

**NAVAL POSTGRADUATE SCHOOL
Monterey, California**



THESIS

**CAREER PLANNING IN THE MEDICAL SERVICE
CORPS: ASSESSING THE VALIDITY OF
CURRENT GUIDELINES THROUGH A
COMPARATIVE ANALYSIS OF DUTY TOURS
AND TRAINING SCHOOLS**

by

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March, 1993

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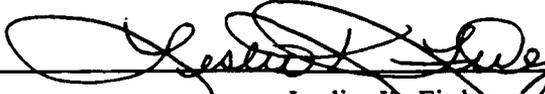
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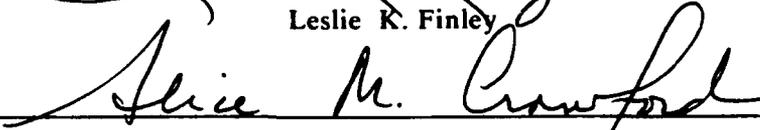
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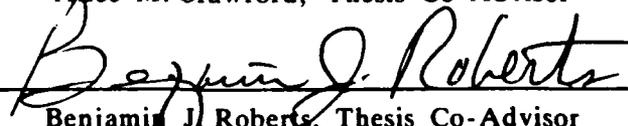


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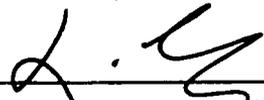
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ABSTRACT

This thesis examines whether or not a more refined career path can be established for Medical Service Corps officers in the United States Navy. Historical duty tour and service school distribution patterns are analyzed to detect relationships between a Medical Service Corps officer's rank and particular duty tour types. Specifically, the patterns in U.S. hospital tours, clinic tours, overseas tours, full-time duty under instruction tours, ship tours, overseas-homeported ship tours, recruiting tours, and tours in the Washington D.C. area are investigated. Results indicate that ship tours, Washington D.C. area tours, clinic tours, and U.S. hospital tours are most related to specific officer grades (rank), and that these relationships vary according to a Medical Service Corps officer's specialty and (to a lesser extent) gender.

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I. INTRODUCTION

Officers in the Armed Forces generally experience more rigid career patterns during their professional lives than do their civilian counterparts. In the Navy, the procedures and policies which govern career paths are dependent upon many factors, including an officer's designated specialty, national strategic requirements, and (to a growing extent) the costs of defense.

While the Department of the Navy has designed and instituted career paths for every designator community, those concerning line officers are generally quite detailed. Line officers, for the most part, work in the "fleet:" the surface, sub-surface, and aviation areas of the Navy. Staff officers provide professional support services to the fleet and to military dependents and beneficiaries. Table 1 provides a list of many of the line and staff communities found within the Navy.

Line professionals constitute the majority of officers on active duty. Outside of the fleet, the Navy's Medical Department has one of the largest groups of officers. These four staff corps communities are highlighted in Table 1. Each medical officer corps has its own career path. Traditionally, officers in Navy medicine have faced less rigidity when structuring their career(s). Having more independence and

TABLE 1

BREAKDOWN OF NAVAL OFFICER COMMUNITIES

LINE	STAFF CORPS
Surface Warfare(SWO)	Judge Advocate General(JAG)
Aviation	Supply
Submarine/Sub-Surface	Civil Engineering(CEC)
Oceanography	Chaplain(CHC)
Aerospace	*Medical Corps(MC)
Engineering	*Dental Corps(DC)
General Unrestricted Line	*Nurse Corps(NC)
Public Affairs(PAO)	*Medical Service Corps(MSC)

*Denotes inclusion in the Navy Medical Department.

Source: U.S. Navy URL Officer Career Planning Guidebook

options, however, may do little to guide the officer along a successful Navy career pathway.

A. NAVY CAREER PATHS

The Navy contends that the progressive movement of officers through sequentially different and more challenging tours assists in their development [Ref. 1:p. 9]. This philosophy necessitates the development of structured, hierarchical career paths in order to ensure proper management of a "career force."

Today's Navy is challenged by its changing mission and downsizing of the military. End-strength numbers are dropping and manpower analysts are tasked with designing force structure models based on unclear mission requirements. For

the officer desiring a Navy career, adequate guidelines are essential.

At present, the Navy Medical Department has been authorized to keep manning levels at (slightly above) its FY 1988 levels through the downsizing ordered in "Base Force I" documents. Each of Navy medicine's communities, including the Medical Service Corps (MSC), will have to meet its manpower and organizational needs by carefully managing accessions and retention of its current force.

B. RESEARCH OBJECTIVES

Tighter manpower restrictions, coupled with increasing demands on Navy medicine, may mean developing a more thorough career guide for Medical Service Corps officers. In an effort to determine if career path changes are needed for MSCs, this thesis will address:

1. Whether or not a more accurate (representative) career guide can be established for MSC officers, particularly regarding recommended duty tours and sequencing of those tours.
2. Whether or not a more detailed training and professional school(s) guide can be developed for MSC officers.

To meet these objectives, an analysis of 04-07 MSC officers' duty tours will be conducted to identify similarities in tour patterns among senior MSC officers. If patterns in duty tours and service schools emerge from the data, this information could enable a more specific (and

comprehensive) MSC career guide for junior officers to be developed. Improvements and clarification of the career guide could assist the Bureau of Medicine and Surgery with manpower planning, and it could enable MSCs to make more informed decisions regarding their duty and training school assignments.

II. BACKGROUND

The U.S. Navy Medical Department is composed of four distinct officer designator groups: the Medical Corps (MC), Dental Corps (DC), Nurse Corps (NC), and Medical Service Corps (MSC). Regardless of corps affiliation and professional alliance, all medical department officers have in common a dual obligation: their role as healthcare providers and their responsibilities as naval officers [Ref. 2:p. 7]. These obligations are qualitatively very different from other naval officers, and from their civilian healthcare counterparts.

MSCs provide professional ancillary support to the Navy Medical Department, including administrative and clinical services. This chapter will discuss the history and development of the Medical Service Corps, and detail the current career planning guidelines for MSC officers.

A. MEDICAL SERVICE CORPS HISTORY AND DEVELOPMENT

On 7 August 1947, the United States Navy Medical Service Corps was established. After World War II, the ongoing demobilization of the Navy pointed out an urgent need for a permanent base force of administrative and allied health professionals. Initially, the corps had four major divisions: Medical Supply and Administration, Pharmacy, Optometry, and Medical Allied Sciences [Ref. 2:p. 89].

The Medical Service Corps has approximately 2,800 officers on active duty (2,765 in FY 1991) in the grades of Ensign through Rear Admiral (Lower Half). It is the most highly diversified corps within Navy medicine. Almost half of the MSCs are healthcare administrators. The other half of the corps is comprised of 22 different healthcare science specialties [Ref. 2:p. 89]. Table 2 displays all of the specialties now represented in the corps and the corresponding distribution of FY 1991 MSC officers.

Approximately 70 percent of the healthcare administration (HCA) officers have had prior active service before being commissioned, and nearly 35 percent of the allied health science (HCS) officers have had prior service time (enlisted time). MSC officers serve in more than 250 different commands in the medical department and line activities of the Navy and Marine Corps. Sixty-five percent serve in facilities rendering direct patient care [Ref. 2:p. 89].

Entry into the Medical Service Corps is accomplished almost exclusively through two routes: (1) recruitment from the civilian community (direct procurement), or (2) commissioning from an enlisted status (inservice procurement). The majority of HCS and HCA officers enter commissioned service through direct procurement, even if they have had prior service.

MSC continuation rates, both on average and by individual specialty, have been consistently above 90 percent for the

TABLE 2

**MEDICAL SERVICE CORPS SPECIALTY DISTRIBUTION
HEALTHCARE ADMINISTRATION (HCA)**

SPECIALTY - HCA	SUBSPECIALTY (CODE)	FY91 DISTRIBUTION
HEALTHCARE ADMINISTRATION (HCA)	FINANCIAL MANAGEMENT (0031)	66
	MATERIAL LOGISTICS MANAGEMENT (0032)	7
	MANPOWER, PERSONNEL, TRAINING AND ANALYSIS (0033)	16
	MANPOWER AND PERSONNEL (0036)	-
	EDUCATION AND TRAINING (0037)	5
	OPERATIONS RESEARCH (0042)	4
	COMPUTER TECHNOLOGY (0095)	11
	PROFESSIONAL HEALTHCARE ADMINISTRATOR (1800)	890
	PATIENT ADMINISTRATION (1801)	161
	MEDICAL SUPPLY AND LOGISTICS (1802)	110
	MEDICAL DATA SYSTEMS (1803)	28
	MEDICAL CONSTRUCTION LIAISON (1804)	16
	PLANS/OPS/MEDICAL INTELLIGENCE (1805)	2
TOTAL HCAs		1,316

TABLE 2 (Continued)

MEDICAL SERVICE CORPS SPECIALTY DISTRIBUTION
HEALTHCARE SCIENCE (HCS)

SPECIALTY - HCS	SUBSPECIALTY (CODE)	FY1991 DISTRIBUTION
PHYSICIAN ASSISTANT	PHYSICIAN ASSISTANT (XXXX)	100
BIOCHEMISTRY	BIOCHEMISTRY (1810)	35
	TOXICOLOGY (1811)	2
MICROBIOLOGY	MICROBIOLOGY (1815)	33
	EPIDEMIOLOGY (1816)	4
	IMMUNOLOGY (1817)	4
	PARASITOLOGY (1819)	8
	VIROLOGY (1821)	1
RADIATION HEALTH	RADIATION HEALTH (1825)	74
	RADIATION SURVEY IONIZING (1826)	-
	RADIATION SURVEY: NON-IONIZING (1827)	-
RADIATION SPECIALIST	RADIATION SPECIALIST (1828)	22
PHYSIOLOGY	PHYSIOLOGY (1835)	15
AEROSPACE PHYSIOLOGY	AEROSPACE PHYSIOLOGY (1836)	89
CLINICAL PSYCHOLOGY	CLINICAL PSYCHOLOGY (1840)	84
	CHILD PSYCHOLOGY (1841)	9
	NEUROPSYCHOLOGY (1842)	5
	MEDICAL PSYCHOLOGY (1843)	4
AEROSPACE PSYCHOLOGY	AEROSPACE PSYCHOLOGY (1844)	34
RESEARCH PSYCHOLOGY	RESEARCH PSYCHOLOGY (1845)	15

TABLE 2 (Continued)

MEDICAL SERVICE CORPS SPECIALTY DISTRIBUTION
HEALTHCARE SCIENCE (HCS)

SPECIALTY - HCS	SUBSPECIALTY (CODE)	FY 1991 DISTRIBUTION
ENTOMOLOGY	ENTOMOLOGY (1850)	39
ENVIRONMENTAL HEALTH	ENVIRONMENTAL HEALTH (1860)	96
INDUSTRIAL HYGIENE	INDUSTRIAL HYGIENE (1861)	126
MEDICAL TECHNOLOGY	MEDICAL TECHNOLOGY (1865)	95
	IMMUNOHEMATOLOGY (1865)	-
SOCIAL WORK	SOCIAL WORK (1870)	30
AUDIOLOGY	AUDIOLOGY (1862)	23
PHYSICAL THERAPY	PHYSICAL THERAPY (1873)	80
OCCUPATIONAL THERAPY	OCCUPATIONAL THERAPY (1874)	6
DIETETICS	DIETETICS (1876)	50
OPTOMETRY	OPTOMETRY (1880)	127
PHARMACY	PHARMACY, GENERAL (1887)	136
	PHARMACY, CLINICAL (1888)	14
PODIATRY	PODIATRY (1892)	31
TOTAL - HCS		1,394

Source: Bureau of Medicine and Surgery, DMDC database

periods FY 1984 - FY 1988 [Ref. 3:p. vii]. HCA officers have tended to stay in the corps for ten years, whereupon many are eligible for retirement due to prior service time. HCS officers, on the other hand, tend to have higher continuation

rates beyond the ten-year point [Ref. 3:p. vii]. Despite the high retention rates, the Navy experiences difficulty in achieving its end-strength goals, mostly due to accession shortcomings.

Each member of the Medical Service Corps must pursue opportunities that will broaden his/her knowledge and skills as a naval officer as well as a healthcare professional. These are oftentimes conflicting responsibilities, which makes it more difficult to construct and implement meaningful MSC career planning guidelines.

B. MEDICAL SERVICE CORPS CAREER PLANNING GUIDELINES

To assist a naval officer in taking a proactive role in career planning, each community publishes guidelines for acceptable pathways which will permit an individual to plan a successful career in the Navy. The U.S. Navy Medical Department Officer Career Guide, published in 1991, provides career path options for Navy medicine's four officer communities.

Because of the extreme diversity of specialties in the Medical Service Corps (shown in Table 2), there are no detailed guidelines for any one specialty [Ref. 2:p. 90]. The "Medical Service Corps Career Planning Chart," Figure 1, illustrates the interrelationship between grade, years of service, developmental phase, and career track(s) for MSCs. It graphically depicts the four "tracks" and five "phases"

MEDICAL SERVICE CORPS CAREER PLANNING CHART

GRADE	YEARS	PHASE	ADMINISTRATIVE / 2XXX	CLINICAL (COMB/OCONUS)	OPERATIONAL	RESEARCH	
FLAG	24 - 30	EXECUTIVE	1A Director, Medical Service Corps / Assistant Chief, BUMED 2A CO 3A XO 4A OIC 4B Director, Administration 5A Dept Head 5B HQ Directors 5C CO	2B CO	2C CO 3B XO 4C OIC	2D CO 3C XO	
					5E HQ Major Staff 5F HQ Staff	5G Research Management	
CDR	16 - 22	ADVANCED	6A XO 7A OIC 8A Director Administration 9A Administrative Officer 9B Dept Head 9C HQ Staff	8B XO 9D Dept Head 9E Asst Dept Head	6C XO 7B OIC 8B HQ Major Staff 9F HQ Staff	6D CO 7C XO 9G Research Management	
					10A OIC 11A Dept Head 12A HQ Staff 13A Dept Head DUINS	10B XO 11C Staff 13C Company Commander DUINS	13D Research Management DUINS
					14A Asst Dept Head	14B Asst Dept Head 14C Asst Dept Head	14D Staff 14E Specialty Tour
ENS - LT	1 - 10	BASIC					
PROFESSIONAL SCHOOL							

Figure 1

Figure 1: Medical Service Corps Career Planning Chart

involved in MSC career pathing. According to the 1991 U.S. Navy Medical Department Officer Career Guide, however, a successful career progression in the Medical Service Corps cannot be accomplished through any one single track [Ref. 2: p. 90]. For this reason, the chart should be considered an oversimplification of the process.

Each of the five MSC officer career "phases" has its own developmental objectives. In addition, all MSC officers should pursue [Ref. 2:p. 97]:

- Professional specialization in accordance with service needs
- Early development of (and continuous attention to) communication skills
- Assignment progression based on diversity of function and level of responsibility
- Continuous professional development through education, training, and professional societies
- Continuous development of staff skills and leadership abilities

During the "Basic" phase, a career-oriented officer may opt for any of the four tracks - Administrative, Clinical, Operational, or Research - depending upon specialty. In all cases, the individual officer is to augment his/her professional education and civilian work experience with the skills and experience required to deliver healthcare in a military setting. This phase provides the foundation for exploring subspecialization, upon which a career plan can be built.

When viewing the chart, it is important to note the very general description of job types (or tours) recommended during the "Basic" phase. Billets which fit such general descriptions will vary widely in importance and responsibility. Ironically, it is during this phase that MSC officers are expected to demonstrate their "worth" to the corps, and express their career intentions by applying for augmentation. Both affect selection to Lieutenant Commander, and are crucial factors in building a career. These limitations, then, must be kept in mind when referring to the MSC career planning chart.

As an MSC advances in rank and years of service, the remaining developmental phases shown in Figure 1 will be encountered. By this time, most MSCs will have obtained subspecialty codes through experience and/or education in a particular field. Usually, subspecialty codes are awarded as a result of both graduate education and proven subspecialty experience. Subspecialty codes are secondary to an officer's primary specialty in the Medical Service Corps.

Once the "Intermediate" phase is reached, an MSC faces a myriad of choices in tour types, billets, and commands. Job decisions are governed by the "Triad of Detailing," often referred to as the "needs of the Navy," the "career needs of the individual," and the "preferences of the individual" [Ref. 1:p. 15]. An officer who began his/her development as an MSC in one "track" may now switch to another for any of the

reasons listed above. Oftentimes the distinction between HCS and HCA officers becomes hazy as the officer continues in his/her career. This is the underlying intent of the corps, which maintains the position that its highest posts will be filled by officers of the highest caliber, regardless of specialty [Ref. 2:p. 93].

Once the MSC officer enters the "Senior" or "Executive" phase, very few billets are available in the Clinical, Operational, or Research "tracks." Those who advance along the career ladder to this stage have demonstrated outstanding professional, military, and (in some cases) clinical expertise. Additionally, MSC officers in the "Senior" phase of their career may compete against any (or all) of the other medical officer designator communities for billets (the 2XXX billets). MSCs who attain this level have extremely competitive records and have proven their ability to command in the Navy Medical Department.

1. Shortcomings of Current MSC Career Guidelines

On 21 November 1988, the "Final Report of the Medical Blue Ribbon Panel" (MP-2) found that:

"Unrestricted line officer career paths provide for a proven stepping stone approach that develops and hones leadership skills through ever-increasing levels of responsibility leading to command."

It then recommended that "a similar system is needed for Medical Department officers" [Ref. 2:p. 33]. In response to this report, the Professional Development Division of the

Bureau of Medicine and Surgery (BUMED) published the 1991 U.S. Navy Medical Department Officer Career Guide. This publication's career paths, though, may not measure up to the recommendations of the Blue Ribbon Panel.

Appendix A includes the career path grids for ten of the Navy's unrestricted line (URL) officer designator groups [Ref. 4]. A simple comparison of any one of these grids to Figure 1 shows the inadequacies of the MSC career planning chart - most notably at the junior officer, or "Basic" level. At a minimum, the URL charts suggest general types of duty tour assignments (i.e., sea or shore tours). The more detailed charts, such as those for Civil Engineering Corps, Oceanography, Public Affairs, and Cryptology officers, also offer specific information on billet assignments to coincide with each tour.

Because of the aforementioned diversity of the Medical Service Corps, it would seem easy to "accept" general (or vague) career guidelines. At the very least, though, these guidelines could contain additional information regarding duty tours. For instance, the "Civil Engineer Corps (CEC) Officer Professional Development Path" (in Appendix A) distinguishes assignments according to activity size. This would be an extremely useful tool for MSCs, helping to clarify the present billet descriptions of "Assistant Department Head," etc., at the "Basic" level in Figure 1. Offering activity size information would not necessarily "restrict" or "limit" a

particular specialty from pursuing an assignment, either. In direct relation to activity descriptions, career guides for URL officers outline sea/shore rotations. With over 250 commands afloat, ashore, and overseas, the MSC community may also need to prescribe a tour rotation plan for its officers. Cross-tracking between operational (i.e., overseas, sea, and Fleet Marine Force tours) and other tracks routinely occurs and is usually imperative for successful career development within the Medical Service Corps [Ref. 2:p. 34].

Appendix A also displays different career tracks for females in certain URL communities. Women in the workforce basically follow alternate career tracks which, when compared to those of men, are noteworthy in the lack of options available to them throughout their career and regardless of their attitudes [Ref. 5:p. 126]. This is certainly true in the military in general and the Medical Service Corps in particular, where women are restricted from duty tours aboard most ships and with the Fleet Marine Force. Consequently, it appears essential that future versions of an MSC career planning chart contain some kind of tour type descriptions, perhaps separated according to gender.

To develop a "proven stepping stone approach" in MSC career development, it will be necessary to overcome its two biggest shortcomings. First, an examination of duty tour patterns is needed. Then, there needs to be a categorization of tour assignments by activity size. In this manner, the MSC

junior officer assignment suggestions of "Assistant Department Head," "Staff," and "Specialty Tour" could be clarified and made meaningful to the MSC desiring a Navy career.

C. MEDICAL SERVICE CORPS TRAINING GUIDELINES

For the Medical Service Corps officer, there are three basic career development processes: education, training, and work experience [Ref. 2:p. 41]. Generally, training and education are used to augment experience-based learning. Each process can, and should be, continuous over an officer's career.

Figure 2 depicts "Education and Training Goals" for Medical Service Corps officers, broken down into the five phases of career development [Ref. 2]. Training and education programs available to MSCs include short courses, correspondence courses, and postgraduate education. Appendices B and C, respectively, list the programs offered in the postgraduate and short course categories [Ref. 2].

While Figure 1 and Figure 2 both place DUINS (full-time duty under instruction) at the Lieutenant Commander/O-4 level, most MSCs actually undergo postgraduate education earlier in their careers. According to Navy Medical Command Instruction (NAVMEDCOMINST) 1520.2A, Medical Service Corps Training Programs, all of the inservice graduate education programs are open to officers in the rank of O-2 to O-4 [Ref. 6].

Figure 2

Basic Phase (O-1/O-3):

- Officer Indoctrination School, Newport, Rhode Island
- Basic Military Short Courses/Correspondence Courses (e.g., Navy Regulations, UCMJ), Basic/Advanced Division Officer Course
- Membership (active participation) in professional associations
- Continuing education courses through professional organizations, academic institutions, correspondence courses and self-study
- Short courses related to specialty or interest
- Commence preparation for advanced education or degree
- Management development course

Intermediate Phase (O-4):

- Continue specialty and leadership courses
- Intermediate Leader Development course
- DUINS for specialty education or advanced degree
- Expand participation in professional organizations to include publications and presentations
- Intermediate service college
- Armed Forces Staff College
- Marine Corps Command and Staff College
- Continue short courses related to specialty or interest

Advanced Phase (O-5) and Senior Phase (O-6):

- Continue educational courses and professional association participation
- Senior Leader Development Course
- Strategic Medical Readiness Contingency Course
- Interagency Institute for Federal Health Care Executives
- PCO/PXO Course for those enroute to Commanding Officer or Executive Officer positions
- Command Leader Development Course
- Industrial College of the Armed Forces
- Naval War College
- Senior Service College
- Executive training program

Executive Phase (Selected O-6 and Flag):

- Capstone Course
- Executive training program

Figure 2: Education and Training Goals

Source: Bureau of Medicine and Surgery, U.S. Navy Medical Department

1. Training and Education Selection Criteria

The Navy Medical Department issues training plans based on the "needs of the Navy" as defined by authorized billets and their requisite billet subspecialty codes [Ref. 7: p. 8]. These "needs" are then compared to available training slots to determine how many officers will be selected for training.

Postgraduate education (or DUINS) includes any programs lasting longer than sixteen weeks. Selection for postgraduate schools is very competitive, and is considered a positive retention factor that motivates officers toward a Navy career [Ref. 2:p. 41]. Applications for postgraduate education are screened annually by a board convened under the auspices of the Bureau of Personnel and/or the Bureau of Medicine and Surgery.

Short courses, which are listed and described in Appendix C, are attended in a temporary additional duty (TAD) status and are available on an ongoing basis. Procedures for selection vary by course, but most attendees are chosen based on their present duty assignment, anticipated duty assignment, or contingency billet [Ref. 2:p. 42].

Navy correspondence courses offer an officer the opportunity to increase his/her knowledge of topics specific to being a naval officer. Subjects vary from basic naval orientation to warfare and defense strategies. Completion of

correspondence courses is usually self-directed and at the discretion of the officer.

III. LITERATURE REVIEW

A. CAREERS, CAREER PATHS, AND CAREER MANAGEMENT

The literature provides many interpretations to the terms "career," "career planning," "career ladder," "career pathing," and "career management." For simplicity, the following definitions are offered:

1. Career: a largely irreversible process in which individuals pursue fulfillment with work; a process wherein compromise is an essential aspect in every choice of consecutive work roles and experiences [Ref. 8].
2. Career planning: a deliberate process for individuals to (a) become aware of self, opportunities, constraints, choices, and consequences; (b) identify career-related goals; (c) program work, education and related developmental experiences to provide direction, timing and sequence of steps to attain a specific goal [Ref. 9: p. 390].
3. Career ladder (or path): paths by which people move between jobs, positions, departments, or divisions of organizations; a reflection of efficient routes for skill development; a prescribed movement pattern valued highly in the organization; logical channels between positions for transfer and promotion [Ref. 8:p. 63].
4. Career pathing: a program design of work and training for an individual [Ref. 8:p. 4].
5. Career management in organizations (or CMO): a system designed to mesh individual career needs with the present and future requirements of the organization [Ref. 8:p. 3].

Current research indicates that effective career management is becoming increasingly complicated and, at the

same time, more important than ever in organizations. A common goal of all organizations is to get the right number of people in the right jobs at the right time with the appropriate skills. To accomplish this often formidable task, career guides are used to clarify both the organization's personnel needs and its commitment to "publicizing" job opportunities.

Times of turbulence and change, such as those challenging the Navy today, generally increase competition for jobs while simultaneously decreasing job opportunities. Maintaining a stable career program in times of rapid change may require periodic auditing to assess each program's validity [Ref. 8: p. 11]. Naturally, an organization cannot be all things to all people, but it can strive to produce valid, up-to-date information to help people make realistic career choices. It is no coincidence that employees often report their greatest career need is for more information on company career opportunities [Ref. 10:p. 11]. Consequently, organizations have enlisted the help of their workforce to establish more mutual career planning and management.

One of the most notable outcomes of consensual career planning and CMO is the career ladder (or path). There are three approaches to creating career ladders/paths [Ref. 8:p. 64]:

1. Traditional approach: examines traditional channels for promotion; concerned with upward movement; usually narrowly defined.
2. Career ladder approach: groups similar jobs together; facilitates mobility; discards heavy reliance on job titles (which alone do not describe jobs).
3. Career lattice approach: variation of ladder approach; concentrates on interrelationships of channels (lateral, diagonal, and vertical); requires more information than the other two approaches.

Use of any particular approach depends upon organizational commitment, workforce complexity and size. Successful implementation of career paths, on the other hand, relies heavily upon the individual.

A tremendous variety of demographic, educational, and labor market factors can affect career development (apart from work experience itself). Many of these exogenous and endogenous factors stem from a protean (or self-directed) orientation toward careers. For instance, individual career attitudes are substantially formed prior to the first job itself [Ref. 5:p. 122]. Initial career aspirations, more than any other career attitude, can end up being critical in accounting for later employment success [Ref. 5:p. 126].

1. Alternative Views on Career Paths

Some of the literature offers alternative, non-traditional views on career paths. Arima (1981) argues that the assumptions about individuals for whom career development programs are designed may no longer be appropriate because of

the life decisions facing today's worker [Ref. 11:p. 9]. Proponents of this ideology believe a steep linear job history profile (i.e., progression up the proverbial "corporate ladder") is nearing obsolescence.

It has been suggested that career pathing for those in the early stages of their careers is premature and mechanistic [Ref. 11:p. 8]. Phrases like "up or out" are now "out," and are being replaced with expressions like "career anchor:" where a person labors to achieve an occupational self-concept or self-knowledge [Ref. 11:p. 19]. Ultimately, these theorists aim to expand the mainstream view of successful career profiles.

How to attain, and then maintain, a career today is unclear. Clearly, though, there is a need for significant career moves other than advancement. As within other civilian organizations, the military is experiencing "crowding" at the middle and top of the hierarchical pyramid. More people are competing for the same number of, or fewer, promotions. There are numerous economic conditions, coupled with the aging baby-boom generation in mid or late career stages, that have discouraged retirement. As early as 1979, Bailyn proposed a "slow burn" alternative to straight line promotions to combat organizational top-heaviness [Ref. 11:p. 26]. A "slow-burn" approach offers a more growth-oriented and developmental plan to the top.

