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Monterey, California

THESIS

THE PERCEIVED EFFECT OF THE
COMMUNICATIONS SUBSPECIALTY
ON A NAVAL OFFICER'S CAREER

by

Robin M. Horne

September 1988

Thesis Advisor: M.J. Eitelberg

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There seems to be a perception that the Communications Subspecialty is not career enhancing for naval officers, especially warfare specialists. This thesis investigates how the subspecialty is perceived by naval officers with the Communications Systems Technology subspecialty code.

A questionnaire was designed to determine: (1) if the officer felt the subspecialty had affected his or her career, (2) where the subspecialists find information concerning the subspecialty, and (3) if the officer had any suggestions or concerns about the communications subspecialty. The questionnaires were then sent to all officers with the Communications Systems Technology subspecialty code (XX82X).

Responses to the questionnaire show that, in general, officers feel that the subspecialty has had a positive effect on their careers, to the extent that they would recommend the subspecialty to other officers. But there does seem to be a lack of good career information concerning the Communications Subspecialty. It is therefore recommended that the subspecialty sponsor (OP-941) try to disseminate more useful information to officers concerning the subspecialty.

This thesis also contains information concerning the Navy subspecialty system, the officer career structure in the Navy, information on the communications subspecialties, and additional thesis topics.

The first chapter outlines the problem. Chapter 2 provides background information on the United States Navy and how it categorized its officers. Sources of career information and career paths is contained in Chapter 3. Chapter 4 consists of a complete description of the methodology of the research including questionnaire design. Chapter 5 discussed the results of the survey, and Chapter 6 contains the conclusions and recommendations. (KR)

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The Perceived Effect of the
Communications Subspecialty
on a Naval Officer's Career

by

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

There seems to be a perception that the Communications Subspecialty is not career enhancing for naval officers, especially warfare specialists. This thesis investigates how the subspecialty is perceived by naval officers with the Communications Systems Technology subspecialty code.

A questionnaire was designed to determine: (1) if the officer felt the subspecialty had affected his or her career, (2) where the subspecialists find information concerning the subspecialty, and (3) if the officer had any suggestions or concerns about the communications subspecialty. The questionnaires were then sent to all officers with the Communications Systems Technology subspecialty code (XX82X).

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I. INTRODUCTION

There seems to be a perception that the Communications Subspecialty is not career enhancing for Naval officers, especially those in warfare specialties. Many people apparently believe that officers with a Communications Subspecialty are not selected for flag rank, and that their chances are lower for selection to a major warfare command. Similarly, it is perceived that Communications Subspecialists have a lower selection rate to Commander and Captain. This negative perception could be critical since the selection to higher ranks is increasingly more competitive for all officers.

These concerns can be related to the classic question concerning the chicken and the egg: which is the cause and which is the effect? Are the Communications Subspecialists not selected because of the subspecialty or because of some factor involving their warfare specialty? Are the front runners required to fill billets at sea leaving the others to find billets ashore? Whatever can be said about the cause and effect relationship, the perception still seems to exist among many officers that communication jobs are not career enhancing.

This thesis investigates how the Communications Subspecialty is actually perceived by those officers assigned to it. The thesis also examines possible causes of negative perceptions and changes to the Communications Subspecialties that might alleviate career concerns as well as meet the needs of the Navy. This thesis focuses on the Unrestricted Line (URL) officer community. A questionnaire, sent to officers with a Communication Systems Management Subspecialty code (XX82X), is the research vehicle for this thesis. Additionally, this thesis consolidates information about the Navy's subspecialty system and URL career path information.

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II. BACKGROUND

Naval officers are categorized by rank, designator, and subspecialty code. An officer's rank indicates his or her level of seniority and leadership in the Navy. A list of naval officer ranks is provided in Table 1. Each job or billet in the Navy is coded to indicate the skills required. The billet coding uses rank, designator, and subspecialty codes which match the officer coding so that an officer can be quickly screened to see if he or she is qualified for a particular billet. Not all billets are subspecialty coded. This chapter explains the designator, the subspecialty system, and unrestricted line officer career paths.

Table 1. NAVAL OFFICER RANKS

Rank	Abbreviation	Paygrade
Admiral	ADM	0-10
Vice Admiral	VADM	0-9
Rear Admiral (upper half)	RADM	0-8
Rear Admiral (lower half)	RADM	0-7
Captain	CAPT	O-6
Commander	CDR	O-5
Lieutenant Commander	LCDR	O-4
Lieutenant	LT	O-3
Lieutenant Junior Grade	LTJG	O-2
Ensign	ENS	O-1
Chief Warrant Officer	CWO4	W-4
Chief Warrant Officer	CWO3	W-3
Chief Warrant Officer	CWO2	W-2

A. DESIGNATOR

The designator is a four-digit code that indicates the officer's community and specialty area. Appendix A contains a table of officer designators. The communities are divided into two categories, Staff and Line. Naval officers who are designated unrestricted line officers are eligible to assume command at sea; other officers are members of a Staff Corps or are specialists in various fields. [Ref. 1: p. 44]

The Staff Corps consists of several specialty fields: Medical, Chaplain, Dental, Nurse, Supply, Civil Engineer, and Judge Advocate General. Line officers are categorized as Restricted or Unrestricted Line. Restricted Line (RL) officers are

specialists trained in a particular technical area such as Intelligence, Cryptology, Aeronautical Engineering. Engineering Duty, Public Affairs, and Oceanography. The Unrestricted Line (URL) officer is a generalist in his or her warfare specialty area, and usually a subspecialist in a particular area. The URL specialty areas are Surface, Submarine, Aviation, which are warfare specialties, and General Unrestricted Line. The General Unrestricted Line (GURL) officers do not have a warfare specialty, but normally concentrate on a subspecialty area.

B. SUBSPECIALTY SYSTEM

The Navy uses the subspecialty system to identify billets that require a specific level of expertise in an area, as well as identifying those officers who have those skills. As stated in OPNAVINST 1000.16F:

> Certain billets requiring additional qualifications beyond those indicated by a designator code are further identified by subspecialty codes. These codes define the field of application and additional education, experience, and training qualifications needed to satisfy special requirements of the billets which meet specific criteria of the subspecialty validation process. Subspecialty codes apply to the Unrestricted Line, Restricted Line, and Staff Corps, regardless of designator, and are professional development fields secondary to specialties. The goal of the Officer Subspecialty System is to provide sufficient officers with subspecialties for which current and projected validated billet requirements exist. [Ref. 2: p. 6-14]

The subspecialty code is made up of five digits: four numbers and one letter suffix, for example 0082P. The first two numbers define the functional field. For Communications Subspecialists below the rank of Lieutenant Commander, this field is coded as "00". For Lieutenant Commander and above, the field is coded as "50", which indicates a background in Command and Control, the functional area that includes communications. The third and fourth numbers in the subspecialty code identify the educational skill area. Three codes apply to the Communications Subspecialty: XX80X Communications (General), XX81X Communications Engineering, and XX82X Communications Systems Technology. XX80X is used as a billet code only at the Commander and Captain level. The letter suffix of the subspecialty code indicates the level of education or skill the individual has in the particular field. Definitions of the

subspecialty suffixes are contained in Table 2 on page 4. [Ref. 3: pp. 32-33]

Table 2. SUBSPECIALTY SUFFIXES

*B   Validated requirement for master's or higher level of education but second priority to P, Q, M, N, C, or D coded billets for assignment or qualified officers; used when subspecialty code compensation for the billet has not been identified.

C   PhD level of education; proven subspecialist.

D   PhD level of education.

E   Baccalaureate level of education in a field applicable to the subspecialty.

F   Master's degree not fully meeting Navy criteria or graduate education less than master's level; proven subspecialist.

G   Master's degree not fully meeting Navy criteria or graduate education less than master's degree.

*H   Billet code to indicate a position for which the assignment of an officer with a master's level of education is desirable, but not required.

M   Engineer's degree level of education; proven subspecialist.

N   Engineer's degree level of education.

P   Master's degree level of education.

Q   Master's degree level of education; proven subspecialist.

R   Significant experience, proven subspecialist.

S   Significant experience.

T   Billet code: denotes training billet which qualifies incumbent for an S-code officer code; identifies students in duty under instruction leading to the indicated subspecialty code.

*   Applies only to billet code.

C. BILLET SUBSPECIALTY CODING

Recommendations for initial billet coding and changes to previously coded billets may be submitted to Director, Total Force Manpower Training and Education Division (OP-11), by Commanding Officers, Fleet and Type Commanders, and Subspecialty Sponsors and Consultants. Additionally, changes in billet coding may result from the consultant's reviews and the Subspecialty Requirements Board convened by the Chief of Naval Operations. Correspondence requesting the establishment, deletion, or revision of subspecialty codes on existing billets, where no other manpower change transaction is required, is to be submitted through the chain of command to OP-11. The correspondence should include the Subspecialty Billet Request Form found in OPNAVINST 1000.16 series. A copy of this form is included in Figure 1. [Ref. 2: p. 6-15.]

Commanders, Commanding Officers, and Officers in Charge are required to review, at least annually, their activity's billet subspecialty coding to ensure that accurate and valid requirements are indicated, and submit requests to revise, add, or delete subspecialty requirements. Each command is required to maintain a complete and up-to-date file of subspecialty-coded billets for each coded billet in the command. [Ref. 2 : p. 6-16]

Subs. cialization can be accomplished through either graduate education or successful tours in a subspecialty billet [Ref. 4: p. 6].

D. GRADUATE EDUCATION

Navy-funded graduate education can be completed at the Naval Postgraduate School (NPS) in Monterey, California, or at selected civilian schools. Completion of the Communications-Computer Systems Staff Officer course at the Air Force Training School, Keesler AFB, Mississippi also qualifies for a graduate education code. Formal designation as a subspecialist is done by the subspecialty selection board, which is convened biennially to identify officers with proven expertise in their field [Ref. 5: p. 25]. Each subspecialty has a primary consultant or sponsor who is responsible for working with the Naval Postgraduate School to develop and maintain curricula that will prepare officers for the particular subspecialty. The primary consultant also identifies the billets requiring officers with the particular subspecialty and for designating officers as proven subspecialists. This last function is performed biennially in the subspecialty selection boards. [Ref. 6: p. 18] The primary consultant for the Communications Systems

```
SUBSPECIALTY BILLET REQUEST FORMAT
                        Date _____

1.  Activity Title: _____

2.  Activity 10-digit Code: _____

3.  BilletSequence Code: _____

4.  Billet Designator and Rank: _____

5.  Billet Title: _____

6.  Subspecialty Code Requested: _____

7.  Subspecialty Code Presently Assigned to Billet: (from latest
    MPA/ODCR) _____

8.  Work Center Mission, Function Statement:


9.  Work Center Subspecialty Requirements: (List other subspecialty coded billets
    in the work center by BSC and subspecialty code)


10.  Specific justification for subspecialty code requested:



11.  Subspecialty code compensation:  (Required for new graduate education
     requirements)



Attn:  CNO (OP-114)
       COMNAVMEDCOM  (MEDCOM-44)
```

Figure 1.   Subspecialty Billet Request Format.

Technology subspecialty is the Director, Naval Communications Division (OP-941), Office of the Chief of Naval Operations, Washington, DC.

The Navy subspecialty utilization policy is to assign subspecialists to billets requiring their expertise. This policy becomes particularly important in assignment of officers educated at the Naval Postgraduate School or through certain Navy-funded civilian programs. These graduates should expect shore duty assignments to billets requiring their education. The goal of this policy is to develop senior officers who are

capable of managing the Navy's major personnel, financial, and materiel programs. [Ref. 5 : p. 24]

Subspecialty designation itself was originated to be career enhancing for URL officers. Selection board statistics reveal that officers who are both outstanding performers in their designated specialty and proven subspecialists enjoy a higher promotion opportunity [Ref. 7 : p. 14]. Designated subspecialists experienced a 10 percent higher rate of selection to Commander (O-5) in the fiscal year (FY) 1986 promotion board than those without a subspecialty [Ref. 8 : p. 6]. The results of the FY 1986 URL Captain promotion board clearly underlined the desirability of obtaining proven subspecialty designation. During this board, promotion for officers possessing proven subspecialty designation was 63.0 percent, while promotion for all other URL officers was 46.8 percent. These statistics highlight the advantage of proven designation for officers concerned with pursuing a long-term and successful Navy career. [Ref. 5 : p. 25]

The graduate education programs are designed to equip officers with an enhanced intellectual and analytical capacity as well as make them more skillful warriors and specialists. The Navy's goal is to have 20 percent of the officer corps with a graduate subspecialty. One intention of graduate education is to prepare an officer for a long career. [Ref. 8 : p. 4] Graduate education is an important milestone in an officer's career [Ref. 9 : p. 14]. Graduate education itself is career enhancing because it leads to subspecialty designation. The professional development of General URL officers through graduate education is vital to their future progression within today's increasingly complex and technologically oriented Navy [Ref. 7 : p. 82].

E. COMMUNICATIONS SYSTEM TECHNOLOGY SUBSPECIALTY

Key billets have been identified within various telecommunication activities that require officers competent in conceiving, developing, implementing, and/or managing complex components of the telecommunication systems of the Department of Defense. This subspecialty identifies those naval officers who are prepared, either by education or experience, to meet those requirements and effectively manage the people assigned to assist in these efforts. According to the Communications Systems Technology fact sheet, the officer subspecialist is required to:

- have the capability to manage telecommunications resources and develop policy pertaining to operations and readiness of telecommunications.

- develop priority lists and planning schedules for fulfillment of validated telecommunications requirements, and monitor progress of approved plans to ensure conformance thereto, and satisfaction of stated requirements.

- be capable of being a Commanding Officer of a communications activity or a department/division head of a functional component primarily concerned with telecommunications, plans policies directives and/or operations.

- function as an advisor of telecommunications systems capabilities and assist in developing telecommunications requirements based upon command and control, administrative, logistical and operational requirements.

- conceive, monitor, review and coordinate studies of implications of telecommunications plans and policies, and of requirements for future mid-range/long-range periods. [Ref. 10: p. 1]

Appendix B contains a copy of the Communications Systems Technology Fact Sheet.

III. CAREER GUIDANCE

There is no set career path for naval officers. There are general milestones that are required for successful career promotion, but the guidelines are purposefully vague and general. The key to success is performance. The types of jobs held, performance in those jobs, and performance in relation to peers all paint a career portrait over time. The keys to selection are based upon sustained professional excellence and potential growth; or, in other words, an individual's future value to the Navy. [Ref. 11 : p. 4] During the course of a naval career, an officer will receive career counseling from commanding officers, department heads, peers, spouse, detailer, etc. The importance of the counseling that one receives from each is a personal judgment.

It is a time-honored tradition that the most appropriate, best qualified, most knowledgeable source of career guidance is an officer's commanding officer. As a result of his or her previous experience, commanding officers have a wealth of knowledge from which the less experienced junior officer can benefit. The credibility of the counseling is evident in that the source of the guidance is an individual whose professional excellence has been recognized by command. Dynamics of the promotion system may outdate an individual's personal experience. The way it was done may no longer be the way it is done. Career development is as dynamic as the external forces that put demands on the Navy. [Ref. 7 : p. 9] Several information sources can help officers understand where present emphasis is placed. Some of these sources are : *perspective*, *the Unrestricted Line Officer's Career Guidebook*, and the detailer. These sources are described below.

A. CAREER INFORMATION SOURCES

1. Perspective: The Navy officers' professional bulletin

The mission of *perspective* is to provide all naval officers information regarding key personnel policy changes, reassignment trends, and retention matters. *Perspective* is approved for official dissemination of information to keep individuals within the Department of the Navy knowledgeable of current and future developments within their areas of expertise for the purpose of enhancing their professional development. *Perspective* is published bi-monthly by Director, Distribution Department (NMPC-4), Naval Military Personnel Command, Washington, DC. [Ref. 12: p. 2]

2. The Unrestricted Line Officer Career Planning Guidebook

This handbook contains guidance for the career-oriented naval officer so that the officer may plan for and intelligently help formulate future assignments. Naval officers are encouraged to take an active role in the planning of their careers. The guidebook contains background information on specific areas of career development that is common to all unrestricted line communities, as well as chapters specific to each specialty area. The guidebook is published by the Director, Military Personnel Policy Division (OP-13), and distributed to all Navy commands. An individual can also obtain a copy by calling his or her detailer or OP-13.

3. The Detailer

The detailer is a Naval officer at Naval Military Personnel Command who is responsible for making personnel assignments. They are the ones who negotiate the individual's orders to his or her next duty assignment. All Naval personnel are assigned to a particular detailer who is normally of similar rank and designator. The detailer is the one source that is able to stay current in both the overall situation, as well as each officer's personal case. The detailer can tell an individual how he or she compares with the competition, what qualifications one needs, when he or she can expect to rotate, how realistic an individual's personal desires really are, and whether one should consider a special program or maintain his or her current plan. The detailer can assess an individual's career development goals in terms the context of the needs of the Navy and an individual's own professional needs. The detailer is familiar, on the basis of recent experience, with the career move an individual is facing. Armed with an officer's personal preferences, knowledge of the officer's professional performance and insight into the need for certain qualifications, the detailer will attempt to place the officer in the billet that will both challenge and stimulate the officer's ability and afford him or her the opportunity to excel professionally. [Ref. 7: p. 9]

B. UNRESTRICTED LINE CAREER PATHS

As mentioned in Chapter 2, the URL is divided into four specialty areas: Surface, Aviation, Submarine, and General.

For the three warfare specialties (Surface, Aviation, and Submarine) the subspecialty is primarily something that is obtained through graduate education obtained during the first or second shore tour and only utilized during subsequent shore tours. These officers will be serving in subspecialty billets after command, or in the place of command at sea or command of an aviation squadron. The goal of these officers is command; everything

else is superfluous. Their leadership track including Department Head, Executive Officer (XO) and Commanding Officer (CO) is in their warfare area. These officers can have similar positions on shore, but to complete the steps toward command at sea their leadership must be proven in their warfare area. Each career path is discussed separately below:

1. Surface Warfare

The Surface Warfare Community is composed of officers who are qualified in the surface warfare specialty, who man the surface ships of the Navy, and whose goal is to command those ships. The Surface Warfare Officer (SWO) must develop experience and in-depth knowledge in a specific line discipline such as operations, combat systems, or engineering. He or she must also learn the fundamentals of engineering, weapons systems and operational tactics, as well as understanding the operations of the various ship types within the surface force, including battleships, cruisers, destroyers, frigates, amphibious, mine warfare, and mobile logistics support ships. Eventually, it must also include an appreciation of air and submarine warfare and inter-type operations in a multi-threat environment. [Ref. 7: p. 30] A typical Surface Warfare Officer's professional development path, which illustrates the general progression of assignments and promotions which one can expect, is provided in Figure 2. [Ref. 7: p. 42]

No two officers will follow identical career patterns, but can expect to meet most of these career milestones in about the same sequence indicated. Surface Warfare Officers will normally only be utilized in their subspecialty area when they are on shore duty. The first shore tour comes normally about 3-4 years after commissioning. The officers can expect to be ordered ashore for a tour of approximately 2 years duration. One possible assignment is a graduate education tour leading to a subspecialty designation, if the individual requests it, is academically qualified, and is selected by formal board action.

Following the first shore tour, the officer goes back to sea for the department head tours. The second shore tour will commence at approximately the 9-10 year point of commissioned service. During this 2-3 year period the officer may have another opportunity to attend NPS if he or she is both academically qualified and formally selected. If during the officer's first shore tour he or she attended NPS, the second shore tour will normally be in a billet requiring the educational background. This tour will be closely related to the postgraduate education subspecialty. It should be considered both

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SURFACE WARFARE OFFICER
PROFESSIONAL DEVELOPMENT PATH

YCS

26 —

CAPT 24 —

5TH SHORE: — SHORE COMMAND
— TRAINING COMMAND / MAJOR SHORE STAFF
— SUBSPECIALTY

| CAPT COMMAND | MAJ SEA CMD | MAJ SHORE CMD |

22 —

SR SVC COLLEGE

POST CO STAFF

20 —

4TH SHORE
— SUBSPECIALTY
— WASHINGTON

| CDR COMMAND | OTHER SEA |

COR 18 —

3RD SHORE — SUBSPECIALTY
— SR SVC COLLEGE
16 — — WASHINGTON
— TRAINING COMMAND / MAJOR SHORE STAFF

POST XO TOUR   SEA STAFF   CO

LCDR XO TOUR

14 —

JR SVC COLLEGE

LCDR 12 —

2ND SHORE — PG SCHOOL
— SHORE STAFF
— PG UTILIZATION

SEA STAFF / DEPT HEAD

JR SVC COLLEGE

10 —

DEPT HEAD SPLIT TOUR
SHIP / STAFF

8 —

NEW CONSTRUCTION

DEPT HEAD SHIP

LT 6 —

DEPT HEAD COURSE SWO SCHOOLS CMD

FIRST SHORE — STAFF
— RECRUITING
4 — — PG SCHOOL (TECH CURRICULUM)

NEW CONSTRUCTION
OTHER AFLOAT

LTJG —

FIRST SEA TOUR
DIVISION OFFICER LEVEL
2 — (BASIC SWO QUALIFICATION)

ENS —

BASIC COURSE SWO SCHOOL CMD ENROUTE TRAINING

Figure 2.   Surface Warfare Officer Professional Development Path

as an application of the graduate education and as development of the officer's subspecialty qualifications.   Additionally, the officer is eligible for assignment to a

greater variety of billets in which his or her total professional knowledge and experience will be most valuable.

During the third and subsequent shore tours, the officer will normally be assigned to billets which fall under five general categories:

1. Operational assignment--billets requiring expertise of a qualified surface warfare officer.

2. Subspecialty billets--as described in chapter 2. The subspecialty assignment area is receiving increased emphasis throughout the Navy.

3. General unrestricted line billets appropriate to rank--billets in support of general Navy requirements can be filled by URL officers of any designator.

4. Senior service college assignment--Naval War College, the National Defense University, or another service's war college is available to selected senior Commanders and Captains.

5. Washington duty--there are an abundance of billets at Navy's major staffs, many of which fit into one of the above four categories. [Ref. 7: pp. 33-37]

As seen above, the utilization of SWOs in their subspecialty area is spaced out and interspersed between sea tours. The main goal for Surface Warfare Officers is command at sea, therefore it is critical that they successfully complete their tours at sea. Subspecialty development is something that is earned if the opportunity presents itself, but not of major importance until later in their career, after command at sea. Command opportunity for Commanders is approximately 55 percent. Since screening for command at sea is highly competitive, there will be a number of fine officers not selected. There is great demand for Surface Warfare Officers at the Commander experience level ashore. For the subspecialist, and especially the proven subspecialist, there are many rewarding assignments. The assignment will be based on the performance record and skill level in an effort to maximize the efficient use of officer assets. [Ref. 7: pp. 37-38]

2. Aviation Community

The Aviation Warfare Community is made up of pilots, Naval Flight Officers (NFOs), and aviation generalist officers. All are involved in some facet of naval aviation as a primary career pursuit. These officers make up over half of the URL officers of the Navy. The aviation officer professional development path is illustrated in Figure 3. [Ref. 7: p. 55]

The figure represents only a general aviation career progression. While it is true that the successful aviator will have completed, at the termination of a career, most of these steps, the order and timing are not universal.

AVIATION OFFICER
PROFESSIONAL DEVELOPMENT PATH
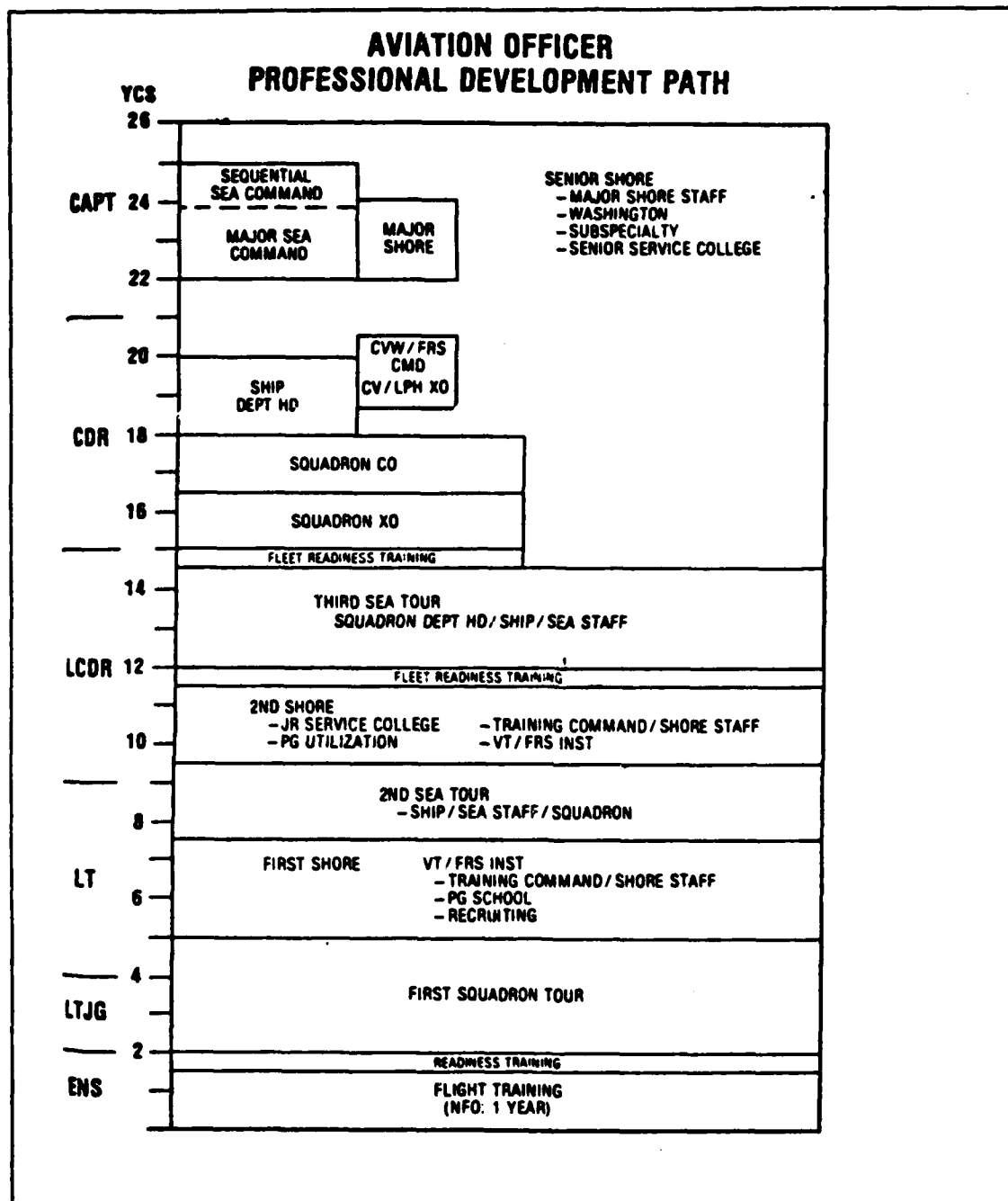
Figure 3. Aviation Officer Professional Development Path

During the first squadron tour, the aviator will gain experience in leadership, in the daily routine of the squadron, and in learning to employ and utilize personnel. After

the first squadron tour, the officer becomes available for assignment to a shore duty billet. Due to the large demands of the Aviation Training Community, many aviators will be assigned to the Aviation Training Command to train the replacement pilots and NFOs needed to fill the seats they have vacated. Others will be available to pursue advanced educational opportunities, such as those offered at NPS. Since there are senior billets in the Navy which require graduate education, there is a strong need to develop the required number of officers while they are at junior levels. Currently there is a shortage of aviators and not all graduate education billets may be filled. Those officers who are assigned to NPS for their first shore tour are primarily slated for technical courses. They can expect to be detailed to a subspecialty billet on their next shore tour; or the subspecialty may be utilized at sea on their next sea tour.

