, further study may have to be undertaken before a definitive statement regarding the overall achievement of parity can be made with a high degree of confidence.

F5.4 Conclusion

(U) Drawing from data reported to the Office of the Secretary of Defense, this report provides a comparison of the drug and alcohol treatment programs of the military services. The analysis reveals that the program efficiency for drug treatment in the Navy is bracketed by the efficiency of the programs of the other services. On balance, the efficiency of the alcohol treatment program of the Navy is far superior to that of the other services.

(U) The success of the alcohol treatment program of the Navy is principally a function of the scale of the Navy program. The superiority of the Air Force drug treatment program may be attributed to the relatively low defined cost of identifying drug abusers. The Air Force uses law enforcement as the principal means of identifying drug abusers (Figure F.3) The Air Force exemption policy and urinalysis process make only small contributions to the identification of drug abusers in the Air Force. The Army has a significantly more productive urinalysis program. Like the Air Force, the urinalysis program of the Navy is markedly less productive than the urinalysis program of the Army. Since law enforcement costs for the identification of potential drug abusers are not reported in the cost of service drug abuse programs, the cost of identification in the Army is substantially higher relative to the other services.

F5.4.1 Comparison

(U) The efficiency of both Drug and Alcohol Identification and Treatment Programs for the military services are compared in Table F.12. Clearly the Navy is superior to the other two services. The cost per successful rehabilitee is roughly double for the Army and Air Force. Table F.12 displays, for comparison purposes, the average end-strength for each service. The Navy is slightly smaller than the Air Force and 68 percent the size of the Army. On balance, the Navy is treating approximately 5 percent of its personnel while the Army is treating 3 percent, and the Air Force is treating slightly more than 2 percent. The magnitude of the Navy programs coupled with its efficiency reveals the Navy performance exceeds the Army by 23 percent and the Air Force by 40 percent.

(U) Though the Navy is clearly superior to the performance of the other services in identifying and treating drug and alcohol abusers, it is deficient in the drug abuser treatment process. Comparing Table F.5 (Assessment of Alcohol Treatment Programs) with Table F.9 (Assessment of Drug Treatment Programs) reveals substantial variances in the two types of programs. At $761 expended per successful recovered alcoholic (Table F.5), the Navy is consistently outperforming the other services by an efficiency factor of 2 and 3:1 for the Army and Air Force, respectively. At $1,161 expended per successfully

(U) TABLE F.12
MILITARY SERVICE ALCOHOL AND DRUG PROGRAM COMPARISON (U)
(PERIOD 1975 THROUGH 1979)

MILITARY SERVICE	COMPARATIVE ALCOHOL AND DRUG PROGRAM EFFICIENCY				
	COMPARATIVE SERVICE SIZE AVERAGE END STRENGTH (000)	PATIENTS		COST (CONSTANT FY-80 VALUES)	
		ENTER TREATMENT (000)	SUCCESSFUL REHABILITEE (000)	TOTAL EXPENDITURE *	COST PER SUCCESSFUL REHABILITEE
NAVY	527.8	129.0	83.7	$123.8M	$1491.00
ARMY	775.5	121.5	72.5	$215.5M	$2972.00
AIR FORCE	580.0	69.5	40.8	$116.7M	$2867.00

* All expenditures of Alcohol and Drug Abuse Programs of the services, including overhead and management costs not identifiable for either drug or alcohol programs.

recovered chemical addict (Table F.9), the Navy is underperforming each of the other services by a factor of 1:2. Thus over the past 4 years, the Navy has restored 58,721 alcoholics to duty. In the same period of time, it may have lost 21,275 identified drug abusers.

APPENDIX G -

SEA/SHORE ROTATION AND WORK WEEK DURATION

APPENDIX G

SEA/SHORE ROTATION AND WORK WEEK DURATION

G1.0 INTRODUCTION

(U) This appendix contains data relevant to sea/shore duty assignment rotations and work week durations. This data is used in the main body of the report to evaluate various family and education issues developed from the parity assessments. The parity assessments of existing programs in the Army, Navy and Air Force are documented in the preceeding appendices.