Not everyone in an organization considers his or her career to be an organizational one [Ref. 11:p. 34]. This is especially evident in medical personnel serving in the military, who often measure their career against their background specialty. To this end, the Medical Service Corps could be considered a group of thirty (or so) occupational "career communities."

Developing a scheme for a universal career path, in lieu of the occupational career communities, is also difficult because of the "steady state careers" associated with most clinical MSC officers [Ref. 11:p. 40]. "Steady state careers" connote inner growth in one's field (such as pharmacy) leading to some upward movement, but essentially there is simply a fixed identity within that field. Consequently, an homogenous career path that cuts across all the MSC specialty "career communities" seems almost useless.

B. U.S. NAVY CAREER PATHS

Three key factors underscore the development and use of career paths in the Navy [Ref. 7:p. 6]:

1. Manpower requirements and authorizations (resourced billets),
2. Personnel, and
3. The distribution of personnel.

As long as these three elements are in "sync," there is little concern for changing the status quo. But if retention statistics show a downward trend, for example, attention will often shift towards assessing and updating career paths as one retention "remedy."

Overall, Navy publications which highlight and examine careers/career paths have several principles in common. First, most references stress that there is no one single promotional path within the Navy, and therefore career patterns are as varied as the number of officers who pursue them [Ref. 4:p. 41]. Second, much of the guidance material emphasizes the role of the officer in making conscious decisions regarding his/her career. Finally, in summary, the career guides of the Navy are only intended to provide an officer " with sufficient information to ask specific and appropriate questions...to make significant career decisions...as a Naval officer" [Ref. 4:p. 8].

IV. DATA DESCRIPTION AND RESEARCH METHODOLOGY

A. DATA DESCRIPTION

To determine which types of duty tours or service schools are correlated with an MSC's rank, data were drawn from the Defense Manpower Data Center (DMDC) database on all FY 1991 Medical Service Corps officers. The data, in turn, were merged with longitudinal Officer Master Files (OMFs) containing eight (maximum) prior duty stations for each officer. Sample data included 2,765 observations with 36 variables, of which 1,025 observations were "senior" MSC officers. For the purposes of this study, "senior" officers refer to those at the rank of Lieutenant Commander (LCDR - O4) or above.

As the sample contains senior Medical Service Corps officers who are still on active duty, its design may control for observed, as well as unobserved, factors contributing to the group's successful promotion and retention in the Navy. Presumably, the types of duty tours and training courses completed by senior MSC officers significantly influenced their successful careers.

The senior MSC officers being analyzed for duty tour and training course patterns in this study were initially treated as a homogenous group. Recognizing that differences in duty

tour patterns may exist because of an officer's specialty, gender, or rank necessitated grouping the data into those categories for comparisons. Medical Service Corps officers were grouped into two specialty categories: allied health professionals (HCS), and healthcare administrators (HCA). Separation by specialty is believed to be important because many commands cannot (or do not) provide a large number of the allied health services listed in Table 2. Gender differences in duty tour patterns can be expected for some tour types (especially ships) due to the Navy's combat and combat vessel exclusionary policies, which prohibit females from serving in certain billets. Finally, differences may arise between the rank groups of Lieutenant Commander, Commander, and Captain since the data capture the eight most "recent" duty stations. For example, it is conceivable that a Lieutenant Commander completed his/her most recent tour in a full-time duty under instruction billet, yet this is not likely to have occurred for a Captain.

B. RESEARCH METHODOLOGY AND MODEL SPECIFICATION

The last two chapters identified several factors believed to influence an individual's career, career plans, and career path in either a military or civilian setting. One overriding theme emerged from the theories, and that is the difficulty of designing a career path that balances professional and personal (demographic) needs. Demographics notwithstanding,

this research concentrates on analyzing those professional aspects of the MSC career path that can be "controlled" or changed by the Navy: namely, recommended duty tours and training/education. This thesis assumes that personal career intentions are closely related to actual professional career choices in duty tours and service schools, and that this combination leads to a successful career in the Medical Service Corps.

In October 1992, at the MSC Leaders Conference, a set of strategic goals were issued for the Medical Service Corps [Ref. 12:p. 16]. Strategic Goal II states that [Ref. 12:p. 16]:

"The Navy Medical Service Corps will continuously revise, refine and publicize career pathways which support the future needs of the Navy and the Navy Medical Department while maximizing the potential of the individual."

One of the strategies to achieve this goal is to define clear pathways that "chart the course" for an MSC's career [Ref. 14: p. 16]. To date, studies have not presented the Medical Service Corps with a conceptual model that could facilitate a correlation between duty tour "types" and an officer's rank (i.e., "chart the course"). This thesis, then, investigates both historical duty tour patterns and training course completion data.

1. Duty Tour Analysis

Longitudinal Officer Master File (OMF) data use a one-character alpha code to indicate the type of assignment for past and present duty stations. Table 3 lists each OMF alpha code and its corresponding definition.

TABLE 3

OMF TOUR TYPE ASSIGNMENT CODES

<u>CODE</u>	<u>DEFINITION</u>
C	Serving at sea; ship billet
S	Serving on shore (United States except Hawaii and Alaska)
A	Serving on shore, Alaska
H	Serving on shore, Hawaii
O	Serving on shore, overseas
D	Overseas ship or squadron
G	Serving with other non-military U.S. government agency

Source: Defense Manpower Data Center (DMDC), OMF

OMF assignment type codes "S," "A," "H," and "G" were considered too vague to incorporate into a refined or clarified version of an MSC career path. Therefore, to make the type codes more representative of the activities and duty tours served by MSC officers, all past and present duty stations were manually re-categorized into the ten tour types of Table 4.

In Table 4, the tour type DUINS captures only those MSCs who have been full-time duty under instruction at Naval

Postgraduate School, Monterey or at Baylor College in San Antonio, Texas.

TABLE 4

TEN TOUR TYPE CATEGORIES

TOUR TYPE	DEFINITION
BIG4	Any of the four large Navy teaching facilities including: Naval Hospital Portsmouth, Naval Hospital Oakland, Naval Hospital San Diego and National Naval Medical Center Bethesda
CLINIC	Any continental U.S. medical clinic
CONHOSP	Any continental U.S. hospital, other than those in the "BIG4" category
DCAREA	Any DC area command, such as the Bureau of Medicine and Surgery (BUMED), Bureau of Naval Personnel (BUPERS)
DUINS	Full-time duty under instruction at Naval Postgraduate School or San Antonio
OSEAS	Any overseas hospital or clinic (kept as type assignment "O")
OSHIP	Any ship homeported overseas (kept as type assignment "D")
OTHER	Includes research positions, drug screening labs, offices of medical/dental affairs, environmental health facilities, and support facilities
RECRUIT	Recruiting commands
SHIP	Ships homeported in the U.S. (kept as type assignment "C")

Source: Author

Capturing those MSCs who pursued outservice DUINS at civilian institutions could not be accomplished with this data set because such students report to recruiting commands while

obtaining their education. Deciphering those tours can only be done on a case-by-case basis.

Because of the extreme diversity of the Medical Service Corps, especially among its allied health professionals, many officers serve in relatively "obscure" support facilities. The OTHER category was created to label and identify those unique assignments.

It should be noted that Fleet Marine Force (FMF) billets are coded as shore-based according to the location of the base. Therefore, these tours appear in either the CONHOSP category or in the OSEAS hospital/clinic category even after re-categorization.

Once the duty tours were grouped into ten "new" categories, senior MSC officers were partitioned off the data base and cross-tabulated by (1) rank, (2) gender, and (3) specialty against all past duty stations. To analyze patterns in training and education, though, the junior officers were added back into the data and all MSCs were cross-tabulated by service schools. The outcome of these tabulations provided the information necessary to identify and chart distribution patterns (over time) in duty tour types and service school attendance. In the case of service schools, no logical "type" categorization was possible as the courses were too diverse. For this reason, courses were tracked individually for two officer groups: junior officers and senior officers.

a. Variable Description

Figure 3 represents a generic conceptual model showing various officer characteristics, including rank, as hypothesized factors used in determining each duty tour type. This model set the foundation for cross-tabulating variables to determine descriptive statistics relating to the MSC career path.

Figure 3



Figure 3: Hypothesized Model of Relationships Between Officer Characteristics and Duty Tour Types

Variables selected from the OMF and DMDC database were chosen to be good approximations of the characteristics used in the conceptual model of Figure 3. Biodemographic data can include age, sex, and race. For this study, only gender was selected. Age is assumed to be highly correlated with years on active duty and was excluded. Additionally, race should have no effect on duty tour assignments, and was not considered pertinent in the context of this thesis. Gender, on the other hand, can legitimately eliminate an officer from serving in a particular assignment. Current Navy policy,

then, dictates gender as a germane variable in the duty tour assignment process.

With forty-seven subspecialties represented in the Medical Service Corps, specialty data plays a vital role in determining duty tour locations. This is especially true of junior HCS officers who continue to work at their designated specialty, since such billets are limited to certain commands providing the services of that specialty or subspecialty. An MSC officer's specialty was broken out into one of two categories: healthcare administration (HCA) or healthcare science (HCS).

Tenure in the Navy serves as both a measure of career commitment and of experience. In this thesis, years of active service (YAS) was used as a measure of tenure.

By analyzing the results of the duty tour distribution patterns of MSCs over time, this thesis may be able to determine when an MSC officer should complete a particular type of duty tour. Additionally, MSC training guidelines will be verified, or discredited, according to actual training program data.

V. RESULTS

Duty tour pattern distribution rates were determined using the techniques discussed in Chapter IV. First, sample data were stratified by rank, gender and specialty to obtain relevant descriptive statistics on the sample data. Table 5 displays the Medical Service Corps officer sample information by stratification cell.

TABLE 5
MSC OFFICER SAMPLE DATA

<u>RANK</u>	<u>TOTAL IN RANK</u>	<u>SPECIALTY</u>		<u>GENDER</u>	
		<u>ALLIED</u>	<u>ADMIN</u>	<u>MALE</u>	<u>FEMALE</u>
SENIOR	1025 (37%)	558 (54%)	467 (46%)	923 (90%)	102 (10%)
JUNIOR	1740 (63%)	891 (51%)	849 (49%)	1265 (73%)	475 (27%)
TOTALS:	2765	1449 (52%)	1316 (48%)	2188 (79%)	577 (21%)

Source: Author/DMDC

As shown in Table 5, only 10 percent of senior MSC officers are female compared to 27 percent of junior MSC officers in this sample. This represents a significant disparity in gender distribution, and will skew gender comparisons in duty tour patterns among senior officers. Furthermore, inferences from the senior officer group that are

gender-based will be inapplicable to the junior officer community. The remaining stratification statistics are fairly consistent across both RANK groups with respect to specialty.

Prior to ascertaining patterns in duty tour distributions, all MSC officers' past and present duty stations were arrayed into a single variable. As a single variable, the percentage of officers who have served one or more tours in each duty tour category could be calculated. Also, a breakdown by rank indicates what percent of each tour type was completed by junior and/or senior officers. These tabulations produced the information in Table 6.

TABLE 6

TOUR COMPLETION PERCENTAGES OF SAMPLE OFFICERS

TOUR TYPE	OVERALL	BY RANK:	
		JUNIOR MSC	SENIOR MSC
SHIP	18.6%	56%	44%
OSHIP	5.1%	37%	63%
CLINIC	29%	46%	54%
CONHOSP	58%	53%	47%
DUINS	2%	56%	44%
DCAREA	17%	20%	80%
RECRUIT	9%	37%	63%
OSEAS	31%	46%	54%
BIG4	56%	50%	50%

Source: Author

Note: OTHER category omitted in arrayed data set.

The descriptive statistics of Table 6 help to confirm an underlying assumption that senior MSC officers, by virtue of their tenure in the Navy, have had greater opportunities to serve in more tours. Accordingly, then, senior MSC officers in this data set completed the majority of tours in five of the nine tour type categories. Of special interest in Table 6, though, are the three tour type categories where junior officers completed the majority of tours.

Fifty-six percent of SHIP tours, for example, have been completed by junior officers in the sample (Table 6). While this finding is consistent with shipboard billet structures, it does not account for the fact that senior MSC officers were also once "junior" enough to serve aboard ships. An explanation for this may be the increased number of billets on ship platforms (during the 1980s) that (1) were designated for MSC officers, and (2) were allowed to be filled by females. The combination of these two conditions may have increased the opportunity to serve aboard ships for junior officers in the sample.

The majority (fifty-six percent) of DUINS tours in Table 6 were also completed by junior officers. Interestingly, this percentage would likely be even greater if LCDRs were considered junior officers in this thesis, as they are in the MSC training instruction [Ref. 13]. Once again, the senior officers in the sample have had more time for a DUINS tour, yet the statistics show that fewer of them have completed such

a tour. This unexpected disparity may mean DUINS tours are receiving greater priority and emphasis among junior MSC officers, or it may reflect an increased opportunity for DUINS tours which previously did not exist. But, because DUINS tours completed at civilian schools could not be captured in this data set, these findings should generally be considered incomplete. Inclusion of civilian program DUINS tours could possibly "shift" the statistics in favor of senior officers.

Column 3 of Table 6 shows that a slight majority (53 percent) of the CONHOSP tours were completed by junior officers. In addition, BIG4 tours were evenly divided among both senior and junior MSCs. Superficially, this would seem to indicate that junior officers are more likely (or as likely) to serve in a CONHOSP or BIG4 facility. A reason for these findings may lie in the higher number of billets authorized at such facilities for junior officers. On the other hand, opportunities for senior officers to complete such tours does not diminish with seniority. Consequently, these two duty types could represent tours that should be recommended for junior officers in a refined MSC career path.

A. TOUR TYPE DISTRIBUTIONS

In order to identify historical patterns in duty tours, all senior officers were partitioned off the MSC database. Ten tour categories (Table 4) were tracked over the officers' last eight duty stations. The officers' present duty station

is labelled as "DUTY1," and their earliest (or in some cases first) tour is indicated as "DUTY8." On average, each tour represents a three year time span. Some of the more "junior" senior officers (e.g., the Lieutenant Commanders) may have less than eight prior duty stations. Results of the analysis are depicted in Figure 4 and Figure 5, with five tour categories graphed in each figure.

1. Duty Station Patterns

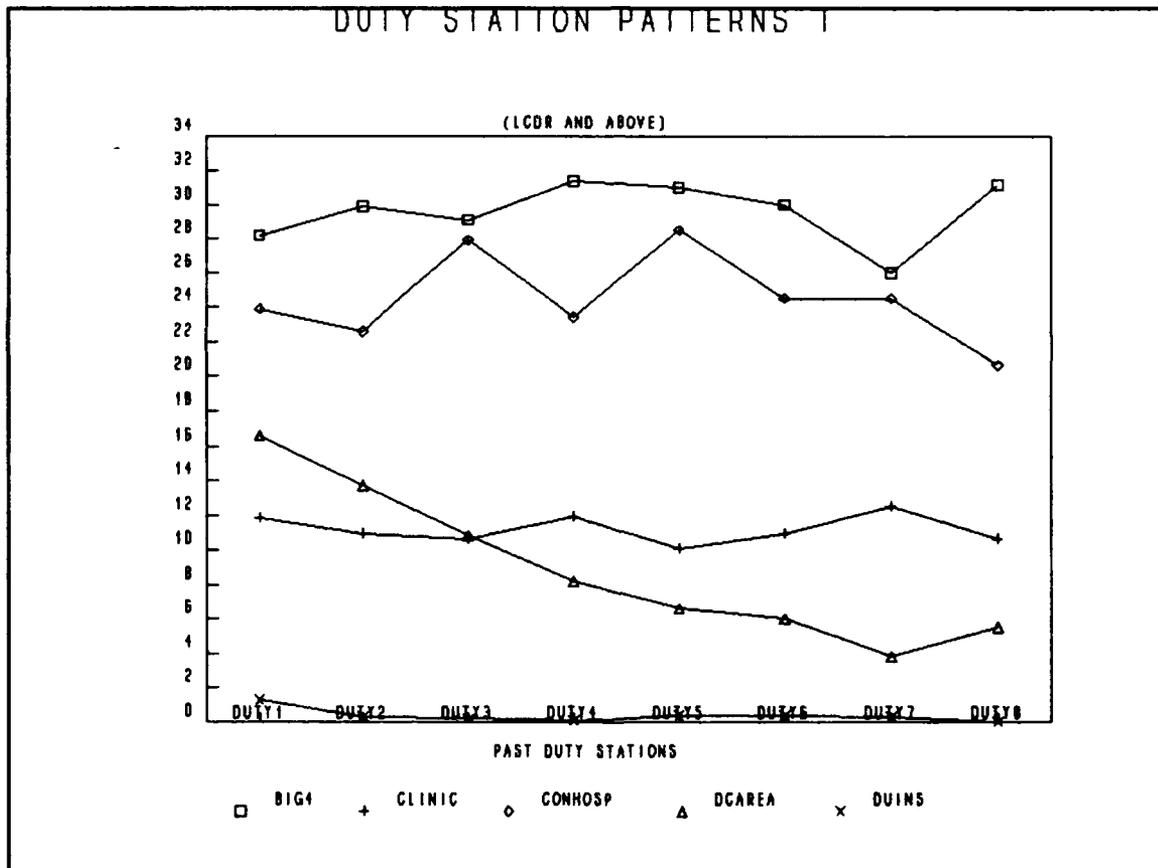


Figure 4: BIG4, CONHOSP, CLINIC, DCAREA, and DUINS Tours

Figure 4 shows the percent distribution of officers who have served at a BIG4 teaching facility, U.S. hospital

(CONHOSP), U.S. clinic (CLINIC), in the DCAREA, or in a DUINS status. It tracks the changes in percentages, over time, of the last eight duty stations.

Tours at a BIG4 teaching hospital appear stable over the officers' careers, with 26-32 percent of MSC officers stationed at these facilities during any given duty tour. The only noticeable "dip" in the trend line occurs in the officers' second tour (DUTY7).

As a check for skewness (outliers), all of the ten duty types were tracked separately according to the four senior officer grades: Lieutenant Commander (LCDR), Commander (CDR), Captain (CAPT) and Rear Admiral (RADM). These results enabled a more detailed comparison and are presented in Appendix D. The graph of BIG4 tours by rank, in Appendix D, shows the Captain cohort having a generally higher percentage of officers serving in BIG4 facilities over time than the other rank cohorts. These differences do not appear to skew the results of Figure 4, however, as the overall trends remain similar among all four groups.

Because there is only one Rear Admiral in the Medical Service Corps at any given time, this rank group will always appear as 100 percent on the graphs in Appendix D when that tour type was completed. The Corps Chief (RADM) for FY 1991, then, is shown in Appendix D to have served his last eight duty tours in the following sequence: (1) DCAREA (present tour); (2), (3), and (4) BIG4 facility; (5) CONUS hospital;

(6) DCAREA; (7) CONUS hospital; (8) DCAREA (earliest tour of record).

CLINIC tours also appear stable in Figure 4, averaging 11 percent over time. While this pattern may parallel the stability of tours at the BIG4, it should be noted that clinic billets are usually filled by a CDR or below. Moreover, these billets are available to few specialty groups in the corps since clinics provide only primary medical care, and not acute secondary level care (requiring a variety of specialists).

Comparing CLINIC tours by rank (Appendix D) reveals only minor differences among the groups. LCDRs predictably show a higher percentage of clinic tours during their most recent tours, whereas CAPTs maintain a smaller percentage until reaching their earlier tours. These findings reflect the billet structures mentioned above.

Twenty to twenty-eight percent of the entire senior officer group served in a CONUS hospital during any given duty tour (Figure 4). Two slight increases occur at the third and fifth most recent tours. Differentiated by rank (Appendix D), the groups follow similar patterns over time. A notably higher percentage (25 percent) of the CDR group, though, served in a CONHOSP at their last duty station of record. Only 10 and 14 percent of the LCDRs and CAPTs, respectively, served in a CONHOSP during that same duty period. The two increases along the CONHOSP trend line are slightly skewed upward by the LCDR group (Appendix D).

Tours in the DCAREA on Figure 4 show a strong tendency to increase in occurrence as an officer gains seniority. Seventeen percent of the officers sampled were serving in the DCAREA in their "present" tour. This percentage shows a sharp increase compared to earlier tours for these officers, where only 4-6 percent of them served in the DCAREA.

Separating the officers by rank, 25 percent of the CAPT cohort is shown to have been stationed in the DCAREA during their three most recent duty tours (Appendix D). Lieutenant Commanders and Commanders, on the other hand, have smaller percentages of their groups in DCAREA tours, and these percentages tend to decline faster than for the Captains.

The patterns in Figure 4 indicate that less than two percent of the MSC officers were in DUINS during any given tour. For this particular tour type, the rank comparisons in Appendix D provide more useful information. The material presented in Appendix D for DUINS tours shows that the majority of the LCDR DUINS tours took place at their "present" duty station. Commanders and Captains, by contrast, completed DUINS farther back in their careers.

Figure 5 graphs the percentage of officers who served in an overseas hospital/clinic (OSEAS), onboard a ship (SHIP), at a recruiting center (RECRUIT), aboard a ship homeported overseas (OSHIP), or in one of a variety of support facilities (OTHER). Each trend line corresponds to a specific duty tour

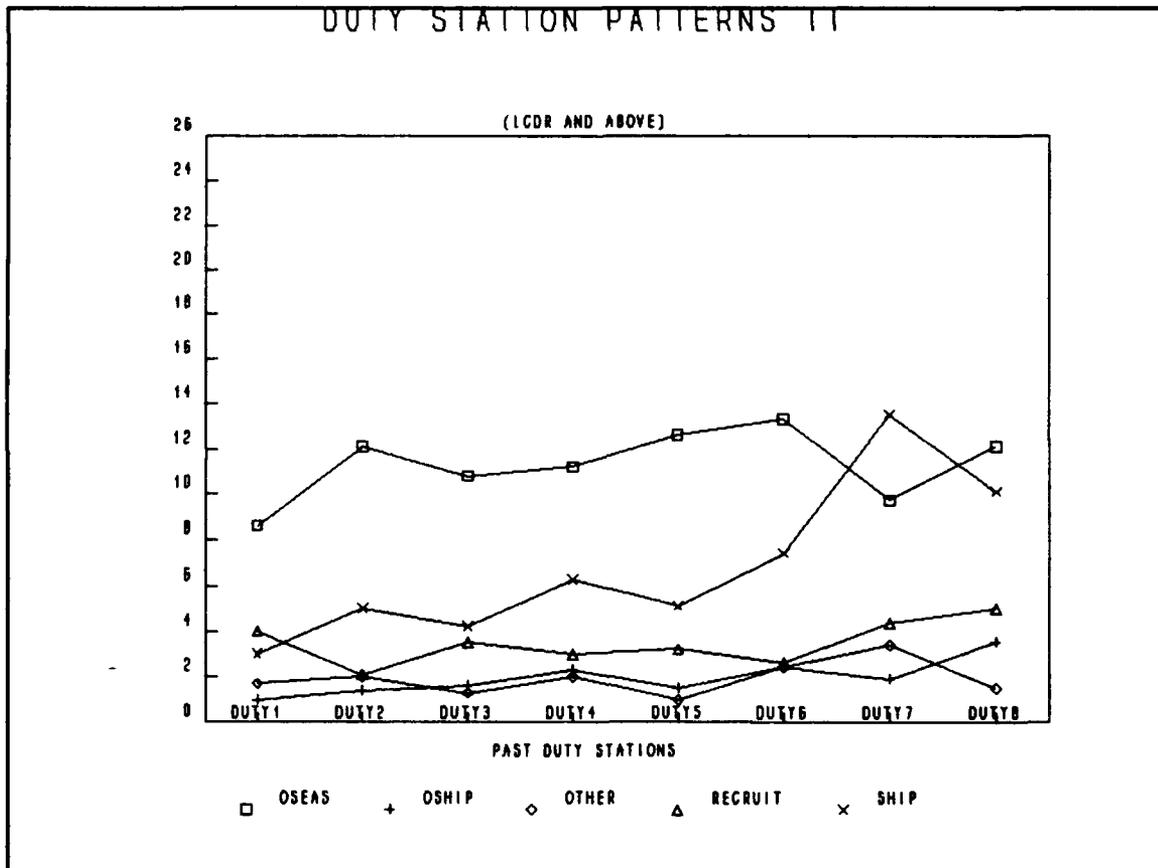


Figure 5: OSEAS, OSHIP, OTHER, RECRUIT, and SHIP Tours

type, marking the changes in percent distributions over the officers' last eight duty stations.

Within the five tour types of Figure 5, OSEAS commands claim the largest percentage of MSC officers, averaging 11 percent. The incidence of OSEAS tours drops at DUTY7, increases at DUTY6, and then declines gradually until the second most recent duty tour. OSEAS tours reach their lowest level in the "present" duty tour.

Ship tours increase in likelihood when the officers are in their earlier career stages. Almost 14 percent of the MSC officers were serving aboard ships during their second

duty tour of record (DUTY7). This percentage drops dramatically until it reaches a low of three percent in the officers' present tour. There are marked differences in the officers when they are separated by rank, as in Appendix D. Duty tours seven and eight, which correspond to the study's first two tours of record, have a much larger (23 and 35 percent, respectively) percentage of LCDRs assigned to ships than either the CDRs or CAPTs. These results could be expected because those LCDRs who have 24 years of active service have usually had prior enlisted time. Thus, the LCDR cohorts seventh and eight duty tours can reflect tours completed as enlistees and not as officers, thereby increasing the likelihood of a sea tour at that time.

According to Figure 5, RECRUIT tours occur more frequently in the officers' earlier duty stations. Overall, only minor fluctuations appear on the RECRUIT trend line, where just two to five percent of the MSC officers served in a recruiting billet during any given duty tour. No apparent outliers were found when comparing RECRUIT tour trends by rank (Appendix D).

Although on a smaller percentage scale, tours aboard ships homeported overseas (OSHIP) follow the same pattern as the SHIP trend line. The more junior the officer (i.e., at DUTY6, DUTY7, and DUTY), the greater the chance of serving aboard an overseas ship. In this case, though, the changes in

percent distributions are extremely minor, ranging (approximately) from a low of two to a high of four percent.

The final trend line appearing on Figure 5 relates the pattern in tours categorized as OTHER. Little fluctuation exists in this trend line, and no obvious differences were noted when OTHER tours were tracked separately by rank (Appendix D).

a. Duty Patterns: By Gender

Appendix E includes a line graph for each tour type to show the differences or similarities in duty tour distributions between males and females in the Medical Service Corps. While the percentages are quite different for the two groups, the resultant trend lines associated with males and females are remarkably similar for every tour type category except OSEAS and SHIP tours. Due to the dissimilar patterns, Figures 6 and 7 are presented here in order to examine the gender differences in OSEAS and SHIP tours.

Overseas tours only begin to follow similar patterns at DUTY4. The trend line fluctuations of Figure 6 are in opposing directions for DUTY5, DUTY6, DUTY7, and DUTY8. For instance, when the percentage of males serving overseas drops from DUTY8 to DUTY7, the percentage of females overseas increases, and so on.