The second shore tour for most aviation officers lasts from 1 to 3 years, depending on the time available prior to entry into the department head tour. Ideally, the officer should commence his/her department head tour (third sea tour) approximately 18 months prior to his or her first look for aviation command screen. Accordingly, the length of the second shore tour may need to be adjusted to ensure that the milestone is met. Many of the assignment opportunities will be similar to those of the first shore tour, including graduate education. If the first shore tour was graduate education, then the second shore tour should be a payback job in a subspecialty coded billet.

The third sea tour is one of the most important tours for aviation officers. The fitness reports which are received during this tour will be considered very carefully by the Aviation Command Screen Board. The command opportunity for all aviation officers is currently approximately 35 percent. This means that only 35 percent of all pilots and NFOs serving in rank as Commander (O-5) will have a command of some type. For post-command planning, officers who have developed a subspecialty can expect his or her post command assignments to be heavily influenced by his or her subspecialty field. Aviation commanders who do not screen for command are detailed in a sea/shore rotation pattern. Sea duty is expanded to include overseas assignments. Subspecialty experience, education, service college attendance, and operational background are key factors in determining shore duty assignments. Officers with technical education or experience which merits a subspecialty code can expect to fill subspecialist billets at the headquarters or a major level staff. [Ref. 7: pp. 46-51]

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3. Submarine Warfare

The Submarine Warfare community consists of nuclear trained submarine officers and general submarine officers. Each has a separate career path, but are closely related since both are available for many of the same sea and shore assignments. The career development paths for each track are provided as Figure 4 and Figure 5. [Ref. 7: pp. 67-68]

a. Nuclear Submarine Officers

"The fundamental goal of the nuclear trained submarine officer is to develop the professional skill and operational background to command a nuclear submarine. The achievement of this goal is accomplished through a definite series of professional qualifications, advanced training and operational sea experience." [Ref. 7: p. 57] Nuclear submarine officers attend 18 months of initial training before reporting to their first submarine. The first sea tour is normally 36 months in duration. Prior to going to his first shore tour, the officer is required to complete qualification as Engineer Officer of a nuclear ship. Many junior officers going ashore will fill shore billets at Nuclear Power School or other nuclear training facility, or on a submarine group or squadron staff. Others will fill important billets at the Naval Academy, NROTC units, recruiting districts, or will attend NPS. These shore tours are 2 years in length and will be followed by an at-sea department head tour. Some officers may be given the opportunity for a shore duty assignment after completion of their department head tour(s). This tour will also be 2 years in duration. Many of the billets available are involved in the support of the submarine force on the staff of the squadron, group and type commanders. [Ref. 7: pp. 57-60]

b. General Submarine Officers (GSO)

The general submarine officer is a submarine warfare specialist within the URL. His professional development provides him with a broad sense of experience necessary for sea command and senior management assignments both inside and outside the submarine community. General submarine officers will command the remaining diesel submarines, submarine rescue vessels, and submarine support drydocks, as well as shore activities. As diesel submarines go out of service, a career path that leads to command and assures senior officer promotion opportunity may require lateral transfer and assignments outside normal GSO billets. For those officers who have demonstrated high quality professional performance, opportunities will be available for:

16

NUCLEAR SUBMARINE OFFICER
PROFESSIONAL DEVELOPMENT PATH

YCS

26 —

MAJOR COMMAND | SEQUENTIAL MAJOR COMMAND

CAPT 24 —

POST COMMAND SHORE | DC SHORE

22 —

POST COMMAND SHORE | MAJOR COMMAND

SENIOR SERVICE COLLEGE

20 —

CDR 18 — COMMAND

16 —

PCO

14 — XO | POST XO SHORE | XO

LCDR 12 — POST DEPT HEAD SHORE | ¹XO | POST DEPT HEAD SHORE

10 — NAV | NAV | WEPS TSO | IMA RADCON | SLO

ENG | ENG | WEPS TSO | ENG | WEPS/TSO NAV | ENG NAV WEPS/TSO

8 —

LT | SUBMARINE OFFICER ADVANCED COURSE (AOAC)

6 — POST JO SHORE TOUR/P. G. SCHOOL

4 —

LTJG — FIRST SEA TOUR

2 —

ENS — INITIAL TRAINING

Figure 4.   Nuclear Submarine Officer Professional Development Path

1. graduate education and a change of designator to Engineering Duty (1440) with assignments associated with strategic weapons submarines as well as traditional engineering duty assignments;

17
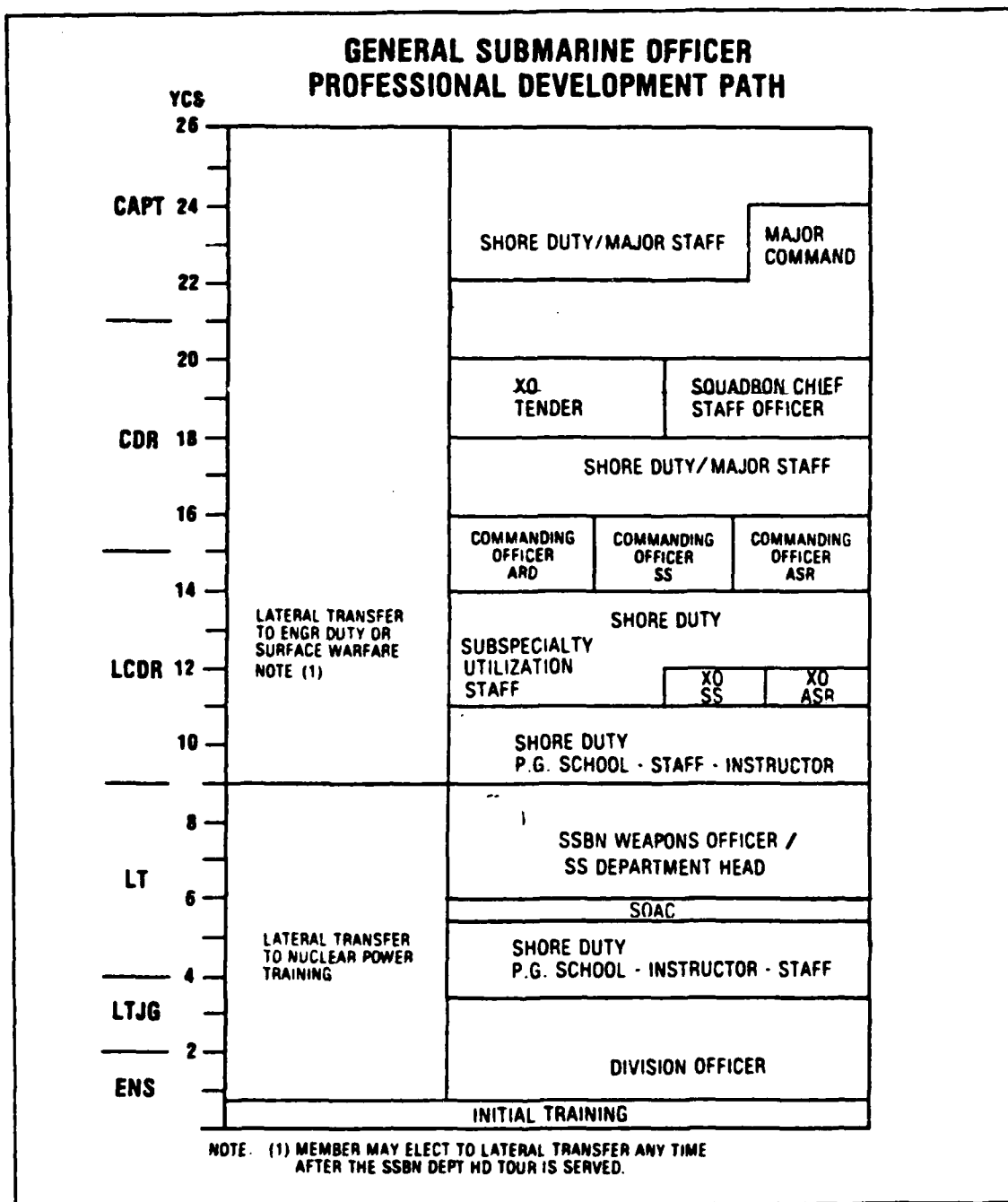
Figure 5. General Submarine Officer Professional Development Path.

2. change of designator to Intelligence (1630), Oceanography (1800), and other areas of the restricted line;

3. change of designator to Surface Warfare Officer (1110/1160); and

4. application for nuclear propulsion training.

During the first sea tour the officer will complete the submarine qualification program, and during the latter part of tour, complete qualification as a Weapons Department head. After completing the basic qualifications, between 2 1/2 to 3 1/2 years commissioned service, the GSO will expect a first shore duty assignment for a period of 2 years.

The first shore tour is often in a general submarine weapons/navigation training assignment at one of several submarine training activities. Assignment to a submarine operational staff is also possible. If the officer has been selected for graduate education, he will be considered for assignment to NPS.

The second sea tour is normally the department head tour. During this tour the GSO proceeds with his qualification for command certification which is a strong indicator of the officer's maturity, professional competence, and leadership. As a post-department head GSO, the officer will enter a transition period at about 9 years commissioned service. He must now determine which of the career options discussed above he desires to pursue. The detailer will provide information upon which following assignments will be based.

The second shore tour will commence near the ninth year of commissioned service and will again be about 2 years long. This will be the second opportunity to obtain Navy-sponsored graduate education. If the officer acquired graduate education during his first shore tour, this tour will normally be in a submarine specialty billet and will utilize the strategic weapons background or another subspecialty. [Ref. 7: p. 63-65]

4. **General Unrestricted Line**

The General Unrestricted Line (GURL) officers, 81 percent of whom are women, are assigned to a variety of shore billets [Ref. 7: p. 80]. By law women cannot participate in combat mission areas. There are women on certain types of support ships, and in the aviation community, but the numbers are small. The majority of women officers of the line are general unrestricted line (110X). An illustration of the GURL career paths is provided in Figure 6. [Ref. 7: p. 85]

The General Unrestricted Line (GURL) career pattern has been split into two tracks: General and Specialty. On the General track, officers will combine tours in subspecialty area with tours as Executive Officer (XO) and Commanding Officer (CO) at shore field activities. Two thirds of the GURL officers will follow this track. The Specialist track will concentrate solely on a subspecialty area. Selection for this track

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NEW GENERAL URL CAREER PATTERN
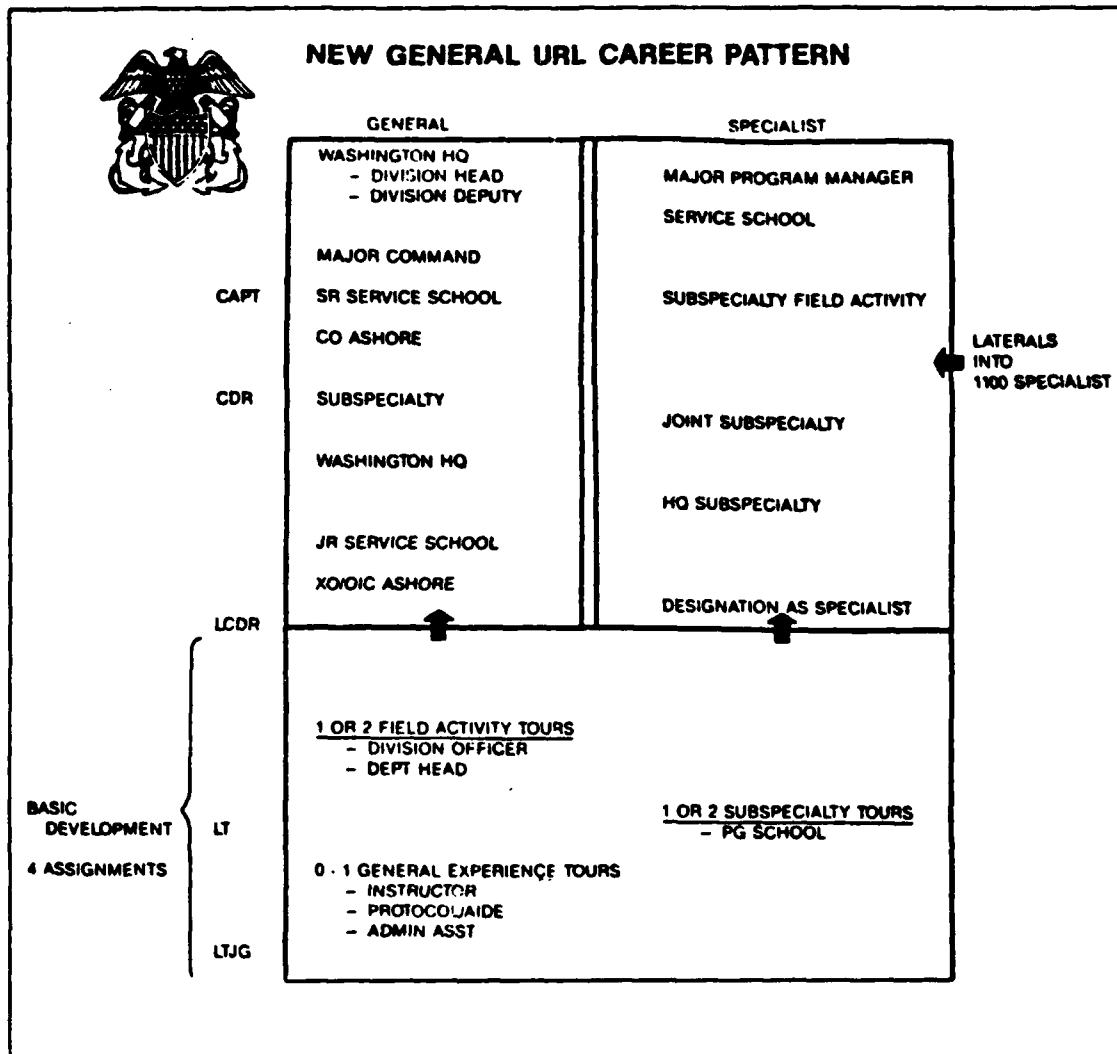
Figure 6. General URL Officer Professional Development Paths

will be made by special board action, normally at the LCDR level. One third of the GURL officers will follow this track. [Ref. 13 : p. 6] Specialists are eligible for all department head, officer-in-charge, XO, and CO positions within the specialty field; however, they must still be CO or XO screened just like all Naval officers. They will not normally be detailed to CO or XO assignments outside their specialty field. [Ref. 5: p. 7] The subspecialties that have been approved for the specialist track are included in Table 3 on page 21. GURL officers who are selected for the specialist track may be eligible for later designation as Materiel Professionals (MP) which "offers the

opportunity for four star rank" [Ref. 4: p. 2]. (The Material Professional program is discussed later.)

The junior officer development of generalists and specialists is similar since both are expected to accumulate leadership experience through responsibility for military and civilian personnel. The major difference in junior officer career development is that the individual who aspires to become a specialist should focus on graduate education and subspecialty development much earlier than the generalist. Graduate education is important for both tracks. [Ref. 14: p. 4]

Table 3. GURL SUBSPECIALTIES SELECTED TO SERVE ON THE SPECIALIST TRACK

Subspecialty	Junior Paygrade on Specialist Track
Naval/Joint Intelligence (XX16, XX17)	LCDR
Financial Management (XX31)	LCDR
Manpower Analysis (XX33)	LCDR
Transportation Management (XX35)	LCDR
Education and Training (XX37)	CDR
Organizational Effectiveness (XX38)	LCDR
Antisubmarine Warfare (XX44)	LT
Command and Control (XX45)	LCDR
Naval Mechanical Engineering (XX54)	LCDR
Underwater Acoustics (XX56)	LCDR
Weapons Systems Technology (XX61)	LCDR
Chemistry (XX62)	LT
Physics (XX63)	LT
Space Operations (XX76)	LCDR
Space Engineering (XX77)	LCDR
Communications Engineering (XX81)	LCDR
Communication Systems Technology (XX82)	LCDR
Computer Science (XX91)	LCDR
Computer Systems (XX95)	LCDR

C. MATERIEL PROFESSIONAL

The MP program was developed as a self-sustaining career path for high quality naval officers from Commander (O-5) to flag rank to improve the management of systems acquisition, logistics, facilities, and technology [Ref. 15: p. 1] The term materiel refers to arms, ammunition, and equipment in general. In the Navy's operational world, the direction of one's career revolves around a warfare specialty associated with a

platform of some type. The acquisition and materiel support world, however, is a function of formal education, personal materiel experience and aptitude. The MP community is concerned with a system's entire life cycle and emphasizes identification of key individuals responsible for the development, fielding, and support of complex systems. [Ref. 16: p. 2] (For more information concerning the MP Program, consult SECNAVINST 1040.1 and OPNAVINST 1040.9.)

IV. METHODOLOGY

A survey was used to determine if there is a negative perception about the Communications Subspecialty. A copy of the questionnaire is provided as Appendix C. The questionnaire was sent to Naval officers with a subspecialty code in Telecommunications Systems Technology (code XX82X). A mailing list and mailing labels for this group of officers were obtained from the Naval Military Personnel Command (NMPC). The mailing list contained the names of the students currently in the Telecommunications Systems Management curriculum at NPS. These students were used as a pretest group.

A. PRETEST

A draft of the questionnaire was pretested on 22 members of the telecommunications curriculum and the curriculum officer. The purpose of the pretest was to see if the questionnaire was simple to fill out and that the responses would be in a form that could be easily evaluated and correlated. To ensure an adequate number of responses, the questionnaire was designed to be quickly and easily completed. The communications experience of the group ranged from zero to seven tours in communications. The participants were asked to complete the questionnaire and then to comment on the questionnaire itself. The pretest pointed out some flaws with the questionnaire, which were corrected in the final draft.

B. MAILING LIST

Two hundred and fifty questionnaires were mailed. Of that number, 17 were returned unopened with no forwarding address, another 17 were inadvertently mailed to medical officers with 1082X and 1682X subspecialty codes. A total of 236 questionnaires of the remaining 416 mailed were completed and returned, for a response rate of about 57 percent. It was intended that franked return envelopes (envelopes printed with return postage permit on them) be included with the questionnaire, to make it easy for officers to respond. The Navy has recently stopped using franked envelopes, and started using metered postage for official business. The procedure for metered mail is to use plain envelopes with the command's return address stamp, and then to send the

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command mail facility where it is run through a postage meter for correct postage. Since this is a relatively new procedure, not everyone is familiar with it. About one third of the responses were returned using the new postage meter system. Another third were returned in franked envelopes provided by the respondent's command. The rest were returned in the plain envelope provided but with a 22¢ stamp supplied by the respondent. This confusion may have decreased the amount of responses. An explanation should have been provided in the cover letter.

C. QUESTIONNAIRE DESIGN

The questionnaire (provided as Appendix C) was designed to gather some demographic data as well as opinions of the subjects included in the study. The demographic data can be used to see if there is any correlation between these characteristics and the opinions of the individuals. The demographic data were provided for in the **Personal Profile** section of the questionnaire. This section requested information on rank, designator, sex, subspecialty code(s), and educational background.

The second part of the questionnaire was the **Questions** section. The first question was actually additional demographic information. It asked the respondent to list all communication billets held and to include the billet title, command, and date. The remaining questions were written with multiple choice answers. The final choice in each question was a general "other" to catch all of the the answers that did not fit one of the given choices or it could be used to expound on a particular answer. Multiple choice responses were used so that the questionnaire would be completed quickly and easily, and to facilitate statistical calculations on the group of responses.

Questions 2 through 7 deal with career issues and were designed to determine the primary sources of information that officers use for guidance in their specialty and subspecialty areas. The second question asked for the officer's main source of career guidance. This question relates mainly to the specialty or warfare area:

2. What is your main source of career guidance? (Please select one)

( ) Senior Officers at command

( ) Perspective

( ) Detailer

( ) Peers with same designator

( ) Senior officers with same designator

( ) Other (describe)

The purpose of question 3 was to gather some data regarding the Telecommunications Systems Management Curriculum at the Naval Postgraduate School and its perceived effect on the individual's career:

3. If you have had a tour(s) in communications, how well did the Telecommunications Systems Management course at Naval Postgraduate School prepare you for that tour(s)? (Please select one)

( ) I have not had a tour in communications.

( ) I did not attend NPS.

( ) I attended another course at NPS.

( ) The course provided me with the background knowledge I needed for a tour in communications.

( ) The course did not prepare me for a tour in communications.

( ) Other (specify)

Question 4 sought the officer's opinion on how the Communications Subspecialty has affected his or her career:

4. In your opinion, how has the Communications Subspecialty effected your career?

( ) Positively?

( ) Negatively? (please explain)

( ) No effect?

( ) The positive and negative points have balanced out?

( ) Other (specify)

To further investigate the individuals feelings concerning the subspecialty, the next question asked if the officer thought positively enough about the subspecialty to recommend it to others:

5. What would you say to someone who came to you for advice concerning the communications subspecialty today? (We will assume that you would recommend that he/she concentrate on his/her warfare specialty.)

( ) I would recommend the communications subspecialty without hesitation.

( ) I would not recommend the communications subspecialty, but would encourage him/her toward another subspecialty. Specify_____

( ) I would not recommend subspecializing at all.

( ) Other recommendations (please specify)

Question 6 refers to the most useful source of information specifically concerning the communications subspecialty. It was asked to see where officers with the subspecialty find information about the subspecialty:

6. What, in your opinion, is the best source of information about the Communications Subspecialty? (check one and fill in the blank)

NMPC (specify code/title)_____

OPNAV (specify code/title)_____

Naval Postgraduate School (specify code/title)_____

I do not know of a good source.

Officers with the communications subspecialty code.

Other (specify)

The next question is actually a series of questions. It is a list of possible changes to the communications subspecialty. The respondents are asked to give an opinion on each one. The last space is provided for the individual to make other recommendations or to comment on the suggestions:

7. Several suggestions have been made concerning changing the Communications Subspecialty. What is your opinion of these suggestions? (circle)

yes/no   The subspecialty should be more technically oriented.

yes/no   The subspecialty should be more management oriented.

yes/no   The subspecialty should be limited to LDO/CWO community.

yes/no   The subspecialty should be limited to the GURL community.

yes/no   The subspecialty should be limited to the URL community.

Other recommendations (please specify)

Question 8 asked if the individual would be interested in a possible follow up to the questionnaire.

8. If your would be interested in a possible follow up interview to this questionnaire pleas put your name, address, and AUTOVON phone number in the space provided below.

The final question was an open-ended question to solicit any other feelings, opinions, and/or recommendations individuals might have concerning the communications subspecialty. This final question provides a place for people to comment on areas they feel were excluded from the survey, or to give further explanation on some of their responses.

9. Do you have any additional comments or suggestions concerning the telecommunications subspecialty? (Answer in space provided or attach additional sheets as needed)

As mentioned earlier, the questionnaire was designed for easy completion. The questions were modified so that they would fit on one sheet of paper. A cover letter was attached introducing the author and asking that the questionnaire be completed and returned as quickly as possible.

V. QUESTIONNAIRE RESULTS

A. DATA EVALUATION

Data from the completed questionnaires were coded and formatted for SPSS, a Statistical Package for the Social Sciences, which is an integrated system of computer programs designed for the analysis of social science data. [Ref. 17: p. 1] The type of SPSS package available was the $SPSS^{x®}$ Information Analysis System which is a comprehensive automated tool for managing, analyzing, and displaying information. It can take data from any type of file and turn them into meaningful information: tabulated reports, plots of distribution, and results from a wide variety of statistical procedures. $SPSS^x$ bri gs together data management, report writing, and statistical analysis in one comprehensive system with a single language. [Ref. 18: p. 1] $SPSS^x$ generated frequency barcharts, and crosstabulations are used in this chapter.

The crosstabulation commands were used to display the frequency of responses classified by two variables such as an "officer's designator" and "officer's main source of career guidance." The pattern of responses can be analyzed with the chi-square test of independence.

The chi-square statistic is used to test the assumption that the two variables are unrelated (called in statistical language "independent".) Independence implies that the distribution of variable A at any level of variable B is the same as the distribution of variable A summed over all levels of variable B. The chi-square statistic is calculated by computing the cell frequencies which would be expected if no relationship is present between the variables, given the existing row and column totals (marginals). The expected cell frequencies are then compared to the actual values found in the table according to the formula: (x_a is the actual frequency, and x_e is the expected frequency)

$$\sum \frac{(x_a - x_e)^2}{x_e}$$

The greater the discrepancies between the expected and actual frequencies, the larger chi-square becomes. If no relationship exists between two variables in the sample under study, then any deviations from the expected values which occur in a table based on randomly selected sample data are due to chance. While small deviations can be

reasonably expected due to chance, large deviations, i.e., large values of chi-square, are unlikely. Since the actual relationship in the universe is unknown, small values of chi-square are interpreted to indicate the absence of a relationship, often referred to as statistical independence. Conversely, a large chi-square implies that a systematic relationship of some sort exists between the variables. [Ref. 17: pp. 223-224]

The significance figure provided by the *SPSS*[x] package is an expression of the probability that the chi-square value was obtained from a sample in which variable A and variable B are independent. If the probability is less than 0.05 (or as a percentage: 5 percent) it is likely that the relationships in the crosstabulations are not due to chance but to some kind of dependence between the variables. In statistical language, the hypothesis of independence between the two variables is rejected. Therefore, the distribution of one variable is likely to change between levels of the other variable. The responses to many of the questions are crosstabulated with other variables to see if there is a relationship between the answers and demographics. The crosstabulations will be provided in figures throughout this chapter.

B. DEMOGRAPHICS

The demographic information from the 236 questionnaires that were completed and returned shows that a variety of officers responded. The distribution of rank is displayed in Figure 7. It was interesting to note that senior officers returned their questionnaires more quickly than junior officers.

The designator distribution shows a wide range of fields. Some of the smaller groups were combined with similar designators for the statistical evaluation. The Submarine Warfare group (1120) was combined with the Surface Warfare (active 1110 and TAR 1117) group because all have similar sea/shore rotations. All of the respondents in the 110X, 12XX, 13XX, categories were combined for each designator group. The final category included the 61XX respondents and the unknown respondent. (See Figure 8)

The distribution for sex, subspecialty code and number of communication jobs are provided as Figure 9, Figure 10, and Figure 11, respectively.

Fifty two questionnaires did not have the subspecialty code filled in. The code was filled in by the researcher based on the following criteria:

- if the officer attended NPS in the Telecommunications Systems Management curriculum, the subspecialty code was assumed to be 82P.

- if the officer did not have graduate education, but had one or more tours in communications billets, then the subspecialty code was assumed to be 82S.