G2.0 SEA/SHORE ROTATION

(U) A search of the historic records of summary sea/shore rotation statistics maintained by the Office of the Chief of Naval Operation (OP-123) provide two data points for comparison of billet allowances. The first set of sea/shore rotation data is for the end of FY74.[1] The second set of sea/shore rotation data is for the end of FY-79.[2] These points in time are significant for the end of FY-74 represents the era when the Navy was adapting to the All Volunteer Force without a conscription inducement to recruiting. The second set of data, for the year ending at FY-79, represents the most current full fiscal year of data.

(U) Table G.1 displays the aggregate sea/shore data for enlisted personnel in the Navy for both periods. Inspection of Table G.1 reveals the following significant factors and improvements in sea/shore duty assignment patterns in the Navy.

- The Navy has increased enlisted personnel billet allowances by 12 percent since 1974.
- The size of the E-6 and above rank structure has increased by 12 percent since 1974.
- The size of the E-5 and below rank structure has also increased by 12 percent since 1974.
- Of all personnel billets for sea duty in 1974, 20.5 percent were for seniors and 79.5 percent were for juniors. In 1979, 21.2 percent were for seniors and 78.8 percent were for juniors.

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[1] Office of the Chief of Naval Operations (OP-122), FY-74 Offshore Duty and Sea Duty Report No. 122614KM (U), 20 February 1980; Unclassified

[2] Office of the Chief of Naval Operations (OP-123), Enlisted Sea/Shore Rotation Requirements Report No. R51812B (Revised 3), (U), as of 30 September 1979; Unclassified

(U) TABLE G.1

AGGREGATE SEA/SHORE DUTY ROTATION FOR ENLISTED PERSONNEL OF THE NAVY (U)

RANK	YEAR	TOTAL ENLISTED IN SEA/SHORE ROTATION	ASSIGNED DUTY		RATIO TO THREE
			SEA DUTY S/S CODES (2, 3, 4, 5)	SHORE DUTY S/S CODES (1, 6)	
E6-E9	1979	106,289	52,354	53,935	2.91
	1974	94,874	48,411	46,464	3.13
E3-E5	1979	271,019	194,728	76,291	7.66
	1974	242,166	187,531	54,634	10.30
TOTAL (E1-E9)	1979	377,308	247,082	130,226	5.69
	1974	337,040	235,942	101,098	7.00

- In 1974, 101,098 enlisted personnel billets were available for shore duty. Of these, 46 percent were for senior petty officers E-6 and above. In 1979, 130,226 enlisted personnel billet opportunities were for shore duty. This is an increase of 29 percent in the number of enlisted personnel billets on shore duty as compared to a total billet increase of 12 percent. Of those billets allowed for shore duty in 1979, 41 percent are for senior petty officers, E-6 and above.

- Of the 108,094 enlisted personnel E-5 and below in rank allowed on shore duty in 1979, the rank structure is as follows:

  E-5 41 percent or 31,279

  E-4 32 percent or 24,699

  E-3 27 percent or 20,313

G3.0 WORKING/DUTY PERIOD

(U) The typical American worker is at his job 1888 hours per year. This is traditionally accomplished during 251 work days a year. The remaining 114 days per year include weekends, holidays and vacation. In contrast, the typical sailor serving in a U.S. Navy warship can anticipate being on-board 2,828 hours if his ship stays in port the entire year. This includes 22.9 weekend days per year. All of this presumes that his ship is able to conform to the Navy standard workweek, and he takes 30 days leave per year.[3] This standard of 59.25 hours per week permits watchstanders to be available for productive work, other than watches, an average of 29.5 hours per week and permits non-watchstanders to be available for productive work 34.5 hours per week.

(U) These standards are established as key elements in the calculation of Navy manpower needs. It is the policy of the Navy to reduce the total number of hours that personnel are required to be on board for work and duty. Toward this end, six duty sections are encouraged for ships in U.S. ports, while ships participating in overseas residency programs are encouraged to maintain four in-port duty sections. However, shipboard manpower objectives and the realities of the quantity and quality of available personnel vary significantly.