Figure 7 distinguishes the SHIP trend lines of male and female MSC officers. Predictably, the SHIP trend line for

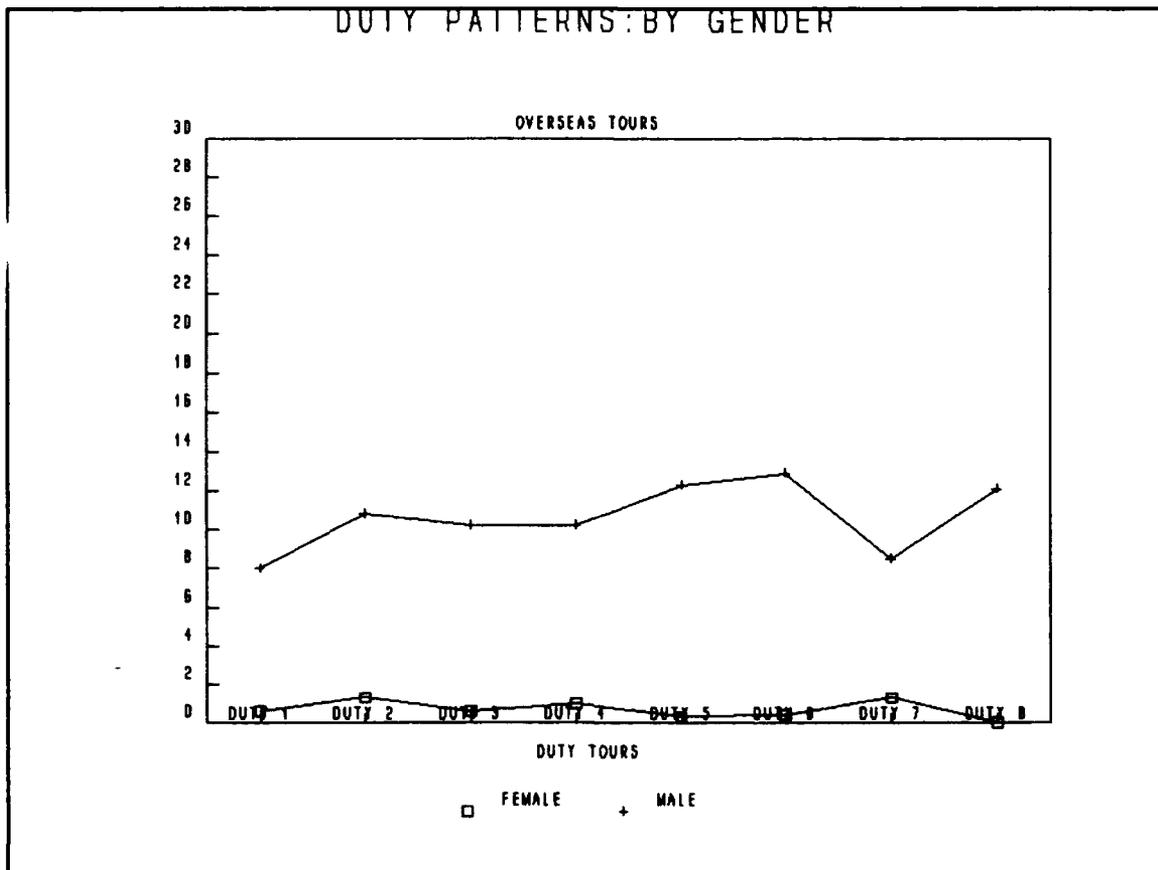


Figure 6: Overseas Duty Patterns Differentiated by Gender

females is located at the smallest percentage levels (near or at zero). In contrast, the SHIP tour trend line for males marks a distinct pattern: SHIP tours decrease in frequency as male officers increase in rank (or tenure). There is also a noticeable increase in the percentage of males aboard ships during their second tour of record (DUTY7).

b. Duty Patterns: By Specialty

To determine whether or not duty tour trends are different for each tour type according to an MSC officer's specialty, the line graphs of Appendix F were prepared. These

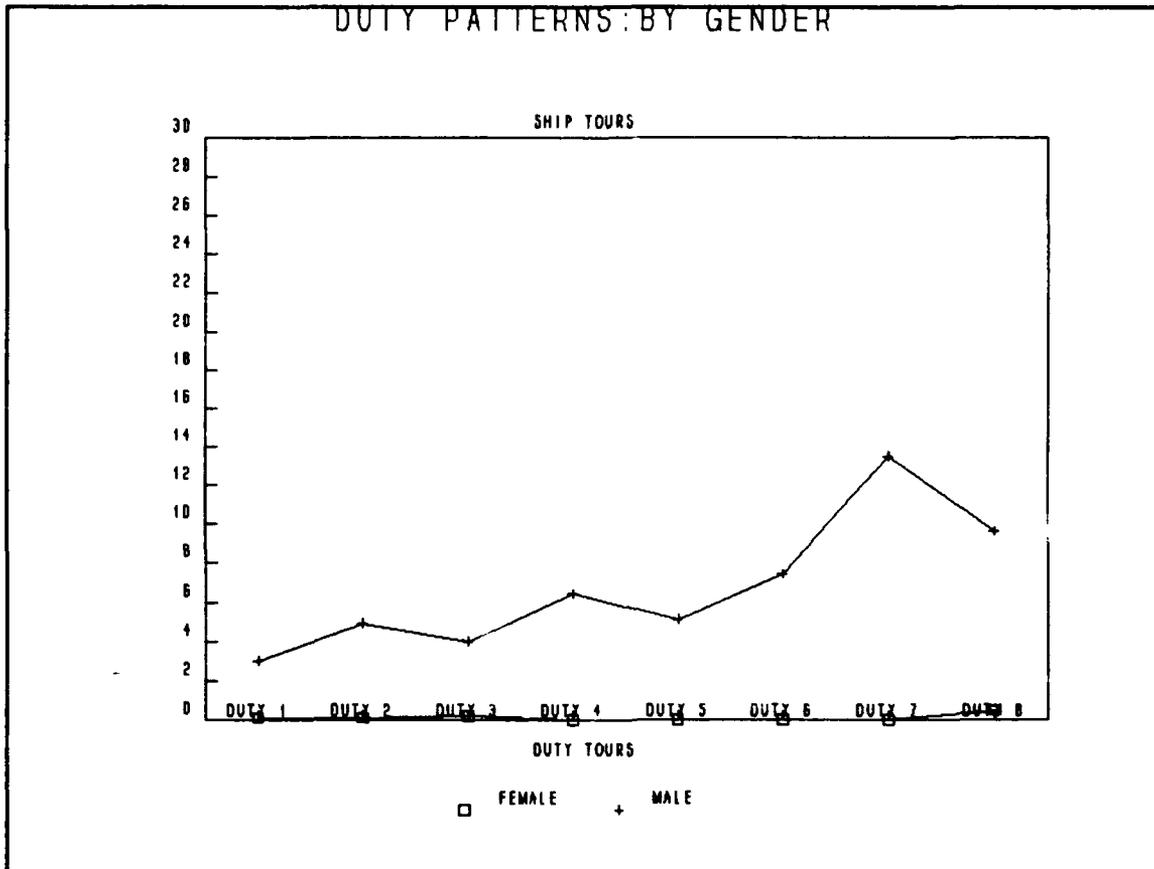


Figure 7: Ship Duty Patterns Differentiated by Gender

graphs compare tour trends of administrative (HCA) and allied science (HCS) officers for each tour type category.

Tour types having the biggest differences between HCA and HCS officers included BIG4, CLINIC, and CONHOSP tours. Graphs for these tour types are shown in Figures 8, 9, and 10, respectively.

Tours by HCA and HCS officers at one of the BIG4 teaching facilities show strikingly different trends (Figure 8). BIG4 tours reach their peak at the earliest tour of record for HCA officers, and then gradually taper off to their

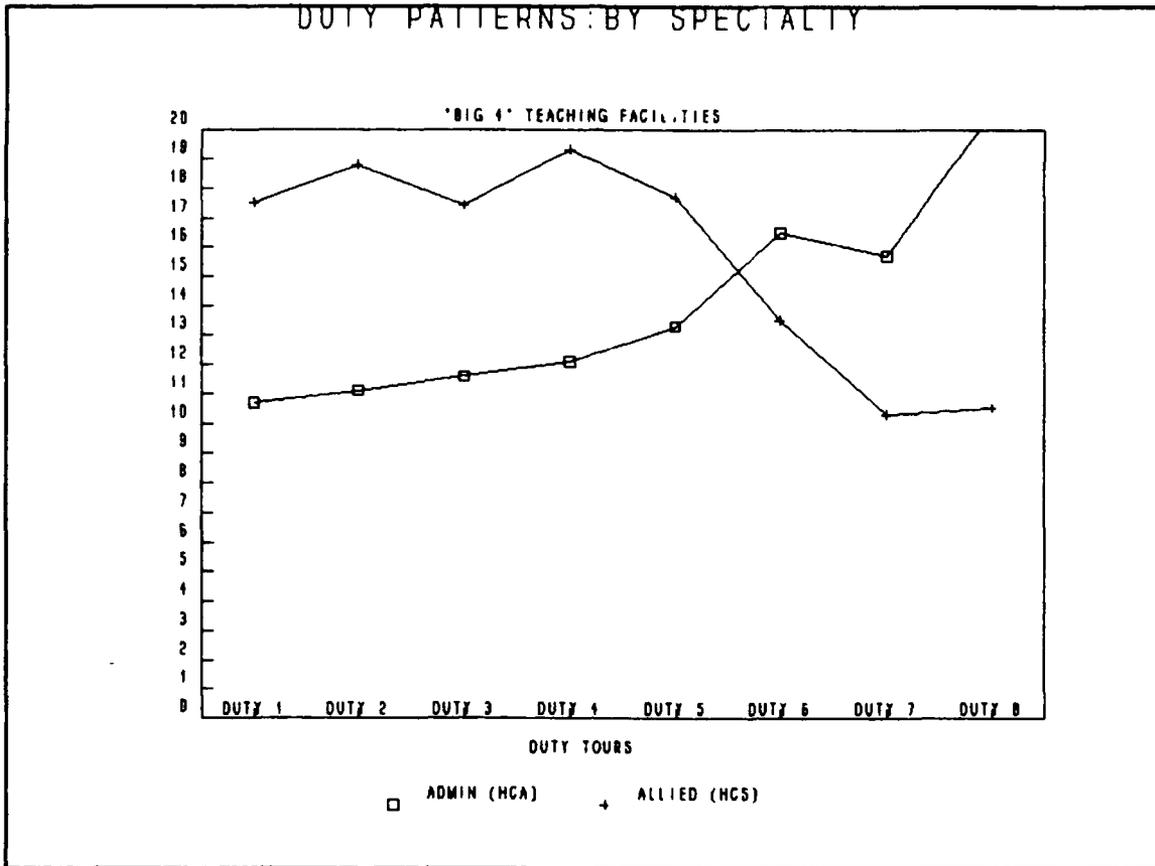


Figure 8: BIG4 Duty Patterns Differentiated by Specialty

lowest level in the present tour (DUTY1). However, the opposite case is apparent in the trend line for HCS officers.

CLINIC tour trends of HCA and HCS officers, although different, cannot be characterized as complete opposites. Figure 9 clearly shows that trend differences occur between all the duty tours except the last two (DUTY7 and DUTY8), where the slopes are (at least) both negative. While the percentages of HCA and HCS officers in clinics are about the same, the transition patterns into (and out of) this particular tour type are not the same.

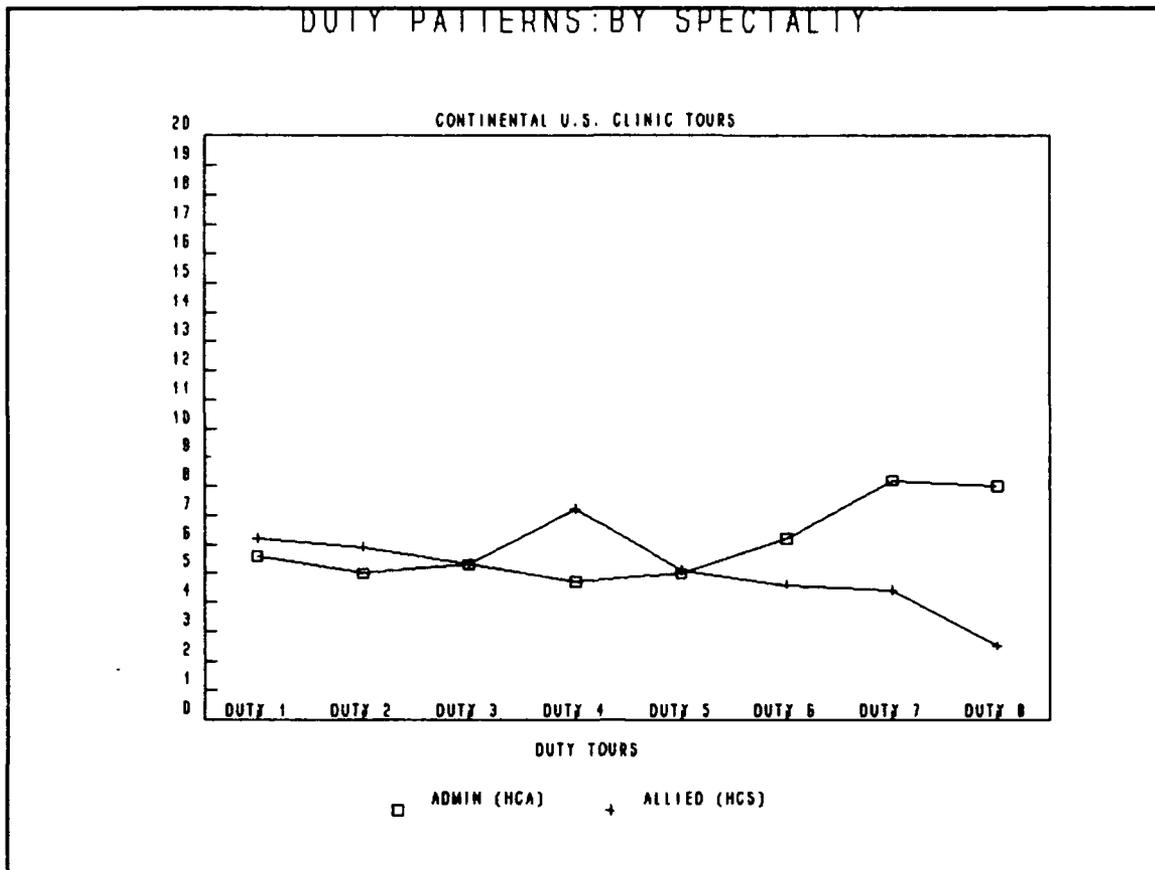


Figure 9: CLINIC Duty Patterns Differentiated by Specialty

Duty patterns of HCA and HCS officers in U.S. hospitals (CONHOSP) are graphed in Figure 10. When the trend lines intersect between DUTY5 and DUTY6, their patterns diverge. Across all eight duty stations, more HCS officers enter CONHOSP tours as they gain seniority, whereas a decreasing percentage of HCA officers serve in U.S. hospitals as they gain seniority.

2. Training School Patterns

The five most recent service schools attended by an officer are recorded in the OMF. Each school is identified in

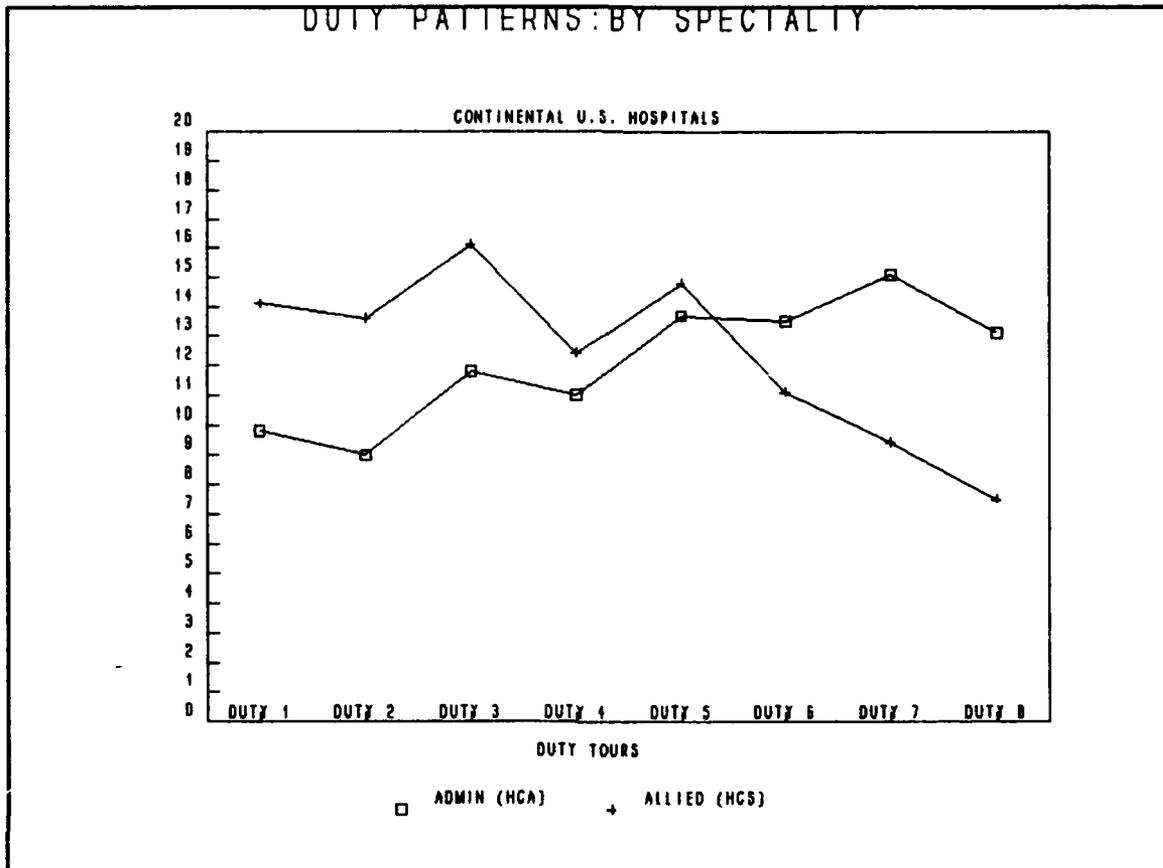


Figure 10: CONHOSP Tours Differentiated by Specialty

the OMF by numerical codes of up to three digits. Medical Service Corps officers included in the sample were divided into two groups, junior and senior officers, so that service school attendance could be "matched" to career phases.

Table 7 identifies the most frequently attended service schools associated with junior and senior MSC officers in the sample, with "One" being the most recent school. Course titles are listed in Table 8 for each course code appearing in Table 7. Referencing Appendix C ("Short Course Descriptions"), by course title, will provide a brief description of course content.

From the data, senior officers are shown to have attended different training courses than their junior officer counterparts, with one exception. During the most recent service school of record (service school one), both junior and senior officers frequently attended the "Medical Department Leadership, Management, Education and Training" course. To determine why this course was common to both groups at the same time, the officers were compared by rank. This comparison showed that 77 percent of the senior officer attendees were actually LCDRs. Since the Navy still considers LCDRs to be junior officers, their participation should not be considered incongruent with the training guidelines.

The most frequently attended courses in this sample are defined as having 10 percent or higher attendance rates. For senior officers, these included the "Senior Officer Short Course in Military Justice," "Medical Department Intermediate Leadership, Management, Education and Training," and "Health Care Administration." In comparison, the most frequently attended schools among the junior officers included "Officer Indoctrination Basic," "Patient Services Administration," "Medical Mobilization Planning," as well as the "Medical Department Intermediate Leadership, Management, Education, and Training" course.

Service School attendance rates found in the officers sampled were compared to the "Education and Training Goals" prescribed by BUMED for MSC officers (Figure 2). The "Basic

TABLE 7

PERCENTAGE OF MOST FREQUENTLY ATTENDED SERVICE SCHOOLS

<u>SERVICE SCHOOL</u>	<u>SENIOR</u>	<u>MSCs</u>	<u>JUNIOR</u>	<u>MSCs</u>
	<u>COURSE NUMBER</u>	<u>PERCENTAGE</u>	<u>COURSE NUMBER</u>	<u>PERCENTAGE</u>
ONE	595	19.92%	76	22.13%
	83	13.41%	83	11.30%
TWO	595	17.83%	76	11.98%
THREE	595	14.98%	67	12.50%
FOUR	595	15.05%	88	13.04%
	60	10.22%		
FIVE	60	17.05%	67	20.00%
<u>TOP OVERALL:</u>	595		76	
	83		67	

Source: Author

Phase" recommendations of Figure 2 closely match the courses actually attended by junior officers in the sample. Both "Patient Services Administration" and "Medical Mobilization Planning" are short courses related to subspecialty fields. The leadership course serves as a management development course for junior officers, which also supports the goals outlined in the "Basic Phase" of Figure 2.

TABLE 8

COURSE CODES AND CORRESPONDING TITLES

COURSE CODE #	COURSE TITLE
595	PCO/PXO COURSE: SENIOR OFFICER SHORT COURSE IN MILITARY JUSTICE
83	MEDICAL DEPARTMENT INTERMEDIATE LEADERSHIP, MANAGEMENT, EDUCATION, AND TRAINING
60	HEALTH CARE ADMINISTRATION
76	OFFICER INDOCTRINATION BASIC
67	PATIENT SERVICES ADMINISTRATION
88	MEDICAL MOBILIZATION PLANNING

Source: DMDC

Training course attendance rates of senior officers parallel the guidelines established in Figure 2. More senior officers attended the "Senior Officer Short Course in Military Justice" than any other course. This course is considered a preparation for command, and is designed to meet the requirements of the "Advanced Phase" of training in Figure 2. Tracking the course over time, however, indicates that during the most recent school of record, 51 percent of attendees were LCDRs. Going farther back, the attendant mix shifts, with CDRs comprising the majority of students at service schools two, three and four. Thus while the course may be considered as part of the "Advanced Phase" of training for MSCs, officers may request to attend the course earlier to prepare themselves to screen for command.

The other courses found to have 10 percent or higher attendance rates among senior officers are actually more closely linked to the "Intermediate Phase" guidelines of Figure 2. This can likely be attributed to the inclusion of Lieutenant Commanders in the senior officer group.

3. Selectivity Bias

Specific evidence of selectivity bias is apparent in the Medical Service Corps data. First, the officers have self-selected into the Navy and their respective professions. Second, all MSCs compete against one another for promotion and (in some cases) for assignments, regardless of specialty. Thus, a selectivity bias may also arise in the sample because it only contains those officers who remain on active duty and who have therefore been promoted. Officers who have attrited from the Medical Service Corps are not included in the sample, and these officers may (or may not) have had different duty tour profiles. However, it is not the intent of this thesis to present a promotional model or a model that attempts to discern a cause and effect relationship between duty tours and rank.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

This thesis attempted to identify duty tour and training course trends among Medical Service Corps officers in order to enhance current MSC career path guidelines. The approach used in this study focused on analyzing historical duty tour and training course distribution patterns. Four major conclusions may be drawn from the results:

1. Four types displaying the most identifiable trends among senior MSC officers over time are BIG4 teaching facility tours, U.S. CLINIC tours, DCAREA tours, and SHIP tours.
2. Duty patterns associated with male and female Medical Service Corps officers are strikingly similar across all tour types except overseas (OSEAS) and ship/sea (SHIP) tours.
3. Duty patterns of HCA and HCS officers show different trends for BIG4, CLINIC, and CONHOSP tour types. For HCA officers, BIG4 tours are more frequently distributed during earlier duty tours and taper off to their lowest level as the officers gain seniority. The opposite "trend" appears for HCS officers. Transitions into and out of CLINIC tours run in opposite directions for HCA and HCS officers. Additionally, across the eight duty stations examined, more HCS officers enter CONHOSP tours as they gain seniority, whereas a decreasing percentage of HCA officers serve in U.S. hospitals as they gain seniority.
4. Trends in training school attendance generally reflect and validate the current education and training goals prescribed for MSC officers.

The historical distributions patterns of officers in specific tour types are, of course, governed by billet (manpower) authorization documents. These documents, though, are often loosely structured in reference to the MSC officer's rank, which is permitted to fluctuate up or down one rank from that designated for the billet. This allows flexibility in assigning officers to specific tours, and warrants the use of historical distribution patterns to possibly augment the current MSC career path guidelines. Finally, while correlations between rank and duty tour type(s) may be made, it is essential that an MSC officer continuously seek an assignment progression based on diversity of function and level of responsibility for a successful career.

B. RECOMMENDATIONS

The following recommendations are made based on the analyses conducted in Chapter IV and the conclusions derived herein:

1. Apply the findings of the model to the current MSC career path grid (as illustrated in Table 9) to reflect tour type options as well as specialty considerations. Note in the recommended tour assignments that BIG4 tours are consistently a viable option for all MSC officers throughout their careers, but that BIG4 tours offer (possibly) more options (advantages) to HCAs as junior officers and to HCSs as senior officers. Operational assignments, like SHIP, OSHIP, or OSEAS tours, are generally more suited to the O1-O3 level officer. DUINS tours should be completed at the O3 level or (at the latest) at the O4 level. DCAREA tours offer a greater number of billets for senior MSC officers, especially

HCA's. At the senior level, OSEAS tours are an option depending upon the specific billet assignment.

2. Continue the use of current education and training goals for MSC officers and update them as necessary.
3. Investigate the possibility of further MSC career path refinement(s) through the use of additional samples, surveys, and/or another model.

TABLE 9

MSC CAREER PATH TOUR TYPE RECOMMENDATIONS

RANK:	TOUR TYPE ASSIGNMENTS:	SPECIALTY ADVANTAGE:
ENS	BIG4 CONHOSP SHIP	+HCA/-HCS* +HCA/-HCS +HCA(males) =HCS(males/females)
LTJG LT	BIG4 CLINIC SHIP OSEAS CONHOSP Option: DUINS OTHER	+HCA/-HCS +HCA/-HCS +HCA(males) =HCS(males/females) None noted +HCA/-HCS None noted +HCS
LCDR	BIG4 CONHOSP CLINIC(LARGE) OSEAS Option: DUINS OTHER DCAREA	+HCS/-HCA +HCS/-HCA None noted None noted-Depends on billet/job None noted +HCS +HCA
CDR CAPT	BIG4(Dept Head) CONHOSP(CO/XO/DFA) OSEAS(CO/XO/DFA) DCAREA	+HCS/-HCA +HCS/-HCA None noted +HCA

*"+": indicates more tours distributed for that specialty
 "-": indicates fewer tours distributed for that specialty
 "=": indicates no distribution differences by specialty noted
 in sample

Source: Author

Careful interpretation and integration of the empirical results of this thesis are necessary in determining whether or not tour types are correlated with rank or career progression. Radical changes in the current MSC career path guidelines may not be essential or advantageous. Periodic revisions and enhancements, however, may prove beneficial to both the individual officer and the entire MSC community. Therefore, alternate approaches to "charting the course" are suggested in order to continuously strive for improvement of the MSC career path guidelines. The issues raised in this thesis regarding the importance of correlating tour types and rank still warrant further analysis.