RANK	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
LT	20	8.5	8.5	8.5
LCDR	114	48.3	48.3	56.8
CDR	66	28.0	28.0	84.7
CAPT	32	13.6	13.6	98.3
RADM	4	1.7	1.7	100.0
TOTAL	236	100.0	100.0	

```
RANK            I
                -----+
   LIEUTENANT   I 20 I
                -----+
                I
   LIEUTENANT   ------------------------------+
   COMMANDER    I                         114 I
                ------------------------------+
                I
                -----------------+
   COMMANDER    I            66 I
                -----------------+
                I
                ---------+
   CAPTAIN      I    32 I
                ---------+
                I
   REAR         -+
   ADMIRAL      II 4
                -+
                I
                I.........I.........I.........I.........I.........I
                0        40        80       120       160       200
                                   FREQUENCY
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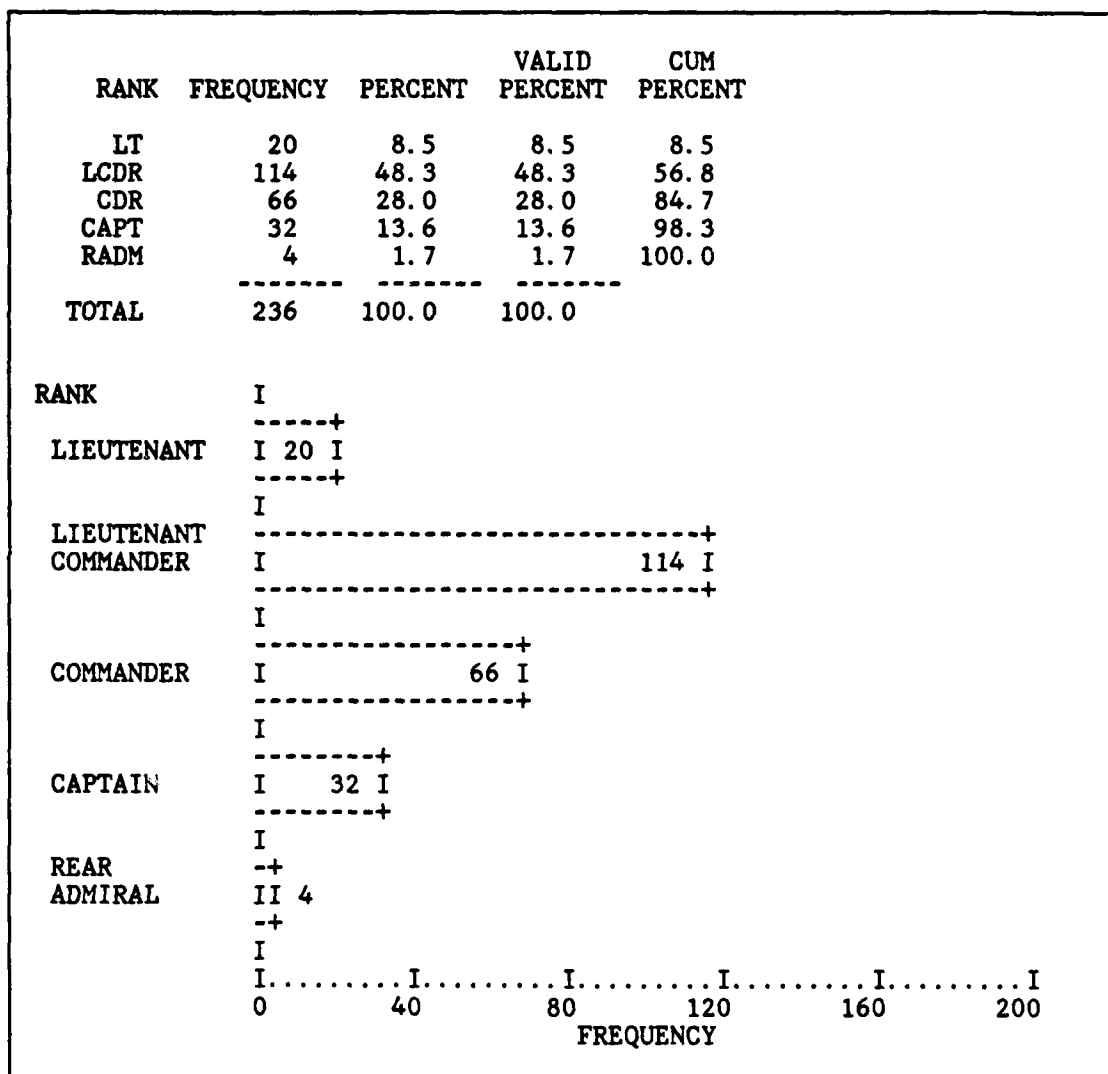
Figure 7. Response Distribution by Rank

C. QUESTION 1

Approximately 50 percent of the respondents attended the Naval Postgraduate School, but not all of them were in the Telecommunications Systems Management curriculum. Of that 50 percent, about half (47 percent) did have subspecialty codes which indicate graduate education in communications. The distribution is shown in Figure 12.

DESIGNATOR	FREQUENCY	PERCENT	VALID PERCENT	CUM PERCENT
1100/1105	56	23.7	23.7	23.7
1110/1117/1120	116	49.2	49.2	72.9
12XX	5	2.1	2.1	75.0
13XX	42	17.8	17.8	92.8
14XX	3	1.3	1.3	94.1
1610	11	4.7	4.7	98.7
OTHER	3	1.3	1.3	100.0
	-----	-------	-------	
TOTAL	236	100.0	100.0	

```
DESIGNATOR       I
                 --------------+
    1100/1105    I          56 I
                 --------------+
                 I
                 ------------------------------+
1110/1117/1120   I                       116 I
                 ------------------------------+
                 I
                 -+
        12XX     II 5
                 -+
                 I
                 -----------+
        13XX     I       42 I
                 -----------+
                 I
                 -+
        14XX     II 3
                 -+
                 I
                 ---+
        1610     I  I 11
                 ---+
                 I
                 -+
       OTHER     II 3
                 -+
                 I
                 I.........I.........I.........I.........I
                 0        40        80       120       160
                             FREQUENCY
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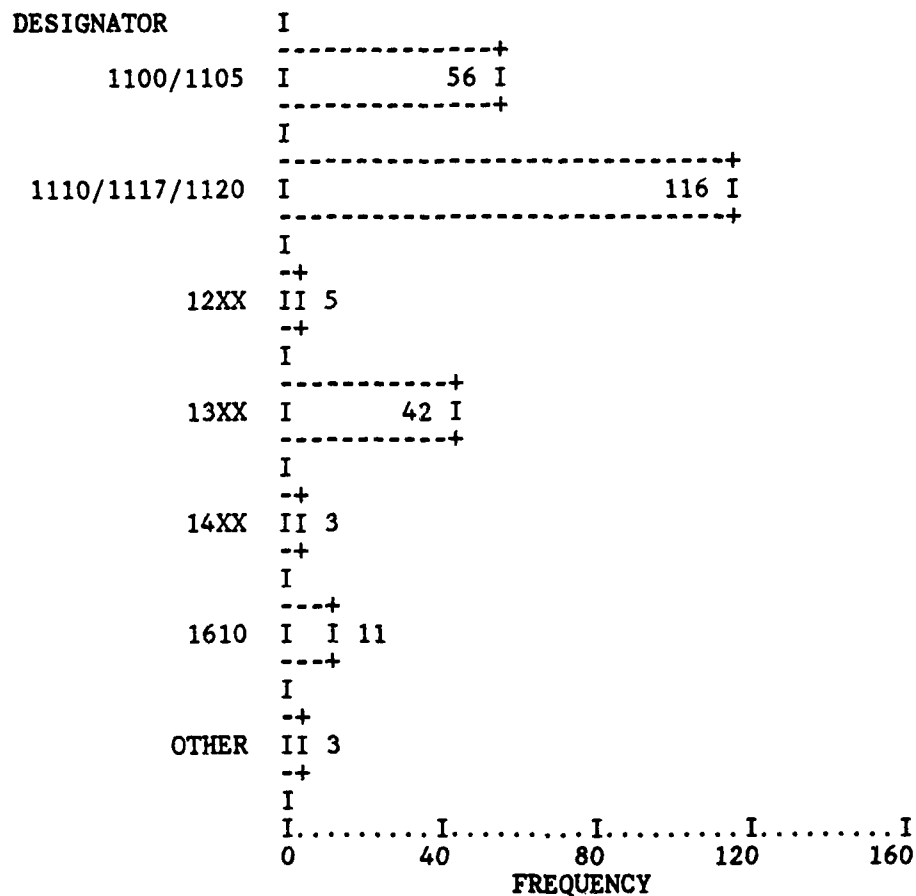
Figure 8.   Distribution by Designator

```
                              VALID      CUM
        SEX      FREQUENCY   PERCENT   PERCENT   PERCENT

      FEMALE        59        25.0      25.0      25.0
      MALE         177        75.0      75.0     100.0
                  -----      ------    ------
      TOTAL        236       100.0     100.0


SEX
           I
           ----------------+
  FEMALE   I          59 I
           ----------------+
           I
           ------------------------------------------------+
  MALE     I                                        177 I
           ------------------------------------------------+
           I
           I.........I.........I.........I.........I.........I
           0        40        80       120       160       200
                                               FREQUENCY
```
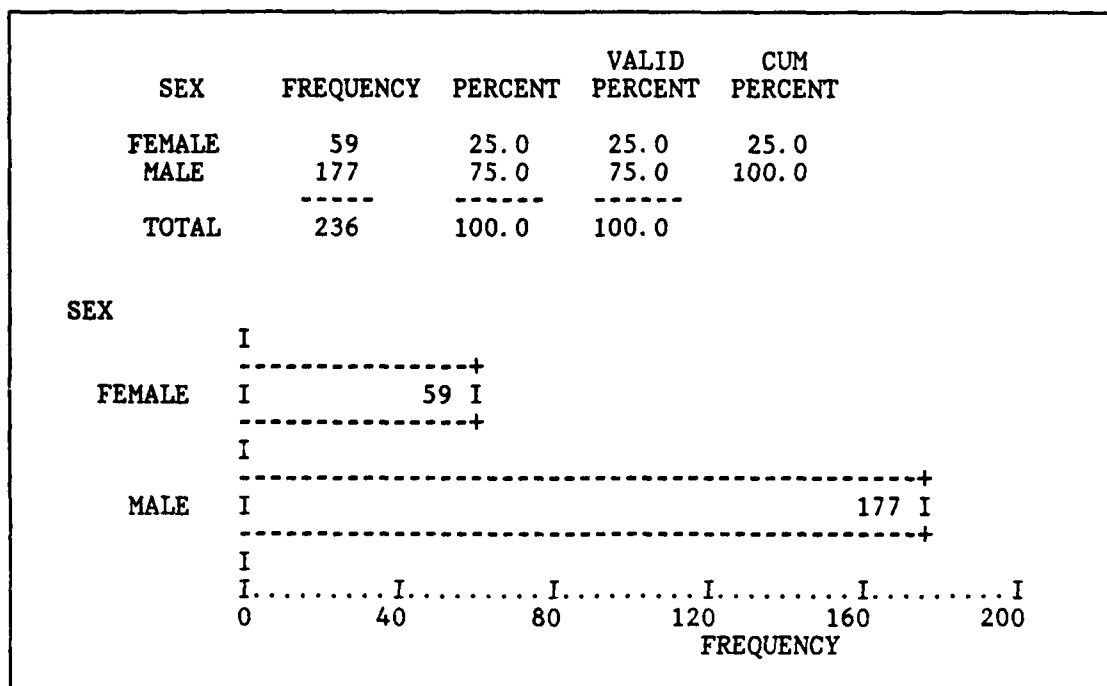
Figure 9.   Response Distribution by Sex

D. QUESTION 2

The primary response to Question 2, concerning the officer's main source of career guidance was "Senior Officers with the same designator." Approximately 31 percent of the officers marked this answer, as shown in Figure 13.

The data from this question were crosstabulated with the designator data. The crosstabulation, Table 4 on page 33, shows a very small significance value and a very large chi-square; this indicates that there is a strong relationship between designator and an officer's main source of career guidance. The 110X, 11XX, and 12XX communities all indicated that their main source of career guidance is "Senior officers with same designator", and the 13XX indicated the importance of "Senior officers at their command". This tabulation also points out the importance of *perspective* , the navy officers' professional bulletin, to GURL, which is a relatively small group and who may not have access to senior officers with that designator.

The crosstabulation between source of career guidance and NPS attendance also showed a significant relationship between these variables. As shown in Table 5 on page 36, the portion of officers that attended NPS utilize senior officers with same designator for career guidance. The group that did not attend NPS was fairly evenly distributed

```
SUBSPECIALTY                       VALID      CUM
    CODE      FREQUENCY   PERCENT   PERCENT   PERCENT

    82F           9         3.8       3.8       3.8
    82G          17         7.2       7.2      11.0
    82P          49        20.8      20.8      31.8
    82Q          46        19.5      19.5      51.3
    82R          27        11.4      11.4      62.7
    82S          88        37.3      37.3     100.0
                -------   -------   -------
    TOTAL       236       100.0     100.0

SUBSPECIALTY
    CODE     I
             -----+
    82F  I  9 I
             -----+
             I
             ---------+
    82G  I      17 I
             ---------+
             I
             -------------------------+
    82P  I                        49 I
             -------------------------+
             I
             ------------------------+
    82Q  I                       46 I
             ------------------------+
             I
             ---------------+
    82R  I        27 I
             ---------------+
             I
             -------------------------------------------+
    82S  I                                          88 I
             -------------------------------------------+
             I
             I.........I.........I.........I.........I.........I
             0        20        40        60        80       100
                               FREQUENCY
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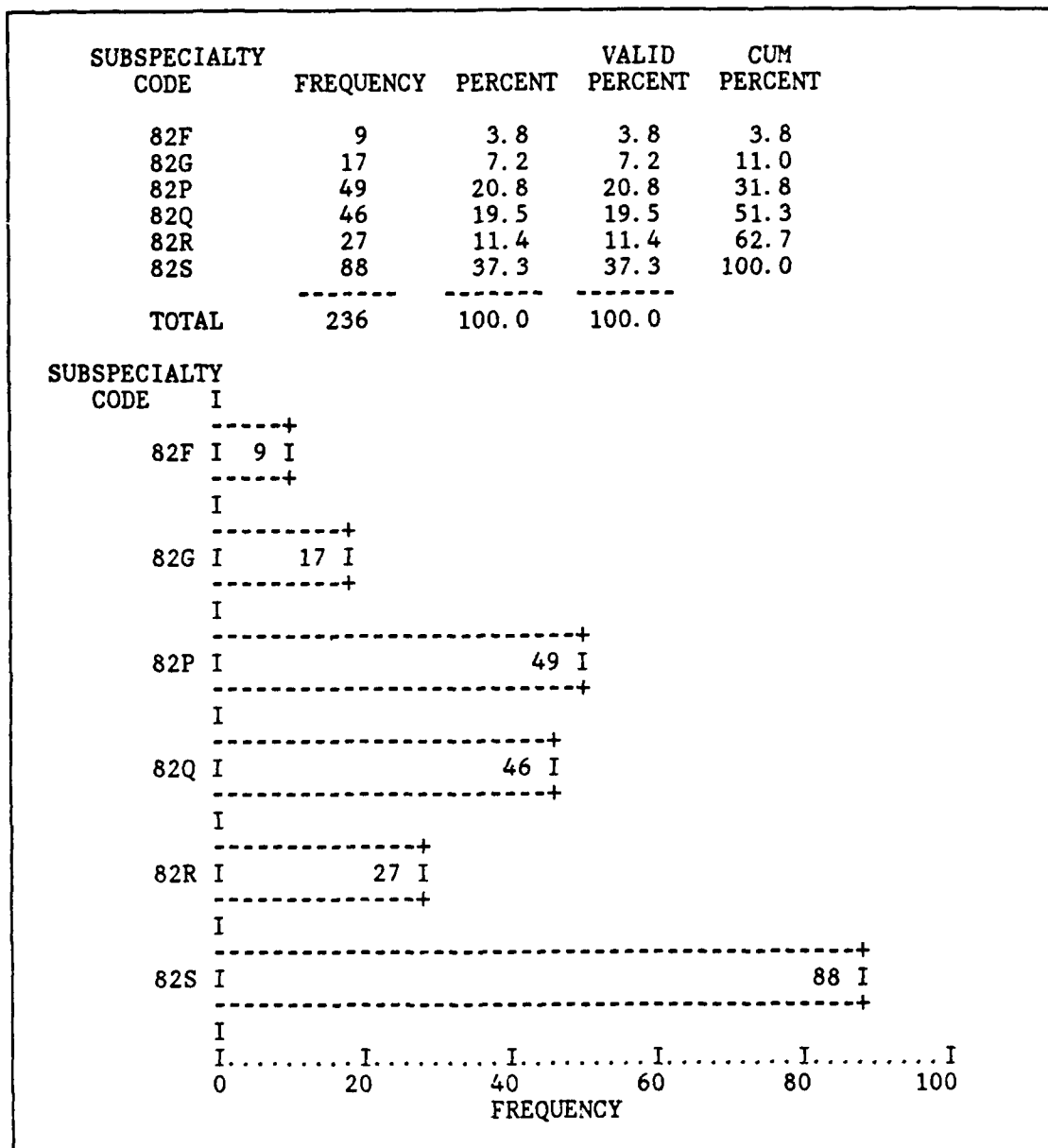
Figure 10.   Response Distribution by Subspecialty Code

across four of the responses, but the majority of the people indicated their main source of guidance was senior officers with same designator.

The responses in the "Other" category had the second highest frequency, at 21.6 percent. The written responses in this section indicated that people rely on combinations

```
         NUMBER OF
         COMMUNICATION     I
             JOBS          I  -------------+
                         0 I              19 I
                           I  -------------+
                           I
                           I  -----------------------------+
                         1 I                              36 I
                           I  -----------------------------+
                           I
                           I  --------------------------------------------------+
                         2 I                                                   61 I
                           I  --------------------------------------------------+
                           I
                           I  -----------------------------------+
                         3 I                                    41 I
                           I  -----------------------------------+
                           I
                           I  ----------------------------+
                         4 I                             32 I
                           I  ----------------------------+
                           I
                           I  ----------------------+
                         5 I                       26 I
                           I  ----------------------+
                           I
                           I  --------+
                         6 I     10 I
                           I  --------+
                           I
                           I  -----+
                         7 I  7 I
                           I  -----+
                           I
                           I  -+
                         8 II 2
                           I  -+
                           I
                           I  -+
                         9 II 2
                           I  -+
                           I
                           I........I........I.........I.........I.........I.........I
                           0       15       30        45        60        75
                                            FREQUENCY
```
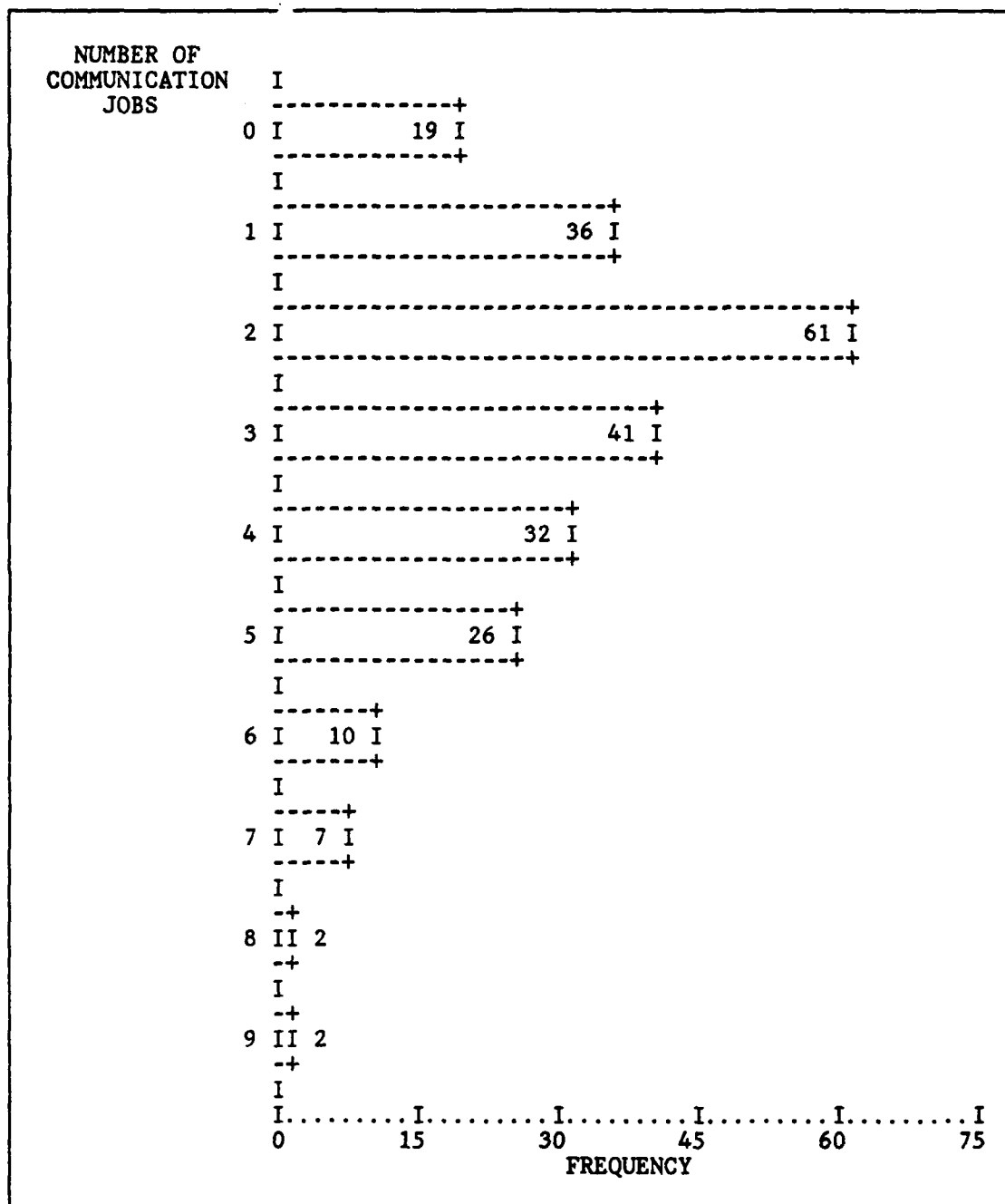
Figure 11.   Response Distribution by Number of Communications Billets

of the resources mentioned, or that the officer relies mainly on his or her desires. For example:

- Personal experience/observation of peers and seniors.

34

• Peers with same designator, Senior Officers with same designator, and my own intuition.

Table 4. CROSSTABULATION OF "DESIGNATOR" BY "SOURCE OF CAREER GUIDANCE"

COUNT PCT Main Source of Career Guidance	Designator 110X	111X/ 1120	12XX	13XX	14XX	1610	Other	TOTAL
Senior officers at command	6 10.7%	26 22.4%	0 .0%	13 40.0%	1 33.5%	0 .0%	0 .0%	
Perspective	13 23.2%	8 6.9%	0 .0%	2 4.8%	0 .0%	0 .0%	0 .0%	23
Detailer	2 3.6%	18 15.5%	0 .0%	1 2.4%	0 .0%	2 18.1%	1 33.5%	24
Peers w/ same designator	3 5.4%	8 7.0%	0 .0%	4 9.5%	0 .0%	3 27.3%	0 .0%	18
Senior officers same designator	20 35.7%	36 31.0%	4 80.0%	10 23.8%	1 33.3%	3 27.3%	0 .0%	74
Other	12 21.4%	20 17.2%	1 20.0%	12 28.6%	1 33.3%	3 27.3%	2 66.5%	51
COLUMN TOTAL	56 100%	116 100%	5 100%	42 100%	3 100%	11 100%	3 100%	236

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
53.50026	30	0.0052	0.229	28 OF 42 (66.7%)

35

```
                                       VALID      CUM
ATTENDED NPS?    FREQUENCY    PERCENT   PERCENT    PERCENT

    NO              116        49.2      49.2       49.2
    YES             120        50.8      50.8      100.0
                   ------     -------   -------
  TOTAL             236       100.0     100.0
```

```
ATTEND NPS?
            I
            +------------------------------+
    NO      I                           116 I
            +------------------------------+
            I
            +------------------------------+
    YES     I                           120 I
            +------------------------------+
            I
            I.........I.........I.........I.........I
            0        40        80       120       160
                           FREQUENCY
```
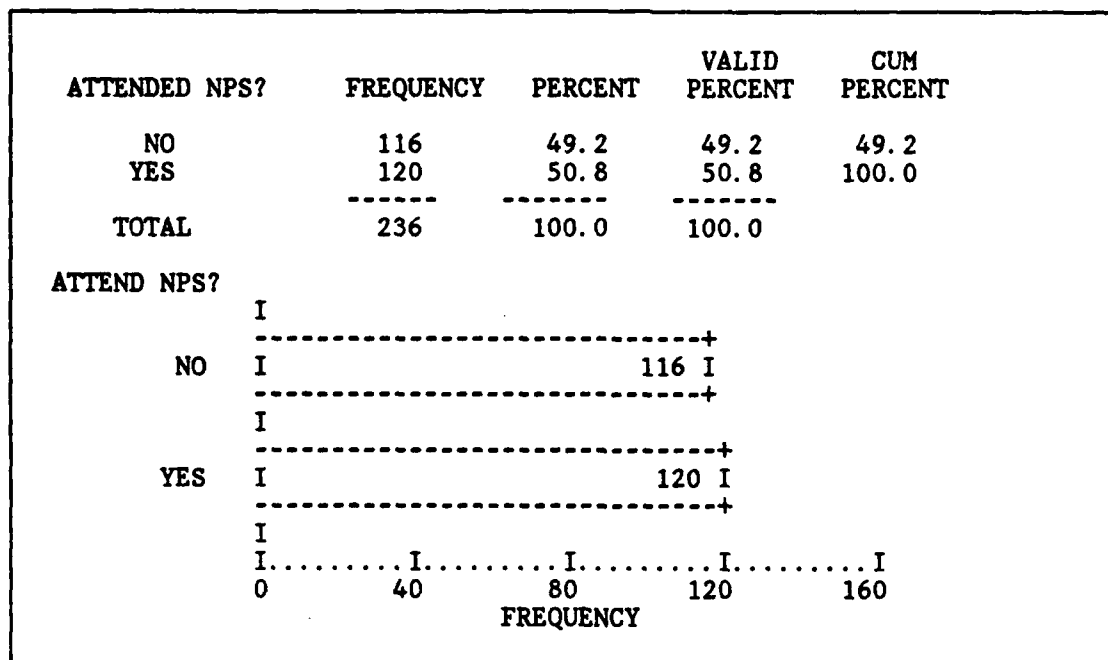
Figure 12.   Response Distribution of NPS Attandence

Table 5.   CROSSTABULATION OF "SOURCE OF CAREER GUIDANCE" BY
           "NPS ATTENDANCE"

```
                   COUNT  I                ROW
                     PCT  I               TOTAL
      Source of           I
    Career Guidance       I   No   I  Yes  I
                          +--------+--------+
    Senior officers       I  24  I   22  I    46
       at command         I 52.2% I 47.8% I  100%
                          +--------+--------+
    PERSPECTIVE           I  13  I   10  I    23
                          I 56.5% I 43.5% I  100%
                          +--------+--------+
    Detailer              I  20  I    4  I    24
                          I 83.3% I 16.7% I  100%
                          +--------+--------+
    Peers with same       I   9  I    9  I    18
      designator          I 50.0% I 50.0% I  100%
                          +--------+--------+
    Senior officers       I  26  I   48  I    74
    same designator       I 35.1% I 64.9% I  100%
                          +--------+--------+
    Other                 I  24  I   27  I    51
                          I 47.0% I 53.0% I  100%
                          +--------+--------+
               COLUMN        116     120      236
```

```
CHI-SQUARE    D.F.     SIGNIFICANCE     MIN E.F.    CELLS WITH E.F.< 5
----------    ----     ------------     --------    ------------------
 17.79926      5          0.0032         8.847            NONE
```

```
MAIN SOURCE OF                                  VALID     CUM
CAREER GUIDANCE            FREQUENCY   PERCENT   PERCENT   PERCENT