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[3]Chief of Naval Operations, Manual of Navy Total Force Manpower (Policies and Procedures)(U), OPNAV INST 1000, 16E (Draft)

(U) Table G.2 displays the status as of May 1979 of typical on-board time being reported in the Pacific Fleet by type of ship.[4] In general, the Navy exceeds its manpower work week criteria by 10 to 21 percent in duty hours. More significantly it exceeds the national work standards by 64 to 81 percent annually. Note that similar data for the Atlantic Fleet is not available.

G4.0 SEA/SHORE ROTATION AND WORK WEEK DURATION

(U) Inspection of Table G.1 (Sea/Shore Rotation) reveals that the Navy has markedly improved the sea/shore rotation opportunities for enlisted men of the Navy since 1974. In the aggregate, the ratio to three factors indicate enlisted men of the Navy may now anticipate less than 6 years assigned to various categories of sea duty and 3 years of shore duty. In 1974, 7 years of sea duty for every 3 years of shore duty were the norm. More importantly, senior grade petty officers (E-6 and above) may now experience less than 3 years of sea duty for every 3 years of shore duty. In 1974, senior petty officers could anticipate slightly more than 3 years of sea duty for every 3 years of shore duty. In the junior ranks, a substantial improvement has been made with 7.66 years of sea duty for every 3 years of shore duty now the norm. In the past, junior enlisted ratings of the Navy could anticipate 10.3 years of sea duty for every 3 years of shore duty.

(U) In 1974, 46 percent of personnel billets allowed for sea duty were for the E-6 and above ranks. This has been reduced to 41 percent in 1979. For junior enlisted personnel billets (E-5 and below) 79.5 percent were allowed for sea duty in 1974. In 1979, this has also been reduced to 78.8 percent. Thus, for all ranks, the sea/shore rotation patterns have improved since 1974. Most significantly, the pattern for senior enlisted personnel has substantially improved.

(U) In comparison to the sea/shore rotation patterns, the on-board duty, work-hour situatuion is significantly inadequate. For surface combatants and submarines of the Pacific Fleet, duty and work hours on board ship, while in port, exceed Navy standards by roughly 20 percent annually. Most significantly, as compared to civilian counterparts, all types of combatant and fleet support commands are reporting work and duty periods that exceed the civilian community by more than 64 percent.

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[4]Vice Chief of Naval Operations, Fleet Working Hour Panel Minutes (U), May 1979, Unclassified

(U) TABLE G.2

PACIFIC FLEET ON BOARD DUTY/WORK HOURS (U)
(MAY 1979)

TYPE SHIPS	REPRESENTATIVE DUTY HOURS DURING ORGANIZATIONAL MAINTENANCE PERIODS				
	DUTY HOURS/YEAR			ACTUAL GREATER THAN	
	CIVILIAN	NAVY STANDARD	ACTUAL*	STANDARD	CIVILIAN
CARRIERS	1888	2828	3168	12%	68%
SURFACE COMBATANTS	1888	2828	3418	21%	81%
SUBMARINES	1888	2828	3384	20%	79%
AMPHIBIOUS	1888	2828	3259	15%	73%
FLEET SUPPORT	1888	2828	3100	10%	64%

* Source: VCNO Working Hour Panel, May 1979

APPENDIX H -

BIBLIOGRAPHY

LIST OF PRINCIPAL CONTACTS

BIBLIOGRAPHY

QUALITY OF LIFE AND RETENTION ASSESSMENT

Office of the Assistant Secretary of Defense (MRA&L), Report on Pay Adequacy Study (U), October 1979; Unclassified

Human Resource Management Center, San Diego. Navy Retention Survey and Analysis (U), 10 December 1979; Unclassified

Advance Technology Inc., Comparative Analysis of Selected DOD Quality of Life Programs (U), 19 January 1979; Unclassified

MORALE, WELFARE AND RECREATION, ASSESSMENT

Department of Defense, Financial Management of Nonappropriated Funds and Related Resources (U), DOD Instruction 7000.12, 17 July 1974; Unclassified

Department of Defense, Funding of Morale, Welfare, and Recreation (MWR) Programs (U), DOD Directive 1330.2, 17 March 1978; Unclassified

Naval Resale Systems Office, Letter on Setting the Record Straight Concerning the Navy Resale and Service Support System's Contribution to the Navy MWR Programs, PLDD:GMH:ndb (U), 30 November 1979; Unclassified