CIVIL ENGINEER CORPS OFFICER PROFESSIONAL DEVELOPMENT PATH

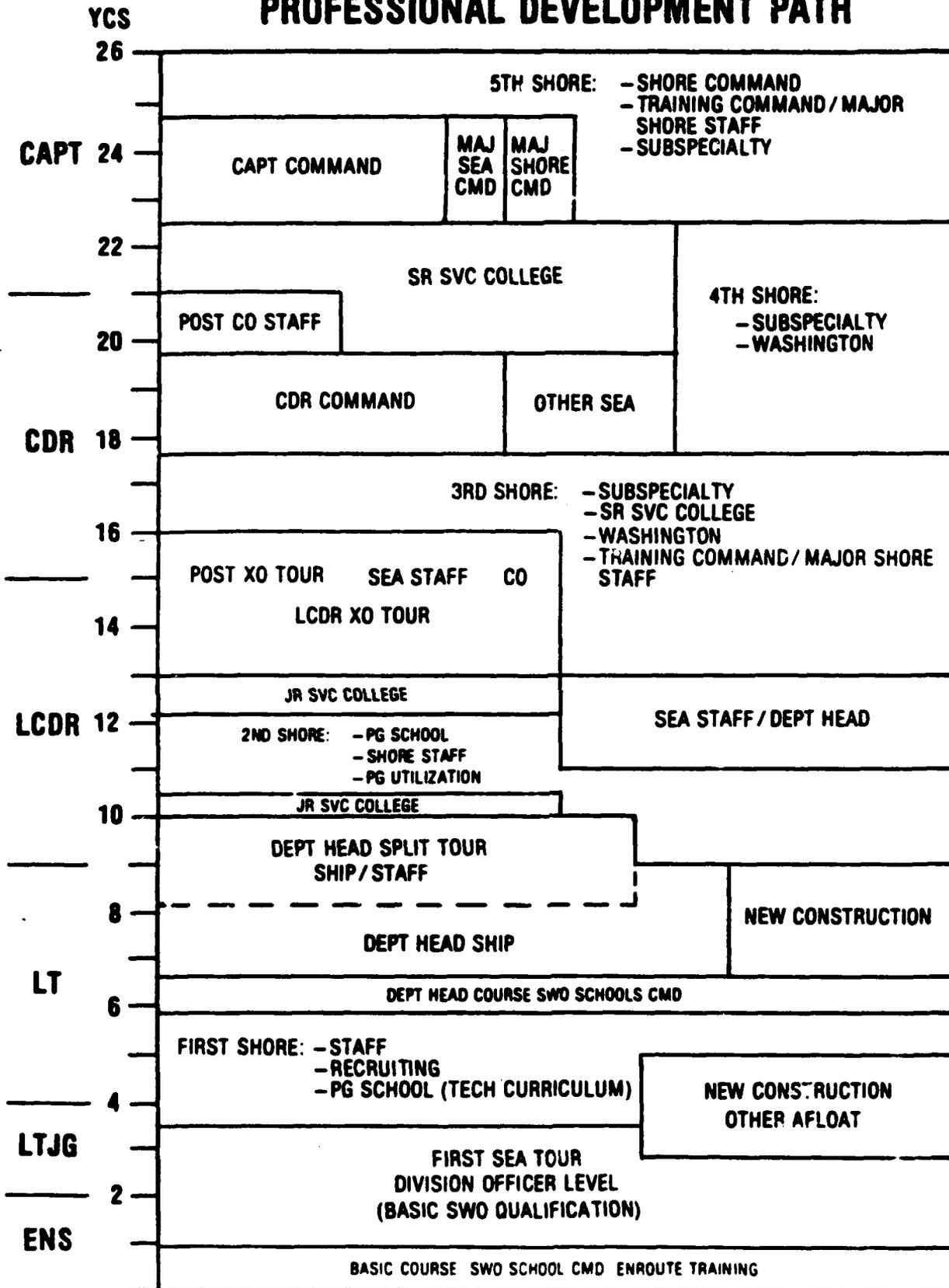
YCS 26 CAPT 24 22 20 CDR 18 16 14 LCDR 12 10 8 LT 6 4 LTJG 2 ENS	COMMAND AND ADVANCED ENGINEERING MANAGEMENT	4-6 ASSIGNMENTS	STAFF ENGINEER (HD MAJOR PROJ MGMT) (HD NAVY-WIDE FAC ENGR) OICC CO (PWC-EFD) PWO (MAJOR ACTIVITY)	SERVICE COLLEGE
	MIDGRADE ENGINEERING AND MANAGEMENT DEVELOPMENT	2-3 ASSIGNMENTS	STAFF ENGINEER (MEDIUM STAFF) (MAJOR PROJ MGMT) (NAVY-WIDE FAC ENGR) XO/OPS (SEABEES) AROICC (LARGE OFFICE) ROICC (MEDIUM OFFICE) PWO (MEDIUM ACTIVITY) APWO (LARGE ACTIVITY)	
	BASIC DEVELOPMENT	3 ASSIGNMENTS	PW (LARGE ACTIVITY) STAFF ENGINEER (SMALL STAFF) SEABEES (CMPY CDR) ROICC/AROICC (SMALL OFFICE) PWO (SMALL ACTIVITY)	PG SCHOOL
		INITIAL ASSIGNMENT	PW (LARGE ACTIVITY) AROICC (MEDIUM-LARGE OFFICE) SEABEES (ASST CMPY CDR)	

SPECIAL DUTY OFFICER (CRYPTOLOGY) PROFESSIONAL DEVELOPMENT PATH

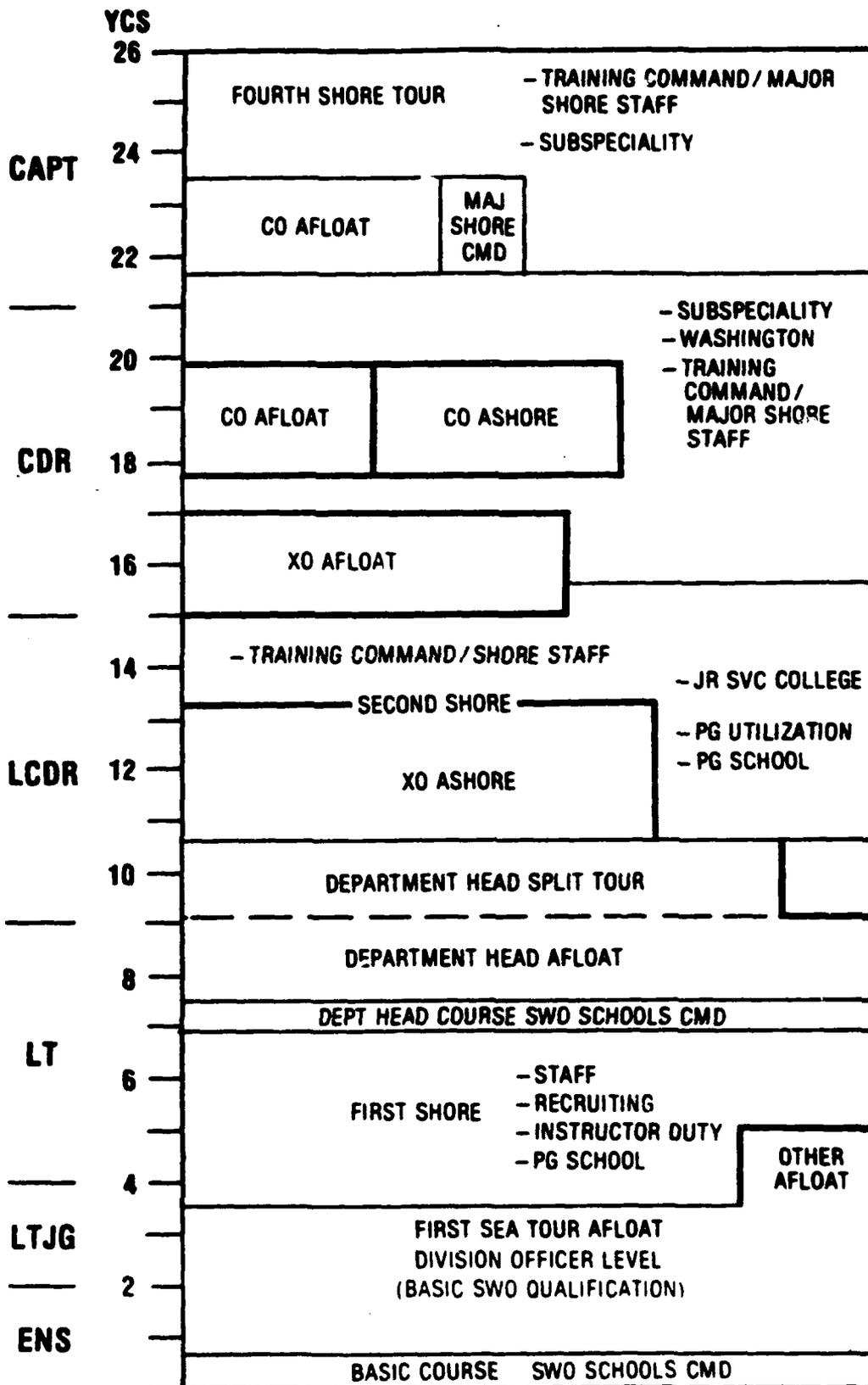
YCS 26		<p>SHORE DUTY</p> <p>DEPUTY/ASST COMMANDER NSGHO NSA OFFICE CHIEF CD NAVAL SECURITY GROUP ACT (NSGA) ACOS CRYPTOLOGY FLTICNG STAFF</p>	<p>SHORE DUTY</p> <p>DC AREA STAFF CO - NAVAL TECHNICAL TRAINING CENTER CHIEF/DEPUTY NSA FIELD OFFICE</p>
24	CAPT		
22			
20		<p>SEA DUTY</p> <p>AFLOAT STAFF</p>	<p>SHORE DUTY</p> <p>NSGHO/NSA/DC AREA STAFF FLTICNG/TYPE COMMANDER STAFF CO/XO/DC NSGA OR NSG DET XO/NSG DEPT HD - NAVCOMMSTA NSA FIELD OFFICE EDUCATION AND TRAINING STAFF CRYPTOLOGIC SUPPORT GROUP</p>
18	CDR		
16			
14		<p>SEA DUTY</p> <p>CV DIVOFF AFLOAT STAFF</p>	<p>SHORE DUTY</p> <p>NSG FIELD STATION NSGHO/NSA/DC AREA STAFF FLTICNG/TYPE COMMANDER STAFF CSG CO/XO/OIC (SMALL NSGA OR NSG DET) NTTC TRAINING STAFF REGIONAL READINESS COMMAND</p>
12	LCDR		
10			
8		<p>SEA DUTY</p> <p>CRYPTOLOGIC COMBAT SUPPORT OPS (SURFACE, SUBSURFACE, AIR) CLASSIC OUTBOARD AFLOAT DIVOFF</p>	<p>SHORE DUTY</p> <p>NSG FIELD STATION NSGHO/NSA/DC AREA STAFF FLTICNG STAFF CRYPTOLOGIC SUPPORT GROUP NTTC TRAINING STAFF XO (SMALL NSGA OR NSG DET)</p>
6	LT		
4			
2	LTJG ENS	<p>SEA DUTY</p> <p>CRYPTOLOGIC COMBAT SUPPORT OPS (SURFACE, SUBSURFACE, AIR) CLASSIC OUTBOARD</p>	<p>SHORE DUTY</p> <p>NSG FIELD STATION NSGHO/NSA</p>

APPENDIX A

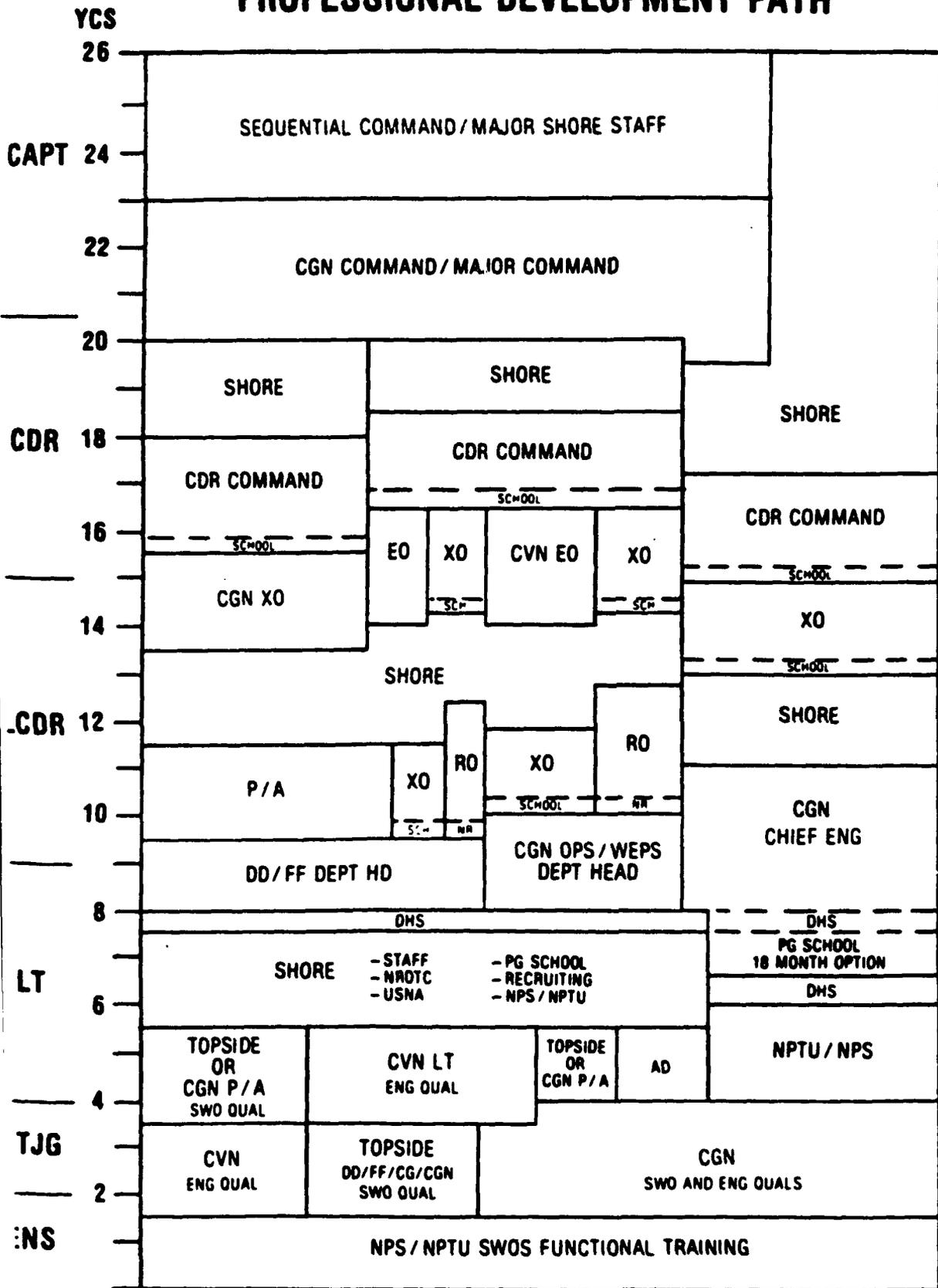
SURFACE WARFARE OFFICER PROFESSIONAL DEVELOPMENT PATH



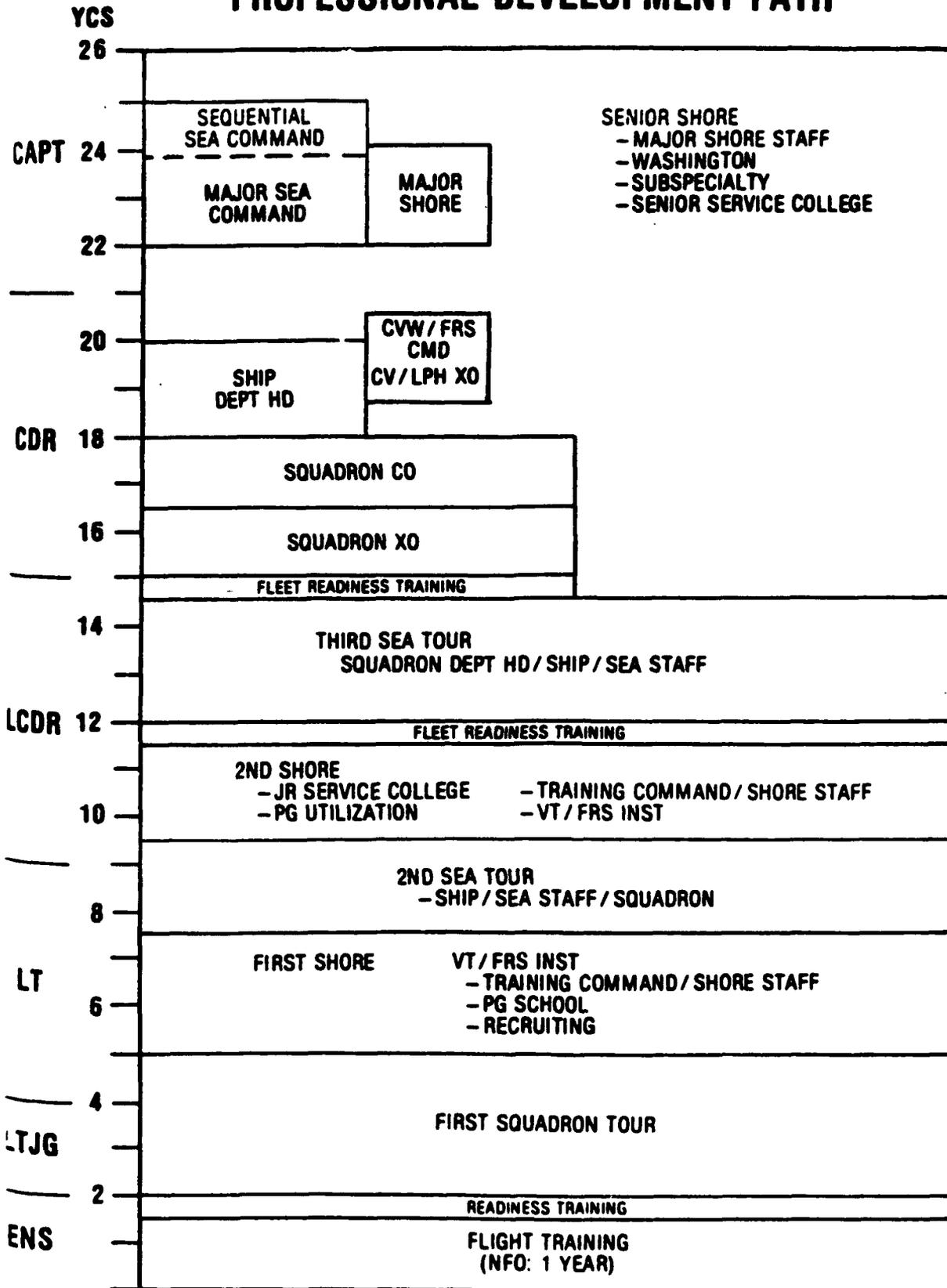
WOMEN SURFACE WARFARE OFFICERS PROFESSIONAL DEVELOPMENT PATH



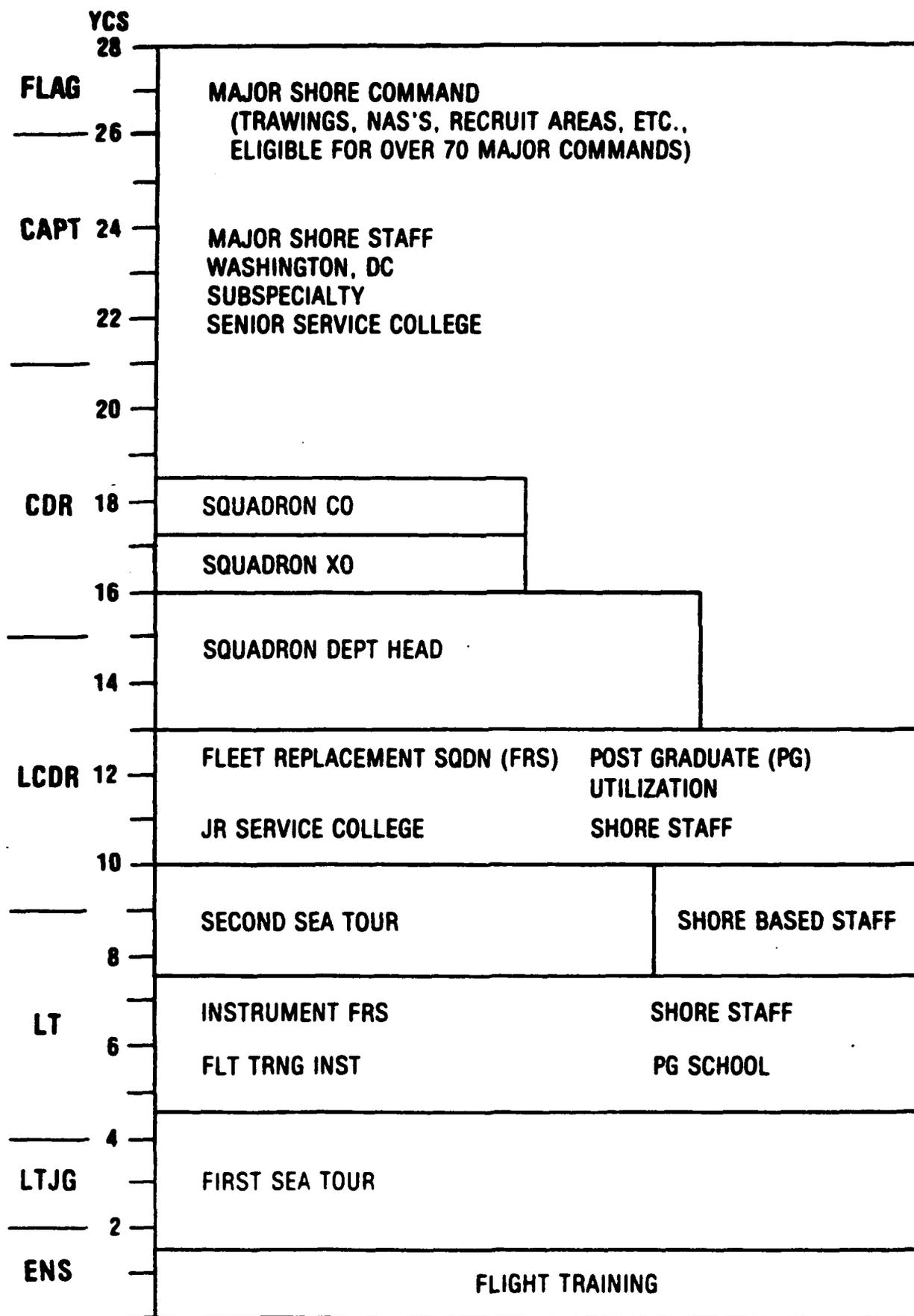
APPENDIX A
**NUCLEAR SURFACE WARFARE OFFICER
 PROFESSIONAL DEVELOPMENT PATH**



APPENDIX A
**AVIATION OFFICER
 PROFESSIONAL DEVELOPMENT PATH**



WOMEN OFFICER AVIATOR CAREER DEVELOPMENT PATH



APPENDIX A
**SPECIAL OPERATIONS OFFICER
 PROFESSIONAL DEVELOPMENT PATH**

RADM	FLAG	
26	CAPT SEA COMEODGRU COMSERVRON COMINERON	
CAPT 24		CAPT SHORE • CO WPNSTA • HQTRS STAFF • MINEWARFARE
22		
20	CDR SEA EODMU, MDSU CSO EODGRU, SERVRON, MINEGRU/RON/DIV	• CO ASHORE (NAVMAG) • XO WPNSTA • TRAINING COMMAND • SHORE STAFF • RDT&E • SR SERVICE COLLEGE • MINEWARFARE • FLEET/TYCOM STAFFS
CDR 18		
16		
14	LCDR SEA • CO ARS, ATS, MCM/MSH/MSO • EODGRU, SERVRON STAFFS • XO EODMU, MDSU, MINERON/DIV	• EOM, WPNSTA • JR SERVICE COLLEGE • XO ASHORE • DEPT HD • TRAINING COMMAND • SHORE STAFF • INSTRUCTOR • RDT&E • MINEWARFARE (RON/DIV) • FLT TYCOM STAFF
LCDR 12	SECOND AHORE	
10	BST MID CAREER COURSE	
8	LT SEA XO ARS, ATS, MCM, MSH, MSO MDSU, EODMU	
LT	FIRST SHORE	• EMO • OIC EOD DET • STAFF • INSTRUCTOR • PG SCHOOL • RDT&E
6		
4	SECOND SEA TOUR	• EODMU • ARS, ATS, ASR • MCM, MSO, MSH
LTJG	BILLET SPECIALTY TRAINING: EOD, DIVING & SALV. EOM, MIW	
2	INITIAL SEA TOUR DIVISION OFFICER TOUR (AE, AOE, AOR, AD, AS, AR, MCM, MSH, MSO)	
ENS	CORE TRAINING BASIC SWDS BASIC DIVING MUNITIONS FUNDAMENTALS	

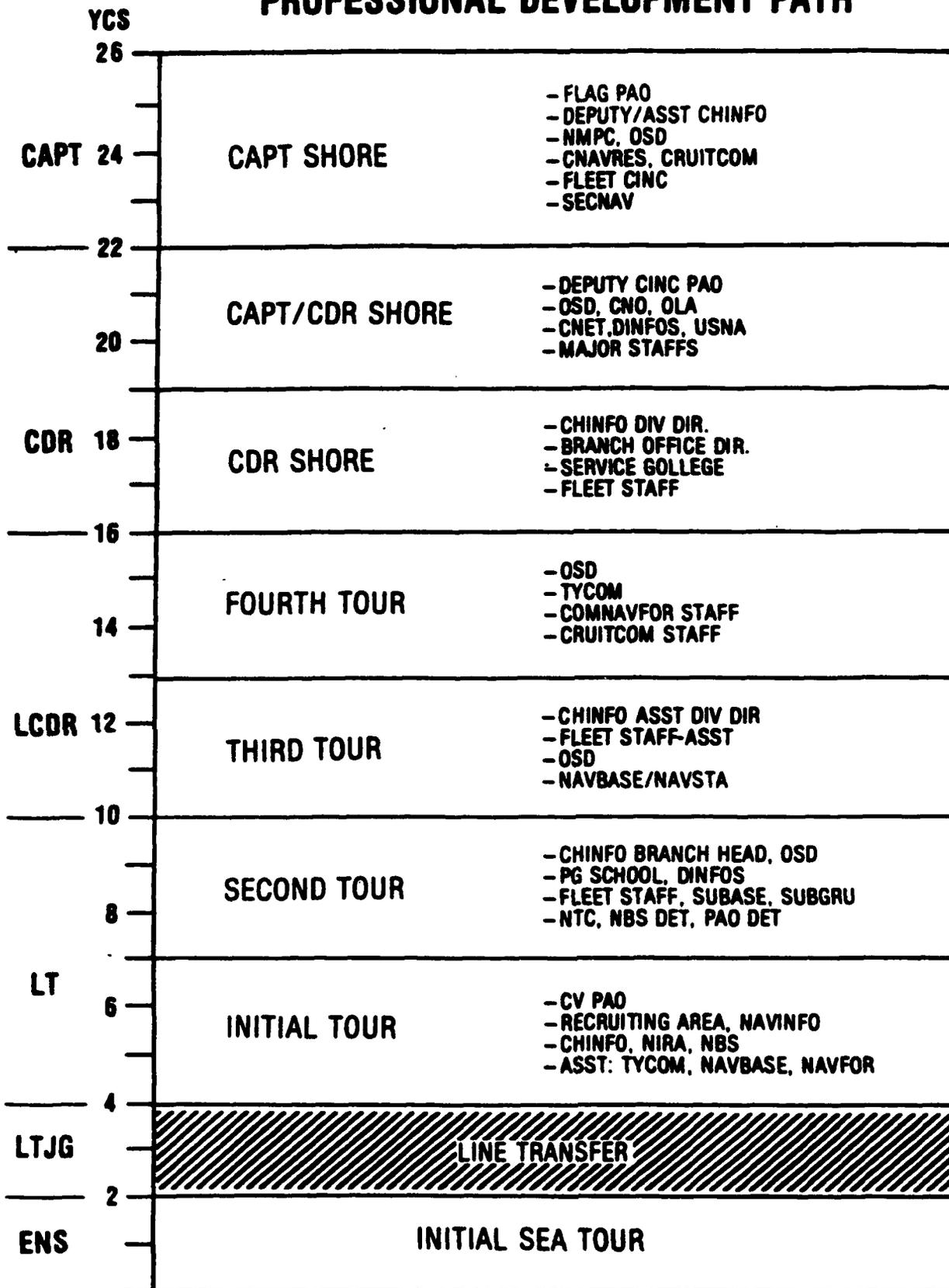
SUPPLY CORPS OFFICER APPENDIX A PROFESSIONAL DEVELOPMENT PATH