Senior Officers at command    46        19.5      19.5      19.5
perspective                   23         9.7       9.7      29.2
Detailer                      24        10.2      10.2      39.4
Peers with same designator    18         7.6       7.6      47.0
Senior Officers, same desig   74        31.4      31.4      78.4
Other                         51        21.6      21.6     100.0
                            -----     -------   -------
                    TOTAL    236       100.0     100.0
        Source
                    I                            .
                    I
 Senior Officers    --------------------------------+
    at command      I                         46 I
                    --------------------------------+
                    I
                    --------------+
   perspective      I         23 I
                    --------------+
                    I
                    --------------+
    Detailer        I         24 I
                    --------------+
                    I
    Peers with      -----------+
 same designator    I      18 I
                    -----------+
                    I
 Senior Officers    ------------------------------------------------+
 same designator    I                                           74 I
                    ------------------------------------------------+
                    I
                    ------------------------------------+
    Other           I                              51 I
                    ------------------------------------+
                    I
                    I.........I.........I.........I.........I.........I
                    0        15        30        45        60        75
                                    FREQUENCY
```
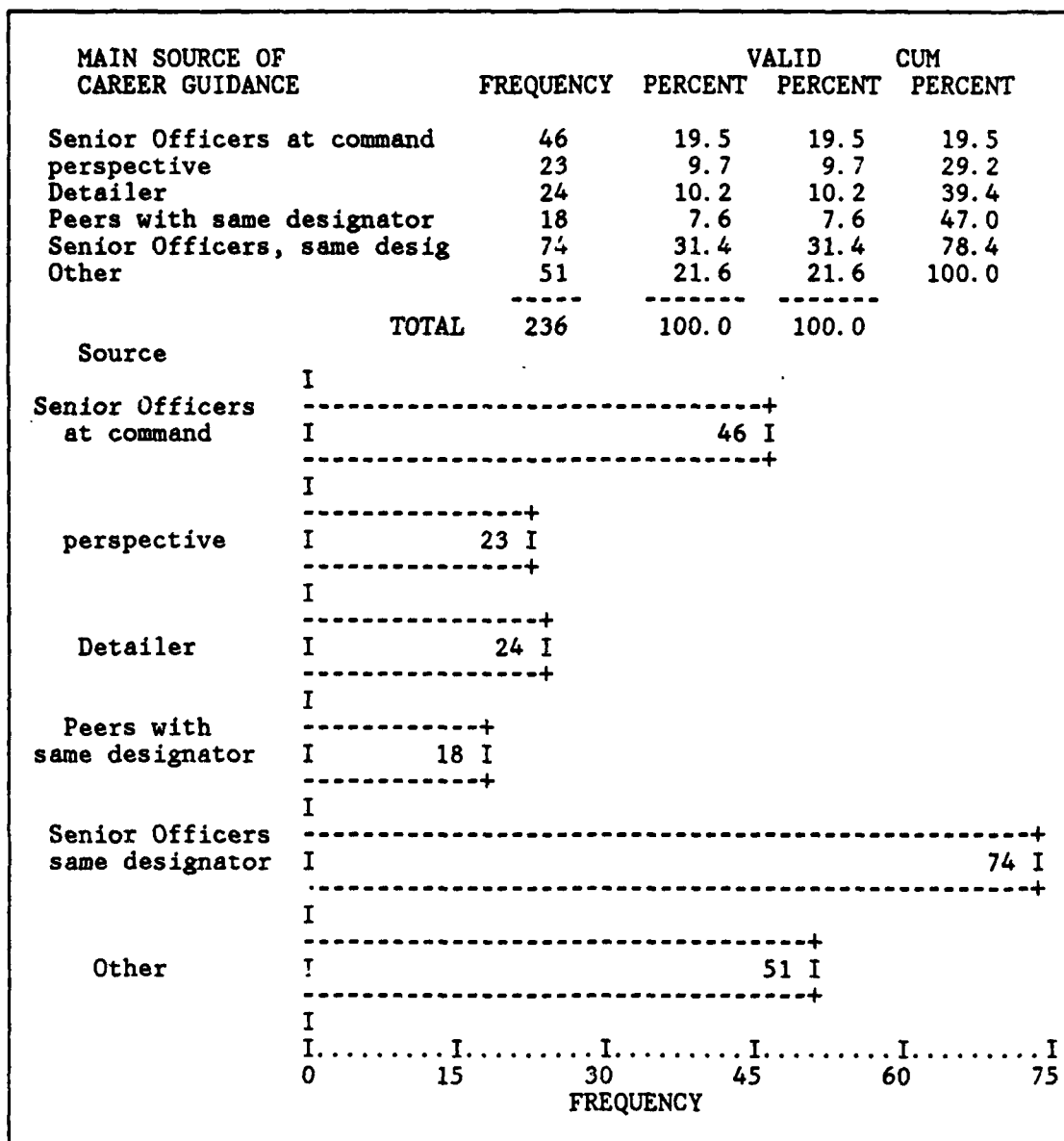
Figure 13.   Response to Question 2

E.   QUESTION 3

The next question involved an evaluation of the Telecommunication Systems
Management curriculum at the Naval Postgraduate School. Excluding everyone who
either did not attend NPS, enrolled in another curriculum, or who have not had a tour
in communications, the response was strongly in favor of the Curriculum. As shown in
Figure 14, 19.1 percent responded that the course provided adequate background for a

37

tour in communications, compared to 6.8 percent who said that the course did not prepare them. Approximately 13 percent marked "Other".

The written comments under "Other" indicated that:

- The NPS course needs to be more oriented toward military communications.

- The course work was interesting, but not vital to follow-on jobs.

- The individual did not go to a communications tour until many years after graduation, so the course work was forgotten or outdated.

F. QUESTION 4

Question 4 asked for an opinion on how the Communications Subspecialty has effected the officer's career. The response was overwhelmingly positive with 45.8 percent indicating that the subspecialty had positively effected their career. The results are displayed in Figure 15.

There were also about 28 handwritten additional comments from positive respondents. Half of the written comments qualified the positive effect with warnings to keep current in the warfare specialty area, and that the Communications Subspecialty may not be viewed as career enhancing. Some examples of the written comments are:

- Extremely satisfying jobs and I would highly recommend it. Personal sense of accomplishment counters many of the negative feelings from the other communities and senior officers. Super job! I have enjoyed being a communicator but it has been detrimental in my community.

- Overall, positively but you must first stay current in your warfare specialty if you are a male officer. For GURL, a strong communications background with NPS is the best way to get positive results from educational experience in a career as a communications subspecialist.

The remainder of the comments were primarily expounding on the positive effect.

- Great managemen education, has been useful and valuable in all billets held since NPS.

- Most likely, without two subspecialties, I would not have been selected for CAPT. I did not have one of the traditional tickets.

The responses to this question were crosstabulated with designator. The results, in Table 6 on page 40, show that across the board the responses were positive for each designator. The 111X/1120 group, however, was evenly divided between positive effect and no effect.

```
How well did TELCOM course at
   NPS prepare you for                               VALID      CUM
   communication job(s)?      FREQUENCY   PERCENT   PERCENT   PERCENT

Have not had a comm tour          19        8.1       8.1       8.1
Did not attend NPS               107       45.3      45.3      53.4
Attended another course at NPS    16        6.8       6.8      60.2
Provided adequate background      45       19.1      19.1      79.2
Course did not prepare me         19        8.1       8.1      87.3
   Other                          30       12.7      12.7     100.0
                               -------   -------   -------
                    TOTAL         236      100.0     100.0
```

```
How well did TELCOM course at
   NPS prepare you for
   communication job(s)?

                           I
Have not had a            -----+
tour in                   I 19 I
communications            -----+
                           I
Did not attend            --------------------------+
   NPS                     I                    107 I
                          --------------------------+
                           I
Attended another          ----+
course at NPS             I   I 16
                          ----+
                           I
Course provided           -----------+
adequate                  I       45 I
background                -----------+
                           I
Did not prepare           -----+
me for tour in            I 19 I
Communications            -----+
                           I
                          --------+
   Other                  I   30 I
                          --------+
                           I
                          I.........I.........I.........I.........I
                          0        40        80       120       160
                                        FREQUENCY
```
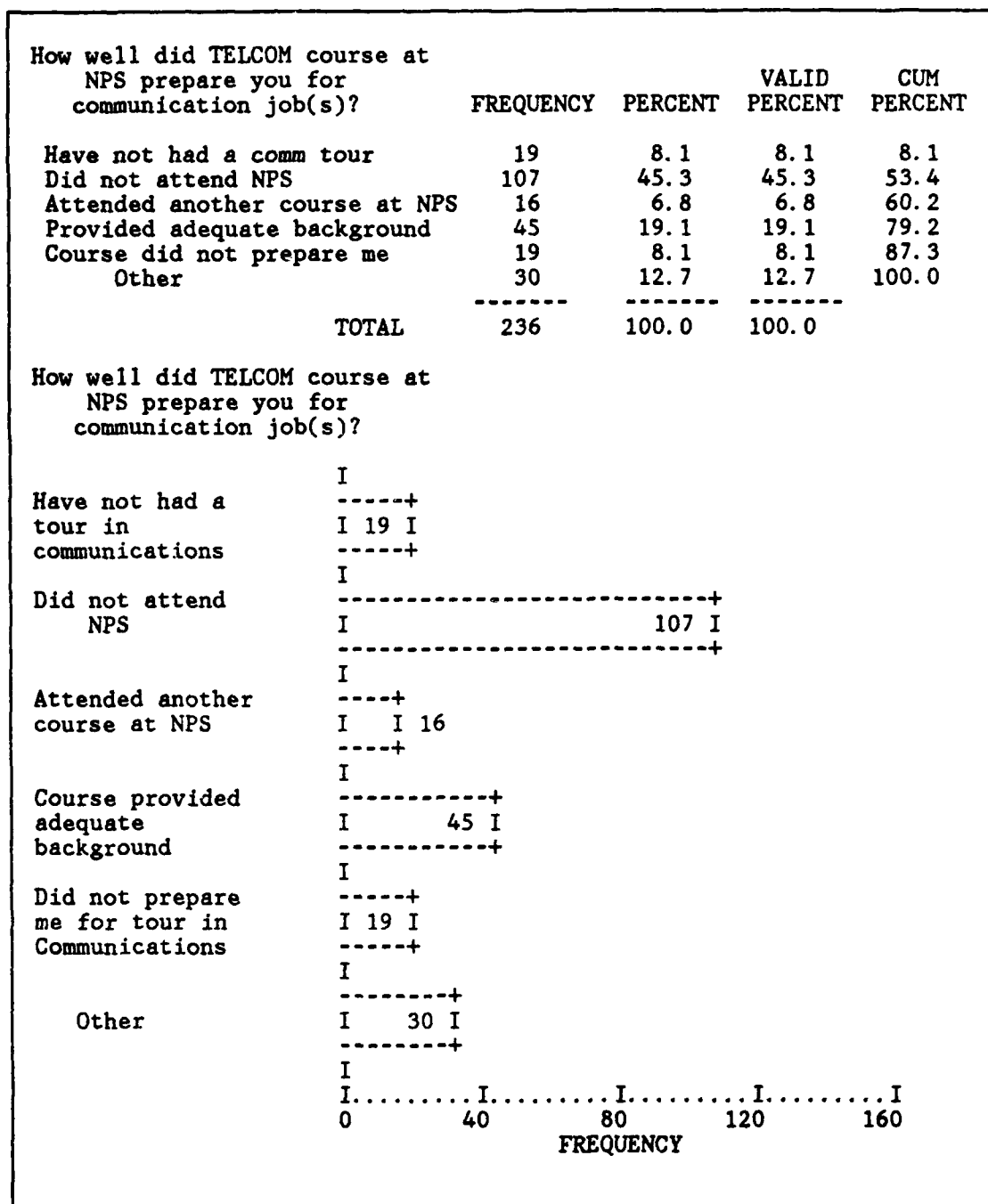
Figure 14.   Response to Question 3

Table 7 on page 40 shows the crosstabulation of career effect by number of communications jobs the officer has held. The distributions for 0 or 1 communications

39

job was fairly evenly divided between positive and no effect. As the number of communications jobs increases the responses become more positive. The significance number (0.0358) validates the dependence of the data.

Table 6. CROSSTABULATION OF "EFFECT ON CAREER" BY "DESIGNATOR"

```
          Designator
   COUNT I
    PCT  I
 Career  I 1100/   111X/                                              ROW
 Effect  I 1105  I 1120  I 12XX I 13XX  I 14XX  I 1610  I other I   TOTAL
         +------+------+------+------+------+------+------+
Positive I   35 I   38 I   4  I   21 I   3  I   5  I   2  I      108
         I 62.5%I 32.7%I 80.0%I 50.0%I 100% I 45.4%I 66.5%I
         +------+------+------+------+------+------+------+
Negative I    1 I   18 I   0  I   4  I   0  I   4  I   0  I       27
         I  1.8%I 15.6%I  .0% I  9.5%I  .0% I 36.4%I  .0% I
         +------+------+------+------+------+------+------+
No Effect I   9 I   38 I   0  I   11 I   0  I   1  I   1  I       60
         I 16.1%I 32.7%I  .0% I 26.2%I  .0% I  9.1%I 33.5%I
         +------+------+------+------+------+------+------+
Balanced I    9 I   11 I   0  I   6  I   0  I   1  I   0  I       27
         I 16.1%I  9.5%I  .0% I 14.3%I  .0% I  9.1%I  .0% I
         +------+------+------+------+------+------+------+
Other    I    2 I   11 I   1  I   0  I   0  I   0  I   0  I       14
         I  3.5%I  9.5%I 20.0%I  .0% I  .0% I  .0% I  .0% I
         +------+------+------+------+------+------+------+
COLUMN      56     116     5     42     3     11     3       236
 TOTAL     100%   100%   100%  100%   100%  100%   100%

CHI-SQUARE   D.F.      SIGNIFICANCE      MIN E.F.     CELLS WITH E.F.< 5

43.84793     24          0.0079          0.178        23 of 35 (65.7%)
```

Table 7. CROSSTABULATION OF "EFFECT ON CAREER" BY "NUMBER OF COMMUNICATIONS JOBS HELD"

```
          Number of Communications jobs
   COUNT  I
 TOT PCT  I
Effect on I                                                            ROW
 Career   I 0 I 1 I 2 I 3 I 4 I 5 I 6 I 7 I 8 I 9  IPERCENT
          +---+---+---+---+---+---+---+---+---+---+
Positive  I10 I12 I24 I17 I17 I14 I 8 I 4 I 1 I 1  I 108
          I   I   I   I   I   I   I   I   I   I    I 45.8%
          +---+---+---+---+---+---+---+---+---+---+
Negative  I 0 I 4 I 5 I 4 I 4 I 5 I 1 I 3 I 1 I 0  I 27
          I   I   I   I   I   I   I   I   I   I    I 11.4%
          +---+---+---+---+---+---+---+---+---+---+
No Effect I 8 I15 I17 I11 I 7 I 2 I 0 I 0 I 0 I 0  I 60
          I   I   I   I   I   I   I   I   I   I    I 25.5%
          +---+---+---+---+---+---+---+---+---+---+
Balanced  I 1 I 2 I 9 I 7 I 2 I 5 I 1 I 0 I 0 I 0  I 27
          I   I   I   I   I   I   I   I   I   I    I 11.4%
          +---+---+---+---+---+---+---+---+---+---+
Other     I 0 I 3 I 6 I 2 I 2 I 0 I 0 I 0 I 0 I 1  I 14
          I   I   I   I   I   I   I   I   I   I    I 5.9%
          I 0%I 3%I.5%I.8%I 8%I.0%I.0%I.0%I.0%I.4% I
          +---+---+---+---+---+---+---+---+---+---+
COLUMN     19  36  61  41  32  26  10   7   2   2   236
 TOTAL                                             100.0%

CHI-SQUARE   D.F.      SIGNIFICANCE      MIN E.F.     CELLS WITH E.F.< 5

52.68891     36          0.0358          0.119        37 OF  50 ( 74.0%)
```
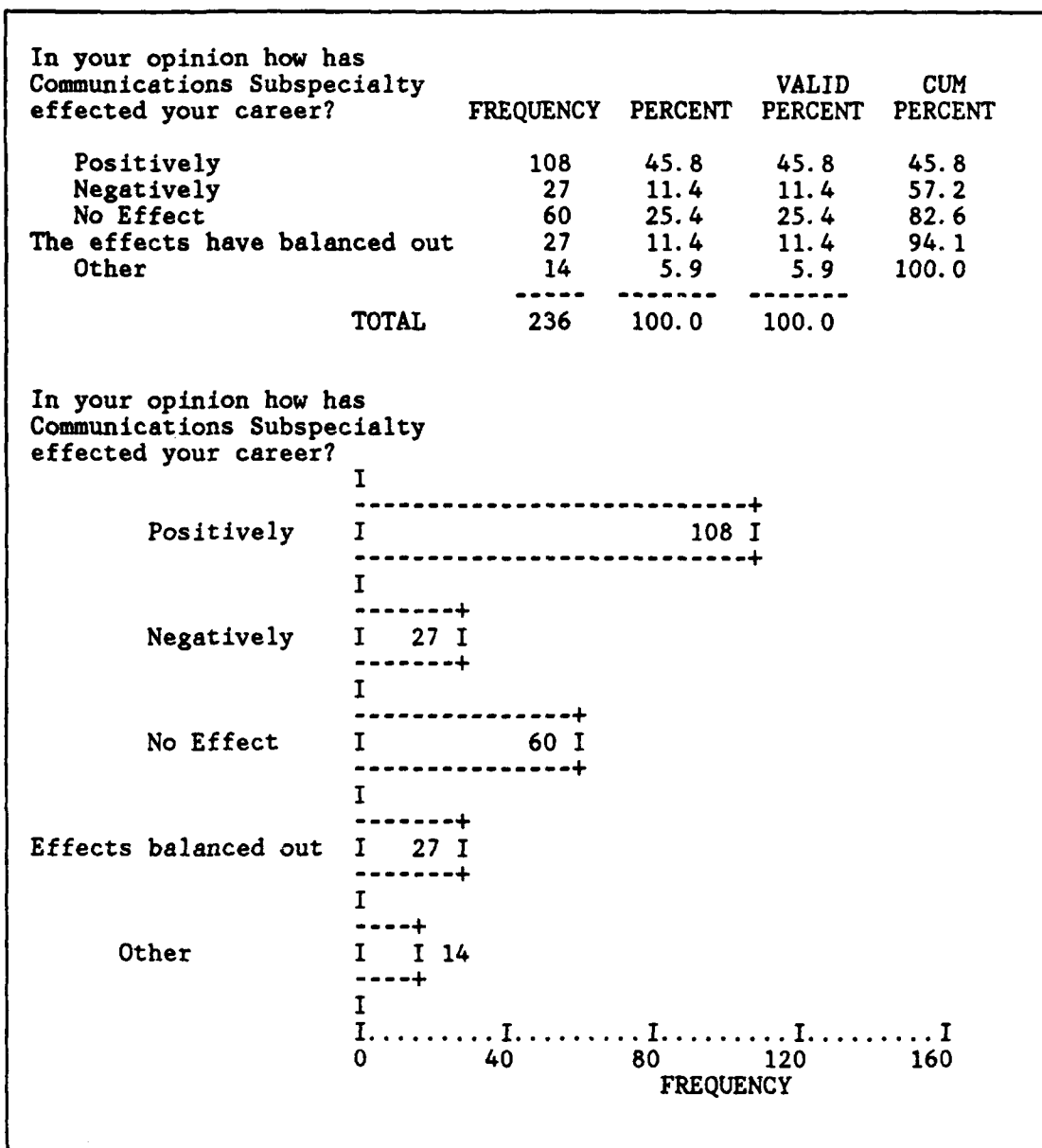
```
In your opinion how has
Communications Subspecialty                          VALID      CUM
effected your career?        FREQUENCY   PERCENT   PERCENT   PERCENT

    Positively                  108       45.8      45.8      45.8
    Negatively                   27       11.4      11.4      57.2
    No Effect                    60       25.4      25.4      82.6
The effects have balanced out    27       11.4      11.4      94.1
    Other                        14        5.9       5.9     100.0
                                -----    -------   -------
                 TOTAL          236       100.0     100.0


In your opinion how has
Communications Subspecialty
effected your career?
                         I
                         -----------------------------+
      Positively         I                        108 I
                         -----------------------------+
                         I
                         -------+
      Negatively         I   27 I
                         -------+
                         I
                         ---------------+
      No Effect          I           60 I
                         ---------------+
                         I
                         -------+
Effects balanced out     I   27 I
                         -------+
                         I
                         ----+
      Other              I  I 14
                         ----+
                         I
                         I.........I.........I.........I.........I
                         0        40        80       120       160
                                          FREQUENCY
```

Figure 15.   Response to Question 4

G. QUESTION 5

Continuing with the perceived effect of the subspecialty, question 5 asked if the officer would recommend the Communications Subspecialty to someone who came to him or her for advice. Once again the response, shown in Figure 16, is overwhelmingly positive with 51.3 percent indicating that they would recommend the subspecialty

without hesitation. The second most frequent response was "Other" 26.7 percent. The comments under "Other" indicated that the individual would recommend the Communications Subspecialty to women (GURL) only, but would not recommend it to men (warfare specialists). Some examples:

- Recommend Communications Subspecialty for women officers in particular, but would recommend for men only if their career goal is to become marketable in second career.

- Would wholeheartedly recommend for female officer. For male, would advise them to look at promotion percentages before jumping in.

- I would recommend NPS, then go to sea and stay at sea until CDR.

There were no crosstabulations with a significance value less than 0.05 for this question.

H. QUESTION 6

Question 6 was designed to find out the group's opinion concerning the best source of information on the Communications Subspecialty. The response indicated that the best source of information is the Communications Subspecialists themselves. The frequency of this answer was 53.4 percent, and is displayed in Figure 17.

The next most frequent answer was "I do not know of a good source of information" at 26.7 percent. The distribution of responses here are especially interesting: over half the officers responding to the questionnaire indicate that the officers themselves are the best source of information concerning the Communications Subspecialty; at the same time, one-fourth of the respondents indicate that they do not know of a good source of information.

The comments written with "Do not know" responses were:

- Unfortunately there is no best source. However much of the slating of the key communications billets is handled in OPNAV-941C. Maybe a newsletter would help.

- CNO OP-941 [Communications] does not have a community manager within NMPC, therefore very little or no community exists.

- If you know of one, let me know.

The crosstabulation showed a significance value less than 0.05 for information source by rank. The results are shown in Table 8 on page 45. Lieutenants through Captain responded that Communications Subspecialtists are the best source of information for the subspecialty. The second most frequent response for Lieutenants

42

```
Would you recommend the                              VALID      CUM
communication subspecialty?   FREQUENCY   PERCENT   PERCENT   PERCENT

Would recommend it               121        51.3      51.3      51.3
Recommend another subspecialty    41        17.4      17.4      68.6
Not recommend subspecializing     11         4.7       4.7      73.3
Other                             63        26.7      26.7     100.0
                                 -----     -------   -------
                  TOTAL          236       100.0     100.0


Would you recommend
the Communications
Subspecialty?
                         I
                         -----------------------------+
Would recommend it       I                        121 I
                         -----------------------------+
                         I
Would recommend          ----------+
another subspecialty     I     41 I
                         ----------+
                         I
Would not recommend      ---+
subspecializing          I I 11
at all                   ---+
                         I
                         ----------------+
   Other                 I           63 I
                         ----------------+
                         I
                         I.........I.........I.........I.........I
                         0        40        80       120       160
                                             FREQUENCY
```

Figure 16.   Response to Question 5

through Commander indicated that they do not know of a good source of information concerning the Communications Subspecialty.

```
What is the best source
of information on the                                VALID      CUM
Communications Subspecialty?   FREQUENCY   PERCENT   PERCENT   PERCENT

Naval Military Personnel Command     2        .8        .8        .8
Office of Chief of Naval Operations  17       7.2       7.2       8.1
Naval Postgraduate School            6        2.5       2.5       10.6
Do not know                          62       26.3      26.3      36.9
Officers with communications         126      53.4      53.4      90.3
    subspecialty
Other                                23       9.7       9.7       100.0
                                   -------   -------   -------
                          TOTAL      236      100.0     100.0
```

```
What is the best source
of information on the
communications subspecialty?
                           I
 Naval Military           -+
Personnel Command         II 2
                          -+
                           I
Office of Chief of        ----+
Naval Operations          I   I 17
                          ----+
                           I
                          --+
Naval Postgraduate        I I 6
    School                --+
                           I
                          ---------------+
Do not know of one        I              62 I
                          ---------------+
                           I
 Officers with            -------------------------------------+
Communications            I                              126 I
 Subspecialty             -------------------------------------+
                           I
                          ------+
    Other                 I 23 I
                          ------+
                           I
                          I.........I.........I.........I.........I
                          0        40        80       120       160
                                            FREQUENCY
```

Figure 17.   Response to Question 6

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Table 8. CROSSTABULATION OF "INFORMATION SOURCE" BY "RANK"

COUNT TOT PCT — Information Source	Rank LT	LCDR	CDR	CAPT	RADM	ROW TOTAL
NMPC	0 / .0%	1 / .9%	1 / 1.5%	0 / .0%	0 / .0%	2
OPNAV	1 / 5.0%	3 / 2.6%	5 / 7.5%	8 / 25.0%	0 / .0%	17
NPS	0 / .0%	2 / 1.7%	3 / 4.4%	0 / .0%	0 / .0%	5
Do not know	7 / 35.0%	37 / 32.5%	13 / 19.6%	4 / 12.5%	2 / 50.0%	63
Communications Subspecialists	9 / 45.0%	62 / 54.4%	38 / 58.0%	16 / 50.0%	1 / 25.0%	126
Other	3 / 15.0%	9 / 7.9%	6 / 9.0%	4 / 12.5%	1 / 25.0%	23
COLUMN TOTAL	20 / 100%	114 / 100%	66 / 100%	32 / 100%	4 / 100%	236

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
31.47761	20	0.0492	0.034	19 of 30 (63.3%)

I. QUESTION 7

The responses to the series of suggestions in question 7 will be discussed separately.

1. Technical Orientation

The first item requested an opinion on making the subspecialty more technically oriented. The response distribution is displayed in Figure 18. The response for "yes" was 42.4 percent, compared to 33.1 percent for "no". None of the crosstabulations showed a significance of 0.05 or less. But, the crosstabulation of "Technical" by rank, Table 9 on page 46, did have a significance figure of 0.0553, which is worth mentioning. The ranks of Lieutenant and Commander clearly favored the technical orientation. Lieutenant Commanders and Captains were evenly split between two categories. The LCDRs were divided between "yes" and "no", and the CAPTs were divided between "no" and "no opinion".

```
The subspecialty should be                          VALID      CUM
more technically oriented.    FREQUENCY  PERCENT  PERCENT  PERCENT

     No                          78       33. 1    33 1     33. 1
  No opinion                      58       24. 6    24. 6    57. 6
     Yes                         100       42. 4    42. 4   100. 0
                               -------   -------  -------
                   TOTAL         236      100. 0   100. 0
```

Should the subspecialty
be more technically
oriented?