FAMILY HOUSING ASSESSMENT

Department of Defense, Determination of Family Housing Requirements (U), DOD Inst 4165.45, 19 January 1972; Unclassified

Department of Defense, Policy and Criteria for Operation, Maintenance, and Repair of Defense Family Housing. (U) DOD Instruction 4270.21, 2 October 1973; Unclassified

UNACCOMPANIED PERSONNEL HOUSING ASSESSMENT

Department of Defense, Bachelor Housing, Determining Requirements and Programming Construction (U), DOD Instruction 4165.54, 3 October 1972; Unclassified

Department of Defense, Adequacy, Assignment and Inventory of Bachelor Housing (U), DOD Instruction 4165.97, 29 July 1977; Unclassified

Department of Defense, Bachelor Housing Military Construction Program for Fiscal Year 1980 (U), NSD (MRA&L) memo, 30 May 1980; Unclassified

Department of the Navy, Tabulation of Family Housing Survey Report DDI& L A666 (U), 31 July 1979; Unclassified

BIBLIOGRAPHY

Department of the Navy, OP-153, Memo to DCNO (MP&T) titled Geographic Bachelors (U), Ser. 12-80, 31 January 1980; Unclassified

Department of the Navy, CNO, Draft CNO Program Analysis Memorandum for Manpower, Personnel and Training (CPAM MP&T) (U), 6 December 1977 (S)

Department of the Navy, NAVFAC Construction Status of UPH FY-1970-1980 (U), 8 February 1980; Unclassified

Department of the Navy, NFEC, Life Cycle Cost Comparisons of BAQ Versus Milcon for UPH (U), 19 October 1979; Unclassified

Department of the Navy, Surface Craft and Boat Accounting Report (SABAR), (U) OPNAVINST 4780.5 K 16 May 1970; Unclassified

OFF-DUTY EDUCATION ASSESSMENT

Department of Defense, Graduate Education in the Department of Defense (U), A report to the House Appropriations Committee, March 1979; Unclassified

Department of Defense, Voluntary Education Programs for Military Personnel (U), DOD Directive 1322.8, 20 August 1975; Unclassified

Department of Navy, DOD Educational Services Program Report, DD-M(A)1101(15) of 30 September 1978; Unclassified

Department of the Navy, U.S. Navy Support of Off-Campus Educational Programs (U), CNO Memo Ser. 991EB, 15 August 1978; Unclassified

Office of the Assistant Secretary of Defense (MRA&L) (Education and Training), Second Annual Report to Congress on the Post Vietnam Era Veteran's Educational Assistance Program (U), April 1979; Unclassified

Office of the Assistant Secretary of Defense (Comptroller), January Issue of FYDP and Construction, Procurement & RDT & E Annexes (U), 28 January 1980; Secret

Office of the Assistant Secretary of Defense (MRA&L) (Education and Training), DOD Educational Incentives Study (U), 9 February 1980; Unclassified

Department of Defense, Voluntary Educational Programs for Military Personnel (U), DOD Directive No. 1322.8, 4 February 1980; Unclassified

FAMILY SUPPORT ASSESSMENT

Office of Assistant Secretary of Defense (MRA&L) Letter to Honorable Fortney M. Stark Jr. (U), 21 December 1978; Unclassified

BIBLIOGRAPHY

Department of the Army, Personal Affairs, Army Community Service Program. Army Regulation No. 608-1, 10 October 1979; Unclassified

Department of the Army, Quality of Life Minimum Standards (U), (CDAPE-HRQ), 6 September 1979; Unclassified

Office of Chief of Naval Operations, Funding for Morale, Welfare and Recreation (MWR) Programs and Family Support Centers for POM-81 (U), OP-12/ 286616. 6 April 1979; Unclassified

Office of the Chief of Naval Operations (OP-152), Inventory of Navy Family Support Program Assets (U), October 1979; Unclassified

Chief of Naval Operations, Personal Services Centers; Establish and Operation of, (OPNAV INST 1740.1A) (U), 7 February 1972; Unclassified

Chief of Staff USAF, Air Force Child Care Centers, Capacity, Average Attendance and Employees as of 10 October 1979; Unclassified