	YCS	ROTATION	PURPOSE
	26		
CAPT	24		TOP MANAGEMENT INCREASING SPECIALIZATION OR DEPTH DEPENDING ON NEED OF THE SERVICE
	22		
	20	CONUS	
CDR	18	SEA / FOREIGN SHORE	MIDDLE MANAGEMENT & DEVELOPMENT OF BLENDS OF IN-DEPTH PROFICIENCY <ul style="list-style-type: none"> • OPERATIONAL EXPERIENCE • PROFICIENCY GROWTH <ul style="list-style-type: none"> - FOR MOST: THREE TOURS IN ONE FUNCTION - FOR MOST: TWO OR THREE RELATED FUNCTIONS TO DEVELOP DEPTH AND BREADTH
	16	CONUS	
	14	SEA / FOREIGN SHORE	
LCDR	12	CONUS	
	10	CONUS	
	8	PG / CONUS	
	6	SEA / FOREIGN SHORE	BASIC DEVELOPMENT <ul style="list-style-type: none"> • DEVELOPMENT OF PREREQUISITE BREADTH <ul style="list-style-type: none"> - OPERATIONAL EXPERIENCE - TRAINING AND/OR EXPERIENCE IN DISTRIBUTION/FINANCIAL/PROCUREMENT FUNCTION - FOR SOME: INTRODUCTORY FUNCTIONAL PROFICIENCY TOUR - FOR SOME: PG SCHOOL
LT	4	CONUS	
	2	SEA	
LTJG	2	SEA	
ENS	2	NSCS	

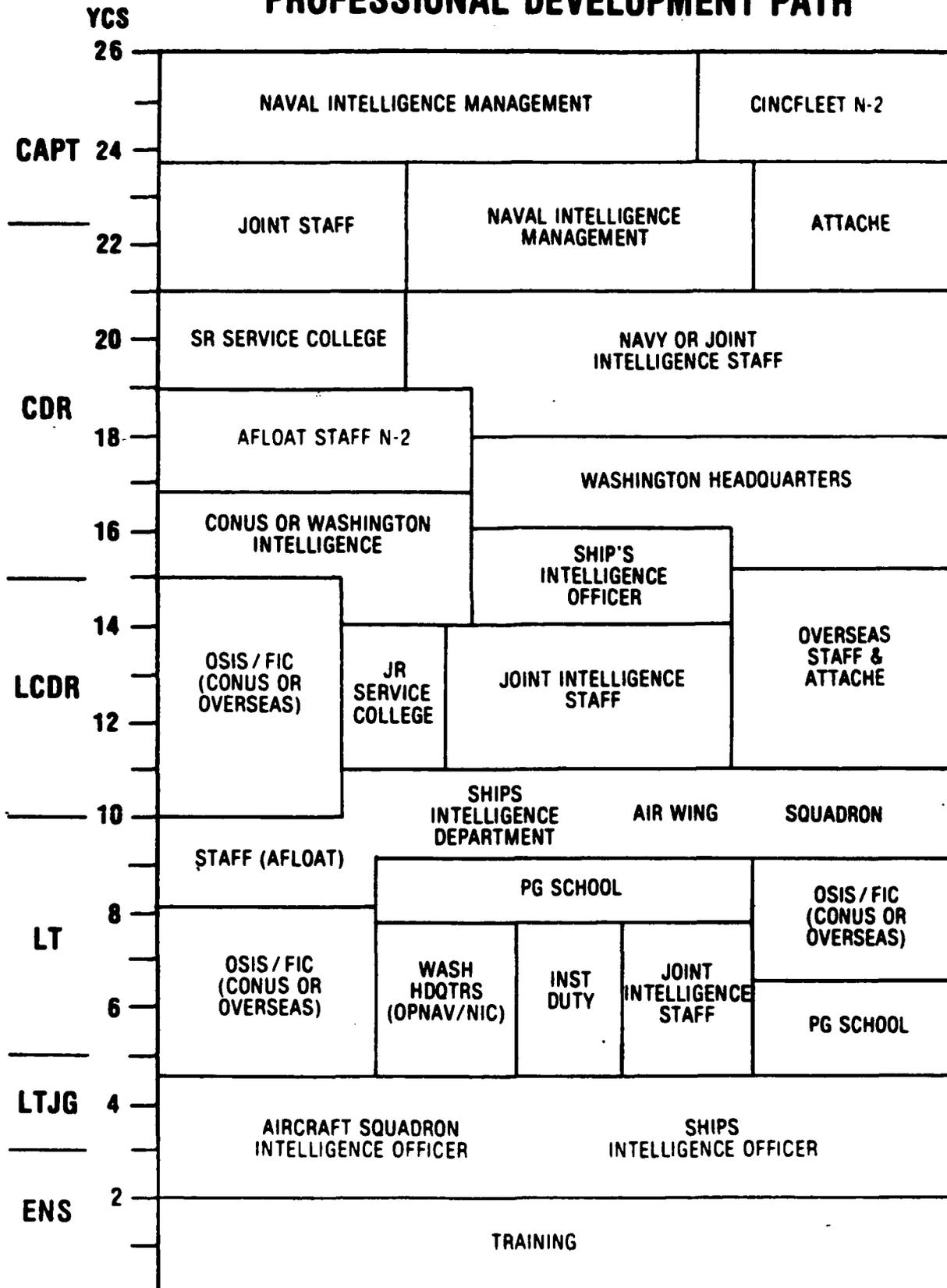
SPECIAL DUTY OFFICER (OCEANOGRAPHY) PROFESSIONAL DEVELOPMENT PATH

YCS	26	MAJOR COMMAND/STAFF TOUR		
CAPT	24	CO: NAVOCEANO/FLENUMOCEANCEN NAVOCEANCOMCEN		
	22	STAFF: OSD/CINCS/NATO/JCS/OPNAV/DON/OLA		
	20	COMMAND/STAFF TOURS		
	18	CO: NAVOCEANCOMFAC/NEPRF OIC: NOSC/HAWAII/LAB		
CDR	16	STAFF: OPNAV/COMNAVOCEANCOM/DMA/HQ/NOAA/SYSCOMS ASN/ONR/NORDA/COMCARCRU/COMSUBGRU/FLTCINCS		
	14	XO: NAVOCEANCOMCEN STUDENT: SR SVC COLLEGE		
	12	STAFF/COMOCEANCOM SYSTEM TOUR		
LCDR	10	CO: OCEANUNIT/DMA OIC: DMA/BROFF/OCEANCOMDET XO: NAVOCEANCOMFAC OCEANO: CV/BB STAFF: CRUDESGRU/OPNAV/DMA/NOAA/ONR/SYSCOMS/LABS NPS/USNA/OCEANCOMCEN/FAC/NORDA/NEPRF STUDENT: JR SVC COLLEGE/NAVPGSCOL/GTRL		
	8	OPERATIONAL OCEANOGRAPHY TOUR		
LT	6	XO: OCEANUNIT/OCEANCOMFAC OIC: OCEANCOMDET/DMA/BROFF FLEET: LPH/LHA/MET STAFF: DERSON/ASWOC/NAVOCEANCOM/NORDA/NEPRF STUDENT: NAVPGSCOL		
	4	FLEET TOUR	OPERATIONAL OCEANOGRAPHY TOUR	
LTJG	2	XO: OCEANUNIT	STAFF: NAVOCEANCOM	
ENS		OCEAN OPTION	MIT/WOODS HOLE	DIRECT ACCESS

**APPENDIX A
SPECIAL DUTY OFFICER (PUBLIC AFFAIRS)
PROFESSIONAL DEVELOPMENT PATH**



SPECIAL DUTY OFFICER (INTELLIGENCE) PROFESSIONAL DEVELOPMENT PATH



APPENDIX B

Postgraduate Education Program Descriptions

Anesthesia Program

Location: Naval School of Health Sciences, Bethesda, Maryland; George Washington University, Washington, DC

Scope: Training for nurse corps officers leading to a Master of Science in Nurse Anesthesia and certification as a Certified Registered Nurse Anesthetist; skills necessary to manage anesthesia department activities, teach other Medical Department personnel, and provide assistance in medical emergency situations.

Army-Baylor University Program in Health Care Administration

Location: Fort Sam Houston, Texas

Scope: Theories, concepts, and practices in the administration and organization of health care delivery systems; managerial tenets and techniques fundamental to the effective administration of these systems, with emphasis on the military hospital. Specific academic prerequisites apply.

Armed Forces Staff College

Location: Norfolk, Virginia

Scope: Concepts and principles of joint and combined military operations, U.S. military capability and the environment in which it operates, formulation of sound decisions within the parameters of joint doctrine, and established staff practices. Designed for O-4/O-5 officers.

Blood Bank Fellowship

Location: Walter Reed Army Medical Center, Washington, DC; Bowling Green University, Bowling Green, Kentucky

Scope: Preparation of medical technologists to be blood bank directors, including military blood banking, blood grouping, and blood transfusion.

Education and Training/Management

Location: Civilian universities designated by Commander, Naval Education and Training (CNET)

Scope: Management of education and training activities, curriculum development and evaluation, organizational development and personnel management, and applications of computer technology in the education and training arena.

Full-time Outservice Programs for Corps Subspecialties

Location: Accredited civilian colleges and universities

Scope: Undergraduate, graduate, and fellowship programs in corps-specific area of subspecialty based on the needs of the service.

Graduate Dental Education

Location: Naval Dental School, Bethesda, Maryland; naval hospitals; appropriate civilian dental schools.

Scope: Advanced training in general dentistry and most specialties, ranging from 1-year fellowships to 3-year residencies. Additional information is provided in chapter V.

APPENDIX B

Graduate Medical Education

Location: Naval hospitals with training missions; NAMI; NUMI; other federal institutions; appropriate civilian institutions

Scope: Entire range of formal graduate medical education for physicians; includes internships, flight surgeon and undersea medicine training, residency training in specialties, and fellowship training in subspecialties. Typical internship, residency, and fellowship training opportunities are summarized in appendix B, chapter IV.

Industrial College of the Armed Forces

Location: Fort Lesley J. McNair, Washington, DC

Scope: National security with emphasis on management of national resources under current and predicted environments; national and world interrelated military, economic, political, scientific, and social factors. Designed for O-5/O-6 officers.

Marine Corps Command and Staff School

Location: Marine Corps Development and Education Command, Quantico, Virginia

Scope: Planning and conduct of force-in-readiness operations by the Marine Air-Ground Task Force with emphasis on amphibious operations, leadership, effective communications, programming, budgeting, and the use of computers. Designed for O-4 officers.

Naval Postgraduate School

Location: Monterey, California

Computer Systems

Scope: Evaluation of changes and advances in the management of computers; effective decision-making processes regarding the development and utilization of military computer-based systems. Specific prerequisites apply.

Financial Management

Scope: Financial management in the Armed Forces, inventory management, policy analysis, accounting theory and standards for financial control, cost accounting and estimation, internal control, and auditing. Specific academic prerequisites apply.

Manpower, Personnel and Training Analysis

Scope: Multivariate data analysis, personnel testing and selection, job analysis and personnel training, manpower economics and requirements determination, and manpower/personnel models. Specific academic prerequisites apply.

Material Logistics Support

Scope: Logistics curricula specific to material or inventory management, logistics engineering, production management, contracts management and administration, systems acquisition, and project management.

Naval War College

Location: Newport, Rhode Island

College of Naval Command and Staff

Scope: Military planning and staff procedures with emphasis on the integration and employment of various

APPENDIX B

platforms into total systems to obtain specific objectives; physical properties and limits of sensors, weapons, and platforms and their relationship to the selection of tactical alternatives. A Master of Arts in National Security and Strategic Studies is awarded. Designed for O-4 officers.

College of Naval Warfare

Scope: Fundamentals of military strategy and foreign policy; political uses of military power; roles of both military and political leaders in policy formulation; military planning, and the conduct of war. A Master of Arts in National Security and Strategic Studies is awarded. Designed for O-5/O-6 officers.

Pharmacy Residency

Location: Naval Hospital, Bethesda, Maryland; Naval Hospital, San Diego, California

Scope: Principles of clinical and administrative aspects of institutional pharmacy.

APPENDIX C

Short Courses

Course/Program	Length of Course	Annual Quota	MC	Available to:		
				DC	MSC	NC
Casualty Treatment Training Course (CTTC)	5 days	20		X		
Cold Weather Medicine	3 wks.	Varies	X	X	X	X
Combat Casualty Care Course (C4)	8 days	800	X	X	X ¹	X
Designing Effective Education Programs for Medical Department Personnel Workshop	1 wk	40	X	X	X	X
Financial & Material Management	12 wks.	30			X	
Interagency Institute for Federal Health Care Executives	2 wks.	18	X	X	X	X
Leader Development						
Command	2 wks.	40	X	X	X	X
Senior	2 wks.	144	X	X	X	X
Intermediate	2 wks.	360	X	X	X	X
Management Development Course (MANDEV)	2 wks.	155	X	X	X	X
Manpower Management	1 wk.	30			X	
Medical Effects of Nuclear Weapons	5 days	Varies	X	X	X	X
Medical Management of Chemical Casualties	3 days	Varies	X	X	X	X
Medical Regulating	1 wk.	30			X	
Operating Forces Management Seminar (OFMS)	1 wk.	Varies		X		
Operating Room Nurse Orientation	6 wks.	Varies				X
Operational Entomology	1 wk.	20	X		X	
Patient Services Administration	4 wks.	30			X	
Plans, Operations and Medical Intelligence (POMI)	2 wks.	60			X	
Practical Comptrollership	2 wks.	Varies			X	

¹MSC officers serve as tactical officers, rather than students.

APPENDIX C

Short Courses

Course/Program	Length of Course	Annual Quota	MC	Available to:		
				DC	MSC	NC
Professional Military Comptroller	8 wks.	3			X	
Prospective Commanding Officer/ Executive Officer (PCO/PXO)	3 wks.	Varies	X	X	X	X
Quality Assurance/Risk Management (QA/RM)	1 wk.	25	X	X	X	X
Strategic Medical Readiness and Contingency Course (SMRCC)	2 wks.	100	X	X	X	X
Surface Warfare Medical Officer Indoctrination Course (SWMOIC)	3-4 wks.	Varies	X			
Tropical Medicine	6 wks.	24	X			

Short Course Descriptions

Casualty Treatment Training

Location: Naval Dental Centers, Norfolk, Virginia; Great Lakes, Illinois; San Diego, California; Pearl Harbor, Hawaii

Scope: Casualty treatment training for recently appointed dental officers and refresher training for career dental officers.

Cold Weather Medicine

Location: Marine Corps Mountain Warfare Training Center, Bridgeport, California

Scope: Survival and providing medical care in the arctic environment; principles of perception; early recognition and treatment of cold weather injuries/illnesses. Includes strenuous, realistic training.

Combat Casualty Care Course (C4)

Location: Academy of Health Sciences, Fort Sam Houston, San Antonio, Texas

Scope: Initial management of casualties in high-intensity conflict at forward points in the casualty care system; leadership and decision making; tactical aspects of combat. Academically and physically demanding field training; primarily for physicians and dentists; triservice.

Designing Effective Education Programs for Medical Department Personnel Workshop (DEEPMEDDEP)

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Provides Medical Department officers serving in education billets with the requisite educational knowledge and skills essential for planning, coordinating, conducting, and evaluating sound training programs.

Financial and Material Management

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Basic overview of financial and material management at activities and DOD levels; audit and internal review; activity budget formulation and execution; capital budgeting and property management; Navy Stock Fund; automated data processing systems; and supply operations and purchasing. Designed for health care administration MSCs entering financial management or supply positions. Basic understanding of accounting, business mathematics, and statistics are prerequisites.

Interagency Institute for Federal Health Care Executives

Location: Washington, DC (area)

Scope: Examines current issues in national health care policy and management and explores potential impact on federal health care systems; provides interaction of senior health care executives of Air Force, Army, Navy, Public Health Service, and Veterans Administration with course civilian and DOD faculty.

Leader Development Courses (formerly LMET)

Scope: Development of sequential levels of leadership and management skills at specific career points through problem solving, situational exploration, and familiarization with competencies needed for outstanding performance.

Command Leader Development

Location: Naval School of Health Sciences, Bethesda, Maryland

APPENDIX C

Scope: For commanding officers and executive officers.

Senior Leader Development

Location: Variable, local area

Scope: For OICs, directors of hospital services, heads of major departments, others in significant supervisory positions.

Intermediate Leader Development

Location: Various locations

Scope: For heads of small departments, division officers, other supervisors at O-3/O-4 level.

Management Development (MANDEV)

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Theory and practice of basic management principles as applied to the Navy health care system; realistic decision making exercises. Primarily for officers whose duties have been clinical but are gaining more management responsibility (O-2/O-5).

Manpower Management

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Basic instruction in the technical aspects of both military and civilian manpower management functions including Uniform Staffing Methodologies, Commercial Activities and the Navy Manpower Engineering Program.

Medical Effects of Nuclear Weapons

Location: Various locations

Scope: Conducted by the Armed Forces Radiobiology Research Institute (AFRRI), Bethesda, Maryland. Familiarity with history, biomedical effects, and basic principles of nuclear weapons; principles of fallout, acute radiation syndrome, electromagnetic radiation, and diagnosis and treatment of radiation casualties.

Medical Management of Chemical Casualties

Location: Biomedical Laboratory, Chemical Systems Laboratory (Edgewood Area), Aberdeen Proving Ground, Maryland

Scope: Principles of management and treatment of acute chemical warfare agent injuries. For officers, especially physicians and nurses, assigned to areas or contingency units with greatest potential for managing chemical casualties.

Medical Regulating

Location: Naval School of Health Sciences, Bethesda, Maryland, and other sites

Scope: Instruction in the functions and responsibilities of coordinating and controlling the evacuation and movement of patients through the various levels of medical support including operational communication procedures.

APPENDIX C

Operating Forces Management Seminar

Location: Naval Dental School, Bethesda, Maryland

Scope: Principles unique to management of a dental care delivery system in the fleet (e.g., shipboard supply procedures, legal issues, current policies).

Operating Room Nurse Orientation

Location: Naval Hospital, Charleston, South Carolina

Scope: Orientation to perioperative nursing; operating room environment, procedures, instruments, and equipment; aseptic technique; and nursing management of surgical suites. Graduates will be assigned as an operating room staff nurse.

Operational Entomology

Location: Navy Disease Vector Ecology Control Centers, Alameda, California; Jacksonville, Florida

Scope: Advanced training in vector-borne disease profiles, field epidemiological principles for vector-borne diseases, contingency vector control principles, ground vector control operations and equipment, aerial dispersal, vector surveillance techniques, and contingency planning and problem solving.

Patient Services Administration

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Principles of management of patient services programs focused on alternative federal and civilian health care services; health benefits programs and beneficiaries, audits, quality assurance, patient disposition, and decedent affairs.

Plans, Operation, and Medical Intelligence (POMI)

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Introduces or updates knowledge and skills required to plan, implement, and monitor command readiness programs; coordinate and execute command medical support for contingency operations (e.g., MMARTs, CMCHS). Designed for incumbents of POMI billets. SECRET clearance required.

Practical Comptrollership

Location: Naval Postgraduate School, Monterey, California

Scope: Overview of all facets of comptrollership: accounting, budgeting, planning, internal review, management evaluation, and performance. For incumbents or those going to financial management billets.

Professional Military Comptroller

Location: Air University Leadership and Management Development Center, Maxwell Air Force Base, Montgomery, Alabama

Scope: A broad, general course emphasizing theoretical, legal, and management concerns within a comptroller organization.

Prospective Commanding Officer/Prospective Executive Officer (PCO/PXO) Shore Station Management

Location: Washington, DC (area) conducted by BUPERS

APPENDIX C

Scope: Principles of managing personnel, financial, and facility resources of major shore establishments. PCOs/PXOs usually attend enroute to permanent duty station.

Quality Assurance/Risk Management

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: In-depth analysis of BUMED and JCAH standards and methods of developing viable assessment tools and performance standards required to implement and sustain a QA/RM program at the activity level. Designed for incumbent or prospective QA/RM coordinators.

Strategic Medical Readiness and Contingency Course

Location: Naval School of Health Sciences, Bethesda, Maryland

Scope: Examines policy development at National, Department of Defense, Navy and Marine Corps, and Medical Department levels; includes overviews of national and international economic and political analysis, joint command organizations, and organizational and operational doctrine and plans. Designed for O-5/O-6 officers; SECRET clearance required.

Surface Warfare Medical Officer Indoctrination Course (SWMOIC)

Location: Naval Schools of Health Sciences, Portsmouth, Virginia; San Diego, California

Scope: To provide Medical Officers newly assigned to surface ships the opportunity to acquire skills in shipboard operations, department head duties, preventive medicine, and clinical aspects of medical practice at sea.

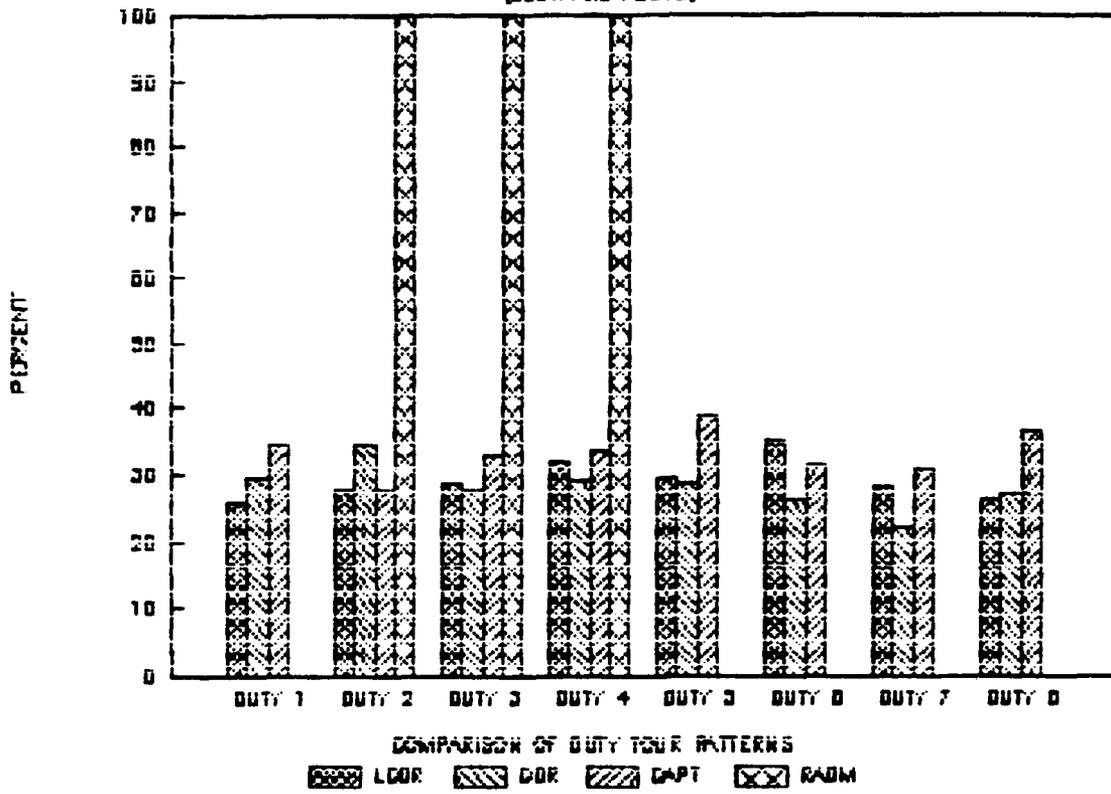
Tropical Medicine

Location: Naval Hospital Roosevelt Roads, Puerto Rico

Scope: Clinical and research aspects of tropical (malarial, diarrheal, parasitic, viral, and nutritional) diseases; practical field experience with the modifying influence of a tropical environment on diseases prevalent in temperate zones.