```
                 -------------------------------------+
      No     I                                     78 I
                 -------------------------------------+
             I
                 ---------------------------+
 No opinion  I                           58 I
                 ---------------------------+
             I
                 ----------------------------------------------+
      Yes    I                                             100 I
                 ----------------------------------------------+
             I
             I.........I.........I.........I.........I.........I
             0        20        40        60        80       100
                               FREQUENCY
```
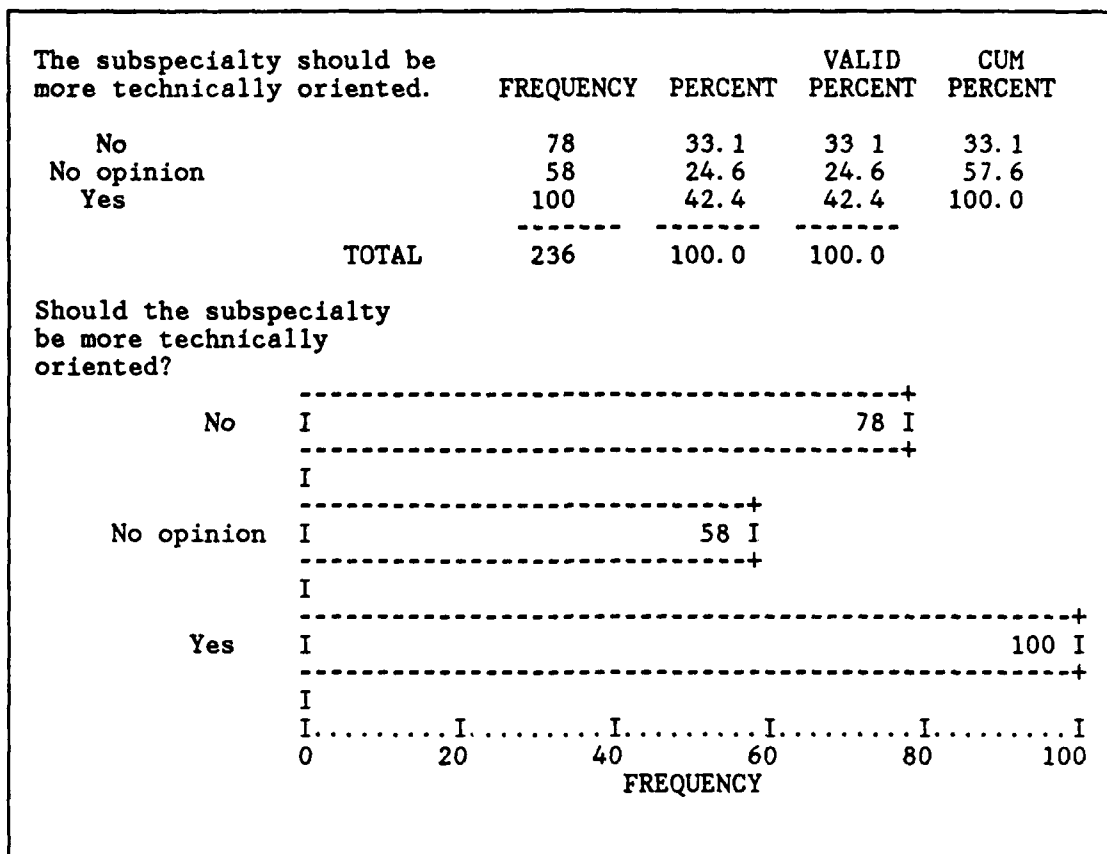
Figure 18.   Response Distribution on "Making the Subspecialty more Technical"

Table 9.   CROSSTABULATION OF "TECHNICAL" BY "RANK"

More Technical	COUNT EXP VAL TOT PCT	Rank LT I	LCDR I	CDR I	CAPT I	RADM I	ROW TOTAL
No		2 I 10.0% I	46 I 40.4% I	18 I 27.3% I	11 I 34.4% I	1 I 25.0% I	78
No Opinion		6 I 30.0% I	20 I 17.5% I	18 I 27.3% I	12 I 37.5% I	2 I 50.0% I	58
Yes		12 I 60.0% I	48 I 42.1% I	30 I 45.4% I	9 I 28.1% I	1 I 25.0% I	100
COLUMN TOTAL		20 100%	114 100%	66 100%	32 100%	4 100%	236

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
15.20537	8	0.0553	0.983	4 of 15 (26.7%)

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2. Management Orientation

The second item asked for opinion on making the subspecialty more management oriented. The response, displayed in Figure 19, was fairly evenly divided with 38.1 percent of the responses for "yes", and 35.2 percent for "no." The crosstabulations of this item versus rank, and NPS attendance did show significance figures below 0.05. The crosstabulation results are provided as Table 10 and Table 11 on page 49.

As shown in Table 10, Lieutenant's responses were fairly evenly divided between "yes", "no", and "no opinion" with the latter being the most frequent response. Lieutenant Commander's choice was better defined with agreement that the subspecialty should be more management oriented. Commanders were also very evenly divided across the choices. The most frequent response of Captains was "no opinion".

The crosstabulation with the NPS attendance data is interesting. Table 11 on page 49 shows a very small significance number, which represents dependence between the variables. Officers who did not attend NPS feel that the subspecialty should be more management-oriented, while the NPS graduates feel just the opposite.

Table 10. CROSSTABULATION OF "MANAGEMENT" BY "RANK"

More Management	COUNT EXP VAL PCT	LT	LCDR	CDR	CAPT	RADM	ROW
No		6 30.0%	45 39.9%	23 34.8%	9 28.1%	0 .0%	83
No Opinion		9 45.0%	18 15.8%	19 28.8%	14 43.8%	3 75.0%	63
Yes		5 25.0%	51 44.7%	24 36.4%	9 28.1%	1 25.0%	90
COLUMN TOTAL		20 100%	114 100%	66 100%	32 100%	4 100%	236

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
20.57719	8	0.0084	1.068	3 of 15 (20.0%)

```
                                                    VALID      CUM
The subspecialty should be
more management oriented        FREQUENCY   PERCENT   PERCENT    PERCENT

            No                     83        35.2      35.2       35.2
       No opinion                  63        26.7      26.7       61.9
           Yes                     90        38.1      38.1      100.0
                                 -------    -------   -------
       TOTAL                      236       100.0     100.0

Should the subspecialty
be more management
oriented?
                 ------------------------------------------------+
     No      I                                              83 I
                 ------------------------------------------------+
             I
                 -----------------------------------------+
  No opinion I                                        63 I
                 -----------------------------------------+
             I
                 ---------------------------------------------------+
     Yes     I                                                 90 I
                 ---------------------------------------------------+
             I
             I.........I.........I.........I.........I.........I
             0        20        40        60        80       100
                               FREQUENCY
```
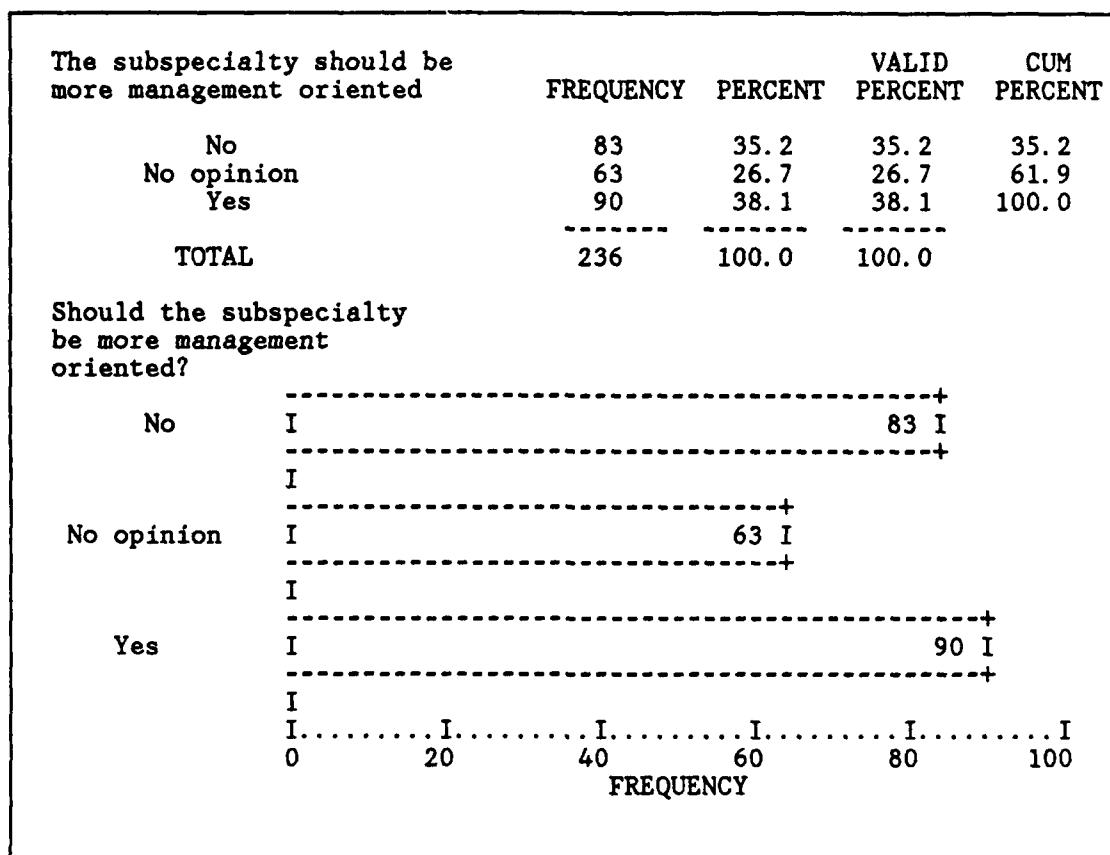
Figure 19.   Response Distribution on "Making the Subspecialty more Management
              Oriented"

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Table 11. CROSSTABULATION OF "MANAGEMENT" BY "NPS ATTENDANCE"

```
                        NPS
             COUNT    I
           EXP VAL    I                           ROW
               PCT    I                         PERCENT
                      I    No    I   Yes    I
  More Management------+---------+---------+
               No     I    32   I    51   I    83
                      I  39.0%  I  61.0%  I   100%
                      +---------+---------+
        No Opinion    I    28   I    35   I    63
                      I  44.4%  I  36.4%  I   100%
                      +---------+---------+
              Yes     I    56   I    34   I    90
                      I  62.0%  I  38.0%  I   100%
                      +---------+---------+
           COLUMN         116      120        236
```

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
10.44016	2	0.0054	30.966	NONE

3. CWO/LDO

The next statement asked if the subspecialty should be limited to the LDO/CWO communities. The overwhelming opinion is that the subspecialty should not be limited to LDO/CWO. The response was 69.5 percent against limiting the field. The results are displayed in Figure 20.

The crosstabulation with rank, shown in Table 12 on page 50, is significant. Lieutenants were fairly evenly divided between the "no" response and "no opinion". Lieutenant Commanders, Commanders and Captains responded with a definite "no". The Rear Admirals indicated "no opinion".

```
The subspecialty should be                              VALID      CUM
limited to CWO/LDO community.  FREQUENCY   PERCENT   PERCENT   PERCENT

              No                   164        69.5      69.5      69.5
         No opir !on                58        24.6      24.6      94.1
              Yes                    14         5.9       5.9     100.0
                                 -------    -------   -------
                       TOTAL        236       100.0     100.0
```

Should the subspecialty
be limited to the
CWO/LDO community?

```
          ------------------------------------------------+
No     I                                                164 I
          ------------------------------------------------+
       I
          ----------------+
No opinion  I          58 I
          ----------------+
       I
       ----+
Yes    I  I 14
       ----+
       I
       I.........I.........I.........I.........I.........I.........I
       0        40        80       120       160       200
                            FREQUENCY
```
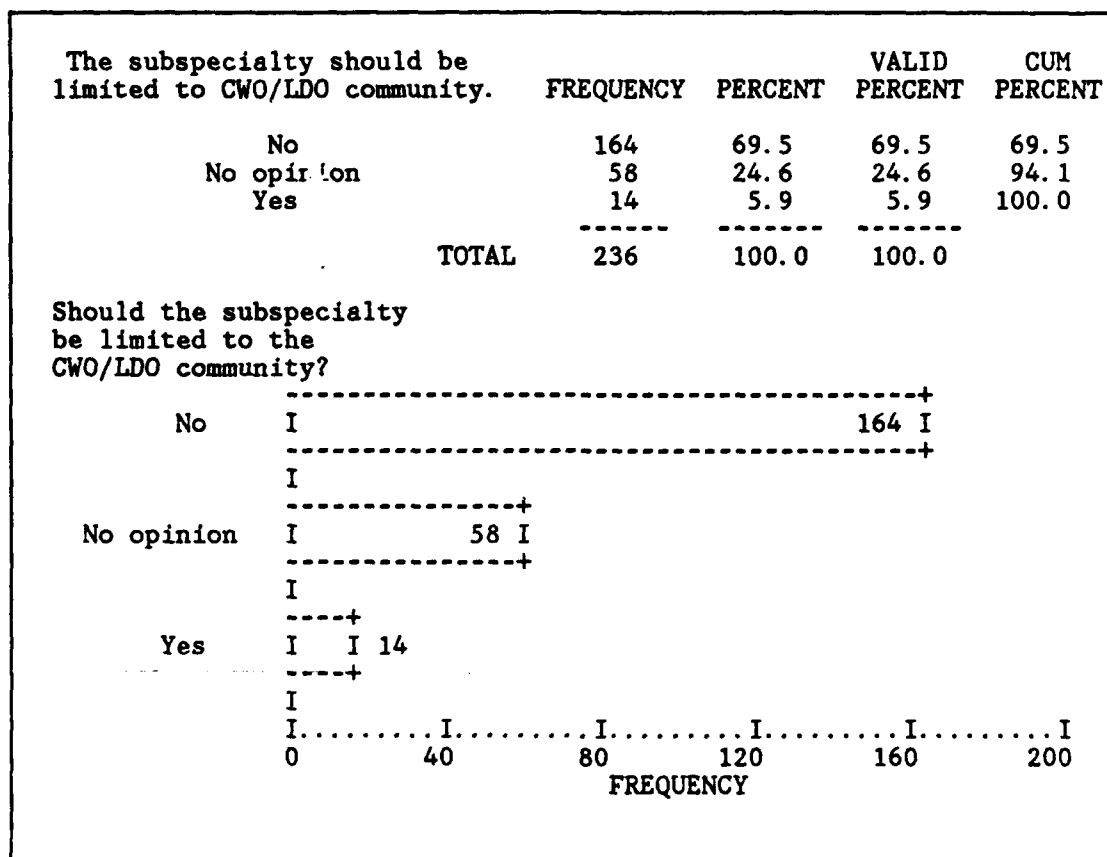
Figure 20.   Response Distribution on "Limiting the Subspecialty to LDO/CWO"

Table 12.   CROSSTABULATION OF "RANK" BY "LIMITING TO LDO/CWO"

```
            COUNT  I  Rank
            EXP VAL I
            TOT PCT I
Limit to            I   LT   I  LCDR  I   CDR  I  CAPT  I  RADM  I     ROW
LDO/CWO    ---------+-------+-------+-------+-------+-------+       TOTAL
       No           I   10  I   88  I   45  I   20  I    1  I     164
                    I 50.0% I 77.2% I 68.2% I 62.5% I 25.0% I
                    +-------+-------+-------+-------+-------+
       No Opinion   I    9  I   16  I   18  I   12  I    3  I      58
                    I 45.0% I 14.0% I 27.3% I 37.5% I 75.0% I
                    +-------+-------+-------+-------+-------+
       Yes          I    1  I   10  I    3  I    0  I    0  I      14
                    I  5.0% I  8.8% I  4.5% I  .0%  I  .0%  I
                    +-------+-------+-------+-------+-------+
            COLUMN      20     114      66      32       4         236
            TOTAL      100%    100%    100%    100%    100%
```

```
CHI-SQUARE    D.F.      SIGNIFICANCE       MIN E.F.    CELLS WITH E.F.< 5
----------    ----      ------------       --------    ------------------
22.43282       8          0.0042            0.237       7 OF 15 (46.7%)
```

50

4. GURL

The statement concerning limiting the subspecialty to General Unrestricted Line (GURL) solicited primarily negative responses. The distribution, Figure 21, is 70.8 percent for not limiting the subspecialty to this designator. The crosstabulation for limiting to GURL by rank had a significance figure of 0.0095, and is provided as Table 13 on page 51. Once again, Lieutenants are evenly distributed between "no" and "no opinion". Lieutenant Commanders, Commanders, and Captains showed strong response in the "no" column.

Table 13.   CROSSTABULATION OF "LIMITING TO GURL" BY "RANK"

Limit to GURL	COUNT EXP VAL TOT PCT	LT	LCDR	CDR	CAPT	RADM	ROW TOTAL
No		10 50.0%	91 79.8%	45 68.2%	20 62.5%	1 25.0%	167
No Opinion		9 45.0%	17 14.9%	19 27.3%	12 37.5%	3 75.0%	60
Yes		1 5.0%	6 5.3%	2 4.5%	0 .0%	0 .0%	9
COLUMN TOTAL		20 100%	114 100%	66 100%	32 100%	4 100%	236

CHI-SQUARE	D.F.	SIGNIFICANCE	MIN E.F.	CELLS WITH E.F.< 5
20.24252	8	0.0095	0.153	7 OF 15 (46.7%)

5. URL

The opinion about limiting the Communications Subspecialty to the Unrestricted Line (URL) was also overwhelmingly negative. The distribution, shown in Figure 22, indicates that 65.3 percent felt the subspecialty should not be limited to URL.

The crosstabulation of rank versus "limiting the subspecialty to URL had a significance figure less than 0.05. As shown in Table 14, Lieutenant Commanders and Commanders responded with "no", while Lieutenants and Captains were evenly divided between "no" and "no opinion."

```
The subspecialty should be                        VALID    CUM
limited to GURL community.    FREQUENCY  PERCENT  PERCENT  PERCENT

            No                   167      70.8     70.8     70.8
       No opinion                 60      25.4     25.4     96.2
            Yes                    9       3.8      3.8    100.0
                              -------   -------  -------
                    TOTAL         236     100.0    100.0
Should the subspecialty
be limited to GURL
community?

                    -------------------------------------------+
       No        I                                          167 I
                    -------------------------------------------+
                 I
                    ---------------+
   No Opinion    I             60 I
                    ---------------+
                 I
                 --+
       Yes       I I 9
                 --+
                 I
                 I.........I.........I.........I.........I.........I
                 0        40        80       120       160       200
                                   FREQUENCY
```
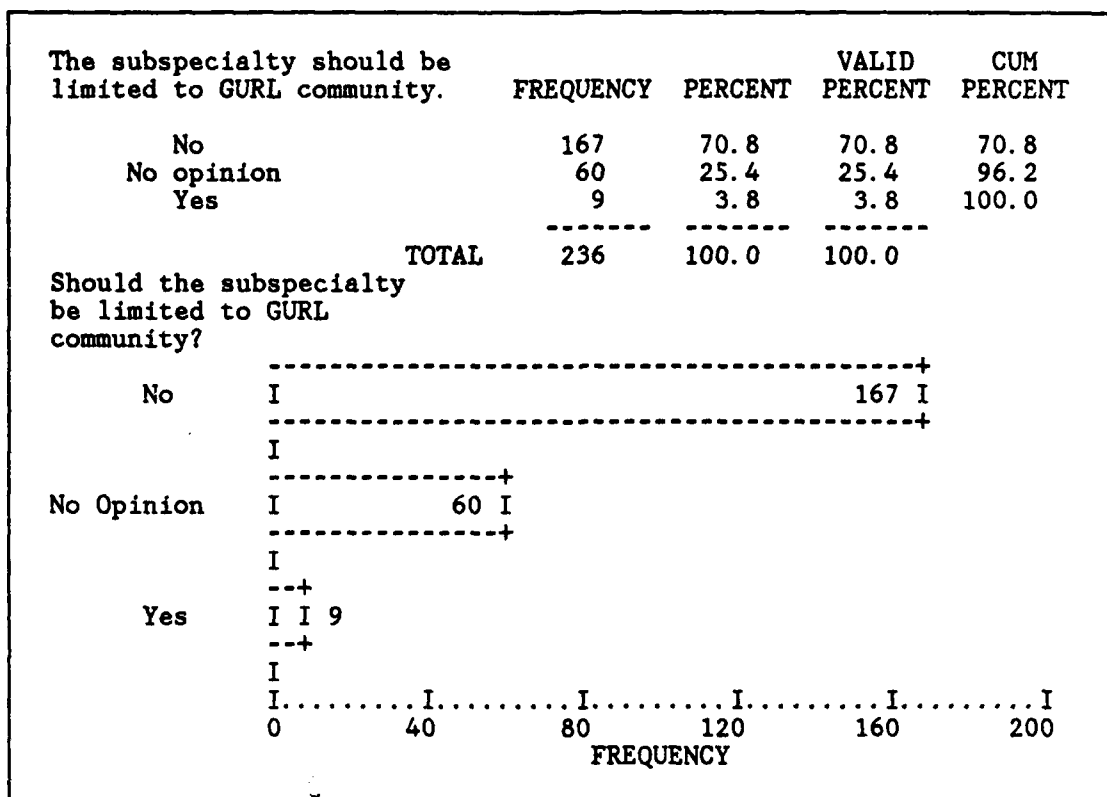
Figure 21.   Response Distribution on "Limiting the Subspecialty to GURL"

Table 14.   CROSSTABULATION OF "LIMITING TO URL" BY "RANK"

```
                    Rank
              COUNT I                                                    ROW
              TOT PCT I                                                  TOTAL
Limit to        I    LT   I  LCDR  I  CDR   I  CAPT  I  RADM  I
URL         --------+------+-------+-------+-------+-------+
   No           I   11, I   84, I   41, I   17, I    1, I    154
                I  4.7% I  35.6% I  17.4% I  7.2% I   .4% I
                +------+-------+-------+-------+-------+
   No Opinion   I    9, I   18, I   20, I   13, I    3, I    63
                I  3.8% I   7.6% I   8.5% I  5.5% I  1.3% I
                +------+-------+-------+-------+-------+
   Yes          I    0, I   12, I    5, I    2, I    0, I    19
                I   .0% I   5.1% I   2.1% I   .8% I   .0% I
                +------+-------+-------+-------+-------+
         COLUMN     20,    114,     66,     32,      4,    236,
          TOTAL    8.5%   48.3%   28.0%   13.6%    1.7%  100.0%

CHI-SQUARE    D.F.    SIGNIFICANCE    MIN E.F.    CELLS WITH E.F.< 5
----------    ----    ------------    --------    ------------------
20.05869       8        0.0101         0.322      5 of 15 (33.3%)
```

52

```
The subspecialty should be                        VALID    CUM
limited to the URL community.   FREQUENCY  PERCENT  PERCENT  PERCENT

              No                   154      65.3     65.3     65.3
        No opinion                  63      26.7     26.7     91.9
              Yes                    19       8.1      8.1    100.0
                                 -------   -------  -------
                       TOTAL        236     100.0    100.0