Military Personnel Center USAF, Child Care Program Income and Expense Statement (U), 1 November 1979; Unclassified

DRUG & ALCOHOL ABUSE ASSESSMENT

Department of Defense, Alcohol Abuse by Personnel of the Department of Defense (U), DOD Directive 1010.2, 1 March 1972; Unclassified

Department of Defense, Illegal or Improper Use of Drugs by Members of the Department of Defense (U), DOD Directive 1300.11, 23 October 1970; Unclassified

Office of the Assistant Secretary of Defense (Health Affairs), Drug and Alcohol Abuse Control Data Book (Draft) (U), Memorandum of 24 August 1979; Unclassified

Air Force Institute of Technology, Technical Report 79-4 Alcoholism and Alcohol Related Problems Among USAF Civilian Employees. (U) Wright - Patterson AFB, Ohio, August 1979; Unclassified

U.S. Civil Service Commission, Instruction on Federal Civilian Employee Drug and Alcohol Program (U), FPM Ltr. No. 792-7; Unclassified

Presearch Technical Report 291, Cost and Benefit Assessment of the Alcohol and Drug Treatment Programs of the Department of the Army (U), 29 December 1978; Unclassified

Presearch Technical Report No. 314, Cost-Benefit Analysis of the Department of the Navy's Alcoholism Treatment Program: Phase II Report, Volume I (U), 30 September 1976; Unclassified

BIBLIOGRAPHY

Cahalan, Don and Cisin, Ira H., Final Report on a Service-Wide Survey of Attitudes and Behavior of Naval Personnel Concerning Alcohol and Problem Drinking (U), Bureau of Social Science Research, Report No. 463, 3 March 1975; Unclassified

Rand Technical Report R-2308-AF, Alcohol Problems: Patterns and Prevalence in the U.S. Air Force (U), June 1979; Unclassified

Naval Health Research Center, Population Differences and Correlates of Post-Treatment Effectiveness in Alcohol Rehabilitation Facilities (U), Report No. 78-48, July 1978; Unclassified

Naval Health Research Center, Alcoholism in the U.S. Navy (U), Report No. 75-79, October 1975; Unclassified

Navy Medical Neuropsychiatric Research Unit, The Association Between Alcoholism and Job Type in the U.S. Navy (U), Report No. 72-44, January 1973; Unclassified

SEA/SHORE ROTATION AND WORKWEEK DURATION ASSESSMENTS

Department of the Navy, Enlisted Sea/Shore Rotation Requirements Report, 24 February 1980; Unclassified

Department of the Navy, Ship Operating Forces of the U.S. Navy - Historical Force Levels; 28 February 1979; Unclassified

Office of the Chief of Naval Operations (OP-122), FY-74 Offshore Duty and Sea Duty Report No. 122614KM (U), 20 February 1980; Unclassified

Office of the Chief of Naval Operations (OP-123), Enlisted Sea/Shore Rotation Requirements Report No. R51812B (Revised 3) (U), 30 September 1979; Unclassified

Chief of Naval Operations, Manual of Navy Total Force Manpower (Policies and Porcedures) (U), OPNAV INST 1000.16E (Draft)

Vice Chief of Naval Operations, Fleet Working Hour Panel Minutes (U), May 1979; Unclassified

BIBLIOGRAPHY

IMPLEMENTATION OF QOL PROGRAM CHANGES

Department of Defense, Bachelor Housing in Military Construction FY-80 (U), OASD (MRA&L) Memorandum to the Assistant Secretaries, 30 May 1978, Unclassified

Department of Defense, A Financial and Personnel Profile of Morale, Welfare and Recreation Activities (Demographic Study) (U) DOD Management Study Group, August 1977, Unclassified

Department of the Navy, Bureau of Personnel, Special Services Division, A Report on Appropriated Fund Support in MWR (U), June 1978, Unclassified

Department of the Navy, Special Services Management Bulletin, 1979 Central Non-Appropriated Fund Annual Report (U), January 1980, Unclassified

Deputy Secretary of Defense, Decision Package Set #38, Titled "Other Personnel Support, Navy" (U), 15 November 1979, Unclassified

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