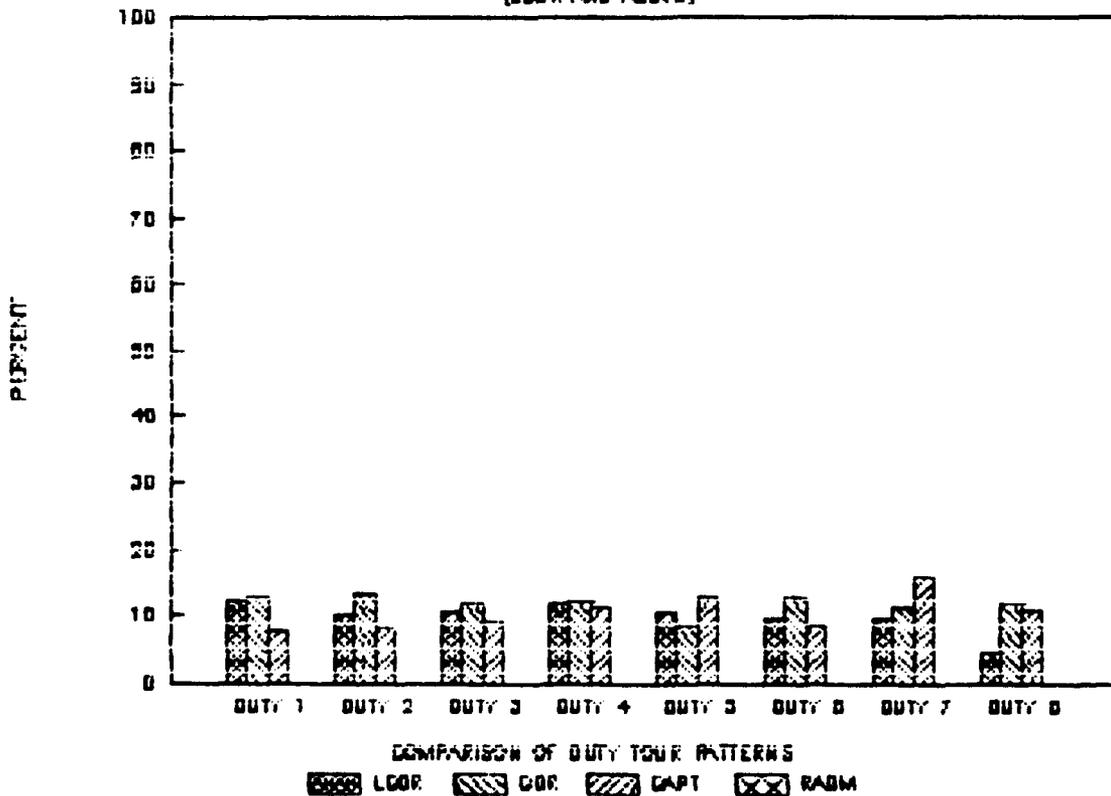
"BIG 4" TOURS: BY RANK

(LCOR AND ABOVE)

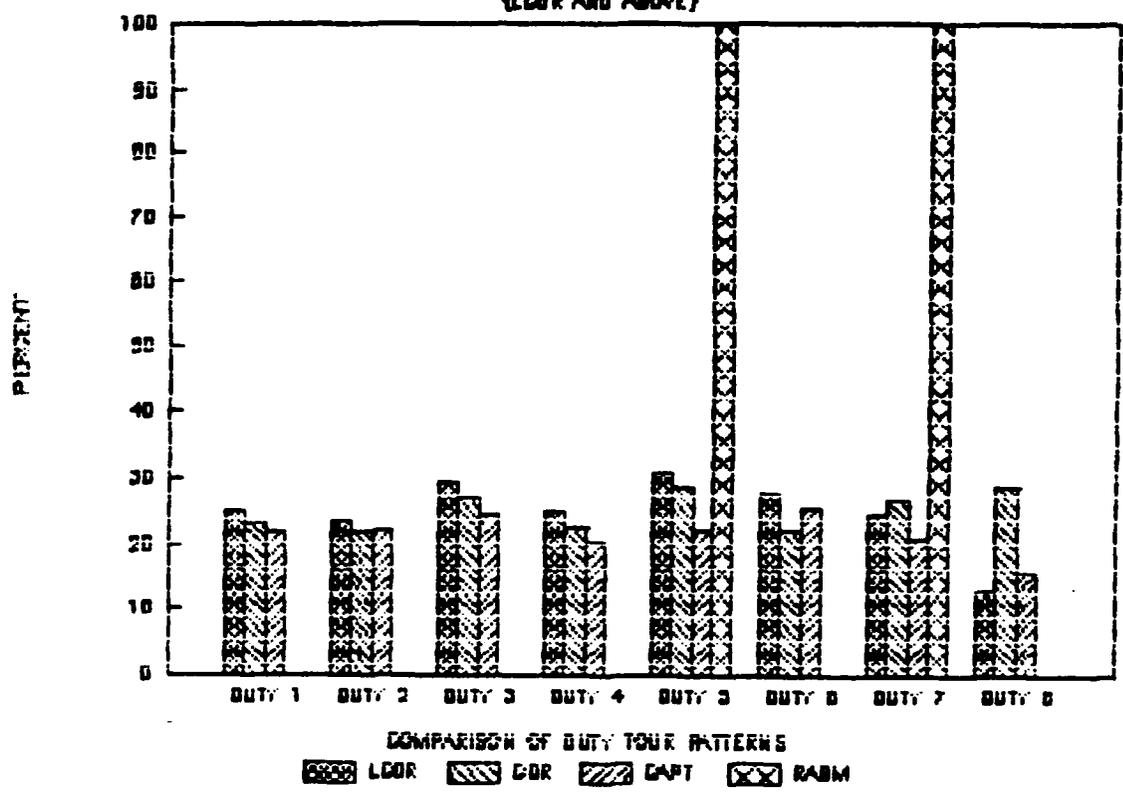


CLINIC TOURS: BY RANK

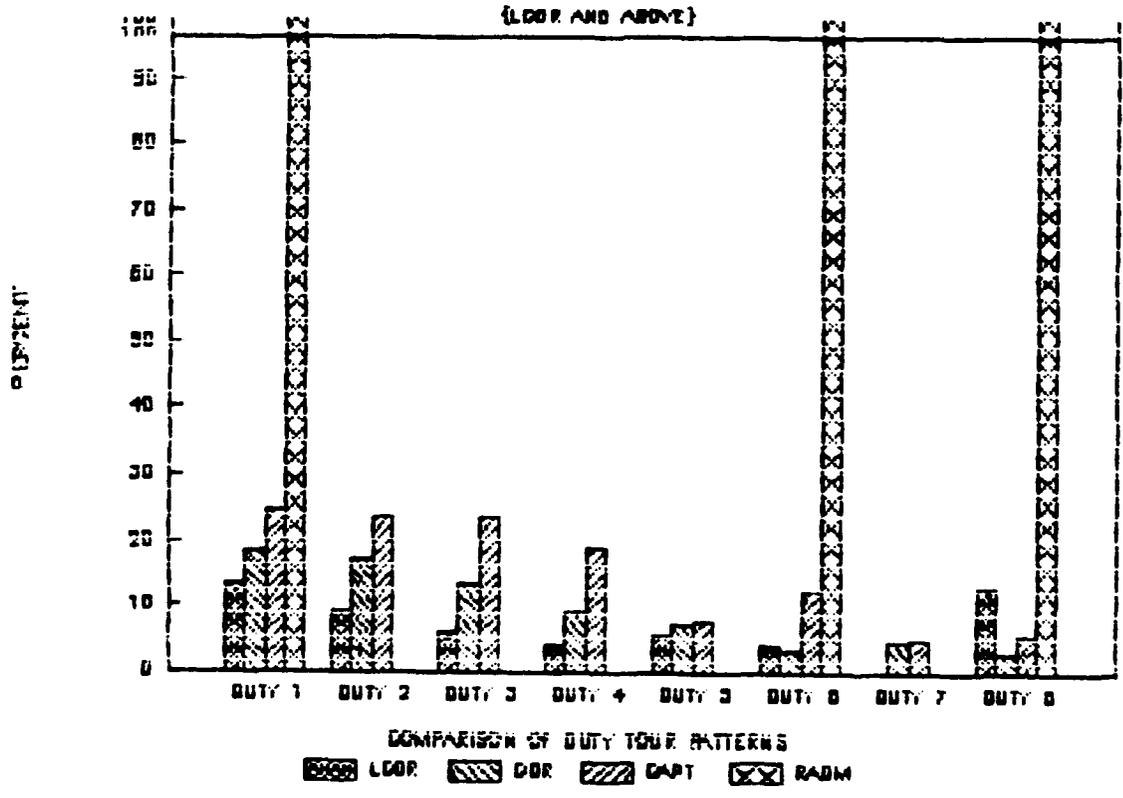
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APPENDIX D
 CONUS HOSPITAL TOURS: BY RANK
 (LDR AND ABOVE)

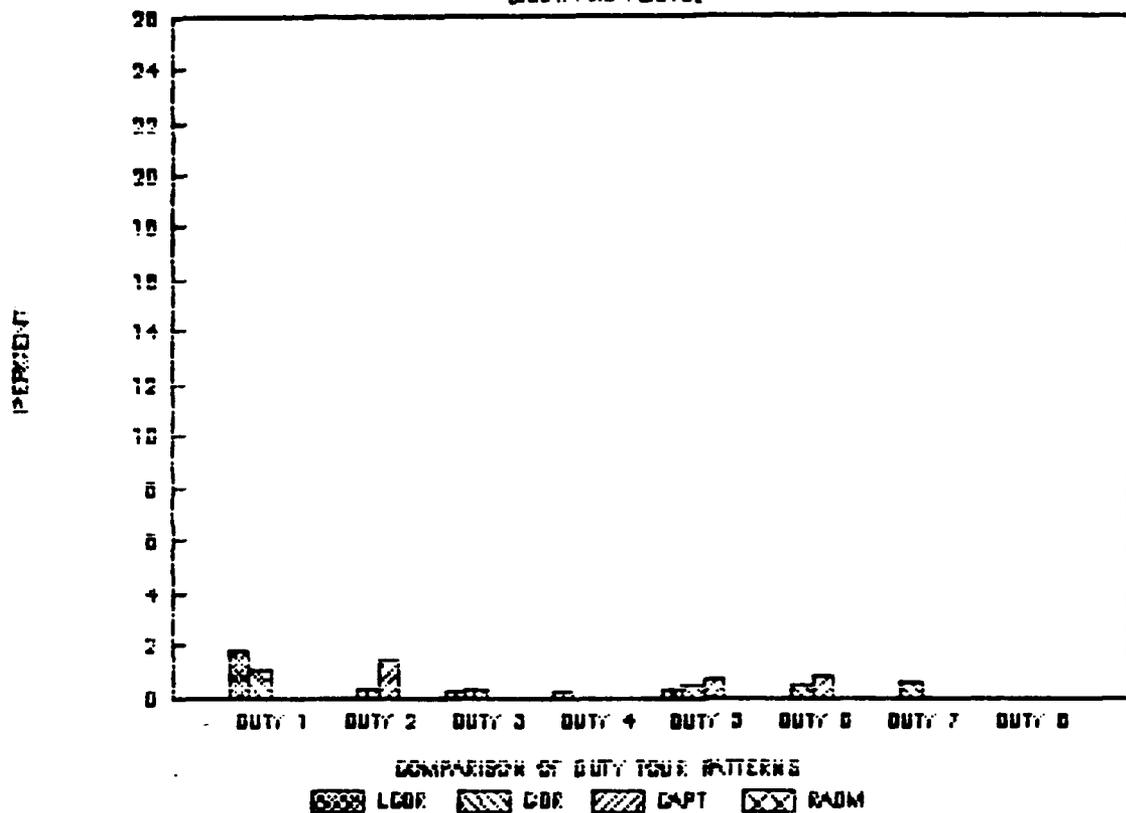


DC AREA TOURS: BY RANK
 (LDR AND ABOVE)



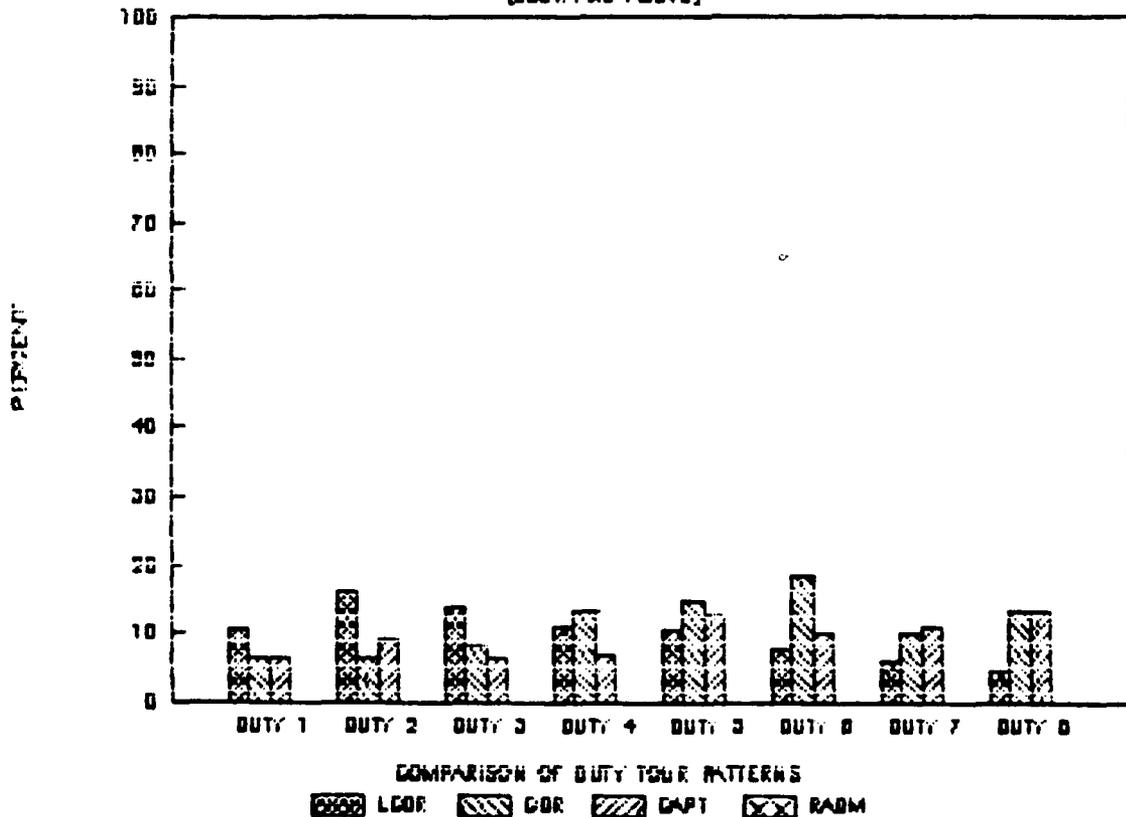
APPENDIX D
DUINS TOURS: BY RANK

{LCOR AND ABOVE}



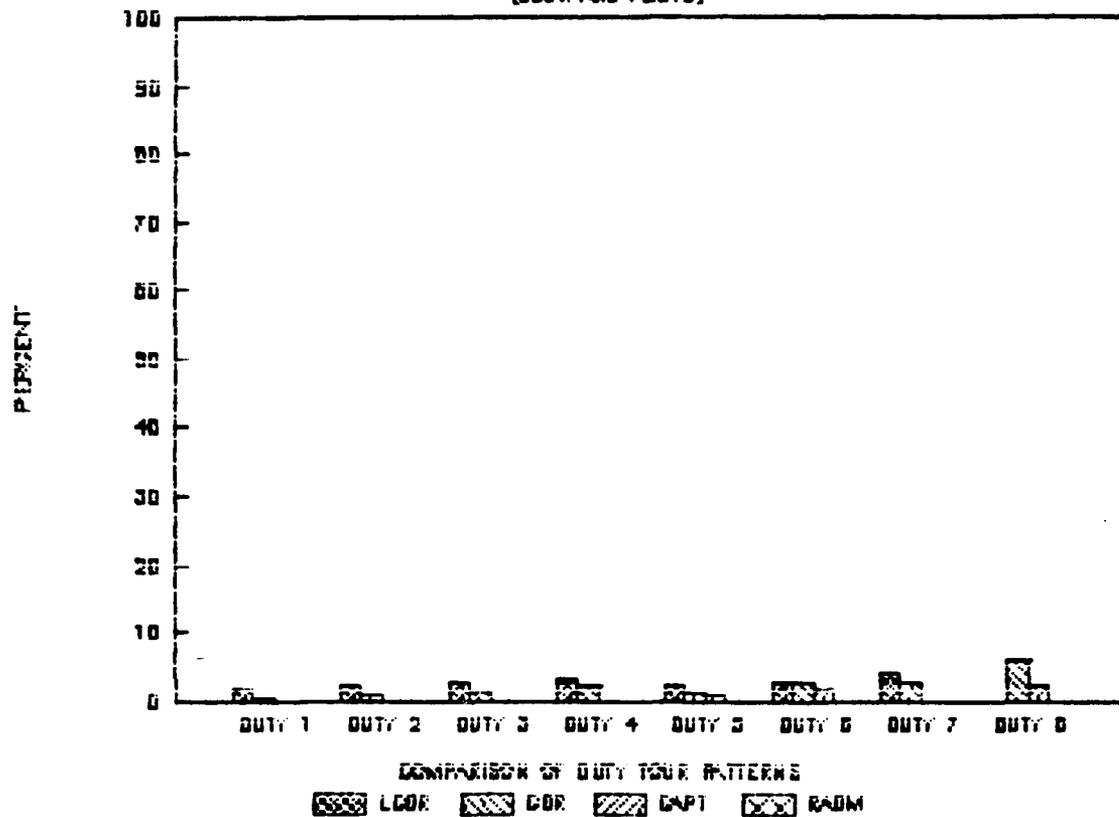
OVERSEAS TOURS: BY RANK

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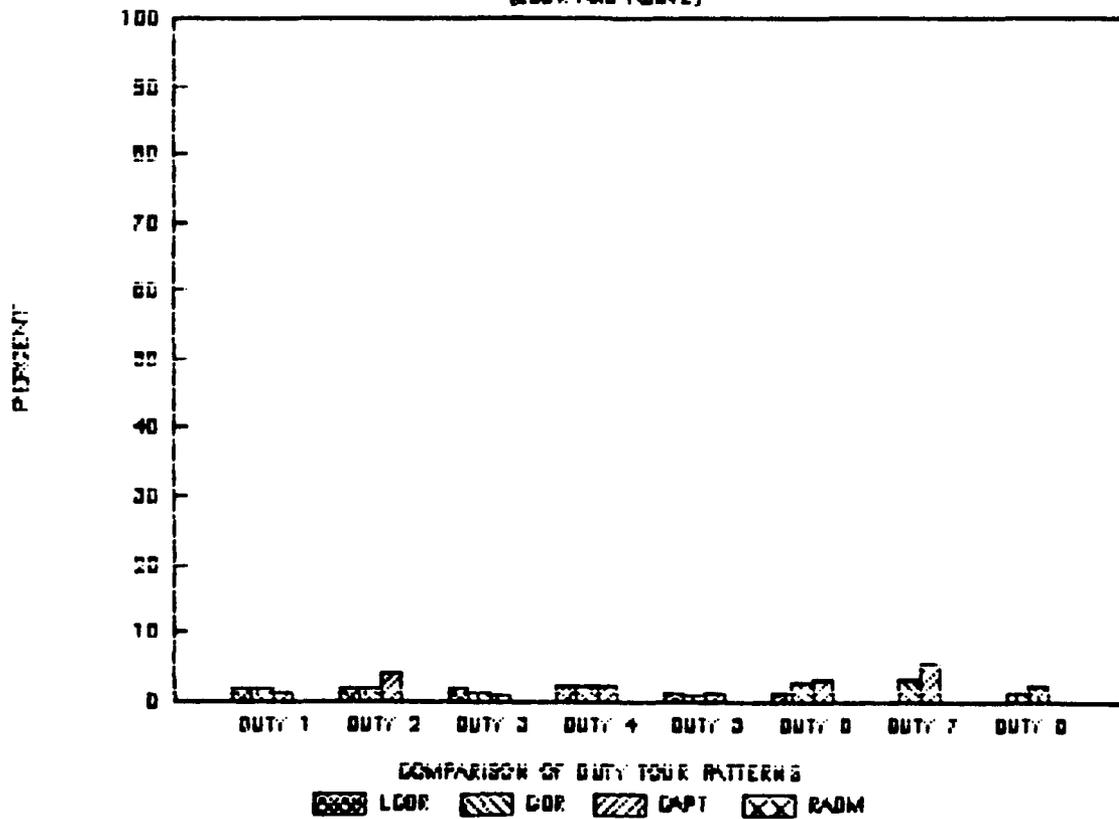


APPENDIX D

OVERSEAS-SHIP TOURS: BY RANK
(LCOR AND ABOVE)

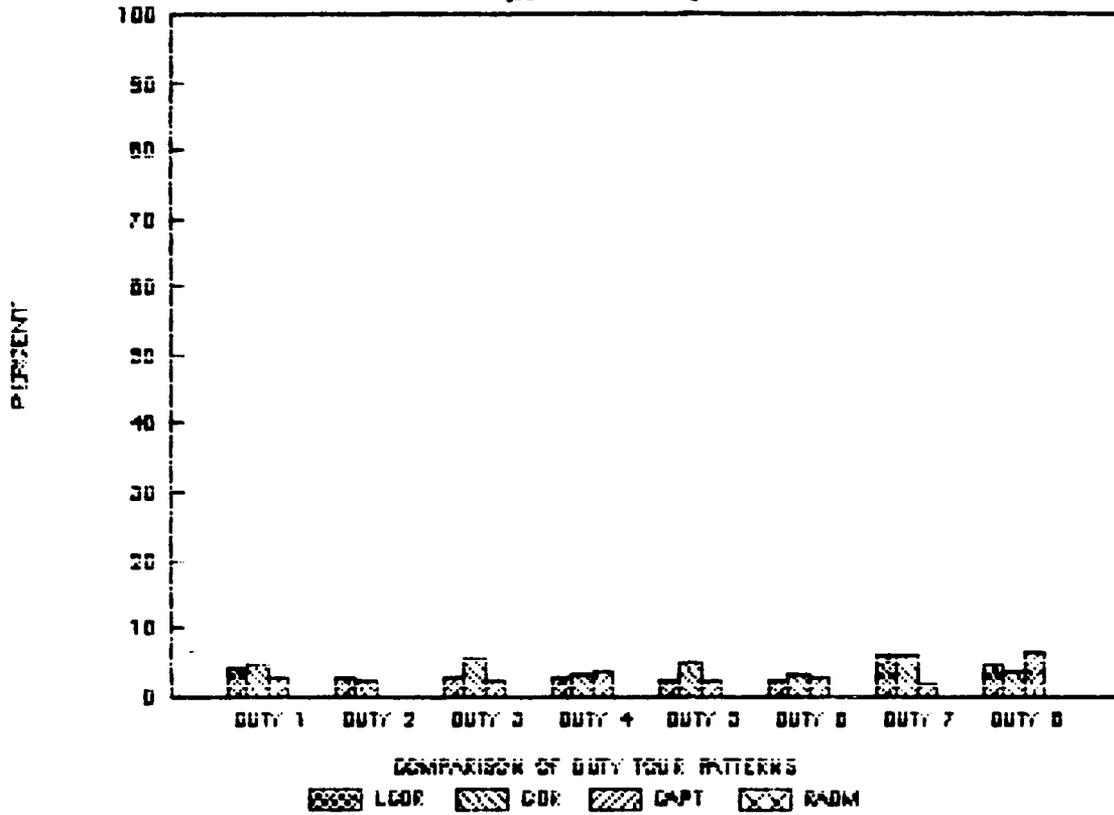


"OTHER" TOURS: BY RANK
(LCOR AND ABOVE)

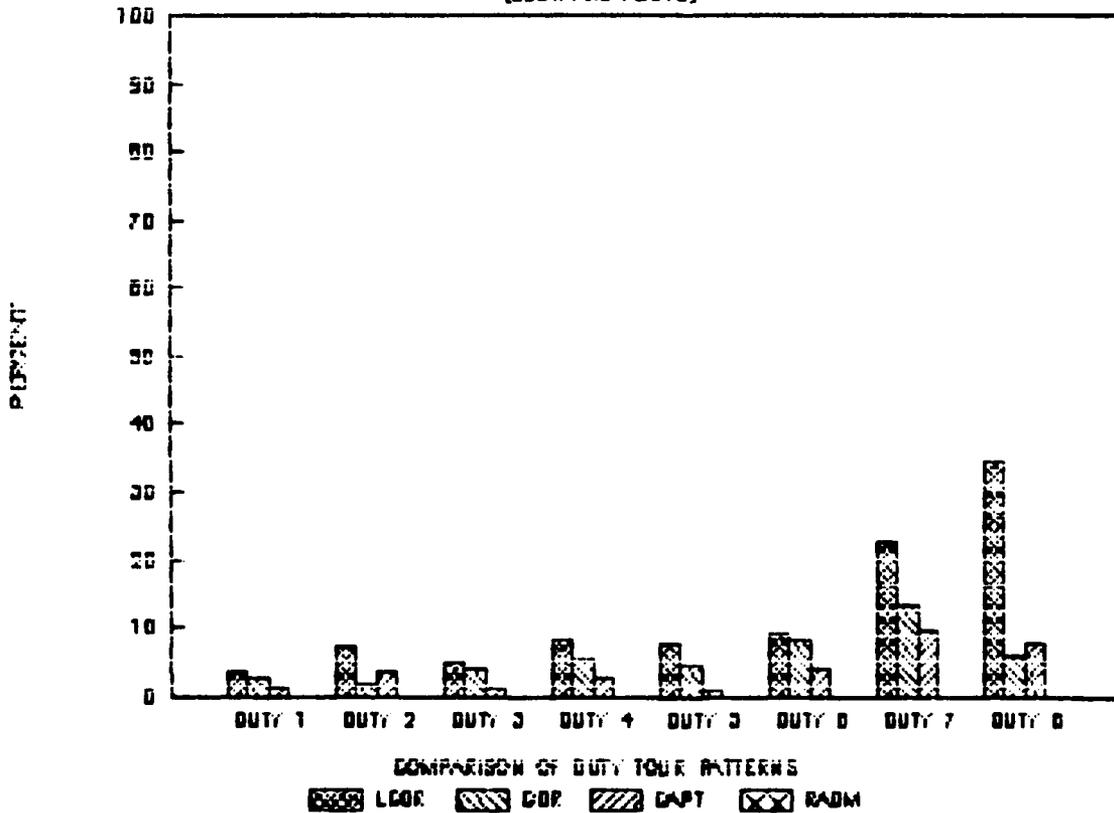


APPENDIX D

RECRUITING TOURS: BY RANK
(LCOR AND ABOVE)

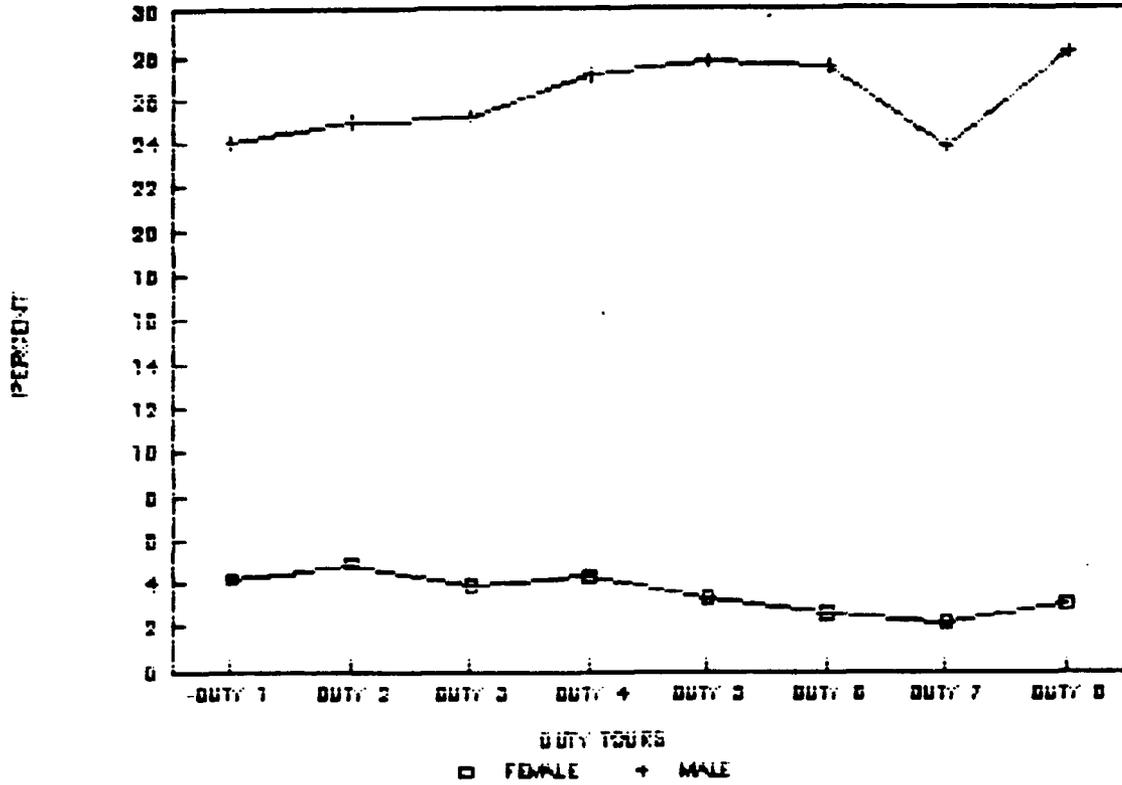


SHIP TOURS: BY RANK
(LCOR AND ABOVE)