Should the subspecialty
be limited to the
URL community?
            -------------------------------------------+
    No      I                                    154 I
            -------------------------------------------+
            I
            -----------------+
 No opinion I            63 I
            -----------------+
            I
            -----+
    Yes     I 19 I
            -----+
            I
            I........I........I........I........I........I
            0       40       80       120      160      200
                         FREQUENCY
```
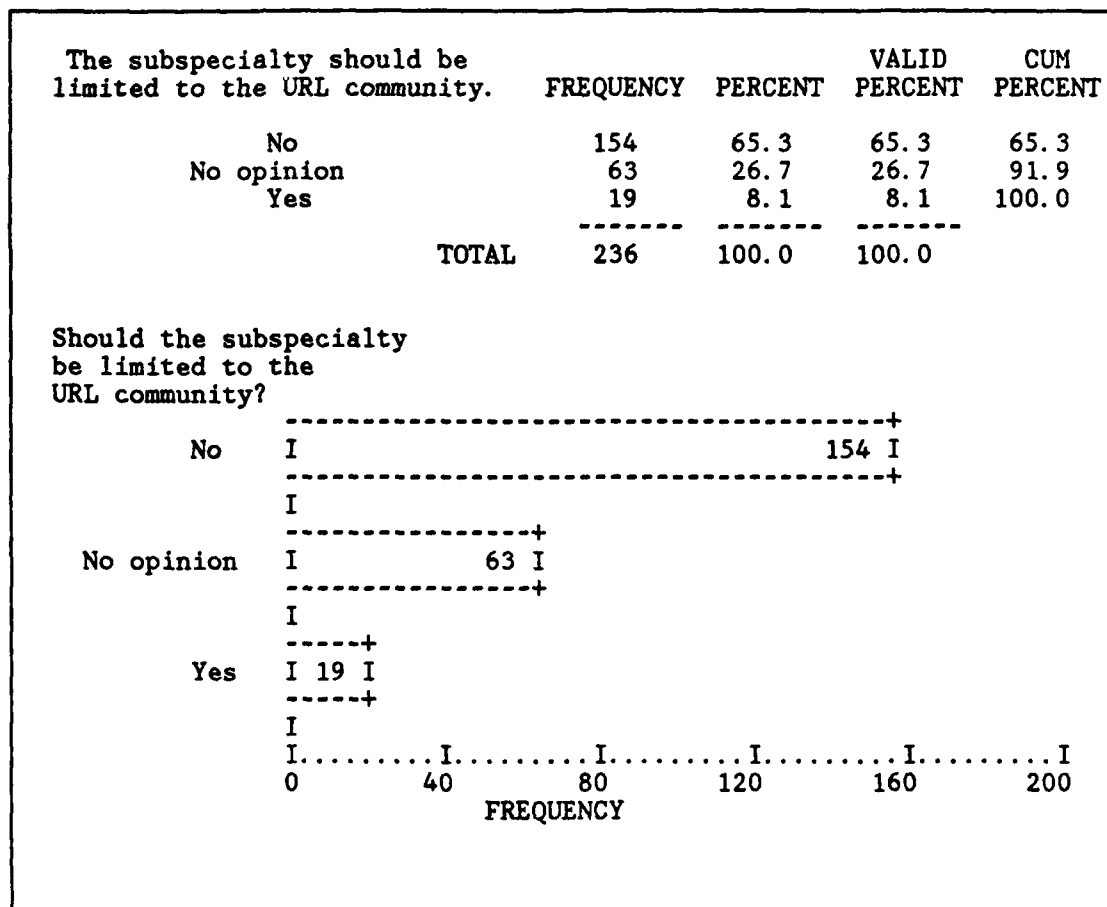
Figure 22.   Response Distribution on "Limiting Subspecialty to URL"

6. Other Comments

The comments in the "Other" column generally fell into three categories. First the communications subspecialty should not be limited to certain communities, but continue to contain a mix of backgrounds and specialties. Some examples are:

- Keep a cross-pollination of communities and get deeply involved in joint communications.

- There should be a proper balance of GURL/URL subspecialists represented to ensure we have the operational understanding which I don't think you totally get with either GURL or LDO. However we need these people to be our "real experts" in communications from a more technical sense and also provide that necessary continuity and corporate knowledge.

Second, the subspecialty should be separated into its own designator as a restricted line community. Some of the specific comments are:

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- Due to increasing complexity consideration should be given to creating a separate Restricted Line community similar to Intelligence for communications.

- Perhaps to be more competitive with other services getting the dollars, we should have a restricted line communications community--"real experts."

Third, to improve the perception of the Communications Subspecialty, a stronger sense of community is needed. Some of the comments:

- Needs a champion--a salesman. Admiral Boyes (when he was CNTC) was the last senior communicator who championed the cause and made it a worthy subspecialty.

- There is no sense of community among Communications Subspecialists. We need some focal point, like a newsletter, magazine, or whatever. Even a list of billets would be a start.

J. QUESTION 9

The final open-ended question brought a large volume of comments and suggestions. Many of the comments are similar to the responses to earlier questions. The comments and suggestions have been divided into categories to facilitate evaluation. The collection of comments are provided as Appendix F.

1. Negative Comments

The comments can be further divided into the following categories.

a. *Importance of Communications*

- Military telecommunications are a scarce national resource and the Navy needs to keep the best and brightest in the field in order to satisfy its future needs.

- Communications is the most important function of command. It is not perceived as such by superiors.

b. *Perceived problems with the subspecialty*

- Until the Navy becomes more aware of the need for communications, other than at sea, the XX82 subspecialty will continue as a second class citizen. As a LCDR, at present, this is not a road to flag. Officers with a communications background are looked at favorably by other services; the Navy sees it as one that the officers couldn't do anything else so they made him a communications officer. This is not the case and should be so recognized.

- The major problem with this subspecialty is that in order to remain current in the field (and to compare with other services in the joint arena) you must have a significant number of repeat tours. As a result, you may miss the operational/leadership wickets needed to make CDR or screen for CO/XO; thereby failing selection. Not as serious for 1100s because this subspecialty has many leadership positions ashore so that the leadership and subspecialty tours can be combined. Selection boards however, do not look favorably at the warfare specialist in the same situation. Consequently, we have very few senior 111X/13XX

communications subspecialists. Guidance must be part of the selection board precept.

c. Need for a stronger community

- The problem with our community is IMAGE! Both external and internal.

- There is really no one who looks out for the subspecialty.

- Needs better definition, and jobs need to be better identified.

Many of these comments are similar to those already mentioned, and more will be discussed in later sections.

2. Unrestricted Line

The comments in this section urge the warfare specialist to keep current in his or her warfare specialty area. Some examples are:

- Make warfare specialty hurdles on time; otherwise you are not even in the running.

- One can't allow himself to get imbedded too deeply in the communications groove or he will lose out professionally. Must fight to get those operational tours.

- Must not rely on subspecialty to maintain competitive with peers. Must excel in primary warfare specialty. Major commands ashore (communications billets) are not as good as sea billets. COs of the Communications Area Master Stations have not done well in flag selections.

3. Positive Comments

The positive comments strongly recommend communications as an interesting and rewarding career. Some comments:

- Communications was the most cohesive of the subspecialties during my time and provided me, and many others, excellent opportunities ashore and at sea. I was strongly advised by the line community to stay out of communications because it was regarded as a career killer. Not so! (CAPT, 1105)

- The good hardworking career minded individual will find a very rewarding career in Naval Telecommunications. The warfare type cannot lose. The LDO/CWO has an open field for advancement and command. The GURL have the best of all fields; early division officer, department head, OIC, and then command. (RADM, 1110)

4. Suggestions for NPS

There were about 10 comments relevant to improving the Telecommunications Systems Management curriculum at the Naval Postgraduate School. Some of the comments were:

- I would like to see the NPS curriculum be better tailored towards our subspecialty. When I graduated from the 620 curriculum in March 1984, it wasn't even close! We need a senior representative at NMPC, I think that we could talk with and

maybe a newsletter or something to give us a vehicle to converse. As it stands, I'd say it's anybody's guess where we are going, etc.

- It needs to incorporate more about the services' operational communications practices, policies, procedures, and capacities. The course is great for becoming a program manager or a corporate telecommunications systems manager, but for military communications operations, it is very lacking.

5. Training

These comments bring out concerns over the way the communications subspecialty should be heading in the future, specifically in the areas of computers and new technology. The following comments are germane:

- Too big a field to be an expert in all the telecommunications field. With the Goldwater-Nichols Reorganization Act and present trends, more emphasis should be placed on Joint Interoperability with reference to Telecommunications and equipment to stay ahead of other services.

- I believe a closer relationship is needed between computer systems and telecommunications.

- Automated Data Processing(ADP) and communications should be combined or at the very least we need more people well versed in computer applications in the communications field.

6. Need Own Community

One suggestion that keeps cropping up is the suggestion for communications to become its own restricted line community. The reason is twofold. First there is the "catch 22" of keeping current in communications, which is a complex and technical field, and keeping current in the warfare specialty area, which is also extremely complex and technical, not to mention highly competitive. Secondly, is the issue of promotability. The comments submitted by the respondents include:

- Strongly recommend the communications community become their own designator and community. Communicators always take the back seat to warfare specialists, and are hurt in the promotion cycle by other more prestigious billets. Every communicator should get a warfare specialty and then consciously shift/select communications just as EDO, Intelligence, etc.

- If we take the communicator out of the URL, he/she would compete for promotion entirely against other communicators. The professionalism necessary to be a good communicator is not well understood by non-communicators. We need to be more technically oriented also. A restricted line community would achieve this.

7. Need for Information

Many of these comments are similar to the ones made in Question 6. A couple of examples are provided below.

- Professional reading in the field is limited, additional emphasis to overall subspecialty career information.

- Affiliate with AFCEA (Armed Forces Communications and Electronics Association). When time for orders comes personally contact detailers, communications placement officer, and OP-941 regarding assignments available.

8. Community Utilization

These comments are germane to Question 7. They relate to proposed changes in the subspecialty, such as limiting it to certain designators. Some examples are:

- If you limit the subspecialty to LDO/CWO and GURL, as is the current trend, the field will suffer, in my opinion. Expertise from all segments, warfare specialists, and others, is necessary to sustain a well rounded, viable community.

- The health of the so called communications community is not good. There have been recent suggestions from Commander, Naval Telecommunications Command--not publicized--about limiting the community to GURL only. Why? Because no one else is getting promoted from command billets.

Many of the comments brought out valid points and suggestions that are discussed in the following chapter.

VI. CONCLUSIONS AND RECOMMENDATIONS

This thesis sought to find out how officers with the Telecommunications Systems Management Subspecialty code felt about the subspecialty. There are four major findings.

A. MAJOR FINDINGS

1. Perception

a. *Conclusion*

The results of the survey are clear. Overwhelmingly, the majority of officers who responded to the questionnaire have positive feelings about the subspecialty. Many people expressed strong positive feelings about the field, and took the extra time and effort to express opinions, share experiences, and make recommendations. But there were some negative comments as well, many by officers who indicated that the subspecialty had a positive effect on their careers.

The expected response was that the subspecialty would be perceived by officers as having a negative impact on their career, especially for officers with a warfare specialty. In reading the written responses it becomes clear that the perceived positive effect may relate more to high job satisfaction than to career promotions. The large amount of responses indicates a strong interest in the Communications Subspecialty. Many of the written comments indicated high job satisfaction and that the training will significantly contribute to a second career after retirement or resignation.

b. *Recommendation*

Much was learned by conducting this research, including how the questionnaire could have been improved to gather more specific information. For example, if the questions had been worded differently, more information could have been gained concerning the perception of the officers with the subspecialty. Specifically, a question should ask if the Communications Subspecialty has interfered with promotion. Other questions could address job satisfaction, how communications jobs are perceived by officers who are not in the field, and could solicit opinions on making the Communications Subspecialty its own designator.

2. Demographics

a. Conclusions

The positive feelings of the officers prevailed across demographic lines. There were no significant difference in response related to sex, designator, rank, or between those that attended the Naval Postgraduate School and those that did not. This was surprising, considering the different demands made on each designator and the experience differences that exist across the ranks. The senior officers did return their questionnaires more quickly, possibly indicating a stronger interest in sharing their opinions and recommendations. The response was strong and positive across all ranks and designators.

b. Recommendation

If this study were repeated with a more specifically worded questionnaire, demographic information should be part of the research. There were no important differences in the responses to the questions in this research, but that in itself is notable.

3. Career Guidance

a. Conclusions

The main area of concern among officers surveyed here is the need for more career guidance. The majority of respondents indicated that Communications Subspecialists themselves are the best source of career guidance. In addition, half of that number stated that they did not know of a good source of career guidance for the Communications Subspecialist.

The best source of career information for each individual is supposed to be the detailer. But the detailer can only be expected to counsel in the area of the warfare specialty or designator. There are too many subspecialties for each detailer to be able to give career advice concerning each one. The Subspecialty Branch at the Naval Military Personnel Command (NMPC-440) handles all of the subspecialties. NMPC-440 has to approve all orders for officers with a subspecialty code. But they, also, have too many subspecialties to be expert enough in each one to be able to give out specific career guidance.

Each subspecialty has a sponsor or primary consultant. For the Communications Subspecialties this is the Director, Naval Communications Division (OP-941), Office of the Chief of Naval Operations, Washington DC. Primarily, that office identifies the billets requiring officers with the subspecialty, works with the Naval

Postgraduate School on the Telecommunications Systems Management and Communications Engineering curricula, and designates officers as proven subspecialists in communications. The officer designation function is performed biennially in the subspecialty selection board. Since they are concerned with keeping the needed number of communicators trained and occupying subspecialty coded billets, they should be the main source of career guidance for the Communications Subspecialists. Another command that could be a good resource is Commander, Naval Communications Command (CNTC), Washington DC, which acts as the administrative manager of the Naval Telecommunications System and its shore facilities. CNTC employs a large number of Communications Subspecialists. Both of these commands should be very interested in providing this type of information to Communications Subspecialists.

b. Recommendations

Career Guidance for the Communications Subspecialist needs to be centralized and disseminated by OP-941 and CNTC. A vehicle that has been used by other subspecialties is *perspective*, a newsletter for officers. It is published bi-monthly by NMPC, and would get the information to everyone at no additional cost to OP-941 or CNTC. Ideally, a newsletter just for Communications Subspecialists would be very useful to the subspecialist, to the detailers, or anyone interested in the subspecialty. A newsletter of this type was published in the past, but discontinued. The types of information needed include:

- Descriptions of communications billets, including the billet code
- Dates when billets will be vacated
- Guidance on career paths for communications subspecialists
- Points of contact for specific types of jobs
- Information on new equipment, sites, and innovations in communications.

This information would be extremely useful to Communications Subspecialists, and would draw the officers together into a stronger community.

4. Restricted Line

a. Conclusion

Another suggestion that was discussed in the responses was to make the Communications Subspecialty its own Restricted Line community. Communicators could be in the field exclusively, similar to what is done in the Army and Air Force. This is not a new idea, but one that surfaces periodically and deserves attention. There are

many pros and cons to this proposed change. Two arguments supporting this change involve community management and specialization. In a Restricted Line community, the members would be grouped by designator and have their own section at NMPC to manage the community. Promotions would be based on performance in communications jobs, not based on "punching warfare tickets." Communications is becoming more complex, with new technology outdating knowlege and equipment almost daily. Today, it is not unusual for a junior officer warfare specialist to have his or her first communications related billet as a student in the Telecommunicaions Systems Management Curriculum at the the Naval Postgraduate School, then return to the warfare specialty area and not have another communications job until he or she is a senior officer. This follow on job is likely to be Commanding Officer or Executive Officer of a Communication Station.

One argument against making communications a Restricted Line community is that communication jobs require fleet experienced members of the Unrestricted Line community in order to be able to support fleet requirements. This argument assumes that only fleet experienced warfare specialists can fully understand and support fleet operations. The main goal of all Navy organizations is to support the fleet. There is some disparity between warfare specialist and members of other areas that are seen as merely support for the Navy's real job which is going to sea. This is another argument against taking communications out of the Unrestricted Line community.

b. Recommendations

More research needs to be done on the feasibility of combining the Communications Subspecialties into a Restricted Line community and looking closely at all of the pros and cons of such a conversion.

B. POSSIBLE THESIS TOPICS

This research revealed several other questions that should be examined more closely in future theses or other research projects. These issues have already been mentioned, and are summarized below.

- Expand this study to the Communications Engineering Subspecialists (XX81X).

- Replicate this research with a more specifically worded questionnaire, especially in the area of the perceived effect of the Communications Subspecialty had on promotion.

- Conduct a study of subspecialty utilization with regard to the Communications Subspecialty. Specifically, "Are the subspecialty billets being held by

subspecialtists?" and "Are the Communications Subspecialists doing payback tours for graduate education?"

- Prepare a resource document on the Communications Subspecialty.

- Study the feasibility of making the Communications Subspecialty a Restricted Line community.

- Update thesis done by Grayson Koogle on "The Subspecialty Management System As It Relates to the Communications Subspecialist Surface Warfare Officer."

A considerable amount of work went into this thesis. The questionnaire had to be designed to solicit the needed information, but be short enough that people would take the time to complete and return it. A mailing list had to be obtained, which was very time consuming. The questionnaires were mailed out and more than half were completed and returned. The majority had hand written comments on the questionnaire or additional pages attached. The questionnaires had to be broken down into data elements and programmed for the $SPSS^{x®}$ Statistical Package. The data from the the statistical package was evaluated and conclusions were drawn. This was a very long and involved process, but much was learned through this research. The Communications Subspecialists seem positive about the communications field, but there is still room for improvement in this subspecialty area. Much more can be learned and should be explored in future research.

APPENDIX A.   TABLE OF OFFICER DESIGNATORS

Source: Register of Commissioned Officers and Warrant Officers of the United States Navy on Active Duty, 1 October 1987, NAVPERS 15018

The officer designator codes are four-digit numbers used to group officers by categories for personnel accounting and administrative purposes and to identify the status of officers. These codes identify, through the first three digits, the categories in which officers are appointed and/or designated and, through the fourth digit, the status of the officers within the various categories. A listing by the first three digits of the officer designator codes and their description is presented below.

1. **Unrestricted Line**

110X   General unrestricted line officer

111X   Line officer qualified in Surface Warfare

112X   Line officer qualified in Submarine Warfare

113X   Line officer qualified in Special Warfare

114X   Line officer qualified in Special Operations

116X   Line officer training for Surface Warfare qualification

117X   Line officer training for Submarine Warfare qualification

118X   Line officer training for Special Warfare qualification

119X   Line officer training for Special Operations qualification

120X   General unrestricted line officer who is Materiel Professional designated

121X   Line officer who is Materiel Professional designated and qualified in Surface Warfare

122X   Line officer who is Materiel Professional designated and qualified in Submarine Warfare

123X   Line officer who is Materiel Professional designated and qualified for duty involving flying as a pilot

124X   Line officer who is Materiel Professional designated and qualified for duty involving flying as a Naval Flight Officer

125X   Line officer who is Materiel Professional designated and a member of the aeronautical community whose rating as a pilot or Naval Flight Officer has been terminated

126X   Line officer who is Materiel Professional designated and qualified in Special Warfare

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127X	Line officer who is Materiel Professional designated and qualified in Special Operations
130X	Line officer in the aviation community whose rating as pilot or Naval Flight Officer has been terminated
131X	Line officer qualified for duty flying as a pilot
132X	Line officer qualified for duty flying as a Naval Flight Officer
133X	Line officer training for duty involving flying as a Naval Flight Officer
139X	Line officer in training for duty involving flying as a pilot

2. Restricted Line

141X	Engineering Duty officer (Ship Engineering and Ordinance Engineering)
144X	Engineering Duty officer qualified as a Ship Engineering specialist
146X	Engineering Duty officer in prescribed program for designator 144X
150X	Aeronautical Engineering Duty officer
151X	Aeronautical Engineering Duty officer (Aeronautical Engineering)
152X	Aeronautical Engineering Duty officer (Aviation Maintenance)
161X	Special Duty officer (Cryptology)
162X	Special Duty officer (Merchant Marine, Deck)*
163X	Special Duty officer (Intelligence)
165X	Special Duty officer (Public Affairs)
166X	Special Duty officer (Merchant Marine, Deck and Engineering)*
167X	Special Duty officer (Merchant Marine, Engineering)*
168X	Special Duty officer (General Administration)*
169X	Special Duty officer (Merchant Marine, Communications)*
180X	Special Duty officer (Oceanography)

3. Unrestricted Line-Prospective Staff Corps

191X	Line officer under instruction as a prospective Medical Corps officer (Senior Medical Student)
192X	Line officer under instruction as a prospective Dental Corps officer
193X	Line officer under instruction as a prospective Medical Service Corps officer (Optometry)
194X	Line officer under instruction as a prospective Chaplain Corps officer**
195X	Line officer under instruction as a prospective Judge Advocate General's Corps officer**

197X	Line officer under instruction in the Armed Forces Health Professions Scholarship Program (Medical Osteopathic)**
198X	Line officer under instruction in the Armed Forces Health Professions Scholarship Program (Dental)**
199X	Line officer under instruction in the Armed Forces Health Professions Scholarship Program (Medical Service Corps)**

4. Staff Corps

210X	Medical Corps officer
220X	Dental Corps officer
230X	Medical Service officer
250X	Judge Advocate General's Corps officer
290X	Nurse Corps officer
310X	Supply Corps officer
410X	Chaplain Corps officer
510X	Civil Engineering Corps officer

5. Limited Duty Officer

611X	Deck-Surface
612X	Operations-Surface
613X	Engineering/Repair-Surface
616X	Ordnance-Surface
618X	Electronics-Surface
619X	Communications-Surface
621X	Deck-Submarine
623X	Engineering/Repair-Submarine
626X	Ordnance-Submarine
628X	Electronics-Submarine
629X	Communications-Submarine
630X	Naval Aviator
631X	Aviation Deck
632X	Aviation Operations
633X	Aviation Maintenance
636X	Aviation Ordnance
638X	Avionics

639X	Air Traffic Control
640X	Nuclear Power
641X	Administration
642X	Data Processing
643X	Bandmaster
644X	Cryptology
645X	Intelligence
646X	Meteorology/Oceanography
647X	Photography
648X	Explosive Ordnance Disposal
649X	Security
651X	Supply
653X	Civil Engineer Corps
655X	Law
*	Authorized for Inactive Reserve officers only.
**	Approved for Inactive Reserve officers only.

APPENDIX B. COMMUNICATIONS SYSTEMS TECHNOLOGY SUBSPECIALTY FACT SHEET

Source: Naval Military Personnel Command, Professional Development Education Placement Branch (NMPC-440), Washington, DC

1. **Subspecialty:**

    Communications Systems Technology

2. **Code:**

    XX82

3. **Applicable Designators:**

    11XX/13XX/161X

4. **Description:**

    Key billets have been identified within various telecommunications activities that require officers competent in conceiving, developing, implementing and or managing complex components of the telecommunications systems of the Department of Defense. This subspecialty identifies those naval officers who are prepared, either by education or experience, to meet those requirements and effectively manage the people assigned to assist in these efforts.

    5. **Representative Billets:**

    a. *Captains*

OPNAV: Deputy Director, Naval Communications Division (OP-941B)

Naval Communications Area Master Stations (NAVCAMS): Commanding Officer

Naval Communications Stations: Commanding Officer

Commander in Chief, Pacific Fleet: Chief of C3 Operations and Plans

    b. *Commanders*

Commander Naval Telecommunications Command: Head of Operations Management Division

Commander in Chief, Pacific Fleet: Staff Communications

Commander, Amphibious Group 2: Communications

OPNAV: Head, Readiness and Resources Section (OP-941C)

c. Lieutenant Commanders

Commander, Carrier Group Staff: Staff Communicator

Aircraft Carrier: Communications

CAMS: Operations/Managements Officer or Communications Officer

Naval Radio Receiver Station: Officer in Charge

d. Lieutenants

Naval Air Station: Communications Officer

LPH (Amphibious Ship): Communications Officer

Commander, Amphibious Squadron: Communications Officer

6. Billet Geographic Distribution: Afloat and Worldwide Ashore

Possible assignments include Norfork, Washington, Naples, Honolulu, Guam, and Japan.

7. Sources:

Experience tours can be gained afloat and at various Navy and DOD communications activities worldwide. Functional level training is available through the Telecommunications Staff Officer Course conducted at Keesler AFB. Master's level requirements are met through successful completion of the Telecommunications Systems curriculum (#620) at the Naval Postgraduate School.

8. Curriculum Criteria

- The Officer subspecialist is required to have the capability to conceive, develop and implement new operational concepts, doctrines, and procedures. He will be required to coordinate telecommunications matters at the senior staff levels in the Department of Defense, and/or Allied Forces.

- The officer subspecialist is required to manage telecommunications resources and develop policy pertaining to operations and readiness of telecommunications.

- The officer is required to develop priority lists and planning schedules for fulfillment of validated telecommunications requirements, and monitor progress of approved plans to ensure conformance thereto, and satisfactions of stated requirements.

- The subspecialist must be capable of being a Commanding Officer of a communications activity or a department/division head of a functional component primarily concerned with telecommunications, plans policies directives and/or operations.

- The subspecialist is required to function as an advisor of telecommunications systems capabilities and assist in developing telecommunications requirements based upon command and control, administrative, logistical and operational requirements.

- The subspecialist must be able to conceive, monitor, review and coordinate studies of implications of telecommunications plans and policies, and of requirements for future mid-range/long-range periods.

- The subspecialist is required to review and validate formal telecommunications requirements, develop planning schedules for fulfillment of such requirements, or is responsible for ensuring conformance with approved plans designed to satisfy validated requirements.

- The subspecialist must be qualified to be the senior naval communicator on staff of a unified, joint or allied command.

- The subspecialist must be capable of being a department/division head of a functional component which reviews detailed programs and budgets intended to satisfy Navy telecommunications requirements.

- The subspecialist must be able to coordinate and review telecommunications plans issued by subordinate activities.

- The subspecialist is required to have a broad understanding of the Department of Defense Planning, Programming and Budgeting System and the relationship of the Naval Telecommunications System to the Director, Navy Program Planning, Comptroller of the Navy, Office of the Secretary of Defense, Defense Communications Agency, and other organizations concerning programming, budgeting and fiscal management of centrally managed communications programs.

- The subspecialist must have the ability to implement, coordinate and/or assist in developing and managing procurement plans, policies and methods of contracting for general applications.

- The subspecialist must be sufficiently knowledgeable in real time information systems so that he can deal with problems associated with ADP procurement, computer security and accuracy, and information system performance evaluation.

- The telecommunications manager must have a basic understanding of programming, modern data processing techniques and applications and understand the role of computers in support of communications

- The officer must have an understanding of the human behavior aspects of management, such as the managerial applications of social science concepts and research findings, implying an awareness of learning modes, motivations techniques and decision making concepts.

- The subspecialist must be familiar with DOD and military department organization as it pertains to communications and strategic and tactical military communications systems.

- The subspecialist should have a basic understanding of communications theory and technology, and be able to apply this to the study and analysis of modern communications systems, including satellite systems and techniques.

- The subspecialist should be familiar with the general principals of international and domestic law and regulatory practices as they affect telecommunications.

9. Postgraduate Curriculum (#620)

Admission to the curricula requires a baccalaureate degree with above average grades. Completion of mathematics through differential calculus is required for the 620 curriculum. The student must be ready to start calculus courses on enrollment.

Successful completion of a program leads to the degree Master of Science in Telecommunications Systems Management. Representative subjects are listed below:

Calculus	Procurement and Contract Administration
Statistics	Real-time Information System Management
Organization Theory	Operations Research
Telecommunications Systems	Managerial Economics
Electronics Systems	Defense Resource Allocation
Computer Networks	Signal Transmission Systems
Managerial Accounting	C3 Mission and Organization

10. Points of Contact:

Professional Development, Education and Subspecialty Branch (NMPC- 440), AUTOVON 224-3321, Commercial (202) 694-3321.

Primary Consultant, OP-941, Director, Naval Communications, AUTOVON 225-7689, commercial (202) 695-7689.

Electronics and Communications Curriculum Office, Naval Postgraduate School, AUTOVON 878-2056, Commercial (408) 646-2056.**

**Note: The phone number on the actual fact sheet is in error, this phone number is correct.

APPENDIX C. QUESTIONNAIRE

HAPPY NEW YEAR!

I am a student at the Naval Postgraduate School in the Telecommunications Systems Management curriculum. The enclosed questionnaire is the basis for my thesis research. I am gathering information concerning the communications subspecialty. You were selected to participate because you are a communications subspecialist. If you have additional comments about any of the questions, please put them in the open spaces around the questions or attach additional sheets, if necessary. Please feel free to respond honestly. No individual identification will be used. Your responses will be kept in strictest confidence.

Graduation is approaching quickly, so I would appreciate it tremendously if you would respond today if possible, but no later than 30 Jan 88. A return envelope is enclosed for your convenience. Thank you for your time.

Very respectfully,

Lieutenant Robin M. Horne, USN
autovon 878-2056

Personal Profile

Rank:

Designator:

Sex: (circle one) M F

Subspecialty Code(s): (example: xx82G)

Education: (please list)

	school	major	degree/date
Undergraduate			
Graduate			

Questions

1. List all *communications* billets held:

	billet	command	date

2. What is your *main* source of career guidance? (Please select one)

   ( ) Senior Officers at command

   ( ) PERSPECTIVE

   ( ) Detailer

   ( ) Peers with same designator

   ( ) Senior officers with same designator

   ( ) other (describe)_____

3. If you have had a tour(s) in communications, how well did the Telecommunications Systems Management course at Naval Postgraduate School prepare you for that tour(s)? (Please select one)

   ( ) I have not had a tour in communications.

   ( ) I did not attend NPS.

   ( ) I attended another course at NPS.

   ( ) The course provided me with the background knowledge I needed for a tour in communications.

   ( ) The course did not prepare me for a tour in communications.

   ( ) Other (specify)

4. In your opinion, how has the communications subspecialty affected your career?

   ( ) Positively?

72

( ) Negatively? (please explain)

( ) No affect?

( ) The positive and negative points have balanced out?

( ) Other (specify)

5. What would you say to someone who came to you for advice concerning the communications subspecialty today? (We will assume that you would recommend that he/she also concentrate on his/her warfare specialty.)

( ) I would recommend the communications subspecialty without hesitation.

( ) I would not recommend the communications subspecialty, but would encourage him/her toward another subspecialty. Specify_____

( ) I would not recommend subspecializing at all.

( ) Other recommendations (please specify)

6. What, in your opinion, is the *best* source of information about the communications subspecialty? (check one and fill in blank)

( ) NMPC (specify code/title) _____

( ) OPNAV(specify code/title) _____

( ) Naval Postgraduate School (specify code/title) _____

( ) I do not know of a good source.

( ) Officers with the communications subspecialty code.

( ) Other (specify)

7. Several suggestions have been made concerning changing the Communications Subspecialty. What is your opinion of these suggestions? (circle)

yes/no   The subspecialty should be more technically oriented.

yes/no   The subspecialty should be more management oriented.

yes/no   The subspecialty should be limited to LDO/CWO community.

yes/no   The subspecialty should be limited to the GURL community.

yes/no   The subspecialty should by limited to the URL community.

( )   Other recommendations (please specify)

8. If you would be interested in a possible follow up interview to this questionnaire please put you name, address, and autovon phone number in the space provided below.

9. Do you have any additional comments or suggestions concerning the telecommunications subspecialty? (answer in space provided or attatch additional sheets as needed)

APPENDIX D. QUESTIONNAIRE RESULTS: RAW TOTALS BY RESPONSE AND SELECTED COMMENTS

Total number completed and returned: **236**

Total number sent to Communications Subspecialists: **413**

Percentage of returns: **57%**

Distribution of Returns by Rank

Number   Rank

  4   Rear Admiral (RADM)

 32   Captain (CAPT)

 66   Commander (CDR)

114   Lieutenant Commander (LCDR)

 20   Lieutenant (LT)

236 *Total*

Distribution by Designator

Number   Designator

 54   1100 (GURL)

  2   1105 (GURL)

105   1110 (URL-Surface)

  8   1117 (URL-Reserve Surface)

  3   1120 (URL-Submarine)

  1   1200 (Materiel Professional (MP)-GURL)

  1   1210 (MP-Surface)

  2   1220 (MP-Submarine)

  1   1230 (MP-Pilot)

 18   1310 (URL-Pilot)

  1   1317 (URL-Reserve Pilot)

 23   1320 (URL-Naval Flight Officer)

  2   1440 (Restricted Line (RL)-Engineering Duty)

1	1460 (RL-Engineering Duty)
11	1610 (RL-Cryptology)
1	6190 (Limited Duty Officer-Communications (Surface))
1	6292 (Limited Duty Officer-Communications (Submarine))
1	Unknown
236	*Total*

Distribution by Sex

177	male
59	female
236	*Total*

Distribution by Subspecialty Code

9	82F
17	82G
49	82P
46	82Q
27	82R
88	82S
236	*Total*

Number of Naval Postgraduate School graduates

120

Question 2:What is your main source of career guidance?

Number	*Response*
46	Senior Officers at command
23	*perspective*
24	Detailer
18	Peers with same designator
74	Senior officers with same designator
51	Other

Selected Comments

Note: The rank and designator of some respondents appear in parentheses following the comment.

-Blind luck

-Personal experience/observation of peers and seniors

-Me

-Personal preference--take the hard jobs

-Fend for yourself (LCDR, 1610)(CAPT, 1310) (LT, 1110)

-Reading/talking to other people (combination of)

-What I perceive to be in my best interest based on qual level, and available billets as well as my interests.

-For 1100's there is no main source of guidance. I get a little info from various sources, make my decisions and hope for the best!(LCDR)

-Scuttlebut and rumors (LCDR, 1110)

-SWAG

-Personal desires

-Inate ability to find the right jobs. The successful career followed outstanding performance of an atypical career path (LCDR, 1320)

-Seems like that's the way the cards fell (CAPT, 1320)

-NONE-Have yet to receive career guidance in 18 yrs! (LCDR, 1110)

-Personal interest and desire to gain experience in an area which has good potential for post-Navy employment.

-I am a survivor! I chart my own course and far exceed most lifelong goals. (CAPT, 1320)

-Detailer useless, tended to want to keep communicators within communications to help him fill billets requiring the training

-Detailer-FAT CHANCE! 1110 detailer knows nothing about communications billets. I suspect likewise for other detailers as well. We need a knowledgeable contact point.

-Wanted subspecialty to increase chances for promotion (LCDR)

-Both detailer and peers with same designator

-Detailer, and senior officers with same designator

-Use a combination of the above; I think it's best to use them all and not put too much emphasis on any one source.

-Senior officers at command, senior officers with same designator, and own research (professional magazines, pubs) (LT,1100)

-Senior officer with same designator and own observations (CAPT, 1320) (CAPT, 1110)

-Senior officers at command and detailer

-Senior officers in VP community

-perspective and Senior officers with same designator

-Peers with same designator, Senior officers with same designator, and my own intuition (CDR, 1320)

-Senior officers with same designator and Senior officers at command

-Detailer and Navy information on career paths (CDR, 1310)

-perspective and *URL Career Planning Guide* (CDR, 1100)

-perspective, detailer and peers with same designator (LCDR, 1100)

-Retired naval officer (LCDR, 1110)

-Peers and seniors in communications subspecialty (CDR, 1310)

-Detailer, peers with same designator, senior officers with same designator, and seniors with same subspecialty. (CDR, 1310)

-perspective and detailer (CDR, 6190)

-Peers and seniors with same designator

-Senior officers (Army and Navy) at other commands

-Personal guidance, succeed at sea first

-Senior officers, specifically females (LT, 1100)

-There is not any adequate guidance after department head at sea. I looked in the billet summary. (LCDR, 1110)

-Senior officers not necessarily with same designator
(LCDR, 1100)

-Senior officers, detailer, and *perspective*
(LCDR, 1110)

-Senior warfare officers were most supportive/informative regardless of whether or not in chain of command (CDR, 1100)

Question 3: **If you have had a tour in communications, how well did the Telecommunications Management course at the Naval Postgraduate School (NPS) prepare you for that tour(s)?**

Number   *Response*

19 **Have not had tour in communications**

107 **Did not attend NPS**

16 **Attended another course at NPS**

45 **Provided adequate background**

Selected Comments

-But much of the day-to-day practical aspects had to be OJT (On The Job training)

-Not ALL knowledge; but made me more effective

-Some

-Generic/theoretical; did not prepare me for practical side of job, i.e. Naval communications background. (LCDR, 1310)

19 Did not prepare me

Selected Comments

-Do not think any schooling could prepare a person for OPNAV (Chief of Naval Operations office)

-For an afloat tour in comms. There was no relationship between the 18 month curriculum I went through and going to a Battle Group Commander's staff to deal with shipboard communications equipment capabilities and limitations. (CDR, 1110)

-As noted while at NPS, the course has little to do with the real world communications. (LCDR, 1100)

30 Other

Selected Comments

-Attended earlier course which was weak in communications

-Although the course work was interesting, I have not used my NPS background for any job I have had since graduation. I could have done my last 3 jobs successfully without NPS program.

-I did not go to a communications related billet until 13 years after my NPS tour. The specific communications courses no longer applied.

-No comment

-The course content did not have relevancy for either of my subsequent communications tours (LCDR,1610)

-By the time I did my payback, technology had passed me waaaay by. (CDR, 1110)

-I disenrolled NPS went to Communications-Computer Systems Staff Officer at Keesler AFB-great course (LCDR, 1100)

-Attended course at Keesler. (CDR, 6190) (CDR 1100)

-The course did not prepare me to perform Navy operational duties, however it did prepare me to serve as a communications program manager for new switch development. (LCDR. 1610)

-NPS courses, with few exceptions, are not sufficiently oriented to military communications systems. The theoretical courses are essential, but more system/application courses are necessary, e.g. encryption technology, multiplexing methods, battle group communications architecture, etc. (LCDR, 1110)

-Little military communications preparation; curriculum more oriented towards civilian/commercial telecommunications. (LT, 1100)

-I have not done a payback tour in communications and at this point I am certain that systems have changed significantly, so that I would have to 'come up to speed' when and if I get a tour in communications. (LCDR,1100)

-Course provided additional info to build on background already acquired. (LCDR, 1100)

-The course trained me as a manager, but offered very little on communications (8 hours total). I understand the present course is better. (CDR, 1110)

-After the NPS course I did not feel qualified for a group or numbered fleet staff billet. The course did not provide indepth information on the Naval Communications Systems. Great general education in electronics, computer systems, math, and management. (CAPT, 1110)

-Some of the education applies to my current job. Due to extensive reorganization at SPAWAR, many of the coded billets are no longer truly communications billets. (CDR, 1310)

-No communications tour since graduation

-Course did not fully prepare me for this tour (OPNAV) but the billet is not a mainstream communications billet (LCDR, 1320)

-My tour was demanding in electricity, electronics, and radio theory, recommend more technical curriculum. (LCDR, 1110)

-Prepared me somewhat (LT, 1610)

-Obviously the course did not prepare me for a tour in communications. I already had 3 tours when I arrived. Did it enhance my knowledge? Yes, in the right areas? Some what. What was missing? Needs much more technical information. (RADM, 1210)

Question 4: **In your opinion, how has the communications subspecialty affected your career?**

Number   *Response*

108   Positively

Selected Comments

-Not utilized subspecialty but having it marked me as achiever

-In that it was awarded for graduate education

-Except that it precluded obtaining needed warfare specialty billet (afloat XO) at a crucial point which affected command opportunity and promotion opportunity (CDR, 1110)

-Particularly at the more senior grades, and primarily for shore billets

-Extremely satisfying jobs and I would highly recommend it. Personal sense of accomplishment counters many of the negative feelings from the other communities and senior officers. Super Job! I have enjoyed being a communicator but it has been detrimental in my community. (CDR, 1220)

-It will open up career options when my URL career is no longer viable. (LCDR, 1310)

-Only in the sense that having a "technical" masters degree allowed me to change designators at a time when my General Submarine Officer (GSO) peers were being squeezed out of the submarine force. At least I still have a promotion path as an ED (Engineering Duty officer). (LCDR, 1460)

-Great management education, has been useful and valuable in all billets held since my tour at NPS (CDR, 1440)

-Overall, positively but you must first be current in your warfare specialty if you are a male officer. For GURL community, a strong communications background with NPS is the best way to get positive results from educational experience in a career as a communications subspecialist. (CAPT, 1110)

-Very much so, although it has served me as background for another subspecialty (C3-Command, Control, and Communications) (LCDR, 1117)

-However I must qualify this with the fact that communications subspecialists are not viewed with the greatest interest in our field. However I wanted to do this so I took the chance and the professional contacts I've made and the staff jobs have made the subspecialty usable. We need people in the subspecialty and somehow we need to set the Navy hierarchy behind it. I was a LCDR when I graduated and fortunately made CDR, the second time around because of the communications visibility at staff. I'm not sure working communications outside of the staff arena would have resulted in selection. (LCDR, 1610)

-Most likely, without two subspecialties, I would not have been selected for CAPT. I did not have one of the traditional tickets, i.e. command or command afloat. (CAPT, 1110)

-Gave me additional career path (LCDR, 1310)

-The communications subspecialty has been my career to date and it has treated me well. I have experienced division officer, dept head, and OIC tours while remaining in my subspecialty. There are very few other subspecialty codes that can uphold this claim to fame. (LCDR, 1100)

-However, it keeps you closely tied to communications billets, many of which historically are not career enhancing. In short, it can be good but there are big risks. (CDR, 1110)

-I'll let you know for sure after MAR 88 Commander promotion board reports out. (LCDR, 1320)

-Provided an alternative career path since I did not screen for an aviation command. (CDR, 1310)

-Good division officer jobs for me on my first two tours. (CDR, 1100)

-Only in the aspect that knowledge gained in obtaining the subspecialty has been applied to achieve superior results in the non-communications billets. Obviously, superior results bring superior fitness reports which equates to positive effects on the career. (LCDR, 1320)

-Having come in at a time when females were not allowed at sea, the communications subspecialty offers one the chance to become a Commanding Officer of a major command or possibly become COMNAVTELCOM, this is not possible in most fields except traditional female ones like nursing. (LCDR, 1100)

-In that it opened additional options. (LCDR, 1320)

-Very much so-although my selection to flag rank was most certainly based on warfare credentials and specifically amphibious warfare. The fact I had substantial communications experience led to my assign as COMNAVTELCOM when only 15% of flag billets are at sea, subspecialty plays a significant part in one's selection to flag. (RADM , 1110)

-What do you think? I obviously was selected to flag because I was a communicator. (RADM, 1210)

-No problem for GURL. Warfare may feel differently. (CDR,1100)

-Because I've had it (proven), I've been able to get good communications jobs. (LCDR, 1100)

-So far not a whole lot, the knowledge gained on some specific systems (ie. DAMA) has helped me to understand systems afloat and relate to communications types. (LT, 1110)

-I hope! It's hard to tell but I think my career opportunities after retirement are pretty good.

-But have worked more in C2 (Command and Control) than direct communications.

27 Negatively

Selected Comments

-Dead end for most officers. (by 1110)

-Too late to help my career; very good for junior women (LCDR,1100)

-I am a TAR, Communications billets have taken me out of the mainstream for my community (Note: A TAR is a Reserve officer on active duty)

-Limited assignment opportunities, keeps you out of operations where greater opportunities exist

-My first look for promotion to CDR came following a selection board which had selected a large number of communications subspecialists. The need for more communicators was greatly diminished (LCDR,1110)

-Got stuck in communications with no chance for command or CAPT. I basically have no regrets with communications duty, however.

-Since becoming a 1610, my only tours have been in communications, which has not allowed me the opportunity to become competitive with my peers who have been 1610's their entire careers. (LCDR,1610)

-I am obligated to take tours in the communications field although I have no interest in it (CDR, 1110)

-There is no sponsor for male 1110 communications types (OP-094 not withstanding) (LCDR, 1110)

-Promotion opportunity for communications subspecialists is very poor. As a result our community is short on officers to fill required billets. We wait past PRD's (Projected Rotation Date) for reliefs to report in or to be identified. (LCDR,1110)

-Every tour has been challenging and interesting but has impacted chances to make CAPT. There is no sponsor taking care of proven subspecialists. There is no reward for being a dedicated subspecialist if you fail to screen for command. Women are treated differently. Communicators with multiple tours in communications are retiring in droves. I will be one of them. The community is in trouble and very few care. (CDR, 1110)

-Overspecialization in communications as 1110 has hurt promotability. Not competitive as surface warfare officer, on the other hand have enjoyed the field and professionalism. (LCDR, 1110)

-It's a job that can be personally rewarding, but I think you start at a disadvantage competitively in a shipboard environment. It is a subspecialty that keeps trying to suck you back into its grasp. (CDR, 1110)

-Kept me from being competitive in my warfare specialty. (LCDR, 1310)

-It has taken me out of the mainstream 1610 mission and limited promotion chances. (CDR, 1610)

-My communications assignments have not been particularly helpful in that I did not have a USN flag officer in my chain of command. That coupled with the distain with which both joint staff duty and communications assignments have been viewed in the Navy in the past, is the reason for my check in the negative column. I would hasten to add, however, that I believe that the situation is changing and that with the new, congressionally-mandated emphasis on joint staff duty and the increased appreciation of the importance of C3, a communications subspecialty and utilization tours, including those outside USN staffs, will be career enhancing. (CAPT, 1110)

-No C3 career path or sponsor for promotions (LCDR, 1110)

-There are no career enhancing communications jobs (CDR, 1110)

-Detailer insisted on sending me to a joint staff tour right after NPS that was communications coded. Resulted in 5 years of 1 or 1 FITREPS, which adversely affected my command opportunities. (CDR, 1320)

-I wouldn't have had to spend a year in the Persian Gulf if I did not have this code. (LCDR, 1110)

-It's taken me out of my warfare and has hurt warfare command opportunity. (CDR, 1320)

-The tour took me away from my warfare specialty area and did not contribute to my knowledge or expertise. I would have been better off getting involved in another area such as NTDS (Naval Tactical Data System) which would have been more related to ships. (LCDR, 1110)

-It has taken me out of our main operational areas. (LT, 1610)

-For some reason the mind set at NMPC (Naval Military Personnel Command) is if you don't go all out for shipboard command, you have no reason to be in the Navy. Those of us who have picked one particular area we are interested in (in my case computers) are left in the dust by the detailers and most selection boards. (LCDR, 1110)

-Despite recommendations for and personal requests from senior officers, I was denied XO (Executive Officer) afloat billet in order to fill a communications vacancy. No command at sea/promotion to CAPT. (CDR, 1110)

-Graduate degrees are not important for line officers. 18 months without fitness reports. (LCDR, 1320)

60   No affect

Selected Comments

-It was just a place to go between sea tours

-As a TAR I have not been assigned to a communications billet since achieving subspecialty status.

-From Navy standpoint; however is personally satisfying as I enjoy communications.

-Enjoyable tour

-None that I know of, but it may have helped at my last 2 promotion points, (CAPT, 1110)

27   Balanced out

Selected Comments

-Allowed me to stay in Hawaii most of my career, but does not allow latitude to get other/different assignments other than communications. (LCDR, 1310)

-I received alot of leadership experience through communications billets however, I am not interested in returning to communications, I'm tired of having to fight every step of the way. (CDR selectee, 1100)

-The tour as Communications Officer at NCS Stockton was outstanding and earned me an S-code--communications community seems stingy w/ their proven designations. I believe I know the Naval Telecommunications System quite well-am well versed in fleet communications and fleet communications support.   Intelligence community offered me "specialist" designation after only 18 months at a joint command, and I don't know Intelligence half as well as communications! I like communications but am not pleased with the community. It seems to kill its offspring (especially male 1110's) promotion opportunity poor I think COMNAVTELCOM is a useless organization full of used up civilians who haven't seen a ship in 20 years! Plus the military heirarchy (at least as it was 2 yrs ago) was anti-female. (LCDR, 1100)

-Being a communications officer served to limit my opportunity to shift divisions on first ship. Of two CO's neither wanted to switch communications officers. But I have gained a full awareness of communications systems which has been a benefit in every billet that I have served in. (LCDR, 1110)

-On the positive side, rewarding tours, good locations, contacts with communications subspecialty community; on the negative side, the subspecialty has kept me from getting a desired Washington DC tour. (CDR, 1110)

 Other

Selected Comments

-Did not know I was one (LCDR, 1117, 2 comm tours)

-I am not a communications subspecialist even though I've extensive experience in communications. [NOTE-He is a 5082S]

-My knowledge and experience of communications has been big help but I do not consider myself to be a communications subspecialist. (LCDR, 1110)

-The opportunity to attend NPS positively affected my career by broadening my knowledge. Communications subspecialty has had no effect on my career.

-Up to the LCDR level communications was OK. I had planned on staying away from communications after NPS. I only went to USS Mt Whitney because of bad fitness report in last Department Head tour.I think the Mt Whitney should be held for an NPS graduate, not as a "get well" tour.

-Consider it job constraining for tours outside warfare specialty. Would like to do something other than communications. (CDR,1110,

-Too early to tell (LCDR, 1110)

-Not sure yet as am not p-coded at this time. Based on current experience in the subspecialty, am leaning away from further communications tours. (LT, 1100)

-At this point it seems to have no effect. However, perception is that it will negatively affect my career eventually.(CDR sel, 1110)

-Unknown, perhaps negative (LCDR, 1110)

   Question 5: **What would you say to someone who came to you for advice concerning the communications subspecialty today? (We will assume that you would recommend that he/she concentrate on his/her warfare specialty)**

Number   *Response*

121   I would recommend the communications subspecialty without hesitation.

Comments

-To GURL's only, dead end for male junior officers

-Especially for women (LCDR, 1100)

-With hesitation, cannot avoid tours in communications

-With some hesitation

-Key is not to subspecialize too early. Warfare officers need to be diverse within warfare area. No more than one communications tour before LCDR. (LCDR, 1110)

-But with a detailed explanation of what might be expected in terms of career.

-But clearly point out the negatives (CDR, 1110)

-I would also encourage individuals to start early in their careers. I think that starting at the senior LT/LCDR level is really putting an individual behind schedule, especially if one is looking for a Washington tour or CNTC, OP-941-945 etc.(LT,1100)

-I would caveat this with the caution that communications utilization tours must be balanced with some direct community support assignments (OP-03, SURFPAC and SURFLANT staffs, or afloat surface staffs in the case of 1110's) (CAPT, 1110)

-I know of no other subspecialty that offers the leadership challenges so early on and with the abundance of command opportunities. (RADM, 1110)

-But would strongly counsel not to get into traditional communications jobs, would recommend joint tours onshore or traditional communications at operational commands. (CDR, 1100)

41   I would not recommend the communications subspecialty, but would recommend another subspecialty. (specify)

1 Weapons Systems

1 Weapons Systems or Engineering

1 Weapons/Antisubmarine Warfare

1 Antisubmarine Warfare/Antiair Warfare/Electronic Warfare

1 C2- Command and Control

2 C3- Command, Control and Communications

1 Anything other than Training or Communications

1 Any real Engineering/science discipline

1 Antisubmarine Warfare/Personnel Management/Intelligence

4 Doesn't matter/anything but Communications

1 Intelligence/C3

1 Anything with Computers and/or Weapons Systems Development

1 Intelligence

1 Aviation Maintenance

1 Financial or Personnel Management

1 Financial, Personnel, International Relations, Weapons Systems Acquisition Management (WSAM)

1 Maybe C2- because track records in communications for promotion not good! (LCDR, 1100)

1 Operations Research or Personnel Management

1 Electronic Warfare

1 National Security Affairs or Administration

1 Computers/Engineering

1 Computer Systems Management

1 I would recommend computers if the time were available. I feel that TELCOM was too general in many areas. The reason that I took it was that it fit the time that I had available to obtain a Masters of Science degree. (CDR, 1310)

1 For males: Electronic Warfare/Antisubmarine Warfare.

1 Antisubmarine Warfare/Electronic Warfare

1 POL-MIL or Materiel Professional (MP)

1 Any more general application-WSAM, Operations Analysis, for example

1 Operations Analysis

1 MP or Engineering (LCDR, 1110)

1 Computers or Acquisition Management

1 Space Operations

Comments

-May run into dead end billets (professionally)

-There is no community management at any level to make it a consistently worthwhile career path. As far as I've been concerned it has been pretty much a paper drill only. (CDR, 1100)

11   I would not recommend subspecializing at all.

Comments

-For an 1100 unless they would be committed to the possibility of future within communications only to the ultimate end of restricted duty. FACT OF LIFE and closed loop detailing.

-For an 1110 specializing is a career detriment

-Because it is too tough to "get out" once you're in. There are no billets other than communications offered. OP-941 does the slating and detailers have little to say. You cannot be "URL." (CAPT, 1110)

63   Other

Comments

-No comment

-I would recommend communications specialty to junior (LT & below) women; I would not recommed communications of any kind to URL men at all! (LCDR, 1100)

-Recommend subspecialty (proven) in something

-Would recommend communications as a subspecialty for women only, still is a killer for men. (No admirals selected for communications --COMNAVTELCOM still does not require it)

-Recommend for women only since they have a complete career path at ashore communications stations; for men recommend Space Systems/C3. (LT, 1110)

-Recommend it only if the individual had requisite technical training.

-I would recommend the communications subspecialty, but also discuss some of the fleet perceptions about communications and how future looks.

-I would recommend the communications subspecialty only after carefully reviewing the individuals background; something else may make more sense.

-I would advise to go into communications subspecialty with eyes fully open; would reiterate historic communications limitations to career.(CAPT, 1110)

-Would be great if planning to get out of the Navy, otherwise I would recommend obtaining Computer Systems Management or Computer Science degree. (LCDR, 1460)

-Get involved in a field that is interesting, holds career potential, and has a wealth of career enhancing billets at all levels of one's career. (CDR, 1110)

-I feel 1100 officers are treated poorly by communications specialists. A person needs to fully evaluate their career desires before entering communications (CDR selectee, 1100)

-I would recommend for some non-technical types in my designator (1610) (eg, female 1610 careerists; males with initial at sea time complete, etc)

-Not applicable

-Unable to effectively answer since no communications tours

-Recommend communications subspecialty for women officers in particular, but would recommend for men if their career goal is to become marketable in 2nd career notably with Washington DC contractors (CDR,1200)

-Recommend it for women, not recommend it for Cruiser/Destroyer ship type operations, weapons billets.

-It would depend on the officer and their background; it is not the road to "stars" (CAPT, 1100)

-I would recommend experiencing at least 2 separate fields and discussing other fields with subspecialists from those fields before pursuing a particular subspecialty. (LCDR,1100)

-Hard to say, subspecialty could be beneficial, but remember: once you subspecialize, subspecialty desk at NMPC gets first shot at you for orders. You lose flexibility in detailing.

-Communications is "advertised" as being a great "operational" tour for women officers. I find it to be more of an administrative job and would not recommend this field for someone oriented towards operations or the real-time picture. (LT, 1100)

-To be a good communicator means to "can" your warfare subspecialty (LCDR, 1110)

-It would depend on the purpose and their objectives. I would recommend subspecialty, based on their particular interest in communications by the individual, I would most likely encourage some other subspecialty. (CAPT, 1110)

-Would recommend it but point out other fields which would also be a positive factor in career growth. (CAPT, 1110)

-Highly recommend to 13xx AQD-DK3 (TACAMO)

-Recommend subspecialty with hesitation. Warfare designated officers must continue in their warfare area, GURLs must map out their career early. (LT, 1100)

-I would recommend the communications subspecialty with hesitation. In my experience it is a viable area for specialization (and necessary) but not on the "main track" in terms of promotion and career path. (LCDR, 1110)

-I would recommend communications for women officers without hesitation; not for men-promotion is not good enough for warfare types.(LCDR, 1100)

-Send them to someone who could discuss the subspecialty knowledgably (LCDR, 1120)

-Would wholeheartedly recommend for female officer. For male, would advise them to look at promotion percentages before jumping in. (LCDR, 1100)

-I think it will potentially become a good subspecialty but it has had no affect on me to date (LCDR, 1310)

-I would recommend the subspecialty but only if the person felt strongly enough about it to risk the impact on his specialty and career. (CDR, 1110)

-Be very careful in selecting a subspecialty. Look closely at follow-on billets to ensure you will enjoy the jobs. Be very careful in selecting billets with your detailer when given the opportunity. (CDR, 1320)

-Depends on career goals. Communications tours and subspecialty are interesting and have good post-Navy potential. Communications subspecialty is the "kiss of death" to a male Navy officer's career.

-A department head tour at a major command is mandatory to make CDR. Another subspecialty to be considered in conjunction with communications is the joint command subspecialty. They go hand in hand. (CDR, 1320)

-Projecting in to the future the needs of both the service and the private sector, I believe the highest growth areas will continue to be space related applications/systems, telecommunications, and computer systems. Therefore, to continue to build the necessary professional infra-structure and to ensure the requisite numbers of experts keep pace with growth in these areas, I would recommend anyone seeking advice regarding subspecialties consider any field related to those growth areas. (LCDR, 1320)

-I would only recommend the communications subspecialty to someone who is interested in that field as a second career. (CDR, 1310)

-For males, they must accept that they won't get promoted off of the communications subspecialty; for females it's a chance to become s Commanding Officer. (LCDR, 1100)

-I would recommend NPS, then go to sea and stay at sea until CDR. (CDR, 1310)

-Depends on individual capabilities and interest. In general I would recommend the communications subspecialty. (CDR, 1110)

-Background, personal desires and past performance would dictate my advice. (CAPT, 1110)

-Communications specialist track for GURL not controlled. CO/XO billets are inadequate to give uncontrolled numbers equitable opportunity for leadership jobs. Until communications community defines what they need specialists for and how many are needed, GURLs are going to be disgruntled with communications as a career. Also lower entry level billets for those getting into communications is needed ie. CWO billets for ENS/LTJG. (CDR, 1100)

-Individual should follow own interests (CDR, 1110)

-For 1110's needs to be worked into Navy's/1110's community's career plans (LCDR, 1110)

-Would recommend only if community management improved. The reputation of the communications community must improve. (CAPT, 1110)

-For GURL only. For warfare good if your hitting wickets in warfare specialty, but it won't make you well if you haven't. (CDR, 1100)

-If you really want to move right on up, you need to do everything in your power to become a generalist and strive for command even if it means ruthlessly running over people on your way up. (LCDR, 1110)

-Would recommend communications subspecialty to junior (LT & below) women; would not recommend communications (any kind) to URL men at all. (LCDR, 1100)

-Okay if you are female. COMNAVTELCOM policy is that there are no "competitive" warfare officers in the claimancy at NAVCOMMSTAs. (LCDR, 1110)

Question 6: What, in your opinion, is the best source of information about the communications subspecialty?

2   NMPC   (Subspecialty Community Manager)

17   OPNAV   code 941

Comment

OP-941 finally starting to manage subspecialty (LCDR, 1320)

6   NPS   code 32

62   Do not know

Comments

-Unfortunately there is no best source. However much of the slating of the key communications billets is handled in OPNAV 941C. Maybe a newsletter would be helpful

-CNO, OP-094 does not have a community manager within NMPC, therefore very little or no community exists. (CAPT,1110)

-If you know of one let me know

126 Officers with communications subspecialty code

Comments

-But choose carefully, I do not know of a good consistent source.

-Find and talk to a wide cross-section of men and women.

23 Other

2 Graduates of the program

1 All of the above

1 Civilian communications specialists, senior enlisted communications specialists

4 OP-941/CNTC personnel

1 NPS and officers with the communications subspecialty

3 As the TYCOM (Type Commander) COMNAVTELCOM has a lot of practical knowledge at its disposal, such as how billets are coded, PRDs, etc. (LT, 1100)

1 NAVPERS 15839, vol 1 (part A) and vol 2. Also the Junior Officer/Senior Officer Billet Summary lists communications billets by geographical area and subspecialty. By becoming familiar with these documents, keeping your ODC (Officer's Data Card) up-to-date, and using the command's ODCR to find communications jobs, I can't think of a better way to keep abreast and up-to-date on the communications subspecialty. (LCDR sel, 1100)

1 OP940-C2 Planning, Appraisal and Systems Integration Branch and Officers with the communications subspecialty

1 NPS (CDR Donnelly) and officers with communications subspecialty

1 detailer

Question 7: **Several suggestions have been made concerning changing the communications subspecialty. What is your opinion of these suggestions?**

The subspecialty should be more technically oriented.

100 yes   78 no   58 no comment

The subspecialty should be more management oriented.

90 yes   83 no   63 no comment

The subspecialty should be limited to LDO/CWO community.

14 yes 164 no 58 no comment

The subspecialty should be limited to GURL community.

9 Yes 167 no 60 no comment

Limited to URL community.

19 yes 154 no 63 no comment

Other (Comments)

-No change

-Combine with C2

-Unknown

-We definitely need a mix of all those with strong operational (warfare) backgrounds of URL community in the majority Key management areas: Communications Planning, Acquisition Management, Programming

-Need our own specialty code (like the 1900/1400 community)

-Recommend proven subspecialty be screened at mid-LT vice LCDR

-A subspecialty tour would be a good idea. There's no future in a Communications Specialist environment. It's a dead end to nowhere. It is limited to strictly naval applications. No tie in with joint or civilian communications. (LCDR, 1110)

-Subspecialty should be limited to URL and LDO/CWO

-Male officers look out; the GURL people are going to dominate the subspecialty.