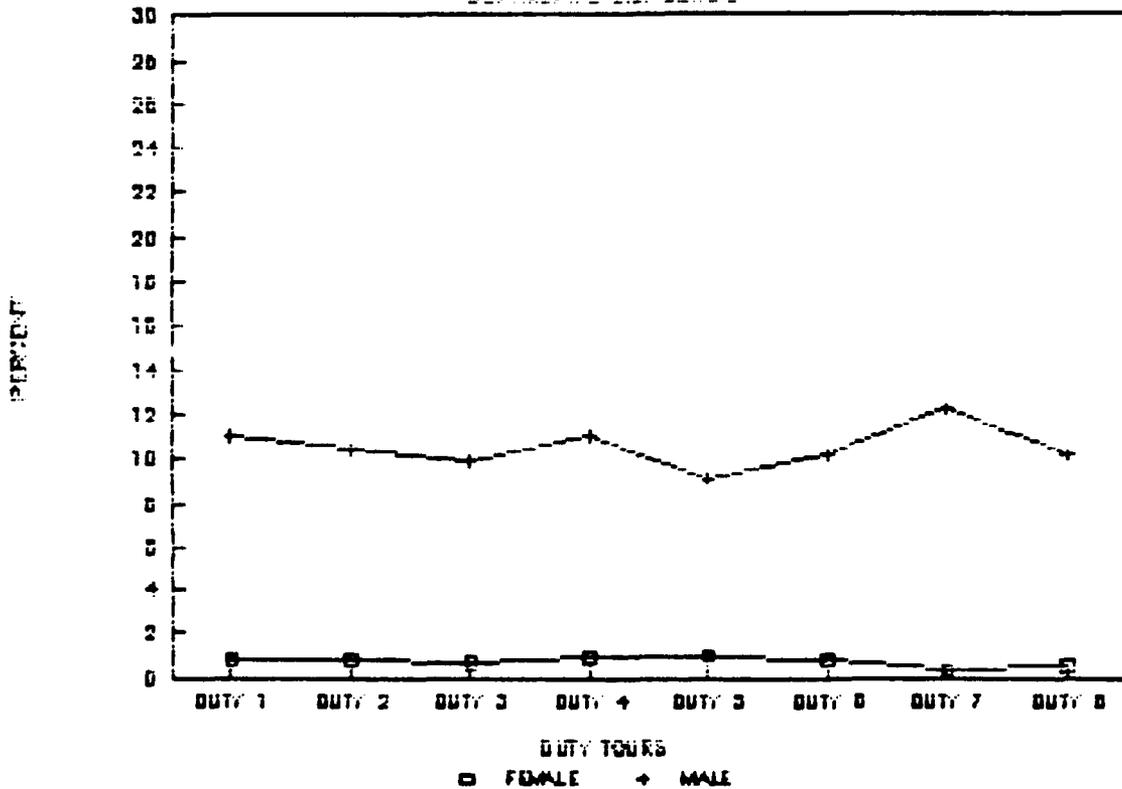


APPENDIX E
 DUTY PATTERNS: BY GENDER

"BID 4" TEACHING FACILITIES

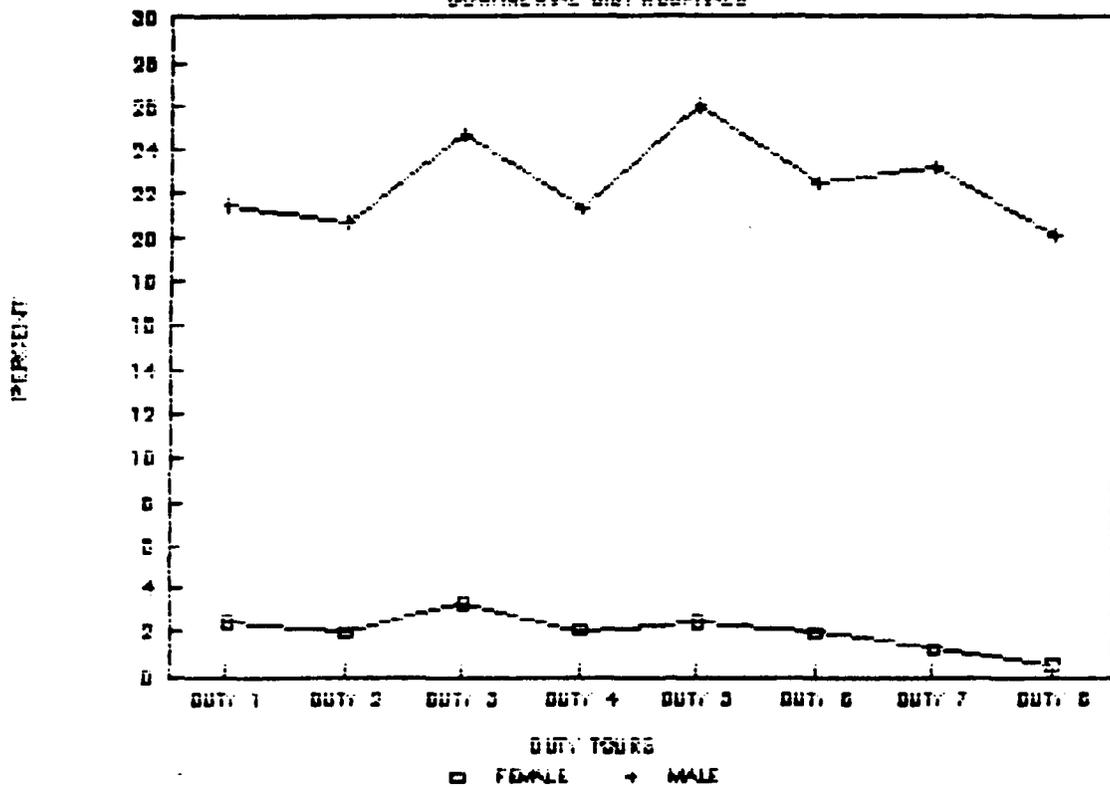


DUTY PATTERNS: BY GENDER
 CONTINENTAL U.S. DUMERS



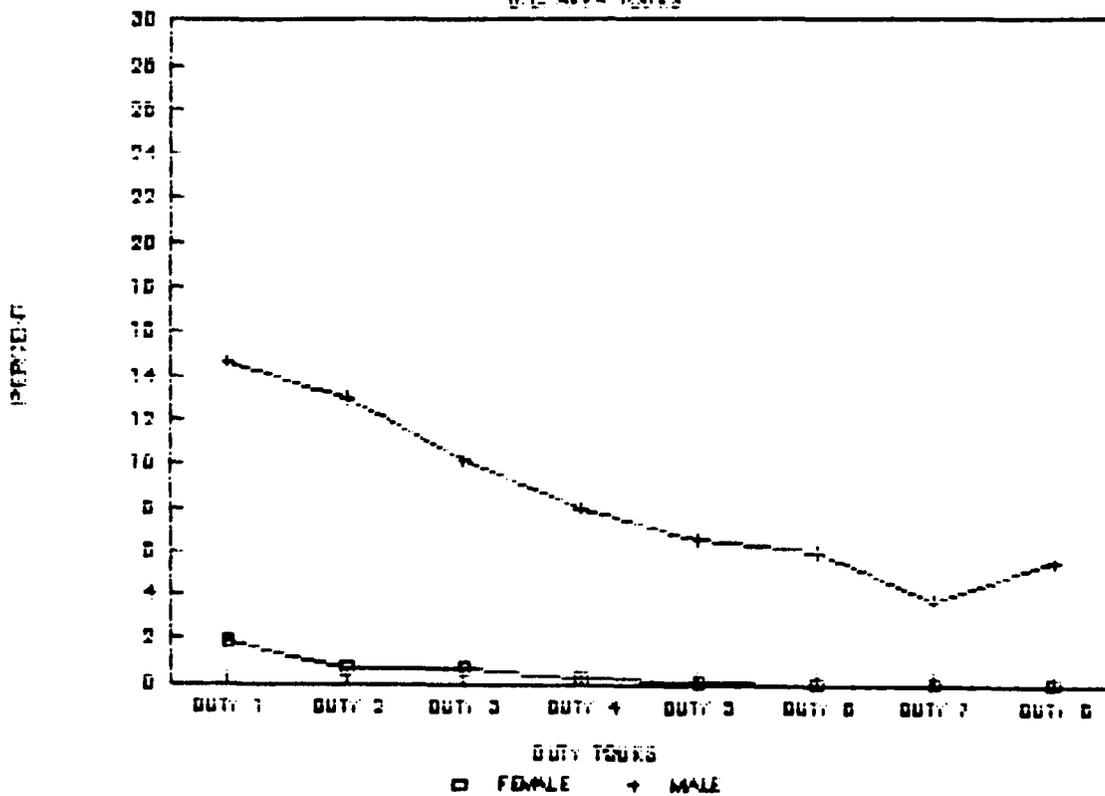
DUTY PATTERNS: BY GENDER

CONTINENTAL U.S. HOSPITALS



DUTY PATTERNS: BY GENDER

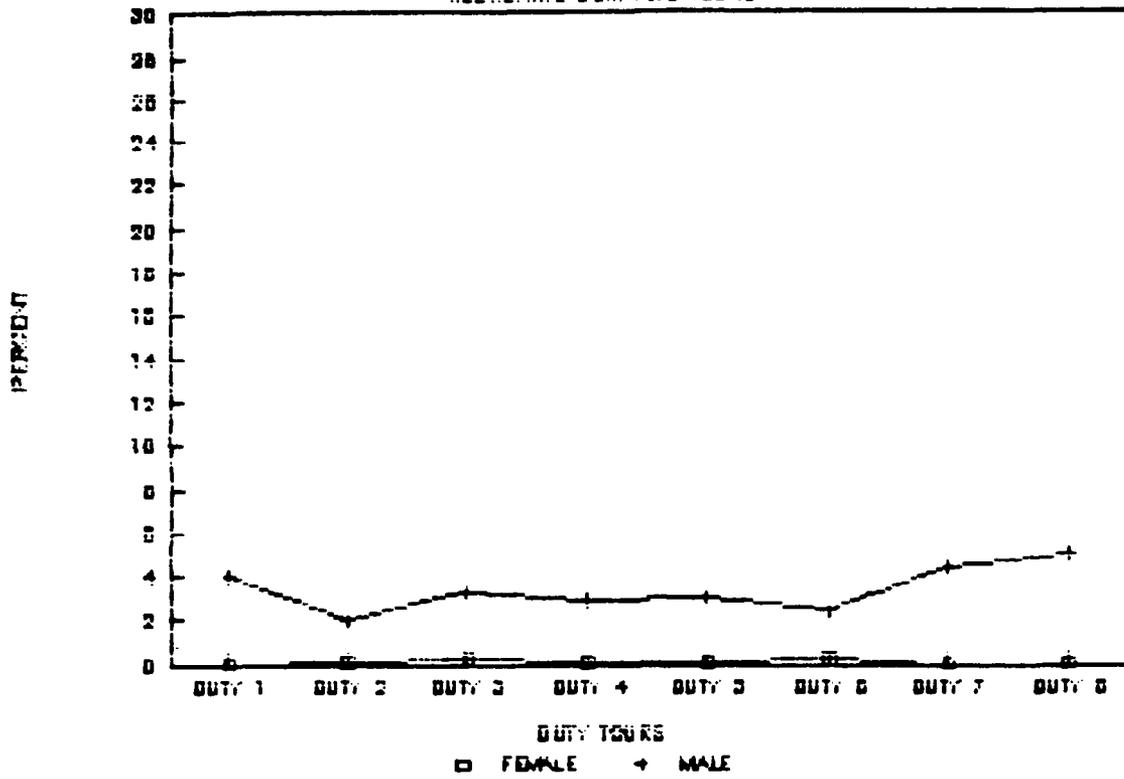
D.E. AREA TOURS



APPENDIX E

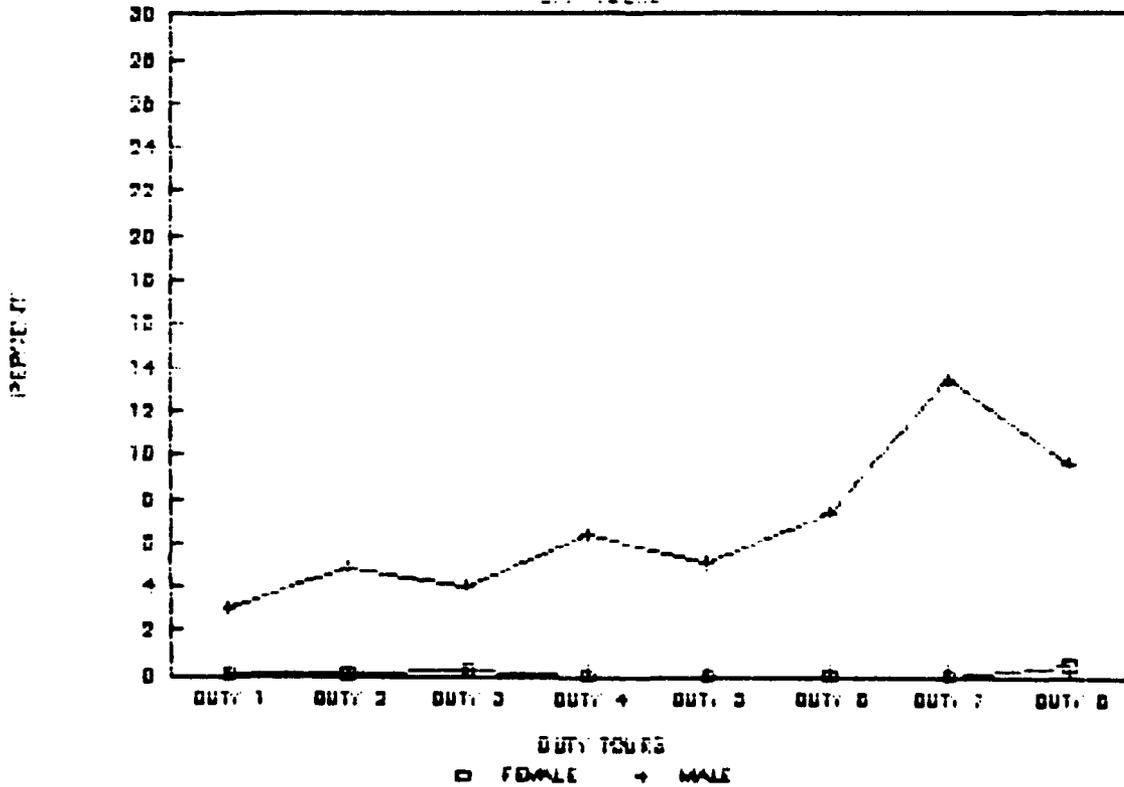
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REGULATED DEMAND TOURS