-Theses if required should deal with more technical issues

-Basic technical knowledge required but management and leadership necessary at senior levels

-Shore communications sites should be managed by civilian specialists under contract or civil service (LDCR, 1610)

-Billets should be coded more strongly, change of attitude for Navy required.

-Should be open to anyone with the acumen-managerial, technical and engineering/analysis (LCDR,1110)

-Subspecialty code should be performance oriented. NPS is great but proven performance should be demonstrated prior to code assign

-Keep the field open and draw from large group of URL talent

-Orient the management portion specifically to US GOV/DOD practices; orient the technical portion more strongly to state of the art information/signal processing.

-I have no opinion

-The subspecialty should not be limited to any particular community. Currently has about the right mix of technical and management courses. However, when I went

through there was not enough good emphasis on current Navy shore and sea communications equipment. When I went through most of the emphasis was on message processing and transmitting, and virtually nothing on tactical Naval communications.

-Balance between technical and management

-Slightly more technical, In 1975 the course did not offer a good enough understanding of NTS and hardware associated with it. Maybe it's better today. I don't think it's necessary to make the program too technical. That's what Communications Engineering program should do. (CAPT, 1110)

-Keep a cross pollination of communities and get deeply involved in joint communications (CAPT, 1110)

-Needs a champion-a salesman. Admiral Boyes was the last senior communicator who championed the cause and made it a worthy subspecialty (CDR, 1110)

-There is no sense of community among communications subspecialists-we need some focal point, like a newsletter, magazine, or whatever. Even a list of billets would be a start. (LCDR,1110)

-The subspecialty should have a higher representation from the URL community (LCDR, 1110)

-There should be a proper balance of GURL/URL subspecialists represented to ensure we have the operational understanding which I don't think you totally get with either GURL or LDO. However we need these people to be our "real experts" in communications from a more technical sense and also provide that necessary continuity and corporate knowledge. (CAPT, 1320)

-This is too complex a subspecialty to be managed as it is currently. After NPS and 8 months into my first and only communications tour, I am convinced that this should be a viable career path for all interested officers-male and female. (LT, 1100)

-Need a good solid mix of technical and management skills
(CAPT, 1110)

-Perhaps to be more competitive with other services getting the dollars, we should have a restricted line communications community--"real experts" (LCDR, 1100)

-The Navy should not waste the talents of its communications subspecialists with the worries about joint billets vs promotion statistics, warfare specialty, etc. Communications people should be communications oriented. (LCDR, 1110)

-I believe the technical/management mix is about right. Unrealistic to limit to one designator community. I believe communicators do need to be better versed in tactical communications and C2 systems. (CAPT, 1110)

-Don't change it--get more top notch people into it. We already have many superb ones. (CAPT, 1110)

-Due to increasing complexity consideration should be given to creating separate RL community similar to Intelligence for communications. (LCDR, 1110)

-Why not have branches for communications subspecialty, similar to Cryptology?

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-Start promoting male warfare types with the communications subspecialty. We need people with sea experience. (LCDR, 1100)

-The subspecialty should blend technical and management; also blend LDO expertise with URL. We need to keep operators from the fleet in communications To do that we must protect them professionally. (CDR, 1110)

-Make it restricted line for these who qualify. (LCDR sel, 1100)

-Operations/System oriented. A combination of the technical and management. Large staffs want communicators not technicians. Do not limit subspecialty to GURL unless they go to sea with battle groups. That's where experience is gained. Communications Stations do not teach operational experience. The communications subspecialty must be more operations oriented. (CDR, 1110)

-An officer serving in communications subspecialty utilization tours can be of the greatest service in the policy area (ie working requirements and matching technology to the Navy's needs). He/she should have a technical foundation and I suspect that this is a part of the communications management curriculum. But the needs of the engineering community in the communications field can be met by others (in most cases the manufacturers who design and develop equipment to meet stated needs or with stated capabilities). The communications subspecialist will be the architect and builder, not the engineer/designer. There was at one time a Communications Engineering course at NPS and it still may exist; if so, it would be a source of the technical orientation.(CAPT, 1110)

-Make it a specialty with its own career path. Only LDO/CWO and GURL designators have much career potential in communications. (CDR, 1110) tours)

-None of these recommendations are of any value without credible, consistent community management.(CDR, 1100)

-If my two tours are any indication, they contained the proper mix of management and technical orientation. I see no need to limit the subspecialty to any category (LT, 1100)

-It should more closely parallel (or include) traditional civilian communications training, including telephones, switches, civilian/defense contractors, computers. (LCDR, 1100)

-Develop separate specialty community ie. 1610. (CAPT, 1110)

-The payback tour should be immediate and knowledge of fleet communications is essential. (CDR, 1310)

-Strongly believe that the communications subspecialty needs to be modified; but highly disagree that the answer lies in limiting it to a specific community(ies). We need participation from all communities; however, community representation should be tied to the various levels dealing with day-to-day maintenance and operations; LDOs and URL/GURL junior officers at the next level; and upper management levels reserved for experienced URL. Rationale: the URL is likely to be more sensitive and responsive to fleet commanders' requirements and operational constraints/problems than other community leaders. Highly agree that the subspecialty (COMM) needs to be up-graded to a more rigorous, technically oriented field. However, rather than substitute some of the management requirements with more technically oriented

courses (which would be a major error), the field needs to be strengthened by the addition of a few more technical classes. (LCDR, 1320)

-LDO/CWO billets should be more technically oriented and they should not be used in leadership positions. They should be placed where GURLs can learn from them, not compete with them. (LT, 1100)

-There is an area that is not readily apparent to all Navy personnel that the communications subspecialty is important, staffs, service and CINCs. One would not expect an LDO/CWO to have to do all the administrative functions that staff officers traditionally get involved in plus the staffs need a balanced outlook where as LDO/CWO personnel may be too specialized. (LT, 1100)

-Should be more directly related to Naval Communications in a realistic sense i.e. communications afloat/ashore problems/solutions, hardware capabilities, etc.(CAPT, 1320)

-The Navy needs to recognize importance of communications and promote communications subspecialties to gain credibility for the young officers to see. (CAPT, 1610)

-There are too many people now with no fleet experience. In the enlisted ranks we promote this by counting stations such as Iceland as sea duty. (CAPT, 1110)

-A wide background knowledge in equipments/systems is essential. (LCDR, 1320)

-Eliminate the subspecialties, and designate subspecialtists as restricted line with a new designator. (CDR, 1310)

-Detailing is the problem--seems to be almost all or nothing regarding communications billets and this does not often produce a well-rounded, competitive warfare specialist.(CAPT, 1110)

-A communication subspecialist needs, above all, to be an effective manager. He should be technically oriented but more importantly he should learn to depend on his more technically skilled CWO's and PO's and not be afraid to delegate authority. (LCDR, 1110)

-Continue URL membership--its a valid career path for officers who fail to screen for warfare/major career gate (eg XO screen/command screen) (LCDR, 1110)

-In my 2nd tour in communications I needed more technical expertise; for my 3rd tour I needed the operational expertise. (CAPT, 1110)

-As the warfare communities become more and more competitive there is a growing opportunity for CWO/LDO/GURL to excell in communications-at the same time any warfare type worth his/her salt should be able to make 06/flag in communications. (RADM, 1110)

-The subspecialty should be 60% management and 40% technical. We need to develop communications subspecialists who have enough technical knowledge to understand modern communications systems but more importantly management knowledge in how to maximize these communications systems. (CDR, 1110)

-The subspecialty should be combined to make a command and control subspecialty. (CAPT, 1110)

-Communications engineering fundamentals and communications theory, non-calculus based for management specialists. (LCDR, 1110)

-I think there is a pretty good mix of LDO/CWO, URL, GURL in Telecommunications it should stay that way. I just think it hurts the URL type in his/her career but is good for the Telecommunications community. (LCDR, 1110)

-Community should be a mix of all three communities. Warfare specialists need experience before LCDR. LDO/CWO role needs to be better defined, they are not substitute for communications managers in URL community. They provide technical expertise for backup to URLs. (CDR, 1100)

-Technology and managerial orientation are necessary for success in communications subspecialty. (LT, 1100)

-The subspecialty should not be limited to a specific community and is already very management oriented if learned through on the job training (OJT). (LCDR, 1100)

-Not qualified to comment (LCDR, 1110)

-Need all designators. LDO and GURL have unique opportunity for repeat tours at COMMSTAs. Warfare LDO for tactical afloat. (CDR, 1100)

-The problem is not too many LDOs in non-LDO billets. (LT, 1110)

-Communications issues, though frequently overlooked, drive most operational scenarios: Grenada, Lebanon, Iran, Central America. Senior officers with both warfare and communications knowledge must be in high level decision making positions. (CDR, 1100)

-Eliminate the subspecialty, establish a new designator. The USAF has the ISC and the Army has the signal command. LDO/CWO and subspecialists are not their equals. (CDR, 1110)

-I'd like to see a restricted line designator be developed for communications specialists. (LCDR, 1100)

-We must either develop a hard-core cadre of professional male/female communicators with experience ashore and afloat that promotes from within to flag rank or continue the status quo. I vote for the former.(CAPT,1320)

-You need to trade the technical and management off. To understand todays complex systems you must be highly technically oriented but at the same time if you can't manage money, people, time, and resources it won't work either. You must be sharp in both areas. (LCDR, 1110)

-LDO/CWO are great--we wouldn't live without them. GURL's serve a purpose, too. But, we should never take the fleet experienced URL's out of the communications business. It's the fleet we're supposed to support and provide the means for higher authority to direct. We need people who have been there to be in charge of Navy communications.(CDR, 1110)

-Get back the areas the space and C3 people have taken from the communications people. (LT, 1110)

-As an 1110 URL, I feel very strongly that my JO's have an adequate appreciation for the capabilities and limitations of both voice and record Naval communications. As you subspecialists take over the management of the systems you must also assume a

responsibility to keep the fleet operators educated enough to fully exploit the capabilities while understanding the limitations. (LCDR, 1110)

-LDO/CWO/GURL may be a possibility, but not much new blood. What about a restricted line designator? Male URL's have no chance for promotion if in communications! Need to merge Communications/Information Systems/Automated Data Processing into a career specialty that includes planning as well as operational billets, and credit for non-operational jobs when under review for promotions. (LCDR, 1100)

APPENDIX E.   ADDITIONAL COMMENTS OR SUGGESTIONS FROM QUESTIONNAIRE

The comments from the questionnaire have been grouped into categories to facilitate evaluation.

A. NEGATIVE COMMENTS

-Military telecommunications are a scarce national resource and the Navy needs to keep the best and the brightest in the field in order to satisfy its future requirements. (CDR, 1110)

-Communications is the most important function of command. It is not perceived as such by superiors. (LCDR, 1100)

-Just don't try to over train or over specialize, remember it's a subspecialty. But communications are important, no doubt about that. (RADM, 1320)

-Don't spend all your time job hunting, just work hard at the job you have. So you "only" become a Captain, there is no sure road to Flag in any area field subspecialty. But, in communications you have (with a technical background) a virtually guaranteed after Navy job. And that's not all bad. (CAPT, 1210)

-What is missing in the TELCOM community is people with a grasp of the technical requirements and the background to meld fleet requirements with acquisition of new technologies. (CDR, 1440)

-Give communications command jobs to those who demonstrate proficiency in communications.   There are few professional CDR communicators and very few CAPT. Warfare front runners get all the good jobs and with rare exception are lucky if they've had more than one meaningful tour in communications. (CDR, 1110)

-The telecommunications subspecialty is not, in my opinion, seen as a "glamorous" billet.   It is a billet which eats junior officers for all three meals.   Promotion rate-especially for warfare officers is generally low. The number of female officers who receive poor marks because of poor training experience for the assigned job is perceived on my part to be high. (CDR, 1100)

-The problem with our community is IMAGE! Both external and internal. We do a lousy job of PR within the Navy, yet operators see us as shortsighted and non-responsive. (CAPT, 1110)

-There is really no one who looks out for the subspecialty. (CAPT, 1110)

-It gets very frustrating to have to explain basic communications to supervisors whose title is "CO NAVCOMMSTA XXX" or "XXX Staff Communicator", but who have little/no experience in communications. Most of these senior people are almost proud of the fact that they know nothing, and that their concept of communications is that it is a "magic black box".   Yet in many years of service, I have seen good communications officers passed over in favor of Materiel Professionals, comptrollers and other business majors. I have seen a one-star Admiral (communicator) relieve a

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two-star (non-communicator) in a billet that should require communications expertise and still be waiting for the second star two years later. I see the Navy communications system as somewhat tenuous and definitely neglected, but until those with the power decide that the ability to communicate with the platform is as important as having the platform itself I do not see that the situations will improve. Nonetheless, I have enjoyed my tours in communications and do not regret my choice of this subspecialty. (LCDR, 1100)

-It's difficult indeed to explain propagation theory to a CO/Admiral whose only background is as an engineer or weapons type, where items work or are broken. Our discipline is not forceful enough at all levels. The Carrier Group Communications officer (a LCDR) must fight with other department heads (CDR or CAPT) for needed money. Even COMNAVTELCOM is junior. We need more seniors in support. (LCDR, 1110)

-Needs better definition, and jobs need to be better identified. (LCDR, 1610)

-Communications is becoming a warrant/LDO community, numerous billets now belong to LDO community, GURL are losing ground. (LCDR, 1100)

- I have 12 years of sea duty and cannot compete with female communicators for preferred shore communications billets. (LCDR, 1110)

-The major problem with this subspecialty is that in order to remain current in the field (and to compete with other service officers in joint arena) you must have a significant number of repeat tours. As a result, you may miss the operational leadership wickets you need to make CDR or screen for CO/XO; thereby, failing selection. Not as serious for 1100's because this subspecialty has many leadership positions ashore so that the leadership and subspecialty tours can be combined. Selections boards however, do not look favorably at the warfare specialist in the same situation! Consequently, we have very few senior 111X/13XX communications subspecialists. Guidance must be part of the selection board precept. (CDR, 1100)

-Until the Navy becomes more aware of the need for communications, other than at sea, the XX82 subspecialty will continue as a second class citizen. As a LCDR, at present, this is not a road to flag. Officers with a communications background are looked at favorably by other services, the Navy sees it as one that the officers couldn't do anything else so they made him a communications officer. This is not the case and should be so recognized.(LCDR, 1320)

-Since my CO tour at a Naval Receiver Site the majority of the communications jobs I've been slated for/offered would have been the kiss of death on a male officer's career, yet the attitude was that by offering them to me they were doing me a favor. That is the reason I took this XO job at Recruit Training Command, opting out of "settling for" jobs no one else wanted or the detailer could not otherwise fill. I'm not bitter, just an informed realist. (CDR, 1100)

-URL has warfare specialty to broaden experience base. GURL should not become locked into subspecialty. The experience base is too narrow. (CDR, 1110)

B. UNRESTRICTED LINE

-Make warfare specialty hurdles on time; otherwise you are not even in the running. Don't put all your trust in your chiefs and LDO's. They are fantastic, but don't understand the Battle group war fighting requirements. Don't waste much time

pushing messages; learn the C2 systems and communications that serve them. (CAPT, 1110)

-The subspecialty offers a second career path for officers who can't make it to CO XO in URL. I don't believe that shore communications billets are career enhancing since they are out of the mainstream. I have been out of communications for 11 years trying to get my tickets punched at sea--trying to be promotable. (CDR, 1110)

-A successful Naval career (ie promotion) depends predominantly on the performance quality in warfare specialty billets assigned. Subspecialty assignments at the expense of warfare assignments is not a promotion path (CDR, 1110)

-As a LT graduating from NPS in '73, I felt Communications subspecialty was like an albatross around my neck and would interfere with opportunities in my warfare specialty. This was true of a tour a DCA as a new LCDR working in the AUTOVON shop (greatly overstaffed--a real "spin your wheels" tour). This has not been true since, particularly of this tour (at OPNAV 941).

-The Navy needs folks with multiple communications tours who are warfare specialists. However, warfare specialists know this hurts career. (LCDR, 1110)

-It is important to match operational competence with success in a subspecialty. Communications subspecialists, in the opinion of a significant number of the officer community, fail on the first point. Moreover, there has been a perception that communications subspecialists are not taken care of to the same degree that other subspecialties take care of their community. (CAPT, 1110)

-One can't allow himself to get imbedded too deeply in the communications groove or he will lose out professionally. Must fight to get the operational tours. (CAPT, 1110)

-Communications subspecialty provides a viable career path for both men and women. But GURLs in the field have to aggressively pursue the billets available. I've found that the detailers know very little about the field and career options in communications. URLs who subspecialize in communications at the sacrifice of their warfare specialty usually lose their chance for promotion.(LT, 1100)

-The TACAMO community is unique in that you gain a subspecialty as a result of experience and have the opportunity to command at the same time. However the bottom line to make CAPT, is to have command. (CDR, 1320)

-"More than one communications tour is too many for a URL career." by an LDO who knew what he was talking about. (LCDR, 1110)

-Don't go to communications if you want to advance past 1 star. Stay operational as much as possible despite pressure to take staff communications jobs.(CDR, 1320)

-Must not rely on subspecialty to maintain competitive with peers. Must excel in primary warfare specialty. Major commands ashore (communications billets) are not as good as sea billets. CO's of NAVCAMS have not done well in flag selections.(CDR, 1110)

-The only concern I have is what happens to the senior URL communicators? It seems CAPT is the highest one can expect to go, and conjecture is that the career limit is attributed to the communications subspecialty. The positive side is that I feel I have

a strong career potential in the civilian world after retirement. Maybe that is the trade off? (LCDR, 1110)

C. POSITIVE COMMENTS

-Communications was the most cohesive of the subspecialties during my time and provided me, and many others, excellent opportunities ashore and at sea, I was strongly advised by the line community to stay out of communications because the subspecialty was regarded as a career killer. Not so! (CAPT, 1105)

-I consider it a good subspecialty, especially in light of the advances in C3S and the requirement for the senior officer to understand communications. (CAPT, 1310)

-There's nothing wrong with the communications subspecialty. Many have had rewarding careers in the field. The one's who don't are usually deficient in their warfare specialty and blame communications for whatever problems they have. I know of many highly competitive officers who are communications subspecialists. They enjoy their work and the profession. No matter how many times you hear it--you must do well in your warfare specialty. Those that look to communications to get well or get away from sea duty perish. Don't complain-excel. (CAPT, 1110)

-Great field! (CDR, 1110)

-Terrific field for women. Get stationed around the world at different communications stations. (LCDR, 1100)

-The good hardworking career minded individual will find a very rewarding career in Naval Communications. The warfare type who is competent cannot lose. The LDO/CWO has an open field for advancement and command. The GURL has best of all fields; early division officer, department head, OIC and then command. When I left CNTC 3 females (2 CDR and a CAPT) were in command, plus numerous NTCC's had female OIC's. Where else? (RADM, 1110)

-Excellent GURL subspecialty career path choice. Billet structure in communications subspecialty makes it difficult to achieve career milestones while "closed loop" in communications assignments, (eg. XO opportunity, Department Head opportunity, CO opportunity!) URL officers who fail to XO/command screen yet still promote to LCDR CDR can pursue careers. (LCDR, 1110)

-Telecommunications subspecialty provides aviators in TACAMO community a route to CAPT and bonus command. I highly recommend it. (CDR, 1320)

-After my 24+ years in the Navy, I include among my remaining goals to be CO of a NAVCOMMSTA and the first TACAMO wing commander (assuming TACAMO would form a wing.) In any case, I am satisfied that the communications subspecialty affords each of us the opportunity to stretch ourselves and maximize our potential to excel! (CAPT, 1320)

D. SUGGESTIONS FOR NPS

-More emphasis on computer technology. All new development communications systems/ equipment have inherent computer and/or processing capabilities. More detail on Naval Telecommunications System with respect to subsystems, equipment and new development. (LT, 1110)

-I cannot rate the 82P subspecialty on courses of NPS since I have not served in a position requiring it. Hopefully I will use it soon. I am looking forward to using my degree. I would recommend Monterey (NPS) to many people. (LT, 1320)

-It needs to incorporate more about the services operational communications practices, policies, procedures and capacities. The course is great for becoming a program manager or a corporate telecommunications systems manager, but for military communications operations, it is very lacking.(LCDR, 1610)

-I think as a prerequisite to the curriculum, at least one communications tour is highly advantageous. For all graduates of curriculum, I think the Communications Officer Afloat course, six weeks duration, at either Newport, RI or San Diego, CA is highly desirable especially for those who have not had previous communications tours. I found this course an excellent complement to my NPS studies. (LCDR, 1100)

-A must course that should be added to the curriculum is a Personal Computer course/data base management course. Curriculum should be more oriented toward Navy/Military systems. (LCDR, 1310)

-Graduates of the Telecommunications curriculum need to fill p-coded billets in order to adequately answer this questionnaire. As an operations officer the technical aspects of the Engineering courses have proven beneficial.(LT, 1610)

-I was the liaison officer between NCEP (Naval Communications Area Master Station, Eastern Pacific) and NPS students during their experience tour in Hawaii in 84 and 85. What they saw (HAWTELCO, COMTHIRDFLT, and CINCPACFLT hqtrs visits-mtgs w/ ADMs etc) was interesting, but did not reflect the communications field in Hawaii or encourage projects in areas of fleet problems (message screening boards, circuit congestion, operations analysis, etc.) And in two CAMS (Communications Area Master Station) tours, I've yet to find a NPS telecommunications specialist assigned. Also, all communications officers should learn FTOC (Fleet Tactical Operations Center) jobs as early in career as possible--as a UI (Under Instruction) watch stander. (LT, 1100)

-I would like to see the NPS curriculum be better tailored towards our subspecialty. When I graduated from the 620 curr in Mar '84, it wasn't even close! We need a senior representative at NMPC, I think, that we could talk with and maybe a newsletter of something to give us a vehicle to converse. As it stands, I'd say it's anybody's guess where we're going, etc! (LCDR, 1100)

E. TRAINING

-I would have loved to have some type of formal training in Communications, instead of getting it the hard way, OJT. (LCDR, 1310)

-Better initial training for 1100/non-ship bound personnel. My training was punching publications, CMS, off-line encryption. Should get more communications theory and hands on equipment training so will have feel for how difficult high frequency (HF) point to point circuits can be; and will be better able to discern when being snowed. (LCDR, 1100)

-I never used it. (CAPT, 1310)

-Automated Data Processing (ADP) and communications should be combined or at the very least we need more people well versed in computer applications in the communications field. (LCDR, 1110)

-I believe a closer relationship is needed between computer systems and telecommunications, as well as between RM's (radiomen) and DP/DS (data processing) community in enlisted ranks. (CAPT, 1110)

-There is a severe requirement for telecommunications systems specialties (including information systems) in the DOD. Billets and career patterns need to allow for specialists with technical PLANNING background to plan for future DOD/Navy requirements. Navy communications hardware is older that you and I, whereas the industry is using state of the art! We are wasting taxpayers money by using and maintaining such systems because "we own them." BIG DEAL! Let's be efficient and optimize our dollars with new technology. LDO/CWO only know the old systems.... (LCDR, 1100)

-Require qualifications (eg. courses, exams, interviews) generally upgrade, make communications specialty mean something. We need to gain respect and now is the opportune time. (CAPT, 1100)

-Communications managers should understand frequency management, automation, fleet communications and joint communications at more than a superficial level to be able to survive in the joint arena where more and more actions will be occurring. For the health of our young officers, get involved early in a joint communications tour. (CAPT, 1110)

-Communications today is split between technically oriented and management. Although cross-pollination should be required it is unrealistic to expect this division to ever go away. This should be recognized formally as per your question 7. The answer is not one or the other, but all, i.e. technically orientated includes LDO/CWO/GURL (with background), URL (with background) and managerial; GURL/URL. (LCDR, 1117)

-Too big a field to be an expert in all the telecommunications field. With the Goldwater-Nichols Re-organization Act and present trends, more emphasis should be placed on Joint Interoperability with reference to Telecommunications and equipment at NPS in order to stay ahead of the other services.(LT, 1110)

-I received my subspecialty from attending the Communications and Computer Systems Staff Officer Course at Keesler AFB, a joint service school run by the USAF. There is very little information on Navy systems in the course because Navy sources gave little or no support to the course, which is a shame. I learned a lot about Army and Air Force systems which has come in handy working in the joint environment. I do not know what the NPS course is like, but I recommend a good cross section of info on all the services because a lot of billets utilizing the communications subspecialty are joint duty billets. To maximize performance it helps to have some background on how the other guys do it.(LCDR, 1110)

F. BECOME OWN COMMUNITY

-Strongly recommend the communication community become their own designator and community. Communicators always take the back seat to warfare specialists, and are hurt in the promotion cycle by other more prestigious billets. Every communicator should get a warfare specialty and then consciously shift/select communications just as EDO (Engineering Duty Officer), Intelligence, etc. (CDR, 1220)

-If we take the communicator out of the URL, he/she would compete for promotion entirely against other communicators. The professionalism necessary to be a good

communicator is not well understood or appreciated by non-communicators. We need to be more technically oriented also. A restricted line community could achieve this. (LCDR, 1110)

-Consideration should be given to making communications subspecialtists into limited line officers. (CAPT, 1110)

-Either we need to be a Navy of "unrestricted" talents or not. I hate to see specialties and subspecialties created which promote unfamiliarity with the "big picture", particularly when serving customers. (CAPT, 1110)

-I believe the subspecialty should have a career to progress in of its own, independent of warfare specialties; become a specialty. An officer can make a career of being a professional communicator. (CDR, 1110)

-Needs community manager to define/identify billets requiring communications experience (improve present inventory) and identify a number of billets to allocate between CWO, LDO, URL warfare specialists, and GURLs. Particularly identify size of community of communications subspecialists. (CDR, 1100)

-Establish a defined community and manage it. (CAPT, 1110)

G. NEED FOR INFORMATION

-I would like to know of a specific source of solid information on the subspecialty career path. (LT, 1100)

-Professional reading in the field is limited, additional emphasis to overall subspecialty career information. (LCDR, 1320)

-There is not enough information available on this or any other subspecialty code. We should not have to hunt this information down, but that seems to be the case. (LCDR, 1100)

-I would like to see more info on subspecialty billets in *perspective*. (LCDR, 1110)

-Affiliate with AFCEA (Armed Forces Communications and Electronics Association). When time for orders comes personally contact detailers, communications placement officer, and OPNAV-941 regarding assignments available. (CAPT, 1110)

H. COMMUNITY UTILIZATION

-LDO's must not run the communications community, the main problem is we are not really a community. LDO's should be allowed to rise as far as their ability takes them, but telecommunications should not be turned over to them. (LCDR, 1110)

- If you limit the subspecialty to LDO/CWO and GURL as is the current trend, the field will suffer, in my opinion. Expertise from all segments, warfare specialists and others, is necessary to sustain a well rounded, viable community.

-The health of the so called communications community is not good. There have been recent suggestions from CNTC--not publicized-- about limiting the community to GURL only. Why? Because no one else is getting promoted from command billets. (CDR, 1110)

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-LDO/CWO should provide technical advice. The subspecialty should be more management oriented, but with plenty of technical knowledge to back management actions. Mix of communities is good. (LCDR, 1100)

-Overall this subspecialty has not hurt me but I feel I have not been well utilized by the Navy with regard to my 5082p. I'm happy at having been given the opportunity to earn a Masters Degree. It has helped me overall as a professional. (LCDR, 1460)

I. MISCELLANEOUS

-I did not know I had a communications subspecialty code. (2 LCDRs, both 1110)

-Everybody is unique-I'm no exception. By completing the Telecommunications Systems Management curriculum at NPS I updated my Electrical Engineering and Operations Analysis data bases. Ultimately I have ended up a proven Intelligence subspecialist because I had the background, both operational and academic to get into the other guys command and control. Sorry I cannot give you anymore detail, but suffice it to say I've felt (since 1981) that I should be a proven communications subspecialist-I just can't get the "main Navy staff" to recognize my special talents. (CAPT, 1310)

-I would have liked to serve my XO tour at a Communications Station but no billets were available (to my liking) when I needed to PCS (Permanant Change of Station); so I took a Naval Recruiting District XO billet. I have been away from communications for 2+ years but would like to get back into it at some point. I am not up to speed on the latest politics and doings at CNTC so my comments may be out of date. (LCDR, 1100)

-I don't really understand how 'they' decide which billets are coded. My communications job on the SAIPAN, for example, was not coded. I think it should be. There seems to be an emphasis on shore billets. (LCDR, 1320)

-I have had little or no contact of any nature with anyone concerning my subspecialty. (LCDR, 1117)

-I liked communications and wanted another tour after getting my computer degree. However, since ADP is more critical than communications, my detailers wouldn't do it. (CDR, 1100)

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