DUTY PATTERNS: BY GENDER

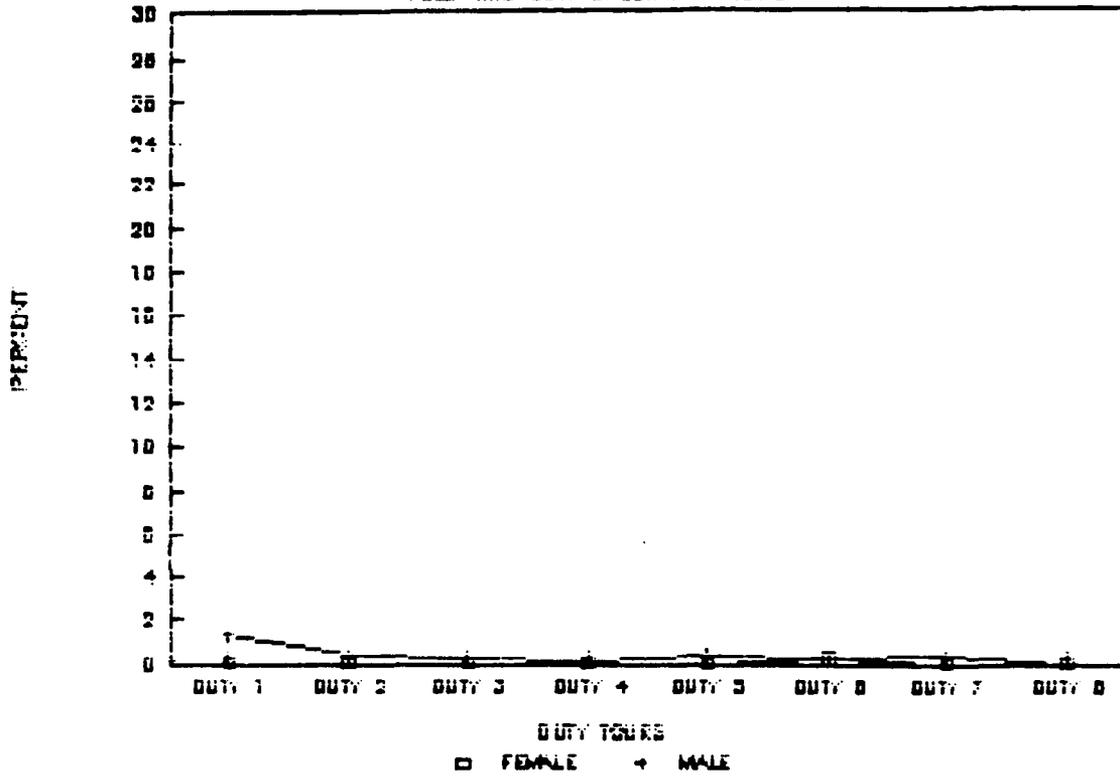
SHIP TOURS



APPENDIX E

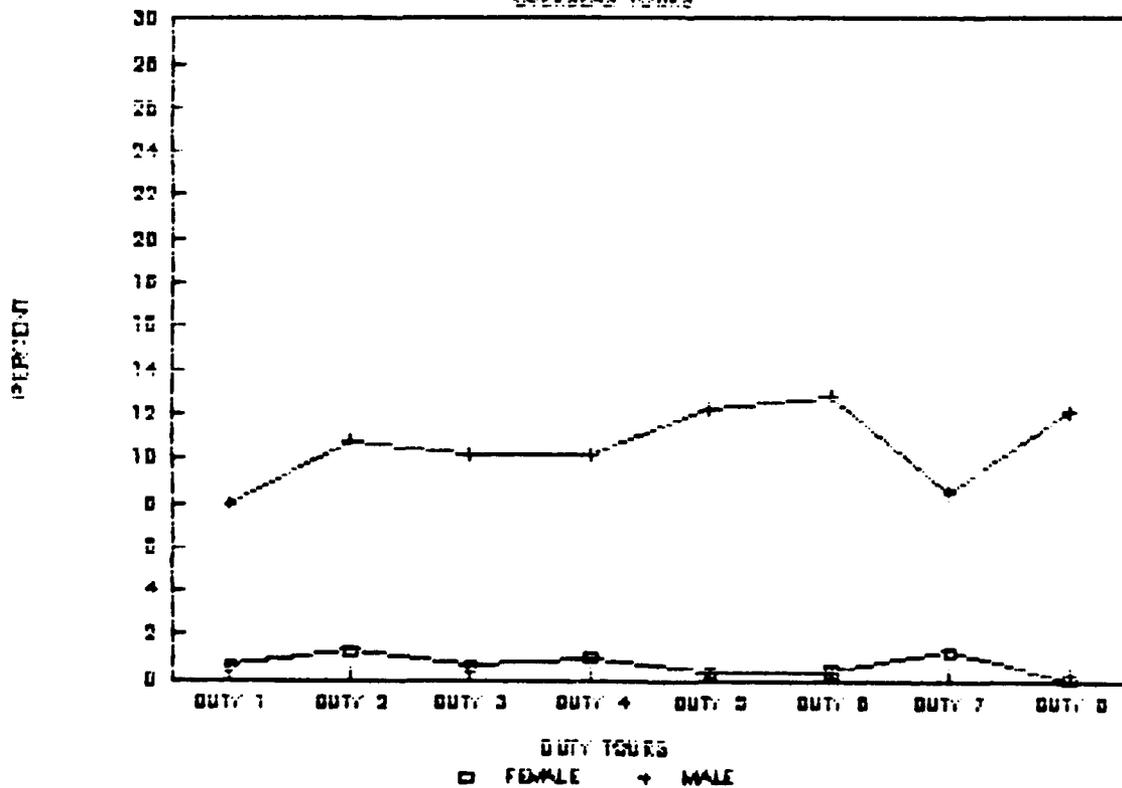
DUTY PATTERNS: BY GENDER

FULL-TIME DUTY UNDER INSTRUCTION



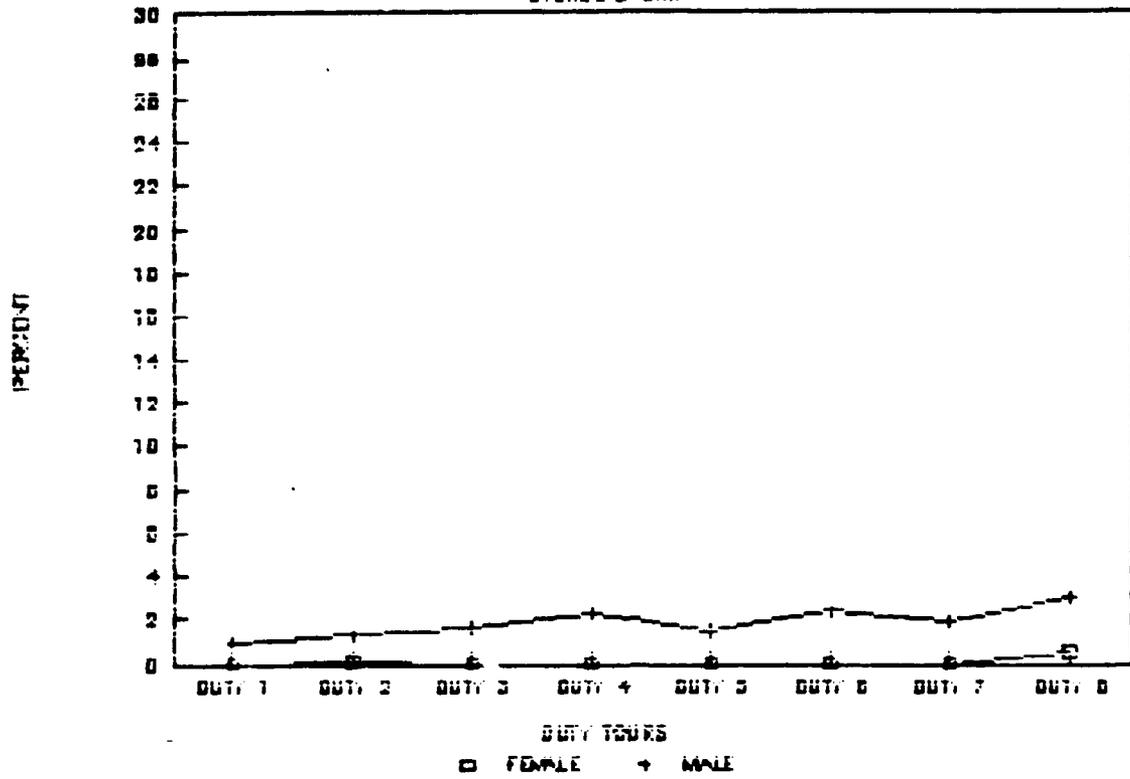
DUTY PATTERNS: BY GENDER

OVERSEAS TOURS



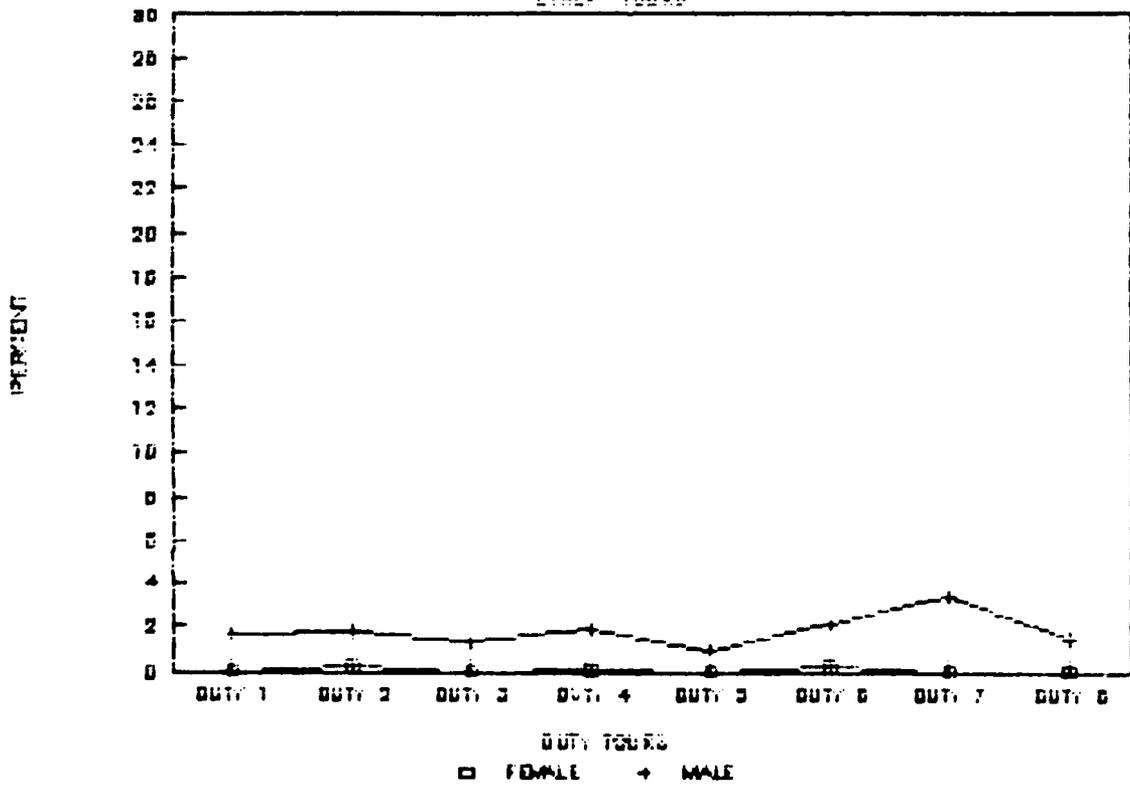
APPENDIX E DUTY PATTERNS: BY GENDER

OVERSEAS SHIP



DUTY PATTERNS: BY GENDER

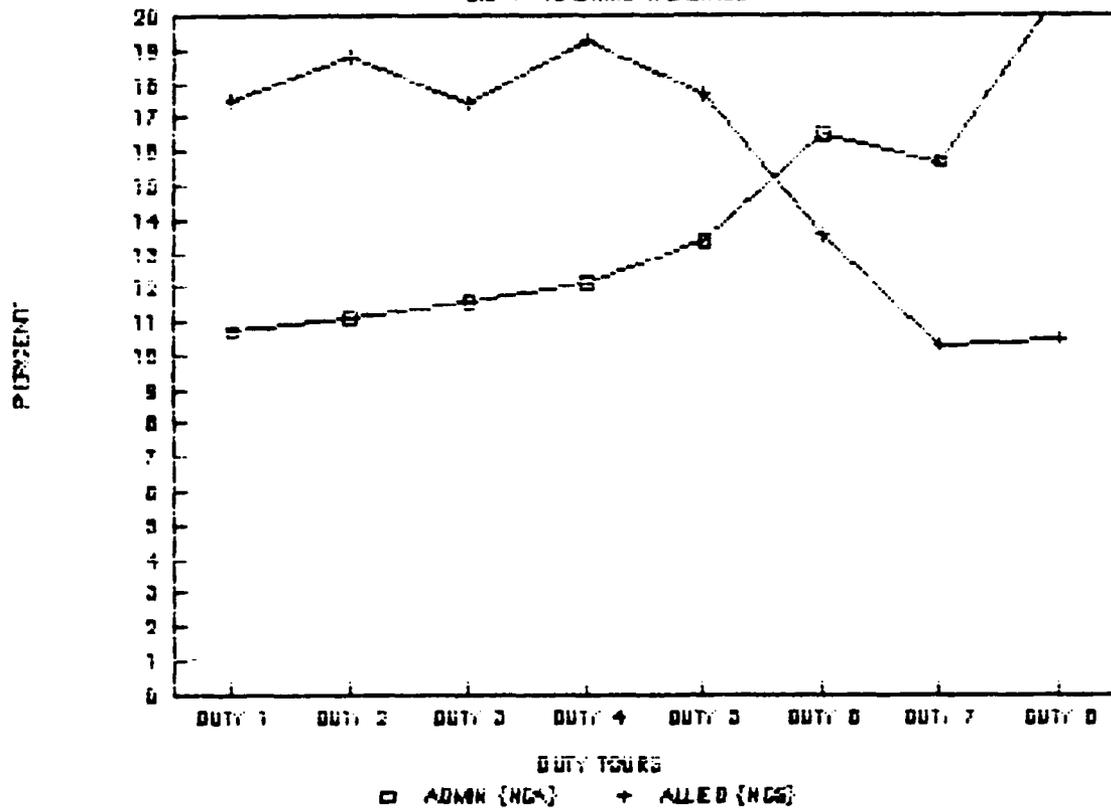
"OTHER" TOURS



APPENDIX F

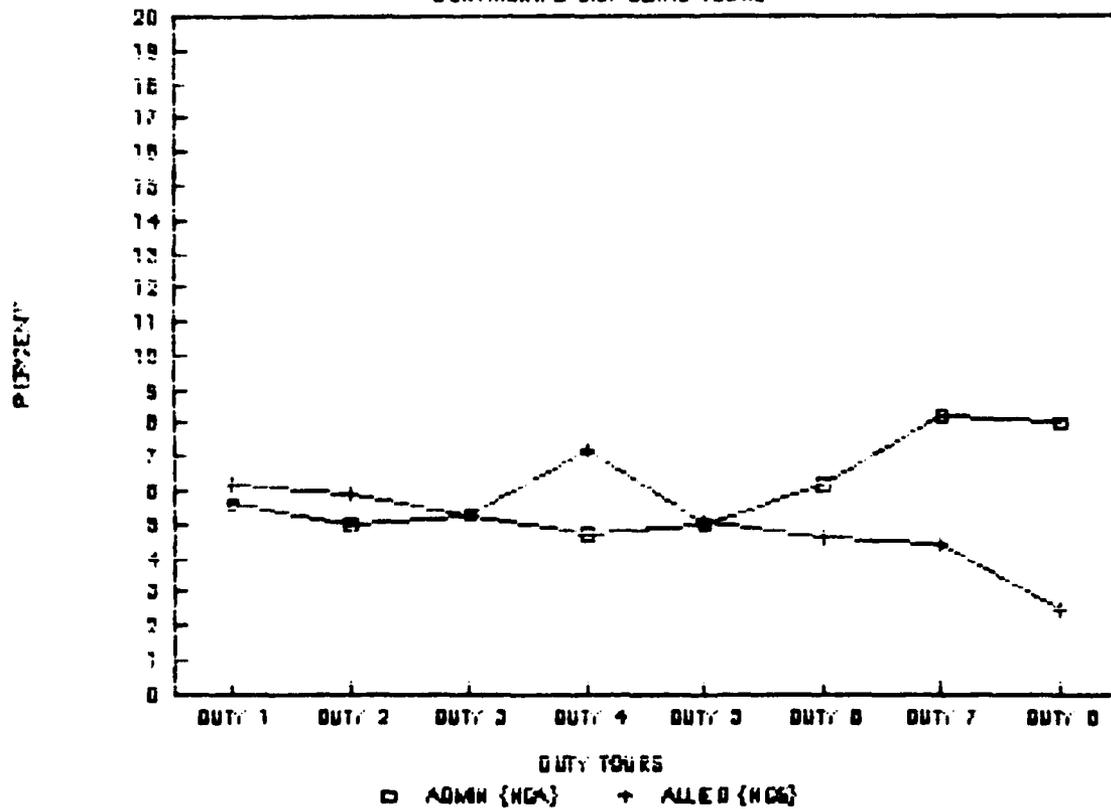
DUTY PATTERNS: BY SPECIALTY

"BIG 4" TEACHING FACILITIES



DUTY PATTERNS: BY SPECIALTY

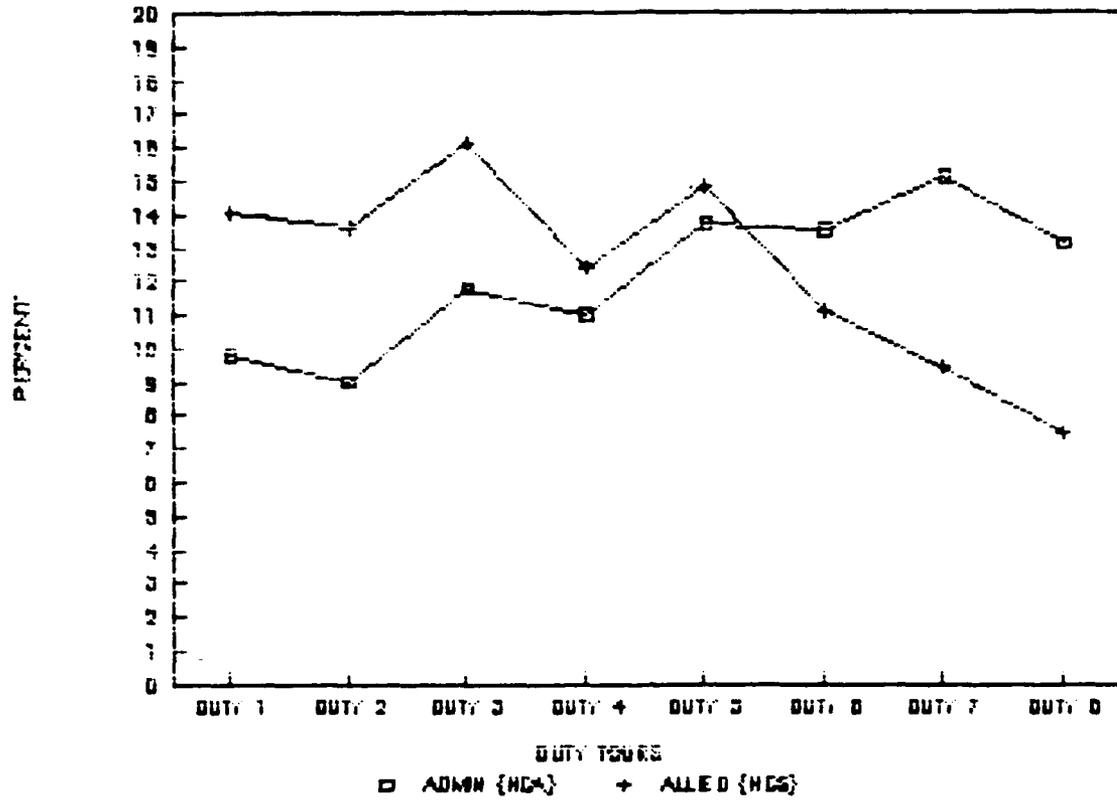
CONTINENTAL U.S. CLINIC TOURS



APPENDIX F

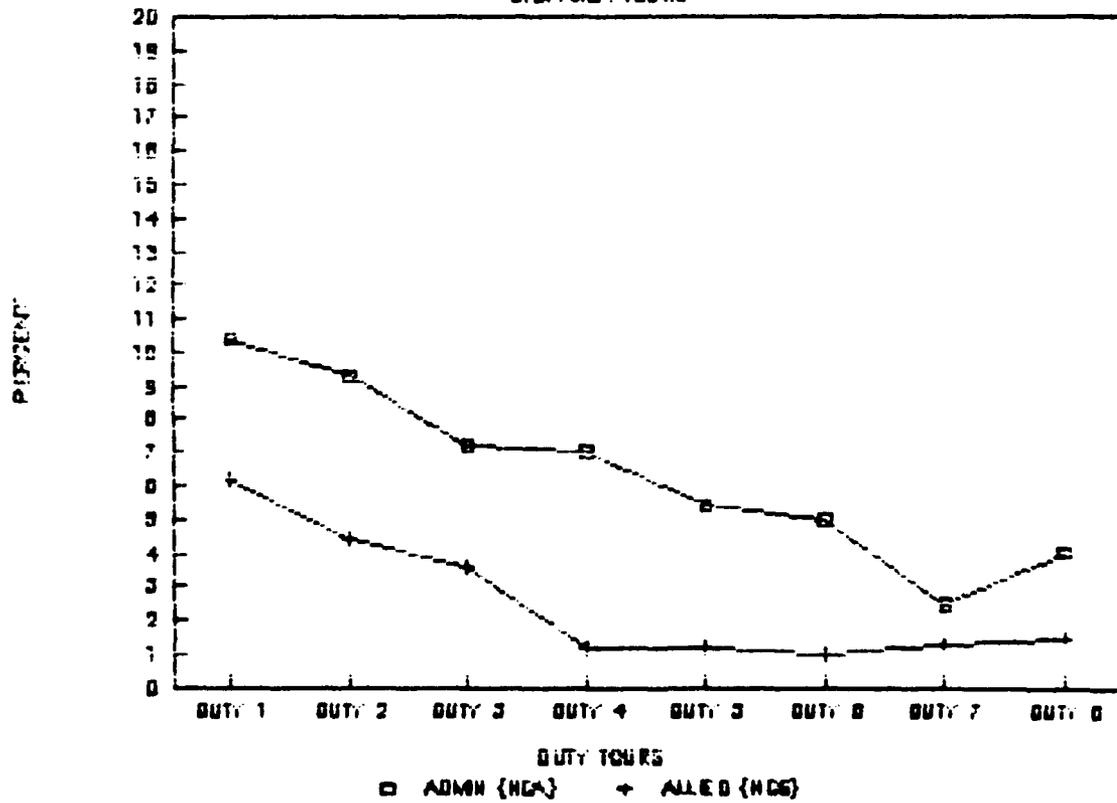
DUTY PATTERNS: BY SPECIALTY

CONTINENTAL U.S. HOSPITALS



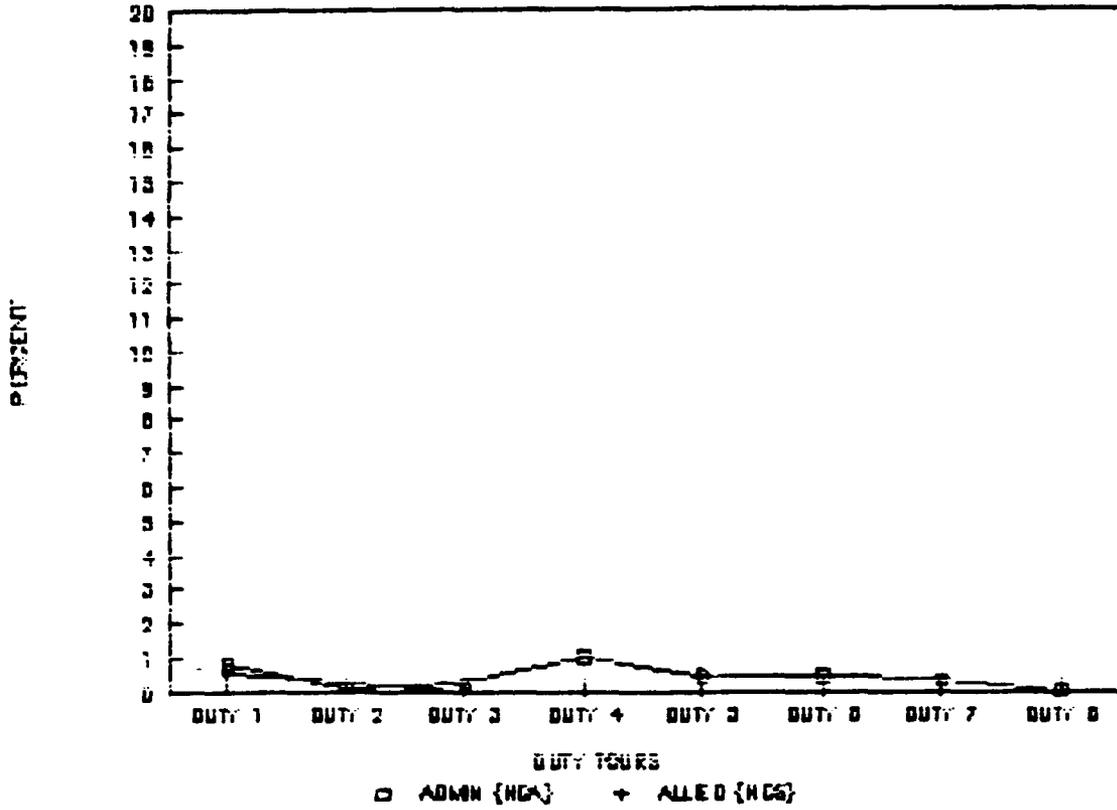
DUTY PATTERNS: BY SPECIALTY

D. C. AREA TOURS



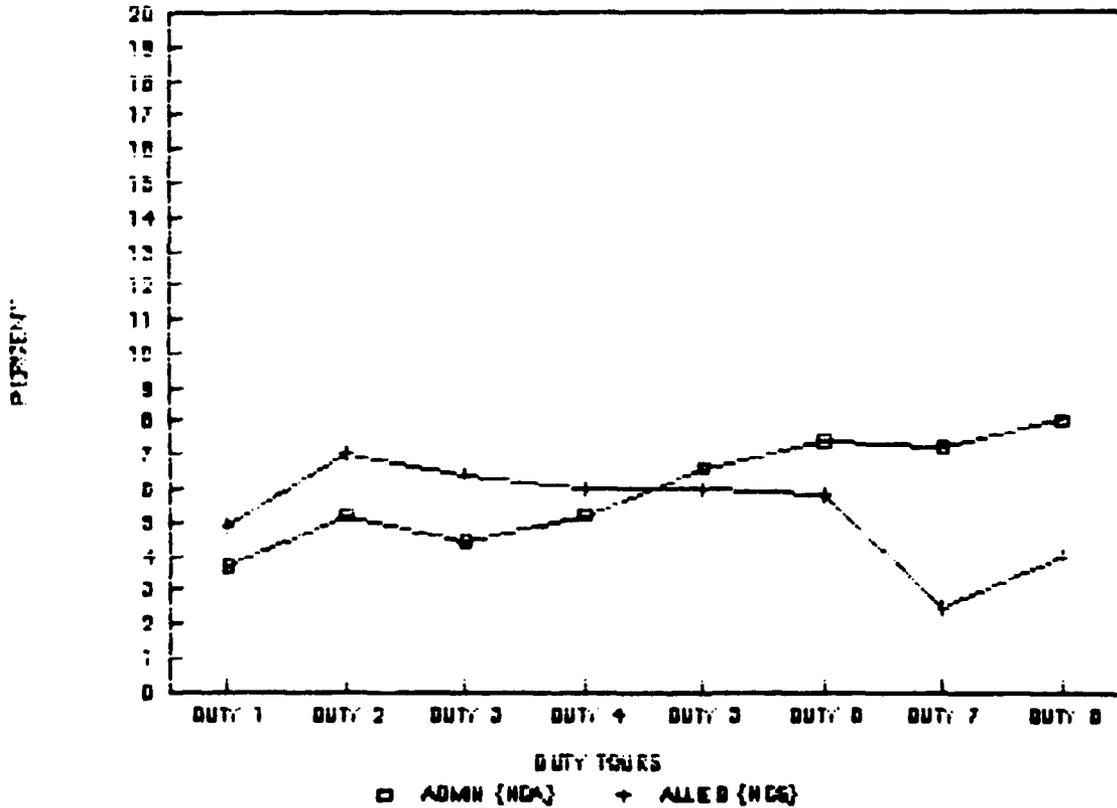
DUTY PATTERNS:BY SPECIALTY

FULL-TIME DUTY UNDER INSTRUCTION



DUTY PATTERNS:BY SPECIALTY

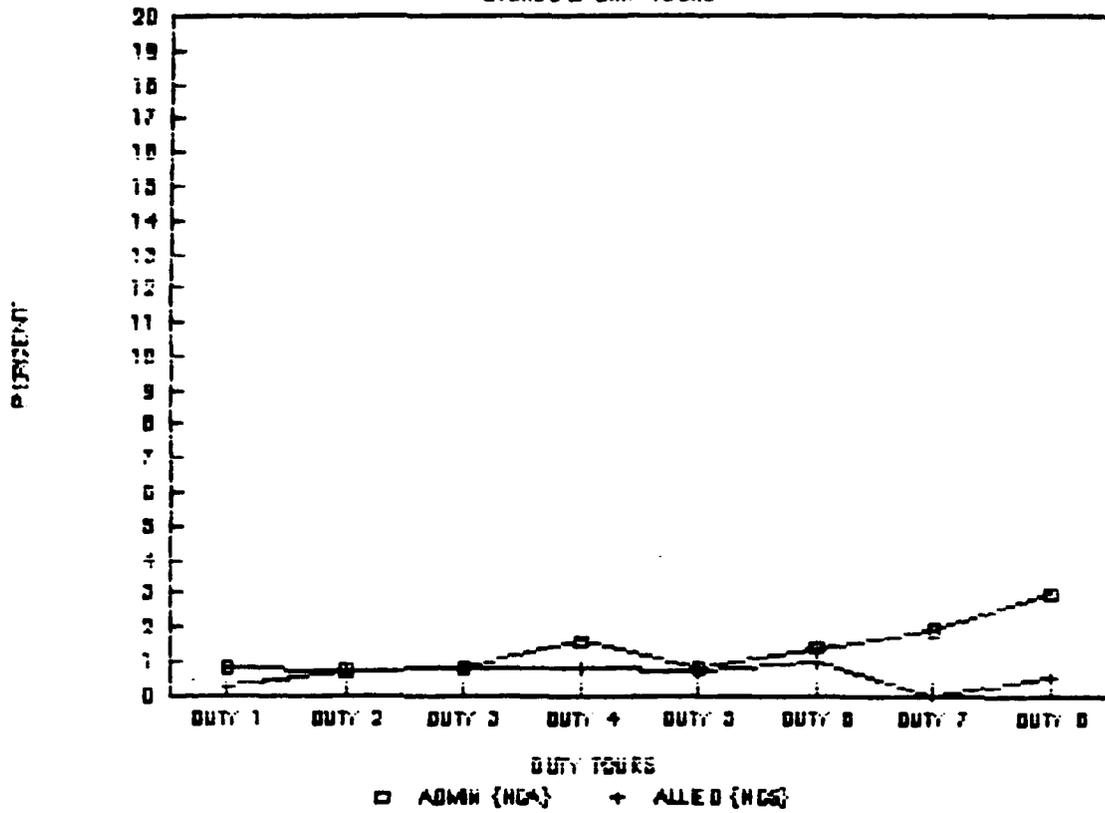
OVERSEAS TOURS



APPENDIX F

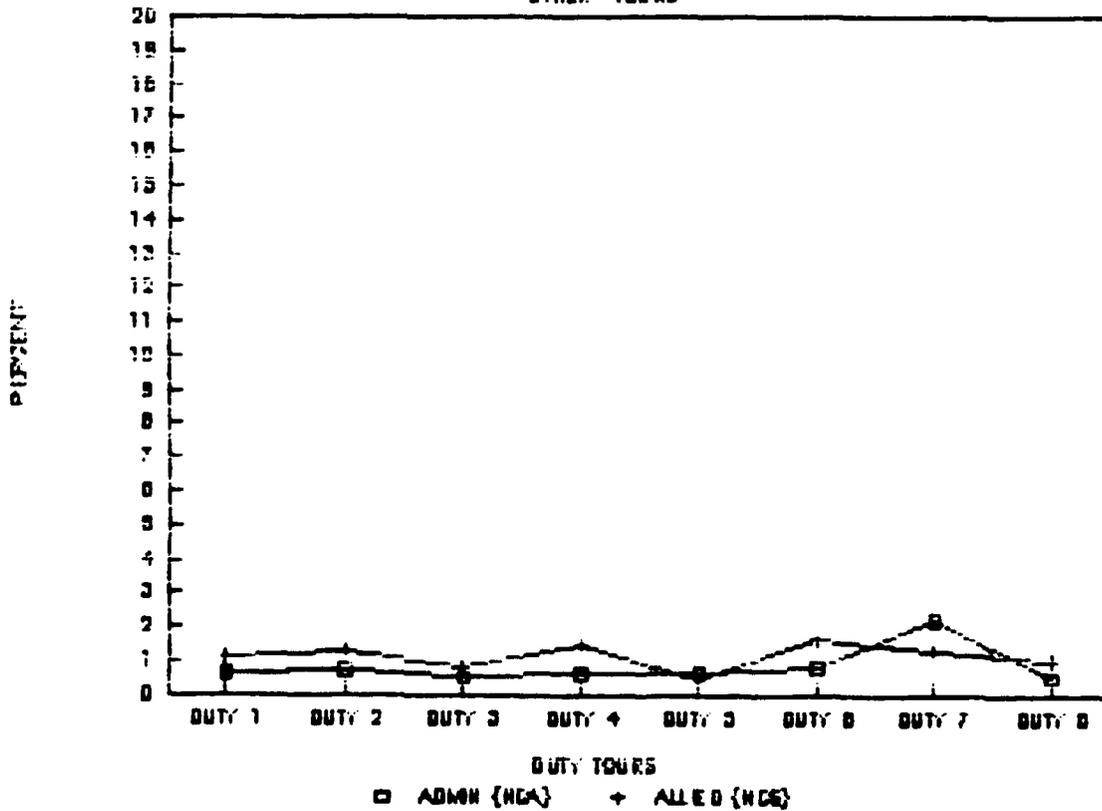
DUTY PATTERNS: BY SPECIALTY

OVERSEAS SHIP TOURS



DUTY PATTERNS: BY SPECIALTY

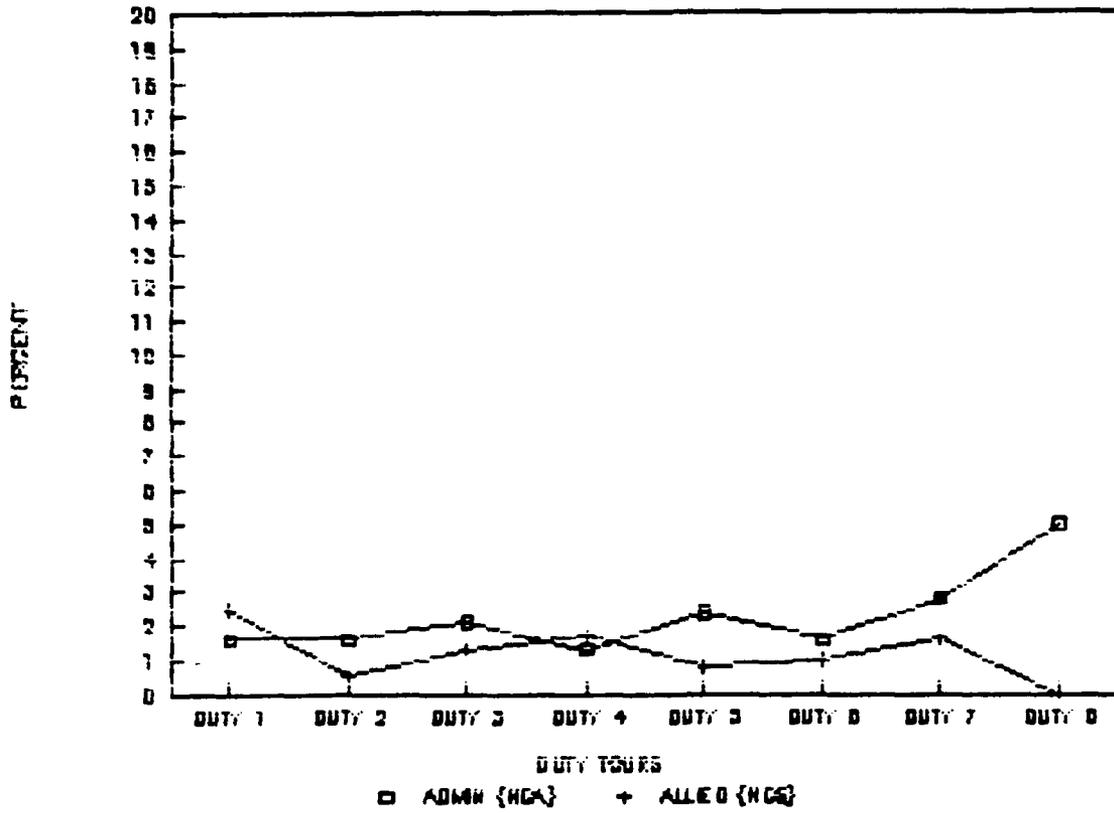
"OTHER" TOURS



APPENDIX F

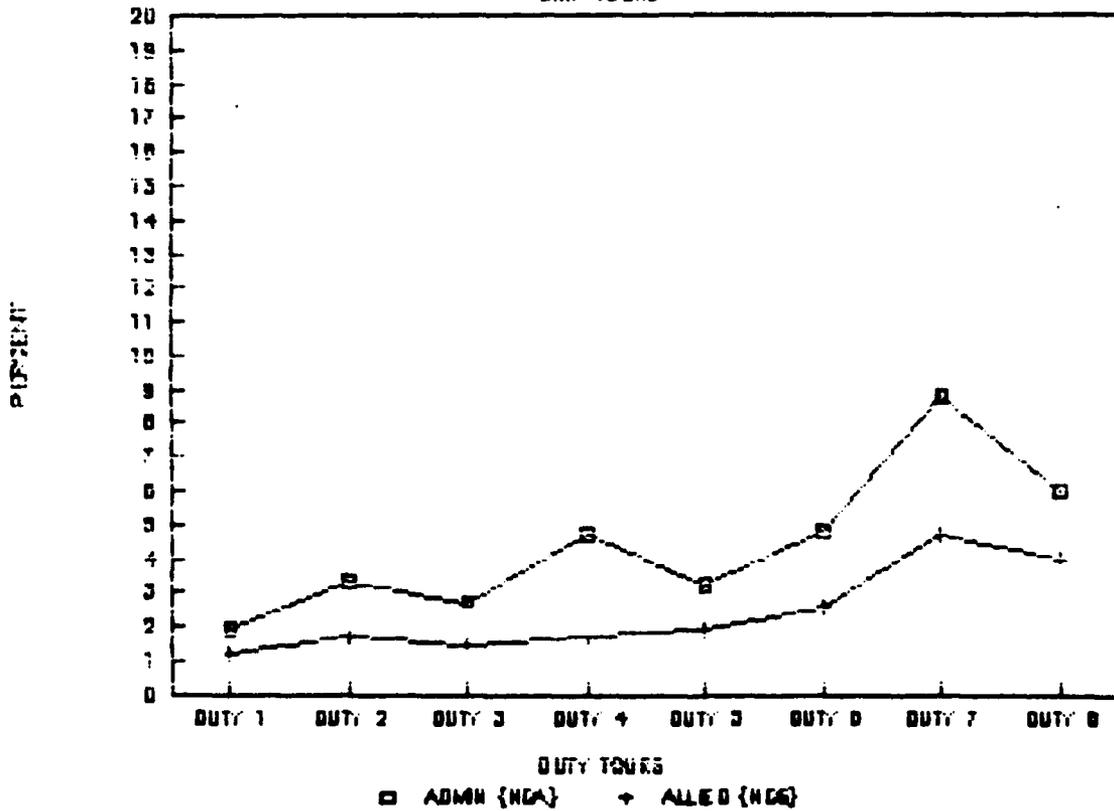
DUTY PATTERNS: BY SPECIALTY

RECRUITING COMMAND TOURS



DUTY PATTERNS: BY SPECIALTY

SHIP TOURS



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